



Innovative Clean Transit and Zero-Emission Bus Rollout Plans

Far North Transit Symposium

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Deadlines and Requirements

- Annual application deadline for the [Omnibus regulation exemption](#): May 1st
- Annual reporting deadline for the Innovative Clean Transit (ICT) and Omnibus regulations: March 31st
- Zero-emission bus (ZEB) purchase requirements starts in 2023 for large transit agencies
- Rollout Plans for small transit agencies is due June 30, 2023
 - [Rollout Plan Guidance Document](#) explains the requirements
 - Large transit agencies' Rollout Plans are posted at the [ICT-Rollout Plans](#) page



Innovative Clean Transit Reporting Tool (ICTRT)

- ICTRT was opened on March 14, 2022, with new modules and will remain available through July 1, 2022
- See ICTRT tutorial webinar [presentation and recording](#) for details
- [Updated ICTRT Guidance Document](#) in Q&A format to illustrate and explain functions of each module
- Send questions to ICT@arb.ca.gov
- More information available at the [ICTRT](#) webpage



Zero-Emission Bus (ZEB) Rollout Plan

- Approved by the transit agency's governing body and submitted to CARB
 - July 1, 2020 for large transit agencies
 - July 1, 2023 for small transit agencies
- Planning is key to success:
 - Identify suitable technologies
 - Plan bus purchase schedule
 - Understand the potential schedule for infrastructure construction



Synchronization of Activities and Planning

Bus Procurement



Infrastructure Planning and Installation



EPA DOT Fuel Economy and Environment Electric Vehicle

Fuel Economy Midsize cars range from 10 to 99 MPGe. The best vehicle rates 99 MPGe.

99 MPGe combined city/hwy
 103 city 95 highway 34 kWh-rs per 100 miles

You Save \$9,600 in fuel costs over 5 years compared to the average new vehicle.

Annual fuel cost \$600

Fuel Economy & Greenhouse Gas Rating (tailpipe only) **Smog Rating** (tailpipe only)

This vehicle emits 0 grams CO₂ per mile. The best emits 0 grams per mile (tailpipe only). Does not include emissions from generating electricity. Learn more at fuelconomy.gov

Actual results will vary for many reasons, including driving conditions and how you drive and maintain your vehicle. The average new vehicle gets 22 MPG and costs \$12,600 to fuel over 5 years. Cost estimates are based on 15,000 miles per year at \$0.12 per kWh-r. MPGe is miles per gasoline gallon equivalent. Vehicle emissions are a significant cause of climate change and smog.

fuelconomy.gov
Calculate personalized estimates and compare vehicles

Smartphone QR Code

Fuel Cost Management



CALIFORNIA AIR RESOURCES BOARD

Required Rollout plan components

- Plan for full transition to ZEBs by 2040 (considering minimum bus useful life)
- Planned bus purchase schedule
- Identify types of ZEB technologies planning to deploy
 - Both battery electric (on-route or depot) or fuel cell electric are eligible
- Infrastructure build out schedule, location and type
- Workforce training (planner, technician, driver, etc.)
- Describe how planned ZEBs would serve disadvantaged communities
- Identify potential funding sources



More on ZEB Rollout Plan

- Rollout Plan
 - Non-binding and could be a moving target
 - The Air Resources Board only enforces the submittal of the initial Rollout Plan but does not enforce the implementation of the Rollout Plan
 - All timelines are estimated with best input from partners, e.g. utilities or other fuel providers
- Rollout Plan Guidance Document
 - Provides general guidance to transit agencies for planning purpose
 - Is not a form or required format
 - Includes both required and recommended information



Contacts and Links

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- Shirin Barfjani, Lead Staff (Shirin.Barfjani@arb.ca.gov)
- ICT program email (ICT@arb.ca.gov)
- ICT ZEB Rollout Plans page (<https://ww2.arb.ca.gov/our-work/programs/innovative-clean-transit/ict-rollout-plans>)
- Innovative Clean Transit Reporting Tool (<https://ictrt.carb.arb.ca.gov>)
- Funding Plans (<https://ww2.arb.ca.gov/our-work/programs/low-carbon-transportation-investments-and-air-quality-improvement-program/low-1>)
- HVIP (<https://californiahvip.org>)
- Funding Finder Tool (<https://fundingfindertool.org>)

