

A GUIDE TO PRACTICAL NEXT STEPS FOR AI IMPLEMENTATION

AI Governance Group: The Operational Function

Enabling safe, trustworthy, and scalable AI across transportation organizations

The Operational Function translates strategy into execution by establishing the processes, tools, and capabilities for responsible AI deployment. It ensures integrity, privacy, and appropriate use, evaluates where AI should be applied, and continuously monitors implementations to maintain these standards.

The Operational Function includes teams managing:

- District Operations
- Human Resources
- IT/ OT infrastructure
- Legal and Regulatory
- Procurement.
- Program Development
- Program/Project Delivery
- Research and Development
- Safety Operations

The Operational Function is accountable for:



1

Establishing governance and assurance processes



2

Developing data and technical capabilities



3

Building workforce skills

1 AI Governance Processes: Building the Framework for Responsible AI

AI governance in transportation must align with guiding principles, best practices, and regulations while integrating seamlessly with existing IT, data, regulatory, and organizational governance systems. A tailored governance structure is essential to manage unique risks and ensure transparency, traceability, and accountability across the entire AI lifecycle.

Governance Processes should:

- ✓ Define organizational roles and responsibilities for AI decision-making
- ✓ Embed AI principles, regulations, and policies across teams
- ✓ Set KPIs to measure progress and impact
- ✓ Ensure traceability, documentation, and risk tracking
- ✓ Maintain a central use case and risk repository

WHY IT MATTERS

Creates consistency, transparency, and accountability across the AI lifecycle, from design and procurement to deployment and monitoring.

2 AI Assurance Processes: Ensuring Safety, Security & Trust

AI assurance ensures that AI systems are safe, secure, reliable, and compliant, supporting transparency, accountability, and trust. Alongside AI governance, it reduces risk and improves user understanding.

Organizations developing AI Assurance processes should:

- ✓ Understand AI solution's purpose, context, and interactions with systems, data, and people
- ✓ Apply best practices to identify, assess, and mitigate risks
- ✓ Build cybersecure AI systems by design using appropriate knowledge, methods, and tools
- ✓ Consider interoperability of assurance processes
- ✓ Ensure interoperability of governance and assurance processes
- ✓ Plan for post-deployment governance and assurance to monitor AI's potential safety and security impact

WHY IT MATTERS

Transportation AI directly impacts public safety. Assurance processes ensure responsible adoption, particularly for high impact and safety critical applications.

3 Building Data & Technical Capabilities: Powering AI Effectively

The Operational Function develops the technical backbone needed for successful AI deployment.

Key capability areas:

- ✓ **Data readiness:** quality, access, interoperability, and standardization
- ✓ **Model lifecycle management:** human-centric design, validation, monitoring, and retraining
- ✓ **Technology stack:** secure, scalable, interoperable, DevOps/DataOps/AIOps, infrastructure (e.g. cloud, on-prem environments, memory, hardware)

WHY IT MATTERS

Data and infrastructure determine AI scalability, integration, and value.

4 People Skills & Responsible AI Culture

A responsible AI ecosystem requires a workforce that understands and applies Principles of Responsible AI, including privacy, transparency, safety, and accountability.

Core elements:

- ✓ Organization-wide AI literacy and role specific training
- ✓ Culture grounded in privacy, transparency, safety, ethics, and accountability
- ✓ Processes that support explainability and human-centric design
- ✓ Continuous learning and feedback loops

WHY IT MATTERS

People are central to AI success. A well-prepared workforce accelerates adoption while protecting public trust.

