

# Aviation Maintenance Industry Outlook and Economic Impact

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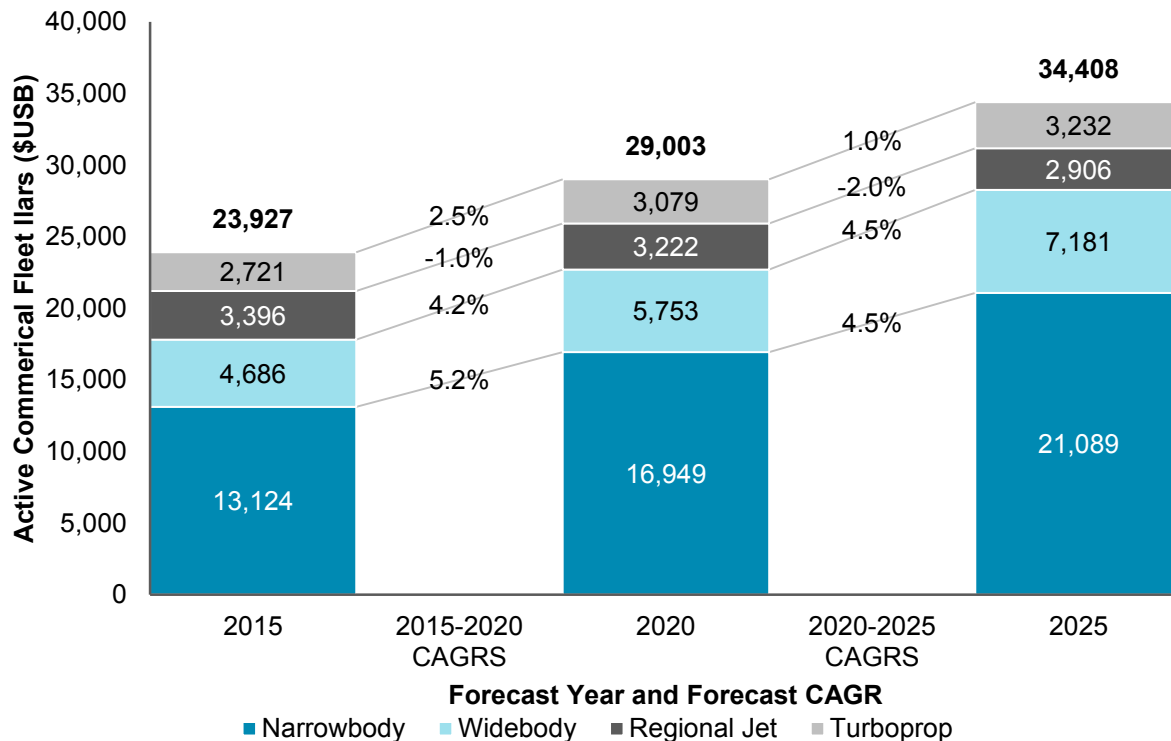
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# 1 | Global Fleet and MRO Market Forecast

# The global air transport jet and turboprop fleet currently stands at 23,927 and will increase by more than 10,000 aircraft by 2025

## 2015-2015 Global Fleet Forecast by Aircraft Class



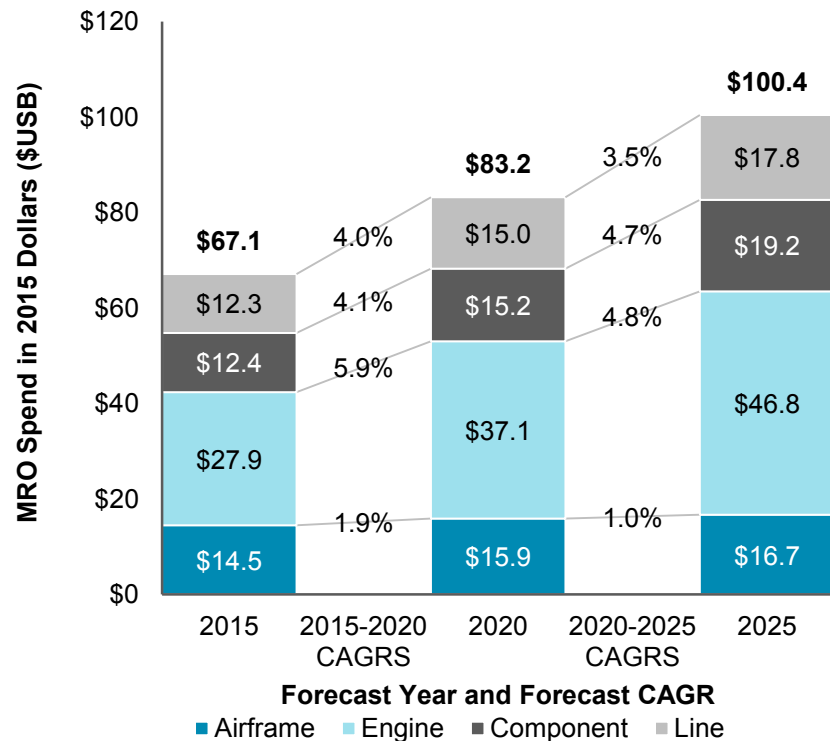
## Key Fleet Forecast Growth Rates

- Global fleet is expected to grow 3.9% annually from 2015-2020
- Growth is expected to slow to 3.5% per year from 2020-2025
- Global fleet will grow on average 3.7% annually over the full forecast period
- Passenger fleet is expected to grow at 3.8% annually
- Cargo fleet is forecast to grow by 2.3% annually

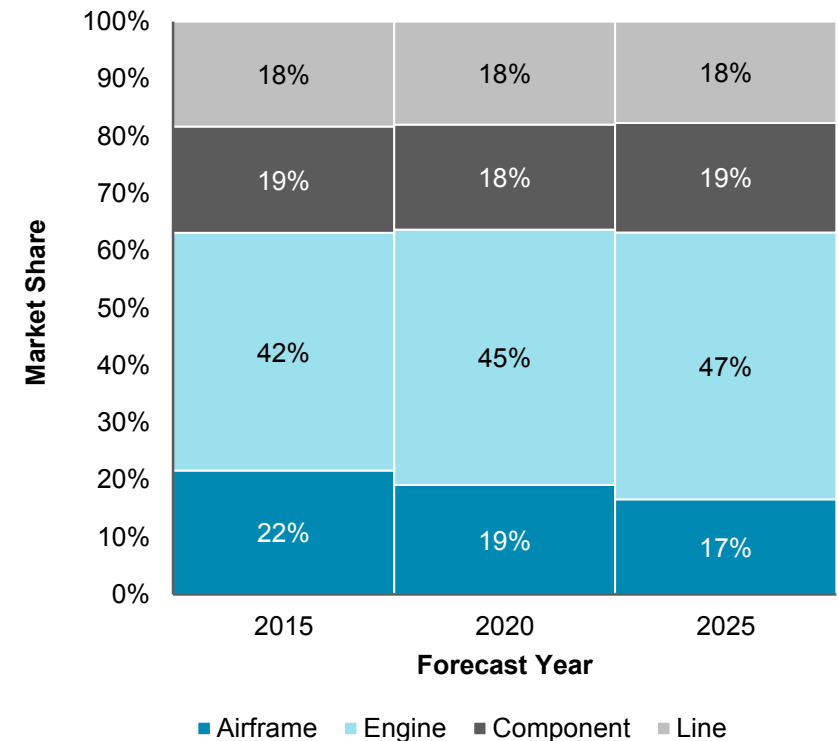
The in-service fleet growth outlook varies by region. North America, while creating the most demand for new aircraft will experience the slowest rate of growth.

# Translating the fleet to global MRO growth, we expect an average 4.1% CAGR through 2025

**2015-2025 Global MRO Market Size Forecast by MRO Segment**



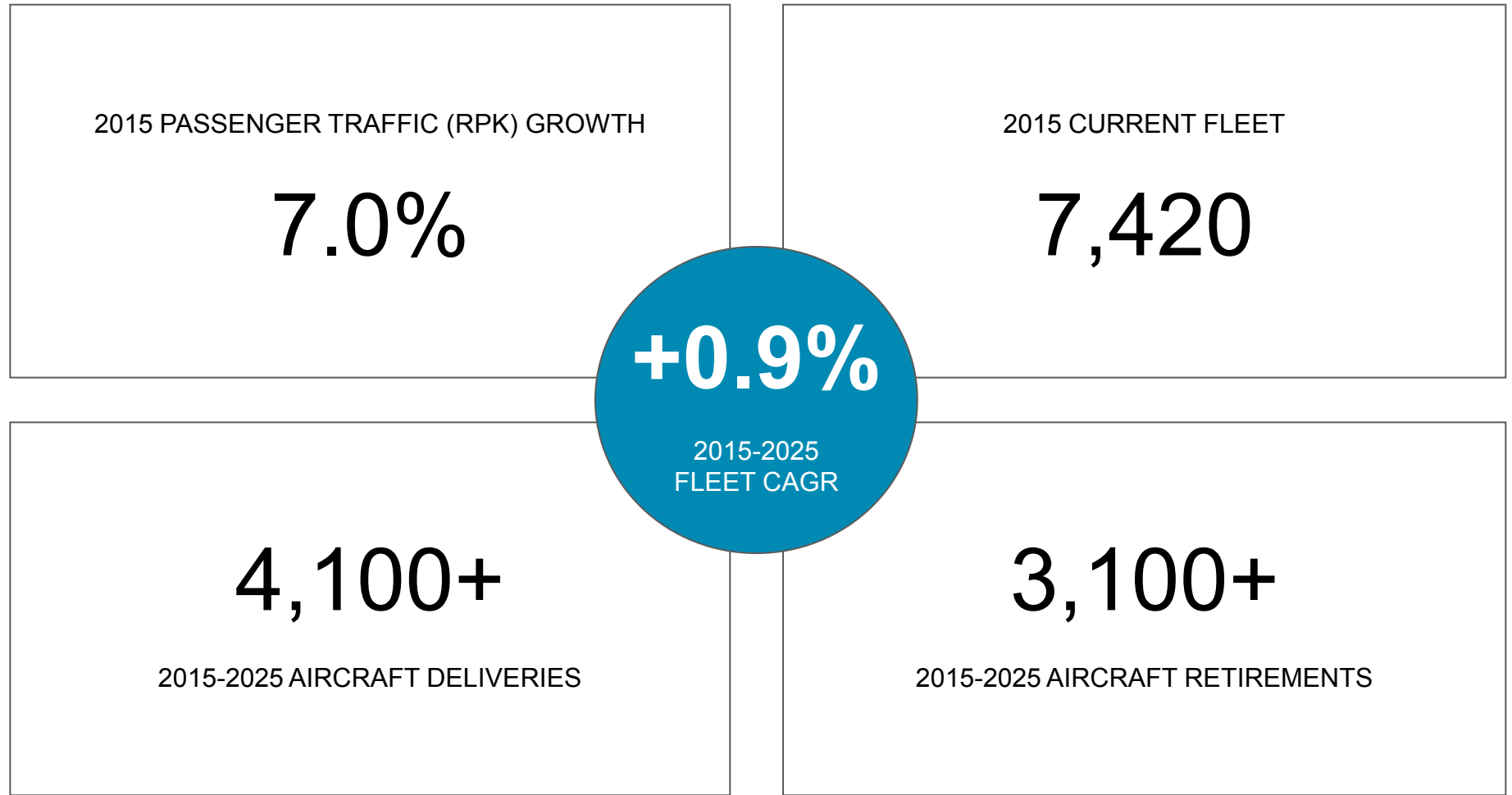
**2015-2025 Global MRO Market Share Forecast by MRO Segment**



Engine MRO will continue to significantly increase its share over the forecast period. Engines are having longer on-wing times; however, Shop Visits are more expensive

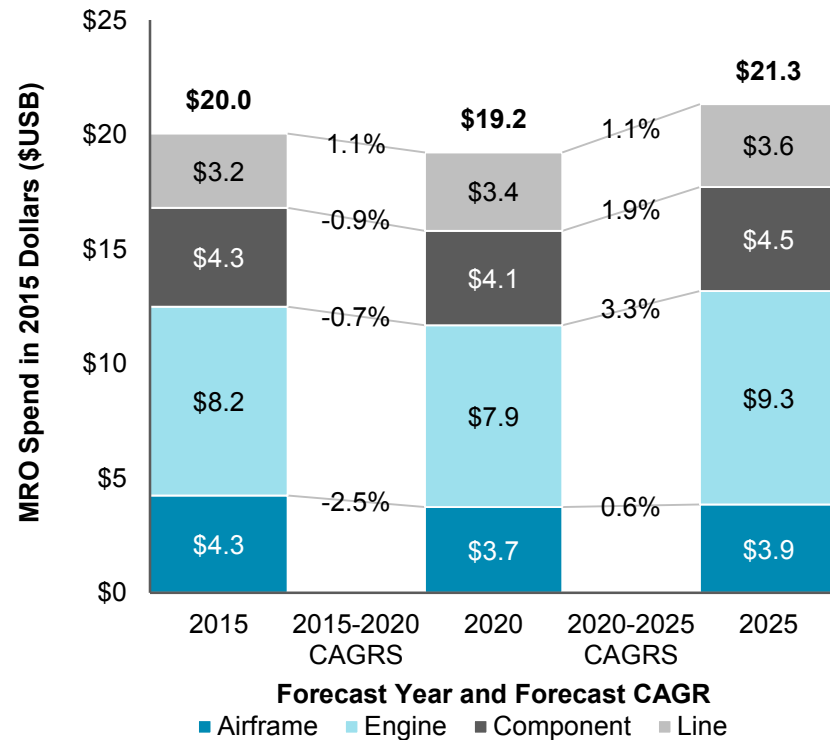
## 2 | North American Fleet and MRO Market Forecast

Passenger traffic is picking up; however, the fleet growth will be limited over the next 10 years as most deliveries are slated to replace aging aircraft

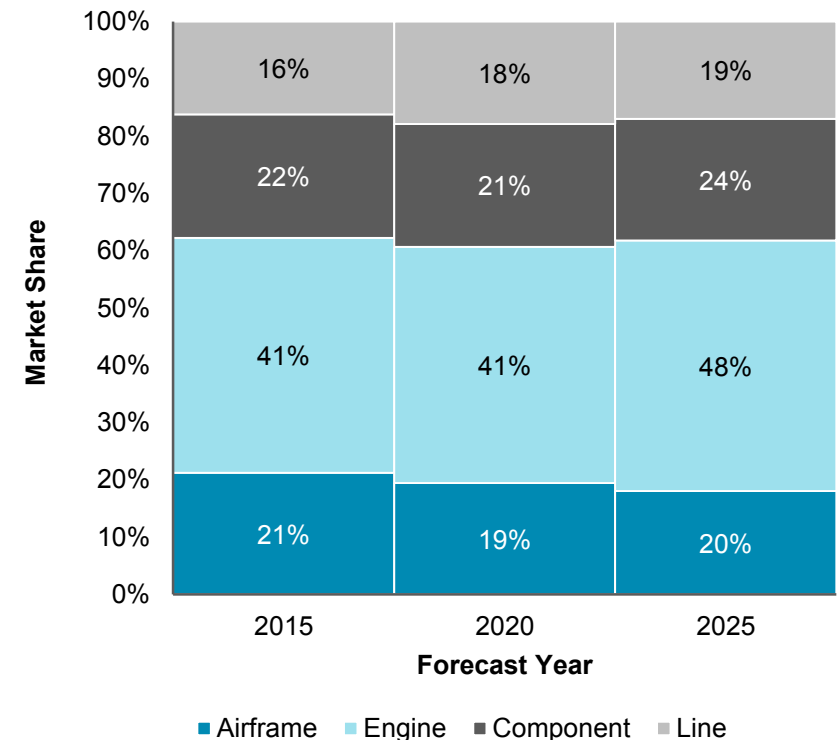


With most of the new deliveries forecast to replace older aircraft, the MRO forecast is virtually flat

2015-2025 North American MRO Market Forecast by MRO Segment



2015-2025 North American MRO Market Share Forecast by MRO Segment

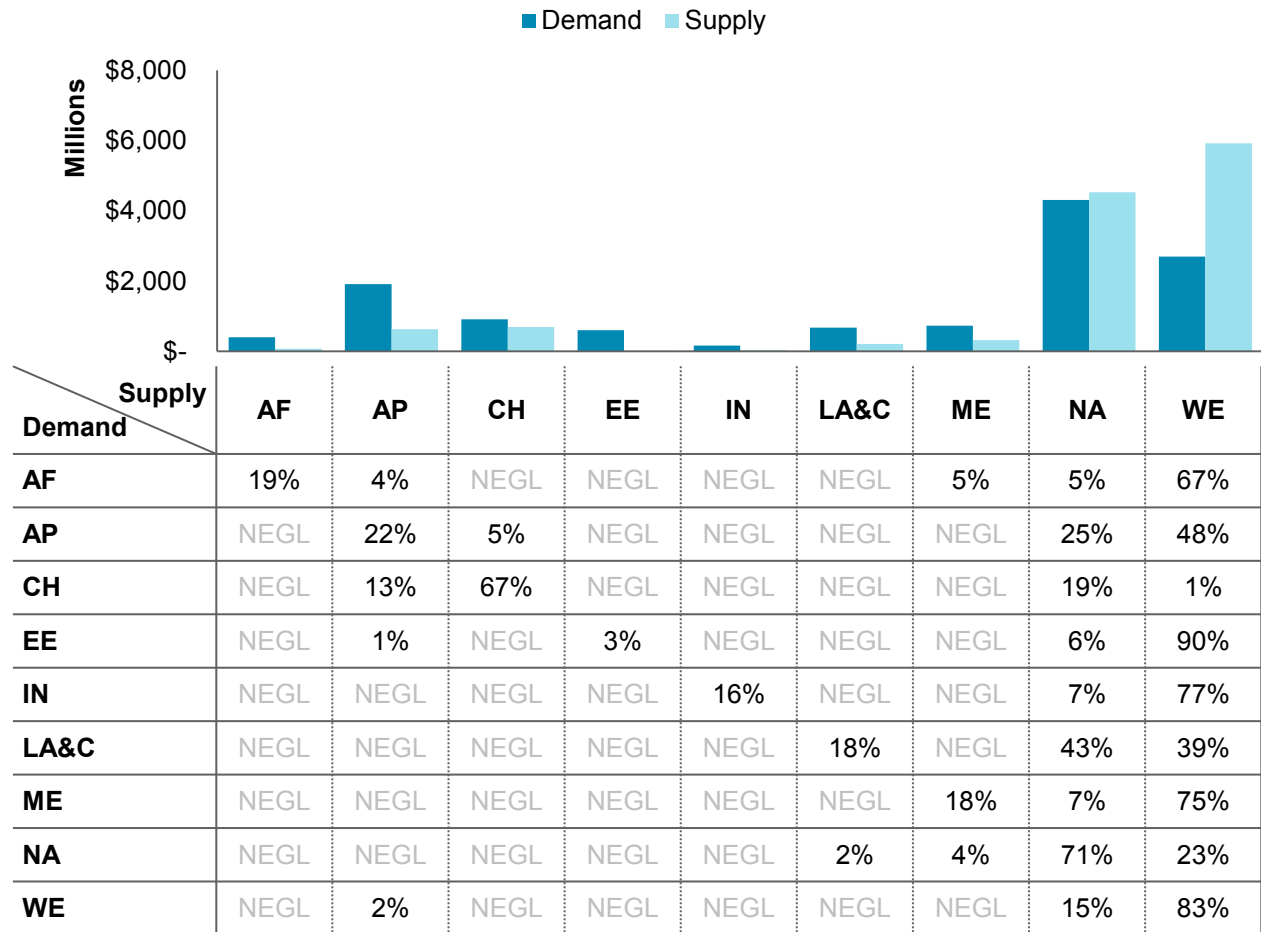


North American MRO will be impacted by less maintenance intensive HMV work and honeymoon periods of engines and components

# North American (NA) operators currently generate \$4.3B in component maintenance demand per year

- 71% of this demand is met by component MRO providers in North America
- Approximately \$1.2B of this component maintenance demand is performed in regions outside North America
- an additional \$1.5B is conducted for other regions
- This results in a total of \$4.5B of component maintenance supplied by North American component maintenance providers

Thus, North America is a net exporter of component maintenance services



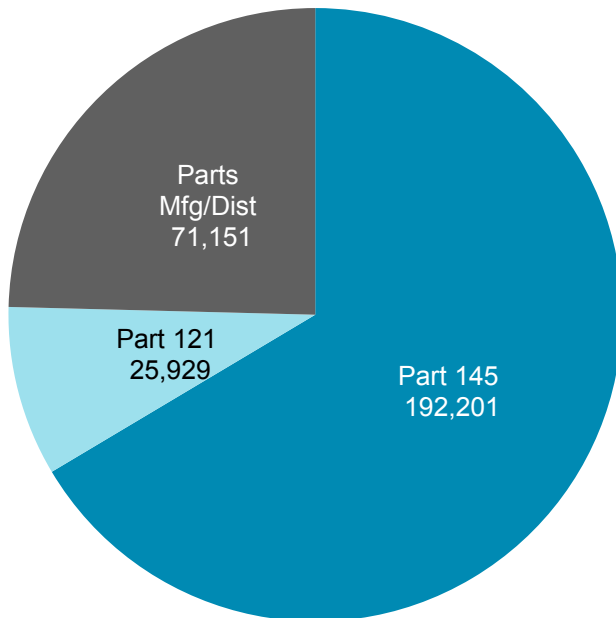
Note: Left column indicates region demand is generated in (region of operator). Top row indicates region maintenance is supplied/performed in (region of MRO). NEGL = Negligible



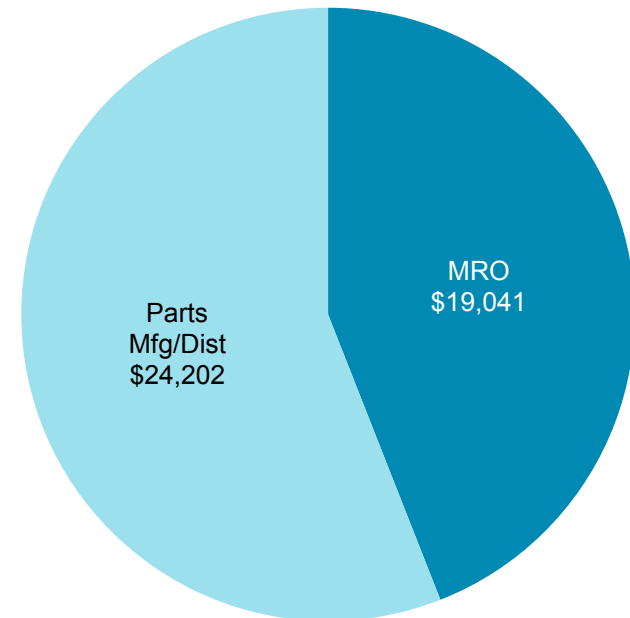
### 3 | U.S. Civil MRO Employment and Economic Impact in 2015

The US civil aviation maintenance industry employs over 289,281 people and generates \$43.2B in economic activity. MRO accounts for 75.4% of the total employment in the US with 218,130.

**Number of Civil Aviation MRO Entities**  
by firm classification



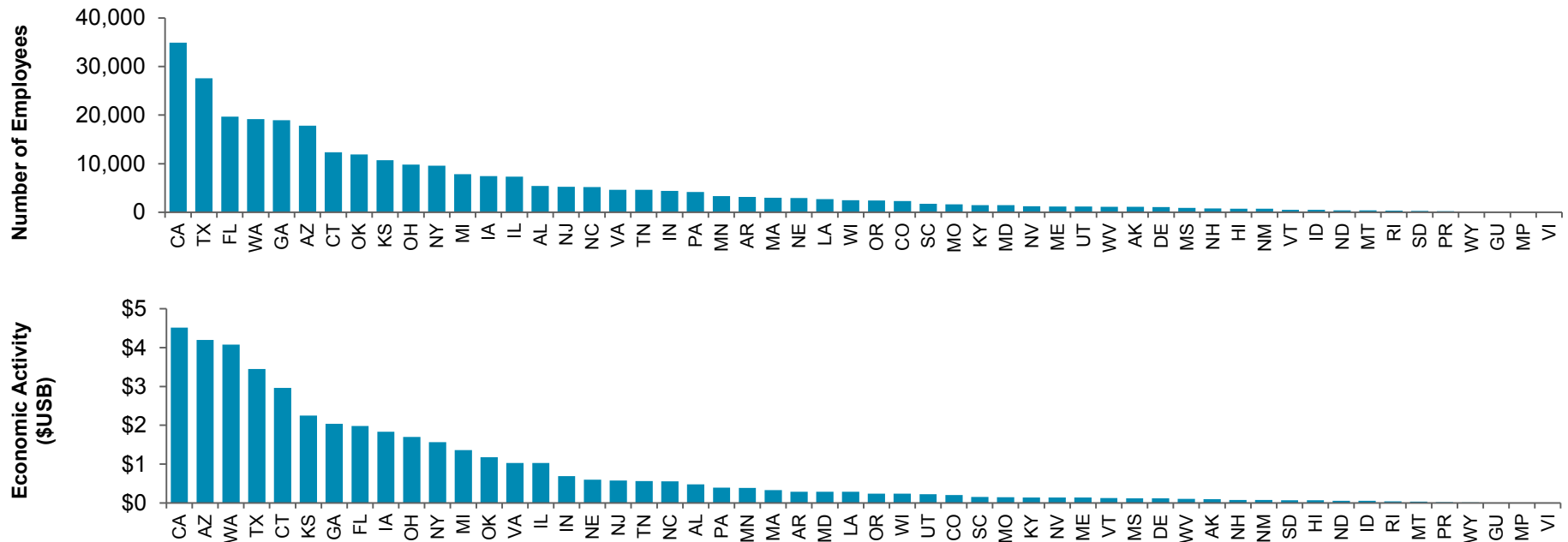
**Economic Activity (\$USB)**  
by firm classification



MRO generates over 42.8% of the economic activity or \$19.0B. With 24.6% of the total employment, parts manufacturing and distribution, accounts for 56.0% of the total economic activity or \$24.2B.

California, Florida, Georgia, and Texas combined represent 35.0% of the total U.S. civil aviation maintenance employment with an estimated 101,147 employees.

## US Employment and Economic Activity by State/Territory



California and Arizona generate the most economic activity followed by Washington, Texas, Connecticut, and Kansas; together, these six states generate nearly 50% of the total economic activity.

The U.S. civil MRO industry contributes more than \$5.3B in federal income taxes annually

Total Federal Income Tax Contribution  
by MRO Employees

\$3.3B

Total Federal Income Tax Contribution  
by MRO Firms

\$2.0B

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MRO firms generate an estimated \$283,000 in revenue per worker for the nearly 290,000 employees in the industry

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