



# Georgia Aerospace Industry Overview & Aerospace Clusters

Center of Innovation for Aerospace  
August 2014



Aerospace



Agribusiness



Energy  
Technology



Information  
Technology



Logistics



Manufacturing



a division of the Georgia Department of Economic Development

# AEROSPACE – KEY INDUSTRY FOR GEORGIA

## CENTER OF INNOVATION FOR AEROSPACE

### *Our Center's Mission*

*Provide the **technical industry expertise**, **collaborative research**, and **partnerships** to help the State's aerospace industry to **Connect, Compete and Grow** globally.*

**Create More Georgia Aerospace Jobs!**



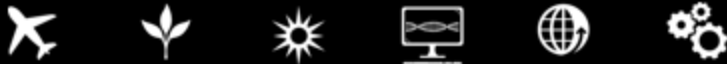
# GEORGIA AEROSPACE: ECONOMIC IMPACT

- **Total Economic Impact of \$50.9 billion** in 2011
- Generated **\$1.6 billion in tax revenues** in 2011, 10% percent of state's total tax revenues
- Aerospace supports **5% of the state's employment, 6% of state GDP**
- Aerospace payroll of \$8.4 billion with over 86,000 employed directly

Each job in the aerospace industry supports 1.72 additional jobs in Georgia

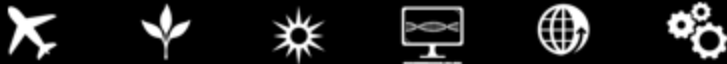
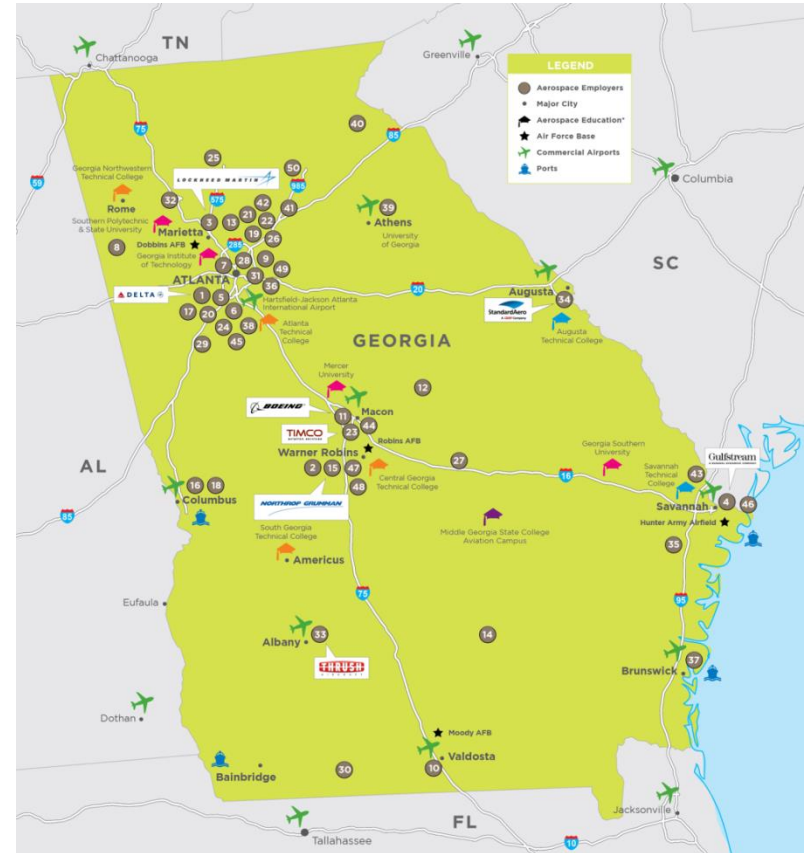


Source: "Economic Impact Analysis of Georgia's Aerospace Industry", Georgia Tech Enterprise Innovation Institute, January 2013



# GEORGIA AEROSPACE: COMPANIES & SECTORS

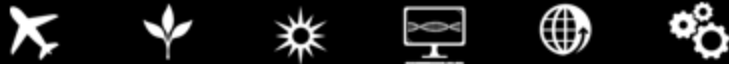
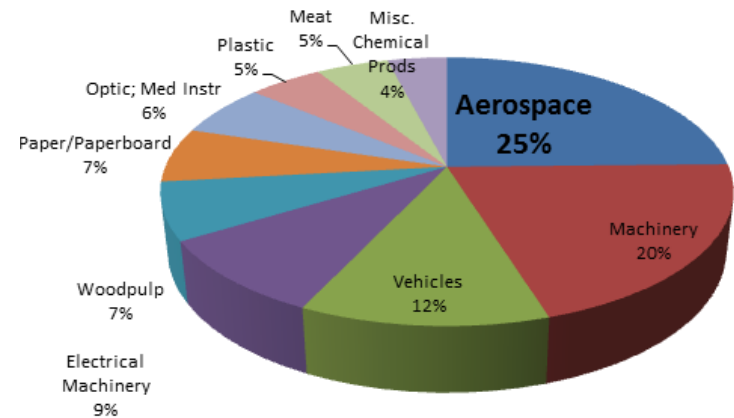
- Over 500 Aerospace Companies
- Geographically Diverse
- Three main sectors
  - Aerospace Manufacturing
  - Maintenance, Repair & Overhaul (MRO)
  - Air Transportation



# GEORGIA AEROSPACE: MANUFACTURING

- Aerospace exports of **\$7.8 billion in 2013**
  - **#1 international export of Georgia**
  - Ranked **#4 in U.S.**
- Aircraft & parts manufacturing for global aerospace programs
  - Aircraft Assembly – *Lockheed Martin, Gulfstream, Maule, Thrush*
  - Aerostructures & Components - *Boeing, Triumph, Meggitt, EMS Technologies*
  - Aircraft Engines - *Pratt & Whitney, PCC Airfoils, PCI, TECT, Firth Rixson*

Georgia's International Exports in 2013



# GEORGIA AEROSPACE: MAINTENANCE REPAIR AND OVERHAUL (MRO)

- Major civilian MRO operations
  - Ranked **#4** among US States
  - Over 20,000 employees
  - Major employers - *Delta, TIMCO, Bombardier, Standard Aero*
- Warner Robins Air Logistics Center
  - Largest industrial complex in Georgia
  - Over 13,000 civilian employees



Source: Aeronautical Repair Station Association & U.S. Air Force

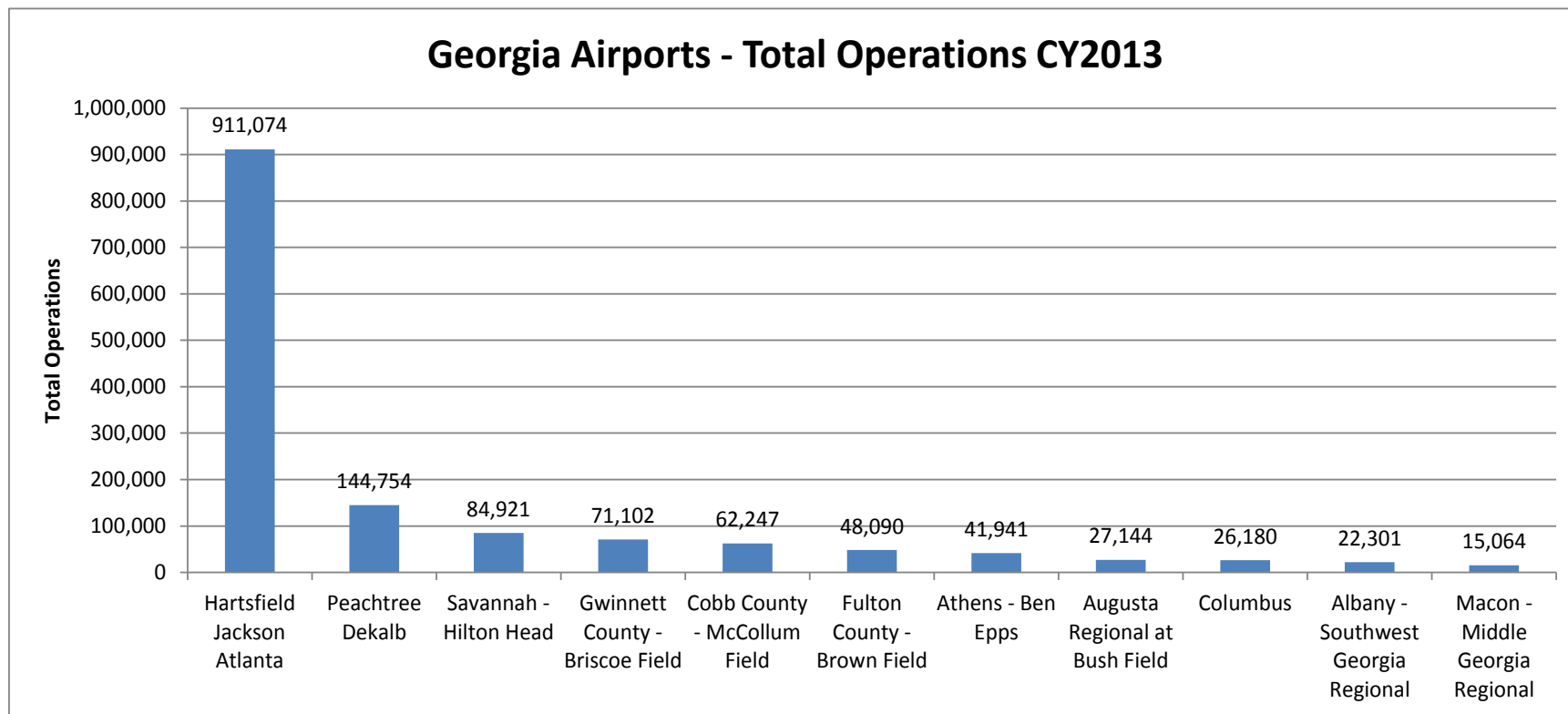


# GEORGIA AEROSPACE: AIR TRANSPORTATION

- 104 public & 339 private airports
- Hartsfield Jackson Atlanta International Airport is the busiest passenger airport in the world
- Home to major airline HQ & facilities
  - *Delta Air Lines, Express Jet, UPS, Southwest major hub*



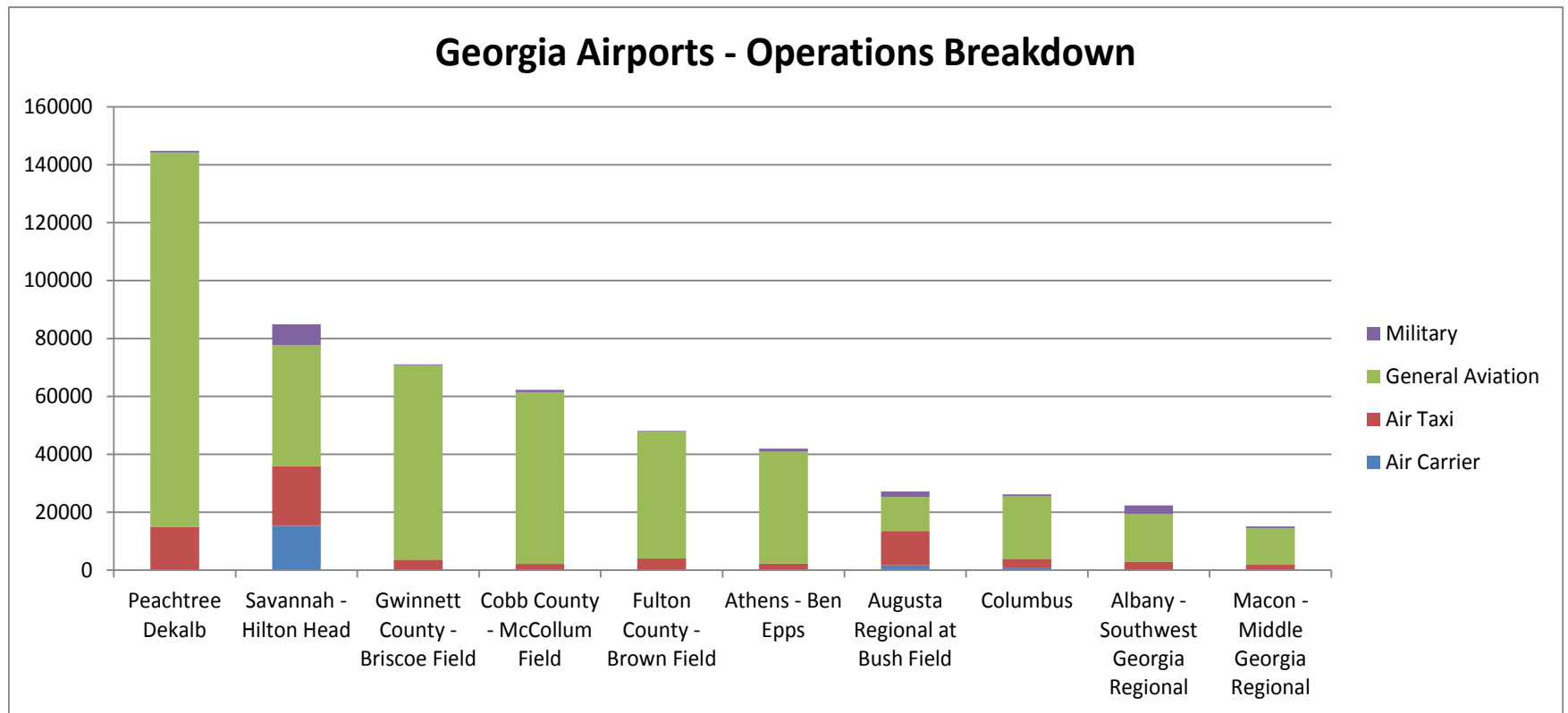
# GEORGIA AEROSPACE: AIRPORTS



Source: FAA



# GEORGIA AEROSPACE: AIRPORTS



Source: FAA

# GEORGIA AEROSPACE: AIRPORTS

Code	Name	Total Jobs	Total Payroll	Total Economic Output
ATL	Hartsfield-Jackson Atlanta	434,434	\$16,313,000,000	\$58,220,000,000
SAV	Savannah-Hilton Head	20,383	\$869,501,600	\$2,448,155,200
AGS	Augusta Regional	1,561	\$59,016,500	\$269,632,600
PDK	Peachtree DeKalb	1,834	\$67,280,300	\$211,745,300
MCN	Macon - Middle Georgia Regional	1,925	\$85,596,100	\$198,544,400
FTY	Fulton County - Brown Field	1,184	\$62,316,200	\$158,642,900
FFC	Atlanta Regional - Falcon Field	793	\$27,307,900	\$142,625,600
BQK	Brunswick - Golden Isles	980	\$40,852,600	\$120,572,900
RYY	Cobb County - McCollum Field	842	\$25,043,200	\$112,412,800
LZU	Gwinnett County - Brisco Field	730	\$24,589,600	\$85,371,200
CSG	Columbus	622	\$24,421,800	\$70,139,600

Source: GDOT 2011 Georgia Statewide Airport Economic Impact Study

# GEORGIA AEROSPACE: AIRPORTS

Code	Name	Operations Rank	Economic Rank
SAV	Savannah - Hilton Head	<b>3</b>	<b>2</b>
PDK	Peachtree Dekalb	2	4
AGS	Augusta Regional at Bush Field	<b>8</b>	<b>3</b>
MCN	Macon - Middle Georgia Regional	<b>11</b>	<b>5</b>
FTY	Fulton County - Brown Field	6	6
RYY	Cobb County - McCollum Field	<b>5</b>	<b>9</b>
LZU	Gwinnett County - Briscoe Field	<b>4</b>	<b>10</b>
CSG	Columbus	9	12
ABY	Albany - Southwest Georgia Regional	10	13
AHN	Athens - Ben Epps	<b>7</b>	<b>18</b>

*Manufacturing, MRO, Commercial Service*

*MRO, Commercial Service*

*MRO*

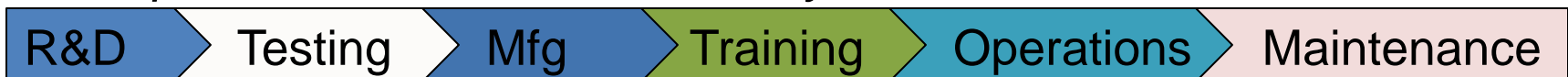
# KEY ENABLERS FOR AEROSPACE ECONOMIC GROWTH AT THE STATE LEVEL

- Technology
- Local Infrastructure
- Educational Institutions
- Policies & Regulations
- Customers
- Capital

***“Birds of a feather flock together”***

Aerospace cluster development key to success

*Aerospace Product Economic Life Cycle*



# AEROSPACE CLUSTERS: WORKING TOGETHER TO GROW TOGETHER

- Most aerospace companies are medium to small in size
- Resources for “*connection*” at a premium
- Combine capabilities & assets to generate “*critical mass*”
- Local airports a catalyst for development of local aerospace clusters

crit·i·cal mass  
noun:

*the minimum size or amount of something required to start or maintain a venture*

# AEROSPACE CLUSTERS: WORKING TOGETHER TO GROW TOGETHER

- Include stakeholders necessary for success

- Airport(s)
- Industry
- Industry Organizations
- Universities
- Technical Colleges
- Economic Development
- Local/State Government
- Investor Groups

- 
- Technology
  - Capital
  - Local Infrastructure
  - Educational Institutions
  - Policies & Regulations
  - Customers

# AEROSPACE CLUSTERS: LOCAL EXAMPLES

- Paulding Aerospace Alliance
  - <http://pauldingaerospace.com/>
  - Joint marketing activities
    - Website, brochures, & other materials
    - EAA AirVenture
    - NBAA
    - MRO Americas
  - Hosting local events to highlight cluster
    - Aero Expo at local air show



# AEROSPACE CLUSTERS: THE CHALLENGE

- Cluster can be a county, group of neighboring counties, or a region – Whatever it takes to reach “*critical mass*”
- Use your airport as focal point of development of local aerospace cluster
- Develop a diverse mix of aerospace business resistant to downturns in any one sector
- COI-Aerospace is ready to partner with you to engage state resources



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## *Aerospace.georgiainnovation.org*



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