



2026 Zero-Emission Bus Study

July 2026



Background

- California's ICT regulation requires all public transit agencies to transition to a 100% ZEB fleet by 2040
- To comply with ICT regulation, OCTA adopted a ZEB Rollout Plan in 2020
- 2026 ZEB Study will update original plan in alignment with lessons learned, new technologies, and evolving operational strategies
- Study began in spring 2026 and will conclude by summer 2027

ICT = Innovative Clean Transit

ZEB = Zero-Emission Bus



Context

- ZEBs are moving from pilot projects to broader deployment
- Implementation is still complex
- Successful ZEB deployment depends on associated infrastructure and support
- Agencies need strong planning, the right technology choices, reliable infrastructure, trained staff, and sustainable funding

ZEB = Zero-Emission Bus



Current Technology and Challenges



- Current ZEB fuel types: Battery Electric (BEB) and Hydrogen Fuel Cell Electric (FCEB)
- Agencies continue to face challenges with range, reliability, scheduling flexibility, vehicle availability, and limited options for cutaways and other specialized vehicles



Public Outreach

Goal: Gather meaningful community input to help inform OCTA's ZEB Study while ensuring outreach reaches a broad and diverse cross-section of Orange County residents.

Outreach activities include:

- Multilingual Community Survey
- Virtual Community Meeting
- Community Pop-up Events
- Stakeholder Roundtables
- Digital Outreach

ZEB = Zero-Emission Bus



OCTA
ZERO-EMISSION BUS TRANSITION PLAN STUDY

AT A GLANCE

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STUDY OVERVIEW

The Orange County Transportation Authority (OCTA) is launching a Zero-Emission Bus Transition Plan Study (ZEB Transition Plan Study) to map out how it can transition its bus fleet to 100 percent zero-emission vehicles.

This study will update OCTA's 2020 Zero-Emission Bus Rollout Plan to reflect new technologies and meet state requirements, including the California Air Resources Board's (CARB) Innovative Clean Transit regulation, which requires large transit agencies to transition all revenue service buses to zero-emission by 2040.

This 14-month study will review current and future service needs, bus operations, and facility requirements, while exploring battery-electric and hydrogen fuel cell technologies. The study will also identify charging and fueling needs, and cost-effective ways to implement the transition. The result will be an updated plan that meets state requirements, maintains reliable bus service, and supports cleaner air and a more sustainable future for our Orange County communities.

OBJECTIVES/GOALS

The ZEB Transition Plan Study will provide a clear roadmap for OCTA's transition to a zero-emission bus fleet. It will identify practical steps, funding opportunities, and investment needs, while helping ensure the transition is cost-effective and minimizes potential impacts to bus service. The study will also support informed decision-making and long-term planning to deliver a smooth and reliable transition for riders and the community.

MILESTONE TIMELINE

MILESTONES	APPROXIMATE TIMELINE
Study Kick-Off	Spring 2026
Public Engagement	Ongoing
Existing Conditions & Fleet Options Assessment	Summer 2026
Draft ZEB Transition Plan	Spring 2027
Final ZEB Transition Plan	Summer 2027
Final Report	

GET INVOLVED

OCTA is committed to keeping the community informed and engaged throughout the study. For updates and opportunities to participate, please visit octa.net/ZEBplan

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Fact sheet as of 6/14/2026



Next Steps and Timeline

- ▶ **Fleet Options Memo**
- ▶ **Infrastructure Requirements**
- ▶ **Trends and Technology**
- ▶ **Operating Cost**
- ▶ **Implementation Phasing**
- ▶ **Financial Plan**
- ▶ **Final ZEB Rollout Plan (June 2027)**