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A Strategic Roadmap for the Development of Advanced Air Mobility



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Acronym Definitions

AAM Advanced Air Mobility **ACEA** Atlantic County Economic Alliance ACY Atlantic City International Airport **ATC** Air Traffic Control **ATM** Air Traffic Management **BVI OS** Beyond Visual Line of Sight **CAGR** Compound Annual Growth Rate **eVTOL** Electric Vertical Take-off and Landing FAA Federal Aviation Administration **GDP Gross Domestic Product hVTOL** Hybrid Vertical Take-off and Landing NARTP National Aerospace Research and Technology Park NAS National Airspace System NIDOT New Jersey Department of Transportation NJEDA New Jersey Economic Development Authority **NUAIR** Northeast UAS Airspace Integration Research Alliance OFM Original Equipment Manufacturer **0&M** Operation and Maintenance PMO Program Management Organization PPP Public-Private Partnership R&D Research and Development RAM Regional Air Mobility **RFP** Request for Proposal ROI Return on Investment SITA South Jersey Transportation Authority UAS **Uncrewed Aircraft Systems** UAV Uncrewed Aircraft Vehicle UTM Uncrewed Aircraft System Traffic Management **VLOS** Visual Line of Sight **VTOL** Vertical Take-off and Landing

Executive Summary

Advanced Air Mobility (AAM) is a step-change in aviation technology and innovation that can revolutionize the way people and cargo move throughout the United States, while transforming the global economy. In the U.S. alone, the AAM market is estimated to reach \$115 billion annually by 2035, employing more than 280,000 high-paying jobs.¹

Today, many state and local governments are recognizing the benefits AAM can provide to their communities and economies. States that enable safe, sustainable, and scalable AAM deployment can become national leaders within the U.S. market. One such state that is currently positioned to become a leader in AAM is New Jersey.

New Jersey's proximity to major cities, such as New York City and Philadelphia, makes it an economically viable location for the early adoption of AAM. New Jersey also has a unique combination of aviation assets and accelerators, such as the FAA William J. Hughes Technical Center, a designated Smart Airport Test Bed Facility at Atlantic City International Airport (ACY), as well

as the National Aerospace Research & Technology Park (NARTP). Collectively, these assets, as well as the surrounding one-mile area, constitute New Jersey's first and only officially recognized Aviation District, located in Atlantic County.² This Aviation District and partnerships with organizations, such as NASA and the U.S. Air Force Air Mobility Command, bring strong expertise to key AAM-related research fields such as safety, energy storage, electric propulsion, sensors, and smart infrastructure. NARTP is well positioned to facilitate strategic alignment of interests between the Aviation District, partnerships, and private industry. AAM will provide New Jersey with a unique opportunity to develop an Aviation Innovation Hub in Atlantic County that builds on unique institutional assets found nowhere else in the world. By leveraging those assets in a region with a relatively lower barrier to entry, New Jersey can launch and accelerate AAM industry development in Atlantic County that would expand across the state. The advancement of AAM offers a once in a generation opportunity to build and strengthen the state's research

and development capabilities, which is consistent with Governor Murphy's economic development strategy to reestablish New Jersey as a leader in technology and innovation.³

Enabling AAM in New Jersey would unlock several economic, environmental, and societal benefits for the state. Establishing and growing an AAM industry in the state is projected to create almost 26,000 jobs in New Jersey over 15 years, which would generate an additional \$152 million in annual state tax revenue.4 AAM also has the potential to reduce carbon emissions and noise pollution in New Jersey; AAM aircraft will likely be electric, or hybrid powered, and some prototypes are already almost 100 times quieter than helicopters during take-off and landing.⁵ Lastly, AAM would improve the quality of life for New Jersey residents by providing a safe, affordable, accessible, and equitable form of transportation for cargo and passengers, connecting historically underserved communities with essential goods and services.

Economic Benefits of AAM



Create Jobs

25,679 NEW JOBS created **IN NEW JERSEY** over 15 years by enabling the AAM industry.

Increase Tax Revenue

OVER \$150M ANNUAL STATE TAX REVENUE generated by AAM-related jobs at the end of 15 years.

Environmental Benefits of AAM



Reduce Emissions

by **6,000KG of CO₂ DAILY FOR EVERY 1,000 PASSENGERS** that use AAM transportation.

Reduce Noise

AAM aircraft are estimated to be **100 TIMES QUIETER** during take-off and landing compared to traditional aircraft.¹

Societal Benefits of AAM



Efficient Transportation

for over **22 THOUSAND DAILY COMMUTERS** & **27 MILLION ANNUAL VISITORS** to Atlantic City.

Increase Access & Equity

AAM provides **THREE TIMES GREATER ACCESS** to jobs, food, and healthcare than conventional public transportation.

To realize the benefits that AAM would bring across the state, New Jersey needs an executable strategy to develop and mature the AAM industry and market. As such, NARTP retained Deloitte Consulting to develop a Strategic Roadmap that introduces AAM capabilities, highlights AAM market opportunities for New Jersey, identifies key drivers for developing a successful AAM state-wide program, and provides an integrated strategy and recommendations in a multi-phased approach to enable AAM in New Jersey.

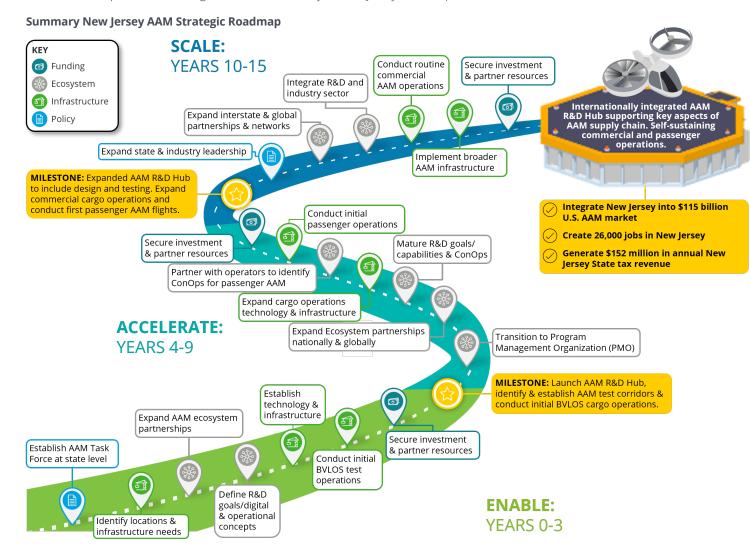
The strategy focuses on the current needs of the emerging AAM market, such as research, development, and testing, while

creating the conditions to support a more mature market through increasing levels of operational complexity.

The Strategic Roadmap provides recommendations, summarized below, for NARTP to serve as a catalyst for AAM innovation in New Jersey, building on the state's unique assets and location. The recommendations are separated into three phases – Enable, Accelerate, and Scale. These phases support increasing levels of research and operational complexity consistent with FAA's "crawl, walk, run" framework. The recommendations address the infrastructure, policy, funding, and ecosystem that are necessary for New Jersey to develop a robust

and sustainable AAM market along the three phases. An example of this would be creating positions and units dedicated to developing aviation innovation and R&D within the New Jersey Department of Transportation, New Jersey Economic Development Authority, and the South Jersey Transportation Authority.

While the AAM industry is still emerging, New Jersey should act swiftly to build momentum toward the development of AAM to position itself as a national leader. A failure to act quickly and decisively may result in a lost opportunity as other states make significant investments in AAM development and infrastructure.



Introduction

Advanced Air Mobility: The next big inflection in the aerospace industry's ongoing evolution.

Advanced Air Mobility (AAM) encompasses a range of cutting-edge technologies that offer the potential for safe, sustainable, affordable, and accessible mobility. AAM aircraft leverage hardware and software for communications, surveillance, ground controls, and other support equipment to enable a new dimension of flexibility, accessibility, and autonomy that traditional crewed aircraft cannot perform.

AAM will integrate air travel as part of day-to-day transportation, whether through delivery of goods in urban environments, linking rural areas to population centers through passenger and cargo mobility, or a new mode of passenger travel within cities and regions.

AAM aircraft are being developed to be

quieter than current aircraft and run on electric or hybrid-electric power, offering a "green" alternative to traditional transportation methods, and reducing the impact of noise pollution and emissions on the environment.

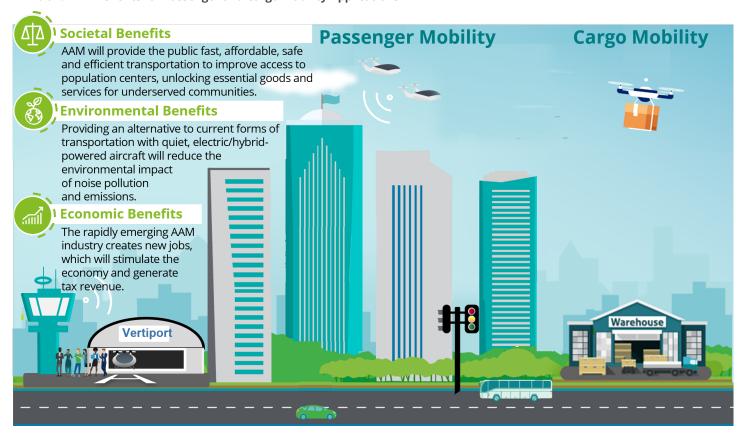
AAM technologies are rapidly evolving, offering new capabilities yet to be implemented. The limitless potential and many benefits of AAM (Exhibit 1) have piqued the interest of governments around the world; a recent Deloitte study found that achieving AAM leadership and market share seems to be a priority among the United States, China, Germany, and South Korea.¹ As these countries race to become the global leader in AAM, the AAM market will continue to grow and mature swiftly.

Passenger mobility applications:

Passenger transportation from point
A to point B within the city, from one
city to another, either on-demand or
as a scheduled service.

Cargo mobility applications: Logistics and cargo transportation, B2B (business-to-business), services from one city to another, and from point A to point B within the city as well as B2C (business-to-consumer) last-mile package delivery.

Exhibit 1: AAM Benefits for Passenger and Cargo Mobility Applications



A booming market: the AAM market in the United States is poised to grow sevenfold, reaching approximately U.S. \$115 billion by 2035.

Globally, AAM vendors from the aviation industry and non-traditional startups are delivering innovative and disruptive capabilities at a significant rate. AAM technologies represent new and extended business opportunities for companies operating across the aircraft manufacturing, infrastructure, supply chain, fleet management, and software spaces. In addition to the commercial utility these technologies provide, many aspects of AAM may have a dual use with military applications as well, driving the demand for AAM even further.

2021 was a milestone year for the AAM market as electric vertical takeoff and landing (eVTOL) aircraft companies witnessed almost \$6 billion in investments, an increase of \$1.5 billion compared to the total \$4.5 billion in investments between 2010 and 2020. According to Vertical Flight Society, approximately 600 eVTOL aircraft concepts and designs are being developed by about 350 companies worldwide.⁶

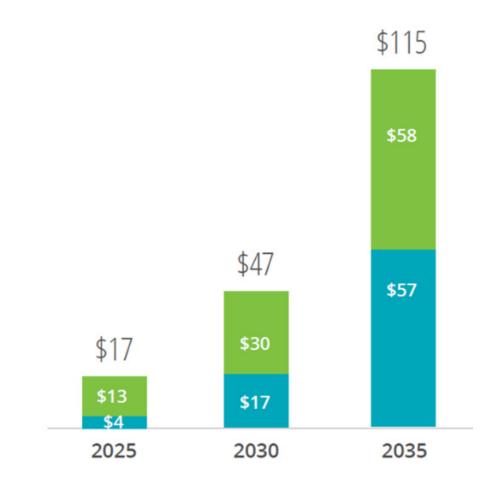
Within the AAM market, two applications are leading the way: cargo mobility and passenger mobility. While the cargo mobility market will likely be the first to grow and achieve scale, the passenger mobility market is expected to start slowly but catch up and exceed the former beyond 2035.

In the U.S., the AAM market for passenger and cargo mobility is projected to reach \$115 billion by 2035 (Exhibit 2). The need for AAM jobs will grow with the demand for these markets

In the U.S. alone, the AAM market is estimated to create more than 280,000 high-paying jobs by 2035, generating \$8 billion in tax revenue.¹

Exhibit 2: Projected US AAM Cargo & Passenger Market (in billions of USD)

■ Passenger AAM market
■ Cargo AAM market



The tax revenue from AAM related jobs will continue to increase over time for state and local governments. In fact, several states are taking notice of the economic benefits that come with participating in this projected \$115 billion market. However, to unlock the economic benefits of AAM, states will need to work strategically to attract and mature the AAM industry.

Enabling AAM technologies and maturing the industry will occur faster in states that

offer incentives, lower barriers of entry, and supporting assets that are already in place. One such state that is currently positioned to become a leader in AAM is New Jersey.

States that enable safe, sustainable, and scalable AAM deployment will become national leaders within the U.S. market.

New Jersey: A Future Leader in AAM

Uniquely positioned to drive AAM growth and innovation nationally, starting in Atlantic County

New Jersey's proximity to major cities, such as New York City and Philadelphia, make it an economically viable location for the early adoption of AAM. This viability lies in the demand from workers commuting daily from New Jersey to surrounding major cities. A Census report determined that New Jersey has more residents traveling out of state for work than any other state in America. While this demand provides the need for New Jersey to become an early adopter of AAM to improve regional transportation and alleviate traffic congestion, the state has many assets that can be leveraged to accelerate the development of the AAM industry.

New Jersey has long been known for strong academics, ranking second in the U.S. in public education and creating an environment that has more scientists and engineers per square mile than any other location in the U.S.8 In 2019, the state's economy employed 4.33 million people, the largest of the industries being elementary and secondary schools. This foundation has created a strong cast of academic institutions across New Jersey to support the AAM industry, both through research partnerships and workforce development programs. An example of this would be an institution in New Jersey that is researching and assessing the operational capabilities of communications and mapping sensors aboard Uncrewed Aircraft Systems (UAS) aircraft.9

New Jersey also has a supportive government eager to set the state on a path towards a stronger future, with innovation at the forefront. Governor Murphy's economic development strategy seeks to reestablish New Jersey as a leader in technology and innovation by creating a diverse innovation ecosystem, while doubling venture capital investment in the state.³ The advancement of AAM offers an unparalleled opportunity to

build and strengthen the state's innovation capabilities and ecosystem to become a national leader in the next generation of mobility.

There are many assets across New Jersey that position the state to play a lead role in AAM. Leveraging those capabilities in a location with a lower barrier-to-entry, such as Atlantic County, can help accelerate AAM industry development for the state.

With several nationally recognized assets and an airspace that supports an increase of AAM operations (Exhibit 3), Atlantic County holds tremendous potential to accelerate New Jersey's AAM capability and industry.

Opportunity for Atlantic County

Atlantic County is home to New Jersey's only officially recognized Aviation District,² which has potential to become a leading destination for research and development of AAM technology. The Aviation District is comprised of aviation assets, such as the FAA William J. Hughes Technical Center, ACY, a designated Smart Airport Test Bed Facility, and NARTP.

The FAA's William J. Hughes Technical Center is a research facility known for advancing the United States National Airspace System (NAS) and sustaining its continued safe and efficient operations. Advancing the NAS includes facilitating the introduction of new technologies into the airspace, which will be key to developing the regulatory framework of AAM through certification requirements for safe, secure, and reliable integration into the NAS, as well as the development and assessment of future detailed concepts of operations and procedures. The FAA's William

J. Hughes Technical Center also has strong partnerships with both public and private entities to accelerate AAM-related testing and research, such as NASA to develop energy storage, electric propulsion and sensors and the U.S. Air Force Air Mobility Command located at Joint Base McGuire Dix Lakehurst to jointly establish pathfinders for smart airports.⁴

ACY provides New Jersey a proving ground for AAM testing in an operational environment. The airport offers Class C airspace, meaning operators can avoid holding patterns, ground stops, and many air traffic control delays that come with Class B airspace in nearby Philadelphia or New York City. ACY is currently operating at only 23% capacity, providing potential to expand operations to include thousands of additional take-offs and landings each year to support AAM development.¹⁰

At the center of Atlantic County's aviation assets is NARTP, a research center right next to ACY that brings together an ecosystem of industry, academia, and governmental partnerships. NARTP is positioned to be the catalyst of AAM advancement in New Jersey by forming strategic partnerships to develop a thriving AAM-focused ecosystem. NARTP's leadership will facilitate alignment across the key stakeholders that comprise the New Jersey and Atlantic County AAM ecosystem, providing a focal point in the state to advocate for the development of AAM.

Economic development groups will foster growth of this ecosystem. The Atlantic County Economic Alliance (ACEA) and New Jersey Economic Development Authority (NJEDA) attract commercial opportunities, businesses and technology innovators that keep New Jersey and Atlantic County at the forefront. The ACEA is exploring the development of an Aviation Training Academy in collaboration

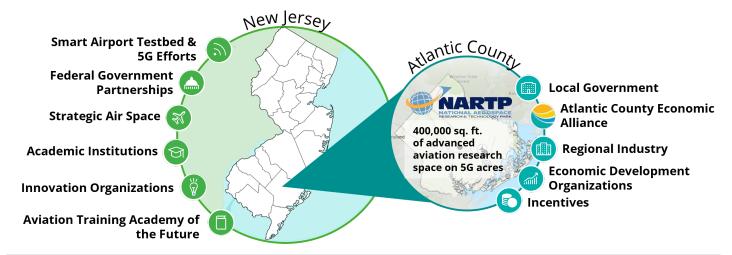
with the U.S. Air Force Air Mobility Command and Embry-Riddle Aeronautical University. The Academy would implement virtual and augmented reality training and the maintenance and repair of UAS and AAM vehicles, which would help develop a workforce to facilitate AAM research and development in Atlantic County.

Surrounding academic institutions, such as Atlantic Cape Community College, will also provide workforce development and training programs needed to support demand over time.

Collectively, these assets provide a foundation for New Jersey to become a leader in AAM.

New Jersey is positioned to be a leader in the development and growth of the projected \$115 billion US AAM market if it leverages its unique research ecosystem, assets, and geographic location.⁴

Exhibit 3: AAM Assets Within New Jersey & Atlantic County's Ecosystem



- Smart Airport Testbed & 5G Efforts
 - ACY, Designated Smart Airport Testbed; Private 5G Network Testing
- Federal Government Partnerships
 FAA, TSA, Air Marshalls, Access to NJ Congressional Delegation
- Strategic Air Space
 Proximity to NYC, Philadelphia, "Air Jitney" Route to Atlantic City
 Opportunity for test flights over water and unpopulated areas
- Academic Institutions
 Embry-Riddle Aeronautical University, Stockton University, Rowan
 University, Atlantic Cane Community, College, Atlantic County,
- University, Atlantic Cape Community College, Atlantic County Institute of Technology
- Innovation Organizations
 National Institute of Aerospace, Smart Airport and Aviation
 Partnership, FlightPlan Aviation Business Accelerator
- Aviation Training Academy Of The Future
 Development in consultation with Embry-Riddle, U.S. Air Force, and
 FAA for Part 147 and UAS and AAM

- Local Government
 Atlantic County and NJ's only "Aviation District"
 - Atlantic County Economic Alliance
 Access to federal, state, and local incentives, workforce
 development and recruiting, permitting and regulatory
 assistance, project facilitation, full economic
 development concierge
- Regional Industry
 Casino/Hospitality Industry, eCommerce/Air Cargo
 Opportunities
- Economic Development Organizations
 ACEA, NJ Economic Development Authority, U.S. Department of Commerce, U.S. EDA
 - Incentives
 Federal Opportunity Zone designation, "Aviation District" tax credits for creating jobs

Project Methodology

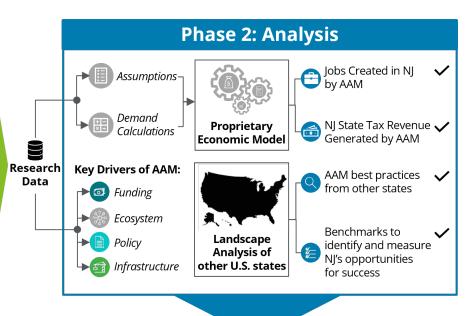
A three-phased approach was conducted to gain a holistic understanding of New Jersey's capabilities, needs, and advantages regarding AAM, as outlined below (Exhibit 4). In Phase 1, data was collected through interviews with New Jersey stakeholders and AAM industry experts, an internal literature review of an AAM industry survey, and secondary research

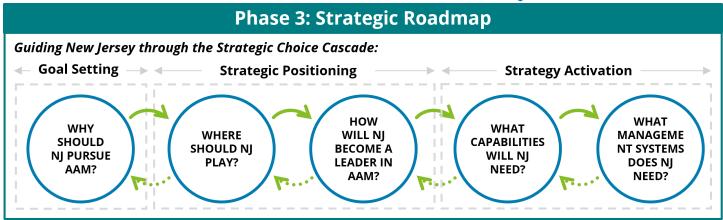
of peer-reviewed sources. The qualitative and quantitative data collected in Phase 1 was organized and analyzed in Phase 2 to understand AAM market opportunities, the economic impact of AAM in New Jersey, and best practices and benchmarks from other states that are exploring AAM. The results from Phase 2 were used to inform a Strategic

Roadmap in Phase 3, which guides New Jersey through the strategic choice cascade and outlines the steps New Jersey should take to become a national leader in the AAM market. The remainder of this report walks through the Strategic Roadmap.

Exhibit 4: High-Level Methodology Outline of AAM Strategic Plan







AAM Benefits for New Jersey

Economic, environmental, and societal benefits

Advanced Air Mobility (AAM) is a step-change in aviation technology and innovation that could revolutionize the way people and cargo move throughout the United States. Today, many state and local governments are recognizing the benefits AAM can provide to their communities and economies. States that enable safe, sustainable, and scalable AAM technologies will become national leaders within the U.S. market and unlock benefits for the economy, environment, and society.

Economic Benefits of AAM Creating Jobs

Imagine a scenario where a person requests an AAM flight as a part of their commute. To enable this trip, software and supporting ride-hailing applications are needed to be developed and managed to receive the trip request. An operator would receive the request through a scheduler who would review fleet availability and finalize the itinerary. Once the trip itinerary is

final, the operator would coordinate with the air traffic authority and controller to ensure appropriate communication to enter the airspace at the designated time. In parallel, groundcrews and technicians prepare the vehicle for departure. Once vehicle preparation is complete, a pre-flight attendant loads any belongings onto the aircraft and addresses customer needs before take-off. These are some examples of the numerous direct jobs that will be needed to enable a single AAM flight. To support AAM demand at scale for long-term sustainability, a range of direct, indirect, induced, and catalytic jobs will be required (Exhibit 5).

As AAM capabilities mature and operations scale, indirect jobs will play a pivotal role in supporting the industry by supplying critical resources in the development of the workforce. This includes maintaining, repairing, and operating the necessary infrastructure to facilitate sustainability and economic viability.

While the AAM industry continues to grow, it will stimulate the growth and development of supporting businesses and services in the region. The employees in these jobs will contribute to the local economy through consumption, such as groceries and transportation expenses, driving the need for those industries to increase capacity to meet new demand. This mechanism, defined as induced job growth, creates further economic impact and benefits for New Jersey.

The final, and potentially most impactful category of jobs that will be created, is catalytic; the growth by tangential industries to support the AAM industry. As the industry matures, the surrounding ecosystem and tangential industries, such as tourism, insurance, legal firms, and real estate will respond to the economic growth observed regionally.

Exhibit 5: Types of Jobs Created to Support AAM

Direct Jobs:

Enable the operation of an AAM flight (air traffic controllers, groundcrew, gate agents, security, etc.)

Indirect Jobs:

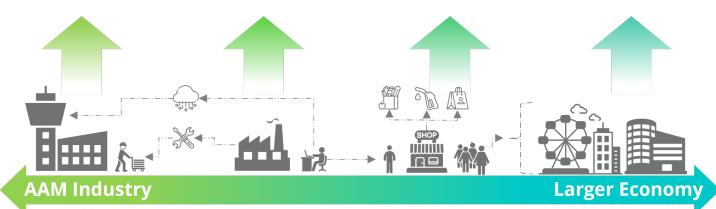
Supply critical components, services, or staffing to support the operation of an AAM flight (software, utility companies, maintenance, etc.)

Induced Jobs:

Create additional revenue through direct/indirect employee consumption (gasoline, groceries, utilities, childcare, etc.)

Catalytic Jobs:

Exist within tangential industries that benefit from AAM operations (Tourism, insurance and legal firms, real estate, etc.)



When analyzing the economic impact of developing a new and innovative mode of transportation, it is clear that AAM has the potential to alter states' economic landscapes through job creation. A proprietary economic modeling tool was used to develop an analysis of economic impact and the total jobs across all four categories that are required to enable and support the AAM operations in New Jersey over a 15-year progression (Exhibit 6). In total, the AAM industry would create over 25,000 jobs in New Jersey over 15 years.4

Taxes from Jobs

AAM also has the potential to significantly impact the economic landscape of New Jersey through tax revenue generated from newly established jobs. The proprietary economic modeling tool estimated the cumulative tax revenue generated from income, property, and sales tax.

This cumulative tax revenue is a projection for New Jersey but has been demonstrated

New Jersey could see almost \$152 million earned annually in additional tax revenue from AAM-related jobs at the end of the 15-year projection.⁴

in other states developing an AAM market. For example, North Dakota employs 175 people directly and 167 people indirectly, and the state has already seen \$19.3 million in tax revenue. This resulted from induced businesses attracted to their UAS test site. New Jersey has the potential to see a similar economic impact through the development of the AAM industry.

Environmental Benefits of AAMReduce Emissions

AAM has the potential to reduce reliance on fossil fuels by serving as an electric or hybrid electric alternative to current transportation methods. This benefit is very relevant and timely, as regions all over the world have set

long-term goals to reduce carbon emissions to zero in an effort to combat climate change.

In 2020, transportation made up 27% of all U.S. greenhouse gas emissions, more than half of this percentage was comprised of light-duty vehicles, such as cars, trucks, and buses. ¹² Consider an average commute from Northern New Jersey to New York City, a duration of about 30 minutes. Each gasoline vehicle will produce around 6kg of CO₂ emissions per trip, compared to an eVTOL which produces zero emissions.

A group of 1,000 AAM passengers (less than 1% of Newark's population) could reduce the total daily CO₂ emission output by 6,000kg, which is the average output that a single vehicle produces annually.¹³

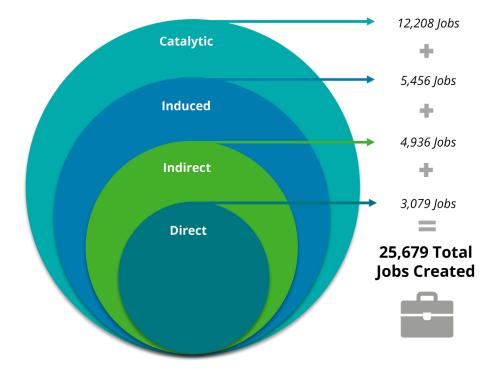
In addition to passenger vehicle impact, AAM also provides a more environmentally friendly alternative to traditional cargo transportation methods such as airplanes and delivery trucks. The demand for fast, efficient cargo delivery is rapidly increasing, as the World Economic Forum forecasts that e-commerce distribution volumes will continue to rise.¹⁴

AAM usage of electric and hybrid VTOL aircraft would reduce the number of ground-based passenger and cargo delivery vehicles in operation, improving air quality and decreasing reliance on fossil fuels.

Reduce Aircraft Noise Pollution

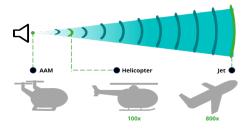
Another less commonly discussed environmental issue is noise pollution caused by airplanes and helicopters, which AAM aircraft manufacturers have highlighted, placing significant emphasis on the reduced noise of their aircraft. For example, one claim has been made that an eVTOL can be 100 times quieter than a helicopter during takeoff and landing and audibly unnoticeable

Exhibit 6: Breakdown of Total AAM Jobs Required over 15 years per Category



while cruising at max elevation,⁵ as shown in Exhibit 7 below.

Exhibit 7: Comparison of noise generation per aircraft during take-off and landing



This feature aims to lessen the disturbance caused to residential areas situated closely to airports and helipads. Atlantic City residents near the regional airport have voiced their concerns about this problem numerous times in recent history. In one situation, a mother complained that her son would be regularly frightened by the loud planes taking off and landing over their house.¹⁵

AAM has the potential to deliver many benefits to states, cities, and communities where traditional crewed aviation cannot through the implementation of innovative technology that has less impact on the environment.

Societal Benefits of AAM

Efficient Transportation

While AAM has been touted as positively impacting our economy and environment, the technology has the potential to significantly impact the quality of life of entire communities. One ever-growing issue that could be improved by AAM is traffic congestion.

In 2020, each driver in the Mid-Atlantic (specifically South New Jersey, Philadelphia, Delaware, & Maryland) wasted an average of 37 hours sitting in traffic (37% higher than the national average of 27 hours).¹⁶ Atlantic County specifically suffers from this problem due to its heavy commuting presence. The current number of people who commute and live outside of Atlantic City (22,000) is double the number of noncommuters who both live and work in the city (11,000).8 This means there is already a heavy reliance on daily long-distance commutes translating to a larger loss of time for those involved.

At an average cruise speed of 150mph,¹⁷ a trip from Philadelphia to Atlantic City with AAM could take as little as 25 minutes compared to the typical 1.5-hour car commute.

AAM has the potential to alter the way our population travels daily, providing more useable time and reducing costs associated with its impact.

Access and Equity

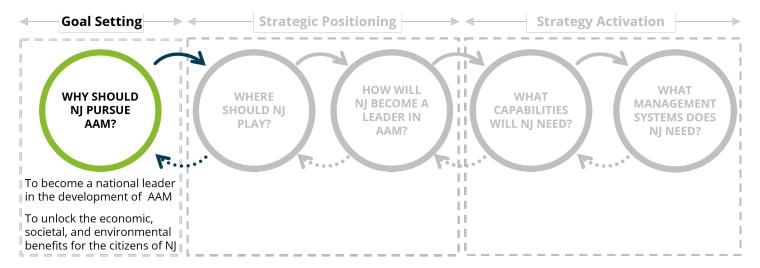
The success of AAM will not only be predicated on how quickly people move from point A to point B, but also on how accessible and affordable it is for all citizens in the region rather than an exclusive, luxury option. For residents and families who live in disadvantaged

communities and impoverished areas, this new form of transportation could unlock a world of accessibility that previously seemed impossible. The Atlantic City Stakeholder Report identified limited public transportation as one of the city's weaknesses.18 This lack of transportation restricts access to employment opportunities, contributing to unemployment rates and societal dissatisfaction. An AAM program would give people in the community access to the same resources or opportunities through a new mode of travel, while recognizing individual circumstances to create equitable solutions for those resources and opportunities to be reached. Opportunities such as access to new areas to work, shop, and live, stimulating the local economy and leading to improved growth. Exhibit 8 depicts the three-times-greater access that is possible through AAM compared to traditional ground-based vehicle travel.

Exhibit 8: Comparison of Accessibility with AAM versus Traditional Transportation



This section highlighted the potential economic, environmental, and societal benefits through developing the AAM market within the state to answer the question, "Why should New Jersey pursue AAM?" The following section will develop key themes to strategically position New Jersey in the AAM market to answer the question, "Where should New Jersey play?"



Where to Play

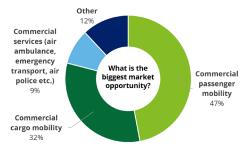
AAM market opportunities for New Jersey and where to start

A survey of 100+ industry, government, and academic organizations in the AAM industry¹ along with 30+ targeted interviews of subject matter experts and New Jersey stakeholders⁴ were analyzed to identify trends, challenges, and priorities for AAM. These trends will help inform New Jersey on which AAM applications and capabilities the state should target to participate in the growth and maturation of the projected \$115 billion AAM market.

AAM Market Opportunities

Exhibit 9 shows which AAM market opportunities survey respondents believe are the most significant.

Exhibit 9: Breakdown of Biggest AAM Market Opportunity by Survey Response



According to AAM industry players, commercial cargo mobility and passenger mobility are expected to be the biggest near-term market opportunities in AAM.¹

However, adoption curves are expected to differ due to safety, societal, and operational considerations. Cargo mobility is expected to have greater near-term adoption than passenger mobility due to the lower psychological barriers and fewer regulatory challenges.

Passenger mobility could build on capabilities developed and proven through success of transporting cargo including

advances in autonomy, remote piloting, secure communications, detect and avoid capabilities, and ground infrastructure.

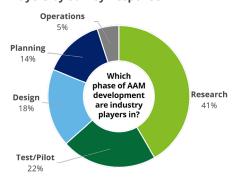
Where to Start

AAM capabilities for cargo and passenger mobility applications are being developed using a crawl-walk-run approach to ensure they are demonstrated safely at increasingly levels of complexity.

R&D is expected to remain a priority for the AAM sector as it matures from initial operations to scaled operations that are a routine part of transportation and logistics networks.

The ultimate objective of safe, scaled commercial operations that are fully integrated into air and ground transportation systems relies on extensive R&D. As shown in Exhibit 10, the majority of survey respondents are still in various phases of research and development, while only 5% of respondents are working in operations.¹

Exhibit 10: Breakdown of AAM Industry Players by Survey Response



Prioritizing Safety and Reliability

As the AAM industry increases technology and operational complexity through R&D, the regulatory environment is also evolving quickly to ensure that safety and reliability remain the top priorities. As shown in Exhibit

11, the majority of survey respondents identified regulation and certification, and safety and reliability as the biggest challenges for passenger and cargo mobility.¹

Exhibit 11: Biggest AAM Challenges by Survey Response

Passenger mobility





Cargo mobility





Entities that continuously meet evolving AAM regulatory standards to ensure safety and reliability will emerge as leaders in the industry.

To do so, advanced R&D facilities and technological capabilities will be needed.

Key Technology and Capabilities

In targeted interviews with New Jersey stakeholders and AAM industry experts, several technologies and capabilities were identified as priorities to enable AAM in a safe and reliable manner and meet regulatory standards, such as Beyond-Visual-Line-of-Sight (BVLOS) flight, AAM Test Beds and Corridors, and a Digital Twin.⁴

BVLOS

AAM encompasses crewed, uncrewed, and/or autonomous flight. One of the first steps towards commercial uncrewed flight operations is establishing remotely-piloted flights. Durrently, remotely-piloted flights are restricted to within visual-line-of-sight (VLOS), with the exception of obtaining a waiver from the FAA. This means the pilot on the ground must be able to see the aircraft at all times, which restricts flights to a very small radius. A current priority across industry and the FAA is to enable beyond-visual-line-of-sight (BVLOS) flights, meaning the pilot on the ground

does not need to see the aircraft during flight (Exhibit 12).²⁰ BVLOS unlocks a variety of benefits and uses, while also introducing more operational complexity that builds toward increased capability and maturity.

Exhibit 12: BVLOS Flight

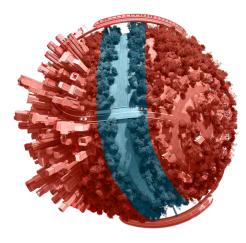


AAM Test Beds and Test Corridors

Early phases of AAM R&D focus on small-scale operations, often in environments with minimal physical obstacles and ideal conditions. As AAM technological capabilities mature, testing will need to be conducted in environments that simulate real-world conditions and larger-scale operations. To enable this, test beds all over the U.S. are being stood up in

coordination with the FAA.²¹ Leading test locations have facilities that support advanced testing such as BVLOS and autonomous operations and offer environments that can simulate a range of weather conditions, geographies, and population densities.²² For larger-scale and longer-range testing, AAM corridors are also being established, which are sections of airspace approved by the FAA for BVLOS testing and uncrewed aircraft operations (Exhibit 13).

Exhibit 13: AAM Test Corridor



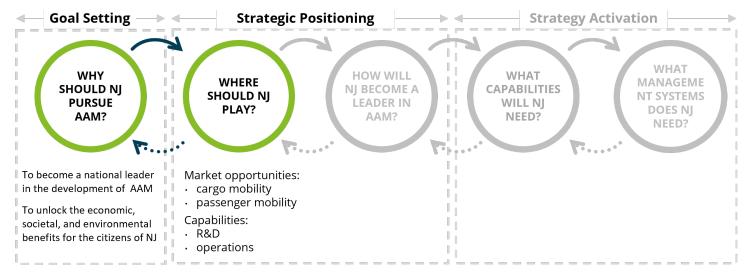
Digital Twin

One way to minimize risk and cost of AAM testing is with digital tools to simulate and test AAM in a virtual environment (Exhibit 14). This virtual environment is designed to be identical to a real environment through the use of extensive data, creating a "digital twin" of the real environment. A digital twin can generate an operational environment that offers endless capabilities such as performing AAM simulations, assessing risk, and evaluating impact of AAM on the environment.

Exhibit 14.: Digital Twin



This section highlighted market opportunities, where to start, and key technologies and capabilities to consider, which answers the question, "Where should New Jersey Play?" The following section will develop key themes to strategically position New Jersey in the AAM market and answer the question, "How will New Jersey become a leader in AAM?"



How New Jersey can become a Leader in AAM

Preparing New Jersey for the Future

New Jersey and Atlantic County have an opportunity to develop and grow the emerging AAM market through the advancement of R&D and operational capabilities for commercial passenger and cargo operations. While this opportunity has the potential to transform New Jersey's role in the next generation of mobility, the path to success will be shaped by the state's priorities and direction.

Four Key Drivers for AAM Success

20+ targeted interviews of AAM leaders, subject matter experts, and New Jersey stakeholders were conducted and analyzed to understand New Jersey's current standing and identify key drivers towards the successful development of an AAM R&D environment and commercial operations capability. From these interviews, the following pillars shown in Exhibit 15 emerged as key drivers to enable the AAM market in New Jersey:

Funding

80% of interviewees communicated a need for dedicated funding either through financial support, incentives, or grants from federal, state, and local governments for AAM related activities and endeavors to create a successful AAM industry. While the AAM industry is still emerging, funding has played a vital role in maturing AAM aircraft technology to the current state, and this will be similar for states' capabilities to enable AAM.

"For New Jersey to become a leader in AAM, the state and local governments need to make an investment in this space and not just rely on industry. There is a lot of opportunity here for economic development, so an investment in AAM would have a large impact and a substantial ROI."

Ecosystem

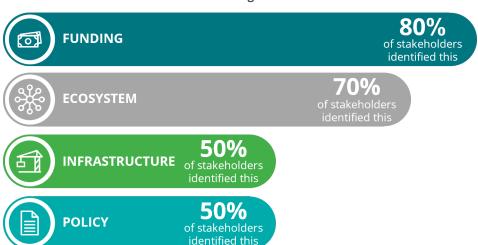
70% of interviewees highlighted the need for a diverse and collaborative ecosystem across the region and state to enable AAM. As the AAM industry continues to mature, the ecosystem required to enable, accelerate, and sustain AAM capability will also expand. This network of organizations within the state across academia, private industry, federal and state government will collaborate and play a unique role in the development of AAM capability that generates distinct benefits for each stakeholder.

"Economic development is an ecosystem play. New Jersey is more likely to attract companies if there are other pieces of their ecosystem puzzle close by."

Infrastructure

50% of interviewees identified infrastructure as a key driver towards the successful development of an AAM R&D environment and commercial operations capability. A network of technologies (e.g., hardware, software, aircraft), systems (e.g., cybersecurity, communication, command and control networks, data sharing platforms) and supporting structures/facilities (e.g., radars, weather sensors, vertiports, maintenance centers) are needed to enable safe AAM R&D and operations. Many interviewees emphasized the need to first identify and leverage current infrastructure within the state that can support AAM R&D and operations. As AAM technologies and capabilities continue to develop and mature, the state will need to build the proper infrastructure to support them.

Exhibit 15: Drivers for AAM Success from Targeted Interviews



"New Jersey already has many aviation assets and infrastructure to serve as a foundation for AAM, but we need to connect the dots and build upon that to support safe BVLOS flight, R&D efforts, and future passenger/cargo operations."

Policy

50% of interviewees pointed to policy as a key driver towards the successful development of an AAM R&D environment and commercial operations capability. Many leaders in the AAM sector believe the industry's maturation is predicated on the development of policy and regulations that clearly define how this technology will be certified and integrated into our current transportation system. Several interviewees expressed that there are current policies in place that inhibit AAM either because they are outdated or implemented out of fear or misinformation. Interviewees also stated that policies and regulations have been moving slower than AAM technologies have been advancing, which hinders innovation and maturation of the AAM industry.

"There is legislation in New Jersey coming out that may inhibit AAM and scare off potential industry players from coming here. We need to work with our policy makers to inform and educate the public about AAM and the benefits it would bring to everyone, and we need a dedicated group to help shape policy to enable safe AAM operations."

Learning from other States

Several states across the U.S. are considering and pursuing AAM. For New Jersey to become a leader in the AAM space, it is important to identify and evaluate best practices from other states to leverage and build upon. The four pillars of funding, ecosystem, infrastructure, and policy served as assessment criteria in a landscape analysis of other states. The resulting insights from this analysis provide benchmarks for New Jersey to understand how the state compares to others and where to focus its efforts to maximize impact. A summary of the landscape analysis and resulting benchmarks is shown in Exhibit 16 below, highlighting six

states that represent a variety of geographic locations, sizes, demographics and AAM maturity levels:

Exhibit 16: AAM Landscape Analysis & Benchmarks with Example States



Benchmarks:



How can New Jersey get ahead?

The key drivers, best practices, and benchmarks identified for AAM success at the state level provide a framework for New Jersey to become a leader in AAM.

Those key drivers and best practices focus on four pillars: funding, ecosystem, infrastructure, and policy, which drive the successful development of an AAM R&D environment and commercial operations capability.

New Jersey has many unique assets across these areas that should be leveraged to accelerate the maturity of the AAM market across the state and each will play critical roles in the key drivers of funding, ecosystem, infrastructure, and policy, as mapped in Exhibit 18.

New Jersey's Funding Enablers

To seed the growth of emerging markets in New Jersey, economic development groups such as NJEDA and ACEA are actively assisting projects and companies through financial resources, incentives, or programs.

For example, the ACEA received a \$1 million federal economic development grant for projects that focus on planning and feasibility studies regarding AAM to accelerate the development of the industry in Atlantic County and across the state.²³ One example of this is through the exploration of a regional air-cargo and logistics center that leverages AAM to support middle-mile and last mile delivery.

New Jersey's Ecosystem

Ecosystems will play a vital role in supporting and maturing the AAM market near- and long- term to create sustainable mobility options for New Jersey.

Groups within the state, such as NARTP in Atlantic County, are providing leadership in the advancement of AAM by creating an ecosystem of industry, academic, and governmental partnerships to foster innovation, collaboration, and sustainable economic growth. Examples of such partnerships are shown in Exhibit 17.

Exhibit 17: Current State of AAM Partnership Ecosystem within New Jersey



Research Partnership:NARTP has partnered with the FAA and NASA to collaborate on advancing drone technology; eVTOL aircraft operating in low-altitude airspace in urban

Smart Airport and Aviation Partnership (SAAP): SAAP aims to transform Southern New Jersey's innovation ecosystem by providing incubation services, acceleration services, commercialization services, and attracting new businesses. The cluster leverages "smart" infrastructure for airport and aviation applications.

New Jersey's Infrastructure

A primary challenge to enabling AAM in New Jersey will be the development and installation of the necessary infrastructure. New Jersey has already started a crucial first step by identifying and leveraging current infrastructure within the state that can support and accelerate AAM capabilities; New Jersey has designated an Aviation District in Atlantic County, which is comprised of ACY, a designated Smart Airport Testbed, the FAA's William J. Hughes Technical Center, and NARTP. ACY is currently operating at 23% capacity, offering the potential for expansion and construction of AAM-enabling infrastructure.¹⁰

New Jersey's Policy-Shapers

Two types of policy are critical for AAM:

- Legislation to prioritize, develop, and fund AAM-related activities
- 2. Regulations to clearly define requirements for certification and operations

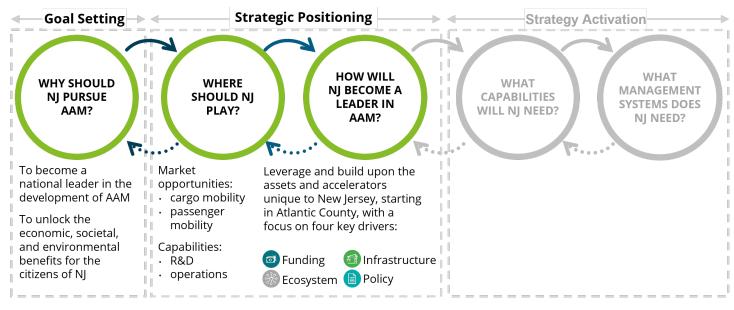
The development of these policies will be the turning point that accelerates the

industry toward commercial operations and scalability. While this will take time, New Jersey has a unique asset in the FAA William J. Hughes Technical Center that can be leveraged to develop key insight around certification requirements for safe, secure, and reliable AAM operations and integration into the NAS.

Exhibit 18: New Jersey's Assets and Accelerators Mapped to AAM Key Drivers

	Key Drivers:			
ASSET	FUNDING	ECOSYSTEM	INFRASTUCTURE	POLICY
SMART AIRPORT TESTBED & 5G EFFORTS			✓	
FEDERAL GOVERNMENT PARTNERSHIPS	✓	✓	✓	✓
STRATEGIC AIR SPACE			✓	
ACADEMIC INSTITUTIONS		✓		
innovation organizations		✓		
AVIATION TRAINING ACADEMY OF THE FUTURE		✓	✓	
E LOCAL GOVERNMENT	✓	✓	✓	✓
ATLANTIC COUNTY ECONOMIC ALLIANCE	✓			
REGIONAL INDUSTRY		✓	✓	
INCENTIVES	✓			
FAA WILLIAM J HUGHES TECHNICAL CENTER		✓		✓
ECONOMIC DEVELOPMENT ORGANIZATIONS	✓			

This section highlighted key drivers for AAM success, best practices and benchmarks from other states, and a framework for New Jersey, answering the question "How will New Jersey become a leader in AAM?" The following section will provide the steps New Jersey will need to take to realize the state's potential, answering the questions that make up Strategy Activation.



The Road Ahead

Realizing the opportunity and benefits of AAM in New Jersey

This section defines an integrated strategy and recommendations to guide New Jersey through the development of AAM, positioning the state to be a leader in the industry.

Strategy

The strategy focuses on the needs of the nascent AAM sector today (research, develop, test) while creating the conditions to support a more mature market (operate at increasing levels of complexity), which were identified through Deloitte's research (Exhibit 19). It aims to create synergies between research and commercial use (research informs commercial applications while information and data from commercial applications drives research), while being anchored on

the principle of generating returns for the citizens and economy of Atlantic County and New Jersey during the process of maturing a new technology from initial viability to scaled operations.

Recommendations

The Strategic Roadmap provides a series of recommendations and potential approaches for NARTP to serve as a catalyst for AAM innovation in the state, building on its unique assets and location. These recommendations can serve as a guide for more detailed implementation plans, investment decisions, and partnership discussions. The recommendations are broken into three phases – Enable, Accelerate, and Scale. These

Establish NARTP as the Catalyst for New Jersey to Develop a Leading Advanced Air Mobility R&D Ecosystem

phases support increasing levels of research and operational complexity consistent with the FAA's "crawl, walk, run" framework.
Each phase includes a target outcome that serves as a north star for that phase (Exhibit 20). Through these phases, NARTP can mature the New Jersey AAM research and development ecosystem and build the conditions for thriving commercial AAM operations that are integrated into the state's broader transportation and logistics networks.

Exhibit 19: Strategic Focus on Both Current and Future AAM Markets

Leading R&D Ecosystem

- Build on NJ's existing assets and industries (e.g., link research centers, academic institutions, logistics hubs, government agencies)
- Align AAM sector needs with NJ's unique capabilities (testing of national airspace technologies, SMART Airport, Port Authority,)

Performance Maturity Focus

- Economic growth & jobs creation
- Work force development
- Access to good & services
- Transportation efficiency

Scaled, Commercial Operations

- Identify and develop safe and secure AAM operational corridors with the potential to support future scaled commercial operations.
- Focus on lower complexity use cases and existing industries (e.g., cargo delivery, operations over water, port/cargo, off-shore industry)

- The early "Enable" phase focuses on establishing the foundational AAM R&D Hub by formally linking existing stakeholders, state assets and expanding partnerships, while at the same time developing corridors with the infrastructure to support initial BVLOS operations with an initial focus around cargo operations.
- As these mature through the "Accelerate" phase, additional partners are added to the research ecosystem, including both national and international partners along with investment toward advanced AAM capabilities (automation, communications, etc.) to support more complex operations. This is accompanied by the development of initial passenger routes in locations that are safe and economically viable.
- These phases and outcomes build to a mature "Scale" phase that supports a thriving commercial ecosystem of AAM innovation in the next generation of technology, as well as AAM operations integrated into local and regional transportation and logistics networks.

 *A summary of this roadmap is provided below with more detailed recommendations for each phase in the following sections.

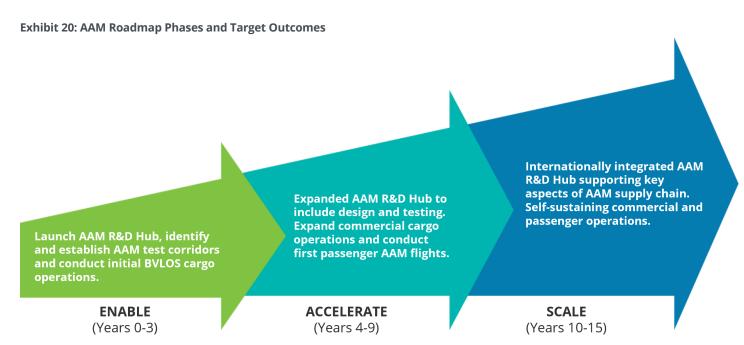
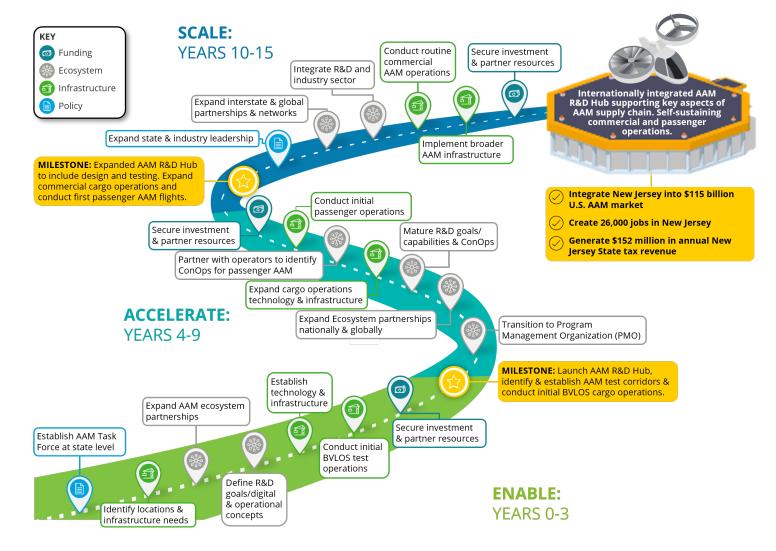


Exhibit 21: Summary New Jersey AAM Strategic Roadmap



ENABLE 0 – 3 YEARS

Launch AAM R&D Hub, identify and establish AAM test corridors and conduct initial BVLOS cargo operations.

Leverage and build regional infrastructure for AAM and BVLOS research and testing: the creation of an AAM task force at the state level will be vital in making sure the correct legislation is in place to begin construction of the infrastructure. Additionally, establishing public-private partnerships, setting up training programs, and identifying AAM technology vendors to grow the industry and workforce will lay the foundation for an ecosystem that can grow over time.

Exhibit 20: AAM Roadmap Phases and Target Outcomes

Recommendation

Potential Methods

Value

Establish State Task Force for AAM



- Establish NARTP as lead organization for an AAM task force including representative stakeholders (e.g., state, federal, industry academia).
- Provide a dedicated team to implement state AAM development / growth.
- Designate or create state units and positions dedicated to developing AAM innovation (e.g., division or formally designated group within NJDOT, NJEDA, SJTA).
- Research shows that states with a focal point to advocated for policy and promote AAM nationally and globally has more favorable legislation and better alignment across the ecosystem.

Identify Locations and Infrastructure Needs



- Formalize partnership agreements between existing aerospace R&D facilities, organizations, and locations with roles and AAM commitments.
- Identify shortlist of potential AAM test corridors with capability to scale for commercially viable operations that link cargo or transit hubs.
- Inventory current R&D and aviation operations infrastructure across locations.
- A network of research and operational assets across New Jersey will establish the initial of AAM Innovation Ecosystem (test beds, research centers/ institutions, commercially viable flight corridors) that supports the AAM industry.

Expand AAM Ecosystem Partnerships



- Establish formal partnerships and roles across stakeholders in NJ AAM Ecosystem.
- Establish new partnerships (industry, states, federal, global) based on AAM research synergies connecting NJ to the national/global AAM sector growth.
- Establish educational and workforce development partnerships integrated with AAM ecosystem.
- Formal partnerships between state AAM Ecosystem stakeholders (R&D centers, test beds, logistics hubs, etc.) and industry will enhance research, operational and workforce development capability.

Recommendation

Develop R&D Goals / Digital &

Operational

Concepts

Potential Methods

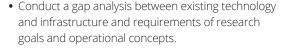
• Develop key roles and objectives for each partner (e.g., advancing air traffic management concepts, testing ground infrastructure, implementing communication and data security, supporting cargo delivery demonstration/test operations).

- Develop a Concepts of Operation and Digital Twin for each potential test corridor to support initial testing and demonstration of flight along with pathway to commercial operations.
- Identify safe and secure technology/infrastructure needs to support research or operational concepts/goals.

Value

- Goals from stakeholders in the NJ AAM Ecosystem will leverage their unique potential within the national AAM sector.
- Baseline Operational Concepts for proposed test corridors (i.e., logistics, passenger operations, BLVLOS) will provide the basis for future technology and infrastructure investments.

Establish Technology and Infrastructure





- Prioritize investment to support priority research topics and support initial BVLOS test operations.
- Identify and secure vendors to acquire and install technology focusing on selected test corridors.
- Develop a data repository to collect and share AAM related digital, operational and test data.
- Validate communication, navigation, surveillance, and information security concepts.

• Installed infrastructure will support AAM research and enable New Jersey to conduct initial AAM test operations with a pathway to commercial operations.

Conduct Initial BVLOS Test Operations

- Develop a safety case and work with the FAA to gain approval for flight operations.
- Identify and secure teams to conduct flight operations.
- Conduct test flights with increasing complexity (shorter flights, visual observers, etc.).
- Conduct BVLOS demonstration flights.

• BVLOS test operations willthat demonstrate viability by linking key logistics/cargo hubs.

and Partner Resources





- Identity state agencies to support/participate in AAM ecosystem development.
- Identify industry organizations to participate in the task force and support initial operations.
- Identify individuals to serve as lead for the NJ AAM ecosystem.

- State and federal investment will be supplemented by key anchor partners in AAM R&D Hub.
- Partner resources will support initial R&D efforts and operations, where practical.

ACCELERATE 4 - 9 YEARS

Expand AAM R&D Hub to include design and testing. Expand commercial cargo operations and conduct first passenger AAM flights.

Begin installing and expanding infrastructure to support cargo and passenger operations, allowing the program to evolve from its beginning state as a research hub. The passing and promoting of AAM policies at the state, local and federal levels through the AAM task force will lead to the dedication of funds towards this growth. The ecosystem will accelerate through the securement of partnerships and vendors to support broader logistics, commercial passenger operations, and cargo operations.

Exhibit 23: Recommendations to Accelerate AAM

Recommendation

Potential Methods

Value

Transition to **Program** Management Organization



- Secure consistent and long-term funding to support a PMO to manage the NJ AAM Innovation ecosystem.
- Identify or establish an organization to manage AAM development, considering an organizational charter, leadership or board, relationship to state aviation groups, and reporting requirements.
- Establish a PMO operating model and performance metrics.
- A separate organization will be responsible for managing and maturing the NJ Innovation Ecosystem (e.g., managing annual budgets, partner agreement, securing state/ federal investment).

Partnerships Nationally & Globally

- **Expand Ecosystem** Develop partnerships with broader NJ industry sectors including innovation, communications, and life sciences.
 - Develop AAM applications and use cases that are additive and/or draw from these industry sectors.
 - Expand partnership with internationally states and
- The ecosystem will expand to be consistent with growth plans, including integration with existing NJ industry sectors and the expansion of national and international partnerships to support NJ AAM growth and development.



- industries nationally in areas there the is mutual benefit or complimentary capabilities.
- Mature R&D Goals and Capabilities, and ConOps



- Coordinate with industry and federal agencies leading AAM research and operational integration to identify key focus areas and needs given the evolving regulatory frameworks or operational capabilities.
- Support research that expands access to AAM (e.g., reduces cost per flight, expands number of routes).
- Research areas will expand in response to industry priorities and evolving national and state regulatory environment.



Recommendation

Potential Methods

Value

Expand Cargo Operations Technology and Infrastructure Concepts

- Mature partnerships with a major cargo hub and operators to develop and expand AAM applications that improve logistics and efficiency.
- Expand AAM infrastructure support a higher volume of routine operations between cargo hubs and/or increase the capabilities of cargo operations (size /weight).
- Build out additional cargo and AAM routes supported by state surveillance and UTM infrastructure.

• Cargo operations will expand beyond demonstration and test flight to support routine operations between cargo hubs and improve access for communities.

Partner with Operators to **Identify ConOps** for Passenger AAM

- Identify locations of high passenger activity and demand (e.g., transit locations) by conducting analyses regarding current transportation patterns and costs.
- Consider potential Regional and Urban Air Mobility (e.g., intra-state and inter-state operations).
- Evaluate existing infrastructure e.g., for landing/take-off, intermodal connectivity, air traffic complexity.
- Evaluate community and environmental requirements and concerns related to new operations.

• Coordination with AAM passenger carriers to explore suitable routes for initial AAM passenger operations will lead to economically viable passenger routes with industry partners.



- Work with operator and FAA to develop and approve AAM routes.
- Support community engagement activities, federal, state, and local regulatory reviews, and approvals.
- The first AAM passenger route will be established, and initial passenger operations will be conducted.



operations

and Partner Resources

- **Secure Investment** Identify initial state level investment to support expansion of state managed AAM infrastructure.
 - Secure expanded industry investment through use of research and testing facilities.
 - Export As a Service Models for commercial AAM operations that use State infrastructure.
- Limited State and Federal investment with increasing proportion of funding generated by commercial industry will provide economic independence for the R&D Hub.



SCALE 10-15 YEARS

Internationally integrated AAM R&D Hub to support key aspects of the AAM supply chain while achieving self-sustained commercial and passenger operations.

Optimize and grow New Jersey AAM infrastructure to integrate with national and international transportation and supply chain operations for expansion to other regions of the country. The maintenance of state-level relationships and funding that will support routine operations beyond state lines, along with expanding the technological capability of the ecosystem at the private level, will be vital in making sure that Atlantic County scales over time to meet the growing demand for regular AAM usage.

Exhibit 24: Recommendations to Scale AAM

Recommendation

Potential Methods

Value

Expand state and industry leadership

Continue to drive growth in NJ AAM Sector though
 PMO



 State entities and other industry groups will support the PMO in maturing the New Jersey AAM industry.

Expand interstate and global partnerships and networks

- Maintain long-standing national and global partnerships for AAM.
- Mature workforce development programs and integrate with academic institutions.
- Expanded national and global partnerships will secure New Jersey's position as a leader in AAM, and will attract investment across the state. .



Integrate R&D and Industry Sector



- Integrate the AAM ecosystem with other major NJ industry sectors as a leader in AAM technology and innovation
- Expand industry develop to support large volumes of operations (i.e., O&M, and other aspect of the supply chain).
- The AAM ecosystem integrated with a broad set of NJ industry sectors will support further development and growth, and evolve to address the supply chain and O&M needs of scaled AAM operations.

Implement Broader AAM infrastructure



- Integrate a network of state and industry-supported infrastructure to enable scaled operations.
- Establish infrastructure maintenance programs and upgrades.
- A network of AAM infrastructure supported and maintained by the state and industry will enable a broad range of cargo and passenger operations.

Recommendation

Potential Methods

Value

Conduct Routine Commercial AAM Operations

• Integrate a network of commercial cargo and passenger operations including small UAS and Large eVTOL.

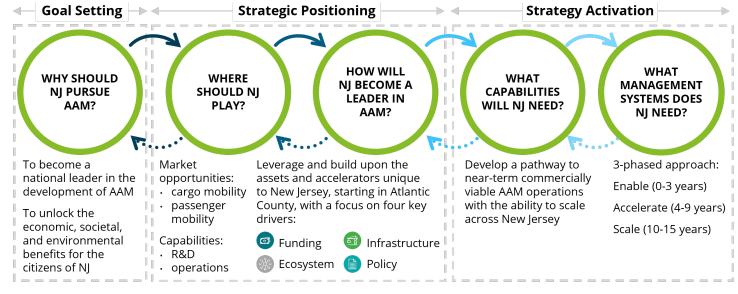
• Commercial operations will grow and scale across the



and Partner Resources

- Secure Investment Establish policies and systems that create revenue streams to finance state AAM infrastructure, such as service fees or "as a service" technology applications.
 - Establish Federal and state programs for investment toward scaling AAM infrastructure.
- · A self-sustaining ecosystem will be established for R&D and commercial operations.

This section highlighted the strategy, near-term focus, and actionable recommendations in a three-phased approach, which answers the questions that comprise the Strategy Activation section of the strategic choice cascade.



Leaving a Lasting Legacy

Considering the Opportunity for New Jersey

New Jersey is poised to solidify themselves as a national leader in the AAM industry by leveraging unique assets established in Atlantic County, existing infrastructure, and favorable capacity for AAM operation and growth.

While AAM holds numerous benefits for the state, obstacles will continue to emerge that could hinder the implementation and integration of this technology. New Jersey should act swiftly to build momentum toward the development of AAM while following a logical, executable strategy to enable operational capability that could lead to significant economic, societal, and environmental impact for the state.

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Acknowledgements

Deloitte thanks the following experts for their insights:

Ray Adams

Chairman & Executive Director, Urban Low Altitude Transport Association (ULTRA)

Don Berchoff

Chief Executive Officer, TruWeather Solutions

Tim Cwik

Division Chair & Assistant Professor – Aviation Studies, Atlantic Cape Community College

Jerome Ferguson

Retired Director of IT, UPS Flight Forward Inc

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