

DRISI

CALTRANS DIVISION OF RESEARCH,
INNOVATION AND SYSTEM INFORMATION

Research Notes

Modal

MAY 2024

Project Title:
Assessment of State Assets for AAM
Integration and Development of
State Workplan

Task Number: 4194

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2024

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Assessment of State Assets for AAM Integration and Development of State Workplan

The purpose of this study is to prepare a comprehensive summary of current state assets available to support the foundation of an aerial corridor transportation system and develop a 3-year workplan to establish rules to achieve outcomes beneficial to state residents.

WHAT IS THE NEED?

The aviation sector has been undergoing a dramatic transformation in electrification and autonomous flight. A new generation of vertical/short take-off and landing (e-VTOL/e-STOL) aircraft will alter urban and regional aviation, providing new opportunities for passenger mobility, cargo and logistics, and emergency response. These new modes of transportation fall under the umbrella term of Advanced Air Mobility (AAM).

As a nationwide leader in aviation land use compatibility planning the Division of Aeronautics has a unique opportunity to continue that leadership as it explores the safe, sustainable, and equitable integration of AAM in its diverse "safe, accessible, low-carbon, 21st century multimodal transportation network."

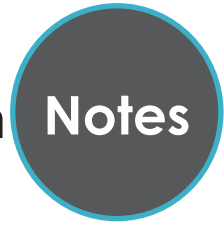
WHAT ARE WE DOING?

Caltrans is seeking to incorporate AAM into its vision for a safe, accessible, low carbon, and Caltrans is seeking to incorporate AAM into its vision for a safe, accessible, low-carbon, and 21st-century multimodal transportation network. As such, Caltrans is looking to:

- Evaluate the readiness of the State's transportation multi-modal network to incorporate AAM in a safe, sustainable, and equitable manner. This will involve documenting current state assets that could serve as a foundation for an aerial corridor transportation system and future assets being developed by the federal government, other state agencies, and business partners. Such assets could include, but are not limited to:



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California's transportation system



- Physical structures and facilities such as airports, roadways, heliports, and land
- Systems and communication networks such as those needed to support AAM flight operations; VTOL aircraft technologies developed by OEMs
- Information or resources such as federal and state policies and funding sources; and/or other state, regional, and local frameworks developed to prepare and support AAM implementation
- Develop a three-year work plan to advance AAM at a statewide level. Based on the results of the AAM readiness evaluation, establish a three-year work plan to advance AAM at a statewide level. The plan will help the State to coordinate, collaborate, and implement actions to achieve outcomes beneficial to State of California residents, including its aging, diverse, and equity-challenged communities, and those living throughout the state's diverse geography-from densely populated urban regions to remote areas challenged by terrain.

WHAT IS OUR GOAL?

Caltrans is seeking to incorporate AAM into its vision for a safe, accessible, low carbon, and 21st-century multimodal transportation network.

WHAT IS THE BENEFIT?

The FAA is including AAM and UAM as a priority in their planning efforts, which is organized around five areas of activity – aircraft, airspace, operations, infrastructure, and community. This has potential to forever change how people and goods move in California.

WHAT IS THE PROGRESS TO DATE?

January 1, 2024 – March 31, 2024

Task 1: Project Management

Goal/Objective:

The goal of project Management is to break the project into clear, manageable pieces. This will create more efficient work and facilitate the completion of the overall project,

Update:

- Meetings/Ongoing Communication with Agency Staff. Mead & Hunt's project manager participated in one teleconference with the Caltrans Management to discuss the status of various deliverables. Informal teleconferences were also conducted with the Caltrans Project Manager.
- Routine Contract Administration. Mead & Hunt's project manager conducted routine invoicing, budget management, and subconsultant coordination during the reporting period.

Task 6, Modal Facilities Selection

Goal/Objective:

The goal of this Task is to facilitate a discussion with the Caltrans Project Panel and other Caltrans staff (chosen by the Contract Manager) by applying the findings from previous Tasks, subject matter expertise, and available Caltrans data for Caltrans to designate specific transportation facilities as launch and land sites for those routes.

Update:

Mead & Hunt held two meetings with subconsultant team members to further completion of the Modal Facilities Selection Report. At the close of the reporting period, Mead & Hunt received a complete draft report for review. The report was 80% complete at the end of the reporting period.

Task 7, Transportation Infrastructure Methodology Toolbox and Analysis

Goal/Objective:

The goal of this Task is to use the deliverables from previous Tasks to develop a consistent methodology to assess the feasibility of the chosen

locations to incorporate AAM (including locations for new vertiports or vertipads not associated with multi-modal facilities).

Update:

Mead & Hunt held one formal meeting and ongoing informal communication with team members to further report conclusion. A proposed methodology and toolbox that included proposed criteria and evaluation tools was approximately 75% complete at the end of the reporting period. The Project team began to identify criteria for evaluating proposed AAM projects and infrastructure, building on previous and ongoing deliverables.

Task 8, AAM Highway Corridor Operations Study

Goal/Objective:

The goal of this deliverable is to provide a report with a broad understanding of and recommendations on the use of State Highways as AAM corridors.

Update:

The project team conducted research regarding the use of highway corridors as potential AAM routes. Research including identifying potential supporting infrastructure located near corridors, such as rest areas fueling facilities, etc. A potential route maximizing the use of highway corridors was developed to identify corridor availability, pros, and cons. At the end of the reporting period, the document was 85% complete.

Phase 9: Final Report

Goal/Objective:

The goal of this deliverable is to provide a comprehensive report and slide presentation incorporating all previous deliverables.

Update:

Project research methodologies and summaries of previous deliverables conducted in support of Phases 2 through 5 were summarized for inclusion in the Final Report. An outline of the proposed report was completed.