



Georgia Department of Transportation



2023

GEORGIA STATEWIDE

HANGAR INVENTORY AND
DEMAND ANALYSIS

EXECUTIVE SUMMARY

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2023 GDOT STATEWIDE HANGAR INVENTORY AND DEMAND ANALYSIS

OVERVIEW

Aircraft hangar structures are common and vital infrastructure components for all Georgia airports. Further, when airports own their hangars, the revenue they collect from hangar rentals provides an important source of income. Airport-owned hangars are easier to control and to restrict use to aeronautical activities as per Federal Aviation Administration (FAA) grant obligations. Aircraft stored at an airport generate revenue not only through hangar rental fees but also from purchases of fuel and other aviation services. Local governments also benefit from aircraft related ad valorem tax revenues that they collect.

According to the Aircraft Owners and Pilots Association (AOPA), a national organization of more than 300,000 aircraft owners, demand for hangar storage is on the rise. Additional information from the General Aviation Manufacturers Association (GAMA) shows that the cost of general aviation aircraft has increased significantly. As costs escalate, a growing number of aircraft owners are seeking the safety, security, and protection from the elements that hangar storage provides.

The Georgia Department of Transportation (GDOT) initiated the Statewide Hangar Inventory and Demand Analysis in response to recommendations in the 2021 report issued by the Joint Legislative Study Committee on Airport Infrastructure and Improvements. This report provides a summary of current hangar availability and hangar conditions, along with identifying unmet demand for hangar storage and examining funding considerations associated with meeting demand.

THREE KEY STUDY COMPONENTS

1. **INVENTORY/DEMAND ANALYSIS:** Identify existing hangar structures, along with their storage capacity and condition, throughout Georgia. Use inventory data and hangar waiting lists to quantify current statewide demand for additional hangar storage and estimate the investment required to address that demand.
2. **SURVEY OF THE STATES:** Gather information from the other 49 states to determine if and how they assist airport sponsors with hangar development and funding.
3. **BEST PRACTICES GUIDE:** Equip Georgia airports with a structured framework for managing existing hangars, maintaining a hangar waiting list, and monitoring the airport's demand for aircraft storage.

INVENTORY AND DEMAND ANALYSIS

STUDY AIRPORTS

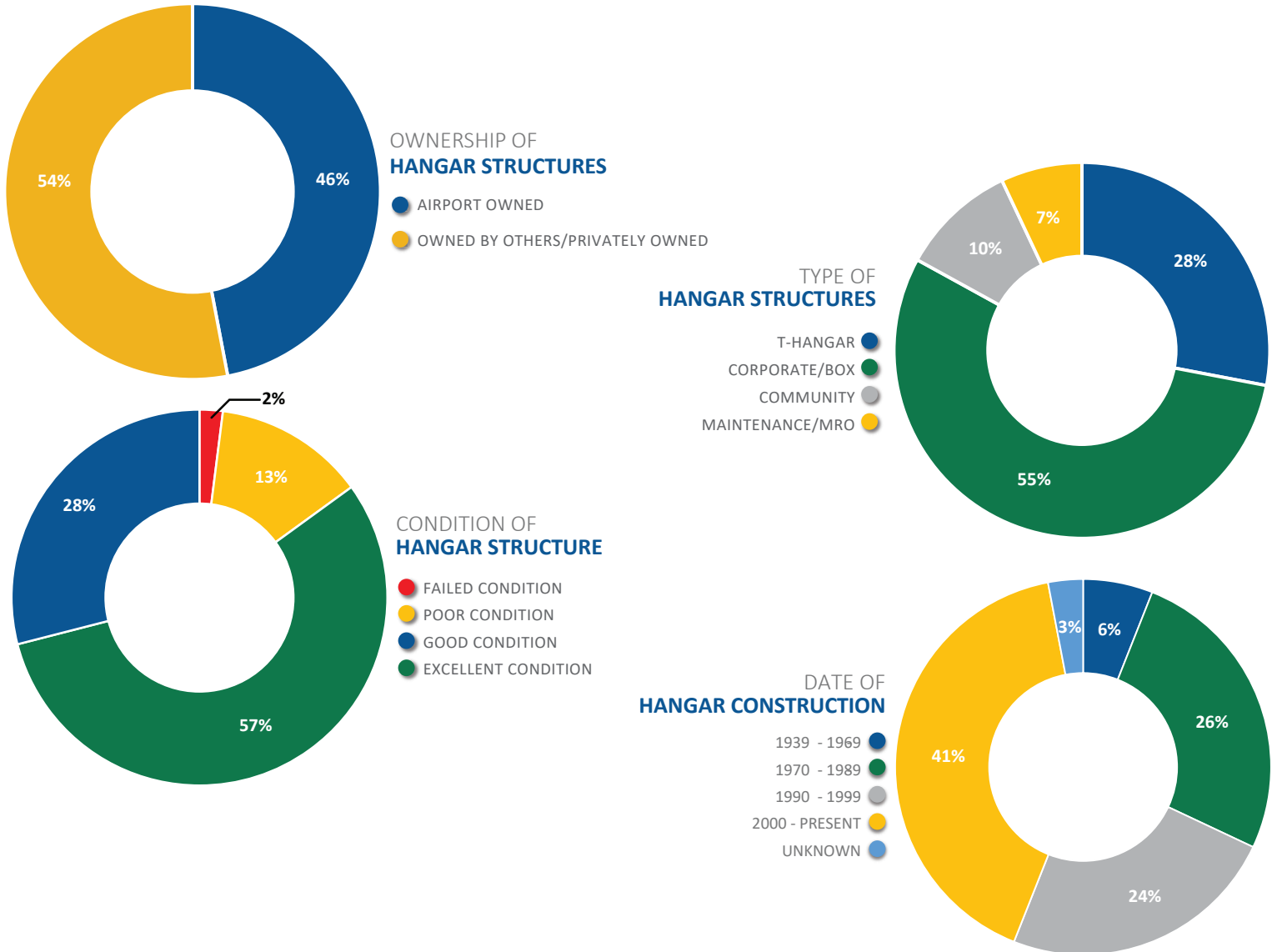
The Statewide Hangar Inventory and Demand Analysis focuses on Georgia's 102 publicly owned commercial service and general aviation airports. Hartsfield-Jackson Atlanta International Airport is not included in this study because of its size and focus on commercial airline service. Results are delivered at the statewide and regional level to reflect the variances in demand across the seven GDOT Districts.

SURVEYS, OUTREACH, AND DELIVERABLES

As part of the study, the 102 study airports were engaged through online surveys, email outreach, telephone interviews, video conferences, and limited in-person visits. A separate survey effort, supported by the National Association of State Aviation Officials (NASAO), garnered other states' approaches to airport hangar funding. The outreach efforts summarized in this report are explored in the Technical Report (state-focused research results are presented in Appendix A). To help airports manage hangar space and maximize benefits/revenue, a best practices guide was also developed as part of this project. All study deliverables are accessible online: www.dot.ga.gov/GDOT/pages/AviationPlanning.aspx.

STATEWIDE FINDINGS FOR CURRENT HANGAR STRUCTURES

The study identified 1,298 existing individual hangar structures, providing an estimated 4,828 aircraft storage spaces across the state.



Existing hangar structures in Georgia average 30 years in age.



These results indicate that many Georgia airports are facing both a lack of hangar space and aging existing structures that will require rehabilitation or replacement. The costs for construction, labor, and materials have dramatically increased the price of a well-constructed hangar. Since less than half of all hangar structures are airport owned, sponsors have fewer revenue streams to fund hangar development.

EXISTING STATEWIDE HANGAR STORAGE

FAA data reports a total of 5,654 based aircraft at the 102 study airports. Study analysis and interviews with airport management reveal information reported below:

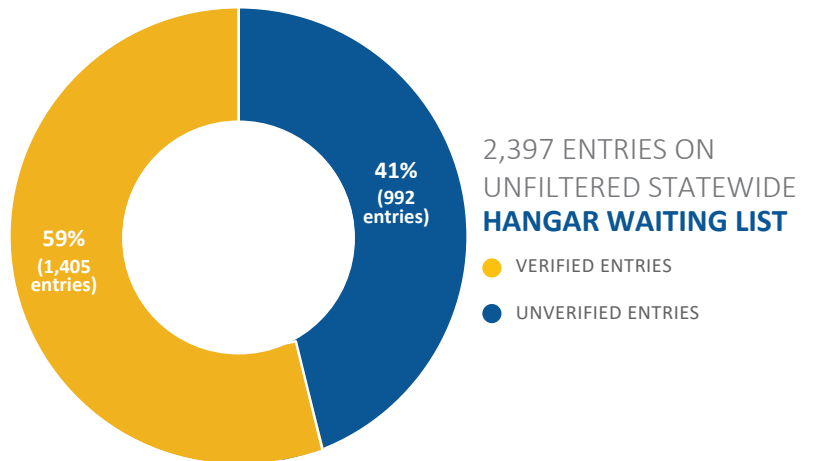
By the Numbers Statewide Statistics



**As determined by study surveys and analyses*

STATEWIDE HANGAR WAITING LIST

Most airports maintain hangar waiting lists of the individuals and businesses seeking to store an aircraft. A total of 2,397 entries were compiled in an “unfiltered” statewide waiting list for all 102 study airports. The study identified valid entries by removing duplication, outdated entries, or owners no longer seeking hangar storage. The resulting 1,405 valid entries were further analyzed to understand the conditions that led the aircraft’s owner to seek storage. Of the 1,405 verified entries, 804 entries are aircraft owners already based at one of the study airports. Most aircraft parked outside on a tie-down are seeking storage in a hangar. The other 601 verified entries are owners moving to Georgia from another state, businesses/individuals buying new planes, second home owners seeking a storage space, and/or owners wishing to move from a privately owned airport to one of the publicly owned study airports.



Study results showed that only eight percent of study airports charge a hangar waiting list fee and only 22 percent have a formal hangar waiting list policy. No formal guidelines exist for airport hangar waiting lists, and the information a sponsor collects varies widely across airports. A best practices guide developed as a companion piece to this report provides a hangar waiting list template and guidance for list maintenance.



HANGAR DEVELOPMENT COSTS

This study utilized recent hangar construction costs (supplied by GDOT and study airports) to establish the price per square foot for different hangar structure types. These figures were used to estimate the cost of addressing Georgia’s storage demand gap through the construction of specific hangar types (i.e., T-hangar or conventional hangar building). FAA and individual airport planning data informed the hangar type(s) designated for an individual airport. Estimated development costs in the study are not airport specific and may not reflect all funds required for an individual hangar development project.

Study analysis determined that an estimated \$450 million of investment is required to close the current hangar storage demand gap in Georgia. At the same time, approximately \$11.8 million of investment is required to replace airport-owned hangars that are in “failed” condition. Because these estimates are based on current dollars, future projects will likely face increased costs.

RISING HANGAR CONSTRUCTION COSTS

T-hangar Unit: \$60,000 in 2015
\$97,200 in 2023

Corporate Hangars: \$40 per sq ft in 2015
\$101 per sq ft in 2023

Information on current hangar construction costs was obtained from GDOT and study airports.

ESTIMATED COSTS FOR HANGAR DEVELOPMENT

\$450 million to currently address demand gap

\$11.8 million to replace airport owned storage hangars that are in failed condition

Costs are in today's dollars and may be impact by rising construction costs and inflation.

CURRENT FUNDING FOR HANGARS

Georgia general aviation airports currently fund aircraft hangar construction through the following sources: FAA Airport Improvement Program (AIP) with state matching on FAA-funded projects, local funds, and private investment. The FAA allows airport sponsors to utilize their AIP non-primary entitlement funds (annual maximum of \$150,000) to fund hangar construction. To do so, that airport must complete all safety-related projects and certify future airside projects will be funded within three years.

GDOT currently provides state matching funds for FAA AIP grants as outlined in its Airport Aid Program Policies and Standards Guide. For federally funded hangar construction, Georgia matches 50 percent of the non-federal portion of the project. While other funding avenues do exist, construction of revenue-generating facilities, like hangars, are ineligible for all other state or federal programs.

These requirements mean the majority of hangar construction projects are funded locally by airport sponsors or private developers. Airport sponsors can utilize airport revenues, general fund appropriations, bonds, and/or loans to fund hangar projects. Funding can also come from voter-approved Special Purpose Local Option Sales Tax (SPLOST) or single county/regional Transportation Special Purpose Local Option Sales Tax (TSPLOST). Sponsors can also engage in ground lease partnerships with private developers to accomplish hangar construction. While this approach does not require the sponsor to take on significant debt, private owners collect the revenue from hangar rentals instead of the airport. Though common in Georgia, the circumstances that factor into an individual airport’s decision to lease land for hangar development vary widely.

New hangar construction projects are ineligible for most federal and state funding programs and require local support.



CONSIDERATIONS FOR HANGAR FUNDING

There are a number of potential funding sources to support hangar construction. The following chart provides a brief description of potential funding sources for hangar construction.

<p>STATE LOAN PROGRAMS</p>	<p>A state loan program for hangar development is not currently available in Georgia. A state sponsored loan program could be considered that includes adequate interest rates and repayment terms. The program should also require airports to set hangar rental fees based on fair market value so an airport can generate sufficient revenue to service the debt. To participate in a state loan program, airports must meet certain prerequisites such as having an approved ALP, having a validated hangar waiting list, and addressing FAA safety and standards criteria. Loan programs have successfully accelerated project schedules, supported opportunities for economic development, and leveraged other federal and local funding sources in 15 other states.</p>
<p>STATE GRANT PROGRAMS</p>	<p>A state grant program for hangar development is not currently available in Georgia. Grant funded hangar initiatives would require greater amounts of overall funding and careful planning to ensure hangar development does not eclipse capital safety, capacity, and maintenance projects. If available, this funding should also be contingent upon meeting similar prerequisites mentioned above for a state loan program. At present, the Georgia State Airport Aid Program cannot fully fund all priority airport projects and would require further investment if hangar investment is made eligible. To close the current gap of 1,405 hangar spaces in the next ten years plus address anticipated growth for 400 new/additional spaces, the Program would need to support the construction of 180 hangar spaces per year at an approximate investment of \$58 million annually.</p>
<p>LOCAL FUNDING</p>	<p>Local funding sources, such as airport revenues and sponsor general funds, are often limited. Since 70 percent of Georgia's airports have fewer than 50 based aircraft, they cannot generate the revenue required to cover the loan payments that would be required for hangar development.</p>
<p>LOCAL BONDS</p>	<p>General obligation and revenue bonds can be a financing option for hangar development. General obligation bonds require a voter referendum and are backed by the credit and taxing authority of the issuing jurisdiction. Revenue bonds do not require a referendum and are repaid with project revenues. Bonding can be cost prohibitive, as the high administrative charges associated with issuing bonds most often makes this funding source inappropriate for hangar development projects.</p>
<p>LOCAL SPLOST/ TSPLOST</p>	<p>SPLOST must be authorized by a County Board of Commissioners and requires a voter referendum. Among all Georgia airports, 33 percent are owned by municipalities which can share in SPLOST revenues but are not able to initiate the process. TSPLOST requires a majority of the counties in a Regional Commission boundary to pass a resolution to initiate this process and a voter referendum. Municipalities cannot initiate the TSPLOST process. The duration of an approved SPLOST or TSPLOST is five and 10 years, respectively. The timing of these local and regional initiatives, along with competing local priorities, may or may not be suitable to the more immediate needs associated with advancing hangar development in Georgia to meet the current demand gap.</p>
<p>PRIVATE SECTOR</p>	<p>A suitable rate of return on hangar investment must be attainable in order to attract private sector investment. Study data showed 26 percent of all existing T-hangars and 71 percent of all corporate hangars at Georgia airports are privately-owned. Analysis of private investors revealed that T-hangars often do not generate the revenue required to cover costs (i.e., construction, loan fee/ interest, land lease, maintenance, operation, and local taxes) without providing secondary benefits like corporate aircraft storage or fuel sales. Based on financial feasibility, private sector investment will benefit corporate hangar development more than T-hangar construction. Privately owned hangars are built on land leased from the airport; at the end of the lease term, ownership of the hangar structure reverts to the airport.</p>

APPLICABILITY OF HANGAR FUNDING SOURCES BY AIRPORT NPIAS ROLE

Airports in FAA’s defined national airport system are part of the National Plan of Integrated Airport Systems (NPIAS) and are eligible for FAA AIP development grants. The FAA uses factors, including based aircraft, to determine an airport’s NPIAS role. In Georgia, 96 of the 102 study airports are in the NPIAS. Of the 96 NPIAS airports, six are in the Unclassified category; this indicates the airport has fewer than 10 based aircraft. All airports with scheduled commercial airline service are in a separate category in the NPIAS and are defined as Primary airports.

The 12 Georgia general airports that are non-NPIAS or are Unclassified do not receive federal entitlement funding. Remaining NPIAS general aviation airports are eligible to receive \$150,000 annually, but airports must have all safety projects completed prior to using federal funding for hangars. Currently, Georgia’s State Airport Aid Program does not allow eligibility for hangar construction as safety projects continue to be the focus of resources available to the Department.

NON-NPIAS AIRPORTS

Six Georgia airports currently do not meet FAA’s criteria for inclusion in the NPIAS. They include Buena Vista-Marion County Airport, Dahlonega-Lumpkin County-Wimpy’s Airport, Folkston-Davis Field, Hawkinsville-Pulaski County Airport, Moultrie-Spence Field, and Soperton-Treutlen County Airport.

UNCLASSIFIED NPIAS AIRPORTS

Six other airports in Georgia’s system are identified in the FAA’s NPIAS as Unclassified. They include Cuthbert-Lower Chattahoochee Regional Airport, Homerville Airport, Jekyll Island Airport, Nahunta-Brantley County Airport, Sylvester Airport, and Wrens Memorial Airport.

NPIAS* CLASSIFICATION	NON-NPIAS	UNCLASSIFIED NPIAS	NPIAS BASIC	NPIAS LOCAL	NPIAS REGIONAL	NPIAS NATIONAL	PRIMARY (COMMERCIAL)
Based Aircraft per NPIAS Guidelines	-	<10	10+	15+	100+	250+	18-150*
Georgia Airports in each Category	6	6	13	44	22	4	7
FUNDING SOURCES							
FAA Funding with State Match	Red	Red	Yellow	Yellow	Yellow	Yellow	Yellow
State Loan Programs	Red	Red	Red	Red	Red	Red	Red
State Grant Programs	Red	Red	Red	Red	Red	Red	Red
Local Funding Revenues	Green	Green	Green	Green	Green	Green	Green
Local Bonds	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Local Taxing - SPLOST/TSPLOST	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Private Sector	Green	Green	Green	Green	Green	Green	Green

* National Plan of Integrated Airport Systems (NPIAS); based aircraft at Georgia’s primary airports range from a low of 18 to a high of 150.

- FUNDING SOURCE CURRENTLY EXCLUDES ELIGIBILITY OR IS NOT AVAILABLE IN GEORGIA FOR HANGAR DEVELOPMENT
- FUNDING SOURCE AVAILABLE FOR HANGAR DEVELOPMENT BUT SOURCES HAVE CONSTRAINTS
- FUNDING SOURCE FOR HANGAR DEVELOPMENT

APPLICABILITY OF HANGAR FUNDING SOURCES BY AIRPORT NPIAS ROLE

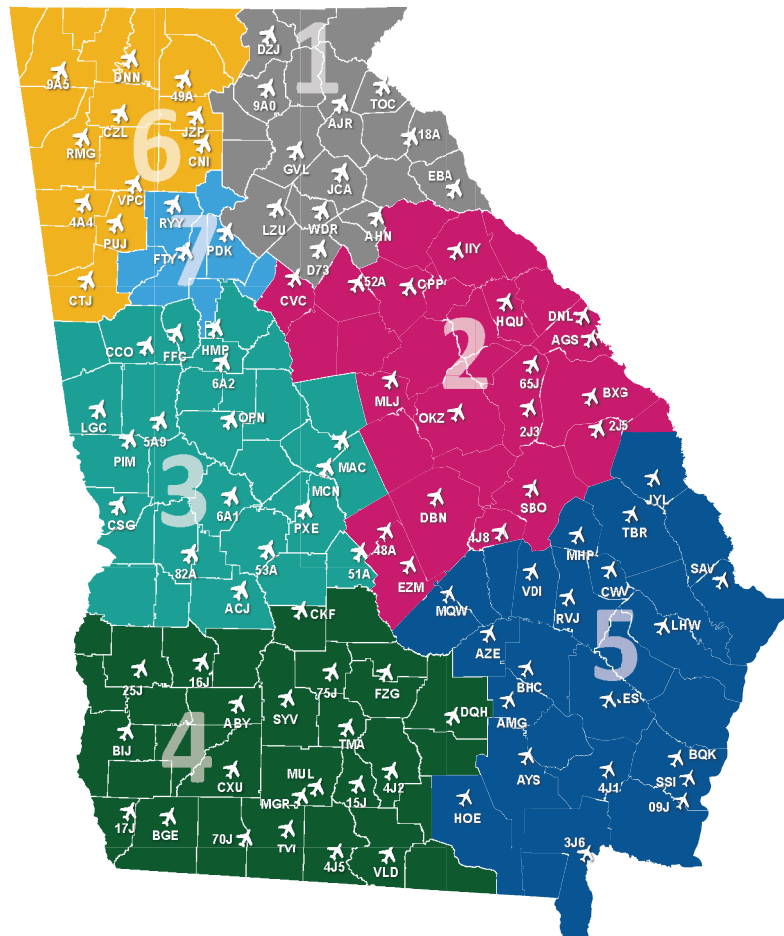
Small/rural airports have more limited options for hangar funding. Costs typically make T-hangar development unattractive for private developers, which also has a negative impact on small/rural airports. If an FAA eligible general aviation airport meets all of its safety, standards, and other applicable requirements, they can use non-primary entitlement funding to support hangar development.

HANGAR STORAGE DEMAND SUMMARY

With 102 public airports, Georgia's aircraft owners often have multiple choices when deciding where to base their plane. While distance, cost, availability, hangar size, and available facilities/services factor into an owner's choice of base airport, study results shows demand for hangar storage outpaces current supply. Georgia would need 1,405 additional hangar storage spaces to accommodate current demand associated with aircraft owners seeking storage. Airports in Georgia report that from the time the need for a new hangar is identified, facility planning/design/construction can take at least two years. With this lag in the process, the demand for hangar storage spaces will continue to increase, even as new hangars are constructed. Based on FAA forecasts and trends observed in this study, Georgia's growth in based aircraft could generate demand for an additional 400 new hangar spaces in the next 10 years. These spaces are in addition to the previously identified 1,405 spaces. As demand continues to increase, costs for hangar construction will also continue to rise.

STUDY RESULTS BY GDOT DISTRICT

DISTRICT	1	2	3	4	5	6	7
Total Based Aircraft	980	421	1,358	609	667	838	781
Total Number of Hangar Structures	187	158	316	164	178	164	131
Total Existing Aircraft Parking Spaces	891	406	1,163	565	571	724	508
Hangar Parking Spaces Needed to Close Current Gap	276	112	251	86	199	245	236
Total Cost to Address Unmet Storage Demand	\$73.5M	\$28.4M	\$88.8M	\$11.5M	\$56.2M	\$56.7M	\$134.9M
Average Monthly T-Hangar Rental Rate	\$319	\$233	\$258	\$129	\$231	\$274	\$750



SURVEY OF OTHER STATES

FINDINGS OF 2023 NATIONAL SURVEY OF STATE HANGAR FUNDING PROGRAMS

State Grant Programs

An additional survey effort was conducted through the National Association of State Aviation Officials (NASAO). Results from that survey identify and compare current aircraft hangar funding programs in other states. The survey investigated three areas relative to funding for hangars:

- State matching funds for federally funded hangar projects
- State funding for non-federal hangar projects
- Special state sponsored loan or funding programs for hangar development

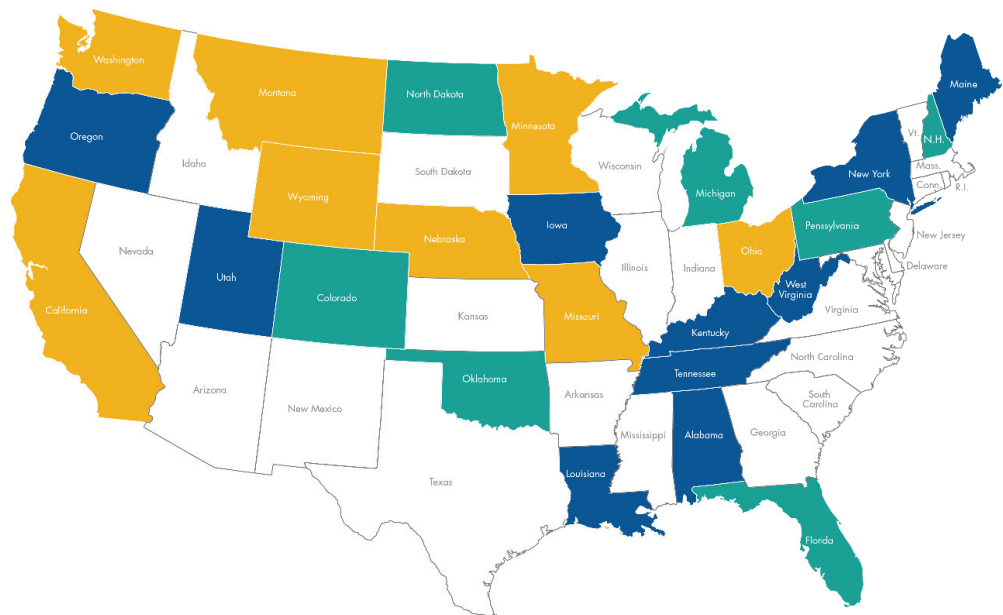
Survey responses from 46 states show that 75 percent of respondents have funding structures similar to GDOT’s current policy of only providing a state match of 50 percent of the non-federal share for a federally funded hangar project. This state funding is only available after an airport has completed all safety projects; in these instances, the state match equates to five percent of the project cost. Fifty-Seven (57) percent of the responding states provide no additional state funding for hangar construction, outside of matching federal entitlement funds. The remaining 43 percent of the responding states provide sources of funding for hangar development when there is no federal participation. For those states that provide funding when there is no federal grant, state participation generally ranges from 5 to 90 percent of the project cost. These state hangar funding programs are generally not large when compared to the state’s total annual aviation program funding; annual hangar funding amounts average 3.4 percent or \$442,000 annually.

Survey responses also identify the special criteria some states use to determine eligibility for state funds: maintaining a current aircraft hangar waiting list, ensuring all airside facility safety/condition requirements are currently met, having the project on an FAA-approved airport layout plan, meeting current state airport licensing requirements, and ensuring that project revenue is collected and deposited in a dedicated airport account.

State Hangar Loan Programs

Fifteen (15) state respondents, indicate they have loan programs available to assist with hangar funding. The table that accompanies this section provides loan program summaries for each state respondent. The interest rates for state hangar loan programs range from 0 to 4.5 percent, repayment terms range from 10 to 30 years, and caps on loan amounts generally range from \$100,000 to \$1.2 million and some states have no funding cap. Hangar and aviation infrastructure loan programs are typically administered by a state aviation office or commission.

Transportation and Statewide Infrastructure Banks (SIB) are administered by state Departments of Transportations or state-level financing agencies. Most state hangar loan programs maintain an available fund of approximately \$2 million. SIB loan programs are not restricted to the development of just hangars but can be used to help fund all airport infrastructure.



- STATES PROVIDING GRANTS FOR HANGAR DEVELOPMENT
- STATES PROVIDING LOANS FOR HANGAR DEVELOPMENT
- STATES WITH HANGAR GRANT & LOAN PROGRAMS FOR HANGAR DEVELOPMENT

SUMMARY OF STATE HANGAR LOAN PROGRAMS

STATE SURVEY RESPONDENT	ELIGIBLE PROJECTS	INTEREST RATE	ESTIMATED AVAILABLE LOAN FUNDING	MAX. TERM (YEARS)	LOAN CAPS
California CalTrans – Aeronautics Program	Airport Infrastructure	GO Bond Rate	\$3,000,000	17	None
Colorado DOT – Division of Aeronautics	Transportation Infrastructure	3.50%	\$12,381,150	10	None
Florida DOT – Aviation Office	State Infrastructure Bank	4.0%	\$203,000,000	30	None
Michigan DOT – Aeronautics	Airport Infrastructure	3.40%	\$2,200,000	10	\$100,000
Minnesota DOT - Office of Aeronautics	Hangars Only	0%	\$2,139,375	20	None
Missouri DOT – Aviation Program	Transportation Infrastructure	Variable	\$1,000,000	15	\$1,000,000
Montana DOT – Aeronautics Division	Airport Infrastructure	1/2 Prime	\$350,000	10	Sponsor's share of project cost
North Dakota Aeronautics Commission	State Infrastructure Bank	2.00%	\$20,000,000	30	None
Nebraska DOT – Division of Aeronautics	Hangars Only	0%	\$1,933,260	20	\$1,000,000
New Hampshire DOT – Bureau of Aeronautics	Airport Infrastructure	Variable	\$2,000,000	20	\$750,000
Ohio DOT – Office of Aviation	State Infrastructure Bank	3.0%	Variable	30	None
Oklahoma Dept. of Aviation & Aeronautics	Airport Infrastructure	Variable	Variable	20	\$600,000
Pennsylvania DOT – Bureau of Aviation	Transportation Infrastructure	Variable	\$30,000,000	10	None
Washington State DOT – Aviation Division	Airport Infrastructure	2.0%	\$2,500,000	20	\$1,200,000
Wyoming DOT - Aeronautics Division	State Infrastructure Bank	4.50%	\$175,000,000	25	None

The most significant takeaway from interviews with states administering hangar loan programs is the need to ensure a sufficient loan payback period so an airport sponsor has time to generate revenue via hangar rentals to service the debt. Length of the lease term is important to generating revenue to cover hangar investment, but equally important is the interest rate for the loan and the rental rate charged for the hangar. Twenty-year lease terms, higher hangar rental rates, and low interest rates are all needed to cover the cost of hangar investment.

BEST PRACTICES

BEST PRACTICES GUIDE

Effective hangar management and leasing policies help an airport maximize hangar benefits and ensure that the airport complies with FAA guidance. A best practices guide has been developed to assist Georgia airports with adopting appropriate hangar management strategies. Contact GDOT at aviationprograms@dot.ga.gov for a copy of the guide.

The guide addresses topics such as permitted and non-permitted uses of hangar structures. Guidance is available on establishing and maintaining hangar waiting list and on setting policies to inspect both airport owned and non-airport owned hangar structures. How to develop effective lease agreements for both hangar structures and land leases is also discussed in the guide. Lease topics addressed in the guide include terms, obligations, subletting, revisionary clauses, and rent setting. Example leases and templates to support management practices are available in the guide. An important aspect of hangar management is setting rates that cover all aspects of hangar maintenance. With demand for additional hangar storage identified in this study, airports should ideally be setting hangar rental rates that provide sufficient returns to cover construction loans or sponsor funded construction of hangars.

HANGAR RENTAL RATES IN GEORGIA

Setting hangar rental rates which cover costs is important to effective airport management. A statewide survey shows that some airports may have hangar rental rates that are insufficient to cover hangar operating, maintenance, and development costs. Study analysis revealed that loans with interest rates of 0 percent to 2 percent and monthly T-hangar unit rental rates exceeding \$300 are needed to generate sufficient hangar rental revenue to retire a 30-year loan for a 10-unit T-hangar. In accordance with FAA grant assurances, airports that have received a federal grant, which includes almost all study airports, are obligated to charge rates which contribute to their financial viability. As part of this effort, a survey was conducted of the study airports to gather information on current hangar rental rates. This information provides a better understanding of current airport revenue streams. The survey sought rate ranges, averages, and rent differentials for different hangar types: T-hangars, corporate/box hangars, and spaces in community hangars. Information was also sought on rates charged for airport-owned versus hangars which are privately held or owned by others. High-level study results show the monthly rent for a single T-hangar unit ranges from \$60 to \$840 per month, and monthly rates are higher for privately owned hangars when compared to hangars owned by an airport.

In mid-2024, GDOT will publish results from a more comprehensive survey on airport rates and charges. Information in that report will enable airports to benchmark their current rates to help maximize their revenue streams to help promote financial self-sustainability—an objective for all airports needing to comply with FAA grant assurances.

AVERAGE STATEWIDE RENTAL RATE T-HANGAR UNIT	
Airport Owned Hangars	\$209
Owned by Others	\$342
AVERAGE STATEWIDE RENTAL RATE CORPORATE/BOX HANGAR STORAGE	
Airport Owned Hangars	\$1,323
Owned by Others	\$2,071
AVERAGE STATEWIDE RENTAL RATE COMMUNITY HANGAR PARKING SPACE	
Airport Owned Hangars	\$321
Owned by Others	\$507

Note: Values above reflect monthly rates. Rate information was supplied by study airports.



SUMMARY OF FINDINGS

POTENTIAL ECONOMIC BENEFITS FROM HANGAR DEVELOPMENT

HANGARS IN GEORGIA:

- Add to airport income
- Support financially self-sufficient airports
- Contribute to a sustainable state airport system
- Increase local ad valorem tax contributions
- Create economic impacts



Hangars are often a main source of income for many general aviation airports. Aside from the sale of fuel, revenues received from hangar rentals are important to an airport's ability to generate sufficient income to cover operating expenses. When airports in Georgia's state airport system are financially viable, this enhances the long-term sustainability of the state airport system. When new hangars are constructed at a Georgia airport, this attracts additional based aircraft. These planes are subject to ad valorem taxes which are collected by the local government. Also, when hangars are being planned, permitted, designed, and constructed, they create significant economic impacts. This study estimates that in each of the next 10 years, at least \$58 million would be needed to support the construction of new hangars to meet identified demand. This study identified a current shortfall of 1,405 hangar storage spaces and an anticipated need for 400 additional spaces over the next ten years; total storage spaces of 1,805 would result in the need to add 180 new spaces each year at a cost of \$58 million annually. Using GDOT's economic impact calculator, annually, the \$58 million in hangar investment would support 787 jobs that would have an annual payroll of \$30 million. The initial \$58 million investment would also result in \$83.3 million in total purchases for materials and supplies from vendors within the state to support hangar construction. Aside from addressing aviation demand, the development of additional hangar spaces at the 102 study airports would have positive economic impacts for the airports, the state's airport system, and local and state economies.

OPTIONS FOR CONSIDERATION

- ✓ Establish a state revolving loan program
- ✓ Increase airport aid funding and expand eligibility for hangar construction
- ✓ Build hangars through locally funded or financed programs

CONCLUSIONS

Given the constraints associated with each funding category, additional funding solutions are needed to address Georgia's shortage in hangar storage. The survey of other states demonstrated that multiple funding options, including a state program for hangar development, can help to more successfully address hangar demand. The benefits of leveraging multiple funding sources include less annual principal/interest debt carried by an airport, higher net revenue, larger project scopes, and accelerated timelines.

A state loan or grant program would be of greatest benefit to smaller or rural general aviation airports. Greater access to funding for hangar construction could fuel much needed development that would, in turn, drive an airport's financial self-sufficiency.





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