

CTA Innovation Studio

Information Session

September 25, 2025



Chicago Transit Authority

Speaker Introductions

- Emily Drexler – Senior Manager, Planning and Innovation
- Erik Jensen – Project Manager, Operations Innovation
- Jeannie Alexander – Vice President, Rail Operations
- Rich Porter – Acting Vice President, Rail Station Management
- Cara Bader – Vice President, Innovation

Innovation Studio continues to expand its portfolio of innovative solutions, delivering diverse pilot projects ranging from improved wayfinding at bus stops to detecting and alerting intrusions on CTA's track 'right of way'. This latest round of challenge statements seeks to eliminate language barriers and help make the system navigable for our riders while another pilot will seek to find more ways to enhance ongoing rail operations training with a new, modern training tool.

-CTA Acting President Nora Leerhsen

CTA Agency Overview



Agency

- CTA serves Chicago and 35 suburban communities with bus and heavy rail service
- 3.4 million people in service area
- Average total weekday ridership of 1.1 million



Bus Service

- 1,966 buses operating on 127 routes
- Provide over 18,000 trips per day to over 10,500 bus stops



Rail Service

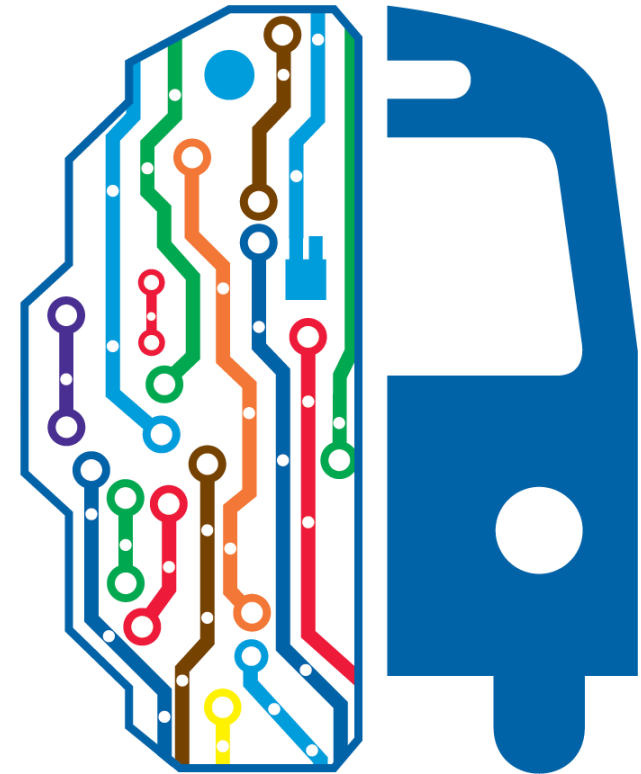
- 1,492 rail cars operating on 8 rail lines
- Provide over 2,300 trips per days and service 146 stations

Agenda

- ➔ Innovation Studio Background
- ➔ Benefits
- ➔ Eligibility and Evaluation Process
- ➔ In-Flight Projects
- ➔ NEW Problem Statements
- ➔ Key Dates
- ➔ Q&A

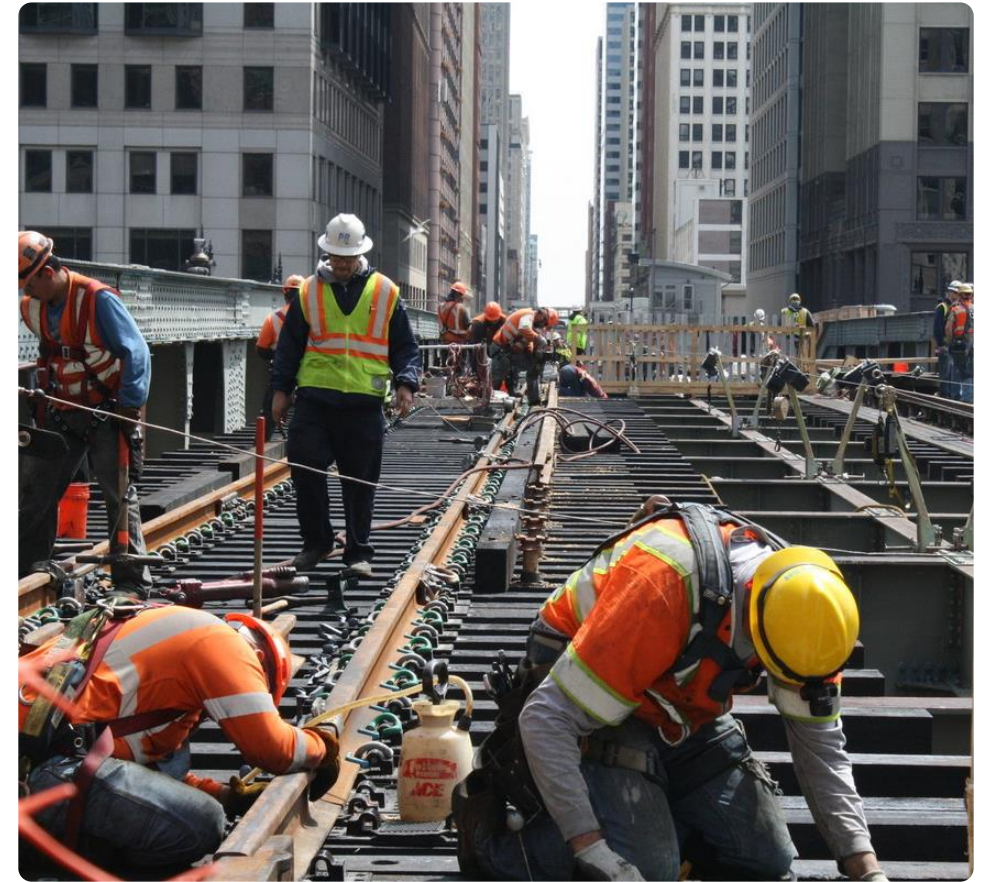
What is Innovation Studio?

- The Innovation Studio program allows CTA to pilot solutions and new technologies for some of the agency's biggest challenges
- Problem statement format allows CTA to learn about solutions we may not have otherwise been aware of, especially in the changing technological ecosystem
- After pilots are concluded, CTA to evaluate whether to pursue larger system-wide solution
- Since program initiation in late 2023, released four problem statements, resulting in four in progress pilots to date



Benefits to Innovators

- Expedited system for working with the CTA
- Direct interaction with transit leaders
- Opportunity to pilot technology at one of the largest transit agencies in the U.S.
- Increased exposure through participation
- Potential to improve customer experience for over 1 million daily riders



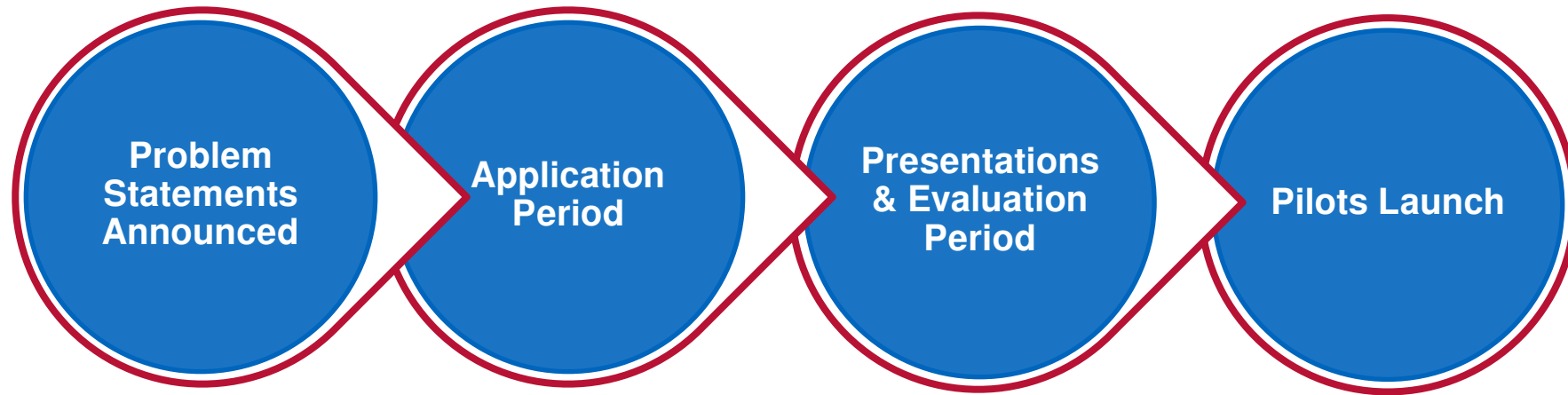
Eligibility Requirements

- ☑ Must be legally able to work in Illinois during the pilot period
- ☑ Innovator should be ready to support the pilot for 12 months
- ☑ Proposed solutions must be developed enough they are ready to deploy, not a Research and Development program
- ☑ No previous transit experience necessary!

DBE Participation

- CTA encourages participation in Innovation Studio from Disadvantaged Business Enterprise (DBE)
- To register as a Disadvantaged Business Enterprise with CTA visit cta.dbesystem.com
 - Register as a vendor with CTA (if not currently)
 - Use the vendor registration login credentials to log into the B2G system.
 - Click "Apply For/Renew" at the top right-hand corner of their firm's homepage
 - Follow the prompts as they apply to their company
 - Submit the Interstate Certification Application
- Please e-mail support@ctavendor.com for additional assistance if needed
- CTA has reciprocity with Chicago/Cook County/Illinois programs as well

Innovation Studio Process



Each year we will announce 2-3 problem statements on our website.

During the application period, host an info-session and accept questions; post answers on website

Applications that pass Phase 1 evaluation will be asked to present to a panel of CTA subject matter experts.

Selected proposals will undergo a pilot up to 12-months in duration.

Previous Innovation Studio Problem Statements



Customer Experience

How can CTA expand real-time arrival and alert signage to bus stops?



Safety

How can CTA automatically detect people or large objects on the tracks to enable swift intervention?



Process

How can CTA automatically monitor the condition of physical assets at bus stops or their use over time?



Customer Experience

How can CTA mitigate the impact to customers of smoking on trains and buses?



New Innovation Studio Challenge

Customer Experience

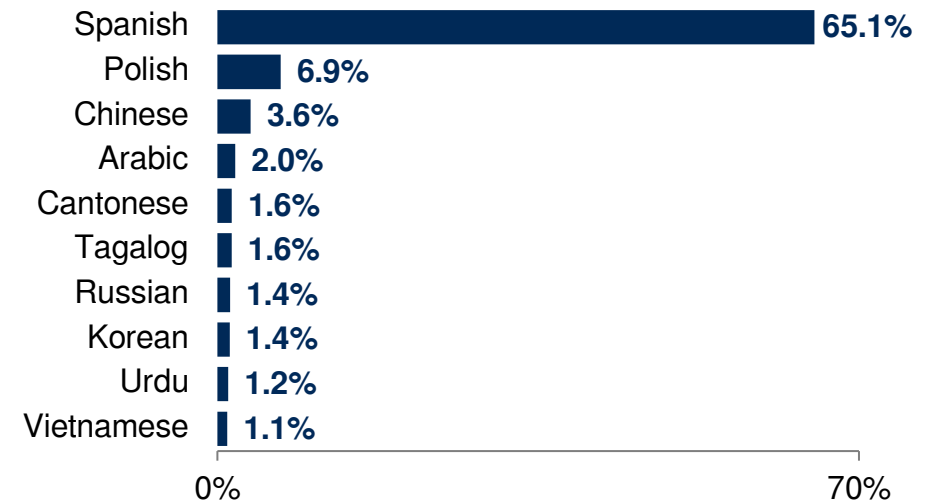


Chicago Transit Authority

Why this challenge?

- **Over 13% of the population** living in CTA's service area has Limited English Proficiency (LEP)
- Chicago had **55.3 million visitors in 2024**, including **2 million international tourists**, many of whom primarily speak languages other than English¹
- Customer Service Representatives/Assistants (CSR/As) at rail stations do not have the tools at their disposal to support riders when they do not speak the same language

Language Spoken at Home For People with Limited English Proficiency*

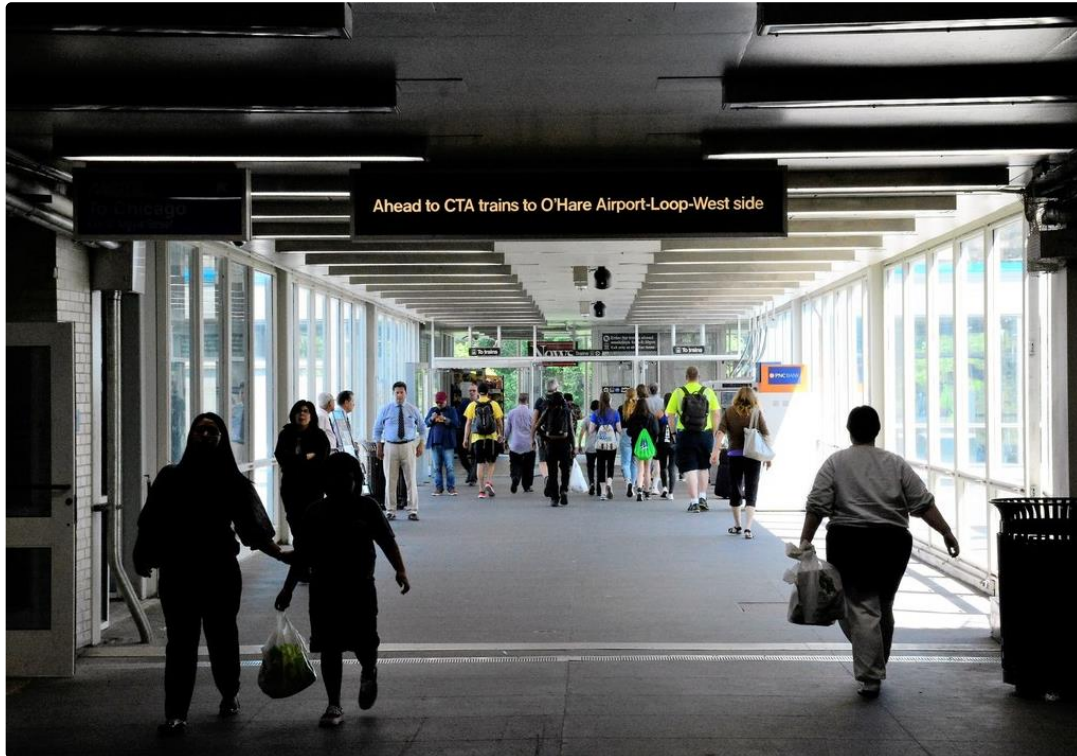


*Based on analysis of 2023 ACS 5-Year data

1. Choose Chicago. (2025, May 15). *Choose Chicago celebrates 2024 visitation and record-breaking economic impact at 2025 Annual Meeting | Choose Chicago.* <https://www.choosechicago.com/press-media/press-releases/choose-chicago-celebrates-2024-visitation-and-record-breaking-economic-impact-at-2025-annual-meeting/>



New Customer Experience Challenge



How can CTA provide rail station attendants with tools to welcome and assist riders with limited English proficiency?

Ideal solutions will:

- Make translation and interpretation assistance available to CSA/Rs and riders
- Be integrated into a stationary device
- Support key accessibility features such as Videophones/Video Relay Service/Live Captions and easy access for people using wheelchairs

Challenging Station Environment

- In recent years, Chicago temperatures have reached as low as -22 °F (2019) and as high as 100 °F (2023)
- Device(s) would be installed in a covered location, but may still be exposed to water, snow, and wind
- CTA uses salt and sand to address snow and ice, which may corrode some materials
- Device(s) should be resistant to vandalism and theft





Rail Simulation Environment

Process Improvement

Why this challenge?

- In the past two years, CTA has hired a significant number of new train operators
- New operators are fully trained and qualified before entering revenue service, but CTA sees opportunities to provide additional tools for operators to practice and improve their efficient operation once they complete training
- Existing training tools primarily limited to dedicated training facilities, not available at locations in the field
- A lightweight portable rail simulator would add layers of resources to improve experience of operators



New Process Improvement Challenge



How can CTA provide virtual reality or simulated training opportunities for rail operators to gain additional hands-on experience?

Ideal solutions will:

- Maintain portability
- Provide scenarios in a variety of weather/time of day conditions
- Reasonably model existing and future rail cabs while maintaining portability

Application Process

- **Phase 1: Written Application (due October 21st)**
Short form application asks innovators to describe solution/innovation, how it fits the problem statement, and pilot cost
Application form can be found at:
transitchicago.com/innovation-studio/application
- **Phase 2: Presentations (December 1st – 5th)**
Innovators selected for Phase 2 will present their solution to a panel of subject matter experts at CTA
- **Innovator Selection**
At the conclusion of the presentations, CTA will select companies to participate in a pilot

Evaluation Criteria – Phase 1

Phase 1 Evaluation Criteria



Responsiveness (40%)

How related is the proposed solution to the problem statement?



Feasibility (40%)

How possible would it be for CTA to pilot the proposed solution in CTA's operating environment?




Timeline (20%)


Does the timeline clearly lay out time for development, implementation, and evaluation in a 12-month period?

If a proposal would require funding from us to pilot the solution, please provide that information as part of the proposal. The need for funding will not disqualify a proposal but may result in additional discussions. We cannot guarantee funding for a pilot.

Evaluation Criteria – Phase 2


Phase 2 Evaluation Criteria

 **The Specific Innovation (40%)**
Product will help solve existing CTA challenge through new/improved processes or technology

 **The Team (20%)**
Designated team of SMEs, product experts, and a project manager able to support the pilot

 **Project Management (20%)**
Clear project requirements and clearly defined areas of support needed from CTA

 **Goals/KPI Alignment (10%)**
Well-defined process for tracking performance, aligned with problem statement

 **Budget/Timeline (10%)**
Length of time for development, implementation, and evaluation as well as the estimated cost

Q&A

- Drop questions in the Q&A box and we will answer questions live/post question answers on the website
- Applications Live at transitchicago.com/innovation-studio
- Send questions to InnovationStudio@transitchicago.com
- Questions accepted until October 6
- Answers posted by October 14 on Innovation Studio Website

