

**Did you know?**

Grossmont Union High School District (GUHSD) serves high schools, adult schools, and Regional Occupational Programs in eastern San Diego County.

Power Your Drive for Fleets

CASE STUDY: Grossmont Union High School District



Fleet profile

The school district's 67 diesel buses traveled nearly one million miles in 2021, using more than 182,000 gallons of fuel at an estimated cost of \$492,727.

In June 2021, GUHSD began renovating its transportation facility and found that approximately a third of the fleet was ready for replacement. The fleet team at GUHSD recognized this as an opportunity to begin their fleet electrification process and infrastructure installation.

Key goals

- Reduce annual fuel costs
- Create a healthier environment for students
- Transition to a zero-emissions bus fleet by 2030
- Simplify and reduce costs of vehicle maintenance
- Take advantage of public funding opportunities
- Demonstrate leadership

A school district's path to zero-emission transportation

Over the years, the district has implemented several energy- and cost-reduction initiatives. For example, GUHSD's 13 campuses have a 90-95% offset for solar, batteries for storing excess power and LED lighting for maximum efficiency.

Beyond making the district's campuses more efficient, Lindsey Danner, Executive Director Facilities Management for the GUHSD, was looking to reduce fuel costs, eliminate tailpipe emissions, and demonstrate leadership by electrifying their heavy-duty school bus fleet.

GUHSD spearheaded the transition and is leading the way as one of the first school districts in California on the path to convert to zero-emission transportation by 2030.



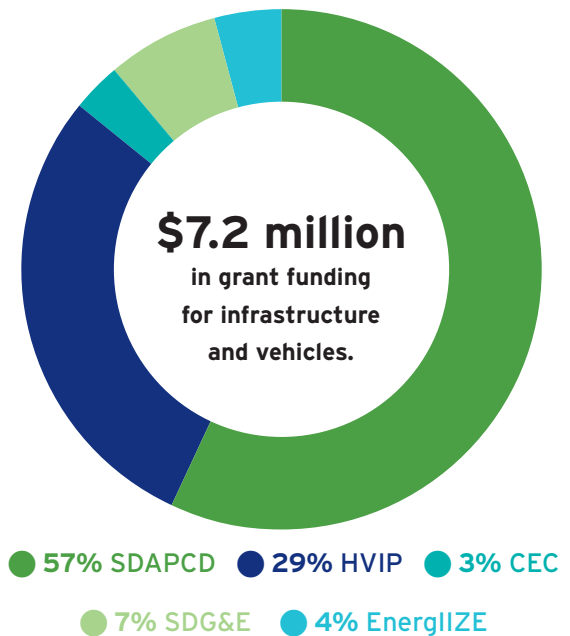
To learn more, scan QR Code or visit sdge.com/EVFleets

Taking advantage of funding

Understanding the funding sources that are available to your fleet is often the first step for transitioning to electric vehicles.

Developing a strategy to procure public sector funding and high-priority grants allowed GUHSD to secure over \$7.2 million in grant funding for infrastructure and vehicles.

- **\$4.2 million** in funding came from the San Diego Air Pollution Control District (SD APCD)
- **\$2.1 million** from California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP)
- **\$200,000** from the California Energy Commission (CEC)
- **\$319,000** from EnergiIIZE
- The district also worked with SDG&E's **Power Your Drive for Fleets** program to receive no-cost make-ready charging infrastructure, valued at approximately **\$500,000**.



Managing energy costs

The upfront cost for electric school buses is currently about three and a half times more than a traditional diesel school bus, however, by utilizing incentive funding and GUHSD's Power Purchase Agreement (PPA) for solar energy, on-site energy storage, and low-cost capital leases for buses, the district will be able to reduce operating costs significantly.

GUHSD also offsets a majority of their energy expenses by using solar energy on top of Low-Carbon Fuel Standard (LCFS) credits and Renewable Energy Credits (RECs) equating to approximately \$170,000 a year. By storing solar energy and using it to charge electric buses during periods of peak energy demand, the district helps keep their energy costs down.



By storing solar energy and using it to charge electric buses during periods of peak energy demand, the district helps keep their energy costs down.

Creating a phased replacement schedule

GUHSD is using a phased approach to replacement and fleet electrification.



PHASE 1: 2021-2022 School Year

- Secure project funding
- Begin infrastructure planning
- Install (18) 60 kW chargers
- Purchase six buses from IC Bus
- Purchase 11 buses from Thomas Built Buses
- Deployment Date: Fall 2022

PHASE 2: 2022-2023 School Year

- Purchase nine from Thomas Built Buses
- Purchase one from GreenPower B.E.A.S.T
- Purchase an additional 10 chargers

Lessons learned

GUHSD is one of the first school districts in California to begin transitioning to electric school buses, and the project team addressed several challenges that other districts may want to consider.

One of GUHSD's key findings was that some chargers require different infrastructure, so working closely with the electric utility is imperative.

Implementing change on a large scale, such as an entire school district, requires consistent communication between the school facilities and transportation departments as well as with SDG&E as the utility provider, in order to understand each organization's role and facilitate the information needed to complete the project.



In the early stages of planning, developing a transition plan with a timeline helps departments understand next steps, collaborate on progress and better support shared goals. Establishing a timeline early on also allows time to research, apply, and delegate grants and incentives which are essential to reducing upfront costs of the vehicles and infrastructure.

GUHSD also found a major difference in the amount of storage space on the electric bus compared to a traditional diesel bus. With the extra battery storage required, passengers had less room for their larger personal items. Delegating space for larger items should be done ahead of time if the passengers will frequently have larger items.



Achieving goals

The district has already received delivery of most of the buses, and accomplished four out of the six key goals GUHSD set out to achieve:

- ✓ **Taken advantage of public funding opportunities** by applying for grant funding from the SD APCD, HVIP, CEC, SDG&E to secure more than \$7.2 million in funding.
- ✓ **Transitioned to a zero-emissions bus fleet by 2030** by beginning the process of buying new vehicles and installing infrastructure early on to take advantage of incentive funding.
- ✓ **Reduced annual fuel costs** by replacing a third of their fleet with electric vehicles, the annual fuel cost will go down once the diesel vehicles are no longer on the road.
- ✓ **Demonstrated leadership** by embarking on the transition to electric vehicles and sharing their findings for other school districts looking to electrify.

Moving forward

The district was already leading the charge with clean energy and storage efforts, so expanding to zero-emission transportation was a natural next step to further their sustainability goals. By electrifying their school bus fleet, GUHSD solidifies their position as leaders in the San Diego region and state of California. The district looks forward to the transition, integrating new software, reducing their environmental footprint, and showing the community how the district has dedicated resources to better the lives of students and faculty.



Power Your Drive *for Fleets*

SDG&E's **Power Your Drive *for Fleets*** program helps fleet managers reduce operating costs, eliminate emissions, and simplify vehicle maintenance by transitioning to electric vehicles. The program connects fleets with resources and financial incentives to easily and cost-effectively design and install the charging infrastructure needed to power medium- and heavy-duty electric fleets.

For more information on the program, visit: sdge.com/EVFleets