



# CTA Innovation Studio Information Session



03/18/2024



# Speakers



## **Molly Poppe**

Chief Planning and Innovation Officer

## **Emily Drexler**

Senior Manager, Planning and Innovation

## **Paul Black**

Project Manager, Operations Innovation



# Innovation Studio



“Through the Innovation Studio, we now have a means of accelerating our efforts to address a variety of matters affecting our day-to-day operations ranging from our number one priority of safety to the customer experience to operational efficiencies”

-CTA President Dorval Carter



# Agenda



- Background
- Benefits
- Eligibility and Evaluation Process
- Problem Statements
- Key Dates
- Q&A

# Why Innovation Studio



Innovation Studio is a unique opportunity to test new technologies on our system more quickly.

This more agile cadence of development allows us to keep up with a changing technological ecosystem.

Presenting problem statements allows us to collaborate with innovators on solutions we might otherwise have missed.

After pilots are concluded, we will evaluate if we want to pursue a larger system wide solution.

# Benefits



Innovators benefit from participating in Innovation Studio through:

- Expedited system for working with the CTA
- Increased exposure through participation
- Direct interaction with transit leaders
- Opportunity to pilot technology on one of the largest transit agencies in the US
- Helping to shape the future of the CTA

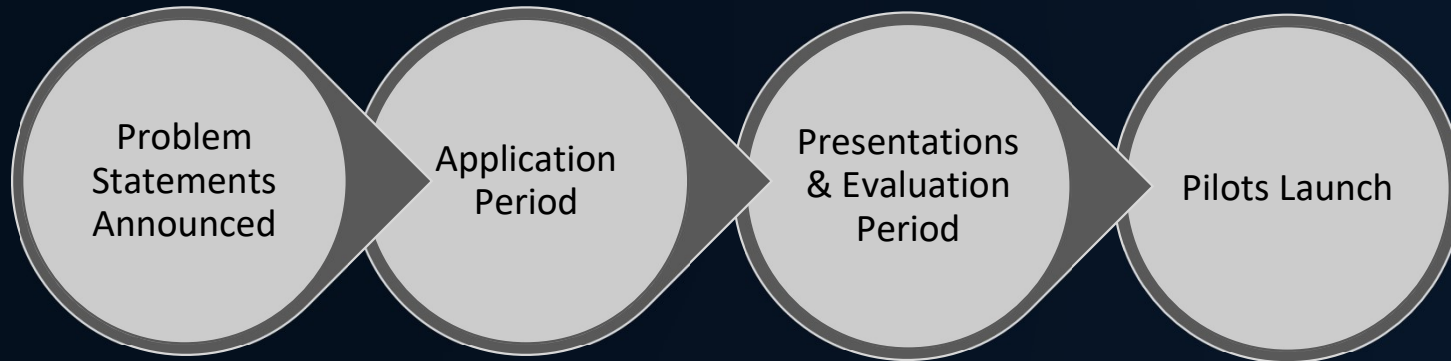


# Eligibility Requirements



- Must be legally able to work in Illinois during the pilot period
- Innovator should be ready to support the pilot for up to 12 months
- Proposed technologies must be developed enough that they are ready to pilot
- No previous transit experience necessary!

# Innovation Studio Process



Problem  
Statements  
Announced

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

Application  
Period

During the application period we will host an info-session and accept questions. Questions and answers will be posted on our FAQ

Presentations  
& Evaluation  
Period

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

Pilots Launch

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



# Evaluation Criteria – Phase 1



Phase 1 of the application process involves submitting a written application on our website at [transitchicago.com/innovation-studio/application/](https://transitchicago.com/innovation-studio/application/).

The applications are designed to give us a high-level understanding of the proposal and will be rated based on the following criteria:

- Responsiveness (40%)
- Feasibility (40%)
- Timeline (20%)

*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 of the application process involves presenting the proposed solution to a panel of subject matter experts. The presentations give innovators an opportunity to expand on their proposal and interact with CTA staff directly either in person or remotely.

These presentations will be graded based on the following criteria:

- The specific innovation (40%)
- The team supporting the pilot (20%)
- Project management (20%)
- Goals and key performance indicators (KPIs) (10%)
- Budget/timeline (10%)

# 2024 Problem Statements



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

**Internal Process Improvements:** *How can CTA automatically monitor the condition of physical assets at bus stops or their use over time?*



**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?*

## **Current state:**

We take safety seriously and want to ensure the safety of our riders and staff in all aspects of their journey. If a person falls onto the tracks, protecting their life requires timely intervention.

## **Problem:**

We currently lack a sophisticated method for automatic detection and intervention in such instances. In these high-risk situations, the more immediate the intervention response, the less risk.



# Safety



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



## **Proposed solutions should:**

- Perform in a variety of weather conditions, locations, and during times of cellular congestion.
- Involve automated reporting to local station staff and the CTA Control Center to allow for immediate intervention.



# Internal Process Improvements

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



**Current state:** CTA monitors assets at over 10,000 bus stops system wide

**Problem:** Creates heavy operational burden as manual checks of bus stop conditions conducted annually and in-person verification required when issues reported

# Internal Process Improvements

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



**Proposed solutions** should target at least one of the following:

- Cataloguing asset condition (e.g., bus stop signage, bus stop furniture, sidewalks);
- Occurrence of passengers not being able to board due to crowding;
- Notifications of asset condition changes.

# Customer Experience

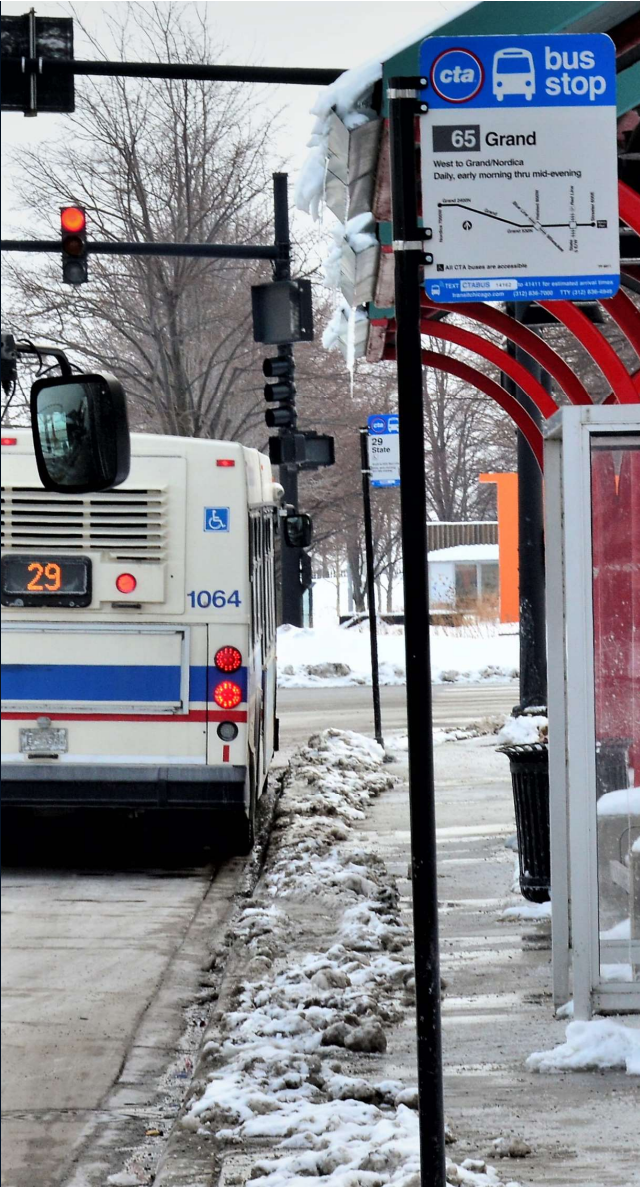
*How can CTA expand real-time arrival and alert signage to bus stops?*

**Current State:** CTA operates 127 bus routes in Chicago and 35 suburbs that serve over 10,000 bus stops

**Problem:** Customers value real-time arrival information signage at bus stops to know when the bus will arrive, but only about 400 bus stops have digital signage reporting real-time bus arrival estimates.







# Customer Experience

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

**Ideal solutions** will present customers with real-time arrival information and customer alerts and be:

- Low maintenance
- Able to be installed with little workforce effort
- Secure, self-powered, and potentially be able to integrate with other CTA solutions
- Able to provide accessibility features

# Key Dates



Event	Date
Questions Due	April 1, 2024
Applications Due	April 15, 2024
Pilot presentations	Early June 2024
Final Selections	July 2024
Scope and Planning Period	August 2024
Pilots Begin	September 2024

# Get Involved



Applications are live on our website at [transitchicago.com/innovation-studio](https://transitchicago.com/innovation-studio)

Questions can be e-mailed to [InnovationStudio@transitchicago.com](mailto:InnovationStudio@transitchicago.com)

Questions about the 2024 problem statements will be accepted until April 1, 2024 and questions and answers will be hosted on our FAQ page

