



Washington State Department of Transportation Air Mobility Aircraft Plan

Response to RFQQ Air Mobility Aircraft Plan
Packet A
April 2nd, 2024





April 2, 2024
RFQQ Coordinator
WSDOT Contract Services Office
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Tumwater, WA 98501
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RE: Deloitte Response to RFQ State of Washington Department of Transportation Air Mobility Aircraft Plan

Dear RFQQ Coordinator,

Deloitte¹ is pleased to submit this proposal to support the Washington State Department of Transportation (WSDOT) in the development of an Air Mobility Aircraft Plan that will serve as a holistic roadmap for integrating Advanced Air Mobility (AAM) into the state's transportation system. We believe our submission meets all the requirements of the request based on RFQQ documents and revisions shared by WSDOT as of February 15, 2024, and demonstrates that our Team possesses the required level of experience to perform the Statement of Work (SOW).

We believe that Deloitte is the right firm for WSDOT based on the following:

- Deloitte's Market Position in AAM – demonstrated through our breadth and depth of projects and publications across State & Local, Federal, and Commercial Industry.
- Our Unmatched Team – bringing together the technical, operational, and strategic skills required to deliver a successful roadmap and AAM Aircraft Plan.
- We know the State of Washington – our established presence and relationships in Washington through past and current projects demonstrate our commitment to the State.

Deloitte's Legal Status

Deloitte & Touche LLP was formed as a limited liability partnership in Delaware in 1997. [Dipti Gulati](#) is Chairman and CEO of Deloitte & Touche LLP. It has a board of directors which maintains general authority and supervision over the management, practice, and affairs of Deloitte & Touche LLP and establishes its various policies. Deloitte & Touche LLP is a subsidiary of Deloitte LLP, which is also a limited liability partnership registered in Delaware. The leaders of Deloitte LLP include [Jason Girzadas](#), chief executive officer, and [Lara Abrash](#), chairman of the board. Deloitte LLP also has a board of directors which has general authority and supervision over the management, practice, and affairs of Deloitte LLP and establishes its various policies.

Deloitte & Touche LLP is registered in Washington with a Uniform Business Identification (UBI) number of 601-568-831 and a Statewide Vendor (SWV) number of SWV0083834.

¹ As used in this document, "Deloitte" means Deloitte & Touche LLP, a subsidiary of Deloitte LLP. Please see www.deloitte.com/us/about for a detailed description of the legal structure of Deloitte LLP and its subsidiaries. Certain services may not be available to attest clients under the rules and regulations of public accounting.

Deloitte's Market Position in Advanced Air Mobility (AAM)

AAM is a broad and nascent industry that is complex and multi-faceted, requiring a comprehensive understanding of aspects such as technology integration, regulation, markets and trends, and operational best practices and challenges. Deloitte has established itself as a market leader and trusted advisor within the AAM industry, leveraging expertise from our subject matter advisors (SMAs) who have executed numerous projects and programs across the aviation and technology sectors. Through our past work, our team has developed differentiated capabilities to deliver high-priority products for clients navigating the dynamic landscape of AAM. This allows us to bring extensive data, past studies, and industry leading practices to accelerate project times and reach client goals more efficiently. Additionally, Deloitte is continuously developing knowledge across the AAM sector by actively engaging with key stakeholders and industry through conference participation and workshops to stay at the forefront of the latest approaches, barriers, and trends.

Our Unmatched Team

Our proposed Project Manager is Nicholas Flom, a Specialist Leader in our Autonomy offering. Nick is a Subject Matter Advisor in UAS, general aviation, and aviation infrastructure. Prior to joining Deloitte, he was the Executive Director of the Northern Plains UAS Test Site. He was also responsible for Vantis, the state of North Dakota's \$50M statewide beyond visual line of sight initiative. Under his leadership, North Dakota was selected as one of 10 participants of the UAS Integration Pilot Program, selected to participate in the FAA's Unmanned Traffic Management (UTM) Pilot Program and has supported multiple federal agencies.

We Know the State of Washington


The State of Washington has trusted Deloitte for over ten years on its most important, complex, and high-profile projects. We have helped nearly 20 state agencies realize their goals and objectives, including the Department of Transportation (DOT), Department of Labor & Industries (L&I), Health Benefit Exchange (HBE), Employment Security Department (ESD), Department of Social and Health Services (DSHS), the Department of Licensing (DOL), the Washington State University (WSU), and the Department of Children, Youth, and Families (DCYF). With four offices across the State of Washington, more than 1,500 Deloitte professionals call Washington State home. Our professionals are passionate about supporting sustainable aviation and alternative transportation options across Washington, furthering the rich aviation history, benefiting regional economies, and enhancing the region's competitive position.

We appreciate the opportunity to present you our approach and effort estimation and hope that the information in this proposal underlines our competencies and our passion for transformative transportation systems. We would welcome the chance to realize this exciting project jointly. If you have questions, please do not hesitate to contact me at mametcalfe@deloitte.com or +1.703.213.8029.

Sincerely,



Matt Metcalf, Managing Director
Deloitte Consulting LLP

**DISTINGUISHING FACTORS**

- Developed the **Urban Air Mobility (UAM) Concept of Operations (ConOps) for NASA**, the foundation for future urban AAM operations and integration
- Ongoing work with **95% of Fortune 500 aerospace manufacturers and suppliers**; leading providers of unmanned systems, air traffic management, and air mobility.

Contents

Letter of Submittal	02
Our Understanding	05
Section 1 – Qualifications of Firms on Team	08
Section 2 – Qualifications of Proposed Project Manager	13
Section 3 – Key Team Member Qualifications	16
Section 4 – Firm’s Project Management System	22
Section 5 – Project Delivery Approach	25

We Understand Your Scope and Objectives




Washington State Department of Transportation (WSDOT) is seeking a report that includes a statewide plan for Advanced Air Mobility integration.

WSDOT is looking to develop a statewide plan to integrate Advanced Air Mobility (AAM) with the following:

Objectives

- 01** Establish a strategic plan for integrating AAM into Washington current transportation system.
- 02** Improve connectivity and accessibility within and between cities
- 03** Plan and invest pragmatically in AAM technology to reduce emissions and enhance transportation efficiencies

Unlocking Value by Addressing Challenges

-  **Enhancing Safety:** Through the design and implementation of safety frameworks, risk assessments, training programs, incorporating safety standards.
-  **Regulatory Harmonization:** By staying informed on current and proposed efforts and identifying opportunities to contribute to policy discussions
-  **Infrastructure Development:** Creating a planning document that inventories current assets and identifies gaps and investment needs

Service Scope

-  **Land use planning recommendations for AAM vertiports**
-  **Inventory of infrastructure and recommendations**
-  **State governance structure and regulatory mechanisms to compliment FAA oversight**
-  **Recommended policies to foster vertiport infrastructure development**
-  **AAM integration into statewide transportation plans**

Value Enhancing Positioning

With Deloitte you will have a team that has experience with state and regional AAM planning and leveraging current assets to act as accelerators for AAM integration

Project Deliverable

Deloitte Consulting will submit and present its output to WSDOT consisting of:

- Executive Summary for Washington's AAM Integration to Unlock Value
- AAM Integration Roadmap which includes recommendations, infrastructure inventory, proposed state governance structures, policies for vertiport infrastructure development, and statewide planning documents.

Deloitte Consulting will submit report in the following schedule:

- Final report 60 days from commencement date
- OR
- Final report 30 days prior to June 1, 2025 (May 1, 2025)

Our Point of View: Advanced Air Mobility

Our work has given us an opportunity to not only consult within the AAM industry, but to also define some of these concepts and advise clients to improve their readiness for integration

State of the AAM Market

Various states such as New York, New Jersey, West Virginia, and North Dakota are developing AAM test beds, Centers of Excellence, and mobility zones to test, pilot, and operationalize various AAM use cases and attract industry and investments

AAM ushers in cutting-edge, dual-use technologies that promise to provide safe and affordable mobility of people and products. Early adopters have the opportunity to invest early in this sector and become leaders in AAM research and development.

We Know Your **INDUSTRY**

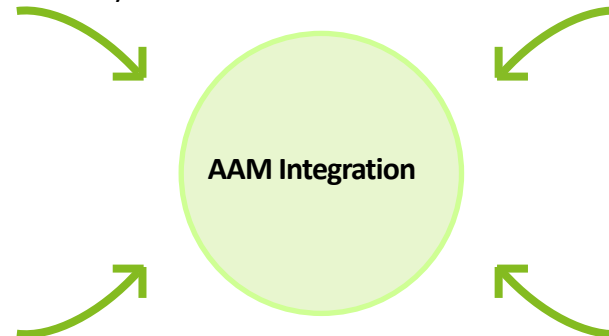
Deloitte has positioned itself as a trusted advisor in the AAM industry. Deloitte's insights are based on an in-depth understanding of the AAM ecosystem, including tech advances, regulatory trends, and market dynamics. Deloitte's contribution to the AAM industry includes the publication of the NASA AAM ConOps and the AAM National Strategy with AIA.

We look at the regional and national **IMPLEMENTATION** strategy

Our perspectives built upon our experience such as West Virginia support regional air travel solutions that can link rural areas, small cities, and isolated regions. By leveraging these new technologies and operational models, AAM has the potential to transform the way we travel, connect communities, improve accessibility, and drive economic growth.

We have the **EXPERIENCE** to Guide You

Deloitte, with its deep industry insights and dynamic approach, has effectively assisted clients in the AAM landscape. This includes strategy creation, technology integration, and economic impact. Deloitte's work in shaping AAM Roadmaps for New Jersey and West Virginia emphasizes our active role in the industry.



We Know Your **CULTURE** and **PRIORTIES**

The promotion of expanded options across this region will attract more talent, benefit regional economies, and enhance the region's competitive position. Deloitte has supported your vision to integrate into current transportation systems and help disadvantaged communities to enable transformational transportation systems through our work with non-profit organizations across the U.S.

We Understand that AAM is **MORE THAN EVTOL AND VERTIPTS**

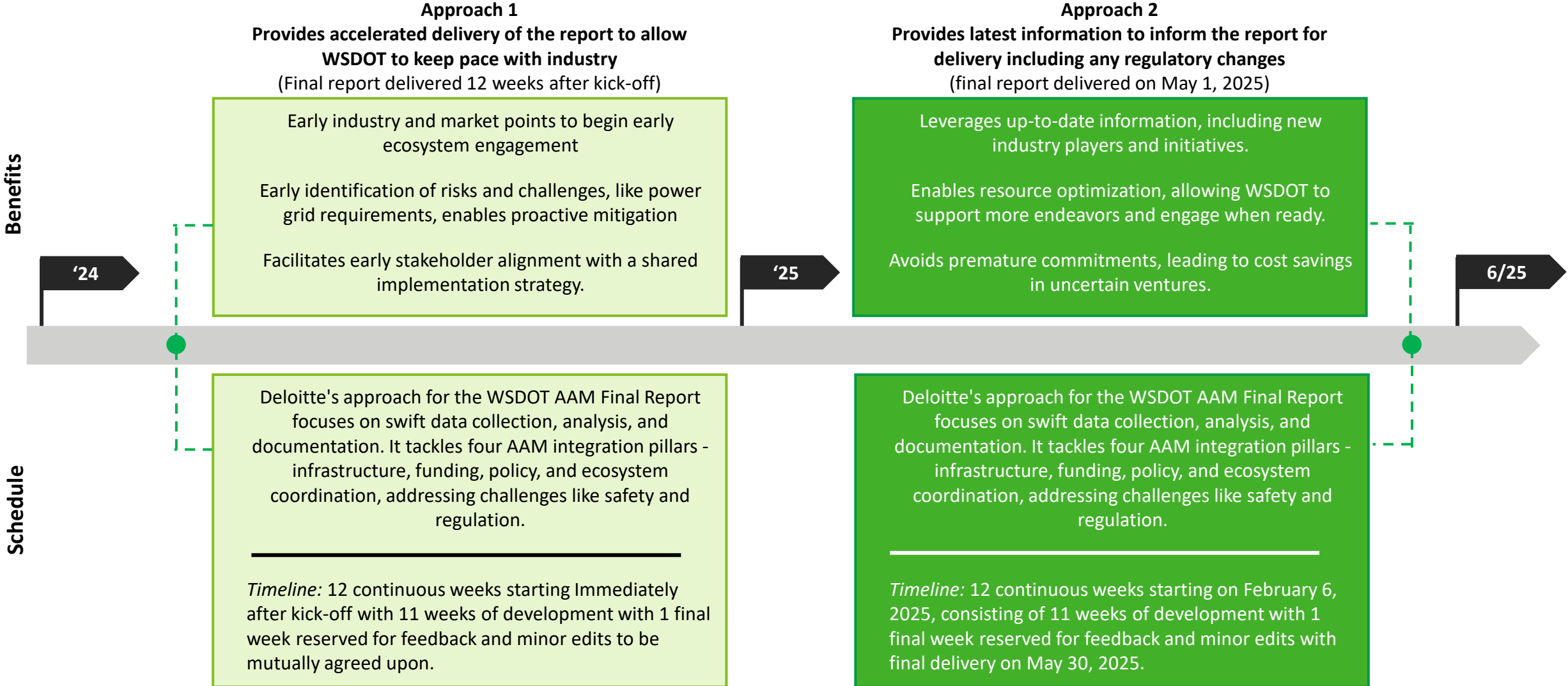
Deloitte has supported NASA on defining AAM to envision it as broader concept that includes regional air mobility, connecting communities in innovative ways. AAM leverages new aviation technologies to transport people, goods, and services efficiently and sustainably over various distances.

We have the End-to-End Capabilities to Enable **SUSTAINED VALUE** Creation

Our experience and deep investments in AAM provides you with the ultimate key to unlocking value lies in having an advisor who comprehends your strategic priorities in the AAM industry and possesses the necessary operational, technical, and organizational experience to successfully implement and derive lasting value from these solutions and recommendations.

Enabling your AAM Integration Roadmap with Flexibility

Deloitte proposes a three-month plan either as Approach 1 or Approach 2, instead of a prolonged timeline through June 2025, to provide the best value to WSDOT's AAM integration by providing critical experienced resources to combine our tested methodology and successful track record.



Section 1 – Qualifications of Firms on Team

About Deloitte



Deloitte provides audit, consulting, financial advisory, risk advisory, tax and related services to public and private clients spanning multiple industries. We have more than 410,000 professionals and we are committed to make an impact that matters. In our AAM practice, we have more than seven years of guiding clients in realizing their vision of implementing AAM.

Deloitte's Positioning



Our Commitment to Washington. For over ten years, the State of Washington has trusted Deloitte on its most important, complex, and high-profile projects. We have supported nearly 20 state agencies, including the Department of Transportation (DOT), Department of Labor & Industries (L&I), Health Benefit Exchange (HBE), Employment Security Department (ESD), Department of Social and Health Services (DSHS), the Department of Licensing (DOL), the Washington State University (WSU), and the Department of Children, Youth, and Families (DCYF) to help realize their goals and objectives. Over 1,500 Deloitte employees call Washington State home, with offices located in Seattle, Bellevue, and Olympia.

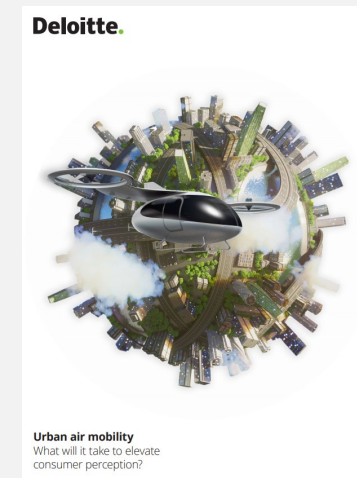
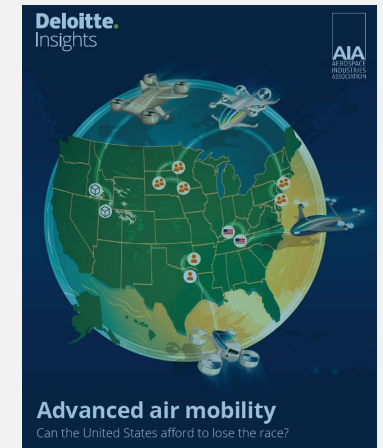


Our Leadership in AAM. Deloitte has over seven years of experience in industry helping lead the advanced air mobility community. Deloitte has developed a range of frameworks and architectures that help define ever-evolving AAM concepts through reports across the AAM ecosystem to advance RAM, LAM, and UAM concepts, extensively developing reference missions and pressure testing applications based on realistic technology, policy, and system development time frames.



We execute. Deloitte is world-renowned for developing and executing implementation plans across various regions and key players, using proven methodologies and frameworks. These methodologies are based on leading practices and lessons learned -- and they help ensure that implementation plans are robust, executable, and fully align with our clients' unique missions.

Read some of our AAM insights by clicking the images below:



Deloitte is committed to Washington

Deloitte has an **extensive presence** in Washington State.



100+ YEARS

experience serving Washington-based organizations. We have supported nearly 20 state agencies to help realize their goals and objectives.



3

Deloitte Washington State offices in Seattle, Bellevue and Olympia



370+

Deloitte staff focused on serving State of Washington government projects



4,796

Hours volunteered in Washington State on Impact Day in FY22



1,700

Deloitte Washington based professionals



1000+

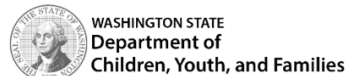
Current Deloitte professionals graduated from 29 Washington-based universities and colleges



\$217K

donated to United Way agencies by our Seattle professionals in FY23

RECENT CLIENTS



Highlighted AAM Experience

Deloitte's AAM efforts including assessing and operationalizing AAM and its many implications and challenges within federal, local and state environments.

1

NASA Public Good

Approximate value of contract: \$305,000

Objective: Assess the potential for AAM to enhance public good in the future, defining what public good means in the context of AAM and detailing use cases, metrics, and requirements to determine similarities to the broader AAM industry.

Key Work Services

- Performed desktop research to establish definitions and characteristics of AAM public good missions
- Analyzed research data to develop a broad list of AAM public good use cases, metrics, and requirements
- Validated research and work products through AAM Ecosystem Working Group presentations and NASA Leadership briefings

Value Delivered

- Unique definition and characteristics to describe AAM Public Good missions
- 42 AAM Public Good Use Cases
- 13 qualitative and quantitative metrics to assess AAM impact on public good mission
- Requirements analysis evaluating aircraft, infrastructure and community, and airspace

2

Identifying and Defining UAS Opportunities in Williston, ND

Approximate value of contract: \$300,000

Objective: Create a strategy for developing UAS in Williston and the surrounding region considering physical infrastructure requirements, regulations, and economic drivers that would sustain UAS.

Key Work Services

- Conducted market analysis of UAS market growth in U.S. and Williston using internal resources, advisors, and external stakeholder interviews.
- Evaluated 3 potential locations for UAS business park based on key considerations (infrastructure, use-cases, regulations etc.)
- Developed CONOPs for UAS operations
- Synthesized inputs into feasibility report with recommendations of how to implement UAS

Value Delivered

- Market overview obtained through 8 research reports, 7 virtual interviews and 11 in person interviews.
- Infrastructure analysis determined through data collection, analysis and development of a pro forma.
- A framework to evaluate a site's ability to conduct UAS flight operations

3

Elevating West Virginia: A Vision for Advanced Air Mobility

Approximate value of contract: \$220,000

Objective: Analyze the projected economic and investment considerations in order to validate the West Virginia - AAM industry potential and determining operational use case prioritization and strategic recommendations.

Key Work Services

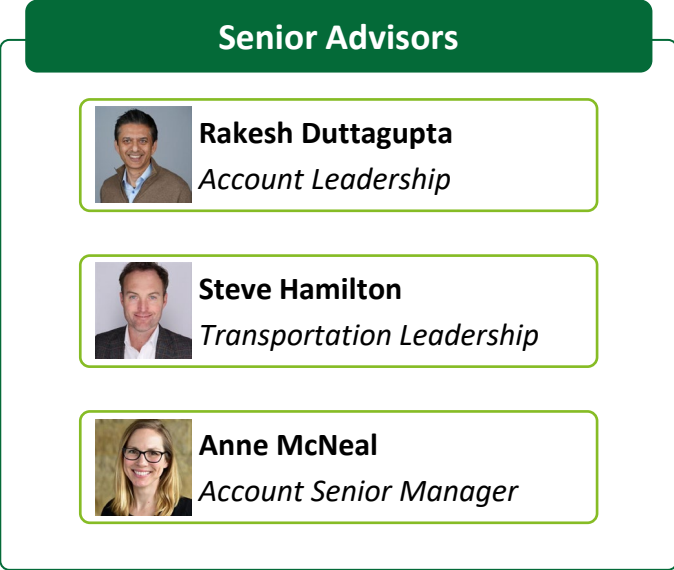
- Established baseline to benchmark infrastructure, policy, economics, regulation and ecosystem
- Conducted economic impact analysis to validate economic potential of AAM
- Developed scalable implementation plan synchronized around stakeholder ecosystem
- Synthesized inputs and findings into actionable report for how to capitalize on AAM

Value Delivered

- Identified the economic benefits of AAM in WV as it relates to jobs created, tax revenue and reduction of costs for operators.
- Developed a roadmap focused on ecosystem, funding, policy and infrastructure priorities.
- Presented 6 down-selected AAM priority use cases for WV to strategically enable

Key Staff and Availability

Based on our proposed three-month engagement timeline, our staffing structure will include all necessary resources for a 12-week delivery.



*Representative team; actual team members and Subject Matter Advisors (SMA) subject to change based upon project start and availability

Availability of Proposed Team		
Proposed Team Member	Hours Available / Week	Total Weeks Available
Matt Metcalfe, <i>Project Executive</i>	5	12
Nick Flom, <i>Project Manager</i>	20	12
Sevan Mehrabian, <i>SMA</i>	As required	12
Edgar Valdez, <i>Sr. Business Analyst</i>	40	12
Marika Ottman, <i>Business Analyst</i>	40	12
Kyra Terenzio, <i>Junior Business Analyst</i>	40	12

Section 2 – Qualifications of Proposed Project Manager

Project Management Experience

Background

Mr. Flom is a Specialist Leader for Deloitte Consulting where he is the market lead for state and local governments focused on US Drone Services. This offering provides advisory, implementation, and operational services for incorporating the infrastructure to enable Advanced Air Mobility (AAM) and other drone services into states. Prior to coming to Deloitte, Mr. Flom was the Executive Director of the Northern Plains UAS Test Site, FAA designated test site, where he was responsible for Vantis, the state of North Dakota's statewide AAM infrastructure initiative. Mr. Flom has also been instrumental in the advancement of beyond visual line of sight (BVLOS) operations for multiple users and use cases and participated on the FAA's BVLOS Aviation Rulemaking Committee.

Professional Licenses / Accreditations

- Airline Transport Pilot certificate, 2008
- Certified Flight Instructor, Instrument, Multi-engine, Renewed 2023

Previous Professional Participation

- ASTM Committee F38 on UAS
- AUVSI – Great Plains Chapter
- ATCA Blue Skies Initiative
- FAA BVLOS Aviation Rulemaking Committee
 - Working Group Lead
- FAA Drone Safety Team
- RTCA SC-228

Select Experience

1. NARTP Advanced Air Mobility Study

- **Client:** National Aerospace Research and Technology Park
- **Timeline:** February 2022 – May 2022

2. FAA BEYOND Program Support

- **Client:** Federal Aviation Administration
- **Timeline:** May 2022 – January 2023

3. Autonomous Technology Strategy

- **Client:** Maryland Economic Development Corporation
- **Timeline:** September 2022 – December 2022

Project Overview

Deloitte crafted a roadmap for AAM in New Jersey, highlighting the state's potential as an AAM leader due to strategic location, aviation assets, and an ecosystem. The roadmap underlines AAM's economic, environmental, and societal benefits, including job creation, reduced emissions, and enhanced transportation accessibility.

Roles & Responsibilities

- Guide the development of a strategic roadmap for AAM in New Jersey, overseeing all aspects of the project from inception to completion
- Identify and leverage the state's existing resources and potential, such as its strategic location, aviation assets, and research ecosystem
- Coordinate with the NARTP and other stakeholders to ensure successful implementation of the roadmap and monitor its progress and effectiveness.
- Requirements guidance, risk mitigation and scope deviations
- Work product review and sign-off
- Communication to wider organization and stakeholders
- Any requirement to deviate from initial program scope and ambition
- Input strategy and direction of the program

Management & Focus



Project Schedule



Scope Creep



Budget Issues



Change Management



Federal Regulations



State Regulations

NARTP Advanced Air Mobility Study

Project Management Experience

FAA BEYOND Program Support







Project Overview

Deloitte gathered data on Unmanned Aircraft System (UAS) operations through interviews and meetings with industry leaders and stakeholders. This data was used to gain insight into various aspects of operations, including safety and efficiency. The findings were used to develop recommendations for the Federal Aviation Administration (FAA) to advance UAS integration.

Roles & Responsibilities

- Establish goals, milestones, and performance measures of success for the BEYOND program
- Communicate to BEYOND stakeholders how program operational, societal and economic benefit data will be used
- Provide stakeholders and the general public with non-proprietary information related to BEYOND results via the FAA website
- Implement a process to periodically assess the data collected during BEYOND







Management & Focus

-  Project Schedule
-  Scope Creep
-  Budget Issues
-  Change Management
-  Federal Regulations
-  State Regulations

Autonomous Technology Strategy Support

Deloitte organized a summit in Southern Maryland to enhance the state's involvement and funding for autonomous technologies. The event showcased Maryland's strengths in autonomy and sought support from key stakeholders. Deloitte developed a strategic vision for the Maryland, assessing the current ecosystem, identifying strengths and gaps, and using stakeholder interviews for insights.

- Organizing and managing the project team and ensuring the establishment of a project management cadence
- Identifying stakeholders, planning logistics, and scheduling interviews
- Ensuring project objectives are met within the schedule and scope, and creating and finalizing deliverables
- Proactively planning and managing the project using various techniques, conducting ongoing quality reviews at multiple levels, and maintaining continuous communication with end-users
- Input on specific work products, participate in key working- and validation sessions
- Alignment with other programs and workstreams as needed
- Co-facilitating work sessions

-  Project Schedule
-  Scope Creep
-  Budget Issues
-  Change Management
-  Federal Regulations
-  State Regulations

Section 3 – Key Team Member Qualifications

Key Team Member Qualifications



Matt Metcalfe

Arlington, VA
mametcalfe@deloitte.com



Nick Flom

Grand Forks, ND
nflom@deloitte.com

ROLE: State Transportation Leader

Specializes in emerging aviation technologies and concepts, including modeling and analysis of economic, technology and market trends. He works with a range of clients to develop operational concepts, technical requirements and business strategy. Over the last 5 years he has led several studies on Advanced Air Mobility (AAM) including NASA's early market assessment and intermediate Concept Operations, he supports FAA UAS, UTM, and UAM programs in safety and air traffic organizations, as well as a range of commercial and regional efforts.

RESPONSIBILITY: Overseeing and managing delivery of project in full adherence to contractual requirements and scope.

Established a Strategic Advisory Group of 35 stakeholders: government, industry, and academia to advise NASA and FAA on UAS public acceptance, regulatory barriers, safety, and market assessment.	Led analysis of the challenges/benefits of integrating UAS for 35 airport partners (airspace management, infrastructure inspections, community involvement, etc.).	For the FAA and DOT, developed analytics and strategy capabilities to support Next Generation Air Transportation System implementation (e.g., modeling aircraft tech and operations)

ROLE: AAM SME & Program Manager

SME in UAS, general aviation, and aviation infrastructure. Prior to joining Deloitte, he was the Executive Director of the Northern Plains UAS Test Site. He was also responsible for Vantis, the state of North Dakota's \$50M statewide beyond visual line of sight initiative. Under his leadership, North Dakota was selected as one of 10 participants of the UAS Integration Pilot Program, selected to participate in the FAA's Unmanned Traffic Management (UTM) Pilot Program and has supported multiple federal agencies.

RESPONSIBILITY: Manages and oversees project delivery on a day-to-day business, ensuring timelines and expectations are met, and providing guidance and direction on roadmap delivery.

Led development of operations, including safety and efficiency recommendations for the FAA to advance UAS integration federally.	Crafted a roadmap for AAM implementation in New Jersey which underlines AAM's economic, environmental, and societal benefits.	Led strategic vision development for Maryland, assessing the ecosystem, identifying strengths and gaps, and using stakeholder interviews for insights.



Key Team Member Qualifications



Sevan Mehrabian

Arlington, VA

smehrabian@deloitte.com



Edgar Valdez

Louisville, KY

evaldez@deloitte.com

ROLE: Drone Services Leader

One of founders and leaders of Deloitte’s U.S. Drone Services program where he oversees project delivery for government engagements and clients. He has led several UAS and AAM projects focused on standing up UAS programs, AAM market and technology studies for state and federal government clients and developing UTM economic models for an aerospace company. He also brings over 14 years of experience providing strategic consulting services to Federal government clients focused on disruptive technology.

RESPONSIBILITY: Provides extra oversight, as needed, and reviews as needed.

●	●	●
Led team supporting U.S. Army Program Executive Office Aviation in developing its UAS strategy.	Developed New York State’s UAS and advanced mobility strategy and roadmap.	Authored a study on economic and technology challenges and opportunities associated with developing vertiports for flying vehicles in various urban environments.

ROLE: Sr. Business Analyst

Attorney and AAM industry thought leader with 7 years of regulatory and compliance experience within the Aviation industry. Has extensive experience within the AAM field, provided regulatory support for initial UAS airline. Oversaw contracting and managed negotiations with UAS / AAM suppliers. Provided executive reports on current state of the UAS/AAM industry as well as regulatory landscape for international operations.

RESPONSIBILITY: Develops and reviews deliverables, manages cost/budget and engages with client to ensure full transparency and collaboration.

●	●	●
Facilitated roundtable for a Federal Agency focusing on implementation and integration of UAS, stakeholders included state, local, and tribal communities.	Managed the development of a roadmap for West Virginia, including establishing the framework for use case prioritization.	Supported the development of a go to market strategy for unmanned traffic management system, including establishing a public agency business case.



Key Team Member Qualifications



Marika Ottman

Chicago, IL
mottman@deloitte.com



Kyra Terenzio

Los Angeles, CA
kterenzio@deloitte.com

ROLE: Business Analyst

Aerospace Engineer with a background in propulsion systems. She has contributed to a range of deliverables including an emerging technology environment scan for a DoD client, a 10-year strategic roadmap for states to attract and enable a drone industry and program support for FAA BEYOND as they work towards drone beyond-visual-line-of-sight flight operations by rule.

RESPONSIBILITY: Develops deliverables and manages daily activities; facilitates meetings, and tracks action items.

●	●	●
Spearheaded the 2-year strategy for FAA, state, local, tribal govts in BEYOND program to advance more complex drone ops in National Airspace System.	Helped develop a 15-year strategy under Vertx, NASA funding, for West Virginia to become a national leader in AAM.	Helped lead study for North Dakota on how to use drones/AAM to support local industry and recommended where and how to strategically establish drone vertiport.

ROLE: Junior Analyst

With a high honors degree in business from University of California, Berkeley's Haas School of Business, she is adept at applying her business/economic acumen to tackle tangible emerging technology opportunities. She has contributed to a range of deliverables including helping define emergency operation procedures and improve safety efforts for a federal agency, conducting a UAS market scan to analyze partner-competitor fit of dozens of companies, and led all market sizing and investment cost projections to evaluate a potential investment in a novel technology.

RESPONSIBILITY: Gather and analyze data points, research strategic solutions and recommendations.

●	●	●
Co-authored two net-new 25-page standard operating procedures of safety operations that defined emergency processes for vulnerable populations.	Assessed market opportunities for UAS technology and created a 20+ step evaluation framework to analyze partner-competitor fit on 100s of UAS companies.	Led all market sizing, investment cost projections and identified 90+ use-cases to evaluate the market opportunity for novel line of sight technology.



Senior Advisor Qualifications



Rakesh Dutttagupta

Sacramento, CA

rdutttagupta@deloitte.com



Steve Hamilton

Boston, MA

shamilton@deloitte.com

ROLE: Account Leadership

State sector leader with over two decades of industry experience and deep expertise in technology management specifically in project management, operations management, financial risk analysis, performance measurement, predictive modeling and organizational transformation leadership for the public sector. Within state and local government, he is an expert in state and citywide infrastructure and transportation management.

RESPONSIBILITY: Senior Advisor

Oversaw effort in which a State agency engaged Deloitte to modernize their licensing solution across all their businesses and professions.	Led effort that supported a State effort to provide and maintain an eligibility system for Medicaid and address identified defects and enhance the current system.	Supported a State agencies goal of increasing voluntary participation in its Employment & Training Program, through a new self service portal.

ROLE: Transportation Leader

He has more than 17 years of experience in 20+ countries providing market assessment, strategic planning, and economic/financial feasibility assessments for large-scale economic development and infrastructure projects worldwide, including alternative delivery (P3) models. He is an experienced project manager, market assessment, governance, financing, and transactions specialist on projects for the World Bank/IFC, private real estate developers/operators, states and localities, and foreign governments.

RESPONSIBILITY: Senior Advisor

Project Lead, maximize the value of school district's under-utilized assets, starting with and help achieve broader community needs given revenue shortfalls.	Responsible for providing project leadership, approving final deliverables and providing real estate and financial analysis related inputs and technical guidance for industrial land delivery.	Project Lead, for the development 'smart connected border' to optimize and transform border dynamics using SMART connected cities framework.

Senior Advisor Qualifications



Anne McNeal

Portland, OR
annemcneal@deloitte.com

ROLE: Account Senior Manager

Her experience includes strategic planning and implementation, change management and communications, customer experience, performance measurement, transformation design, continuous process improvement and program assessment projects. Prior to joining Deloitte, Anne received her Master's of Public Policy from Georgetown University and her Bachelor of Arts from the University of Michigan.

RESPONSIBILITY: Senior Advisor

		
Led a strategic cost transformation effort to better align client resources to direct mission-focused work through interviews and surveys.	Led a project to build a customer-centric service delivery model, defined required capabilities, developed a maturation plan, and clarified the operating model for public affairs within the bureau.	Supported the implementation of a sustainable performance measurement plan for data-driven decisions, including expanding the organization's global operations.

Section 4 – Firm’s Project Management System

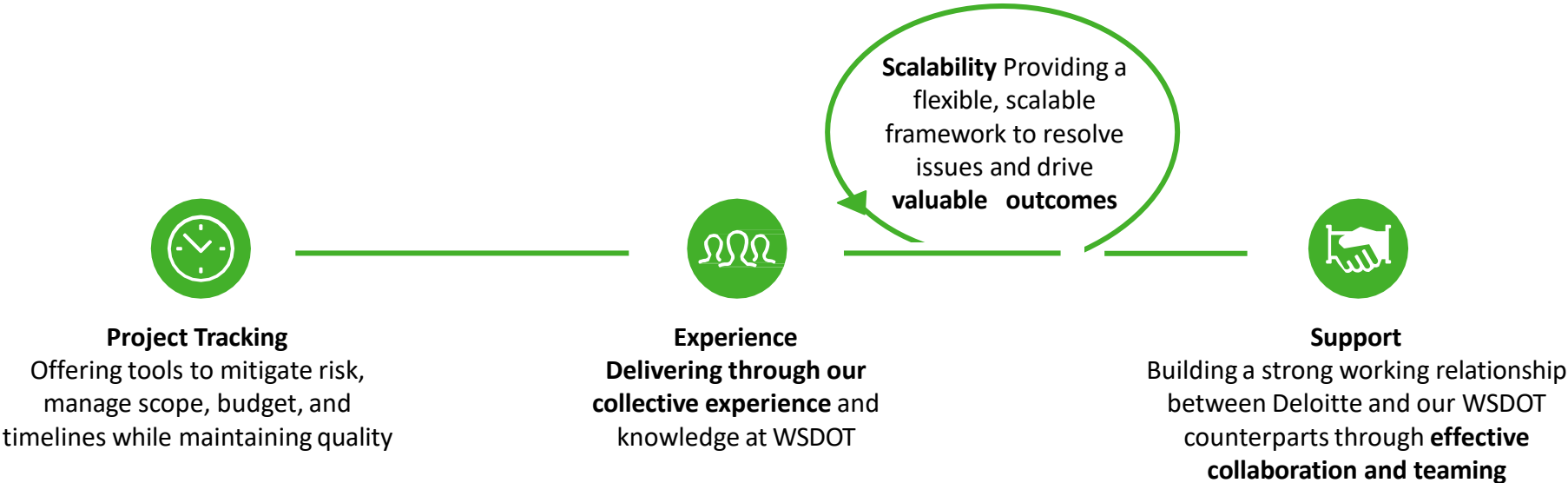
Project Management Approach

Our project management approach is focused on industry-leading project tracking, transparent communication and active management of risk and issues, to deliver the project as per the agreed upon schedule.

We've tailored our project management methodology to align with WSDOT's expectations, and it is **iterative** and focused on **achieving critical outcomes**.

Our project management approach supports strong collaboration – across all areas of project management, by advocating through effective collaboration and joint governance.

An overview of our project management approach

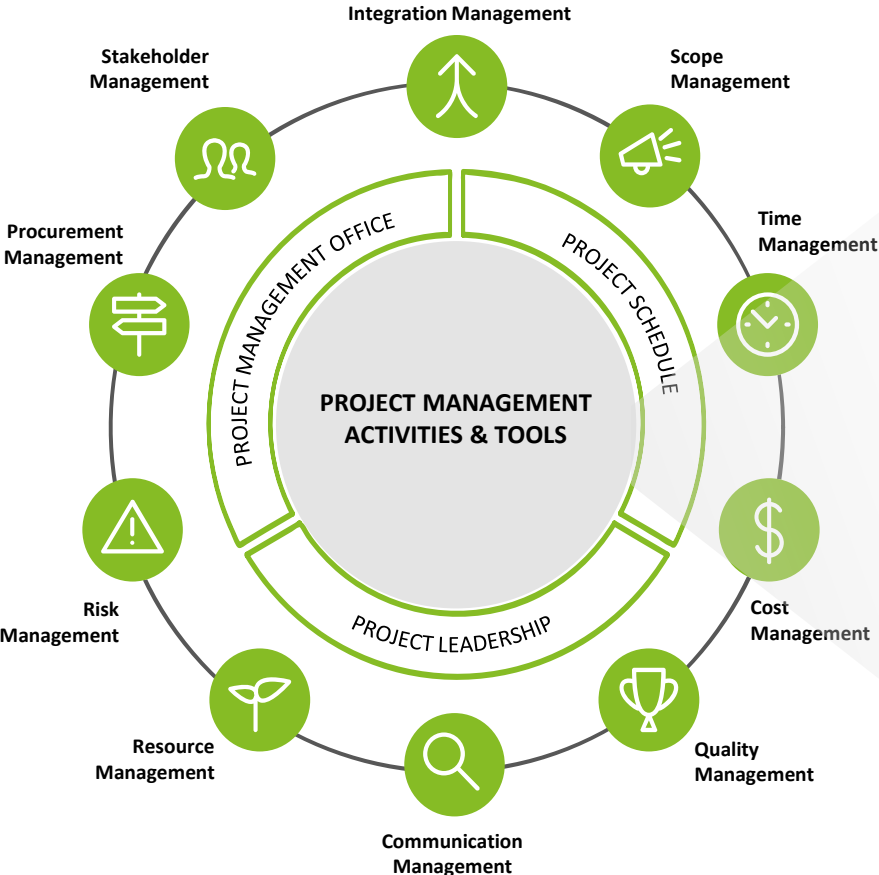


To facilitate the success of the Ameren engagement, we will anchor our project management around 4 key areas:

<p>Measurable goals</p> <ul style="list-style-type: none"> Clearly defined milestones, Exit Criteria and Definition of Done KPIs to track weekly progress against the defined milestones 	<p>Transparency</p> <ul style="list-style-type: none"> Clear and proactive communication on Risks and Issues Transparent review process of all technical work and artifacts 	<p>Agility</p> <ul style="list-style-type: none"> Mitigation strategies for Issues to minimize impacts on schedule Adapt to alternative approaches/ replanning to meet end goals 	<p>Documentation</p> <ul style="list-style-type: none"> Clear documentation of all technical artifacts Track review and approval of all documentation through Jira
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Project Management Governance

Furthermore, we believe that strong project governance – combined with a collaborative approach to stakeholder management and alignment – are essential to success



Integration management	<ul style="list-style-type: none"> • Project organization and governance • Standard processes for issues, action items, change requests, and decisions
Scope management	<ul style="list-style-type: none"> • Requirements management • Change control • Deliverable tracking and acceptance
Time management	<ul style="list-style-type: none"> • Work planning and schedule tracking • Time sheets and critical path monitoring • Work Plan analysis and re-planning
Cost management	<ul style="list-style-type: none"> • Project performance tracking and management • Earned value capture and reporting • Work Plan and baseline updates
Quality management	<ul style="list-style-type: none"> • Deliverable reviews, sign-offs, and acceptance • Quality assurance and quality support
Communication management	<ul style="list-style-type: none"> • Communication planning and execution • Project health and status reporting
Resource management	<ul style="list-style-type: none"> • Project staffing and resource management • Onboarding and offboarding • Training, policies, and compliance
Risk management	<ul style="list-style-type: none"> • Identify and analyze risks • Plan proper risk responses • Risk mitigation, monitoring, and control
Procurement management	<ul style="list-style-type: none"> • Client contract management • Subcontractor management • Vendor management
Stakeholder management	<ul style="list-style-type: none"> • Stakeholder engagement and sponsorship

Section 5 – Project Delivery Approach

Approach and Pillars

Deloitte will deliver an agile approach focused on data collection, analysis and validation to produce the final report for the Washington Legislature. This approach will address four key pillars of AAM integration into the state transportation systems of infrastructure, funding, policy and ecosystem coordination -- as well as accompanying challenge areas such as safety, public acceptance, and regulation adherence.

1 Data Collection

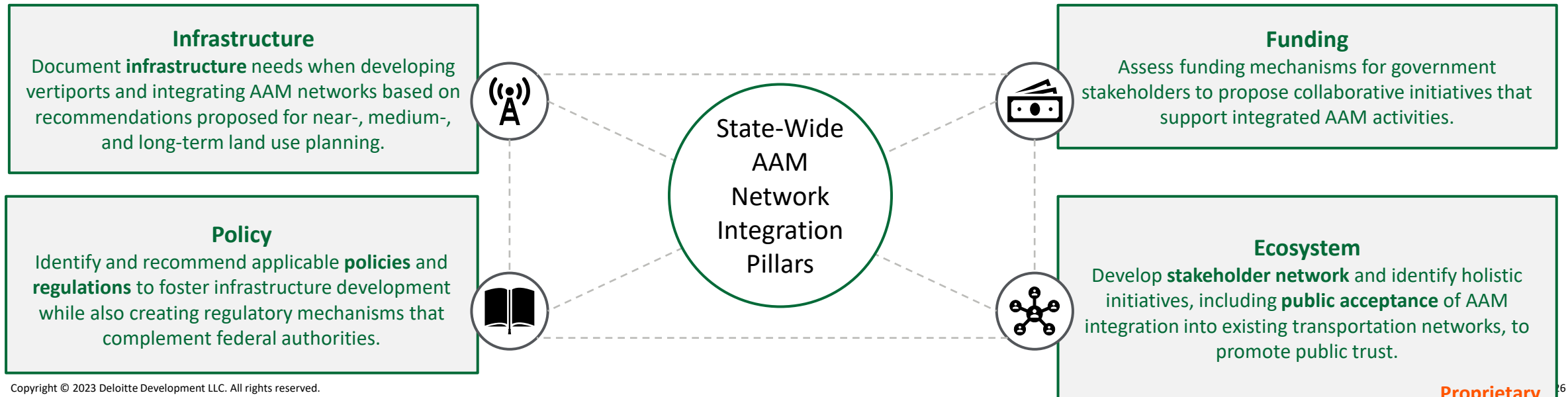
- Develop foundational knowledge through research, internal knowledge assets/advisors and external interviews to create an AAM baseline in Washington

2 Analysis and Synthesis

- Analyze data collected in phase 1 and current policies in place to identify gaps and build strategies accordingly
- Develop near, short-term and long-term considerations for Washington

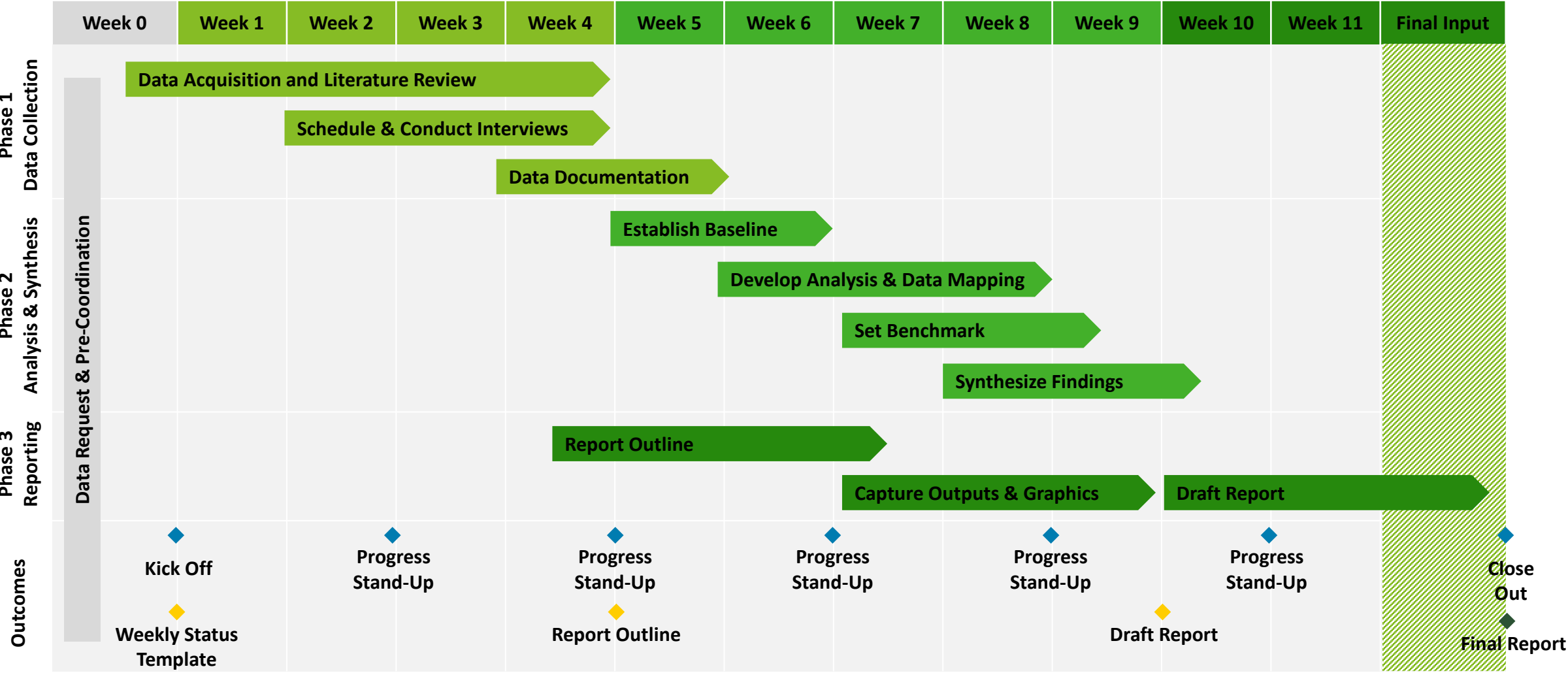
3 Validation and Review

- Determine resources and next steps for program development
- Validate synthesis and recommendations with Washington State, and refine as necessary to finalize report



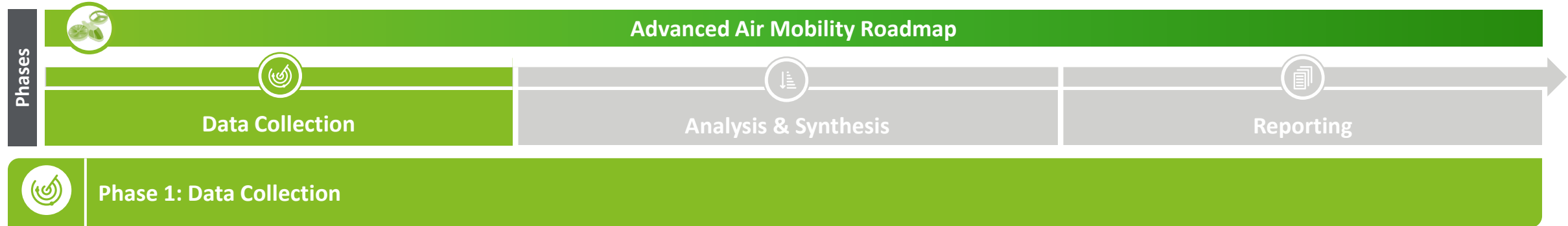
Project Timeline

Deloitte will conduct a 3-phase approach for the development of the Roadmap, which will be referenced as the Final Report



Key: ◆ Meeting ◆ Work Product ◆ Deliverable [Hatched Box] Final Input week may not directly follow the preceding week

Phase 1: Data Collection – Approach Deep Dive



Phase 1: Data Collection

- Kickoff Meeting
 - Introduction of team members
 - Align on work plan and deliverables
 - Confirm and establish communication protocol
 - Provide bi-weekly update template
- Data Acquisition & Literature Review
 - Review client provided documents
 - Define search terms and limits
 - Conduct search through a range of appropriate search terms
- Schedule Interviews
 - Identify key stakeholders relating to AAM integration
 - Develop interview templates and questions
 - Coordinate with WSDOT on additional key stakeholders
 - Schedule & conduct interviews
- Data Documentation
 - Categorize previously collected data
 - Map to integration pillars
 - Develop Report Outline with initial layout and section headings



Assumptions

- WSDOT will provide the current Transportation Planning Documents
- WSDOT will identify key personnel names, roles, responsibilities and contact details



Outcomes

- Work Product(s) & Meetings
- Bi-weekly status template
 - Kick off conference and presentation
 - Interview Materials
 - Categorization of data collection based on the four (4) integration pillars for AAM
 - Initial Report Outline with section headings

Phase 2: Analysis & Synthesis– Approach Deep Dive



Phase 2: Analysis & Synthesis

- Assess
 - Confirm key drivers, priorities, initiatives, and identified AAM use cases
 - Update current AAM initiatives efforts and market assessment
 - Establish method to capture current AAM assets within the State and regionally
- Establish Baseline
 - Starting point for an analysis will be to define and construct an appropriate baseline
 - The baseline will be based on four (4) elements: Infrastructure, Policy, Ecosystem, and Funding
- Set Benchmark
 - Establish a target state with representative outcomes
 - Identify capabilities necessary to achieve target state
 - Map the benchmarks including gaps based on the four (4) elements
- Synthesize Findings
 - Review of initial preliminary outcomes relating to land use planning, infrastructure inventory, state governance structures, and recommendations for integration of AAM



Assumptions

- No further interviews will be conducted, unless mutually agreed upon
- WSDOT to share any relevant documents relating to aerospace and AAM assets, including but not limited to: Airports, Aerospace & Defense companies, Air Carriers, Passenger and Cargo movement, and funding.

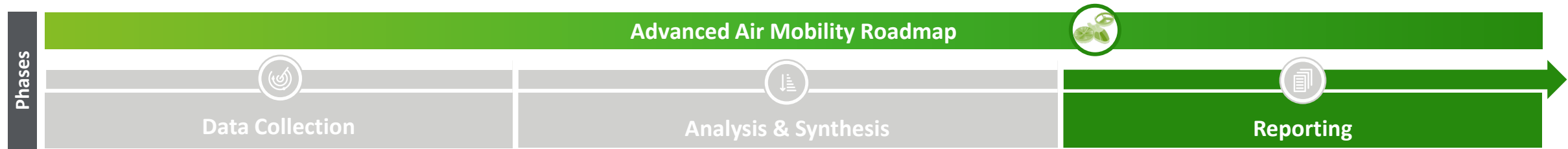


Outcomes

Work Product(s) & Meetings

- Mapping and Analysis of the four (4) integration pillars with preliminary recommendations
- Draft of Initial Draft Report

Phase 3: Reporting– Approach Deep Dive



Phase 3: Reporting

- Prepare Draft Report & Close Out Meeting
 - Update draft report with key stakeholder’s input and feedback
 - Develop Agenda for Close Out Meeting
 - Identify participants and attendees
- Develop Graphics & Publication Plan
 - Establish look and feel of the Final Report
 - Coordinate on publication plan with WSDOT
- Prepare Final Report & Close Out Meeting
 - Structure and format content into its final format
 - Conduct quality assurance and finalize revisions

Assumptions

- Final feedback and proposed edits provided to Deloitte two weeks prior to Close Out meeting

Outcomes

- Work Product(s) & Meetings
- Close Out Meeting Materials
- Deliverable
- Final Report centered around the four (4) integration pillars for AAM and recommendations



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