

# Phase 1 Zero Emission Bus Program



asucd CITY OF DAVIS  
**UNITRANS**

In 2022, Unitrans committed to only purchasing zero emission buses, six years before the California Air Resources Board requirement goes into effect for all public transit services. Right now, Unitrans is in Phase 1 of an envisioned three phase conversion program. Phase 1 will replace 14 older buses by 2024 with 14 zero emission battery electric buses or about a third of the fleet. Full conversion to a 100% zero emission fleet is projected by 2033.

## Phase 1 Summary

14 total battery electric buses:

- 6 in service now
- +4 in summer 2023
- +4 in summer 2024

Manufacturer: New Flyer

Batteries: 525 kwh

Range: Approx. 175 miles

Total cost: \$950,000 each  
or approx. \$14 million



### Charger Cabinet



### Charging Dispenser



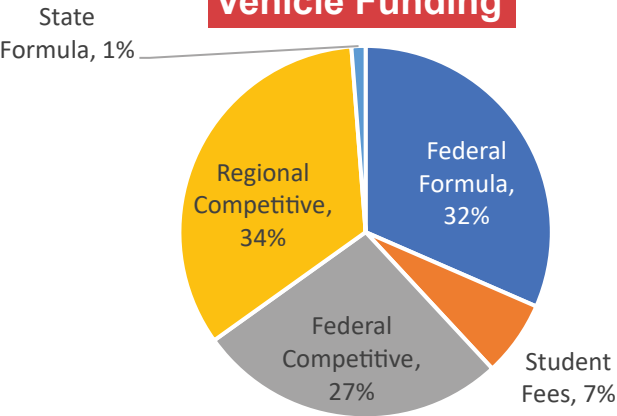
Unitrans currently has seven chargers serving 14 charging stations. The chargers are manufactured by ABB and provide 150 kwh per charger. Total charge time for two “empty” buses: 7.5 hours  
Cost: \$200,000 each or \$1.4 million for chargers + \$3.2 million in infrastructure upgrades.  
Total Cost: \$4.6 million

**What is Unitrans?** Unitrans is the UC Davis & City of Davis local fixed-route public bus service. Operated by the Associated Students (ASUCD), Unitrans is funded through a combination of undergraduate student tuition fees and State and Federal public transit funding provided by the City. All Unitrans drivers and most staff are UC Davis undergraduate students working part time.

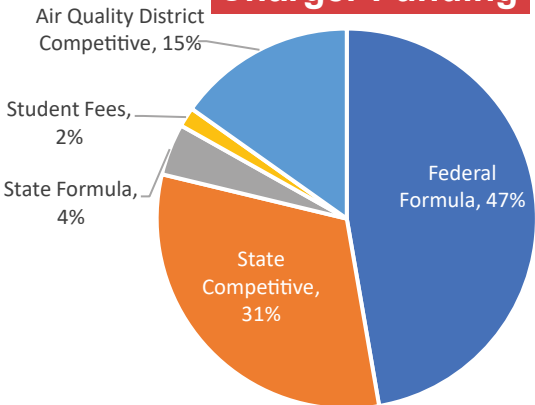
# Phase 1 Funding

The successful full funding for Phase 1 is thanks to the strength of the Unitrans partnership between the City and University. Major funders include: the Federal Transit Administration, State of California, Undergraduate Students of UC Davis, and the Sacramento Metropolitan Air Quality Management District.

## Vehicle Funding



## Charger Funding



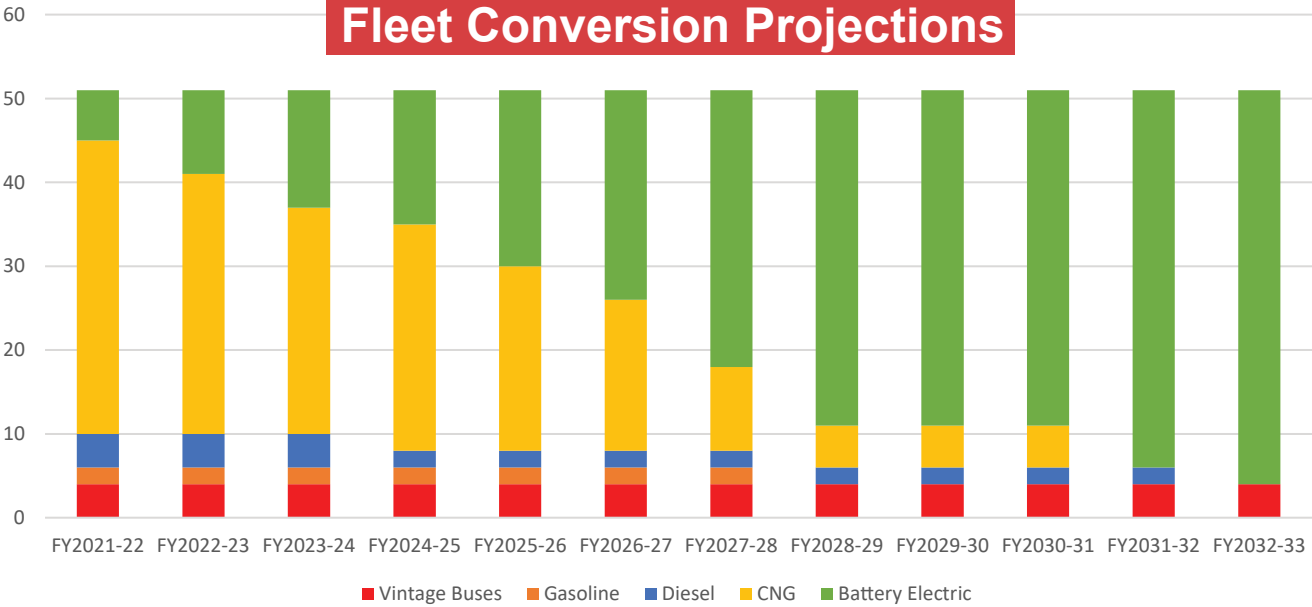
Formula funds are provided to the City for public transit service based on Unitrans ridership and the local population and passed to Unitrans.

### What's next?

Phase 2 planning is underway now for 12-15 more electric buses and charging stations. Construction is planned for 2025-2026. Phase 2 is dependent on future funding.



## Fleet Conversion Projections



**What about the vintage London buses?** We're committed to maintaining our three historic buses which are an icon for our city and university. Right now, there are no plans to convert or replace these buses. Unitrans will be assessing future exemptions for these historic vehicles through the State.