GOAL

To develop a dynamic, industry-driven framework for the foundational and technical competencies that are necessary for workers across all sectors of the Aerospace Industry. The model is intended to provide a common language to inform discussion among industry leaders, educators, economic developers and public workforce investment professionals as they collaborate to:

- Identify specific employer needs
- Develop competency-based curricula and training models
- Develop industry defined performance indicators and skill standards
- Develop assessment and testing instruments

The Aerospace Competency Model will also inform decisions around investments in workforce preparation strategies in the Aerospace Industry.

STAKEHOLDERS

- Industry needs a standardized set of foundational skills and competencies so that they know they are hiring workers who are prepared to succeed in Aerospace careers in the 21st Century.
- Prospective workers – young people, low-skill incumbent workers, or career changers – want to know what skills they need to take the first step toward a successful career in Aerospace.
- Training providers, such as community colleges and Job Corps, need to know what competencies to train to, and that those competencies are directly relevant to industry requirements.
- The public workforce system needs to know that the training programs they support are producing workers that will find employment.

ONE COMPONENT OF BROADER COMPETENCY MODEL STRATEGY

By supporting the role of industry to develop competency model frameworks, ETA seeks to:

- Be a catalyst for convening industry leaders to develop competency model frameworks;
- Give education and training providers an industry driven framework for preparing workers with 21st century skills in high growth sectors of the economy;
- Inform federal investments in education and training activities;
- Promote portability of credentials; and
- Prevent future duplication of effort by sharing research and information through a database of existing and newly developed competency-based resources.
ABOUT THE MODEL

Before reviewing the draft model for the Aerospace Industry, it may be helpful to understand the model framework. The draft competency model is depicted in a graphic consisting of nine tiers. The arrangement of the tiers in a pyramidal shape is not meant to be hierarchical, or to imply that competencies at the top are at a higher level of skill. The model’s shape represents the increasing specialization and specificity in the application of skills as you move up the tiers. Tiers 1-4 are divided into blocks. The blocks represent competency areas, that is, the skills, knowledge, abilities, and other factors essential to successful performance in the Aerospace Industry. The model emphasizes Science, Technology, Engineering, and Math (STEM) competencies. A table of the competency definitions or key behaviors follows the graphic and provides additional detail or explanations of the competencies.

Tiers 1 through 3, called Foundation Competencies, form the foundation needed to be ready to enter the workplace.

Tier 1 – Personal Effectiveness Competencies are shown as hovering below the pyramid because these competencies are essential for all life roles. Often referred to as "soft skills," the Personal Effectiveness competencies are generally learned in the home or community and reinforced and honed at school and in the workplace. They represent personal attributes that may present some challenges to teach or assess.

Tier 2 – Academic Competencies are critical competencies primarily learned in a school setting. They include cognitive functions and thinking styles. Academic competencies are likely to apply to all industries and occupations.

Tier 3 – Workplace Competencies represent motives and traits, as well as, interpersonal and self-management styles. They generally are applicable to a large number of occupations and industries.

Tiers 4 and 5, called Industry Competencies, show competencies that are specific to the industry or industry sector. The cross-cutting industry-wide technical competencies make it possible to show career lattices within an industry wherein a worker can move easily across industry sub-sectors. As a result, this model supports the development of an agile workforce, rather than narrowly following a single occupational career ladder.

Tier 4 – Industry-Wide Technical Competencies represent the knowledge and skills that are common across the sectors within a broader industry. These technical competencies build on, but are more specific than, a competency represented on a lower tier.

Tier 5 – Industry-Sector Technical Competencies represent a sub-set of industry technical competencies that are specific to an industry sector

The top tiers (6-9) represent specialization within specific occupations within an industry. Occupational competencies are beyond the scope of this project.