

STATE OF CONNECTICUT**Department of Administrative Services****NASCIO State IT Recognition Awards Submission****CT AI Lab**

Artificial Intelligence • September 2025 to Present

Entry Snapshot

Project title	CT AI Enablement and Engagement Lab (CT AI Lab)
Award category	Artificial Intelligence
Submitting agency	State of Connecticut, Department of Administrative Services
Partner agencies	Seven partner agencies (prototype builds) along with governance support from OPM
Project dates	September 2025 to Present
Primary contacts	Alex Amari, Governor's Fellow, alex.amari@ct.gov 9733490474 Tim Sowa, Governor's Fellow, timothy.sowa@ct.gov 8604061268
Executive sponsor	Mark Raymond, Chief Information Officer
Submission owner	Mark Raymond, Chief Information Officer

EXECUTIVE SUMMARY

Connecticut state agencies are under simultaneous pressure to modernize service delivery, comply with new federal grant analytics requirements, and absorb the rapid pace of change in artificial intelligence—all while facing constrained budgets and an expensive vendor market for AI capabilities. In late 2025, the Connecticut Department of Administrative Services Bureau of Information Technology Solutions (DAS-BITS) launched the Connecticut AI Enablement and Engagement Lab (CT AI Lab) to build a repeatable, low-cost internal capability to prototype, evaluate, and de-risk AI across state agencies—and to give leaders an unbiased counterpart to every vendor pitch. The lab pairs that build capability with the state's first sustained AI literacy program. In eight months, a two-person team has produced six working AI prototypes in beta across seven agencies, trained 600+ state employees, and shared its open-source toolkit with peer states.

AI Products in active beta include:

- An AI-augmented Invoice Processor for Department of Public Health (DPH)
- An AI-powered financial screener tool for the Office of the Healthcare Advocate (OHA) that helps residents identify hospital financial assistance eligibility
- An LLM-powered bank examination pre-screening tool for the Department of Banking (DOB)
- An agentic assistant for CT licensing for the Department of Consumer Protection
- An AI-assisted rental assistance tool for Department of Housing
- An interagency AI-powered legislative intelligence platform

Literacy offerings include:

- 12 Bi-weekly office hour presentations on current events and trends in AI, open to agency staff and leadership from across the state, drawing ~250 cumulative attendees from ~1,000 invited statewide
- Ongoing AI literacy workshops and training sessions for 3+ agencies
- 5+ Small group AI best practices and training sessions for agency commissioners and other state leaders
- A day-long AI-in-government workshop at UConn School of Public Policy with the state CIO and CDO
- A demo presentation on some of our pilots and workflows for AI officers from all 50 states at the Center for Civic Futures' AI roundtable

The lab's tools are built on a shared technical substrate that aims to make each additional product easier to build and deploy. Some of the tools used to build this stack have been shared with other states on GitHub (github.com/ct-ai-lab/ct-ai-lab-tools). The goals are to reduce fear of these technologies through interactive experiences and to turn the experiment in the state's internal AI capability into a repeatable model. A small, agile team, a shared technical substrate, and agency partnership means bespoke AI applications are built in weeks, at a fraction of external assistance costs. All the while we aim to equip CT's state workforce and leadership with the knowledge necessary to leverage the newest AI capabilities as they emerge.

IDEA

What problem or opportunity does the project address?

Connecticut's state agencies face a structural mismatch between the speed of AI capability advancement and the speed of public-sector procurement and adoption. Foundation model capabilities shift every three to six months; state procurement cycles run twelve to twenty-four months. In that gap, at least four failure modes compound:

1. **Agencies may overpay for commodity AI.** Industry delivered capabilities are expensive—invoice processing, document Q&A, eligibility screening, transcription—that a well-equipped internal team can build with CT infrastructure quickly and at reduced cost
2. **Residents may wait or never get the tool.** Without an internal capability, agencies either pay for solutions or defer the project indefinitely. Tenants in eviction proceedings, residents seeking hospital charity care, and licensees waiting for exam review all bear the cost of that gap.
3. **State agencies often lack a technical counterpart.** Agencies historically lacked in-house AI expertise to evaluate whether the proposed AI scope, price, and approach were sound
4. **State employees had limited access to AI literacy training.** Without intentional AI literacy programming, the gap between frontier model capabilities and employee knowledge and capability grows each month.

Why does it matter?

Almost every technology modernization conversation in state government now has an AI component, including benefits eligibility, licensing, procurement, customer service, and public health. A state without internal AI capability buys AI commodity at retail and struggles to evaluate technical questions related to modernization.

Plus, the stakes are larger than cost avoidance. AI is reshaping the relationship between residents and government, for example in how applications are processed, how questions are answered, how risks are flagged, how decisions are made. State governments sit closer to residents than the federal government, move faster than federal agencies, and encounter the operational questions first. Connecticut's choice to build internal capability is a choice to help design that future rather than to exist purely as a consumer of technology.

What makes it different?

A small, embedded, technically capable team inside state government that ships product, runs literacy programs, and acts as an in-house counterpart to the AI market brings agility to a traditionally slower delivery stream.

The differentiators:

1. **Embedded, not vendored.** The lab sits inside DAS-BITS with cross-agency reach. Every project starts with an agency intake conversation, not an RFP.
2. **Shared substrate.** A single open-source toolkit (ct-ai-lab-tools) underpins every project. Marginal cost of project N+1 is lower than project N by design.
3. **Open by default.** Agent tools are public on GitHub and shared collaboratively through discussions with other state AI officers regarding advice and codebases.
4. **Engagement AND Enablement.** Roughly 50% of lab effort is literacy, training, office hours, and leader support. Most "AI teams" only build; the lab also teaches.

What makes it universal or transferable?

The lab is designed to travel. Every product solves a problem that exists in more than one agency and often in every state, for example—invoice processing, benefits eligibility screening, hearings transcription and legislative intelligence. ct-ai-lab-tools is our public repository of agentic AI tools and is openly licensed and explicitly

designed for reuse. The governance model (small team, BITS-housed, open-source default) is replicable in any state that can fund two to four positions.

IMPLEMENTATION

What was the roadmap?

Phase	Timing	Major activities	Decision or deliverable
Onboarding	September 2025	AI Governor's Fellows Alex Amari and Tim Sowa are onboarded	Lab established with relevant accounts, domains, and permissions
Literacy and outreach	October 2025-January 2026	Literacy program begins, AI use case intake process and risk assessment defined	First AI office hour sessions and agency workshops, first 3 use cases scoped
Building, shipping, and continued literacy	February 2026-May 2026, ongoing	Building a shared technical substrate, including ct-ai-lab tools, deployment playbook, and building out use-case specific apps	Six AI applications in pilot, continued AI office hours, agency presentations, and agency leader trainings, and university workshop

Who was involved?

Executive sponsors:

Mark Raymond, State CIO, Tom Armstrong and David Labbadia, Directors of Architecture

Core team members:

Alex Amari, CT Governor's Fellow, Tim Sowa, CT Governor's Fellow

Partners:

State Chief Data Officer Scott Gaul, data governance partner.

State Chief Information Security Officer Gene Meltser, cybersecurity partner.

Office of Policy and Management (OPM) intake and policy partner.

DECD Commissioner Daniel O'Keefe, partner on the Lookout testimony app

Agencies with prototype builds:

Office of Health Strategy (OHS), Office of the Healthcare Advocate (OHA), Department of Public Health (DPH), Department of Banking (DOB), Department of Consumer Protection (DCP), Department of Housing (DOH)

How did you do it?

The lab was built around four design choices that aim to compound:

1. **Build with ct-ai-lab-tools**, an open-source library of reusable agentic coding skills. Every new project starts from a known FastAPI + Jinja2 + Azure App Service template with CT.gov branding baked in. Applying these

reusable tools with Claude Code, Codex, and Gemini CLI is the single largest reason a small team can ship across seven agencies in eight months.

2. Fellows sit with agency staff during discovery. The problem definition reflects how work actually gets done. The DPH invoice processor and DOH rental assistance assistant both started from a single staff conversation.

3. Open by default, secure by design. Every product undergoes BITS security review and accessibility check before pilot. Resident-facing products include transparency pages explaining what the AI does and does not do, as well as a shared AI feedback interface.

4. Enablement runs in parallel. Bi-weekly AI Office Hours are scoped to surface real problems—in fact, many of the lab's current builds originated as questions raised during a session. Commissioner one-on-ones translate executive-level questions into agency-level requirements.

Technology choices:

- Python / FastAPI / Jinja2 for application stack
- Claude Code, GPT Codex, and Gemini CLI as agentic coding tools
- Azure App Service for hosting (already approved tenancy)
- Microsoft Entra ID for SSO
- Whisper for transcription
- Anthropic Claude, OpenAI GPT, and Google Gemini models (selected per task and data sensitivity)
- SQLAlchemy and Azure SQL/Postgres for persistence
- GitHub for source control with branch-protected deploys

What risks or barriers did you manage?

Risk/Barrier	Mitigation
Security and data governance: Our AI tools may handle sensitive information	BITS security review on every deployment; SSO gating on internal tools; explicit data-handling rules; no PII to external providers without business owner sign-off
Equity and accessibility: Applications must work for the most vulnerable stakeholder. AI apps may become convoluted or inaccessible.	All apps are built with native multilingual support, plain-language design, and to ADA specifications; all apps receive an AI-assisted ADA audit before beta testing
Procurement misalignment: State procurement cycles do not match AI release cadence.	Document apps thoroughly (for both humans and future AIs) and keep applications model-agnostic (swap in and swap out model APIs as necessary)
Capacity constraints: Agency demand often exceeds team throughput	Shared technical substrate to build fast. Identify agency-side project owner to coordinate testing and feedback
AI risk and adoption skepticism	Office Hours sessions cover risk and limitations explicitly; deployments include human-in-the-loop by default; trainings address governance questions head-on.

IMPACT

What did the project make better?

Before September 2025, Connecticut state government had no internal AI build or evaluation capability. Agencies seeking AI-driven modernization had to procure from vendors, defer projects indefinitely, or build informally without security or governance support. Staff received limited, self-directed AI literacy training.

Eight months later, Connecticut has:

1. **A working internal AI build-and-evaluate capability.** Six AI prototypes in beta across seven agencies—an estimated >\$1M in comparable vendor cost—built on under \$1,000 of infrastructure spend, proving the state can prototype and de-risk AI in-house in weeks.
2. **A durable institutional home to scale further AI initiatives.** DAS-BITS has posted the state's first AI Manager role —the anchor hire that converts the fellowship pilot into a sustained capability.
3. **An increasingly AI-literate workforce.** 600+ state employees have attended AI Office Hours, agency presentations, and workshops; commissioners have received one-on-one AI training; Microsoft Copilot rollout is coordinated with literacy programming.
4. **Open-source AI assets.** ct-ai-lab-tools and select project repositories are public and openly licensed, and available for reuse by peer states and municipalities.
5. **A production pipeline through 2027.**

How do you know?

- Products in beta: 6 across 7 agencies, with documented agency sponsors and use cases
- Estimated vendor cost avoided: >\$1M, benchmarked against comparable commercial quotes and agency RFPs for equivalent capability (OHA financial-assistance screener, DOB exam pre-screener, DPH invoice processor)—delivered on under \$1,000 of cloud/API infrastructure plus ~\$50,000 in fellowship personnel, entirely state-internal
- Operating cost to date: under \$1,000 in infrastructure and AI API spend across pilot phase on Anthropic platform, OpenAI platform, Google Vertex, and Microsoft Azure
- AI Office Hours: 12 bi-weekly sessions, ~1,000 invited and ~250 cumulative attendees; topics span LLM fundamentals, AI safety and policy, and frontier model releases
- Department of Education and Housing sessions: 250+ attendees at two lunch-and-learn workshops
- UConn SPP workshop: day-long AI-in-government session co-led with State CIO and Chief Data Officer for SPP Hartford students and faculty
- Commissioner trainings: one-on-one copilot trainings delivered to 4 agency commissioners.
- Permanent Lab-adjacent role posted: AI Manager position at DAS-BITS, April 2026
- Open-source artifact: ct-ai-lab-tools public repository at github.com/ct-ai-lab/ct-ai-lab-tools
- Cross-state interest: 3 discovery meetings with other state AI officers (Maryland, Colorado, and Vermont)

Impact metrics table

Measure	Before	After or current	Evidence source
AI-augmented employee hours (e.g., Department of Banking)	25 hrs/bank pre-examination	5 hrs/bank pre-examination	System report from Department of Banking

Tokens processed	0	8 million in beta testing	Application insights and API usage statistics from providers (Anthropic, OpenAI, Google)
AI application vendor cost	~\$1m	\$50k in personnel spend, ~\$1k in infra spend, now all state internal	RFPs from multiple agencies (including DOB, DCP, OHA, and DPH, e.g., \$200k earmarked for OHA app in vendor spend)
Open-source AI tools	0	20+ skills and templates across 3 agentic coding frameworks (Codex, Claude, and Gemini)	Github.com/ct-ai-lab/ct-ai-lab-tools
AI office hours	0	12	~1000 invitees and 250 cumulative attendees drawn from MSFT Teams data
Internal AI-focused employees and fellows	0	3	CT Governor's Fellowship, DAS-BITS April Manager role
Gen AI-powered benefits eligibility screeners	0	2	DOH and OHA apps in beta testing

What now?

Lab priorities through 2027:

1. Ship products! Move from beta to production where it makes sense (3 targeted for Summer 2026)
2. Publish the playbook. Further open-source the lab's operating model—intake, tech substrate, governance, evaluation framework—so that other states can stand up equivalent capabilities. CSG Intergovernmental Software Collaborative, direct peer-state relationships (NJ, MA, NY, UT), and written publications are potential channels.
3. Deepen workforce literacy. Continue ongoing literacy initiatives and facilitate a brand-new AI Specialists Network across 15+ agencies (AI champions for use case discovery and evangelism embedded in agencies)
4. Formalize team. Onboard AI manager and future AI Governor's Fellows, contractors, and FTEs.