



AI in Project Delivery: How RTC Uses a Closed AI Platform to Work Faster and Smarter

Presented by: Lee Anne Olivas, RTC Management Analyst

RTC | June 25, 2026

Executive Summary

The Regional Transportation Commission of Washoe County has deployed Madison AI, a closed AI platform built exclusively for government staff. The system draws only from RTC's own indexed documents — thousands of files including board materials, financial records, engineering project files, adopted plans, and internal policies. This presentation outlines how AI is being applied at each phase of project delivery, the governance framework that makes it possible, and the lessons learned that other agencies can apply to accelerate their own work.

The Challenge: Institutional Knowledge at Scale

- RTC has accumulated decades of institutional knowledge in board minutes, project files, financial reports, adopted plans, and internal procedures
- That knowledge is valuable but time-consuming to find and difficult to search comprehensively
- Often inaccessible to staff who were not present when decisions were made
- The goal: give every staff member fast, accurate access to the agency's own institutional knowledge
- Research that used to take hours now takes minutes

The Solution: Madison AI

Closed Platform

Does not draw on generic training data — works primarily from RTC's own documents. Hosted within a secure Microsoft Azure environment so RTC data stays accessible only to RTC staff.

Cited Results

Every result is cited back to a source document so staff can verify directly. Internal results appear in beige, internet results in purple.

Updated Monthly

Knowledge base is refreshed monthly with new documents across three core knowledge domains plus project-specific collections.

What's in the Knowledge Base

Knowledge Domain	Contents
Board & Master Docs	Board agendas, minutes, packets, staff presentations, master plans, agency policies (2019–present)
Finance	ACFR, budgets, fuel/sales tax data, procurement files, instructions, and templates
Engineering Projects	Monthly engineering reports, individual project folders, bid tabs, contracts, change orders, standards
TRIPP (Project-Specific)	Project-specific data for the Truckee River project

Governance First: RTC's AI Policy

- RTC Management Policy P-65 — Artificial Intelligence Technologies — approved August 21, 2024
- **Purpose:** guide the responsible use of AI technologies ensuring data security, transparency, and ethics
- **Scope:** applies to all RTC employees
- **Key requirement:** users must review, revise, and independently fact-check any AI-generated content before using it in official documents
- Meeting AI tools may be used to transcribe and analyze meetings, but the host must have sole access to content generated

AI Across the Project Delivery Lifecycle

Phase	AI Application
Planning	Board history research, issue summaries, timeline generation, traffic study retrieval
Environmental Review	NEPA document research, public outreach tracking, stakeholder meeting documentation
Design	Project overviews, budget allocation analysis, scope of work drafting
ROW Management	Budget and schedule risk identification, stakeholder meeting tracking
Procurement/Contracting	Solicitation document review, contract analysis, procurement policy lookup
Construction	Change order tracking, PSA comparison, bid tab analysis, contractor lookup
Maintenance	Maintenance needs research, pavement condition data, asset management

Planning Phase

- **Board History Research:** instantly retrieves years of board actions on a topic before bringing a new item forward
- **Traffic Studies & Historical Research:** quick search by location saves significant time instead of searching through numerous project folders
- **Issue Summaries:** generate a concise overview of a subject — its origin, key milestones, and current status — in minutes
- **Detailed Timelines:** produces a chronological overview of all decisions and developments related to a specific topic

Environmental Review Phase

- Rapidly retrieve and summarize all National Environmental Policy Act (NEPA) Environmental Assessment documentation, public scoping meetings, and public hearings
- **Public outreach tracking:** compile records of public information meetings, stakeholder meetings, and comment responses
- **For Pyramid Highway/Sparks Blvd Interchange:** compile engagement history with business owners, community organizations, native tribes, public officials, and first responders
- Regulatory and permitting requirements retrieved by searching core technical references including the RTC's Street & Highway Procedures, Standard Specifications for Public Works Construction, and Regional Road Impact Fee (RRIF) Manual

Design Phase

- **Project Overviews:** summary of all relevant documents, scope and objectives, key milestones and timelines
- **Budget Allocation Analysis:** total budget, funding sources, and how allocations are distributed across phases and have changed from original budget
- **Scope of Work Drafting:** provide project details and AI drafts a scope for professional services using existing procurement templates
- **Average Cost Lookup:** analyze bid tab files to determine average cost of specific items and evaluate whether line items are priced appropriately

ROW Management Phase

- **Budget and Schedule Risk Items:** Quick Reference Summary Report flags potential issues and challenges by project, including concerns from Right-of-Way (ROW) and utility relocations
- **Stakeholder Meeting Tracking:** compile records of one-on-one meetings with property owners, business owners, and other stakeholders affected by ROW acquisition
- **Board Action History:** quickly retrieve all board actions related to ROW acquisitions or property-related decisions for a specific project

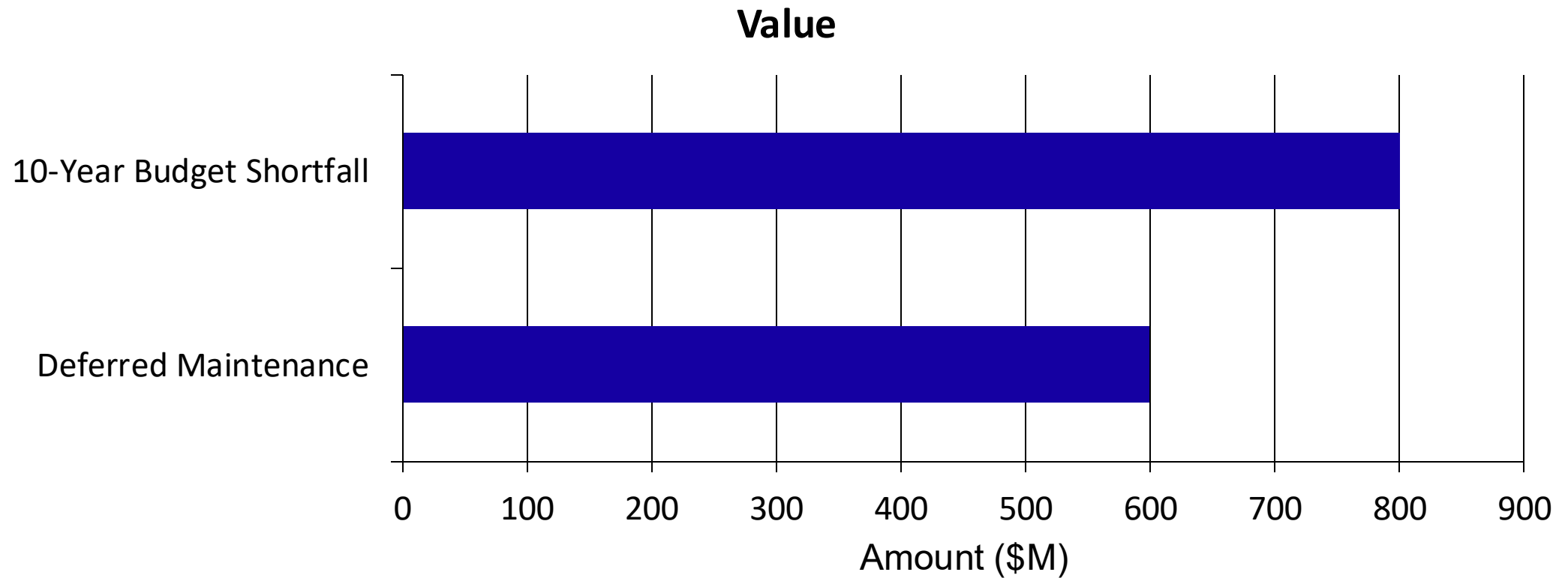
Procurement & Contracting Phase

- **Solicitation Document Review:** AI reviews draft solicitation packages in four structured sections — Contractual Gap Analysis, Document Consistency Audit, Pre-Proposal Conference Agenda, and Key Clarifications
- **Purchase Agreement Analysis:** comparative analysis of Master Contract versus draft contract, drafts a consolidated agreement, and provides summary of key differences
- **Procurement Policy Lookup:** instant access to procurement guidelines for projects of varying sizes and funding sources
- **Contract Summarization:** quickly understand terms, scope, and obligations without reading the full document

Construction Phase

- **Project Status Comparison:** compare monthly Professional Services Agreement (PSA) reports to identify all project statuses that have changed, projects bidding in next 90 days, projects behind schedule, and projects over budget
- **Quick Reference Summary Report:** consolidates 4–5 monthly reports into a single at-a-glance report covering active bids, change orders, and budget/schedule risk items
- **Change Order Tracking:** lists change orders and PSA amendments by project, including change amount and reason
- **Contractor Lookup:** identify design firm, construction contractors, and project manager who worked on a project and total amount paid to them

Maintenance Phase: Regional Funding Gap



Maintenance Phase: AI Applications

- Rapidly retrieve maintenance data, pavement condition information, and historical treatment records across the regional road system
- Monthly engineering reports track budget-to-actual comparisons for pavement preservation projects
- **Key findings:** network conditions are declining regionally, program maturity differs across jurisdictions, and alternative funding mechanisms are needed
- Recommendations include updating PMP databases, additional testing, more robust decision trees, and evaluating additional cost-saving treatment types

How It Works: The Research Flow

Step	Description
1. Submit a Query	Staff types a question in plain language and selects the appropriate knowledge domain
2. Output Standards Applied	Internal quality standards determine format, detail level, citation requirements, and scope
3. Index Search	AI searches the selected knowledge domain's indexed document library
4. Fact Checking	Automated check against master documents; inconsistencies flagged before results are delivered
5. Results Delivered	Cited response delivered — internal results in beige, internet results in purple
6. Review and Verify	Staff reviews cited sources, verifies key facts, and applies professional judgment

Responsible Use: The Verification Framework

Output Type	Verification Level	What to Check
Official documents (board packets, staff reports)	● High	Verify every cited figure, date, and claim against source documents
Public-facing materials	● High	Independently verify all facts; legal counsel review before publication
Board presentations and briefings	● High	Confirm figures match most current adopted documents
Internal memos	● Medium	Review for accuracy; verify specific facts and policy references
Research summaries	● Medium	Spot-check key claims against cited sources
First-draft outlines and brainstorming	● Lower	Review for relevance and direction

Prompting Best Practices: The RTCF Framework

Element	Question	Example
R — Role	Who should AI be when answering?	You are an RTC transportation planner...
T — Task	What exactly do you want it to do?	...summarize all board actions related to the I-580 corridor project...
C — Context	What background does it need?	...from 2020 to present, focusing on scope changes and funding amendments...
F — Format	How should the answer be structured?	...respond in bullet points organized by year.

Real-World Impact: AI in Transit Operations

Transit Scheduling

RTC uses AI internally for developing transit schedules, managing multiple data points to produce optimized schedules.

24/7 Customer Information

AI is being deployed for round-the-clock customer information, addressing the limitation of 8-to-5 Monday-through-Friday live support.

Sparks Intelligent Corridors

AI-based dynamic signal timing with vehicle trajectory data achieved 11% improvement in buffer time and 11.4% improvement in travel time on Sparks Blvd northbound. Received an international award from the Institute of Transportation Engineers.

Lessons Learned

- **Have an AI policy in place** — this is essential before deploying any AI tool
- **Get buy-in and support from leadership** — executive sponsorship drives adoption
- **Be flexible and creative** — use cases evolve as staff discover new applications
- **Periodically run tests and spot-check sources** — evaluate the data and make necessary changes
- **Don't be afraid to make changes** — RTC restructured its Engineering Projects knowledge domain based on experience
- **Lots of testing needed** — the Sparks Intelligent Corridors project required two and a half years of development and extensive virtual testing
- **Fiber communications are critical** — AI-driven traffic systems only work with reliable communications infrastructure



Key Takeaways for Your Agency

- AI is not a replacement for professional judgment — it is a force multiplier for institutional knowledge access
- A closed, agency-specific AI platform ensures data security and relevance
- **Start with governance:** adopt an AI policy before deploying tools
- Organize your knowledge base into domains that match how your staff works
- Build a prompt library so staff don't start from scratch
- Invest in training and community — RTC uses a Teams channel for peer support, best practices, and issue reporting
- **Verification is non-negotiable:** AI output is a first draft, not a final product

Questions & Contact

RTC Internal Contact:

Lee Anne Olivas, Management Analyst

lolivas@rtcwashoe.com | 775-332-2138

Madison AI Platform Support:

Hello@MadisonAI.com | 775-747-7407

AI Policy Reference:

RTC Management Policy P-65, approved August 21, 2024