



Public Works Department

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Clifford G. Finley
Public Works Director

ON CALL AGREEMENT TASK ORDER

TASK ORDER NO. 2

Page 1 of 3

Consultant/Contractor:	<u>Stantec Consulting Services, Inc.</u>	On Call Agreement Amount:	\$ <u>500,000.00</u>
Agreement No.:	<u>12500-2020</u>	Prev. Approved Task Orders:	\$ <u>25,140.00</u>
Agreement Date:	<u>7/1/2020</u>	This Task Order:	\$ <u>102,836.00</u>
Agreement Expiration Date:	<u>6/30/2023</u>	On Call Agreement Balance:	\$ <u>372,024.00</u>
DIR Registration Number:	<u>100008020</u>	City Council Approval Date:	<u>9/27/2022</u>
DIR Expiration Date:	<u>6/30/2023</u>	City Business License Number:	<u>20-5622</u>

CI Project or O & M Account No. 651-5540-682-5699 (50%) 651-5550-682-5699 (50%)

CI Project Name: Zero Emission Bus Transition Plan (Non CIP)

SCOPE OF WORK FOR THIS TASK ORDER:

Prepare a California Air Resources and Federal Transit Administration compliant Zero Emission Bus Transition Plan

NOT-TO-EXCEED FEE AMOUNT FOR THIS TASK ORDER: \$ 102,836.00

TIME FOR COMPLETION OF ALL SERVICES UNDER THIS TASK ORDER: 5/1/2023

Recommended By: Mike Houser, Transit Program Manager Date: _____
City of Thousand Oaks

Approved By: Nader Heydari, Public Works Deputy Director Date: _____
City of Thousand Oaks

Approved By: Clifford G. Finley, Public Works Director Date: _____
City of Thousand Oaks

Approved By: Andrew P. Powers, City Manager Date: _____
City of Thousand Oaks

Approved As To Form: Tracy Friedl, Assistant City Attorney Date: _____
City of Thousand Oaks

Accepted By: Derek Rapp Date: _____
Stantec Consulting Services, Inc.

Approved By: Bob Engler, Mayor Date: _____
City of Thousand Oaks

Attested By: Cynthia M. Rodriguez, City Clerk Date: _____
City of Thousand Oaks

*If the term of the Master On-Call Agreement from which this Task Order was issued expires prior to the completion of this work, the terms and conditions of the Agreement, including all rights and obligations, shall remain in effect and bind the parties until the work is completed.

ZERO EMISSION BUS TRANSITION PLAN

SCOPE OF WORK

Consultant shall provide all labor, materials, and expertise to produce a Zero Emission Transition Plan for the City of Thousand Oaks' Transit Program's conversion from CNG by 2040, as mandated by CARB and by Federal requirements to apply for 5339(b) and 5339(c) funds, including the Grants for Buses and Bus Facilities and Low or No Emission Program. Final Transition Plan shall include all required Transition plan components to be considered complete by CARB and Federal Department of Transportation. Plan shall be modifiable (a "living document") so that plan can be updated as technology improves, and additional funding sources become available.

Transition Plan to include, but not be limited to the following:

Consultant shall consider the operational and financial impacts of conversion and examine the difference in the capital and operating costs of new battery-electric or hydrogen fuel cell bus technology versus the current compressed natural gas (CNG) transit fleet technology currently used by the City and MV Transportation. Transition plan shall recommend a ZEB mode (battery electric or hydrogen production).

Financial component of Plan shall discuss operating and capital revenues and expenditures and their impact on City budget. Transition Plan's financial analysis shall consider lifetime/lifecycle costs, and eligibility, and time sensitivity of applications for grant revenues and vehicle purchases.

Plan shall describe the partnership of City and Thousand Oaks Transit with the electrical utility provider or alternative fuel provider. Plan shall discuss Capital and Operating cost impacts associated with new ZEB vehicles and infrastructure, the cost of rehabilitation or purchase of interim non-ZEB vehicles and infrastructure, labor, employee training, route modeling, fuel, and maintenance costs.

Capital vehicle and Infrastructure components shall discuss existing and future requirements, include suggested vehicle makes and models, types of charging components or systems, purchase schedules, annual design, and construction schedules.

TASK BREAKDOWN

Task 1 - Project Management and Administration

David Verbich shall serve as Project Manager (PM) and shall be City's main contact during the project. PM shall provide TOT with project updates, including details regarding completed deliverables, work in progress, proposed meetings, and required approvals. PM shall ensure the draft and final ZEB plans meet Federal and State Zero Emission and Innovative Clean Transit Regulations.

Task 2 - Existing Conditions & Market Scan

Consultant shall evaluate existing operational practices to establish baseline or existing conditions necessary for the ZEB plan.

Consultant shall review existing operational practices to establish a service level baseline for Consultant to develop status-quo cost projections, identify needed changes for ZEB transition, provide gap analysis, and establish parameters to evaluate the success of ZEB compared to current operations of TOT. A summary of those findings will be provided in the existing conditions report. Consultant shall:

1. Analyze existing routes to identify attributes such as lengths and topographical challenges.
2. Identify the fleet size required to meet pull-out as well as FTA-mandated spare ratios.
3. Analyze operational characteristics, including vehicle scheduling, blocking, revenue hours and miles, deadhead in addition to other non-revenue hours and miles, as well as by vehicle type to provide a granular view of TOT's services.
4. Review changes to TOT's routes, fueling practices, and fleet composition that are proposed or anticipated prior to ZEB conversion.
5. Identify disadvantaged communities as defined by CalEnviroScreen 4.0 (census tracts that are disproportionately burdened by, and vulnerable to, multiple sources of pollution).
6. Review applicable collective bargaining agreements to understand unique work rules that may impede ZEB transition.
7. Conduct a site visit to the maintenance yard at 1993 Rancho Conejo Blvd. to assess existing conditions. Representatives from Consultant's relevant ZEB transition streams—operations, power, buildings, maintenance, fleet and fueling—will be in attendance (either in person or virtually). Consultant shall meet with City and ask questions, take pictures and gain understanding of the current facilities that the ZEB transition infrastructure plan will build upon.
8. Engage with TOT staff or subcontractors who have hands-on experience operating, maintaining, and fueling fixed-route, dial-a-ride, and paratransit fleets.

Task 3 - Modeling and Preferred Fleet Concept

Of special significance for this task is the need for a rigorous analysis of ZEB fleet fueling compared to existing bus routes, dispatch practices, and operations with the various range limitations of ZEB vehicles.

3.1 Route Modeling and Fleet Simulations

Consultant shall use data collected from Task 2 and service schedules, blocking, passenger loads, vehicle assignment, mileage, service area data, original equipment manufacturer vehicle specifications and develop a route model, a bus performance model, and a fleet operations requirements model that will determine if TOT can feasibly operate ZEBs from the current service design plan and determine power and fuel requirements.

3.2 Preferred Fleet Concept – Determining Technology Type(s) and Fleet Size

Modeling results will provide an understanding of the power and fuel requirements for a ZEB-equivalent fleet and feasibility of each technology type for TOT.

Consultant shall use ZEBDecide to help solidify the decision regarding the composition of the proposed ZEB fleet, defining a preferred fleet concept that Consultant shall use to develop a rollout plan for the preferred technology, whether a single technology type, or multiple technologies. Consultant shall use ZEBDecide to derive a preferred fleet concept by first defining the feasible technologies for TOT's service. This will set the parameters from which to develop two or three potential fleet composition scenarios to test and refine.

Consultant shall use a multiple criteria evaluation to outline the trade-offs to the fleet concepts and arrive at a preferred fleet mix. The criteria considered are qualitative and include considerations for:

- a. Scheduling and planning
- b. Operations and dispatching
- c. Training and agency-wide adoption
- d. Technology availability/OEMs/procurement
- e. Service area-specific considerations
- f. Total cost of ownership
- g. Other considerations
- h. Overall fit for TOT

This will help define the preferred fleet mix that will minimize overall costs as well as meet all operational goals. When the Preferred Fleet Concept exercise is complete, Consultant shall meet with TOT to discuss the proposed approach for optimizing the fleet composition and technology, and to define the parameters for Consultant's development of the rollout and implementation plan.

3.2 Charging Profile and Infrastructure Power Modeling

If the selected solution are BEBs, Consultant shall combine the fleet's energy demand with operational considerations—such as vehicle dispatching schedules—to estimate 1) the ideal number of chargers, 2) charger capacity, and ultimately, 3) the power demand. Using the power requirements, as well as details from the service schedule, a charging profile shall be generated defining charging times and number of connected chargers to mitigate power demand during on-peak rate hours.

If the selected fleet includes FCEBs, Consultant shall combine the modeling results with the operational considerations to finalize the fueling station configurations, which includes 1) the number of needed dispensers, 2) required flow rate of compressors to ensure service for the entire fleet during the available refueling window, 3) size of hydrogen storage and station capacity, 4) required grid connection upgrades, and 5) footprint for the station. The final design of the station will be directly related to the available refueling window and the dispatch hours of the vehicles.

3.3 Rate Modeling and Fuel Cost

Combining the power and rate models Consultant shall provide predictive electricity costs and technical specifications for the upgrade of the grid connection to engage

discussions with Southern California Edison. Consultant shall forecast the electricity cost throughout 2040.

Task 4 - Needs and Opportunities Assessment and Financial Modeling

4.1 Needs and Opportunities

A. Analysis of electrical infrastructure needs

Consultant shall perform an Electrical Infrastructure Analysis including the following:

- a. Forecasting the electrical charging needs based on the modeling while anticipating the growth or changes required when deploying an all-electric fleet. If hydrogen FCEBs are the final recommendation for the fleet, then the modeling will provide the power requirements to operate the refueling station as the necessary grid connection upgrade
- b. Consideration of grid connection upgrades to the future infrastructure site
- c. Evaluation of the existing depot electrical and operations infrastructure to project necessary upgrades to support the new fleet and future electrical demand from all activities managed by TOT.
- d. Coordination with the local electric utility to identify system capacities, when such capacity will be surpassed, and to confirm their ability to meet the projected energy demands.
- e. Preparation of a comprehensive infrastructure plan through the fleet transition period that identifies the required infrastructure upgrades, both internal to the TOT facility and on SoCal Edison distribution system (e.g., on-site transformer and conduit needs), and provide a phasing plan that will result in an infrastructure that can fully support the evolving fleet.
- f. Developing a preliminary architectural and engineering design of the on-site electrical infrastructure upgrades required to support the BEB fleet at the garage and at on-route charging locations. The design will include initial equipment and power distribution system sizing, layouts, and inform order of magnitude cost estimates.

B. Analysis of Yard Layout and Charger Location

Electric bus charging for buses at transit facilities will increase the complexity of the current circulation and parking situation at the City's Municipal Service Center. ZEB's will be purchased over time, which will require maintaining infrastructure for the current conventional buses, while constructing and using the recharging/refueling ZEB equipment. Maintenance and servicing of the ZEB charging infrastructure is different than that of CNG vehicles.

Consultant shall research and investigate alternative charging equipment and configurations, layouts, and the impacts on the operational flow of the Municipal Service Center during the ZEB transition and after full implementation. The deliverable shall be a site layout which will consider charger physical specifications (i.e., potential size), as well as proposed vehicle flow that also considers the new areas for the charger cabinets, charger dispensers, and any additional electrical infrastructure to operate the chargers.

If hydrogen FCEBs are selected by City as the preferred fleet alternative, the fleet's hydrogen demand shall then be combined with operational considerations — such as the time window for refueling buses and available footprint — to estimate 1) max capacity of the hydrogen station in kg per day, 2) hydrogen- storage capacity, 3) number of dispensers, 4) power requirement of the station, and 5) overall equipment specifications (e.g., flow rate of dispensers, capacity of the compressors, etc.). The deliverable shall be the hydrogen station footprint, as well as a layout concept with a proposed vehicle flow that considers the new hydrogen refueling area.

C. Energy Storage and Renewable Energy

Consultant shall complete a thorough analysis which is required ensure the most optimal choices for the use of solar panels. Consultant shall analyze the role Battery Energy Storage Systems (BESS) could play in storing renewable energy, as TOT conventional energy pulled off the grid. A BESS may help TOT reduce its peak-load demand and also set up the agency for arbitrage opportunities, buying power when the cost is lower and selling it back to the grid at a higher price when the energy is not required for BEB operations or charging.

If determined that BEB options are appropriate for TOT, Consultant shall analyze energy storage and solar opportunities. Specifically, Consultant shall evaluate local energy storage opportunities to reduce demand and energy charges. Items to be considered will include centralized depot battery storage and charger-integrated storage.

Consultant shall provide an analysis of the technical and economic feasibility of using solar and/or energy storage technologies to provide energy for the TOT ZEB fleet, if required after the preferred fleet mix is selected by City. The analysis shall include the current cost of required capital infrastructure, the benefits of time-shifting utility purchases, and power generated by the solar array.

4.2 Cost Estimation and Financial Modeling

Consultant shall prepare an analysis of the costs of maintaining the current propulsion type until 2040 - a status quo (or base case) scenario - assuming fleet growth and service hours remain consistent. Status quo cost projections shall include the current cost of fleet operations including maintenance, fueling, bus replacement frequency and other relevant factors such as major midlife/overhaul costs. Next, Consultant shall apply a discount rate to future cash flows to ensure all costs are presented in 2022 dollars.

With the information and cost estimation data from the Needs and Opportunities assessment, Consultant shall compile all the costs related to owning and operating a ZEB fleet (again, assuming service levels stay consistent), considering the transition period where a combination of ZEB and CNG vehicles will be in operation. This analysis will also be used to refine the implementation plan and all the requirements of the ICT plan, including most crucially, the quantity of each type of bus in each fiscal year. Variables to the plan are as follows:

A. Vehicle Costs

Consultant shall derive capital ZEB costs based on their database of costs derived from prior plans developed for other agencies. Assumptions will include the California Department of General Services (DGS) quotes for ZEB for California agencies and the database Consultant maintains of recent peer purchase prices.

B. CNG and Gasoline Fueling

Though CNG fueling will ultimately be phased out as the agency transitions to ZEB-compliant technologies, it will remain a critical element of TOT's bus strategy up to the 2040 timeframe. Accordingly, the cost of CNG through the transition period will be an important metric and a basis of comparison versus the cost of the future ZEB-based 'fuels'.

In order to determine these costs, Consultant shall examine the key variable constituent cost of CNG. These costs will be determined by studying TOT's current and recent expenditures in these areas, as well as by Consultant researching anticipated trends and reviewing historical data of CNG fuel prices over the past five and ten years, respectively. Based on the information reviewed, Consultant shall make a best available projection on the price of CNG in the future to serve as a baseline for cost comparison. The projection method could be based on historical costs or based on existing Energy Information Administration (EIA) forecasts, or a combination of both.

All these fuel-cost elements will then be extrapolated and mapped over the course of the ZEB-transition timeframe as a basis for understanding the comparative delta to fuel costs associated with the ZEB-compliant alternatives.

C. Electricity and Hydrogen Fuel

The cornerstone for bus fleet energy demands shall be determined through detailed modeling of the individual bus routes as described previously. The models will include route length and topography, passenger loads, and critical weather-related accessory loads (heating and cooling).

These detailed models will be used to evaluate bus operation and charging requirements, or fuel capacity requirements for FCEBs, and will form the basis for evaluating the charging/fueling infrastructure that will be required as well as the timing and cost of the energy supplies.

To calculate the cost of electricity, Consultant shall coordinate with SoCal Edison to define current and near-term electricity costs and tariff structures to develop a cost baseline for evaluating charging alternatives. Costs will also be estimated out for a 20-year lifecycle cost analysis of each ZEB option. Hydrogen costs will be based on market research of current costs and anticipated rates. This information will then be used to make reasonable projections for the cost of electricity (and hydrogen) over the next twenty years.

Consultant will compile data from agencies that operate BEB and FCEBs, as well as data from OEMs to get a wider picture of the fuel cost. Historical data from projects

across the country for the different bus technologies has already been collected and analyzed to create a cost library and these will supplement the cost projections.

D. BEB Charging Infrastructure

Consultant may consider the following capital cost factors for in yard charging:

- a. Offsite utility distribution and primary feeder
- b. Onsite transformer(s)
- c. Utility service and metering
- d. Associated civil-site upgrades
- e. Onsite distribution, conduits, and wiring
- f. Full-power charger and dispensers in yard – this is the critical element, as these quantities and power ratings will directly drive the overall power and energy needs
- g. Lower-power charger in maintenance bays – likely potable and able to be powered by existing arc- welding outlets where applicable
- h. Support infrastructure for chargers and dispensers, including possible overhead gantries to support inverted pantograph dispensers
- i. Robust IP and data pathways, as needed to support the critical communication and software layer
- j. Considerations for phasing and associated inflation, since the buildout of the ZEB fleet will likely take more than 10 years to complete
- k. Consideration to incorporate onsite energy storage where peak demand charges or utility capacity constraints may exist
- l. Consideration of onsite power generation, which may be implemented as either conventional backup power and to comply with current codes and standards
- m. Consideration of, if possible, inter-agency sharing of infrastructure and costs for opportunity chargers. Given the standards-based interface for opportunity chargers (J3105 pantograph) and that all agencies in the region are under the ICT ZEB mandate, cooperative development may be appropriate.

E. Hydrogen Fueling Infrastructure

To the extent that the modeling and TOT and Consultant's team's evaluation calls for implementation of FCEB propulsion within the system, appropriate hydrogen fuel capital cost modeling will be developed on a per-facility basis as appropriate. Hydrogen fuel can be derived and implemented in a range of modes. Accordingly, the infrastructure cost modeling shall be broken out based on technical approach, and will contain a combination of the following capital cost elements as applicable:

- a. Offsite utility distribution and primary feeder.
- b. Onsite transformer(s) or upgrades
- c. Metering or upgrades
- d. Onsite distribution, conduits, and wiring
- e. Hydrogen fuel supply
- f. Water electrolysis – includes requirements for very high input electrical energy
- g. Gaseous hydrogen via tube-trailer exchange
- h. Liquefied hydrogen via tanker truck
- i. High-pressure compression of gaseous hydrogen – 350 bar / 5000 PSI
- j. High-pressure pumping of liquefied hydrogen (also 350 bar) with heat exchanger to produce high-pressure gas

- k. High-pressure buffer storage
- l. Gaseous H₂ dispensing infrastructure
- m. Considerations for phasing and associated inflation, since the build out of the ZEB fleet will likely take more than 10 years to complete
- n. Consideration of onsite power generation, which may be implemented as conventional backup power
- o. Addition of gaseous-detection and alarming systems at the maintenance buildings to account for hydrogen
- p. Modifications to maintenance buildings air circulation system to account for use of hydrogen and to comply with current codes and standards.
- q. Consideration of, if possible, possible inter-agency sharing of hydrogen refueling infrastructure and costs. Given the standards-based interface for hydrogen refueling and current future plans of nearby agencies to transition to hydrogen, cooperative development may be appropriate.

F. Additional General Capital Costs

An additional factor that relates to facility cost and implementation of either of the ZEB-propulsion technologies is the phase out and decommissioning of the existing diesel infrastructure at TOT's facilities.

Other facility modifications identified through the analysis tasks in this project, such as maintenance bay upgrades, yard layout changes, and methane/hydrogen related detection systems, may be required and shall be included in the recommendations and cost estimates.

All capital cost estimating shall be led by Consultant's cost estimator. Additionally, the specific and ever-evolving technical details and specialty equipment costs for charging and hydrogen systems shall be coordinated by Consultant's charging- and hydrogen-infrastructure specialists.

G. ZEB and Base Case Financial Report

After Consultant has evaluated capital, operations, refurbishment, and maintenance costs from a start-up and lifetime perspective for the recommended propulsion technology, they shall finalize the ZEB scenario of the financial modeling, for comparison to the status quo (or base case) scenario. The modeling will demonstrate how forecasted costs, both Capital and Operations and Maintenance costs compare between the two scenarios, as this will give an indication of where incremental funding may be required, or where cost savings may materialize.

Findings shall be synthesized and communicated in discounted 2022 dollars to allow for a fair comparison between the scenarios. This step as it will act as the foundation for the ZEB Rollout Plan's implementation.

Consultant shall evaluate the yearly total cash flow assuming a twenty-year lifecycle from ZEB implementation and will compare it to the CNG base case. This comparison of ZEB implementation against the "business as usual" scenario that will provide the most compelling quantitative analysis in support of the ZEB business case.

4.3 ZEB Conversion Recommendations

Consultant shall compile and review prior outputs regarding the preferred fleet alternative, fleet needs, fueling needs, site plans, energy requirements, and cost estimates and budgets to develop strategic steps for a ZEB implementation plan. The conversion recommendations developed in this task will form the basis of the recommendations and implementation strategy for the final reports and deliverables in Task 5.

Consultant shall meet with City and discuss various phasing scenarios and address any challenges regarding the following:

- a. Alignment with other ongoing planning efforts related to transit service
- b. Alignment with other construction or capital projects at the transit facility and/or related facilities
- c. Ensuring that fueling/charging equipment is phased in a logical manner to minimize construction disruptions and reduce operational constraints
- d. Ensuring that fueling/charging equipment is phased in prior to vehicle procurements to support ZEBs
- e. Refining ZEB procurement phasing/fleet replacement plan that leverages TOT's fleet management plan and aligns with CARB's ICT requirements

4.4 Procurement and Funding – CARB applicable funding incentives and other competitive funding sources

Although a complete list of funding incentives and sources will be established during the study, Consultant shall detail the process and potential financial return for seeking the following list of funding sources:

- a. The Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project (HVIP), where a voucher application process could offset the cost of a new ZEB vehicle by \$120,000 - \$175,000 USD.
- b. H2 infrastructure, with up to \$100,000 for equipment cost for each fuel cell voucher.
- c. EnergIZE Commercial Vehicles infrastructure voucher program to support the infrastructure deployment.
- d. The Low Carbon Fuel Standard, where agencies using fuel and fuel blend stocks with carbon intensity below the established threshold receive credit incentives, with additional incentives for electric/hydrogen powered charging stations.
- e. SCE's Charge Ready Program
- f. State Transit Assistance
- g. Proposition 1B Transit Capital/Transit Security Funding
- h. Low-Carbon Transit Operations Program (LCTOP)
- i. 5307/5309/5311 Funds
- j. Opportunities for leasing vehicles and/or electric bus batteries, where some suppliers have leasing programs available.
- k. FTA Low or No Emission Vehicle Program (Low-No)
- l. FTA Bus & Bus Facilities
- m. FTA Tribal Transit
- n. NHTSA Autonomous Funds
- o. USDOT BUILD (formerly TIGER)
- p. DOT Autonomous Program
- q. Beneficiary Mitigation Plans for Volkswagen Settlement Funding
- r. Community Air Protection Program (CAPP)

- s. Carl Moyer Funding
- t. District DMV (AB923 & AB2766)
- u. AB617 Protections thru New Select CAP Investments
- v. Electric Program Investment Charge (EPIC)
- w. Transit and Intercity Rail Program (TIRCP), which applies to both urban/intercity and BRT

TASK 5 – Draft and Final ZEB Implementation and Transition Plan

5.1 Draft Zero-Emission Bus Rollout and Facilities

Consultant shall prepare a cohesive and concise report that summarizes the work of all previously completed tasks (Tasks 2, 3 and 4). Consultant shall ensure all deliverables are being met and clearly stated throughout the entire report. Consultant shall work closely with TOT to develop presentations and summaries that can be utilized for presentations and meetings. Presentations will solicit feedback, respond to questions, and resolve critical issues.

Consultant shall support TOT in documenting conclusions and findings. The final report will include an executive summary and the main body of the report will be organized in a logical manner which includes all previously described tasks and deliverables, and also takes into consideration other findings, assessments, evaluations, conclusions, and strategies uncovered over the course of the project. A clear rationale for the recommended ZEB technology(s) will be provided, which will be supported by a compelling business case and a summary of associated operating and capital costs for the transition to this ZEB technology. A timeline of key activities to ensure compliance with the CARB ZEB regulation by 2040 will also be included. Report shall meet the requirements of CARB's ICT Rule (13 CCR§2023.1(d)(1)) and shall be consistent with CARB's Zero-Emission Bus Rollout Plan Guidance for Transit Agencies.

Plan shall have the following format:

- a. Introduction, CARB requirement and project approach
- b. Summary of existing conditions
- c. Block-level modeling results
- d. Preferred fleet composition concept
- e. Fleet procurement strategies
- f. Facility and infrastructure modifications
- g. Service in disadvantaged communities
- h. Workforce training
- i. Potential funding sources and financing
- j. Financial analysis/impact
- k. Other transition items
- l. Phasing and Implementation

Consultant shall also provide a ZE Fleet Transition Plan that is FTA-compliant so that TOT can use this plan as part of the application for funding like Low-No and Buses and

Bus Facilities Program. The Plan will leverage content developed throughout the Rollout Plan study.

The elements for the FTA plan shall include:

- a. A long-term fleet management plan
- b. Availability of current and future resources to meet costs for transition and implementation
- c. Policy and legislative impacting relevant technologies
- d. Evaluation of existing and future facilities for alternative propulsion technologies
- e. Partnership with local utility or alternative fuel provider
- f. Workforce training and development plan

Consultant shall provide City Project Manager with a Draft Plan incorporating all of the above findings in an electronic format allowing for comment/feedback.

5.2 FINAL ZEB TRANSITION PLAN

City and TOT shall review draft plan and submit to Consultant a consolidated list or plan containing all comments and edits.

Consultant shall update the draft plan with comments received from City and TOT and provide a Final Report in electronic format.

Consultant shall also present and discuss the contents of the Final Report to TOT's designated staff, to City Council, and to other municipal councils and oversight as necessary.

Consultant shall provide City with a Final Plan in PDF format incorporating comments and suggestions from Draft Plan and all elements required for the Plan to be deemed complete by CARB and the Federal Department of Transportation.

Final Transition Plan to be delivered no later than May 1, 2023.