Funding Subcommittee

Texas AAM Committee

Meeting #4, May 1, 2024

Agenda

- TxDOT budget overview – Sara Trott
- Review recommendations with state funding and prioritize
- Refine funding amounts

Recommendation	Funding Amount	Funding Notes	State	Industry	Federal	Timeframe	Priority
Economic Impact Study	$100,000-250,000	25% local match	Y	Y		26-27	
Statewide AAM Plan			Y	Y	Y	26-27	
Data Capture and Analysis			**Y**				
Mitigation of Cybersecurity Risks			Y	Y	Y		
Ancillary Off-airport Infrastructure			Y		Y		
Vertiports at Existing Airports							
Electrical Infrastructure			Y		Y		
AAM Office		**Endorse TxDOT's ask for additional FTEs for AAM**	**Y**			**26-27**	
Vertiport Construction Matching Program	$100,000,000		Y		Y	28-29	
AAM Public Awareness	$1,000,000	Bi-annually each from state and industry	Y	Y	Y	26-27	
AAM Advisory Committee	**$120,000**	**bi-annually**	**Y**			**26-27**	
AAM Workforce – K-12	**$2,000,000**		**Y**			**28-29**	
AAM Workforce – Higher Education	$10,000,000	annually (for a set period of time)	Y		Y	26-27	
AAM Research and Development	**$40,000,000**	**bi-annually**	**Y**			**5-10 yrs**	
First Responder Training	$2,000,000	annually	Y		Y	26-27	
Statewide Airspace Infrastructure	**$20,000,000**	**annually**	**Y**			**28-29**	
Vertiport Grant Program	**$50,000,000**	**annually**	**Y**			**28-29**	

Economic Impact Study (short-term)

Recommendation: Put together a preliminary study estimating workforce development and economic impact potential.

Who: AAM committee, industry

Funding source: industry and/or local partners

How much: $50,000-75,000

Timeline: complete by January 2025 at the latest

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Economic Impact Study (long-term)

Recommendation: Put together a comprehensive statewide study estimating workforce development and economic impact potential.

Who: regional and state stakeholders, industry, and other relevant parties

Funding source: state, industry, federal

How much: $500,000-1,000,000

Timeline: FY 26

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Statewide AAM Plan

Recommendation: TxDOT develop a statewide plan for Texas AAM in conjunction with industry, similar to other AAM leader states

Who: industry, state

Funding source: state, federal, industry

How much: $500,000-1,000,000

Timeline: FY 26/27

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Data Capture and Analysis

Recommendation: Coordinate collaborative mechanism for capturing and analyzing existing public data on airspace integration and from drone detection companies to enhance air safety, especially for public safety uses.

Who: TxDOT? Texas Comptroller model

Funding source: state

How much:

Mitigation of Cybersecurity Risks

Recommendation: Develop a statewide certification process to ensure good cybersecurity practices are adhered to for autonomous AAM technologies for services to be purchased by the state and connected to state systems

Who: DIR, NIST, CISA

Funding source: general, federal, industry

How much:

Ancillary Off-airport Infrastructure

Recommendation: Increase TxDOT aviation funds and allow funds to be used on or off-airport to construct infrastructure to enhance the aviation system.

Who: TxDOT, OOG, AAM office

Funding source: federal, state, general, rider

How much:

Vertiports at Existing Airports

Recommendation: Modify Chapter 21 of the Transportation Code to enable existing airports to function as vertiports and increase available funding if the vertiport meets public use/public good standard.

Who: legislature

Funding source: N/A

How much: $?

Electrical Infrastructure

Recommendation: Provide matching funding to improve electrical capacity on or near Texas airports for airborne and ground vehicles.

Who: TxDOT, AAM office, ERCOT

Funding source: general, federal, rider, PPP

How much:

Recommendation

AAM Definition

Recommendation: Include drones and UAS in Texas AAM definition

Who: Texas Legislature

Funding source: N/A

How much: $0

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Recommendation

AAM Office

Recommendation: Create an office at TxDOT to increase adoption and awareness of AAM (through demonstration day coordination, conference presentations, etc.)

Who: TxDOT

Funding source: Endorse TxDOT's ask for additional FTEs for AAM

How much: 0

Vertiport Construction Matching Program

Recommendation: Create a state matching program for new public good/public use vertiport construction

Who: TxDOT, AAM office

Funding source: general, rider, federal

How much: $100M

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AAM Public Awareness

Recommendation: Provide funds to create communication materials targeted to the public, decision makers, and recreational drone users that can be implemented as appropriate.

Who: Texas Economic Development, TxDOT, Program Manager

Funding source: general fund, rider, industry funds (advertising campaign), federal funds

How much: $500,000 annually each from state and industry

Recommendation
AAM Rep on TxDOT Aviation Committee

Recommendation: Add AAM representation to the existing 9-member TxDOT Aviation Advisory Committee.

Who: Legislature

Funding source: TxDOT

How much: $0

AAM Advisory Committee

Recommendation: Continue the AAM Advisory Committee

Who: TxDOT

Funding source: TxDOT state funding or general funds

How much: $120,000 bi-annual

AAM Workforce – K-12

Recommendation: Direct the TEA to integrate AAM into K-12 curriculum (e.g., NASA toolkit) and coordinate with TWC on developing AAM apprenticeship programs at high schools.

Who: TEA, TWC

Funding source: state

How much: $2M

AAM Workforce – Higher Education

Recommendation: Support education and workforce development for AAM by providing funds and resources for state universities, community colleges, and vocational schools to develop and offer programs and courses related to AAM.

Who: workforce solutions, TWC, THECB, TSTC

Funding source: federal (DOD), state, general

How much: $10M annually (for a set period of time)

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AAM Research and Development

Recommendation: Support research and development for AAM technologies, products, and services in Texas by creating a program for state universities (e.g., developing UTM systems) which could be used as matching funds for federal grants and a minimum percentage of community or industry match.

Who: TxDOT

Funding source: general

How much: $40M bi-annually

First Responder Training

Recommendation: Provide a funding mechanism to help with first responder training

Who: AAM office, Texas DPS, TDEM, TEEX, TCOLE

Funding source: general, federal (DOJ, homeland security, FEMA)

How much: $2M annually

Recommendation (combine with economic impact rec.)

Revenue Streams for AAM

Recommendation: Develop and recommend a list of revenue streams to educate the legislature on their options

Who: legislature

Funding source: N/A

How much: $0

AAM IWG Workshop (not legislative)

Recommendation: Ask the Governor's Office to request an AAM interagency working group (IWG) workshop for the state of Texas

Who: TxDOT to draft request to Governor's Office

Funding source: NA

How much: $0

Disallowed AAM Uses

Recommendation: List of ways that AAM will not be used and encouragement of liberal use when applicable (e.g., use on state land)

Who:

Funding source:

How much: $0

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State Agency Information Sharing

Need: Legislation governing information sharing among agencies using AAM during disasters (HB2340-89R)

Recommendation: update legislation (HB2340-89R) to include AAM aircraft

Who: legislature

Funding source: N/A

How much: $0

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Recommendation - Airspace

- The State of Texas SHOULD invest in state-wide airspace infrastructure that provides 24/7 surveillance, situational awareness, traffic management support (not Air Traffic Control), communication / telemetry support, identification services, and micro weather infrastructure.

- Key Considerations:
  - The State could invest in the core infrastructure and create the framework that operators and developers could "plug in" to to exchange data.
  - Important for the State to not pick winners / losers but provide the framework that other system developers and operators can push data to and pull data from.
  - Funds for the system could be appropriated to TXDOT who could then hire integration engineers to define the system and possibly operate it on behalf of the State.
  - Significant upside for communities, workforce, and development of the AAM and broader UAS industries.

- Funding – State of Texas for core system - $50M to $100M over 4-6 years but cost will vary depending on surveillance hardware required.

Recommendation – Real Estate

- The State of Texas SHOULD create a grant program for the development of Vertiports across the State.

- Key Considerations:
  - Funds to be appropriated and managed by TXDOT and awarded on rolling basis over next two years.
  - Grants to be two-step process – initial planning grant followed by implementation grant; Initial planning grants $500K-$1M with implementation grants up to $20M. Possible fund matching criteria.
  - Grant proponents could be communities, economic development, development authorities, academic institutions, quasi-governmental, or possibly land stakeholders. (This list is not exhaustive, but grantees should have sign-off from stakeholders with land use planning authority.)
  - TXDOT to set up grant management committee to set up rules, eligibility, process, review proposals, review plans, and conduct ongoing grant management reviews. May need multiple committees
  - Planning grants awarded based on make-up of team, core details of the plan, planning approach; Implementation grants awarded based on comprehensiveness of plan for economics, sustainability, workforce, community engagement and other key criteria. Other criteria TBD.

- Funding: $200M over 4 years

Next Meeting Dates

Funding Meeting : **June 5**, 10:00-12:00

Full Committee Meeting: **May 14**, 9:00-12:00 (fully online)