

## 42nd Utility Energy Forum

April 19-21, 2023  
Cambria Pines Lodge  
Cambria, CA

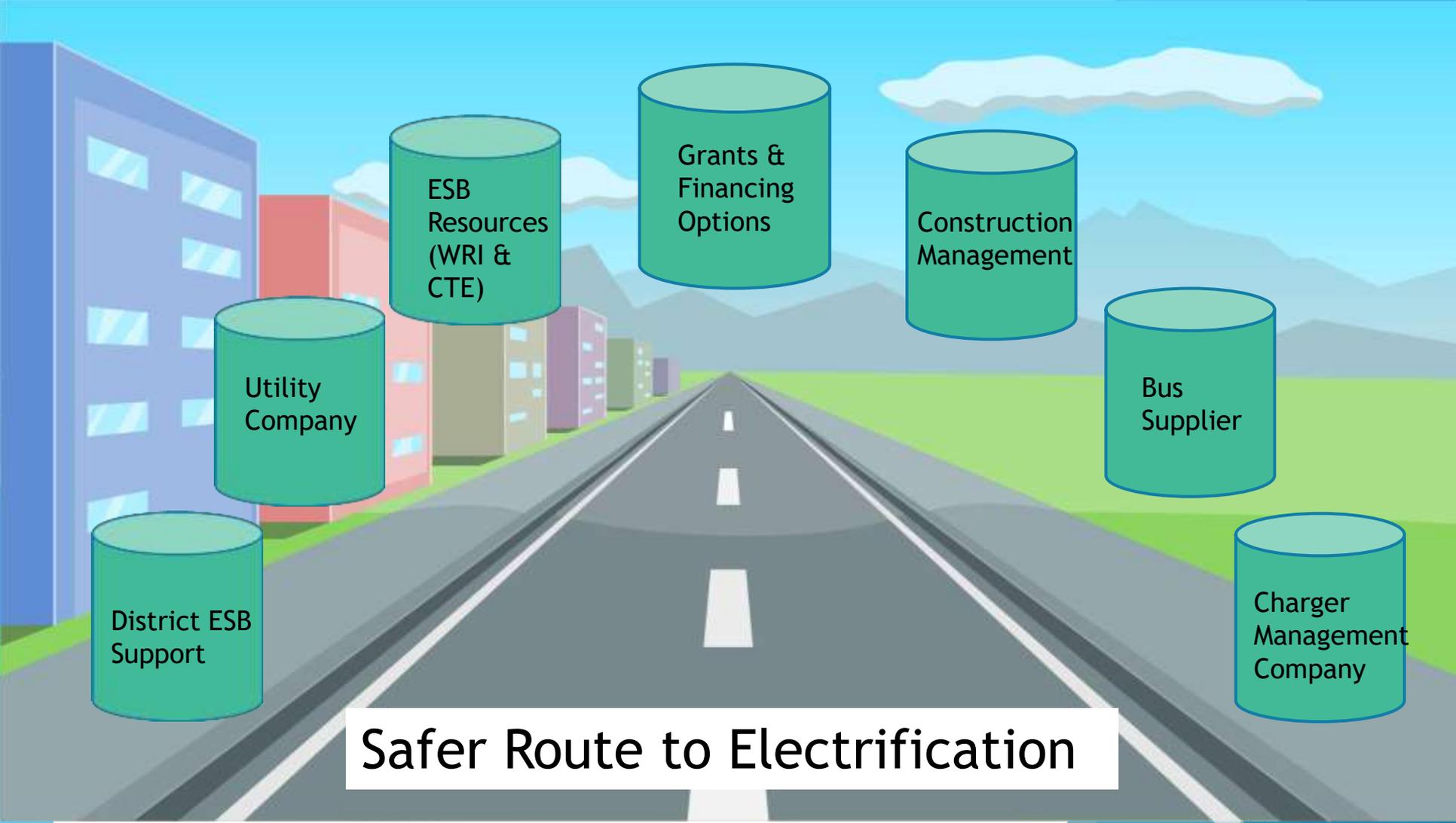
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Gilbert Blue Feather Rosas, Director II, Sustainability & Adaptation

“Collaborating with Schools for Sustainability Initiatives”



	<b>Stockton Unified School District</b>	<b>Modesto City Schools</b>	<u>Notes</u>
Time Period	03/19 to 03/22	03/22 to Present	
From Groundbreaking to Charging Buses	less than 11 Months	less than 11 months*	*(06/22 to 04/23)
Grant Funding Signed	\$11.04M	\$9.4M	
Grant Funding applied for	\$16.8M	\$16.6M **	**3/1/23
Battery Electric Buses	11	30	
Overall Fleet Size	92	62	
# of Students	40,000	30,000	
District Ranking by enrollment	15	25	
DCFC (DC Fast Chargers)	4	2	
L2 AC Chargers (level 2)	20	30	
Conduit stub-ups for future	0	12	



District ESB  
Support

Utility  
Company

ESB  
Resources  
(WRI &  
CTE)

Grants &  
Financing  
Options

Construction  
Management

Bus  
Supplier

Charger  
Management  
Company

# Safer Route to Electrification

## These are the grant “funding Plates” we are spinning



➤ Bi-partisan Infrastructure Law (BIL) EPA Clean School Bus Program	\$ 3,160,000.
➤ California’s Hybrid & Zero-Emission Truck and Bus Voucher Incentive Program	\$
➤ San Joaquin Valley Air Pollution Control District- Clean Vehicle Fueling Infrastructure Program (PH1)	\$ 4,190,000.
➤ San Joaquin Valley Air Pollution Control District- Clean Vehicle Fueling Infrastructure Program (PH2)	\$ 1,950,000.
➤ San Joaquin Valley Air Pollution Control District- Clean Green Yard Machines	\$ 30,000.
➤ San Joaquin Valley Air Pollution Control District- Public Benefits Grant New alternative Fuel Vehicle Purchase	<u>\$ 72,517.</u>
➤ Total Grant Funds	\$ 9,402,517.

# Community Sustainability Partner

Sustainable Outdoor Learning Environment (SOLE)



# Considerations for Electric School Bus Deployment

## Environmental

- Local Air Quality
- Noise Pollution
- Oil/Fuel Consumption
- Improve Quality of Life for Students & Employees

## Political

- Focus on Sustainability
- Strengthen the local grid
- Social improvement at the local level

## Economical

- Reduce overall cost of ownership
- Reduce staff workload
- Reduce parts inventory

# Electric School Bus vs. Diesel Bus Analysis

## 10-Yr Lifetime Operational Cost per Mile

O&M Cost Comparison	ESB	Diesel	Savings
Electricity/Fuel Cost, \$/mi	\$0.03	\$0.44	<b>\$0.41</b>
Maintenance Cost, \$/mi	\$0.56	\$1.54	<b>\$0.97</b>
<i>Total Operation Cost, \$/mi</i>	<i>\$0.60</i>	<i>\$1.98</i>	<b><i>\$1.38</i></b>



CELEBRATING 150 YEARS - 1871-2021  
EVERY STUDENT MATTERS, EVERY MOMENT  
COUNTS

Internal



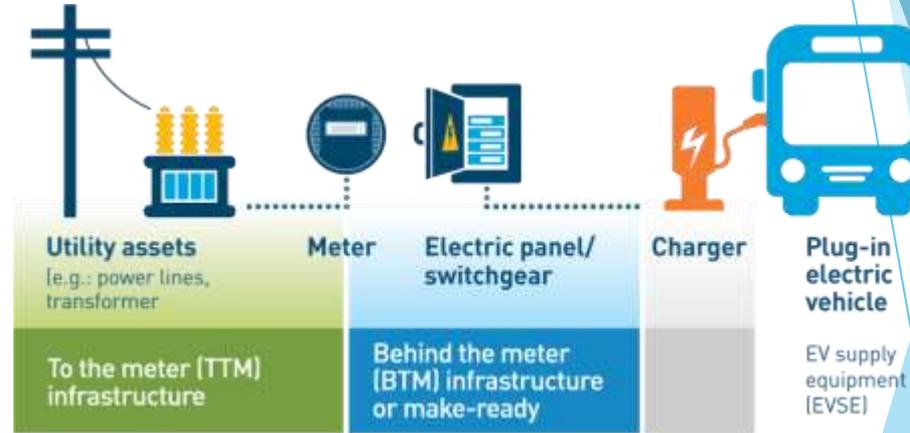
## Key Points:

- ▶ Plan Ahead – Expect 12-18 Months Lead time
- ▶ Plan For Growth To Save Money
- ▶ Level 2 (AC) & DC fast charge are Standard

## Funding Opportunities:

- ▶ CEC EnergIZE Program
- ▶ PG&E Fleet Ready Program
- ▶ SCE Charge Ready Program
- ▶ San Joaquin Valley APCD Program
- ▶ Bay Area AQMD Program
- ▶ Sac Metro SMUD Program
- ▶ Mojave Desert AQMD Program

# Infrastructure



BTCPower

CLIPPER CREEK

evconnect

NUVE

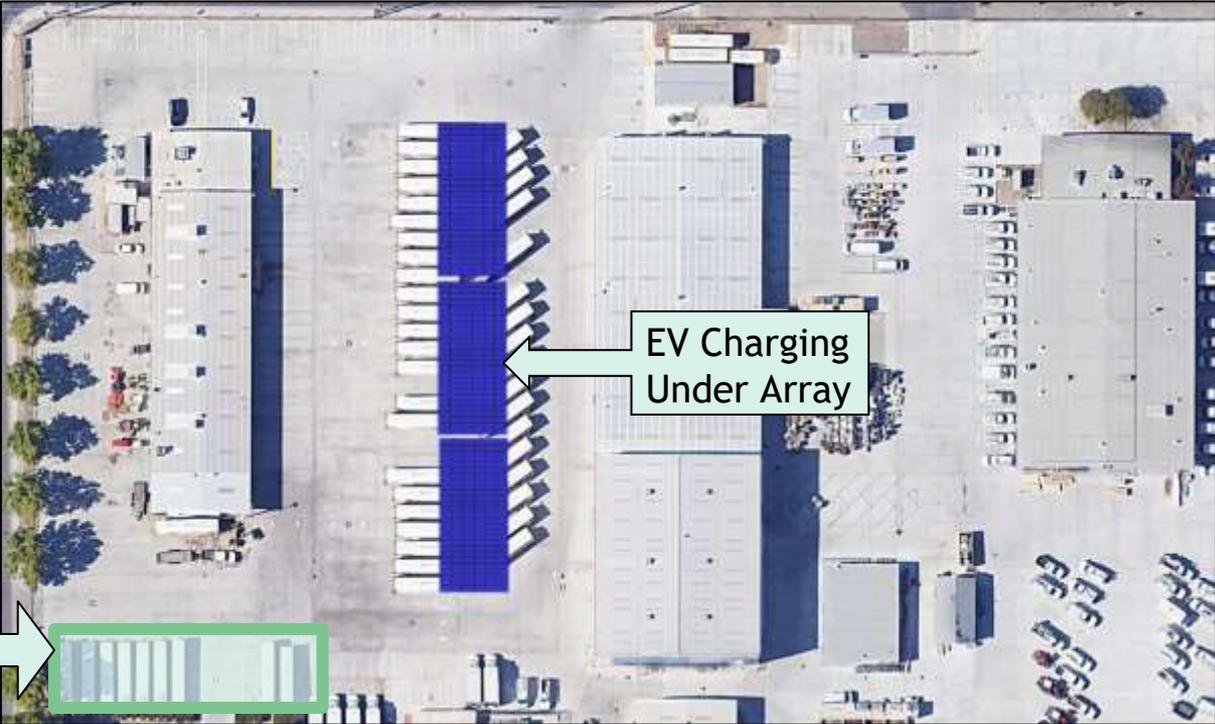
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# ESB Charging and Solar Shade Structures



Additional  
DC Fast  
Chargers

EV Charging  
Under Array



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COUNTS



# Improving For Future Generations





**Modesto City Schools Sustainability Webpage:**  
**<https://www.mcs4kids.com/page/sustainability-and-adaptation>**