

MEMORANDUM OF UNDERSTANDING
Among the
UNITED STATES DEPARTMENT OF TRANSPORTATION
And
UNITED STATES DEPARTMENT OF EDUCATION
And
UNITED STATES DEPARTMENT OF LABOR
To
PROMOTE AVIATION AND SPACE EDUCATION AND AEROSPACE
WORKFORCE DEVELOPMENT

Purpose:

This Memorandum of Understanding (MOU) establishes a collaborative effort between and among the Department of Transportation (DOT), the Department of Education (ED), and the Department of Labor (DOL) to foster the development of a skilled workforce through science, technology, engineering, and mathematics (STEM) programs and initiatives relating to aerospace workforce development. DOT, ED, and DOL share a common goal of promoting and developing a skilled workforce that can meet the Nation's demands for the 21st century. The purpose of this MOU is to improve collaboration and inter-departmental support among DOT, ED, and DOL in furtherance of that goal and in accordance with the following department missions:

- DOT:
 - Serve the United States by ensuring a fast, safe, efficient, accessible, and convenient aerospace system that meets our vital national interests and enhances the quality of life of the American people, today and into the future;
- ED:
 - Promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access;
- DOL:
 - Foster, promote, and develop the welfare of the wage earners, job seekers, and retirees of the United States; and
 - Advance opportunities for profitable employment.

This MOU establishes a mechanism for inter-departmental collaboration for the purpose of developing and implementing strategies and activities for using STEM education to develop a workforce that is highly qualified to work in the aerospace industry. Under this MOU, each department will seek to leverage existing resources and increase coordination of activities in support of aerospace workforce development, including through industry collaboration and by increasing internship, apprenticeship, mentoring, and volunteering opportunities in STEM fields. This MOU will support programs promoting learning, workforce development, and teacher training relating to skill development for STEM fields, including mathematical reasoning, scientific inquiry, and problem-solving skills. This MOU promotes joint endeavors by the departments that motivate students and help

them develop STEM skills leading to careers that benefit the Nation's workforce and address growing needs within the aerospace industry.

Background:

In April 2010, the Future of Aviation Advisory Committee (FAAC) was established by DOT to provide information, advice, and recommendations to the Secretary of Transportation on ensuring the competitiveness of the U.S. aviation industry and its capability to address the evolving transportation needs, challenges, and opportunities of the global economy. The FAAC's final report contained the following:

“The Secretary of Transportation should work with the Secretary of Labor ... to implement a national strategy focused on recruiting, training, and cultivating the aerospace workforce.... Additionally, the Secretary of Transportation should work with the Department of Education to provide resources that would create state-of-the-art STEM elementary and secondary educational facilities.”

This recommendation followed up on the finding of DOL's Interagency Aerospace Revitalization Task Force, in February 2008, (*Report of Interagency Aerospace Revitalization Task Force*) on the importance of STEM education. In that report, the Task Force found that “... there is significant concern that students who are participating in K-12, postsecondary, apprenticeships, and/or career and technical education are not adequately prepared for employment in STEM careers.”

In September 2010, the President's Council of Advisors on Science and Technology published a report (*Prepare and Inspire, K-12 Education in Science, Technology, Engineering, and Math (STEM) for America's Future*). The committee concluded:

“To meet our needs for a STEM-capable citizenry, a STEM-proficient workforce, and future STEM experts, the Nation must focus on two complementary goals: We must prepare all students, including girls and minorities who are underrepresented in these fields, to be proficient in STEM subjects. In addition, we must inspire all students to learn STEM and, in the process, motivate many of them to pursue STEM careers.”

The report went on to state:

“Over the past few decades, a diversity of Federal projects and approaches to K-12 STEM education across multiple agencies appears to have emerged largely without a coherent vision and without careful oversight of goals and outcomes. In addition, relatively little Federal funding has historically been targeted toward catalytic efforts with the potential to transform STEM education, too little attention has been paid to replication and scale-up to disseminate proven programs widely, and too little capacity at key agencies has been devoted to strategy and coordination.”

DOT's strategic plan notes that developing human capital through workforce planning is important to identifying mission and workforce trends, to assessing mission-critical core competencies, and to implementing plans to close workforce gaps through vigorous learning and knowledge management approaches, targeted recruitment, and succession planning. The DOT/FAA's Aviation and Space Education (AVSED) program is uniquely situated to provide resources and expertise to address the concern about the future workforce needs of the aerospace community. With DOT's mission in mind, the AVSED program is committed to ensuring a dependable supply of qualified workforce professionals by supporting educators and engaging students through exciting and high-quality aerospace thematic STEM programs, including many aspects of STEM education, in order to ensure a dependable supply of qualified workforce professionals. The AVSED program strives to ensure a steady entrance of diverse, qualified STEM experts into our country's air transportation and aerospace industry.

Intent:

The aim of this MOU is to facilitate increased collaboration and coordination of information by and among DOT, ED, and DOL in order to share information more efficiently and more effectively target the appropriate audience. By informing decisions on each Department's allocation of resources in the development of a skilled professional workforce through quality STEM programs, the three departments can better fulfill our Nation's aerospace workforce needs.

As a key part of this effort, DOT, through the AVSED program, will provide training and support for educators, work with local educational agencies and state educational agencies to thoughtfully connect aviation and aerospace-related instructional materials to existing curriculum, and disseminate information about activities, projects, youth events, and aviation career guidance. To the extent possible, ED will assist with the collection of information relating to STEM education and its dissemination to state and local educational agencies, provide information regarding internships, apprenticeships, and grant opportunities, and promote educator development opportunities as they relate to this MOU. DOL will support the public workforce system's efforts to coordinate with industry, share grant information related to STEM career pathways initiatives with partner agencies and their stakeholders, and disseminate information on educational initiatives and workforce development as it relates to this agreement.

It is understood and agreed by DOT, ED, and DOL that the intent of this MOU is to state shared goals and to establish and maintain cooperation and collaboration towards meeting these shared goals. This MOU does not create any binding obligation, contractual, financial, or otherwise, for any party. This MOU also does not serve to obligate any funds of the participating agencies nor to authorize the transfer of funds between the participating agencies of this agreement. Each department agrees to conduct its respective activities in a coordinated and mutually beneficial manner. DOT, ED, and DOL will evaluate their respective participation in any specific event on a case-by-case basis, in accordance with relevant law and regulations. Pursuant to this MOU, DOT, ED, and DOL agree to establish a partnership that will develop and coordinate activities that address, but not necessarily be limited to addressing, the following objectives:

1. *Collaboration*

- Participating jointly in the Administration's strategic planning and design of projects and activities that advance transportation workforce development in STEM fields;
- Serving as a resource for communities exploring alternative methods for the delivery of aerospace educational services; and
- Continuing to encourage department personnel to support existing internship, apprenticeship, mentoring, and volunteering opportunities in order to create a consistent national effort.

2. *Focal Areas*

- Reviewing new and existing programs to identify opportunities for collaboration in instances where programs directly complement or supplement one another;
- Involving or partnering with non-federal stakeholders, including schools and state and local decision-makers;
- Working with educational organizations, both formal and informal, to provide support and assistance where practical, beneficial, and applicable to the focus of this MOU;
- Engaging industry partners and workforce stakeholders to align Federal efforts with industry's projected needs;
- Designing program collaboration in a manner that capitalizes on the relative strengths and expertise of each department and reflects department missions; and
- Aligning program collaboration to capitalize on the relative strengths, expertise, and mission of each department.

3. *Coordination*

- Sharing information and/or supporting joint efforts in the following areas: K-12 program partnerships; workforce services, including training for workers (both incumbent and unemployed); and leveraging internet resources, including social media;
- Setting program priorities and ensuring alignment to achieve common goals and objectives; and
- Promoting mentoring and volunteering opportunities.

4. *Strengthening the knowledge base by sharing intellectual expertise*

- Exchanging information on pending legislation related to STEM education;
- Sharing information on legislative initiatives, regulatory and non-regulatory issues, and administrative actions originating from DOT, ED, and DOL that may affect aerospace workforce development;
- Reviewing proposed legislation to identify common issues, as well as to assess the potential impact on department programs and the relationship of proposed initiatives to department strategies and priorities;
- Sharing of information relating to aerospace workforce development and STEM education; and

- Identifying common issues and strategies to maximize allocation of resources and attainment of common goals.

5. *Leadership Support and Accountability*

- Developing a formal process to improve communication and coordination between departments regarding aerospace workforce development efforts;
- Exploring and developing a collaborative communications strategy designed to increase public awareness and visibility regarding STEM education and aerospace workforce development;
- Supporting designated staff as points of contact to enable them to carry out the purposes and scope of the MOU;
- Identifying the highest-priority joint actions along with timelines for implementation; and
- Developing performance measures to track progress of this MOU.

Effective Date and Termination:

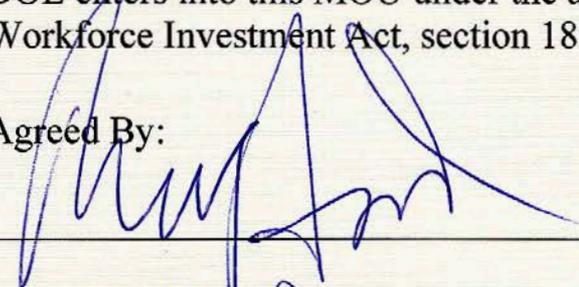
This MOU takes effect when signed below and shall remain in effect for a period of three (3) years. DOT, ED, and DOL agree to review this MOU annually to determine whether it should be revised, renewed, or terminated. Notice of termination shall be served on all other parties at least ninety (90) days prior to the effective date of that termination unless all parties consent to an earlier termination date. Only the signatories or their successors and designees may terminate this MOU.

DOT enters into this agreement pursuant to its authority under 49 U.S.C. § 301 and § 322(c).

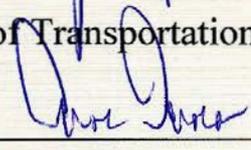
ED enters into this MOU under the authority to enter into agreements in section 415 of the Department of Education Organization Act (DEOA) (20 U.S.C. § 3475), and consistent with the purposes set forth in section 102(4), (5), and (6) of the DEOA (20 U.S.C. § 3402(4), (5), and (6)).

DOL enters into this MOU under the authority under 29 U.S.C. § 551 and also under the Workforce Investment Act, section 189(c) [29 U.S.C. § 2939(c)].

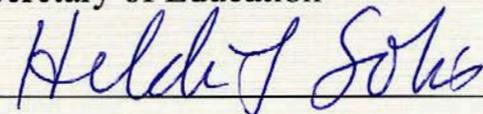
Agreed By:



Secretary of Transportation



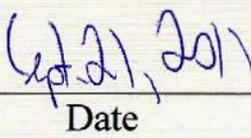
Secretary of Education



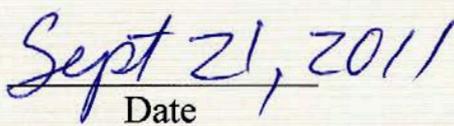
Secretary of Labor



Date



Date



Date