

Providing the information and methodologies needed to guide planning, assessment, deployment, and oversight of automated transit projects by documenting the lessons learned from the AvCo project as a case study.

YOUR GUIDE TO SUCCESS

To truly accelerate an autonomous transportation future, we're giving industry leaders a front-row seat to collectively learn lessons from AvCo through CityForward, the AV playbook. Instead of spending resources individually and repeating similar pilots, CityForward will **capture lessons learned, pitfalls to avoid, and key accomplishments** broadly applicable to the global connected and autonomous vehicle industry to safely and effectively introduce connectivity, automation, and electrification into transit operations. Our goal is for the nation to be better prepared to leverage the benefits and mitigate the risks associated with these technologies by taking a big step forward, together.

CityForward is being developed and distributed in collaboration with Stantec GenerationAV, a renowned pioneer in the field. It includes videos, webinars, checklists, and more in a regularly consumable, actionable format. CityForward provides the information and methodologies to guide planning, assessment, deployment, and oversight of automated transit projects. It is composed of six tested and vetted phases, each thoughtfully outlined to guide practitioners from Getting Started to Monitor and Evaluation of your AV deployment. We've clearly and comprehensively outlined the steps to deploy an automated transit system across our many courses included in the playbook, so you and your stakeholders can feel confident that it will be done right.



Course Name	Key Topics	Phase	Est. Date
Visioning Workshop Guide	<ul style="list-style-type: none"> How, whom, and when to engage stakeholders and the public 	Getting Started	Sept 2021
AV Readiness Plan	<ul style="list-style-type: none"> The use cases and opportunities with public transit applications and integration 	Getting Started	Sept 2021
Infrastructure Assessment Toolkit	<ul style="list-style-type: none"> How to navigate intersections - the requirements associated with controlled and uncontrolled intersections and introducing connectivity What changes to the road and environmental infrastructure are required and other aspects to consider 	Feasibility	Fall 2021
Connected & Electric Vehicle Integration Roadmap	<ul style="list-style-type: none"> The roles of Connected Vehicle (CV) and Electric Vehicle (EV) technologies Understand common standards, integration, and roadmaps for increasing Operational Design Domain (ODD) 	Feasibility	Fall 2021
Liability & Insurance Guide	<ul style="list-style-type: none"> Insurance, liability, and other risk considerations with deploying AVs on public roads and how to determine a line between parties 	Acquisition	Fall 2021
Safety and Operational Performance Guide	<ul style="list-style-type: none"> What testing should be done by the city prior to putting a vehicle on the road - standards, comparisons, and performance reviews to ensure safe operations 	Implementation	Early 2022
Compliance Guide	<ul style="list-style-type: none"> Understand federal, state, and local regulatory, permitting, and licensing requirements 	Implementation	Mid 2022
Infrastructure Implementation Toolkit	<ul style="list-style-type: none"> Put the assessments conducted during the Feasibility Phase into action Test the navigation of intersections and detailed design of infrastructure 	Implementation	Mid 2022
Security Risk Assessment	<ul style="list-style-type: none"> Understand cybersecurity risk and mitigations 	Implementation	Mid 2022
Methodologies & Management Toolkit	<ul style="list-style-type: none"> Practical considerations associated with involving or educating organized labor - such as operators, safety attendants, and emergency staff 	Operations	Late 2022
Data Analysis Guide	<ul style="list-style-type: none"> How and with whom to share data - includes approach, dissemination, storage, privacy and proprietary considerations, and more 	Monitor & Evaluate	Early 2023
Public Communications Guide	<ul style="list-style-type: none"> Guidance to gather passenger feedback and understand customer reactions 	Monitor & Evaluate	Early 2023
Lessons Learned Summary Report	<ul style="list-style-type: none"> Full summary of operations and lessons learned during the monitor and evaluation phases Understand AV economic impacts and confirm return on investment 	N/A	Mid 2023

AvCo CITYFORWARD



Pricing Level	Description	Price
Three Phase Bundle <i>Three phases (6+ courses)</i>	<ul style="list-style-type: none"> Get courses as they are developed Purchase the "Planning Bundle", includes Getting Started, Feasibility, and Acquisition phases and products Or purchase the "Deployment Bundle", includes Implementation, Operations, and Monitor & Evaluate phases and products 	\$3,500
Complete Package <i>All six phases + final report</i>	<ul style="list-style-type: none"> Get courses as they are developed The most comprehensive package, includes all six phases and courses, and final report 	\$9,000
Add an in-person learning experience <i>Purchase of Complete Package required</i>	<ul style="list-style-type: none"> Purchase the Complete Package and add our in-person learning experience Visit the Golden, CO deployment site and partake in an immersive learning experience called "Day in the Life of an AV Shuttle" Learn about the technology from EasyMile and AvCo's process to deploy from CSCA Workshops will be offered throughout the year and are subject to change Discounts available for bulk purchases Minimum 10 of people Maximum 25 of people 	\$2,000/ person
Add data <i>Purchase of Complete Package required</i>	<ul style="list-style-type: none"> Purchase the Complete Package and add data from the AvCo projects - easily digestible in an online platform, both real-time and historical data available 	\$7,000
Playbook Workshop <i>Purchase of other CityForward products not required</i>	<ul style="list-style-type: none"> Take a deeper dive into the Playbook process and learn from Stantec GenerationAV experts in a collaborative workshop setting Includes travel expenses for trainers Discount available for virtual workshop Maximum 25 of people 	\$25,000
Data <i>Purchase of other CityForward products not required</i>	<ul style="list-style-type: none"> Get data from the AvCo projects - easily digestible in an online platform, both real-time and historical data available Includes operational performance, battery consumption, incident reports, and more 	\$10,000
Summary Report <i>Purchase of other CityForward products not required</i>	<ul style="list-style-type: none"> Summary of the AvCo project with lessons learned Excludes how-to guides and in-depth Playbook learning experience 	\$3,000

The AvCo project will be the nation's largest deployment of low-speed, all electric automated shuttle fleets. It is a multi-year microtransit service operating in mixed traffic across multiple operating environments and use cases across Colorado with partners Colorado Smart Cities Alliance, EasyMile, Panasonic, and Siemens. The scale and deployment environments were purposefully designed to establish an industry learning platform with multiple living labs designed for research and demonstration of Automated, Connected, Electric and Shared (ACES) technologies, starting with 10+ EZ10 shuttles.

Stantec GenerationAV Learning Center is an intuitive, one-stop-shop for education on all things AV, from high-level concepts and in-depth analysis to complex ideas and technical information made simple, all delivered online by industry experts and technology partners with real-world experience creating safe and effective AV deployment programs. The goal of the Learning Center is simple—to provide participants with a foundation to build on and a new level of confidence with AVs and their potential.

Most importantly it is where you can find more information on the CityForward AV Playbook and purchase courses, such as the bundles, the complete package, and summary report — *URL link is pending*. Please contact us to schedule a Playbook Workshop or purchase data. Contact EasyMile to purchase an in-person learning experience.

Learn more today!

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