

Research

Notes

Planning, Policy & Programming

MAY 2023

Project Title:
Innovation Tools and Concept Strategies for System Planning

Task Number: 3879

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Innovation Tools and Concept Strategies for System Planning

A Tool to Help System Planners with the Development of Corridor Plans.

WHAT IS THE NEED?

Caltrans has started developing the next generation of corridor plans, which will analyze multimodal transportation issues and opportunities for optimizing system operations and support a safe and reliable system. Corridor improvement concepts should strive for travel equity, economic opportunity, access to jobs and housing, and consider the environment and users of the system. With new focus areas will come the need for Caltrans to develop innovative techniques for which to assess system planning products such as corridor and management plans.

This is the first phase of tool development, with the intent to conduct research and develop a minimum viable product Caltrans Districts can use to develop corridor plans. Once System Planning/Corridor Planning needs are determined from Caltrans Districts, the tool will assist System planners in the development of corridor plans, and how to address a host of innovative alternative strategies.

WHAT ARE WE DOING?

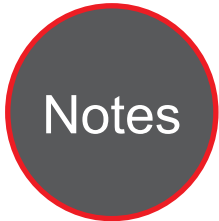
The first step will be conducting research, tool development, followed by training.

WHAT IS OUR GOAL?

The outcome includes the development of new assessment and analysis tools to improve mobility in corridors in every region of the state. The project should support system planners in identifying innovative solutions that are also context-sensitive and feasible in their specific locales.



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WHAT IS THE BENEFIT?

1. Assist in creating a fully realized multimodal transportation system that, through the deployment of innovative ideas and enhanced stakeholder outreach and engagement, offers more mobility options, improved accessibility and mobility equity for all Californians.
2. Help District system planners and engineers sift through options to address growing demand for mobility through means other than highway system expansion, with the capacity to be expanded and updated over time.
3. Facilitate assessment of large-scale mobility projects like Bus Rapid Transit (BRT), various rail options, cable systems, and aerial travel, Intelligent Transportation Systems, Complete Streets, Active Transportation, mobility hubs and services, and other operational strategies across the state.

WHAT IS THE PROGRESS TO DATE?

1. The research team completed Task 1 with a kick-off meeting in May 2022 and identified reports and journals to review for Task 2 (literature review) during June 2022. The team followed-up with suggestions received from the Panel during the kick-off meeting and obtained a spreadsheet-based tool on multimodal planning from Southeast Michigan Council of Governments.
2. Worked on Task 2 and held a Panel meeting to review preliminary findings in mid-July 2022.
3. Introduced draft tool to the Panel for feedback on January 30, 2023. Draft tool was introduced at the Statewide System Planning Meeting on January 21, 2023.
4. Completed Tasks 2, 3 (data exploration), and Task 4 (tool development) and discussed tool development with the Panel on March 17, 2023, for an urban setting and April 11, 2023, for a rural setting.
5. Next step is to plan and conduct Task 5 (District Workshop) on June 8, 2023.

IMAGES



Figure 1: Multi-criteria decision-making (MCDM) approach with outcomes, which helps make recommendations for optimal solutions for corridor planning.