MANTECH™
ALWAYS ADVANCING

Real Property Lifecycle AI
AI-Assisted Real Property Lifecycle

Decision-Grade Cost Estimating with Agentic AI

MANTECH's AI-assisted real property lifecycle management solution, Real Property Lifecycle AI, applies a modern agentic AI architecture to deliver faster, more complete, and defensible auditable cost estimates, providing leaders with decision-grade insight earlier, when it matters most.

Real Property Lifecycle AI is designed for complex federal environments. The solution augments planners, programmers, and engineers with trusted AI-supported analysis across the complex steps in a lifecycle of a facility and portfolio while preserving human oversight, traceability, and compliance.

The Government Challenge

Federal agencies collectively manage billions of dollars in real property assets and military construction programs. Yet cost estimating and early project planning remain constrained by:

- **Error-prone, manual workflows** reliant on individual expertise learned over time
- **Inconsistent early estimates** that do not account for comprehensive requirements
- **Fragmented data** spread across standards, historical projects, cost models, and policy guidance
- **Extended planning cycles** caused by low-fidelity submissions and repeated reviews

Across large portfolios, even small inefficiencies compound, putting schedules, budgets, and mission readiness at risk.

The MANTECH Innovative Solution

AI-Assisted Cost Estimating & Planning
- Early-stage cost estimate validation and anomaly detection
- Automated identification of missing or inconsistent scope elements
- Parametric estimate support informed by historical projects

Real Property Lifecycle Support
- Facility classification and building category code determination
- Space authorization and requirements analysis
- Planning artifact generation for downstream systems and reviews

Portfolio & Risk Insight
- Clustering of similar historical projects to more effectively benchmark new estimates
- Identification of cost, scope, and risk drivers across portfolios
- Improved visibility into tradeoffs between funded and unfunded requirements

Decision-Ready Outputs
- Structured, auditable planning artifacts
- Clear rationale supporting estimates and assumptions
- Faster handoffs with preserved project context

Agentic AI for Real Property Lifecycles

MANTECH delivers an AI-enabled cost estimating and planning capability purpose-built for real property lifecycle management. The solution employs a multi-agent AI architecture that recognizes the complexity of real property workflows and guides planners through the cost estimation process, such as auto-verifying inputs, synthesizing historical and authoritative data, and generating decision-ready planning artifacts, while keeping humans firmly in the loop.

- AI agents reason, retrieve data, validate assumptions, and generate artifacts collaboratively with the Planner
- Outputs are traceable, consistent, and grounded in authoritative sources
- The system supports early planning through execution and portfolio-level decision-making

Real Property Lifecycle AI is not a simple chatbot. It is an AI-enabled decision support system engineered for real world real property processes.

Measurable Impact

Proven capabilities from operational proof-of-concept results that suggest the value of AI-enabled cost estimating:

- **Hours-to-days of manual research reduced to minutes for** early planning tasks
- **Up to 90% reduction in rework** driven by incomplete or inaccurate planning submissions
- **Significant reduction in review cycle time** through first-pass data completeness
- **Improved estimate consistency** across organizations and installations
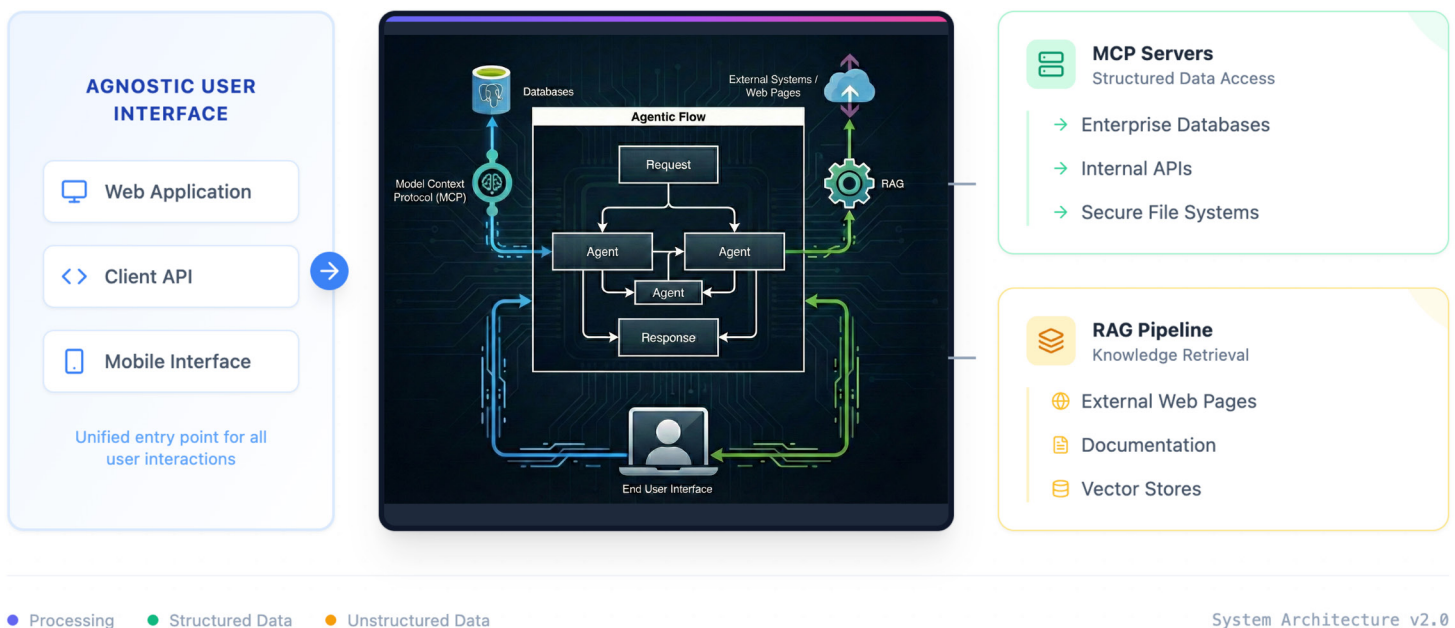
When applied across hundreds of construction projects, these gains translate directly into standardized & comprehensive submissions, quicker cycle times, reduced risk, and better stewardship of taxpayer resources.

Modern, Secure Architecture

Real Property Lifecycle AI is engineered for modular adaptability in government environments:

- Modular, multi-agent AI architecture
- Retrieval-augmented generation grounded in authoritative data
- Secure project-centric data persistence and auditability
- Deployable in cloud-connected or disconnected environments
- Designed for integration with existing government systems

This architecture enables rapid scaling, future capability expansion, and secure operations aligned to federal requirements.

Why MANTECH

MANTECH partners with agencies to modernize facilities management processes delivering results that leverage AI benefits to accelerate outcomes without compromising governance. The benefits MANTECH provides include:

- Deep experience supporting federal real property and infrastructure missions
- Proven delivery of AI solutions in secure government environments
- Expertise bridging domain knowledge with advanced data and AI engineering
- Focus on **solution delivery**, built to operate at mission scale

Mission Advantage. Better estimates. Earlier decisions. Lower risk.

AI-assisted real property lifecycle cost estimating empowers leaders with the insight needed to prioritize investments, defend budgets, and deliver infrastructure that supports mission success.

Let's redefine how government plans and invests in its built environment.

LEARN MORE - MANTECH.com or contactus@MANTECH.com