

Culver CITY

Transportation Department

Mobility Planning • CityBus • CityShare • CityRide • CityFleet



Vehicle Electrification

Mobility Subcommittee Update - 3/30/21

Vehicle Electrification - “e-Mobility”

Enhancing Mobility and Clean Transportation

- ▶ October 2018 - City Council highlighted in Culver City Strategic Plan (2018-2023) Mobility & Transportation
- ▶ In 2019, Culver City joined The Transportation Electrification Partnership, which is run by the LA Cleantech Incubator.
 - ▶ Culver City has joined other cities, the state, EV manufacturers, utilities and the goods and people movement industry to accelerate zero emissions mobility by 2028 - align with World Olympics.
 - ▶ Culver City, who shares a common goal with the Partnership, will strategize and learn from its fellow members on how to go about influencing change in the right direction to foster zero emission mobility.
- ▶ Culver City is creating a e-Mobility strategic plan that will balance these objectives, focusing on:
 - ▶ Culver City Services
 - ▶ Public Vehicle Electrification

Vehicle Electrification - “e-Mobility” Strategic Plan

Multiple Programs

Culver City Services

- City Vehicle Plan
- City Vehicle Infrastructure
 - Fueling Stations
- Employee Charging -
Rideshare Incentive
- Public Charging - City
Provided

Public Vehicle Electrification

- Policies to Encourage
Transition to Electric
Vehicles
 - Business Fleets
 - Individual Drivers
- Public Charging Stations -
Private Enterprise

Culver City Vehicle Electrification Status

City Service Vehicles

Policy: Buy electric vehicles if mature technology available and able to meet service requirements;

Department Director submits exemptions & approved by CM

Otherwise seek funding for pilot projects

Class 1 Vehicles: 15% - 8 EV and 5 PHEV to date, +2 proposed in FY22

Need to expand Level II charging throughout city to support more EVs - all are at Transportation

CityBus: 100% - 54 Battery Electric Buses by 2028

City Vehicle Fueling Stations

10 Level II @ Transportation Facility

LT Electrification Transition Plan for Transportation Facility underway

Employee Charging

14 Charging stations @ City Hall - shared cost / Rideshare

Public Charging

1 EVgo Level II Charging at City Hall

3 EVgo Level III Charging at Ince Parking Structure

6 EVgo Level III Stations @ Veterans and Senior Center

54 Tesla Level III Charging Stations citywide

Public Vehicle Electrification Status

Business EV Use

SCAG Grant: EV Infrastructure Plan study underway (finish mid-2022)

Business Fleet Identification

Landlord EV Charging Station Guide: Grants, Acquisition, Permitting, Installation, Maintenance, Billing Tenants for Use of Electricity

Individual EV Use

SCAG Grant: EV Infrastructure Plan study underway (finish mid-2022)

EV Owner Guide: EV make/models, maintenance, incentives for purchase/leasing, public charging station locations and how to use them

Private Charging Stations

Site Suitability Analysis -- Business and Residential

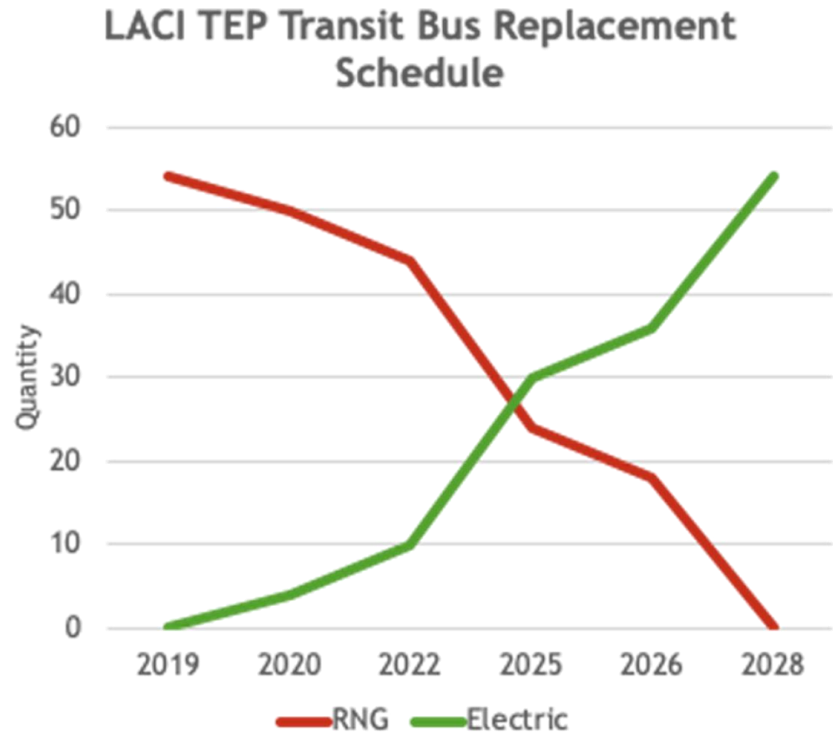
- Inventory of existing charging infrastructure on private property
- DMV EV registration data to determine need
- Morning and mid-day modeled EV destinations to determine where
- Locations of large employers
- Identify and rank potential EV charging station sites

Transportation Facility Electrification Transition Plan



Mobility Planning • CityBus • CityShare • CityRide • CityFleet

Electrifying CityBus



- ▶ CARB ICT Regulations - Full Electrification required by 2040 - CC committed to 2028
- ▶ Replacing CNG w/ Electric on 1:1 Basis
 - ▶ Four Battery Electric Buses - Aug 2021
 - ▶ Budgeting 6 BEBs to be delivered by Dec 2022
- ▶ Undergoing LT Infrastructure Study
 - ▶ LT Plan presentation to Council - Aug 2021
 - ▶ Construction Plan Phase I Dec 2021 / Build Dec 2022
- ▶ Complete Operational Analysis
- ▶ Develop a charge management program
- ▶ ZEB Rollout Plan due to CARB by 2023

Battery Electric Bus & Facility Electrification Objectives

Objective 1: Facility Analysis and BEB Transition Plan

- Complete Analysis of BEB Bus Market
- Perform Route & Rate Analysis - projecting Life-Cycle Costs for Operations
- Long-term Facility Electrification plan

Objective 2: Pilot Phase I: 4 BEBs

- Purchase and deploy 4 New Flyer BEBs
- Install temporary charging stations at the depot for first four buses
- Train operators/technicians
- Compare route analysis and against actual service
- Establish Operating protocol for management of buses in service
- Design Charge Management System

Objective 3: Pilot Project Infrastructure Design

- Create Bid Documents for Construction or Design/Build
- Incorporate Sustainable / Redundancy Charging
- Engage technical, governmental, and community stakeholders to ensure support for the project

Objective 4: Infrastructure Build

- Construct required infrastructure for electrification for 10 buses
- Issue Quarterly KPI Reports

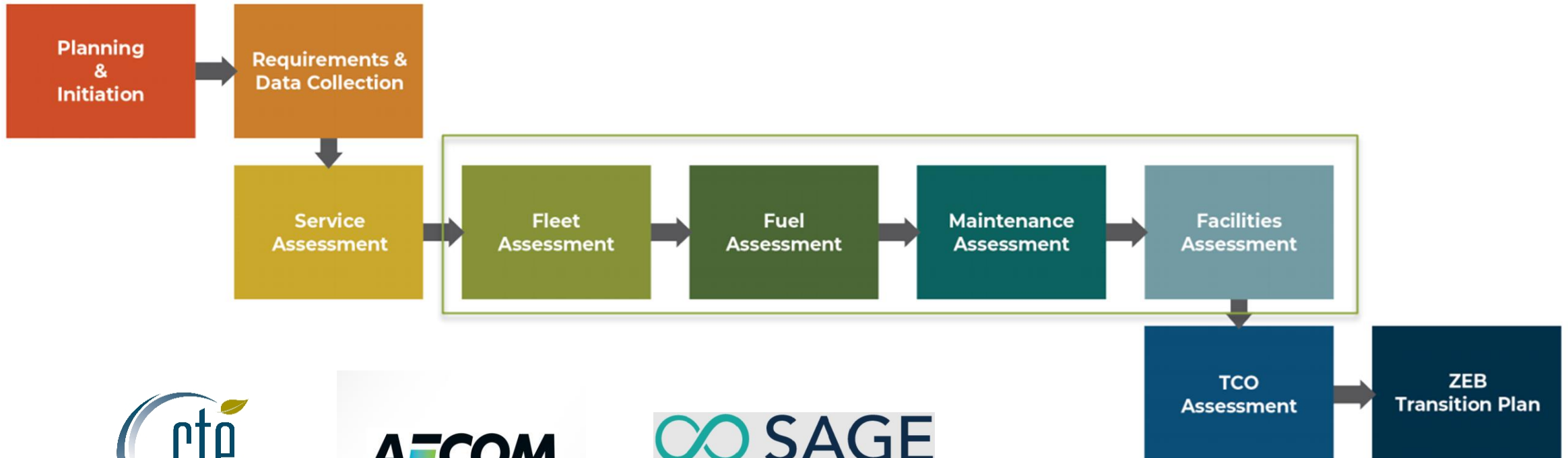
Objective 5: Pilot Phase 2: 6 BEBs

- Purchase and deploy 6 additional New Flyer BEBs
- Implement Charge Management System

Objective 6: Secure Funding for LT Facility Electrification by 2025

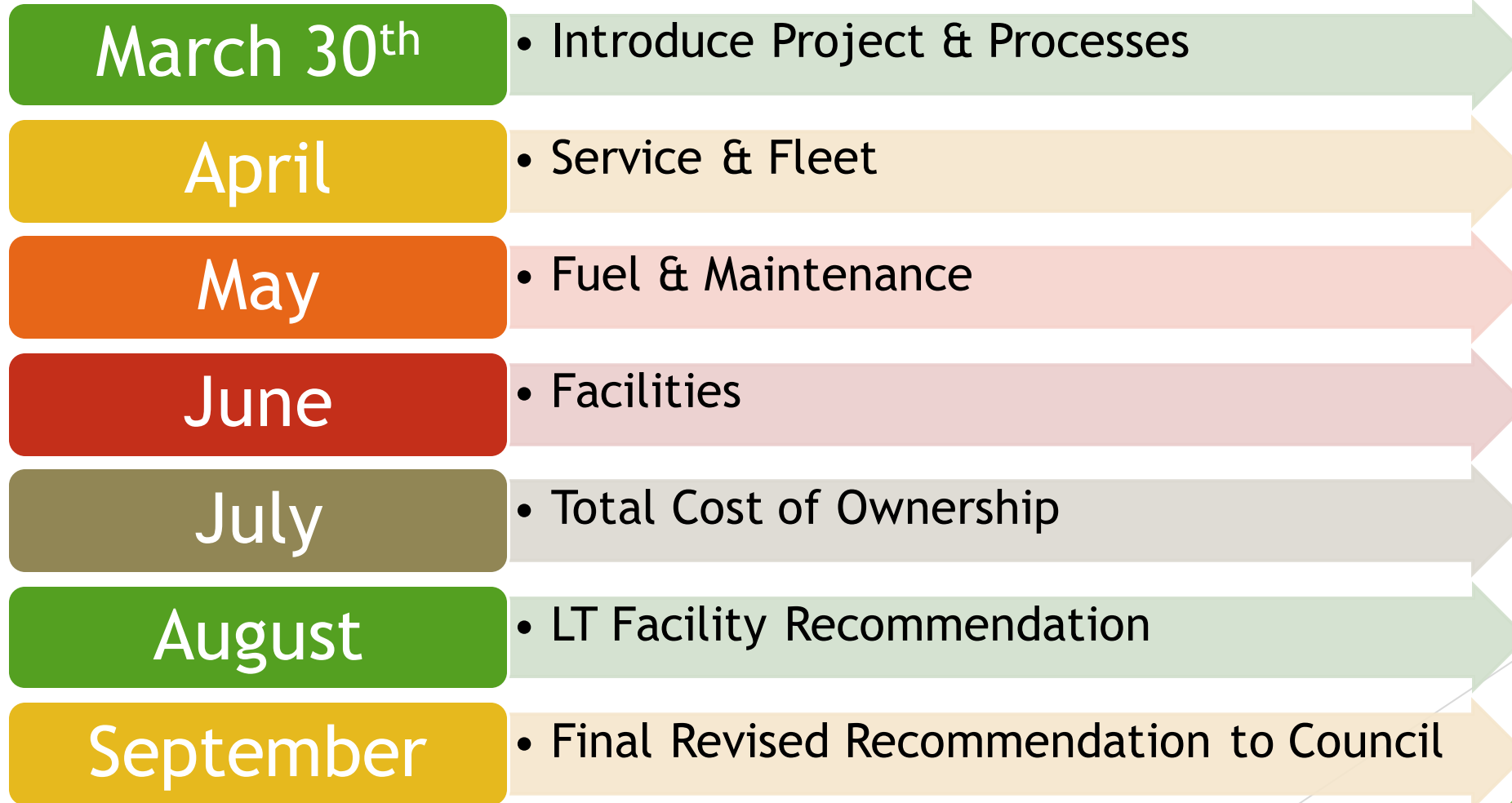
CityBus Electrification

Objective 1: Facility Analysis and BEB Transition Plan

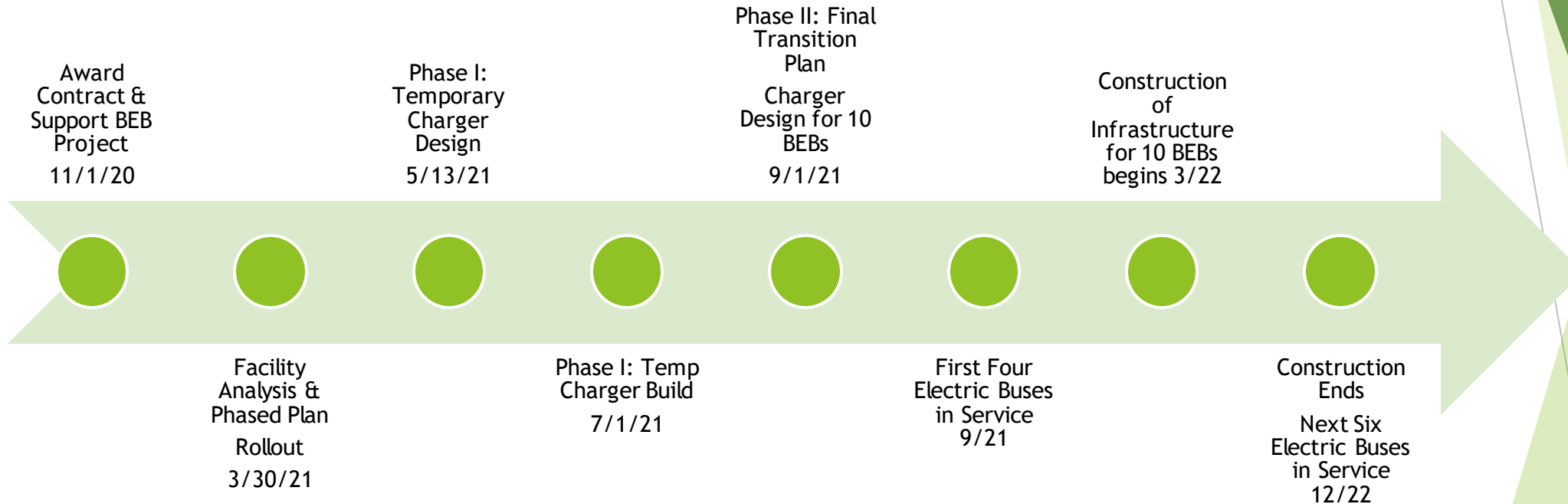


CityBus Electrification

Transition Plan Development



CityBus Electrification Project Timeline



Objective 6: Secure Funding for Long-Term Facility Electrification by 2025



- ▶ Currently have \$4M in FTA 5307 for infrastructure
- ▶ California Energy Commission – submitted 12/20
 - ▶ GFO-20-602 - Zero-Emission Transit Fleet Infrastructure Deployment
 - ▶ GFO-20-601 - Blueprints for Medium- and Heavy-Duty Zero-Emission Vehicle Infrastructure
- ▶ FTA Low or No Emission Grant Program
 - ▶ \$180 million available in federal funding
 - ▶ Competitive program provides funding to state and local governmental authorities
 - ▶ purchase or lease of zero-emission and low-emission transit buses
 - ▶ acquisition, construction, and leasing of required supporting facilities.
 - ▶ Application due April 12th
- ▶ Congressional Earmark – LT Infrastructure



[APTA.com Homepage](#)

[Join APTA](#)

[Log In](#)



Welcome to APTAU Learning!

Upcoming Webinars

[Log In](#)

[Learning Homepage](#)

[Catalog](#)

Zero Emission Bus Planning and Deployment: Session 2

[Includes Credits](#)  Includes a Live Web Event on 03/31/2021 at 2:00 PM (EDT)

This APTAU CEU Academy two-part series provides training on zero emission bus (ZEB) deployments. This second session focuses on ZEB and infrastructure procurement and deployment, including topics such as developing technical specifications, infrastructure installation, and performance monitoring. Registration fees: Member - \$49 / Non-members \$99

Questions?