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Aerospace Panel Presentation: Current Trends and State Higher Education Needs in the Aerospace Industry

The aerospace industry is a critical component of the state's economy. Aerospace workers make up a greater share of total state employment in Washington than they do in any other state, and overall rank second in total number only to California. Workforce needs in the industry span a wide range of skill and education levels, including general managerial, administrative, and support positions, as well as those that are highly specialized and technical.

In 2010, about 84,000 workers were employed by aircraft and major component manufacturers in Washington. Of these, 86 percent were employed by the Boeing Corporation. A large percentage of these jobs require a high degree of skill and education. Nearly half require a bachelor's degree or higher, and a quarter are engineering positions or are engineering-related. Beyond this core manufacturing sector, there is a large supplier and support network employing about 180,000 workers. Most of these jobs require mid-level education and skills.

Commercial aviation remains a dynamic, growing, and competitive industry. Forecasts indicate that between now and 2030, the overall market may grow to \$3.6 trillion. For Washington to maintain its position as a world leader in the aerospace industry, it will need to meet a growing demand for workers at both the mid- and high-levels of skill and education.

Engineers and workers with key technical skills, in particular, will be crucial to the continuing success of the state's aerospace companies. Currently, the demand for engineers in the state significantly exceeds total baccalaureate degree production. Nationally, Washington is ranked third in employment of aerospace engineers but only 22nd in annual production of aerospace engineering degrees. The UW and WSU produce about 87 percent of all aerospace-related engineering degrees in Washington.

Key Questions regarding the State's Higher Education Support for the Aerospace Industry

The panel discussion will focus on the following central questions:

- What are the main factors driving rising demand for more skilled and educated workers in Washington's aerospace industry?
- What are the crucial gaps in the current higher education supply and demand chain with respect to this sector?
- How has Washington responded thus far to this rising demand?
- What else should the state do to improve higher education support for this sector?