



# THE MITRE IMMERSION LAB

Immersive Reality for Integrated Solutions

An immersive lab capability is not new or unique – not even within MITRE. An immersive *solutions environment*, however, offers an elevated experience that enables users to make impactful, long-term decisions. It's not just about problem solving – it's about creating integrated and sustained solutions that serve the public and the greater good.

## An Unparalleled Experience

MITRE's Immersion Lab is a dynamic, scalable ecosystem that enables distributed decision making using the best tools, models, data, and developers to create the best possible solutions.

Stakeholders are immersed in complex, multi-dimensional problems so they can understand systems of systems impact from diverse perspectives, make meaningful contributions, understand the effect of choices, and collaborate to make informed decisions.

The interoperable system connects labs across MITRE and outside of MITRE and is unbound to physical or virtual space, elevating the collective energy around problem identification and problem solving to solution discovery and sustainability, with full spectrum analysis from macro to micro perspectives.

By evolving from simple problem solving to enabling a persistent and flexible solution space, MITRE offers the ultimate sandbox to create collective, long-term solutions.

**MITRE**

MITRE's Immersion lab capabilities provide high fidelity virtual environments, employing geospatial modeling, and system modeling and simulation (Human/Hardware-in-the-Loop, computational). Extensive use of immersive technologies such as AR/VR and large-scale video displays bring these capabilities to life.

Because of MITRE's independent status, we can guarantee a safe environment, protected data, and conflict-free support.

## Enhanced User Benefits

Any given experiment incorporates users, data, and intelligent systems representing every aspect and viewpoint, regardless of location, role, level, discipline, domain, system, or experience. Every user has the opportunity to fully understand their potential impact in creating actionable solutions, whether that involves designing a Smart City, improving supply chain efficiency, or using climate modeling to enhance emergency planning efforts.

Our immersive environment allows users to work in alternate realities and consider solution options they may have never considered before, where additional variables provide information and insights that make an organization smarter, safer, and more efficient. These virtual environments support human-machine collaboration by engaging our senses, emotions, and cognition in meaningful ways.

Imagine incorporating your team's collaborative ideation into any given scenario where intensive use of bleeding-edge technologies, graphic rendering, and integrative AI/ML capabilities work *with* you, wherever you are, to drive long-term consensus solutions. MITRE's Immersion Lab makes all that possible.

## Solutions for a Safer World

MITRE's Immersion Lab builds on years of immersive experimentation experience and underscores our commitment to building an environment that enables sustainable solutions that impact our lives every day.

## EXAMPLE USE CASES

- Smart City Design
- Climate Modeling for Emergency Planning
- Intelligent Transportation Systems Design
- Integrated Commercial Space Operations
- Port-to-Port Supply Chain Management
- Mission Response Command and Control

*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.*