Airport Design Challenge
Airport Collaborator Toolkit

Welcome to the STEM AVSED Airport Design Challenge Toolkit, a collection of helpful materials and resources you may use to promote the Challenge and encourage students in your area to participate. Have questions or comments? Please contact the National STEM AVSED Airport Design Challenge Team at avsed.challenge@faa.gov.

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Federal Aviation Administration

ABOUT AIRPORT DESIGN CHALLENGE

The Airport Design Challenge (ADC) is an interactive learning and collaboration opportunity for students in grades K-12. The FAA Science, Technology, Engineering, and Math Aviation and Space Education (STEM AVSED) Program organizes and sponsors this exciting challenge to work toward our shared goal of inspiring the next generation of aerospace professionals. As an airport leadership team, the Airport Design Challenge is an excellent resource to positively engage with your community, by providing an opportunity to work with schools and other community groups.

During the Airport Design Challenge, students can design virtual airports in Minecraft based on guidance from FAA aerospace and engineering experts. Participating students meet aviation professionals, engage with other designers, and learn about the aerospace industry. The challenge offers first-hand experience in an aviation-related application of STEM concepts and helps students apply their academic knowledge and skills to professional simulations.

While participants are encouraged to form teams of up to five members, they may also participate individually. Instructional modules cover topics ranging from airport layout to pavement and lighting, then on to structures, and finally, innovative growth. Module knowledge check assignments and screenshots of students' designs are used to assess progress and provide feedback.

AIRPORT DESIGN CHALLENGE AS COMMUNITY ENGAGEMENT

We recognize that the ADC can be an excellent opportunity for you to engage with the public in your community. Here are some ways that you can use this tool to do that.

SHARE INFORMATION WITH OTHERS

The Airport Design Challenge (ADC) is an innovative educational initiative fostering aerospace interest among students in grades K-12. As we work toward our shared goals for the aviation and aerospace industry, the challenge welcomes all participants, including underserved and

underrepresented populations. By sharing information about the Challenge, you are inspiring students to pursue aerospace careers and can provide a concrete way to connect with the community. Below are some ways you can easily incorporate ADC into your broader community engagement efforts.

Spread the Word: Utilize your communication channels to disseminate information about the ADC. Share program details, registration instructions, and key dates to encourage participation.

Connect with Schools and Organizations: Reach out to local schools, homeschooling groups, and community organizations to promote ADC, or even consider sponsoring a team as a coach.

Digital Screens and Announcements: Explore opportunities for digital screen advertising and announcements within your airport. Engage passengers, parents, and educators through visually appealing content highlighting ADC's educational value. Videos and other resources are available on the [FAA Airport Design Challenge website](#).

Social Media Promotion: Leverage your social media platforms to create buzz around ADC. Use relevant hashtags, share success stories, and engage with the audience to generate interest and participation. You can find graphics, videos, and sample language in our [Airport Design Challenge Social Media Toolkit](#).

ENCOURAGE TOURS OF AIRPORTS FOR CHALLENGE PARTICIPANTS

Immersive experiences can significantly enhance students' understanding of aviation and airport design. Encouraging tours of your airport provides participants with real-world insights, enriching their Airport Design Challenge journey.

Facilitate Airport Tours: Organize guided tours for challenge participants. These tours offer a behind-the-scenes look at airport operations, fostering a deeper connection with the subject matter and build positive relationships within the community.

Expert Q&A Sessions: Arrange Q&A sessions with airport professionals during the tours. Participants can gain firsthand knowledge, ask questions, and further enrich their understanding of the aviation industry.

Promote Learning Opportunities: Emphasize the educational value of airport tours in your promotional efforts. Highlight how these experiences complement the ADC by providing practical insights into airport design and operations.

MATERIALS AND SUPPLIES FOR ADVERTISING

Take a look at the Airport Design Challenge Digital Toolkit. In the toolkit, you can find a variety of resources for you to adapt and share, including videos, sample social media posts, email templates, ADC graphics, and official FAA channels to stay up to date with the agency.

The [Airport Design Challenge Digital Toolkit](#) is available at www.faa.gov/adc/toolkit.

ADDITIONAL INFORMATION

The Airport Design Challenge is flexible and can be integrated into various educational settings, such as individual passion projects, homeschool curricula, school-based STEM programs, community organizations, and aviation-focused groups. K-12 students can work on the challenge up until the submission deadline, including over the summer. The program is designed to be accessible to students worldwide, regardless of geographic location or educational background. This flexible structure allows airport management teams to engage with students as little or as much as they'd like throughout the Challenge, either through virtual or in-person opportunities.

As an additional resource, we have developed Parent & Educator Toolkits, with helpful resources for parents, educators, or advisors that we encourage you to share with your community to support students in completing the challenge. These are available under the Quick Links sections of the [Airport Design Challenge webpage](#). Please feel free to share these resources with people in your network.

Within the toolkits are information regarding:

- Quick Start Guide
- How to Get Minecraft
- Create an Account
- Program Schedule
- Blackboard Learn Overview

CONNECT WITH US

Don't forget to tag the FAA's social media accounts so we can amplify your posts!

- Twitter: [@FAANews](#)
- Facebook: [@FAA](#)
- LinkedIn: [@FAA](#)
- Instagram: [@faa](#)

Feel free to connect with use via email for any Airport Design Challenge questions at avsed.challenge@faa.gov.

To stay connected with FAA STEM AVSED check out www.faa.gov/education/contact-us