THE AEROSPACE SECTOR IN MEXICO
A positive development in 2014

- 16.5% growth with exports of 6.3 billion dollars, surpassing the 5.4 billion achieved in 2013.
- 22.8% growth in total imports of 5.4 billion dollars, more than the 4.4 billion recorded in 2013.
- 949.4 million dollars favorable result on the 2014 trade balance, with an average surplus of 4.1 million in the last eight years.
- 4th destination of manufacturing investments in the aerospace sector, after China, India and the USA*.
- 6th supplier of aeronautical parts to the USA, above Brazil, Italy, Israel and China.

In July 2014 the Advisory Council on Aerospace was formed to integrate and follow up on the sectorial agenda.

In January 2015, exports amounted to 467.9 million dollars, while imports reached 376.7 million dollars, for a favorable balance of 91.3 million dollars.

It is estimated that by the end of 2015 the sector’s exports will exceed 7.3 billion dollars, and imports will reach 6.4 billion.

Comparative figures for the same period between 2015/2014 (millions of dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports</th>
<th>Exports</th>
<th>Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014*</td>
<td>456</td>
<td>470</td>
<td>16</td>
</tr>
<tr>
<td>2015/2014 (%)</td>
<td>15.0</td>
<td>-9.4</td>
<td></td>
</tr>
</tbody>
</table>


Imports exports

AEROSPACE INDUSTRY
Trade balance (billions of dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Exports (Millions USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>2,042.19</td>
</tr>
<tr>
<td>2007</td>
<td>2,656.24</td>
</tr>
<tr>
<td>2008</td>
<td>3,082.65</td>
</tr>
<tr>
<td>2009</td>
<td>2,522.44</td>
</tr>
<tr>
<td>2010</td>
<td>3,266.28</td>
</tr>
<tr>
<td>2011</td>
<td>4,337.24</td>
</tr>
<tr>
<td>2012</td>
<td>5,040.33</td>
</tr>
<tr>
<td>2013</td>
<td>5,469.45</td>
</tr>
<tr>
<td>2014</td>
<td>6,365.82</td>
</tr>
<tr>
<td>2015</td>
<td>467.99*</td>
</tr>
</tbody>
</table>

Source: Ministry of Economy, High Technology and Heavy Industries General Office, Banxico.

1 “aerospace & defense, 2012 year in review and 2013 forecast,” PWC.
2 With information from the Ministry of Economy, General Directorate of Foreign Investment, FDI Flows branch 3364 SCIaN.
320 companies and support organizations in 18 states of the Republic. Between 2006 and 2014 the number tripled from 109 to more than 300.

+1.7 billion dollars of direct foreign investment have accumulated in the sector in the last 20 years*.

0.66% of the Manufacturing GNP was represented by aerospace in 2014; 88% more than in 2007.

+15% average annual growth rate of exports during 2006-2014.

THE AEROSPACE and Defense Sector in Mexico

**BAJA CALIFORNIA**

- **Focus**
  Baja California’s manufacturing industry is recognized mainly for its innovation in aircraft design interiors and complete integration tests. In manufacturing, the state specializes in precision machinery, electric and power systems, hydraulic and interior systems, and metal plate conformation processes for the A+D market. Some companies have the internal capacity for special processes, thermal and surface treatment, and perform MRO motor part activities.

- **An often-overlooked segment that has a strong presence in the state is the defense industry. This industry has been leveraging the advantages of working in the state for many years. With the Wassenaar Agreement, ITAR and BASA (Bilateral Aviation Safety Agreement) this industry is expected to continue its growth.**

- **Companies**
  50 companies and support organizations most of which have Nadcap and AS9100 certifications

- **Available Qualified Human Capital**
  Close to 5,441 technicians graduate every year.

- **Exports**
  1.8 billion dollars a year

- **Available Qualified Human Capital**
  24,349 students enrolled in engineering and technology programs from a universe of close to 905,441 nationwide.

- **Training and Education**
  Has 2,851 students graduated and the number is expected to increase to 6,500 among others.

**SONORA**

- **Focus**
  Center of excellence for manufacturing blades and engine components, and the availability of special processes. Investment casting, die casting, sand casting, heat treatment, vacuum heat treating, vacuumisation, brazing, sintering, CAD plating, surface treatment, HVOF spray, VPA, plasma spray, platinum plating, gold plating, sulphuric anodize, chromic anodize, priming, and painting.

- **Companies**
  More than 50

- **Exports**
  More than 1.1 billion dollars a year

- **Available Qualified Human Capital**
  29,203 students enrolled in engineering and technology programs

- **Training and Education**
  Instituto de Manufactura Avanzada y Aeroespacial de Sonora (IMAAS)

**CHIHUAHUA**

- **Focus**
  Industrial and advanced manufacturing. Innovation capacities in the design, engineering, manufacture and assembly of fuselages, aerostructures and their parts (airplanes and helicopters), engine and their parts, electrical wiring systems, high-precision machining, interiors, seats and their components, landing gear parts and emergency systems such as chutes and life rafts, among others.

- **Companies**
  An often-overlooked segment that has a strong presence in the state is the defense industry. This industry has been leveraging the advantages of working in the state for many years. With the Wassenaar Agreement, ITAR and BASA (Bilateral Aviation Safety Agreement) this industry is expected to continue its growth.

- **Exports**
  More than 1.1 billion dollars a year

- **Available Qualified Human Capital**
  30,100 engineering students, around 3,900 engineers, and 1,500 technicians graduate every year.

- **Training and Education**
  Has 59 universities and technological schools, 65 technical schools and two high level research and development centers.

**NUEVO LEÓN**

- **Focus**
  Creation of high-level technical talent for the aerospace industry with high-level academic institutions integrated to the sector in addition to the integration of local suppliers to the value chain of the national aviation industry through the development and conversion of suppliers with manufactured high added value pieces. Finally, Nuevo León specializes in MRO services for civil aviation.

- **Companies**
  28 companies and 22 DGAC-certified maintenance, repair and overhaul (MRO) workshops serving 12% of the Mexican fleet.

- **Exports**
  631 million dollars per year.

- **Available Qualified Human Capital**
  The education institutions graduate more than 6,000 engineers every year.

- **Training and Education**
  High quality and excellence of its highly competitive education institutions. Universidad Autónoma de Nuevo León (UANL), Instituto Tecnológico de Estudios Superiores de Monterrey (ITESM), and other technical schools and technical institutes

**QUIERETARO**

- **Focus**
  Appropriate infrastructure and optimal business conditions, particularly those intended to complement the supply chain for complex machining processes, surface coatings, heat treatments, sheet metalworking, forging and casting. The main aerospace products and processes in the state:
  - Machining of complex components
  - Aeronautics
  - Landing gear components and MRO
  - Composite components
  - Propulsion engines MRO
  - Components for braking systems

- **Companies**
  30 aerospace companies.

- **Exports**
  1.1 billion dollars. The state exports mainly goods for the assembly or manufacture of aircraft and aircraft parts, turbojets with thrusts in excess of 25 KN, landing gear and parts and goods for aircraft or aircraft part repair or maintenance.

- **Available Qualified Human Capital**
  Since 2008, 2,631 students have graduated and the number is expected to increase to 6,300 by 2016 considering the UNAQ alone.

- **Training and Education**
  Universidad Aeronáutica en Querétaro (UNAQ), Laboratorio de Pruebas y Tecnologías Aeronáuticas (Labia) and Red de Investigación y de Innovación Aeroespacial de Querétaro (RIAQ)