

Research

Notes



MAY 2022

Project Title: After Study for the Richmond – San Rafael Bridge

Task Number: 3141

Start Date: June 1, 2018

Completion Date: June 30, 2022

Task Manager: Akber Ali Transportation Engineer (Civil) akber.ali@dot.ca.gov

After Study for the Richmond – San Rafael Bridge

A research focuses on assessing the impacts of the improvements on traffic and bicycle use at the Richmond-San Rafael Bridge.

WHAT IS THE NEED?

The Richmond San-Rafael Bridge improvement project is a fouryear Pilot. Before and After Studies are needed to assess the impacts of the improvements on traffic and bicycle use. The project includes two distinct items: (a) the construction of an auxiliary lane in the eastbound direction to improve traffic flow; and (b) a bicycle/pedestrian barrier project on the upper deck to provide a Bay Trail link between Contra Costa and Marin counties and provide a bicycle/pedestrian connection between the two counties over the bridge. The After Study will assess whether the improvements accomplished the goals.

The After Study will be an apple to apple comparison of before study and after study, and will provide analysis on traffic, accident and quality of life impacts after these improvements.

WHAT ARE WE DOING?

The after study is an apple to apple comparison of Richmond San Rafael Bridge before study. The researcher will evaluate following items at East Bound (lower deck) and West Bound (upper deck).

- Traffic congestion
- Incident Clearance Time
- Rate and Severity of Incidents
- Impact on Bicycles and Pedestrians
- Quality of life (impact business and public daily activities due to new improvements)



DRISI provides solutions and knowledge that improves California's transportation system

ADA Notice: Users with accessibility issues may contact the California Department of Transportation, Division of Research, Innovation and System Information. For TTY assistance, call the California Relay Service at 711, email: Drisi.Communications@dot.ca.gov or write Caltrans, DRISI – MS-83, P.O. Box 942873 Sacramento, CA 94273-0001



After Study for the Richmond – San Rafael Bridge

Research

Notes

WHAT IS OUR GOAL?

The researcher will provide an evaluation that measures the level of success compared to the before study for the Caltrans consideration. Based on the study results Caltrans will decide if adjustments are needed, and what can be implemented permanently. Besides, this research can provide a standard to applicable projects with similar parameters.

WHAT IS THE BENEFIT?

Caltrans can evaluate the success of each individual improvement and analyze the resulted impacts. The research results can assist Caltrans to determine what changes can be left permanently, and what changes that need to be reevaluated.

WHAT IS THE PROGRESS TO DATE?

- Submitted quarterly report to project panel for review
- Continued monitoring traffic flows on the bridge.
- Continued monitoring utilization of the EB shoulder lane to gauge compliance with open/close periods.
- Continued monitoring travel speeds and travel times on the upper deck of the bridge to assess potential impacts of the bikeway barrier on traffic speeds.
- Continued monitoring bike counts for the bridge bikeway.
- Continued monitoring bike counts for the bridge bikeway.
- Conducted monitoring pedestrian counts for the bridge bikeway.
- Safety evaluation by coordinating CHP
- Survey business owners and bike riders
- Working on final draft report for the project panel review

The contents of this document reflect the views of the authors, who are responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the California Department of Transportation, the State of California, or the Federal Highway Administration. This document does not constitute a standard, specification, or regulation. No part of this publication should be construed as an endorsement for a commercial product, manufacturer, contractor, or consultant. Any trade names or photos of commercial products appearing in this document are for clarity only.