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 four-year 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:

• The construction of an auxiliary lane in the eastbound direction to improve traffic flow
• 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 study will be an apple to apple comparison of the before study. The after study 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 the Richmond San Rafael Bridge before study. The researchers will evaluate the following items at East Bond (lower deck) and West Bond (upper deck).

• Traffic congestion
• Incident Clearance Time
• Rate and Severity of Incidents
• Impact on Bicycles and Pedestrians
• Quality of life (impact on business and public daily activities due to new improvements)
WHAT IS OUR GOAL?

The researchers 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 executed permanently, and what changes need to be reevaluated.

WHAT IS THE PROGRESS TO DATE?

• No cost time extension to June 30, 2022 is in progress.
• Continued monitoring traffic behavior on the bridge upper deck.
• Updated analysis of EB and WB traffic flows on the bridge to include October, November, and December data.
• Updated the EB shoulder lane utilization analysis to include October, November, and December data.
• Continued monitoring travel speeds 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.
• Conducted monitoring pedestrian counts for the bridge bikeway.
• Continued developing the capability to analyze the safety of the bridge bikeway.