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Project Title:
Rail Maintenance or Layover
Facilities in CA

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Locations for Future Intercity Passenger Rail Maintenance or Layover Facilities in CA

This research project is interested in the decision-making criteria for locating such facilities and how those criteria impact the performance of the rail system.

WHAT WAS THE NEED?

California Department of Transportation (Caltrans) is responsible for providing maintenance and servicing passenger railcars and locomotives that are in use for intrastate and intercity travel.

Maintenance and layover facilities are vital in operating and maintaining passenger rail systems and having robust design and citing criteria will help build the optimal facilities to meet California's current and future needs.

Since these facilities must mechanically maintain a large variety of rolling stock equipment, their designs and operations are critical to the proper maintenance of the new Department owned locomotives and railcars. There exists little research on where in the United States (US) these new facilities were recently built, and what design criteria were considered to accommodate the new generation of rolling stock equipment. This effort is to address that void.

WHAT WAS OUR GOAL?

The goal was to identify project parameters and study other facility characteristics to study; and the criteria on selecting the locations for future intercity passenger rail maintenance or layover facilities.

This would be done by documenting the recently constructed facilities, the contributors to their engineering and construction success and failure, discuss how these factors may work in the California, and recommend new design criteria in the final report.



Caltrans provides a safe, sustainable,
integrated and efficient transportation
system to enhance California's
economy and livability.

WHAT DID WE DO?

Office of Rail Equipment of Division of Rail and Mass Transportation is interested in knowing the types of most recently-built passenger rail maintenance and layover facilities in the US. These facilities are vital in maintaining a fleet of railcars, locomotives, and other rail equipment that make the rail transportation network function.

The research team investigated where and when the most recent intercity passenger rail maintenance and layover facilities were built in the US. They also studied the new engineering and construction methods that were used to build the new facilities.

WHAT WAS THE OUTCOME?

The outcome identified project parameters and studied other facility characteristics; and the criteria on selecting the locations for future intercity passenger rail maintenance or layover facilities.

The research documented the recently constructed facilities, the contributors to their engineering and construction success and failure, discuss how these factors may work in the California, and recommend new design criteria in the final report.

WHAT IS THE BENEFIT?

The research findings complemented and supported the goals of Caltrans' Rail Fleet Management Plan and the California State Rail Plan. The research product investigated the new methodologies, such as engineering and design criteria, the construction types of the passenger rail maintenance, and layover facilities recently built throughout the US.

Furthermore, it listed the new engineering and design criteria, and the new methods used to construct these new facilities. The new methodologies could then be used to design all future maintenance and/or layover facility in California.