October 2021 Youth Access to American Jobs in Aviation Task Force (YIATF) Meeting

AGENDA

Dr. Sharon DeVivo, YIATF Chair, and Angela Anderson, Designated Federal Officer

HOSTED AT: Virtual Platform (Zoom)

DATE: October 8, 2021

TIME: 9:00 AM to 12:30 PM EST

OBJECTIVE: Receive updates from the four subcommittee chairs on the work completed to date and

what they see as their way ahead.

Time	Topic	Facilitator
9:00 – 9:05 am	Call to Order Federal Advisory Committee Act (FACA) Official Statement	Angela Anderson
9:05 - 9:10am	Open Meeting	Sharon DeVivo
9:10 – 9:30 am	Update from Subcommittee Chair/Discussion – Trends Speakers: Brett Levanto Kasey Herzberg Cyd Smith	Yvette Rose
9:30 – 9:50 am	Update from Subcommittee Chair/Discussion - Awareness Building Speakers: Whitney Dix Jennifer Henderson Stacey Bechdolt Amy Voss	Joey Colleran
9:50 – 10:10 am	Update from Subcommittee Chair/Discussion - Funding Speakers: David Purser John Huff Tammera Holmes	Dr. Ralph Coppola
10:10 – 10:30 am	Update from Subcommittee Chair/Discussion - Expanded Pathways Speakers: Dr. Nancy Shane Hocking James Hall Joel English	Ryan Goertzen

Time	Topic	Facilitator
	Jo Damato	
10:30 – 10:40 am	Break – 10 mins	
10:40 – 11:45 am	Subcommittee Open Discussion & Action Item Review	Sharon DeVivo
11:45 – 12:20 pm	 Museums as Part of the Aviation Ecosystem Amy Spowart, President and CEO, National Aviation Hall of Fame, Dayton, Ohio Jennifer Baxmeyer, Executive Director, Cradle of Aviation Museum, Garden City, NY 	Sharon DeVivo
12:20– 12:30 pm	Public Speaker Statement	Sharon DeVivo
12:30	Adjourn Meeting	Sharon DeVivo, Angela Anderson

Draft YOUTH ACCESS TO AMERICAN JOBS IN AVIATION TASK FORCE RECORD OF MEETING

MEETING DATE: June 9, 2021

MEETING TIME: 9:00 AM – 2:30 PM EDT

LOCATION: The Youth Access to American Jobs in Aviation Task Force

(YIATF or Task Force) held a public virtual meeting.

PUBLIC

ANNOUNCEMENT: The Federal Aviation Administration (FAA) provided notice to the

public of this YIATF meeting in a *Federal Register* notice published on May 14, 2021, (86 FR 26599). Recordings of the

meetings can be found at:

https://youtu.be/pfdVxREcu84 https://youtu.be/aZstI0LFzB0

ATTENDEES:

Committee Members		
Amy Voss		
Brett Levanto		
Cyd Smith		
David Purser		
James Hall		
Captain Jennifer Henderson		
Joanne Damato		
Joey Colleran		
Captain John Hornibrook		
John Huff		
Dr. Nancy Shane Hocking		
Dr. Ralph Coppola		
Ryan Goertzen		
Dr. Sharon DeVivo, Chair		
Tammera Holmes		
Yvette Rose		

FAA		
Angela Anderson, Designated Federal		
Officer		
Aliah Duckett		
Allison LePage		
Jack Fino		
Leslie Welch		
Lindsay Aaronson		
Steve Custer		
Talisa White		
Thuy Cooper		
Non- FAA Attendees		
Jennifer Henderson		
Erica Cook		
Christopher "Mookie" Walker		
Stacey Bechdolt		
Kyle Sucher		
Nancy Hocking		

The FAA live streamed this meeting on its social media platforms. As a result, the list of FAA and public attendees does not capture those individuals.

Welcome and Introduction

Ms. Angela Anderson, Designated Federal Officer (DFO), began the meeting at 9:00 am by welcoming everyone to the third YIATF public meeting.

Ms. Anderson read the required press disclaimer and the live stream statement, as the meeting was live streamed on the FAA's YouTube, Facebook, and Twitter accounts. She also read the Federal Advisory Committee Act (FACA), Title 5, United States Code (5 U.S.C.); Appendix 2 (2007) statement.

Ms. Anderson introduced the YIATF Chair, Dr. Sharon DeVivo, who thanked everyone for attending the meeting.

Ratification of Minutes

Dr. DeVivo asked for a motion to accept the minutes from the March 31, 2021, meeting. Ms. Yvette Rose motioned to accept the minutes, and Mr. Brett Levanto seconded. The Task Force voted to ratify the minutes with no objections.

Status Reports

The June 9, 2021, YIATF meeting packet can be found at: https://www.faa.gov/regulations_policies/rulemaking/committees/documents/media/Updated%20June%20YIATF%20Meeting%20Packet.pdf

Trends Subcommittee

Ms. Yvette Rose, Trends Subcommittee Chair, provided the subcommittee update. She acknowledged and thanked members of the Trends Subcommittee and the FAA subject matter experts for their input. Ms. Rose reviewed the Trends Subcommittee task, which is to identify industry trends that encourage or discourage youth in the United States from pursuing careers in aviation. She asked Mr. Levanto to discuss updates from the subcommittee.

Mr. Levanto described the group's schedule and noted that they continue to meet weekly. He stated that they have coordinated with the other subcommittees and external entities, such as the Smithsonian. Mr. Levanto noted that the current focus is to concentrate efforts on the educator survey and focus groups. He asked Ms. Cyd Smith to speak on the value and importance of connecting with educators.

Ms. Smith discussed the role of educators, ways to engage parents, and the influence teachers have on students, parents, and on each other. Ms. Smith focused on the significant role that teachers have on promoting aviation career awareness and igniting student interest in aviation. She stated that the subcommittee intends to create a survey that focuses on gauging teachers' awareness of careers in aviation.

Mr. Levanto reviewed some key conclusions from the youth survey administered to aviation students. He noted that the survey aimed to pinpoint the age in which students became interested in pursuing aviation. The survey revealed the role teachers play in raising awareness. Mr. Levanto highlighted additional key conclusions from the survey.

- Focus on the formative years (age 10-18),
- Outreach to Historically Black Colleges and Universities and community colleges,
- Use online platforms as opportunities to reach young people.

Ms. Smith further described examples of online platforms that currently exist and the plan for an aerospace focused database she hopes will exist in the future.

Ms. Rose stated the subcommittee's next steps include developing the educator surveys, continuing to work with other subcommittees, and formulating recommendations. She asked if anyone had questions for the subcommittee.

Dr. DeVivo asked if the group considered various state regulations when doing their research. Ms. Rose noted that they have researched the curricula requirements throughout different states, but she believes the general lack of awareness is not hindered specifically by differences between states.

Ms. Jo Damato spoke on existing programs that do not include aerospace industry options on their career ready platform. Ms. Smith agreed and stated the group would like to work towards improving these platforms and creating an aerospace-specific platform.

Ms. Joey Colleran suggested using state sponsored workforce development events as a resource for more outreach. Dr. DeVivo mentioned an existing career focused website called Burning Glass, a career site, stating that this and other similar platforms would be helpful to partner with. Mr. Ryan Goertzen asked what types of data would classify a career to be categorized as aerospace and what other classifications or parameters should the group be thinking about within the ideal aerospace platform. Mr. Ralph Coppola described an interactive, extensive, aerospace competency model created by the Department of Labor (DOL). Mr. Coppola suggested that this aerospace competency model details both the requirements and expectations for aerospace careers.

Funding Subcommittee

Mr. Ralph Coppola provided the Funding Subcommittee's status report.

Ms. Tammera Holmes described gaps in traditional funding sources. Ms. Holmes summarized current loan, scholarship, and grant systems and the problems that create gaps within each funding source.

Mr. Coppola described funding requirements needed to impact the aerospace workforce. He stated that the group believed funding should be national, ongoing, and targeted to aerospace education. Mr. Coppola noted that results need to be tied to the increase in numbers of people interested in aerospace and an increase in numbers of people getting into the aerospace workforce. He asked Mr. David Purser to describe the group's recommendations.

Mr. Purser described the two initial recommendations – (1) offer a loan forgiveness and (2) develop new funding source. Mr. John Huff discussed an existing loan forgiveness program that exists through the Department of Education. He described positive aspects of an aerospace loan forgiveness administered by the Department of Education, Office of Federal Student Aid. He described a funding model, which generated revenue from airline ticket taxes.

Mr. Coppola discussed the recommendation to develop a new funding source, which would be an incentive-based funding solution and proposed legislation. Mr. Coppola proposed the idea to include appropriation legislation throughout the Departments of Defense and Transportation (DOD and DOT), which would allocate funds from all aerospace contracts to be used for aerospace education programs that lead to jobs in the aerospace and defense workforce. Ms. Holmes explained a model for new funding for aerospace education. She compared information on DOD's budget and funding allocated for aerospace education with similar information from DOT. Mr. Coppola went over an aerospace education program list. The primary goal of the list is to educate people and get them into the aerospace workforce.

¹ See https://www.careeronestop.org/competencymodel/competency-models/aerospace.aspx.

Dr. DeVivo encouraged non-Task Force members to provide feedback and help vet these ideas. She noted that recommendations should not include things that are not feasible, in terms of funding or otherwise.

Mr. Huff emphasized that the recurring theme of one central location or portal for aerospace information and thinking about how that can be funded and maintained. Mr. Goertzen mentioned funding that may be available through grants and the FAA Reauthorization Act. He asked questions about the current loan program through Title IV and if it may be modified. Mr. Coppola noted the group has researched the Department of Education's loan forgiveness programs, which they look to as a model for what they are trying to accomplish. He noted that funding opportunities should work to support aviation, engage the community, and increase exposure to aerospace opportunities.

Ms. Smith asked about accessible funding for teachers and classrooms. Mr. Purser described existing funding programs that apply to different age groups and what he feels is lacking in those current programs. Ms. Holmes described the tiers in the group's funding model, which includes resources for teachers in Tier 1 funding.

Dr. DeVivo encouraged all members to look at Title IV funding program and provide suggestions for long- and short-term changes. She also mentioned the FAA grant program and how the Task Force can use that as a model to see what works or does not.

Awareness Building Subcommittee

Ms. Joey Colleran provided the Awareness Building Subcommittee status report.

Ms. Colleran stated that the subcommittee's charge is to consider how the Administration, the aviation industry, and other aviation stakeholders can coordinate efforts to support youth in pursuing careers in aviation. She asked Ms. Jennifer Henderson to describe the current subcommittee work.

Ms. Henderson stated the subcommittee is creating a survey for school counselors, students, and aviation-related professional organizations. She further stated that the subcommittee is considering the survey questions and the most effective way to reach people not involved in aviation. Ms. Stacey Bechdolt noted that the group is working with other subcommittees to cover overlapping topics. She explained the outreach effort that the group is doing to distribute their surveys and gather more and effective data. Ms. Bechdolt stated that the subcommittee welcomes feedback on the surveys from other Task Force members. She asked Ms. Amy Voss to discuss next steps.

Ms. Voss stated that the next steps include distributing surveys to organizations, gathering data and analyzing results, and inviting guest presenters to subcommittee meetings. She asked if anyone had questions.

Ms. Damato asked about the role of school guidance counselors at various stages of a student's academic life. She suggested that perhaps children closer to a career age should be targeted. Ms. Bechdolt noted that they did consider this factor. She stated that she has worked with school guidance counselors at targeted conferences, and confirmed counselors generally know very little about aviation career paths. Ms. Damato asked if they knew what industries were more "normal" or "familiar" to guidance counselors. She suggested that those industries could be used as a model for outreach. Members agreed that the one stop shop of resources would be helpful to guidance counselors, as well as all other end users. Ms. Holmes spoke of her experience getting into aviation because of a brochure her counselor happened to have with an airplane on it, and she stressed the importance of getting sharable information into the hands of educators and counselors. Dr. DeVivo suggested focus groups that include counselors, as follow ups to the surveys may be helpful. Mr. Purser mentioned that providing surveys to members of the National Science Teachers Association may be a good idea.

Expanded Pathways Subcommittee

Mr. Goertzen provided the Expanded Pathways Subcommittee's status report. Mr. Goertzen reviewed the membership and the subcommittee's charge, which is identify industry trends that encourage or discourage youth in the United States from pursuing careers in aviation. As part of its work, he stated the subcommittee is considering the following questions.

- What are the existing programs that work well in reaching youth?
- What are the impediments to reaching young people and why is aviation not considered as a career choice?
- What role do teachers and guidance counselors play in shaping a student's decision to pursue aviation?

Mr. Goertzen stated that subcommittee is reviewing case studies and conducting interviews to help understand and align opportunities to expand pathways. Mr. Goertzen asked Mr. James Hall to detail high school expansion programs.

Mr. Hall described the importance of an industry recognized credential earned as part of the high school's programs. He noted the programs should have:

- a nationally approved curriculum,
- little to no cost barriers for high school students, and
- Promote motivation and benefits for secondary and post-secondary partners to participate Mr. Hall noted that the group would like the FAA to approve a national curriculum. He cited the Aircraft Owners and Pilots Association (AOPA) curriculum as an example.

Mr. Goertzen asked Mr. John Hornibrook to talk about the link in relationships between teachers and parents. Mr. Hornibrook described the roles of teachers, of parents, and of teachers and

parents with each other. He mentioned the creation of a summer teaching academy program and the importance of partnering with industry to support travel, hotels, and transportation.

Mr. Goertzen asked Ms. Damato to speak on information currently available. Ms. Damato emphasized the lack of data currently available, including the recurring theme of the one stop shop for aerospace information. She said there is a need to attract people into the industry but also to keep them interested and engaged. She stated that these gaps in data contribute to the barriers in pathways to information and in being able to track progress.

Mr. Goertzen reviewed the following four focus areas as next steps.

- Develop the concepts of a Nationally Approved Curriculum leading to industry recognized credentials.
- Develop the concepts of a summer teaching academy program.
- Develop the concept for a robust national aviation website.
- Create a virtual counselor platform.

Ms. Nancy Hocking further detailed what the programs, website, and platform could look like. She described the important influence that a live interaction with a counselor could have on a student interested in aviation.

Mr. Goertzen asked if anyone had any questions. Mr. Coppola offered insight regarding credentials, from an engineering perspective. He noted that real world experience is often needed to enter the industry and if there is a way to link credited programs to experience would be helpful. He asked what kind of process would be needed to receive this kind of credentialing. Mr. Goertzen noted that once curriculum is created, FAA would need to be engaged to further the process. Mr. Brett Levanto spoke on the important role of employers in the pathway, and Ms. Damato agreed, especially considering the changes in jobs during the pandemic.

Subcommittee Open Discussion

Dr. DeVivo began the open discussion with the idea of using various industries as allies. She described struggles in technical fields, such as the lack of use of regular tools. Ms. Holmes highlighted the need for research into employer's recruitment and retention rates, and suggested that providing the cost benefit analysis of training people at a young age may be beneficial. She stated that the Funding group's proposal calls for action by employers. Ms. Holmes and Dr. DeVivo mentioned Career and Technical Education (CTE) programs that currently exist and lead directly into jobs and that aerospace should model these programs. Ms. Holmes reminded the group that all subcommittees should work together to come up with a best practices list. Ms. Damato suggested to focus on both local and national efforts. Mr. Goertzen agreed and noted that there is value in organizations working together toward a national effort.

Mr. Coppola suggested that next steps should include initiating some of the ideas being discussed. Ms. Rose asked about the vision for a federally chartered nonprofit, and Dr. DeVivo confirmed she hopes to get more information from the FAA's Government Affairs office. Ms. Joey Colleran asked if any members participate with the U.S. Chamber of Commerce and their

workforce development programs. Mr. Goertzen confirmed he has a contact there, and he has had aviation-related conversations with them.

FAA Social Media Approach

Ms. Allison LePage described the FAA's approach to social media. She noted the FAA has over 1.5 million followers across their social media platforms and is also in the third season of the agency's podcast. Ms. LePage described how following and working with social media influencers extends aviation opportunities to wider audiences. She described opportunities for influencers to help bring awareness of career opportunities in aviation. Ms. LePage cited the FAA's interaction with aviation influencer, @planegirl, as an example.

Ms. LePage described challenges to outreach brought on by the pandemic. She talked about opportunities for students and teachers specifically designed for virtual learning. She shared examples of aviation lesson plans that could be done from home, including an airport design challenge.

Ms. LePage emphasized that the FAA podcast reaches a new generation of audience and helps to connect with young people. She spoke about FAA student employment opportunities and the agency's direct connections with colleges and universities. Ms. LePage noted that if any public influencers were interested in working with the FAA, they should contact the agency.

Dr. DeVivo thanked Ms. LePage and asked if she had any experience with using the platform, Twitch. Ms. LePage noted that FAA does not currently have a presence on Twitch, but they are always open to new ideas and platforms.

Mr. Levanto noted that he knows a TikTok influencer that he would like to connect with Ms. LePage, and she welcomed that idea. He asked if there was any mechanism to work with other podcasters to expand the audience. Ms. LePage stated the FAA is open to collaborating with others.

Ms. Rose asked whether or not aviation is included in the STEM approach. Ms. LePage stated that the goal is to inspire aviation through any route, within or outside of the scope of STEM. She noted that she did not have an aviation background before working with the FAA.

Ms. Damato asked about using some of Ms. LePage's connections for networking, surveying, or focus groups. Ms. LePage described the intern structure and stated that she thought it was a great idea to survey them for information, but she said she is not sure how many of them have aviation backgrounds. Dr. DeVivo suggested possibly doing both pre- and post- surveys with FAA interns. Ms. LePage noted that anyone can email digital@faa.gov with any feedback.

United Airlines' Aviate Academy Pledge

Mr. Kyle Sucher described United Airlines' programs to create a high-quality diverse pipeline for future pilots. Mr. Sucher described Aviate, United's pilot development program. He noted that, through Aviate, United plans to train 5000 new pilots, half of which are women and people

of color. He described how the United Aviate academy will work with partners within a bigger aviation ecosystem. Mr. Sucher described scholarship funds and other ways to reduce financial barriers.

Dr. DeVivo thanked Mr. Sucher and asked him how many applications United has received. He stated they have received over 5,500 diverse applications since April. He noted that they plan to enroll 100 students this year, and they will offer a mix of full and partial scholarships that total about \$25,000. Some discussion continued about loan interest rates, and Mr. Sucher explained that with the guaranteed career path, they hope any loans will come with very low risk.

United States Air Force (USAF) Approach to Developing the Workforce

Brig General Christopher "Mookie" Walker provided insight on being an Air Force aviator as well as the target, threats, and tactics of the USAF. He described the target to meet the national (global) demand for aerospace professionals and to ensure inclusive opportunities in order to attract the nation's best and brightest to our aerospace industry. He discussed identifying threats and how to make intentional efforts towards meeting the USAF's mission. Mr. Walker defined tactics as how to accomplish the mission and described these tactics on institutional, organizational, and personal levels. He explained a working hypothesis that utilizes a deliberate collaborative approach that starts at a young age.

Mr. Walker described the 4C's model of Air Force pilot development and the national 'pilot' ecosystem which includes various industries, institutions, and communities. He described the 4C model:

- childhood (reaching people from a young age with programs like the Air Force JROTC Flight Academy),
- college/cadet,
- cockpit (to bring in qualified candidates), and
- career

Dr. DeVivo thanked Mr. Walker and asked him what barriers he has found in his experience. Mr. Walker stated the biggest barrier is one being in their own head and not seeing someone that looks like them as a role model. He also mentioned financial barriers and the military civilian divide. Mr. Walker addressed a question related to STEM and the need to have knowledge of various subjects within the USAF.

Mr. Levanto asked about recruitment and transition for people coming out of the military. Mr. Walker noted that forums such as this Task Force and other platforms can help spread awareness for information that is currently unavailable or hard to find for people coming out of the USAF and the other branches of service.

Action Items Review and Other Business

Dr. DeVivo noted that everyone is on the same page for the one-stop shop of resources. She mentioned that today's meeting emphasized the importance of teachers and counselors. She

expressed the importance of personal relationships and the alignment of relationships with employers and other members of the industry. Dr. DeVivo suggested vetting ideas to people outside of the task force to gain more feedback in moving forward. She asked what other members gained from the meeting.

Ms. Rose mentioned that subcommittees should cross collaborate to cover any overlapping topics and themes. Ms. Damato mentioned that various subcommittees have mentioned targeting youth at different ages and asked if there was a sweet spot age that the Task Force should focus on. Dr. DeVivo suggested she believed the target age to reach youth is between 10-18. Mr. Levanto said it is important to understand the different levels of engagement at various ages, especially since some have little to no exposure to aviation. Dr. DeVivo suggested trying to reach more underrepresented groups.

Dr. DeVivo stated the YIATF is having a working group session on July 13, 2021, and asked Ms. Anderson if she had anything to add. Ms. Anderson thanked the Task Force members and guest speakers. She noted that the next public meeting is on September 13, 2021.

Adjournment

Dr. DeVivo adjourned the meeting at 1:59 p.m.

Trends Subcommittee Update

YOUTH ACCESS TO AMERICAN JOBS IN AVIATION TASK FORCE

PUBLIC MEETING: OCTOBER 8, 2021



Trends Subcommittee Members

Yvette Rose

President, Aero Club Foundation of Washington & Subcommittee Chair

- Kasey Herzberg
 - Director of Engineering, Aircraft Data Fusion
- Brett Levanto

Vice President of Operations, Aeronautical Repair Station Association

Cyd Smith

School Counselor at Elkins Park School, Cheltenham School District, Cheltenham, PA

FAA Subject-Matter Experts

James Brough, Analyst, National Aviation and Space Education Program Christina Drouet, Manager, Aviation Workforce and Education Division

FAA's National Engagement & Regional Administration Office of Policy, International Affairs, and Environment Trends
Subcommittee
Task

Identify industry
trends that
encourage or
discourage youth in
the United States
from pursuing
careers in aviation





Continued to Meet Weekly

Virtual meetings among subcommittee members and FAA SMEs



Coordinated with other Subcommittees

Joint meetings and discussions



Educator Survey

Completed survey and conducting outreach to K-12 (and post-secondary) educators nationwide

Updates Since Last Public Meeting



Key Trends

- Valuable Role of the Educator
 - Building on data collected in youth survey
 - Collecting more data through direct educator survey
- Educator Awareness Leads to Student Awareness
- Engage Parents and Get Parent Buy-in

Developing Themes

Collaboration – aligning industry/government/academic efforts to deliver programs or resources to students

Educator Resources/Development – providing training, tools or opportunities to those working in educational institutions

Engagement – researching/developing the best ways to engage with students/youth

Next Steps

Distribute Educator Survey

Finalize Recommendations



Awareness Building

Members of the Committee

Stacey Bechdolt

President and Founder of Aerospace Education Resource Organization (AERO)

Joey Colleran

Director of Customer Success at Redbird Flight Simulations Board Member of University Aviation Association

Whitney Dix

Manager of Dispatch Training at Southwest Airlines

Captain Jennifer Henderson

Engineering Test Pilot/Chief Pilot of 737 at Boeing

Amy Voss

Regional Training Manager at Cirrus Aircraft

FAA Subject Matter Experts

Christine Sharp

Manager, Aviation Workforce and Education Division

Robyn Mulenga

Management Program Analyst

Youth Access to American Jobs in Aviation Task Force

Charge to the Subcommittee and Questions to Consider

- Consider how the Administration; air carriers; aircraft, powerplant and avionics manufacturers; aircraft repair stations; and other aviation stakeholders can coordinate efforts to support youth in pursuing careers in aviation.
- 1. How are the FAA, employers, non-profits and others currently involved in workforce development?
- What would be the best structure to having these groups work together and use best practices to reach young people?
- 3. Are there existing "umbrella groups" that could be leveraged to provide a "onestop-shop" for both organizations, students, parents and educators to learn more about aviation?

Subcommittee Work

Ongoing -

- Creation of survey for school counselors
- Outreach to educators to host focus groups for students/youth
- Applying results to previous subcommittee research to determine best practices and determine recommendations

Funding Subcommittee

October 8, 2021

Members of the Funding Subcommittee

Dr. Ralph K. Coppola

Chair, Funding Subcommittee
Founder & Executive Director, Real World
Design Challenge & President
RKC International

Tammera L. Holmes

Founder & CEO of AeroStar Consulting Corporation & AeroStar Avion Institute

John Huff

VP of Human Resources, HAECO Americas

David Purser

Aviation Physics Instructor Karnes City High School

Jonni Christian

FAA AVSED

Michelle Christensen

FAA AVSED

Funding Subcommittee Process

- Extensive review and analysis of the the literature.
- Review of 40 years of government and private workforce reports.
- Research and analysis of existing funding sources such as government, corporations, foundations, trusts, individuals and fees.
- Developing ideas to address the the workforce issue using funding strategies based on the research.
- Getting feedback from key stakeholder groups using structured interviews.

Gaps in Traditional Funding Sources

Loans

- Must be repaid
- Interest accruing
- Qualification requirements present barriers to access
- Disproportionate negative outcomes among underrepresented borrowers y

Scholarships

- Difficult to locate (no centralized database for national aviation scholarships)
- Do not often fund vocational education programs
- Usually offer one-time support
- Highly competitive
- Dependent on philanthropic giving

Grants

- Little to no aviation focus
- Low success rate
- Highly competitive
- Robust tracking and evaluation

Youth Access to American Jobs in Aviation

Funding Requirements Needed to Impact the Aerospace Workforce

- National
- Ongoing
- Targeted to aerospace education
- Results tied to
 - Increase numbers interested in aerospace
 - Increase numbers going into the aerospace workforce

Expanded Pathways Subcommittee

October 8, 2021

Members of the Committee

- Joanne Damato, CAM, VP, Educational Strategy & Workforce Development; National Business Aviation Association
- Dr. Nancy Shane Hocking, Director Gateway College and Programs;
 JetBlue
- James Hall, Dean, Aviation Technologies; Wichita State University
- Dr. Joel English, Executive Vice President; Centura College
- Ryan Goertzen, VP Maintenance Workforce Development; AAR
- Ed Cormier, Program Analyst, FAA

Charge to the Subcommittee and Questions to Consider

 Specific charge: Identify methods of enhancing aviation apprenticeships, job skills training, mentorship, education and outreach programs that are exclusive to youth in the United States.

- What are the current pathways to careers in aviation (please consider the following: maintenance technician, pilot, engineer, technician, airport manager/operations, dispatcher, air traffic controller, unmanned aerial systems and any others that are applicable)?
- How can apprenticeships be best promoted and leveraged with employers to create more pathways for students?
- How can mentorship and outreach programs be leveraged to attract more underserved populations to aviation?
- What are aviation colleges and universities already doing to reach students (especially underserved populations) and could those efforts be scaled at a national level?

AVSED Alignment



The many benefits of collaborating with FAA:



Students

- Engage in hands-on learning
- · Widen horizons for the future
- · Demonstrate STEM literacy
- Look up to role models in their community
- Become aware of aviation and aerospace career opportunities



Teachers

- Encourage STEM literacy
- Build connections with industry and national partners
- Increase library of educational resources
- Support career awareness





Schools

- Collaborate with FAA and other partner entities
- Enhance reputation for advancing students' STEM skills
- Provide unique learning opportunities



Key Observations

High School Programs Expansion

- CTE / Dual Credit Programs leading to Industry-Recognized Credential
- FAA recognition of Nationally-Approved Curriculum
 - Example: Choose Aerospace / AOPA, NCATT, NC3
- Removal of Cost Barriers for High Schools and Students
- Motivation and Benefit for the Secondary and Post-Secondary Partners to Participate

Importance of Teachers and Parents

- "You can't be it if you can't See It"
- Inspired teachers are contagious and impact not only students but parents.
- Creation of a Summer Teaching Academy Program.
 - Role of Museums
- Industry must support through travel, hotels and transportation

Information is Critical

- Information is fragmented; lack of centralized clearinghouse for "one stop shopping"
- Many pathways exist but information on how to find/enter them is not readily available to all
- Lack of tracking of students in existing programs means they are missing key career information

Next Steps

- Develop concepts of Nationally Approved curriculum leading to industry recognized credentials.
 - Unbundling of the A&P
 - FAA Guidance or Regulation
- Develop the concepts of a Summer Teaching Academy Program.
 - Focus on museums
- Develop the concept for a robust national aviation website.
 - The role of AVSED
 - Inter Subcommittee work
- Creation of a Virtual Counselor platform.