



SAFETY TRAINING

The nation's transportation domains are in a state of rapid evolution. New vehicles are entering our airspace, and the technology onboard traditional aircraft is changing every day. Meanwhile, automation is transforming not only aviation but also rail, automotive, and maritime operations.

Training—of air traffic controllers, bus and rail operators, and technicians in all realms—must keep pace to ensure the safety of transportation, whatever form it takes.

Safety Management System Training

As a leading expert in Safety Management Systems (SMS)—a proven systematic approach for managing risk—MITRE offers the training needed to achieve that goal.

Our [SMS training courses](#) teach organizations how to implement an effective SMS. These systems make risk management a core business function, from front-line staff to executives. Our training program also shows how to ensure risk mitigations are effective and how to build in mechanisms that constantly improve safety performance.

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Taught by our own leading experts and informed by research into the latest leading practices, these courses help professionals in aviation, ground transportation, and other industries keep pace with the ever-increasing complexity of today's global operations. With SMS, any organization can reach the next level of safety.

Workforce Development

Beyond SMS, we have more than 15 years of expertise in aviation workforce development training needs assessment, identification of technological solutions, and instructional design experience—expertise we are now applying to other transportation domains as well.

In aviation, a highly trained and proficient workforce is critical to safety. To support the Federal Aviation Administration (FAA) in maintaining a workforce with the skills appropriate to today and tomorrow's needs, we analyze skill and training needs and design cost-effective methods to meet them.

Additionally, we define and build solutions to staffing needs based on the latest training design best practices and technologies. Our solutions—which we prototype and demonstrate using the capabilities of our state-of-the-art [laboratory](#)—incorporate gaming and augmented reality/virtual reality (XR) technologies to help organizations move beyond the limitations of physical equipment and simulators to achieve faster, more efficient, and more effective training.

Our research and training prototypes have applications for a variety of workers in the various transportation domains. We're currently working with the [Washington Metropolitan Area Transit Authority](#) on a plan to more efficiently train [rail and bus](#) operators, not only on routine day-to-day operations but also on how to respond to rare but safety-critical events. Our training is applicable to other industries as well, including healthcare, law enforcement, energy, defense, and manufacturing.

As automation is an increasing feature in all transportation domains, our research into human-machine and [human-automation](#) interactions will further inform our training recommendations.

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MITRE's mission-driven teams are dedicated to solving problems for a safer world. Through our public-private partnerships and federally funded R&D centers, we work across government and in partnership with industry to tackle challenges to the safety, stability, and well-being of our nation.

MITRE | SOLVING PROBLEMS
FOR A SAFER WORLD®