



Transportation Services Division

Electrification Plan

October 17, 2023 LAUSD Board Meeting



LAUSD
UNIFIED

Transportation

Electrification Plan

Board Resolution

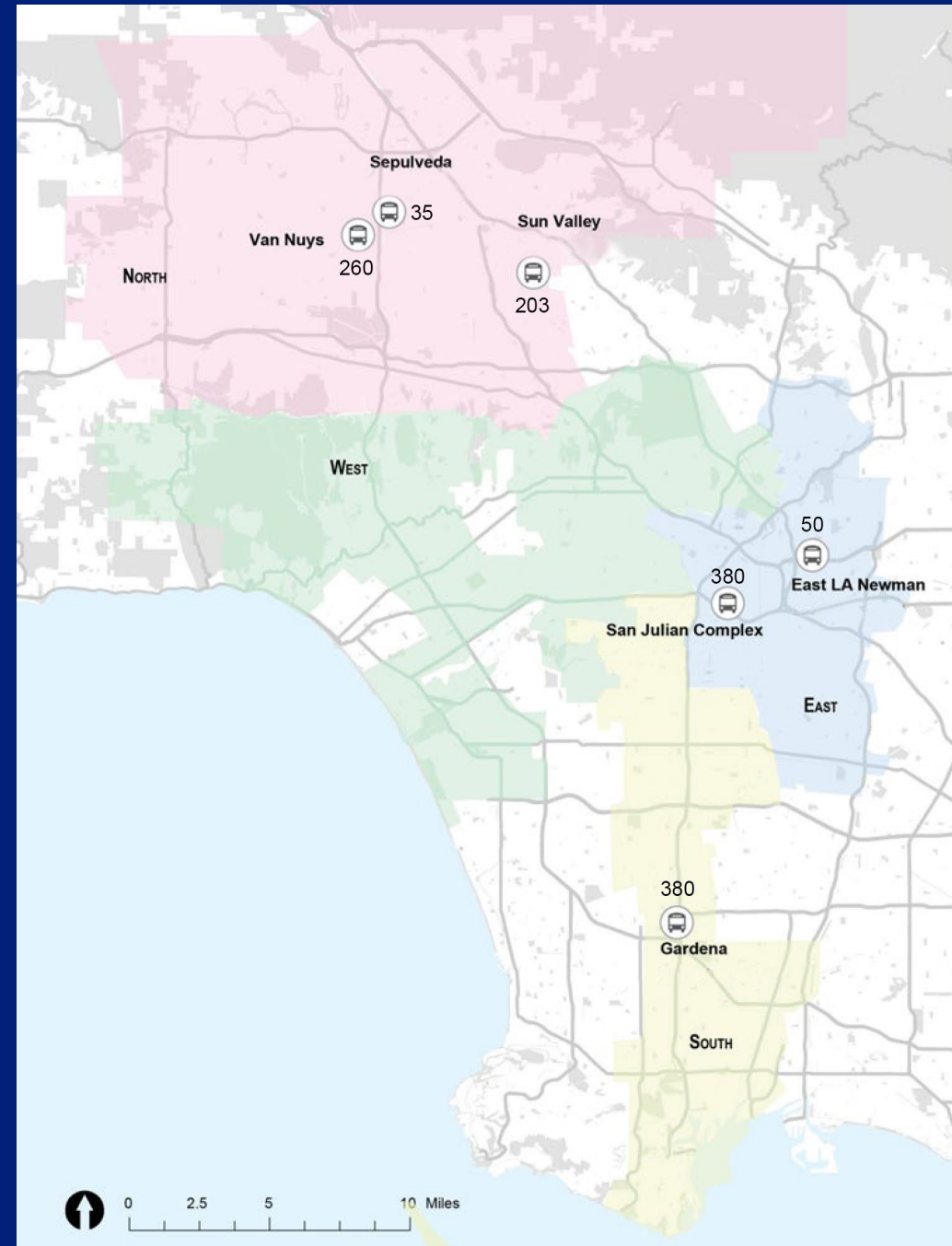
- Transitioning Los Angeles Unified School District to 100% Clean, Renewable Energy Resulting in Healthier Students and More Sustainable, Equitable Communities (Res-018-19/20)

Planned Upgrades (near-term)

- Sun Valley Bus Yard – by 2026
- Gardena Bus Yard – by 2028

Upcoming Plans (long-term)

- Newman Center (East LA)
- San Julian Complex
- Sepulveda Bus Yard
- Van Nuys Bus Yard (leased)



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EQUITY ANALYSIS

To address service areas that are disproportionately affected by air pollution

CalEnviroScreen Percentile

- Scores each Census tract for 21 total indicators

Analysis Considerations

- Within one mile of existing bus facilities and school locations
- Considering equity as a factor among other considerations

BUS FACILITY	LAUSD EQUITY PRIORITY RANKING*	OVERALL CALENVIROSCREEN PERCENTILE	POLLUTION BURDEN PERCENTILE	POPULATION CHARACTERISTICS PERCENTILE	POVERTY PERCENTILE
Sun Valley	1	83.5	83.0	95.8	80.3
Sepulveda**	2	82.3	68.0	98.2	82.0
Van Nuys	3	78.6	92.2	98.9	65.7
East LA Newman	4	78.2	92.9	86.2	87.7
San Julian Complex	5	74.5	98.9	61.4	82.8
Gardena*	6	65.0	94.9	72.4	55.4

* accelerated due to soil stabilization concerns

** delayed to correspond with replacement of Type A buses

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LONG-TERM ACTIONS

All-electric yellow fleet by 2040

Electric School Bus (ESB)

- Purchase all-electric school buses beginning 2022
- Leverage available external resources
 - Office of Government Relations
 - 8 Letters of Recommendation

EV Supply Equipment (EVSE)

- Mostly Vehicle-to-Grid (V2G) 60kW bidirectional chargers
 - New technology
 - Charge management (“smart charging”)
 - Revenue generating
- Some Level 2 AC chargers for reliability & contingency



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NEAR-TERM ACTIONS

Within the next five years to set the groundwork for long-term transition

ESBs & EVSE

- 400+ electric school buses by 2028
- 300+ EV chargers by 2028
- Funding opportunities (EPA, CARB, CEC, etc.)



Infrastructure

- Planning, design, & construction for Sun Valley and Gardena Bus Yards
- Partnership with LADWP for electrical upgrades \$4.8M going to Board Oct 17, 2023
- Leverage available external resources



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ELECTRIC SCHOOL BUS (ESB) PURCHASE

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A-Z Bus Sales

- One-time purchase of 180 ESBs
- Competed IFB received four (4) bids
 - Awarded to the lowest responsive and responsible bidder
- Ensure students are provided with safe and sustainable transportation to and from school

Strategic Plan

- Pillar 2 – Joy and Wellness
Provide safe and reliable school transportation
- Pillar 4 – Operational Effectiveness
Maintain efficiency by utilizing the most up-to-date, sustainable alternative fuel systems



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ELECTRIFICATION GRANT WRITING

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Bench of Two (2) Contracts

1. California Consulting, Inc.
 2. Katherine Nelson, LLC
- Federal Funding
 - The Bipartison Infrastructure Law- \$5b
 - EPA Clean School Bus Grant- \$1b
 - The investment of utilizing specialized grant contracts results in a high rate of return
 - Reduce the need for general funds expenditures

Strategic Plan

- Pillar 1 – Academic Excellence
Reduce the need for general funds which can be re-directed to improve student achievement
- Pillar 2 – Joy and Wellness
Facilitate the transition to clean-powered school buses to benefit the health of students and community



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MOU between Los Angeles Department of Water and Power (LADWP)

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- Establishes program funding of up to \$4,845,000 to support Los Angeles Unified transportation electrification projects.
- LADWP will provide \$4,000 to \$30,000 per EV charging station depending on the type (AC Level 2 or DC fast charger) and output capacity (kW) of each charging station.

Strategic Plan

- Pillar 1 – Academic Excellence
Reduce the need for general funds which can be re-directed to improve student achievement
- Pillar 2 – Joy and Wellness
Facilitate the transition to clean-powered school buses to benefit the health of students and community



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TIMELINE

Facility upgrades for a 2040 transition (partial approach)

