



Cross-cutting

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Project Title:

Mapping and Improving the
Delivery Process of Highway
Pavement Rehabilitation Projects

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Mapping and Improving the Delivery Process of Highway Pavement Rehabilitation Projects

Research investigated potential standardization of the delivery of Highway Pavement Rehabilitation projects to launch continuous improvement efforts.

WHAT WAS THE NEED?

Highway Pavement Rehabilitation (HPR) projects are delivered in many different ways, which makes comparison and cross-project learning difficult. There's a need to apply continuous improvement efforts in state DOT's to standardize HPR project delivery.

WHAT WAS OUR GOAL?

The goal was to identify if and how continuous improvement initiatives based on Lean Six Sigma already targeting day-to-day operations at Caltrans could be extended to include Lean Thinking applied to projects.

WHAT DID WE DO?

The researchers collected data on three projects that Caltrans recently completed including information on lean practices used in other transportation departments. Using this data and the Caltrans work breakdown structure, the researchers mapped the processes used to deliver two of them (projects in Districts 3 and 6). The researchers then obtained further data and gauged the performance of these projects' delivery processes. Comparison of the resulting process maps, and their combination into a single process map that may function as a draft "standard," serve as the basis for formulating recommendations to Caltrans.



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WHAT WAS THE OUTCOME?

The researchers recommend that Caltrans personnel with a Lean mindset review the maps provided and fine-tune them for further use in collaborative efforts within their organization (e.g., engaging multiple functional units within districts and engaging multiple districts) as well as with supply chain partners (e.g., contractors) while using Lean Thinking to identify and pursue opportunities for continuous improvement of its project delivery practices.

WHAT IS THE BENEFIT?

Lean Thinking applied to HPR projects will help Caltrans achieve cost savings and target improvements in project delivery to customers in-house and at large.

LEARN MORE

<http://ucconnect.berkeley.edu/mapping-and-improving-delivery-process-highway-pavement-rehabilitation-projects>

IMAGE



Image 1