# AGREEMENT WITH ICF INCORPORATED LLC TO PROVIDE FLEET ELECTRIFICATION & EV CHARGING MASTER PLAN AND FLEET POLICIES FOR THE CITY OF SANTA ANA

THIS AGREEMENT is made and entered into on this 6th day of August, 2024 by and between ICF Incorporated, LLC ("Consultant"), and the City of Santa Ana, a charter city and municipal corporation organized and existing under the Constitution and laws of the State of California ("City").

## RECITALS

A. On January 11, 2024, City issued Request for Proposal ("RFP") No. 24-002, by which it sought qualified firms to provide fleet electrification and electric vehicle charging master plans, as well as fleet policies.

B. Consultant submitted a responsive proposal that was selected by the City. Consultant represents that it is able and willing to provide the services described in the scope of work that was included in RFP 24-002.

C. In undertaking the performance of this Agreement, Consultant represents that it is knowledgeable in its field and that any services performed by Consultant under this Agreement will be performed in compliance with such standards as may reasonably be expected from a professional engineering firm in the field.

**NOW THEREFORE**, in consideration of the mutual and respective promises, and subject to the terms and conditions hereinafter set forth, the parties agree as follows:

## 1. SCOPE OF SERVICES

Consultant shall perform the services described in the scope of work that was included in RFP No. 24-002, which is attached as **Exhibit A**, and as more specifically delineated in Consultant's proposal, which is attached as **Exhibit B** and incorporated in full.

## 2. COMPENSATION

a. City agrees to pay, and Consultant agrees to accept as total payment for its services for City, the rates and charges identified in **Exhibit B**. The total amount to be expended during the term of this Agreement shall not exceed $173,179.

b. Payment by City shall be made within 45 days (forty-five) days following receipt of proper invoice evidencing work performed, subject to City accounting procedures. Payment need not be made for work which fails to meet the standards of performance set forth in the Recitals which may reasonably be expected by City.

## 3. TERM

This Agreement shall commence on the date first written above for a three-year term and terminate

on August 5, 2027, unless terminated earlier in accordance with Section 16, below. The term of this Agreement may be extended for two, one-year extensions upon a writing executed by the City Manager and City Attorney.

## 4. PREVAILING WAGES

Consultant is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 16000, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. If the services being performed are part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and the total compensation is $1,000 or more, Consultant agrees to fully comply with such Prevailing Wage Laws. Consultant shall defend, indemnify and hold the City, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws.

## 5. INDEPENDENT CONTRACTOR

Consultant shall, during the entire term of this Agreement, be construed to be an independent contractor and not an employee of the City. This Agreement is not intended nor shall it be construed to create an employer-employee relationship, a joint venture relationship, or to allow the City to exercise discretion or control over the professional manner in which Consultant performs the services which are the subject matter of this Agreement; however, the services to be provided by Consultant shall be provided in a manner consistent with all applicable standards and regulations governing such services. Consultant shall pay all salaries and wages, employer's social security taxes, unemployment insurance and similar taxes relating to employees and shall be responsible for all applicable withholding taxes.

## 6. OWNERSHIP OF MATERIALS

This Agreement creates a non-exclusive and perpetual license for City to copy, use, modify, reuse, or sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement ("Documents & Data"). Consultant shall require all subcontractors to agree in writing that City is granted a non-exclusive and perpetual license for any Documents & Data the subcontractor prepares under this Agreement. Consultant represents and warrants that Consultant has the legal right to license any and all Documents & Data. Consultant makes no such representation and warranty in regard to Documents & Data which were provided to Consultant by the City. City shall not be limited in any way in its use of the Documents and Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at City's sole risk.

## 7. INSURANCE

Prior to undertaking performance of work under this Agreement, Consultant shall maintain and shall require its subcontractors, if any, to obtain and maintain insurance as described below for the entire

Term of this Agreement against claims for injuries to persons or damage to property which may arise from or in connection with services, products and materials supplied to City. Total cost of such insurance shall be borne by Consultant.

a. Minimum Scope and Limit of Insurance

1. **Commercial General Liability (CGL)**: Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **$1,000,000** per occurrence and **$2,000,000** aggregate. Required policy limits can be met with primary and umbrella/excess insurance policies.

2. **Automobile Liability**: ISO Form Number CA 00 01 covering any auto (Code 1) with a limit no less than **$1,000,000** combined single limits.

3. **Workers' Compensation**: as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than **$1,000,000** per accident for bodily injury or disease.

4. **Professional Liability Insurance:** with limits no less than $1,000,000 per occurrence or claim, and $2,000,000 aggregate.

5. **Broader Coverage**: if the Consultant maintains broader coverage and/or higher limits than the minimums shown above, the City requires and shall be entitled to the broader coverage and/or the higher limits maintained by the Consultant. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

b. Other Insurance Provisions

1. **Additional Insured Status:** The City, its City Council, its officers, officials, employees, and volunteers are to be covered as additional insureds on the Consultant's CGL, Professional Liability, and Automobile Liability policies, with respect to liability arising out of work or operations performed by or on behalf of the Consultant including materials, parts, or equipment furnished in connectionwith such work or operations.

2. **Waiver of Subrogation:** Consultant hereby grants to City a waiver of any right to subrogation that any insurer of said Consultant may acquire against the City by virtue of the payment of any loss under such insurance. Consultant agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City has received a waiver of subrogation endorsement from the insurer.

3. **Primary Coverage:** For any claims related to this contract, the Consultant's insurance coverage shall be primary. Any insurance or self-insurance maintained by the City, its

officers, officials, employees, or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.

4. **Severability of Interest:** A severability of interest provision must apply for all the additional insureds, ensuring that Consultant's insurance shall apply separately to each insured against whom a claim is made or suit is brought, except with respect to the insurer's limits of liability.

5. **Notice of Cancellation:** Each insurance policy required above shall provide that coverage shall not be canceled, voided, reduced in coverage or in limits, non-renewed by the carrier, or materially changed except after thirty (30) days prior written notice has been given to City. Ten (10) days prior written notice shall be provided to City for policy cancellation or non-renewal due to non-payment of premium.

6. **Self-Insured Retentions:** Self-insured retentions must be declared to and approved by the City. The City may require Consultant to purchase coverage with a lower retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

7. **Acceptability of Insurers:** Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the City.

8. **Claims Made Policies:** If any of the required policies provide coverage on a claims-made basis: (1) the Retroactive Date must be shown and must be before the date of the contract; (2) Insurance must be maintained and evidence of insurance must be provided for at least three years after completion of work; (3) If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a Retroactive Date prior to the contract effective date, Consultant must purchase "extended reporting" coverage for a minimum of three years after completion of work.

9. **Verification of Coverage:** Consultant shall furnish the City with original Certificates of Insurance including all required amendatory endorsements (or copies of the applicable policy language effecting coverage requiredby this clause) and a copy of the Declarations and Endorsement Page of the CGL policy listing all policy endorsements to City before work begins. However, failure to obtain the required documents prior to the work beginning shall not waive the Consultant's obligation to provide them.
   The City reserves the right to require complete, certified copies of all required insurance policies,including endorsements required by these specifications, at any time.

10. **Subcontractors:** Consultant shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Consultant shall ensure that City is an additional insured on insurance required from subcontractors.

11. **Special Risks or Circumstances:** City reserves the right to modify these requirements, including limits, based on the nature of therisk, prior experience, insurer, coverage, or other special circumstances.

## 8. INDEMNIFICATION

Consultant agrees to defend, and shall indemnify and hold harmless the City, its officers, agents, employees, contractors, special counsel, and representatives from liability: (1) for personal injury, damages, just compensation, restitution, judicial or equitable relief arising out of claims for personal injury, including death, and claims for property damage, which may arise from the negligent operations of the Consultant, its subcontractors, agents, employees, or other persons acting on its behalf which relates to the services described in section 1 of this Agreement; and (2) from any claim that personal injury, damages, just compensation, restitution, judicial or equitable relief is due by reason of the terms of or effects arising from this Agreement. This indemnity and hold harmless agreement applies to all third party claims for damages, just compensation, restitution, judicial or equitable relief suffered, or alleged to have been suffered, by reason of the events referred to in this Section or by reason of the terms of, or effects, arising from this Agreement. The Consultant further agrees to indemnify, hold harmless, and pay all costs for the defense of the City, including fees and costs for special counsel to be selected by the City, regarding any action by a third party challenging the validity of this Agreement, or asserting that personal injury, damages, just compensation, restitution, judicial or equitable relief due to personal or property rights arises by reason of the terms of, or effects arising from this Agreement. City may make all reasonable decisions with respect to its representation in any legal proceeding. Notwithstanding the foregoing, to the extent Consultant's services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant.

Limitation of liability: notwithstanding any contrary provisions herein, in no event shall either party be liable to the other party, for any lost profits or incidental, consequential, special, punitive, or indirect damages under the Agreement, regardless of whether advised of the possibility of such damages and in no event shall either party's liability for damages under this Agreement exceed the value of the Agreement.

## 9. INTELLECTUAL PROPERTY INDEMNIFICATION

Consultant shall defend and indemnify the City, its officers, agents, representatives, and employees against any and all liability, including costs, for infringement of any United States' letters patent, trademark, or copyright infringement, including costs, contained in the work product or documents provided by Consultant to the City pursuant to this Agreement.

## 10. RECORDS

Consultant shall keep records and invoices in connection with the work to be performed under this Agreement. Consultant shall maintain complete and accurate records with respect to the costs incurred under this Agreement and any services, expenditures, and disbursements charged to the City for a minimum period of three (3) years, or for any longer period required by law, from the date of final payment to Consultant under this Agreement. All such records and invoices shall be clearly identifiable. Consultant shall allow a representative of the City to examine, audit, and make transcripts or copies of

such records and any other documents created pursuant to this Agreement during regular business hours. Consultant shall allow inspection of all work, data, documents, proceedings, and activities related to this Agreement for a period of three (3) years from the date of final payment to Consultant under this Agreement.

## 11. CONFIDENTIALITY

If Consultant receives from the City information which due to the nature of such information is reasonably understood to be confidential and/or proprietary, Consultant agrees that it shall not use or disclose such information except in the performance of this Agreement, and further agrees to exercise the same degree of care it uses to protect its own information of like importance, but in no event less than reasonable care. "Confidential Information" shall include all nonpublic information. Confidential information includes not only written information, but also information transferred orally, visually, electronically, or by other means. Confidential information disclosed to either party by any subsidiary and/or agent of the other party is covered by this Agreement. The foregoing obligations of non-use and nondisclosure shall not apply to any information that (a) has been disclosed in publicly available sources; (b) is, through no fault of the Consultant disclosed in a publicly available source; (c) is in rightful possession of the Consultant without an obligation of confidentiality; (d) is required to be disclosed by operation of law; or (e) is independently developed by the Consultant without reference to information disclosed by the City.

## 12. CONFLICT OF INTEREST CLAUSE

Consultant covenants that it presently has no interests and shall not have interests, direct or indirect, which would conflict in any manner with performance of services specified under this Agreement.

## 13. NON-DISCRIMINATION

Consultant shall not discriminate because of race, color, creed, religion, sex, marital status, sexual orientation, gender identity, gender expression, gender, medical conditions, genetic information, or military and veteran status, age, national origin, ancestry, or disability, as defined and prohibited by applicable law, in the recruitment, selection, teaching, training, utilization, promotion, termination or other employment related activities or any services provided under this Agreement. Consultant affirms that it is an equal opportunity employer and shall comply with all applicable federal, state and local laws and regulations.

## 14. EXCLUSIVITY AND AMENDMENT

This Agreement represents the complete and exclusive statement between the City and Consultant, and supersedes any and all other agreements, oral or written, between the parties. In the event of a conflict between the terms of this Agreement and any attachments hereto, the terms of this Agreement shall prevail. This Agreement may not be modified except by written instrument signed by the City and by an authorized representative of Consultant. The parties agree that any terms or conditions of any purchase order or other instrument that are inconsistent with, or in addition to, the terms and conditions hereof, shall not bind or obligate Consultant or the City. Each party to this Agreement acknowledges that no representations,

inducements, promises or agreements, orally or otherwise, have been made by any party, or anyone acting on behalf of any party, which is not embodied herein.

## 15. ASSIGNMENT

Inasmuch as this Agreement is intended to secure the specialized services of Consultant, Consultant may not assign, transfer, delegate, or subcontract any interest herein without the prior written consent of the City and any such assignment, transfer, delegation or subcontract without the City's prior written consent shall be considered null and void. Nothing in this Agreement shall be construed to limit the City's ability to have any of the services which are the subject to this Agreement performed by City personnel or by other contractors retained by City.

## 16. TERMINATION

This Agreement may be terminated by the City upon thirty (30) days written notice of termination. In such event, Consultant shall be entitled to receive and the City shall pay Consultant compensation for all services performed by Consultant prior to receipt of such notice of termination, subject to the following conditions:

a. As a condition of such payment, the Executive Director may require Consultant to deliver to the City all work product(s) completed as of such date, and in such case such work product shall be the property of the City unless prohibited by law, and Consultant consents to the City's use thereof for such purposes as the City deems appropriate.

b. Payment need not be made for work which fails to meet the standard of performance specified in the Recitals of this Agreement.

## 17. WAIVER

No waiver of breach, failure of any condition, or any right or remedy contained in or granted by the provisions of this Agreement shall be effective unless it is in writing and signed by the party waiving the breach, failure, right or remedy. No waiver of any breach, failure or right, or remedy shall be deemed a waiver of any other breach, failure, right or remedy, whether or not similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies.

## 18. JURISDICTION - VENUE

This Agreement has been executed and delivered in the State of California and the validity, interpretation, performance, and enforcement of any of the clauses of this Agreement shall be determined and governed by the laws of the State of California. Both parties further agree that Orange County, California, shall be the venue for any action or proceeding that may be brought or arise out of, in connection with or by reason of this Agreement.

## 19. PROFESSIONAL LICENSES

Consultant shall, throughout the term of this Agreement, maintain all necessary licenses, permits, approvals, waivers, and exemptions necessary for the provision of the services hereunder and required by

the laws and regulations of the United States, the State of California, the City of Santa Ana and all other governmental agencies. Consultant shall notify the City immediately and in writing of its inability to obtain or maintain such permits, licenses, approvals, waivers, and exemptions. Said inability shall be cause for termination of this Agreement.

## 20. MISCELLANEOUS PROVISIONS

a. Each undersigned represents and warrants that its signature herein below has the power, authority and right to bind their respective parties to each of the terms of this Agreement, and shall indemnify City fully, including reasonable costs and attorney's fees, for any injuries or damages to City in the event that such authority or power is not, in fact, held by the signatory or is withdrawn.

b. All Exhibits referenced herein and attached hereto shall be incorporated as if fully set forth in the body of this Agreement.

## 21. NOTICE

Any notice, tender, demand, delivery, or other communication pursuant to this Agreement shall be in writing and shall be deemed to be properly given if delivered in person or mailed by first class or certified mail, postage prepaid, or sent by fax or other telegraphic communication in the manner provided in this Section, to the following persons:

To City:

Clerk of the City Council
City of Santa Ana
20 Civic Center Plaza (M-30)
P.O. Box 1988
Santa Ana, CA 92702-1988
Fax: 714- 647-6956

With courtesy copies to:

Nabil Saba
Executive Director, Public Works Agency
City of Santa Ana
20 Civic Center Plaza (M-21)
P.O. Box 1988
Santa Ana, California 92702
Fax: 714-647-5635

To Consultant:

ICF Incorporated, LLC
1902 Reston Metro Plaza
Reston, VA 20190
(213) 312-1707

A party may change its address by giving notice in writing to the other party. Thereafter, any communication shall be addressed and transmitted to the new address. If sent by mail, communication shall be effective or deemed to have been given three (3) days after it has been deposited in the United States mail, duly registered or certified, with postage prepaid, and addressed as set forth above. If sent by fax, communication shall be effective or deemed to have been given twenty-four (24) hours after the time set forth on the transmission report issued by the transmitting facsimile machine, addressed as set forth above. For purposes of calculating these time frames, weekends, federal, state, County or City holidays shall be excluded.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date and year first above written.

**ATTEST:**

Jennifer L. Hall
Clerk of the Council

**CITY OF SANTA ANA**

Alvaro Nuñez
Acting City Manager

**APPROVED AS TO FORM**:
SONIA R. CARVALHO
City Attorney

By: Kyle Nellesen
Kyle Nellesen
Assistant City Attorney

**ICF INCORPORATED LLC:**

Rhonda Hall
Name: Rhonda Hall
Title: Sr. Contracts Administrator

**RECOMMENDED FOR APPROVAL:**

Nabil Saba Digitally signed by Nabil Saba
Date: 2024.07.22 15:31:30 -07'00'

Nabil Saba
Executive Director
Public Works Agency

EXHIBIT I

SCOPE OF SERVICES

**Contractor shall perform services as set forth below.**

## I. CONTRACTOR RESPONSIBILITIES

The Consultant shall provide all labor, materials, services, and equipment necessary for the development of a comprehensive Fleet Electrification & Electric Vehicle (EV) Charging Master Plan and City Fleet Policies. The proposed Master Plan and Fleet Policies shall serve as a framework to guide decisions on growth, development, and management of the City's fleet services.

The assessments shall be conducted in accordance with well-established industry standards. The assessment shall be performed by individuals trains and licensed and/or certified in construction, engineering, and/or architecture for the specific building systems they are assessing.

All work shall be in accordance with applicable practices and shall conform to all applicable laws, codes and regulations. Business hours are considered from 7:00 A.M. to 5:00 P.M. (Monday through Friday). Any time outside of business hours of operation may be considered after hours/weekends. All services, equipment and materials provided by the Consultant must be in accordance with applicable Federal, State and local regulations, laws, and codes. The City reserves the right to modify the scope of the project at any time.

## II. SERVICE

The Consultant shall provide professional consulting services and is expected to fulfill the requirements described in the Scope of Services to accomplish the City's objective of electrifying the City's fleet and updating the City's fleet policies. The Consultant is expected to provide suggestions other than those listed in the Scope of Services, which they believe would be of value to producing master plan that reflects the unique nature of the City of Santa Ana. Suggestions which require the Consultant to provide a service that may cause a cost increase are to be shown as "Value Added Costs." Upon final selection, the Scope of Services may be modified and/or refined as needed. It is important to note that emergency vehicles defined in California Vehicle Code § 165 are exempt from Californinia electrification mandates.

The Scope of Services is organized into the following tasks:

### TASK 1 – PROJECT KICK-OFF

**Project Kick-Off Meeting**

The Consultant will facilitate a kick-off meeting with key City Staff to receive available information related to the project, identify and discuss any technical issues, identify and discuss relevant regulations, coordinate City Staff/Consultant responsibilities, and refine the project schedule.

## TASK 2 – REVIEW OF POLICIES, DOCUMENTS, AN EXISTING CITY FLEET AND INFRASTRUCTURE

The Consultant shall review policies and documents that are relevant to the development of the final Fleet Electrification & Electric Vehicle Charging Master Plan and City Fleet Policies. The Consultant shall obtain from the City, where available, existing policies and data prior to the commencement of the assessments.

## TASK 3 – ELECTRIC VEHICLE AND CHARGING STATION ASSESSMENT

### Electric Vehicle Assessment

- Work with City Staff to evaluate the composition of the City's existing fleet, utilization patterns, locations of vehicle storage, and maintenance. The inventory shall establish a baseline for the current City fleet and electrification status.
- Review the City's existing fleet policies and procurement procedures.
- Identify and recommend available EV options and provide a cost analysis, including purchase, maintenance, expected useful life, and salvage value.
- Provide a budget and cost analysis.
- Offer insights on expected costs and estimated timelines for the availability of vehicles not currently on the market.
- Create a timeline for the expected vehicle replacement schedule.
- Identify incentive and financing mechanisims and other strategies that could accelerate the electrification of the City's fleet.
- Include South Coast Air Quality Management District (SCAQMD) compliance considerations.
- Identify barriers to the fleet electrification transition.
- Provide guidance on California Air Resources Board (CARB) Advanced Clean Fleets regulation and requirements .
- Provide guidance on potential paths forward for vehicles that do not clearly qualify for exemption under the various CARB regulations.

### Electric Vehicle Charging Equipment Assessment

- Work with City Staff to evaluate the composition of the City's existing EV charging infrastructure, consumption patterns, locations of charging stations, current fee, and maintenance.
- Identify site locations for EV charging infrastructure.
- Determine energy requirements for the proposed fleet and existing power supply.
- Identify applicable EV charging equipment options and provide acquisition and maintenance costs.
- Provide a budget and cost analysis.
- Provide a life cycle cost analysis of EV charging equipment.
- Identify incentive and financing mechanisims.
- Include South Coast Air Quality Management District (SCAQMD) compliance considerations.
- Advise City Staff of infrastructure improvements necessary to meet electrical needs for charging equipment, including coordination with the utility company on electrical supply availability.

- Identify opportunities for public and City staff EV charging on City properties.
- Identify scenarios where additional off-site charging resources may be required to support fleet operations.
- Provide recommendations for emergency backup charging, solar generation, and storage.

**Deliverables**

- Report and presentation of CARB regulations, updates, and compliance requirements.
- Electric Vehicle Assessment that includes vehicle replacement schedule, vehicle replacement recommendations, budget and cost analysis, regulatory compliance.
- Electric Vehicle Charging Equipment Assessment that includes site locations, energy requirements, infrastructure improvements, budget and cost analysis (acquisition, installation, maintenance, life cycle), emergency backup/solar recommendations.

## TASK 4 – DEVELOPMENT OF CITY FLEET POLICIES & STANDARDS

- Work with City Staff to review existing fleet policies.
- Present information to the City identifying existing policy issues and any relevant federal/state mandates.
- Identify and present fleet industry standards and future developments.
- Draft comprehensive, clear, and consistent fleet policies and standards; including, new and revision of existing policies. Consultant must submit the original version in Microsoft Word format.

**Deliverables**

- Using information received and developed in Task 2, 3, and 4, draft recommended policies that align with Fleet industry standards that support the Fleet operation, City objectives, and related legislation.

## TASK 5 – WORKFORCE & STAFFING LEVELS

- Review existing City Fleet staffing levels.
- Determine any changes in staffing and training required to adequately manage the electrified fleet and resources available for that training.
- Provide recommendations on technical and professional development of City Staff in order to maintain, service, and repair electric fleet and infrastructure
- Provide a comprehensive labor cost analysis for the repair and maintenance of EVs including estimated labor hours for common EV on repair tasks.
- Provide recommendations for staffing levels for Fleet Maintenance including, technicians, project managers, and administrative staff to execute and administer the Master Plan.

**Deliverables**

- Comprehensive workforce assessment that identifies the required staffing levels to maintain, service, repair EVs and EV charging equipment, and administer the

Master Plan, including labor cost assessment of repair and maintenance tasks as well as resources available for training and professional development.

**TASK 6 – FLEET ELECTRIFICATION & VEHICLE CHARGING MASTER PLAN**

The Consultant must prepare the Fleet Electrification & Vehicle Charging Master Plan that contains, but is not limited to the following:

1. Utilizing information gathered and developed in Task 3, provide a Master Plan which takes into consideration the City's anticipated needs to electrify the fleet, infrastructure to support fleet electrification, fleet policies, fleet industry standards, and CARB mandates.

2. The final Master Plan shall include, but are not limited to:

    - Executive Summary
    - Fleet Electrification Equipment Replacement Schedule
    - Electric Vehicle Recommendations
    - Carbon and Pollutant Reduction Analysis
    - Electric Vehicle Charging Plan
    - Project Budget & Analysis
    - Incentive Programs & Funding Sources
    - Workforce/Staffing Recommendations
    - Other Relevant/Diagrammatic Information
    - PowerPoint Presentation (to accompany the plan)

## III. VALUE ADDED RELATED SERVICES

The Consultant may propose additional related services that the City has not specificially identified in this RFP to accomplish the stated goals of this RFP. Value added related services will be considered by the City and may or may not be incorporated in the agreement.

**February 27, 2024**
**ICF Statement of Qualifications | RFP NO. 24-002**

# Fleet Electrification & Electric Vehicle Master Plan And City Fleet Policies

**Submitted to:**
Michael Ortiz, Acting D.D. Public Works
(Parks, Fleet, Facilities)

City of Santa Ana
Public Works Agency
Parks, Fleet, Facilities Division
20 Civic Center Plaza
Santa Ana, CA 92701

**Submitted by:**
ICF Incorporated, L.L.C.
49 Discovery
Suite 250
Irvine, CA 92618

**Contact**:
Theodora Konstantinou, PhD
Project Manager
(213) 312 1707
Theodora.Konstantinou@icf.com

# Cover Sheet

February 26, 2024

Michael Ortiz, Acting D.D. Public Works (Parks, Fleet, Facilities)
City of Santa Ana – Public Works Agency – Parks, Fleet, Facilities Division
20 Civic Center Plaza
Santa Ana, CA 92701

**Subject: ICF Statement of Qualifications (SOQ) 2024-162484 in Response to Request for Proposals (RFP) titled "Fleet Electrification & Electric Vehicle Master Plan And City Fleet Policies"**

Dear Mr. Ortiz,

ICF Incorporated, L.L.C., is pleased to submit our SOQ in response to the City of Santa Ana RFP titled "Fleet Electrification & Electric Vehicle Master Plan and City Fleet Policies." The ICF team are committed to fulfilling the entire scope of this important project and adhering to the requirements described in the City's RFP. We believe our team is exceptionally well positioned to accomplish this project for the following reasons.

**Our team has a deep understanding and knowledge of the California EV market and policies.** ICF has a rich history of involvement in California, where we have supported key initiatives for the California Energy Commission, the Southern California Association of Governments, and various municipalities throughout the state. Throughout these engagements, we have guided these agencies through the intricacies of California's complex regulatory frameworks. Moreover, our project director—Sam Pournazeri, PhD—and deputy project manager—Stephanie Kong, PhD—have joined us from CARB. During their tenure at CARB, they were part of the team that developed the Advanced Clean Fleet (ACF), and Advanced Clean Cars 2 (ACC 2) regulations. Our team also has a deep understanding of the local regulations imposed by South Coast AQMD. Over the past year, we have assisted multiple municipalities across California navigating through ACF regulation.

**We are a leader in fleet electrification assessment.** ICF has been deeply engaged in fleet electrification planning initiatives for almost a decade. To date, we have executed electrification studies for almost 200 fleets (half of which have been municipality fleets) spanning more than 78,000 vehicles. Our comprehensive approach calls for the evaluation of current fleets, the identification of ideal electrification opportunities, and the creation of solid implementation strategies. Using our analytical tools, we have designed fleet transition plans and carried out zero emission infrastructure planning. In California, ICF is playing a pivotal role in the state's transition to zero emission transportation. We have been helping numerous municipalities and public agencies design and implement comprehensive fleet electrification plans and develop electric vehicle (EV) charging infrastructure. Our endeavors in Southern California have not gone unnoticed; a Los Angeles Times newspaper has featured our work.

**We have strong experience in designing tailored charging infrastructure plans for fleets.** ICF boasts extensive expertise in the formulation of charging infrastructure plans for fleets ranging from 50 to 10,000 vehicles. We possess the necessary tools, expertise, and industry connections to ensure that our charging infrastructure recommendations are tailored to the unique needs of each fleet. We can identify the ideal EV supply equipment (EVSE) solution for each fleet, considering their operational and logistical constraints to enhance fleet efficiency and curtail energy costs, and we conduct onsite assessments at client locations to determine the optimal site layout and devise the most effective charging strategy.

We look forward to hearing from you regarding the status of our proposal and welcome the opportunity for further discussion. ICF's proposal remains valid for a period of one hundred eighty (180) days from the date of submission. ICF reserves the right to review its submission, and to extend or revise its offer based on the facts known at the end of the 180-day period. We are available to discuss contractual questions and may be contacted at (703) 556-5639 or via email at Rhonda.Hall@icf.com. Technical questions should be directed to our proposed project manager, Dr. Theodora Konstantinou, at (213) 312 1707 or Theodora.Konstantinou@icf.com.

Sincerely,

Joseph C. Moran

Joseph C. Moran, Senior Contracts Manager

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## Service Provided

ICF proposes a comprehensive suite of services tailored to meet the City of Santa Ana's needs for transitioning to an electrified fleet and supporting infrastructure, as outlined in their Request for Proposals (RFP) 24-002. Our approach is designed to address the city's objectives through a structured, six-task framework, ensuring a smooth transition to electric vehicles (EVs) and the establishment of a sustainable, efficient charging infrastructure.

**Task 1 – Project Kick-Off** initiates the project with a thorough kick-off meeting, ensuring that ICF's team aligns with key City Staff on the project's scope, timeline, key milestones, potential technical issues, relevant regulations, and responsibilities. This initial step will set the foundation for a collaborative effort, refining the project schedule to meet the city's needs and expectations effectively.

**Task 2 – Review of Policies, Documents, and Existing City Fleet and Infrastructure** involves a comprehensive review of current policies, documents, and data related to the city's fleet and infrastructure. ICF will assess these materials to understand the baseline from which the electrification efforts will be launched. This task ensures that the electrification plan is built on a solid understanding of existing conditions and practices, allowing for targeted improvements.

**Task 3 – Electric Vehicle and Charging Station Assessment** focuses on evaluating the current state of the city's fleet and its charging infrastructure. ICF will work closely with City staff to collect the necessary fleet, EV infrastructure, and facility information, analyze vehicle usage patterns, maintenance practices, and existing fleet policies. ICF will then leverage our extensive experience and expertise along with our proven analytical tools, including our ***PowerGuide*** and ***FleetCHARGE*** models, to craft a customized fleet transition strategy and robust EV infrastructure plan tailored for the City of Santa Ana fleets. Through ***PowerGuide***, ICF will analyze each vehicle in the current fleet and will recommend an equivalent EV, provided such an option is available and can meet the operational and financial constraints provided by the City. The fleet transition assessment will also consider factors such as SCAQMD compliance and CARB regulations, ensuring the proposed plan puts the City on a cost-effective compliance pathway with these regulations. Next, using ***FleetCHARGE***, ICF will conduct an in-depth analysis to determine the optimal number, type, and location of charging stations, including detailed cost assessments and deployment schedules. Importantly, this detailed technical assessment will be accompanied by a specific timeline and funding strategy, providing the City with a clear, structured pathway to achieve their fleet electrification goals efficiently and effectively.

**Task 4 – Development of City Fleet Policies & Standards** entails collaborating with City Staff to refine and develop fleet policies and standards that support the electrification goals. The focus will be on creating adaptable, forward-looking policies that facilitate efficient fleet management, compliance with environmental regulations, and the adoption of clean transportation technologies. ICF will leverage its expertise to present information on existing policy gaps, federal and state mandates, and future industry developments. This will culminate in drafting fleet policies that will equip the City with the tools necessary for a sustainable fleet transformation, focusing on the operationalization of these policies to achieve cost savings, efficiency improvements, and a reduced carbon footprint, all while navigating the complexities of vehicle electrification and regulatory compliance..

**Task 5 – Workforce & Staffing** Levels addresses the human element of the electrification process. ICF will evaluate current staffing levels and training needs to ensure the city's workforce is equipped to manage, service, and repair the electrified fleet and its supporting infrastructure. Recommendations will be made for technical and professional development, along with a detailed labor cost analysis for EV maintenance. This is to ensure that City can minimize operation disruptions, optimize efficiency, and ensure the successful implementation of the Master Plan.

**Task 6 – Fleet Electrification & Vehicle Charging Master Plan** is the culmination of the project, where ICF will integrate all information gathered and developed in the previous tasks into a comprehensive Master Plan. This plan will outline strategies for fleet electrification, charging infrastructure development, budget analysis, and incentive program identification. The plan will also include workforce recommendations and an executive summary, accompanied by a detailed PowerPoint presentation for city stakeholders.

Our close proximity to the project stakeholders allows us for expedited communication and swift response times, ensuring smoother project progression. Most of the key project staff are located in California: our project manager, Dr. Theodora Konstantinou is based in Los Angeles and our deputy project manager, Dr. Stephanie Kong, is based in Orange County. Our entire project staff is dedicated to the development of high-quality deliverables that meet and exceed client expectations. We strive to deliver work products that are technically accurate and delivered according to the established project schedule. It is the responsibility of our project management team to ensure that all services our team provide are of the highest quality and consistent with the City's objectives, contractual requirements, and applicable laws, codes, and standards.

## Agreement Statement

**ICF would like to submit the exceptions below in response to the sample Agreement.**

**7. Indemnification** Consultant agrees to defend, and shall indemnify and hold harmless the City, its officers, agents, employees, contractors, special counsel, and representatives from liability: (1) for personal injury, damages, just compensation, restitution, judicial or equitable relief arising out of claims for personal injury, including death, and claims for property damage, which may arise from the negligent operations of the Contractor, its subcontractors, agents, employees, or other persons acting on its behalf which relates to the services described in section 1 of this Agreement; and (2) from any claim that personal injury, damages, just compensation, restitution, judicial or equitable relief is due by reason of the terms of or effects arising from this Agreement. This indemnity and hold harmless agreement applies to all third party claims for damages, just compensation, restitution, judicial or equitable relief suffered, by reason of the events referred to in this Section or by reason of the terms of, or effects, arising from this Agreement. The Consultant further agrees to indemnify, hold harmless, and reasonable costs for the defense of the City, including fees and costs for special counsel to be selected by the City, regarding any action by a third party challenging the validity of this Agreement, or asserting that personal injury, damages, just compensation, restitution, judicial or equitable relief due to personal or property rights arises by reason of the terms of, or effects arising from this Agreement. The City may make all reasonable decisions with respect to its representation in any legal proceeding. Notwithstanding the foregoing, to the extent Contractor's services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Contractor.

**ICF would like to request to include the clause below**:

Limitation of liability: notwithstanding any contrary provisions herein, in no event shall either party be liable to the other party, for any lost profits or incidental, consequential, special, punitive, or indirect damages under the agreement, regardless of whether advised of the possibility of such damages and in no event shall either party's liability for damages under this agreement exceed the value of the agreement.

## Firm and Team Experience

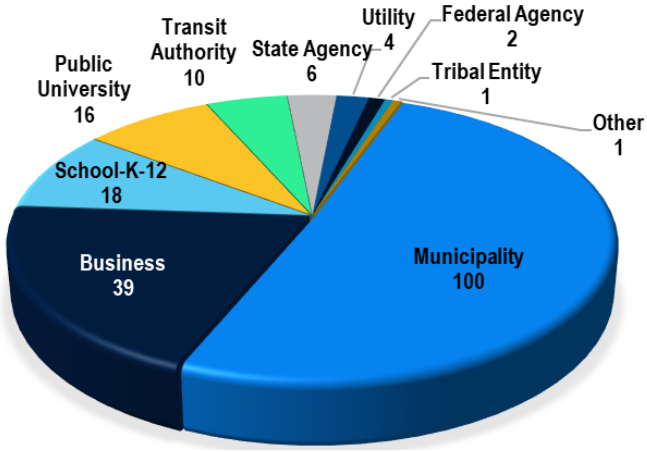
ICF is a leading global consulting firm, renowned for taking on the world's most pressing social and environmental issues with a deep understanding of transportation, energy, and climate change. For over 50 years, ICF has partnered with governments, corporations, and multilateral organizations worldwide, delivering strategic value to client programs at every stage. With a network of 75 offices and almost 10,000 employees, we provide unparalleled expertise and problem-solving capabilities, delivering innovative solutions to complex transportation policy, planning, and programming challenges. When it comes to creating a sustainable future, ICF is the trusted partner of choice.

| | |
|---|---|
| **ICF Headquarter Address** | 1902 Reston Metro Plaza, Reston, VA 20190 |
| **ICF Nearest Address Serving the City of Santa Ana** | 49 Discovery, Suite 250, Irvine, CA 92618 |

## *National Leadership in Fleet Electrification Programs*

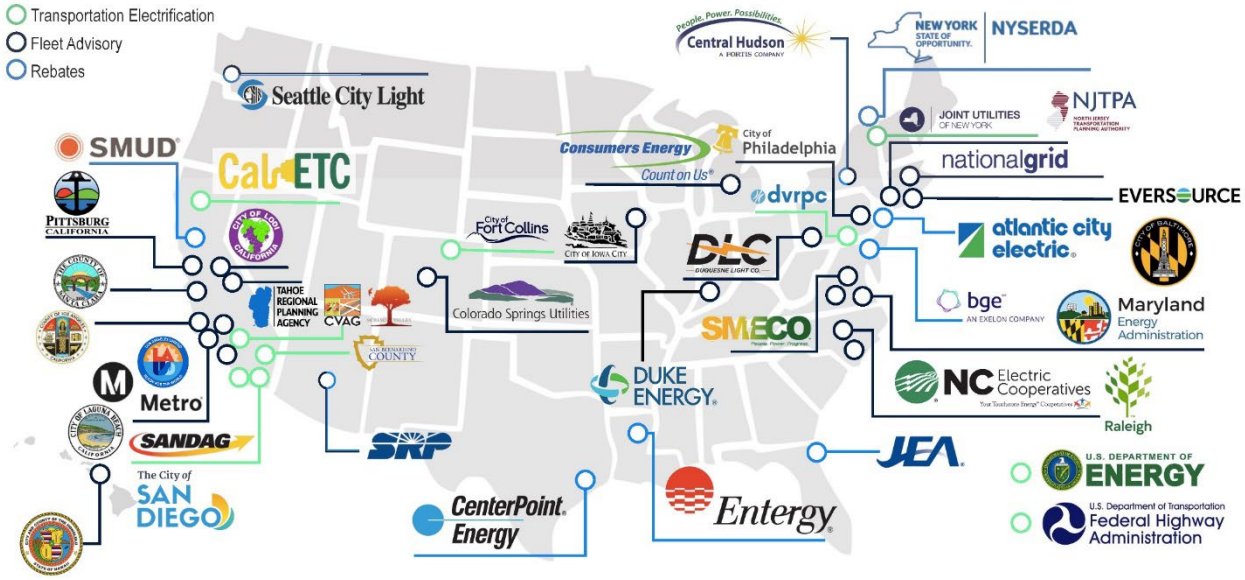
We pride ourselves on being a national leader in fleet electrification. The chart in **Exhibit 1** displays our diverse and extensive portfolio in this domain. To date, we have conducted fleet electrification studies for almost 200 fleets ranging in size from 50 to 5,000 vehicles. Among these include some of the major local and regional agencies in the United States, such as the cities of Laguna Beach, CA; Lodi, CA; Pittsburg, CA; Raleigh, NC; Honolulu, HI; Iowa City, IA; Colorado Springs, CO; and Baltimore, MD; the Los Angeles County Metropolitan Transportation Authority (Metro); Santa Clara County, CA; the Southern California Association of Governments (SCAG); the San Diego Association of Governments (SANDAG); and numerous other agencies within and outside of California.

***Exhibit 1. ICF has conducted fleet electrification studies for fleets across many sectors.***




Moreover, we have recently initiated an effort supporting the Los Angeles Unified School District (LAUSD), the second-largest school district in the country, to conduct a comprehensive fleet electrification and EV charging assessment. Our role spans the entire project lifecycle, which includes conducting initial site assessments, developing program requirements, overseeing project permitting, conducting inspections, and documenting commissioning activities. Our track record of successful projects demonstrates our commitment to creating innovative, effective solutions that make a real difference in our clients' communities. The comprehensive scope of ICF's work in transportation and fleet electrification is succinctly depicted in **Exhibit 2**, which highlights our extensive experience, nationwide coverage, and capabilities.

***Exhibit 2. ICF has an extensive transportation and fleet electrification portfolio.***




ICF has also supported federal, state, and local workforce agencies, employers, and stakeholders in developing and implementing work-based learning, training & technical assistance (TTA), and employment programs. We have more than 75 professionals dedicated to solving workforce issues in energy and climate-related sectors as well as transportation and manufacturing. For more than 20 years, ICF has held hundreds of contracts, subcontracts, and

task orders focused on comprehensive, employer-driven, community-based, and outcomes-focused solutions to address complex workforce development challenges.

The Scope of Services in the City's solicitation is ambitious and will require strong capabilities in a variety of elements of fleet transition and EV charging and infrastructure planning. ICF is unique in that we provide deep, proven expertise in technology, data collection, charging optimization solutions, the analysis of fleet operational characteristics, the assessment of EV charging infrastructure needs and cost, and the development of workforce and training programs. **Exhibit 3** lists examples of the work performed by ICF in the past three years that best characterize the work quality and expertise that the City can expect ICF to apply to the tasks in the scope. More detail on each of these projects can are available upon request.

***Exhibit 3. ICF Project Examples***

| Client, Project | CA-Based Program | Fleet Transition Planning | EV Infrastructure Assessment | Fleet EV Policies Development | Workforce Strategy and Staffing | EV Transition Master Plan |
|---|---|---|---|---|---|---|
| **City of Laguna Beach**, EV Fleet and Charging Station Assessment | ✓ | ✓ | ✓ | ✓ | | ✓ |
| **LAUSD**, Energy White Fleet Electrification Assessment | ✓ | ✓ | ✓ | ✓ | | ✓ |
| **City of Pittsburg**, Infrastructure Needs Assessment Related to Future Municipal Fleet Electrification | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| **City of Lodi**, Fleet Electrification Plan | ✓ | ✓ | ✓ | ✓ | | ✓ |
| **Santa Clara County**, Driving to Net Zero | ✓ | | ✓ | ✓ | | ✓ |
| **Midpeninsula Regional Open Space District**, Consultation to Improve Fleet Management | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| **LA Metro**, EV Charging Infrastructure Implementation Plan | ✓ | | ✓ | | ✓ | ✓ |
| **City of San Diego, CA**, Zero Emission Vehicle Strategy | ✓ | | | ✓ | ✓ | ✓ |
| **SCAG**, Supporting Infrastructure for Zero Emission Medium- and Heavy-Duty Truck Study | ✓ | | ✓ | | ✓ | ✓ |
| **SANDAG**, Medium- and Heavy-Duty Zero Emission Vehicle Blueprint | ✓ | | ✓ | | ✓ | ✓ |
| **City of Raleigh**, Fleet Electrification Implementation Rollout Strategy | | ✓ | ✓ | ✓ | ✓ | ✓ |
| **City of Philadelphia**, Municipal Clean Fleet Plan Support for EVs and Charging Infrastructure | | ✓ | ✓ | ✓ | | ✓ |
| **City of Honolulu**, Capital Fleet Transition Plan | | ✓ | ✓ | ✓ | | ✓ |
| **Baltimore Gas & Electric,** Fleet Advisory Services Program | | ✓ | | ✓ | ✓ | |
| **National Grid Massachusetts**, Fleet Advisory Services Program | | ✓ | ✓ | ✓ | ✓ | ✓ |

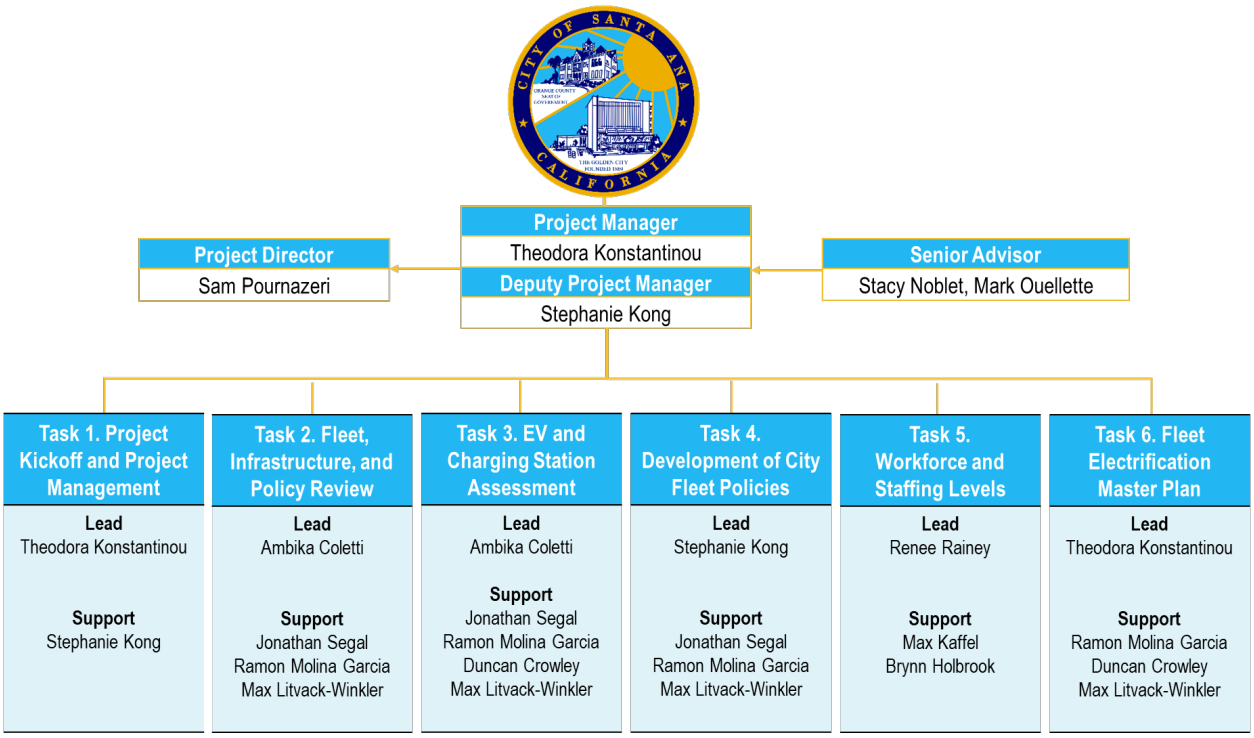
## *Team Organization*

We propose a team of dedicated professionals with expertise in the EV readiness planning, charging infrastructure technology, EV program design and implementation, and workforce and staffing assessment, who have the capacity to provide the City with quality time and effort. Each proposed staff has a key area of subject matter expertise and will work closely with the City staff and their stakeholders on all aspects of the project to keep the progress cohesive. **Exhibit 4** highlights areas of subject matter expertise for key staff and other senior staff, while our proposed staffing plan is presented in **Exhibit 5** below. Resumes for all proposed staff are included in Appendix A.

***Exhibit 4. Subject Matter Expertise for Key Staff and Other Senior Staff***

| Name | Project Title | Role | Related Qualifications & Past Relevant Experience |
|---|---|---|---|
| Sam Pournazeri, PhD | Project Director | Executive Oversight | ▪ Lead ICF state & local transportation decarbonization and electrification work<br>▪ A clean technology expert with more than 14 years of experience with clean transportation planning, policy development, and EV analytics |
| Theodora Konstantinou, PhD | Project Manager | Project Management, Lead Task 1 & 6 | ▪ **Based in Los Angeles, CA**<br>▪ ICF's lead transportation and energy consultant with recent experience developing EV roadmaps and charging infrastructure plans<br>▪ 7 seven years of experience in transportation electrification and decarbonization, specializing in truck fleet electrification |
| Stephanie Kong, PhD | Deputy Project Manager | Lead Task 4 | ▪ **Based in Orange County, CA**<br>▪ ICF's expert in transportation electrification planning, infrastructure development planning, infrastructure policy<br>▪ More than 5 years of experience conducting infrastructure assessment, transportation modeling, and policy evaluations |
| Ambika Coletti | Senior Consultant | Lead Task 2 & 3 | ▪ ICF's energy efficiency and beneficial electrification consultant. Led the development of ICF's proprietary Fleet Assessment Model which is used to evaluate and identify fleet electrification opportunities<br>▪ Over 9 years of experience specializing in the design and management of beneficial electrification and fleet assessment programs |
| Renee Rainey | Senior Consultant | Lead Task 5 | ▪ **Based in Los Angeles, CA**<br>▪ ICF's expert in energy sector workforce development, technical assistance and data collection and analysis<br>▪ Currently leading an EV pre-apprenticeship program |
| Stacy Noblet | Senior Advisor | Fleet Electrification Oversight | ▪ Vice President of Transportation Electrification at ICF, and a Senior Fellow with ICF's Climate Center<br>▪ More than 15 years of experience in helping federal agencies, state and local governments, and utilities to plan, design, and implement clean transportation strategies and programs |
| Mark Ouellette | Senior Advisor | Workforce Development Oversight | ▪ **Based in Los Angeles, CA**<br>▪ 12+ years developing clean energy and energy efficiency workforce training programs<br>▪ Experience leading clean energy studies for four California utilities and for utilities in Maryland, Virginia, and the District of Columbia |

***Exhibit 5. Proposed Staffing and Organizational Chart***




# Proposed Work Plan

## *Project Understanding*

To accelerate the adoption of ZEVs, the state of California has implemented a range of measures, including mandates requiring automakers and truck manufacturers to produce a certain percentage of ZEVs, fleet requirements to purchase ZEVs, financial incentives for consumers to buy ZEVs, and investments in charging and fueling infrastructure. In September 2020, Governor Newsom signed Executive Order N-79-20, which sets ambitious goals of transitioning 100% of light-duty vehicles to ZEVs by 2035 and all MD/HD vehicles to ZEVs by 2045. The order also includes directives for accelerating the deployment of charging infrastructure, increasing the number of ZEVs in public fleets, and promoting consumer awareness and adoption of EVs. The executive order lays the foundation for implementing policies to achieve these targets. To date, California has implemented several regulations that put the state on an ambitious transportation electrification pathway. **Exhibit 6** provides a summary of the most significant regulations currently in effect pertaining to the zero emission transition of on-road vehicles.

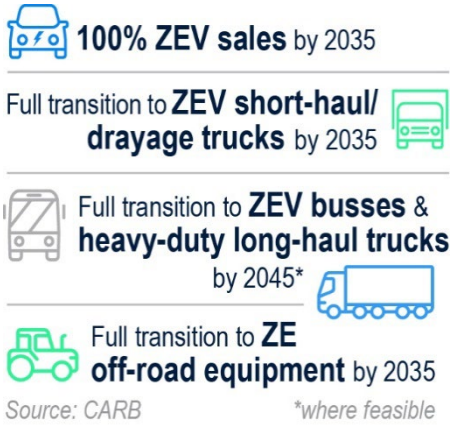



***Exhibit 6. California regulations pertaining to ZEV deployment***

| Advanced Clean Trucks | Advanced Clean Cars 2.0 | Advanced Clean Fleet | Innovative Clean Transit |
|---|---|---|---|
| **Manufacturer Sales Requirement**<br>Increasing percentage of truck sales in California should be zero-emission | **Manufacturer Sales Requirement**<br>Full transition to light-duty ZEVs and plug-in hybrid EVs (PHEVs) by 2035 | **Zero-Emission Truck Purchase**<br>(> 8,500 lbs.) Starting in 2024, 50% must be ZEVs, ramping up to 100% by 2027 | **Zero-Emission Transit Purchase**<br>Full transition of public transit fleet to ZEVs by 2040 |
| | *Post 2035, only ZEVs will be available for purchase.* | *This affects the municipalities' MD/HD fleet starting in 2024.* | |

The upcoming ACF regulation is set to significantly influence municipalities' short-term compliance priorities and long-term strategies in fleet procurement, maintenance, and operation. This regulation requires municipalities across California, including the City of Santa Ana, to transition their fleet to ZEV as quickly as possible and focus on creating a future-proof EV charging infrastructure for their fleet. Aside from CARB's regulation, there are other regulations such as *Rule 1191 - Clean On-Road Light- and Medium-Duty Public Fleet Vehicles* by the South Coast AQMD that impacts the City of Santa Ana fleet.

We recognize that transitioning fully to EVs or other alternative fuel technologies is far from straightforward. This shift will be particularly challenging for MD/HD vehicles in terms of technology availability, cost, and, especially, the required EV charging infrastructure. A robust planning process is essential to guide the City through this transition.

## *Technical Approach*

This section presents our proposed work plan. Our approach includes all the activities described in the Scope of Services and will deliver all the required work products, and also provides the services that ICF can provide over the course of the three-year contract after the completion of the initial Master Plan, including on-call technical support and fleet transition refresh.

### Task 1: Project Kick-Off and Project Management

Within two weeks of contract execution, our Project Manager will develop a project management plan and maintain it for the life of the contract. The project management plan is a critical asset in implementing our technical and management approach and will include our processes for schedule management, cost management, staffing, communications, and risk. Our project management plan will guide daily management of our programs and will define, integrate, and coordinate all plans, processes, methods, and procedures to be used to manage the project. The project management plan will describe how the program and projects will be executed, monitored, and managed.

ICF will also lead a project kick-off meeting within two weeks of contract execution. The goal of this meeting is to review the process of the project, discuss relevant regulations and any specific requirements or expectations, and establish communication protocols, file sharing platforms and workflow with the City's project personnel. Following the kick-off meeting, we will summarize key outcomes and action items from the meeting and follow up with written minutes. Following the kick-off meeting, ICF will compile the meeting minutes, update the project management plan accordingly, and share them with the City.

In addition to project kick-off, the ICF team will actively participate and lead virtual meetings with City's Project Manager and key personnel. Our plan is to be proactive and lead these meetings on a monthly basis. We remain flexible though to the possibility of increasing the meeting frequency if the need arises. Ahead of each meeting with the City, we will circulate an agenda including work updates, budgetary matters, preparation for forthcoming meetings, potential schedule revisions, and any technical queries or challenges. We plan to utilize Teams for our communications with the City, a method we have effectively used in previous collaborations, while remaining flexible and open to exploring alternative communication methods as needed.

As shown later in the proposed schedule, ICF proposes a 12-month period to finish all services as specified in the Scope of Services. Once the Master Plan has been submitted to the City, the ICF team will provide an additional two-year on-call technical support to the City, which aims to provide the City with continuous support during the initial implementation of the Master Plan and assist the City to navigate the complex regulatory compliance mechanisms and fleet procurement and budgeting processes.

#### Task 1 Deliverables

- Project management plan
- Project kickoff meeting agenda and notes
- Monthly progress meetings and invoices

### Task 2: Review of Policies, Documents, and Existing City Fleet and Infrastructure

In Task 2, ICF will review existing City fleet policies and establish a baseline for both existing vehicles and charging infrastructure data. First, we will collaborate with City staff to gather and assess data on the existing vehicle fleet from all City departments. To do so, our team will submit a data request form to the City staff to collect information such as the following:

**Fleet Characteristics**

- VIN
- Vehicle type (e.g., sedan, pickup truck)
- Fuel type
- Make, model, model year
- In-service year
- Average daily mileage
- Time & frequency of use
- General purpose for vehicle use
- Power Take Off (PTO) usage
- Current odometer reading
- Current fuel costs
- Current maintenance costs
- Estimated service life
- GPS information (pending data availability)

Additionally, to the extent available, ICF will also collect data on fleet logistics, including information regarding facilities owned by the City where the fleet vehicles are being dwelled at:

**Depot Information**

- Current dwell site
- Size of the depot
- Layout of the depot
- Existing charging infrastructure
- Asset ownership (owned, leased)
- Utility tariff

**Fleet Operation/Procurement/Logistics**

- Brief overview of daily operations and unique challenges
- Current fueling site
- Fueling process
- Vehicle replacement schedule
- Maintenance practice
- Type of procurement (purchase, lease)

In addition to the data request form, ICF will interview the City's fleet management team to obtain insights into the typical range of operating conditions for the vehicles, which may not be available or obvious within the data provided, major barriers of fleet electrification, as well as to better understand future fleet needs. The data solicited, information collected from interviews, the City's fleet replacement policy will be used to create an initial, business-as-usual vehicle replacement schedule. The replacement schedule will consider vehicles' age, mileage, maintenance cost, use case, current conditions (e.g., operability), and typical service life. There may be opportunities to downsize or "right size" vehicles depending on how they are currently being used and the needs of drivers. ICF will coordinate and communicate with each fleet manager to determine if such opportunities exist.

The second step of Task 2 will involve collecting data to establish a baseline on the City's charging infrastructure conditions. We will compile a comprehensive list of all known locations for EV charging infrastructure within the City's facilities such as charging station street address, charger types (Level 2 or Direct Current Fast Charger), number of ports per charger, number of chargers per station, availability of station (e.g., available, temporarily unavailable, or planned station), accessibility of station (e.g., publicly available, private station, shared use), rate structure (e.g., free charging, pay for charging), remote access (e.g., networked chargers, non-networked chargers) and station owner. In addition to information on chargers, we will also collect data on site-level and grid-level electrical equipment to understand the current capacity of the equipment for power delivery. We will make sure to work with the City staff to obtain and review available reports, maps, data, and records and to research existing underground and overhead utilities serving the project areas and their capacity to serve increased future loads. In collecting data on site-level electrical equipment, ICF will coordinate with the City and identify the proper points of contact, such as facility managers, building managers, and/or engineers that can provide us with capacity data on the electrical equipment at each site which currently houses charging infrastructure. ICF will collaborate with Southern California Edison (SCE) and Municipal Utility Services (MUS) to acquire information on crucial distribution components, including transformers, feeders, and conductors, that supply power to each of the City facilities where fleet vehicles are being domiciled.

The last component of Task 2 involves reviewing existing City fleet policies, climate goals, and planning documents that are relevant to the development of the final Master Plan. These policies may include, but not limited to, the City's fleet procurement process, vehicle and equipment replacement policy, maintenance policies, employee vehicle take-home policy (if applicable), the General Plan, the Hybrid and Alternative Fuel Vehicle Acquisition Policy, the Five-Year Strategic Plan, and the Climate Action Plan. ICF will synthesize the major takeaways that are relevant to the development of the Master Plan from the document review along with the existing City fleet and charger infrastructure information into a summary memo.

### Task 2 Deliverables

- Data request form
- Summary of interviews with fleet managers and drivers
- A memo summarizing baseline fleet, existing fleet charging infrastructure, and relevant policies in the City

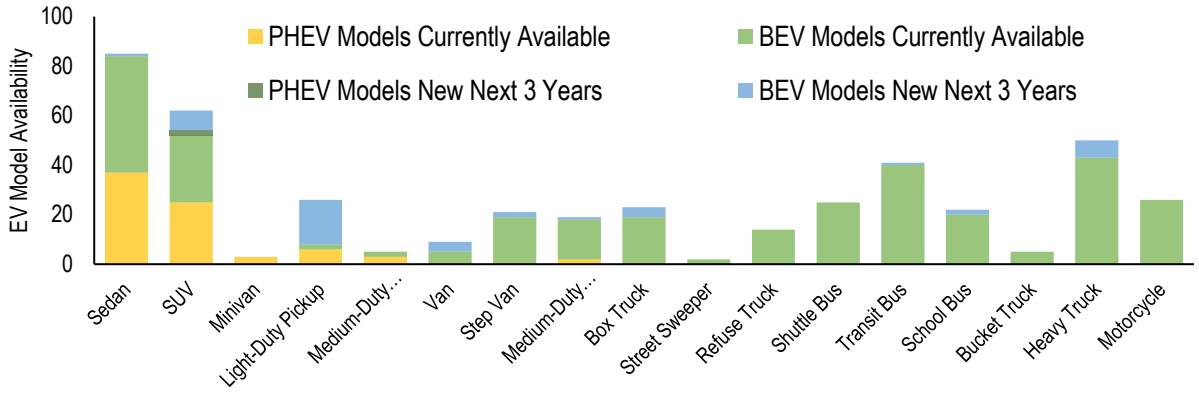
## Task 3: Electric Vehicle and Charging Station Assessment

In Task 3, ICF will analyze the City's fleet and develop a fleet EV transition plan and replacement schedule, along with a detailed fleet charging infrastructure plan that supports the transition of the City fleet to EVs. ICF will use time in the project kickoff meeting to understand the City's top priorities with respect to fleet transition (e.g., compliance with CARB regulation, cost savings, state climate goals, etc.). ICF will rely on these priorities and criteria to develop a fully integrated EV plan.

### *Task 3.1: Electric Vehicle Assessment*

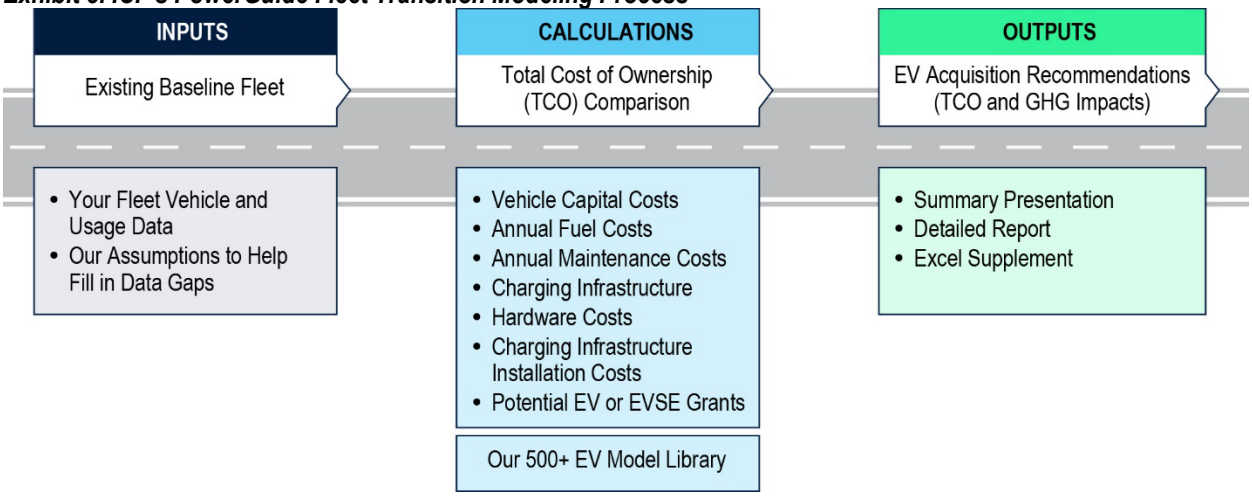
**EV Replacement Recommendation:** Leveraging outcomes of existing fleet analysis as well as other information collected in Task 2, ICF will employ our in-house fleet assessment model (also known as ***PowerGuide***) to analyze the City's fleets, characterize their operations, and develop tailored recommendations for the transition of fleet vehicles to EVs. ICF's *PowerGuide* is a robust tool, developed and refined over time for use with multiple municipal and fleet clients. Originally developed for our partnership with our extensive utility programs, ICF has continued to improve tool and the supporting data embedded in the model to assist almost 200 clients, including California municipalities such as the cities of Laguna Beach, Lodi, Pittsburg, and multiple utilities, as they developed plans for transitioning their vehicles, including their specialty vehicles, to EVs. Included in the *PowerGuide* is a comprehensive database of over 500 EV models comprising BEV and PHEV options for light-duty and MD/HD vehicles (**Exhibit 7**). This extensive database enables the ICF team to deliver highly customized fleet transition recommendations. By using this unique database, the ICF team will conduct an overview of currently available and forthcoming BEVs and PHEVs that could potentially replace the vehicle types currently used by the City. The ICF team also has a separate database for fuel cell EVs which it will use for vehicles where cost-effective EV options might not be available. ICF's EV model library is updated monthly to capture the latest EV models available and changes to vehicle attributes and pricing.

***Exhibit 7. ICF EV Library Model (model and trim level) Availability***



Aside from all of the features described earlier, the ICF fleet assessment model, *PowerGuide*, also ensures the proposed EV transition plan fully complies with California's ACF regulation. Despite the requirements of the ACF regulations for public fleets (i.e., the ZEV purchasing requirement or the ZEV milestone requirements), the regulation provides a number of exemptions that address a variety of circumstances, including lack of ZEV availability, vehicles operated less than 1,000 miles per year, delays in ZEV infrastructure, and more. To ensure timely compliance, our team will extract and delineate specific regulatory milestones and deadlines embedded in the regulations and create an EV replacement timeline that aligns with key regulatory requirements, including mandated annual ZEV purchase requirements and milestone fleet conversion options. The representation of the underlying algorithm within the *PowerGuide* is illustrated in **Exhibit 8**.

***Exhibit 8. ICF's PowerGuide Fleet Transition Modeling Process***




When determining the recommended vehicle replacement schedule, we will start with simple cost-effective replacements while also staying mindful of the complexity and difficulty associated with replacing certain use cases due to insufficient alternatives, operational challenges, unreliable technology, safety, excessive costs, or other identified reasons. For vehicles without currently available EV replacements, the ICF team will provide insights on the potential future availability as well as detailed descriptions of why no recommendation is provided in this project. Additionally, for vehicles where no EV replacement is recommended due to either excessive cost or lack of technology availability, the ICF team will provide the necessary documentation to the City so it can be used when the City applies for ACF exemption.

**Total Cost of Ownership (TCO) Analysis:** ICF's *PowerGuide* also provides us with the capability to estimate the total cost of owning and operating each replacement vehicle, including upfront and lifecycle costs as well as the capital and installation cost of EV charging infrastructure. The cost data embedded in the *PowerGuide* is informed by available cost data from manufacturers (both vehicles and charging manufacturers), dealerships, and the data collected from the municipality fleets across the country. This TCO analysis will compare the differences in TCO over the service life of each vehicle between EV replacements and a scenario where the City only replace their vehicles with ICE vehicles. The ICF team will estimate TCO on a vehicle-by-vehicle basis and will consolidate these vehicle-level estimates into fleet-level transition cost estimates.

*PowerGuide* does not restrict evaluating TCO under the traditional ownership model, but it can also assess TCO under various alternative ownership arrangements, including financing and leasing. This model flexibility allows us to determine cost implications under different scenarios, providing a broader perspective on the economic feasibility of the transition. The project team will leverage this data, examining challenges and opportunities associated with each ownership model. By considering City fleet's unique operational needs, budget constraints, and strategic objectives, we will provide informed recommendations on the types of ownership models the City could use for a seamless, cost-effective transition to EVs while the meeting the regulatory requirements of the ACF regulation.

Within ICF's *PowerGuide*, we can also specifically limit the selection of EV models to those available on cooperative purchasing contracts, such as Sourcewell, Drive EV Fleets, California Department of General Services, and others. Our EV library has already embedded the information regarding most of these cooperative purchasing contracts. This approach is designed to streamline the future vehicle procurement process for the City. Additionally, we will include recommendations on the types of cooperative purchasing contracts that may be most suitable for the City to ensure that City staff can make informed decisions that align with their specific needs and procurement strategies.

**Environmental Impacts:** In addition to the TCO, the ICF team will conduct a lifecycle assessment accounting for emissions from electricity as well as liquid fuel production and distribution. ICF's *PowerGuide* can evaluate the criteria pollutant and GHG emissions reduction potential from the City's electric fleet. Our approach is based on lifecycle GHG emission factors from Argonne National Laboratory's Alternative Fuel Life-Cycle Environmental and Economic Transportation (AFLEET) tool and data from EPA's Emissions and Generation Resource Integrated Database (eGRID) to account for electricity carbon intensity variation at the regional level.

***PowerGuide* Deliverables:** Using the *PowerGuide*, the ICF team will deliver key recommendations at a vehicle-by-vehicle level and a fleet level. Outputs of the model will include the following:

- Recommended zero emission technologies (battery electric, plug-in hybrid, and fuel cell vehicles)
- Recommended EV replacement makes and models
- TCO, including the upfront and lifecycle vehicle costs
- Identification of vehicle types that are least viable for conversion
- Recommended replacement years
- A fleetwide phased vehicle replacement schedule
- Estimated GHG emissions reductions from EV replacements
- Recommended charger types (e.g., Level 2, DCFC)

### *Task 3.2 Electric Vehicle Charging Equipment Needs Assessment*

**Charging Infrastructure Assessment:** Using the fleet modeling results and recommendations developed in Task 3.1, we will identify sites that will require new or upgraded charging infrastructure, including the number, types, and power level of EVSE. This assessment will be conducted using our ***FleetCHARGE*** tool, which is specifically designed to evaluate the charging energy and power requirements at each site where EV replacements are recommended and where EV operation is concentrated. The algorithms embedded in the tool analyze expected vehicle operations at each site and compare them with critical information on the EVs to accurately estimate daily charging needs. Key factors considered include the vehicles' energy efficiency, daily mileage or operation hours, battery capacity, maximum power acceptance rates, and charging time.

FleetCHARGE Charged by ICF

we will utilize information on vehicle dwell time, driving routes, parking locations, and operational characteristics to determine the optimal locations for charging infrastructure. Using this information, the ICF team will develop a charging infrastructure implementation scenario with rollout schedule that projects the following information:

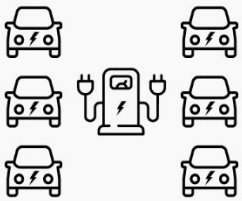
- The projected number of chargers needed at each site to support the EV replacements
- The recommended locations of EV charging infrastructure
- The recommended type (e.g., Level 1, Level 2, DCFC) and power level (in kW) of chargers for each vehicle type
- The overall power need associated with charging infrastructure at each site

**Charging Infrastructure Optimization:** One of the key features that sets ICF's ***FleetCHARGE*** tool apart from other charging infrastructure models in the market is its embedded optimization algorithms. These algorithms enable the City to optimize the number of chargers by increasing the vehicle-to-plug (V2P) ratio while maintaining the resilience of both charging and fleet operations. Following the development of the baseline charging infrastructure needs scenario (assuming 1:1 V2P), *FleetCHARGE* uses its optimization algorithm to develop an optimized charging infrastructure needs scenario. This involves determining the most appropriate V2P ratio for each groups of vehicles and assessing the feasibility of smart/scheduled charging. This approach implies using fewer charging stations to service a greater number of EVs, leading to significant cost savings. It reduces the upfront investment in charging infrastructure and minimizes ongoing operational and maintenance expenses. Moreover, this efficient use of resources is particularly beneficial in conserving space, a crucial aspect in urban or densely populated areas. The ICF team will carefully review the recommendations provided by its ***FleetCHARGE*** tool to identify the highest feasible V2P ratios that can be achieved while ensuring reliability and successful daily operations of the fleet.

**1:1 Vehicle to Plug (V2P) Scenario**

*In this scenario, each vehicle is paired with a dedicated charging plug, ensuring that every vehicle has its designated charging port.*

**Optimized V2P Ratio Scenario**



- Optimized V2P ratio
- Multiple vehicles share a port

*This scenario aims to optimize the number of vehicles capable of sharing a charging port. This is accomplished by adjusting the vehicle-to-plug ratio to ensure efficient use of infrastructure while still meeting each vehicle's duty cycle.*

In determining the charging infrastructure needed for each location, the ICF team will also plan for future growth and expansion by considering the scalability of the chosen charging station configurations. Our team will anticipate the potential increase in the City's EV fleet and ensure the selected charging stations can accommodate the additional demand. This may involve allocating additional space and electrical capacity for future installations. By proactively considering scalability, the ICF team will ensure the charging infrastructure can easily adapt and scale up to meet the growing needs of the City's EV fleet.

Similar to the approach taken in fleet transition planning, the ICF team will also extend its services to provide recommendations for cooperative contract procurement options for charging infrastructure, if available. This includes exploring established contracts with entities such as Sourcewell and Drive EV Fleets, among others, to ensure the City has access to the most efficient and cost-effective charging solutions.

**Opportunity for Community-Level and Employee Charging**: In addition to fleet charging, the ICF team will also evaluate the feasibility of installing publicly accessible community-level charging infrastructure at various facilities (including cities' public parking facilities), an initiative aimed at enhancing EV adoption within communities and for City employees. This process involves a collaborative effort with facility managers to assess the frequency of public vehicle visits and the average dwelling time of these vehicles at the facilities. This information is critical in determining both the number of charging stations required and the appropriate power level for each charger. For instance, in scenarios where vehicles are typically parked for more than 2 hours, such as at parks or libraries, Level 2 chargers would be suitable. These chargers offer a balance between speed and efficiency, making them ideal for longer stays. Moreover, the volume of visiting vehicles and the likelihood of these being EVs will inform the decision on the number of charging stations needed at each facility. However, the mere presence of charging stations may attract additional EV users to these facilities. Therefore, a safety factor will be applied to account for this potential increase in EV traffic. To prioritize City facilities for public and employee charging, the ICF team will develop a scoring rubric to identify the most suitable facilities for charger installation. Through this scoring as well as the assessment described earlier, the ICF team will provide recommendations on the number and type of publicly accessible chargers that eligible facility could consider.

**Utility-side Electrical Infrastrcture Assessment:** Once the team has determined the number, types, output power levels, and locations of chargers (including both fleet and community charging) to be deployed, we will review the capacity of the City's facilities to support the projected additional electrical load from charging EVs and identify

potential site-level and distribution grid impacts of that additional load. To identify potential utility distribution electrical infrastrcture impacts, our team will first coordinate with SCE and MUS to review data that they already have on the capacity of existing distribution grid infrastructure to answer the following questions:

- How large is the electrical service from the utility for each relevant facility?
- How much electrical current is each facility consuming at existing peak power demand levels?
- How much electrical capacity is remaining on the utility-side of the meter at existing peak power demand?
- How much electrical capacity remains on the City's facility side of the meter?

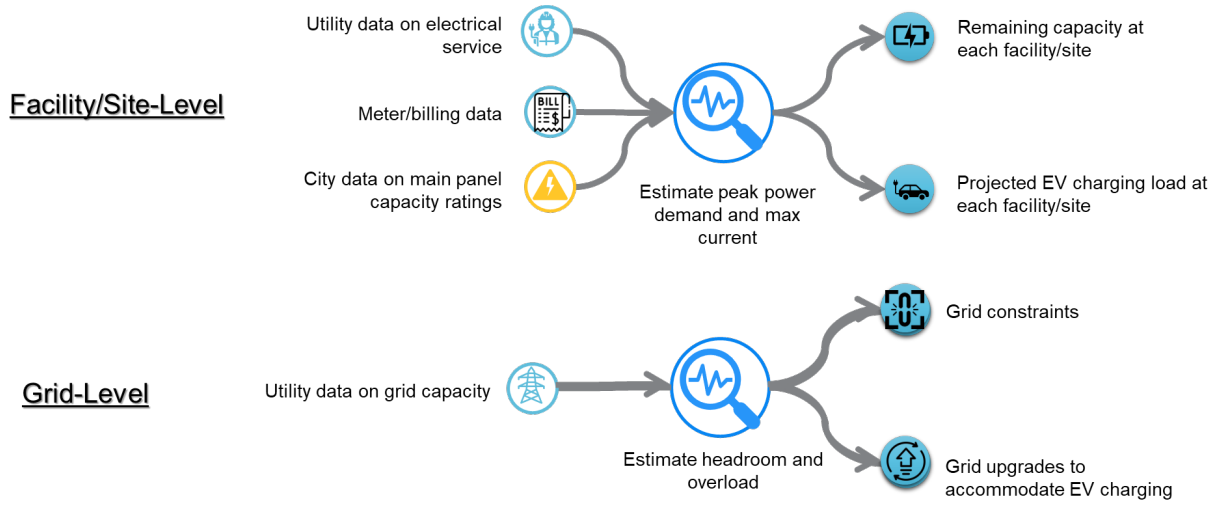
Responses to these questions will help us gather the needed data to conduct the electrical capacity analysis at each facility and to determine any potential impacts to the electric grid. With an understanding of peak power demand and the voltage of service drops at each facility, our team will estimate the maximum current used at each facility at peak power demand. This will then be subtracted from the size of existing electrical service to provide an estimate of how much electrical capacity is remaining on the utility-side of the meter. Our team will then compare that to the projected additional load from EV charging at each facility to determine whether each facility has sufficient utility-side capacity to accommodate chargers or if upgrades may be necessary. Aside from the information provided by the utility, our team will also use the data from the SCE's Distributed Resources Plan External Portal (DRPEP) to determine the load capacity for facilities that fall within the SCE's service territory.

**Facility-side Electrical Infrastrcture Assessment:** After completing the distribution grid capacity analysis and utilizing information obtained from site visits, the ICF team will assess the existing electrical infrastructure at each of City facilities for its ability to support the proposed EV charging infrastructure. This evaluation will determine if the current infrastructure is adequate or if upgrades, such as panel upgrades or the installation of step-up/down transformers, are necessary. Should an upgrade be deemed necessary, the ICF team will document this requirement and proceed to evaluate the associated costs, ensuring a comprehensive understanding of the investment required. Additionally, the ICF team will explore the costs related to preparing each facility for the deployment of charging infrastructure, covering a broad spectrum of components crucial for the site's overall readiness.

- **Panel and Service Boards:** Estimating costs for upgrading or installing new electrical panels and service boards to accommodate additional loads.
- **Step-up/Step-down Transformers:** Evaluating the costs for installing transformers that are essential for converting electrical power from one voltage to another (to serve both Level 2 and DCFC chargers)—these transformers are crucial in scenarios where a switch between 208 volts (V) to 480 V or vice versa is needed to match the power requirements of the EV charging stations with the facility's existing electrical infrastructure.
- **Meters:** Assessing the need and costs for new or upgraded metering systems to monitor electricity usage.
- **Conduit and Cable:** Calculating the expenses for necessary conduit and cable installations to connect the charging stations.
- **Trenching:** Determining the costs for trenching work required to lay down electrical lines underground.
- **Bollards:** Evaluating the expenses for installing bollards to protect charging stations from accidental vehicular damage.
- **EV Signage and Striping:** Assessing the costs for necessary signage and striping in parking areas to designate EV charging spots.
- **Permits:** Estimating a high-level cost for obtaining any required permits for the installation and operation of charging stations.
- **Engineering Design:** Assessing a high-level cost for professional engineering design services needed for the infrastructure setup.
- **Labor and Installation:** Estimating the labor costs and expenses related to the installation of the entire charging infrastructure.

Upon completing the evaluations, the ICF team will compile and consolidate all the associated costs for each facility that has been assessed. A simplified illustration of our methodology to electrical infrastructure assessment is shown in **Exhibit 9**.

***Exhibit 9. ICF's Process for Load Capacity Analysis***




**Charging Infrastructure Rollout Schedule & Cost:** To advise the City on expectations for charging infrastructure development, the ICF team will develop a rollout timeline and cost estimates for the proposed charging infrastructure. Depending on circumstances, the lead time for charging infrastructure development can be significantly longer than the lead time for vehicle procurement. Due to this, a well-laid-out electrification timeline that includes both vehicle procurement and infrastructure development is critical to minimizing time for implementation. In developing these schedules, the ICF team will ensure there will be sufficient charging capacity available to support expected EV deployment, and the City can spread the cost over time to facilitate funding the infrastructure build out. In developing the schedule, the ICF team will consider the upfront utility upgrade and site preparation investments needed during the initial phase, known as futureproofing, to ensure sufficient charging capacity will be available within each facility to expand charging equipment in future years without the need for additional construction. For example, if a facility needs a total of 10 chargers by 2030, it is more cost-effective to build such capacity during the initial phase, while the charging equipment can be installed over multiple phases.

The ICF team will also produce cost estimates for charging infrastructure development. Cost components to be factored into the analysis can be split into capital, and operating costs. Key capital costs include the following:

- EVSE hardware (materials cost) and EVSE installation
- Software (e.g., charging management /smart charging software)
- Make-ready costs (e.g., site preparation—electrical work and wiring, special work such as boring and trenching, special site and structural considerations)
- Distribution grid equipment and infrastructure upgrades

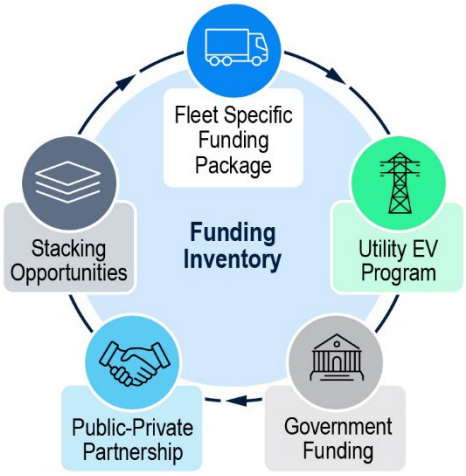
Operating costs are also critical to determining the business case of deploying EV charging infrastructure, including charger networking costs, charger data contract costs, and maintenance costs. The ICF team will estimate capital costs across each infrastructure development scenario as well as the ranges of possible operating costs associated with each scenario. The ICF team will also develop cost estimates by location for each phase of infrastructure implementation across the entire charging infrastructure development timeline.

### *Task 3.3: Fleet Transition Refresh*

Given the dynamic nature of the EV market, the ICF team has included in its offering one round of updates to the fleet transition plan over the course of the two-year on-call technical support service. This revision will encompass recalibrating vehicle replacement recommendations to align with the most recent vehicle models and their associated

pricing available at the time of the update. Moreover, this refresh will factor in any new or adjusted vehicle data and fleet or administrative policy furnished by the agency, provided it is presented in a format compatible with ICF's analytical tools. After this refresh, the ICF team will update the fleet transition planning section within the Master Plan. Additionally, we will refine the accompanying data to reflect the latest findings from our fleet assessment. The deliverable will also include the updated recommendations pertaining to vehicle technology choices, EV replacements, the TCO analysis, and the overarching fleet transition timeline. The fleet transition refresh can be initiated at any point during the period of performance of ICF's contract with the City of Santa Ana subsequent to the completion of the initial Master Plan.

### *Task 3.4: Funding Strategy*




California State and Federal governments are offering a suite of incentive and financing programs for transitioning the fleets to EVs. To minimize costs for City to transition to an electric fleet, the ICF team will develop a funding and financing plan that recommends specific grants, rebates, or various utility programs for the vehicles, charging infrastructure, and site readiness for the project, as necessary. In doing so, the ICF team will rely on the comprehensive Laws & Incentives database we maintain as part of the Alternative Fuels Data Center, which includes nearly 1,000 records of laws, incentives, loan funds, and programs related to EVs and EVSE, including those in California. This will include programs such as federal tax credits; federal grants; California's Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project; grants offered through the California Energy Commission's Clean Transportation Program; and incentive programs offered by regional air quality management districts and utilities such as SCE. Additionally, as owners and operators of EVSE, the City can also participate in CARB's Low Carbon Fuel Standard (LCFS) market and generate LCFS credits for providing EV charging services. These credits can contribute meaningfully to the return on investment of installing EVSE at their facilities.

At the conclusion of this task, the ICF team will compile a summary table with upcoming funding deadlines and pertinent application details. Additionally, the ICF team will prepare a funding package memo. This memo will present the funding opportunities in an organized format, such as a table or spreadsheet, categorically sorted by vehicle type – including light-duty and MD/HD – and charging infrastructure. It will detail associated application deadlines, specific requirements, and any other essential information to aid City in their application process.

### Task 3 Deliverables

- A memo summarizing the results of EV alternatives recommendations, TCO analysis for EV replacement, GHG impact analysis, the recommended roll-out timeline to install charging infrastructure, excepted usage trends, and cost estimates by location for each phase of charging infrastructure deployment.
- If the fleet transition refresh (Task 3.3) is exercised, a revised fleet transition plan with accompanying data that reflects any potential changes to the original vehicle replacement recommendations.
- Summary table with upcoming funding deadlines and relevant application information

## Task 4: Development of City Fleet Policies and Standards

To ensure that the City fleet remains reliable, efficient, and fit for purpose, it is important to formulate a procurement policy that aligns with the operational demands of the City's fleet maintenance and operations. This is critical as the fleet transitions to EVs. ICF will assist the City in developing policies that not only address the immediate operational needs but also anticipate future requirements, ensuring the fleet remains resilient and adaptable.

Building upon existing Santa Ana City policy review from Task 2, ICF will also research across other municipalities and public fleets to understand current practices and identify areas of improvement. By analyzing policies enacted by other municipalities, we aim to glean valuable insights, best practices, and lessons learned, ensuring that the City can benefit from proven strategies and avoid common pitfalls. Our team will then engage in benchmarking activities,

comparing the City's current practices against industry standards and leading practices in fleet management. This will include an examination of how other municipalities have successfully transitioned to EVs, with a focus on their vehicle replacement policies, vehicle and EV charging maintenance protocols (e.g., in-house vs. third party maintenance), operational adjustments, and EV charging policies. Through this analysis, ICF will identify key success factors and potential challenges, providing the City with a clear roadmap for effective policy development. In parallel, ICF will present findings from existing policy review to key City staff to identify issues and shortcomings with existing policy issues and any relevant federal or state mandates that may affect City policies.

Our team will also conduct a high level assessment of the current maintenance facilities to identify and recommend the necessary modifications to meet the needs of EVs. This evaluation will cover a range of considerations, including updates to equipment, adjustments to the layout, enhancements to safety measures, and other relevant factors, ensuring that the facilities are fully prepared to accommodate the unique requirements of EVs.

Building on the insights gained from the policy review and stakeholder consultations, ICF will then work closely with the City to draft a comprehensive vehicle replacement policy. The development of the policies will also be based on the findings from Task 3, which establishes clear decision thresholds for the replacement of existing vehicle inventory, ensuring that the City has all the necessary information to make informed and strategic decisions.

Additionally, we will consider policies to guide driver behavior, promoting efficient driving practices that maximize battery range and reduce wear and tear. Emergency procedures will also be outlined, providing clear instructions for handling vehicle breakdowns, charging station malfunctions, and other unforeseen events.

Leveraging ICF's extensive experience and track record of success in working with diverse municipalities across the country, we are uniquely positioned to bring forward a wealth of best practices and valuable insights to inform the development of optimal policies for the City of Santa Ana. Our engagement with various municipalities, particularly those of similar size and operational characteristics, has afforded us a deep understanding of the challenges and opportunities inherent in transitioning to EV fleet practices. We will draw upon this rich repository of knowledge to present the City with a curated set of proven strategies and policy recommendations. These will be tailored to the City's specific context, ensuring that they are both relevant and actionable.

### Task 4 Deliverables

- Presentation to City staff
- Draft comprehensive, clear, and consistent fleet policies and standards, submitted in Microsoft Word

## Task 5: Workforce Development and Staffing Levels

To successfully transition a City fleet to EVs, a comprehensive workforce development plan is necessary. The reasons for this include the fact that EVs have different maintenance requirements compared to traditional ICE vehicles, and existing fleet maintenance staff need to be trained to perform maintenance, repair, and service on EVs. Administrative staff to execute and administer the Master Plan will also need to be equipped with EV fleet operation knowledge. Furthermore, EV charging infrastructure is a complex technology that requires specialized skills and knowledge. Technicians need to be trained to install, maintain, and service charging stations. Fleet managers must also understand and navigate the intricacies of EV charging to ensure optimal vehicle utilization, determine the appropriate charging stations to use, monitor and manage battery health, and address any issues that may arise. Staffing levels for City fleet and coordinating adequate charging sessions for fleet vehicles between operating shifts are also essential considerations. Another critical aspect of workforce development is the need for ongoing training and education to keep the workforce up-to-date on the latest technology and best practices. As EV technology is still evolving, new advancements are expected to emerge over time, making it crucial to have well-trained personnel who can ensure the safety and reliability of the charging infrastructure. Therefore, a comprehensive workforce development plan that includes training plans and schedules by job specification, fuel type, maintenance class, vehicle type, and frequency is necessary to ensure that the City workforce is adequately prepared for the transition to EVs. This plan will equip the workforce with the necessary skills and knowledge to maintain the vehicles and infrastructure at an optimal level and address any challenges that may arise during the transition.

ICF will conduct an in-depth analysis of the City's existing training programs and resources to provide robust recommendations on workforce development. This analysis will include an assessment of the current knowledge and skill levels of the staff and an evaluation of the training curriculum to identify gaps in knowledge and skills that need to be addressed. To ensure that staff are well-prepared to maintain, service, and repair zero-emission vehicles and infrastructure, ICF will make targeted recommendations based on this analysis. To further support the City's workforce development, ICF will also provide a comprehensive estimate of labor hours for common vehicle repair tasks by zero-emission vehicle type. This analysis will help the City to plan for staffing levels and allocate resources effectively. We will also provide a comprehensive labor cost analysis for the repair and maintenance of electric fleets. The analysis will start with a comparation in vehicle equivalency units between zero-emission and fossil fuel vehicles by vehicle type. By understanding the differences in maintenance requirements between these two types of vehicles, the City can accurately plan for the staffing needs and labor hours to maintain a zero-emission fleet and infrastructure.

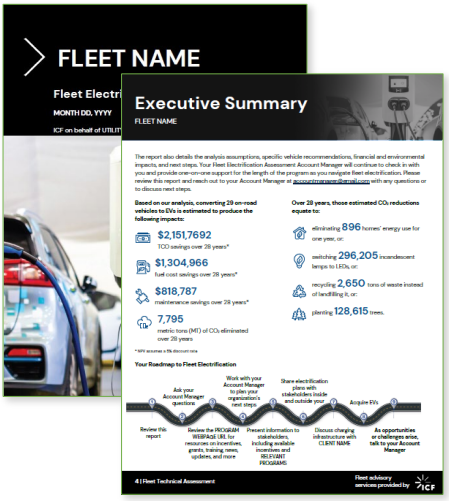
In addition, ICF will also elaborate the steps that the City can take to prepare its workforce for transition to EV. This could include taking advantage of trainings from the manufacturers and station suppliers, including maintenance and operations training, station operations and fueling safety, first responder training and other trainings that may be offered by the technology providers. In addition, the project team will assist the City to review current city job specifications for Fleet Maintenance, identify opportunities for ZEV maintenance, and make recommendations to address the opportunities. Finally, ICF will provide a detailed cost breakdown for the workforce development recommendations, including training, staffing, and any necessary resources. This cost breakdown will be developed to enable the City to make informed decisions regarding the allocation of resources.

### Task 5 Deliverables

- A memo summarizing recommendations for Fleet Maintenance workforce development and staffing levels

### Task 6: Fleet Electrification and Vehicle Charging Master Plan

Following the completion of all tasks, ICF will compile the findings and develop a draft Fleet Electrification and Vehicle Charging Master Plan for the City. This draft plan will encompass all analyses from the previous tasks, including an executive summary, EV replacement schedule, recommendations for charging infrastructure development, total cost of ownership, and emission benefits analysis. Additionally, the plan will cover budgeting needs, vehicle replacement/procurement policies, workforce and staffing level recommendations, and all other strategies and recommendations for infrastructure development, operation, and maintenance developed throughout the previous tasks. The plan will also identify opportunities and constraints related to EV charging infrastructure development, providing practical recommendations for the City to consider.




ICF will submit the draft Plan to the City for review and feedback by Feb 28, 2025, and then subsequently revise and submit a final Plan for approval by Mar 31, 2024. Both the draft and the final report will be sent electronically in Microsoft Word (*.doc or *.docx) format. ICF will also help the City to develop a PowerPoint presentation to summarize key findings and outcomes of the final Master Plan, which the City staff to easily adapt as needed to communicate and brief regional stakeholders on the project.

### Task 6 Deliverables

- A draft Fleet Electrification and Vehicle Charging Master Plan
- A final Master Plan, incorporating feedback from City staff and relevant stakeholders
- A PowerPoint Presentation accompanying the Master Plan

## *Project Schedule*

ICF will begin work once the City has approved the workplan and budget, assumed to be April 1, 2024. ICF proposes a 12-month period of performance to finish the required technical scope as stated in this proposal, from April 2024 through March 2025. As indicated in Task 1, we will hold regular monthly check-in calls between the City and the ICF team. **Exhibit 10** shows the proposed project timeline. After the completion of the Master Plan, ICF will also continue providing on-call technical support to the City for an additional two years with an option to refresh fleet transition plan, from April 2025 to March 2027. Major deliverables are noted with an "M+No.", as further illustrated in **Exhibit 11.**

***Exhibit 10. Proposed Project Timeline***

| Task | Apr 24 | May 24 | Jun 24 | Jul 24 | Aug 24 | Sep 24 | Oct 24 | Nov 24 | Dec 24 | Jan 25 | Feb 25 | Mar 25 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Task 1: Project Kick-off and Management | M1 | | | | | | | | | | | |
| Task 2: Existing Conditions Review | | | M2 | | | | | | | | | |
| Task 3: EV and Infrastructure Assessment | | | | | | M3 | | | | | | |
| Task 4: City Fleet Policies | | | | | | | | M4 | | | | |
| Task 5: Workforce and Staffing Levels | | | | | | | | | M5 | | | |
| Task 6: Draft and Final Master Plan | | | | | | | | | | | M6 | M7 |
| *On-Call Technical Support and Fleet Transition Refresh will be provided over the course of two years, from Apr 25 to Mar 27.* | | | | | | | | | | | | |

***Exhibit 11. Proposed Milestone Submitted to the City of Santa Ana***

| # | Milestone Deliverables |
|---|---|
| M1 | Kick-off meeting and minutes |
| M2 | Task 2 existing conditions memo |
| M3 | Task 3 EV and infrastructure memo, with accompanying datasets |
| M4 | Task 4 draft fleet policies and standards |
| M5 | Task 5 workforce and staffing levels memo |
| M6 | Draft City of Santa Ana Fleet Electrification and Vehicle Charging Master Plan |
| M7 | Final City of Santa Ana Fleet Electrification and Vehicle Charging Master Plan |

## References

CITY OF SANTA ANA

ATTACHMENT B

List and describe fully the contracts performed by your firm which demonstrate your ability to provide the supplies, equipment or services included in the scope of the proposal specifications. Attach additional pages if required. The City reserves the right to contact each of the references listed for additional information regarding your firm's qualifications.

### REFERENCE 1

Customer Name: City of Lodi

Address: 1331 S. Ham Ln., Lodi, CA 95242

Contact Individual: Melissa Price

Phone Number: 209.333.6811

EMAIL: mprice@lodi.gov

Year: 06/2022 - 06/2023

Contract Amount: $87,000

Description of supplies, equipment, or services provided:The City of Lodi has a fleet of more than 240 vehicles spanning across various vehicle types and use cases (e.g., bucket trucks, digger derricks, vac trucks, etc.). ICF supported the City to develop an EV replacement and infrastructure plan as the City plans to transition its fleet to zero emission vehicles in response to CARB's upcoming Advanced Clean Fleet (ACF) regulation. As part of this project, ICF developed a Phased Master Plan for the City to: 1) evaluate the City's fleet and provide recommendations to transition from fossil fuel vehicles to electric options; 2) deploy EV charging stations for public fleet vehicles; 3) assess City facilities' Capacity to support additional electrical load from charging operations; 4) estimate costs of the transition including vehicle replacement, infrastructure deployment, and operations; 5) highlight barriers to fleet conversion (e.g., technology availability, operational challenges) and strategies to overcome them; and identified potential innovative funding and financing sources to facilitate the transition to EVs and deploy charging infrastructure.

### REFERENCE 2

Customer Name: City of Laguna Beach

Address: 505 Forest Ave., Laguna Beach, CA 92651

Contact Individual: Michael Litschi

Phone Number: 949.497.0303

EMAIL: mlitschi@lagunabeachcity.net

Year: 05/2022- 05/2023

Contract Amount: $78,000

Description of supplies, equipment, or services provided: Transportation is a significant contributor to greenhouse gas (GHG) emissions and air pollution in the City of Laguna Beach. The City's fleet currently has approximately 122 vehicles, of which 85 are powered by gasoline, 20 are powered by diesel, and 17 are powered by propane. Transitioning this fleet to EVs can significantly reduce the City's carbon footprint, clearly demonstrate the City's leadership in and commitment to clean transportation and sustainability, and support the City's climate action plan (CAP). ICF supported the City in developing an EV Fleet and Charging Station Master Plan. In this plan, ICF evaluated the City's fleet and provided recommendations for transition from internal combustion engine (ICE) vehicles to clean transportation alternatives; developed EV charging infrastructure strategies for City fleet vehicles; provided guidance on decommissioning unnecessary propane and fossil fuel infrastructure; evaluated opportunities to install EV charging stations at City facilities that are available to the public; and identified potential funding sources and financing models to facilitate the City's EV transition.

### REFERENCE 3

Customer Name: City of Pittsburg, CA

Address: 65 Civic Ave., Pittsburg, CA 94565

Contact Individual: John Samuelson

Phone Number: 925.252.4271

EMAIL: jsamuelson@pittsburgca.gov

Year: 02/2022-06/2024

Contract Amount: $106,000

Description of supplies, equipment, or services provided: ICF is supporting the City of Pittsburg in its quest to transition to the use of zero emission vehicles (ZEVs). The goal of this project is to create a comprehensive master plan to establish a robust, future-proof charging network that would be capable of catering to the needs of the city's entire fleet. The plan is designed to adapt to an increase in the number of fleet vehicles in the future. Over the next decade, the plan will guide the City through the

conversion process of existing and additional fleet vehicles. The analysis will delineate the specific number, types, and locations of the EVSE required to support the transition to a fully electrified fleet. It will also provide a detailed breakdown of the associated costs and the proposed schedule for deployment. The plan goes beyond setting up charging infrastructure. It will also lay out detailed plans for each city facility, identify prospective maintenance needs and costs for EVSE, and highlight any necessary upgrades for the electrical system and grid. It is not only a deployment guide but also a roadmap for the continued efficient management of the fleet. In addition, the plan will include recommendations and guidelines for fleet management and best practices for the maintenance of EVs and EVSE. It will address contingency situations by providing a strategy for an emergency charging plan during unexpected power outages.

THIS FORM MUST BE COMPLETED AND INCLUDED WITH THE PROPOSAL.

PROPOSALS THAT DO NOT CONTAIN THIS FORM WILL BE CONSIDERED NONRESPONSIVE.

# Appendix A:
# Key Staff Resumes

## Sam Pournazeri, PhD, PE

### Senior Director, Transportation and Energy

Dr. Sam Pournazeri is the Senior Director of Clean Transportation and Energy at ICF, recognized nationally as an expert with over 15 years of experience in advanced transportation technologies, data analytics, emissions and energy modeling, and the development of sustainable transportation strategies. At ICF, Sam is currently assisting a dozen state and local governments with their transportation decarbonization and fleet electrification needs. He collaborates closely with a diverse range of clients, aiding in the design and development of strategies to accelerate the adoption of zero-emission and low-carbon alternatives in the transportation sector. In California, Sam's expertise and leadership have been particularly impactful in the area of municipal fleet electrification. His focused efforts on helping municipalities across the state electrify their vehicle fleets and deploy the necessary charging infrastructure demonstrate his deep industry knowledge and practical experience. This involves a comprehensive assessment of each municipality's current fleet composition, usage patterns, and energy requirements, setting the stage for a smooth transition to electric vehicles (EVs). Before his current role at ICF, Sam made significant contributions at the California Air Resources Board (CARB), playing a key role in shaping the Mobile Source Strategy, a detailed plan outlining the state's future freight and passenger transportation policies for the next three decades.

**Years of Experience**
Professional start date: 09/2008
ICF start date: 11/2021

**Education**

- PhD, Mechanical Engineering, University of California Riverside, 2012
- BSc, Mechanical Engineering, Sharif University of Technology, 2008

**Certifications and Registrations**

- California Certified Professional Mechanical Engineer (PE), License No. M36830

## PROJECT EXPERIENCE

**EV Fleet and Charging Master Plan—City of Laguna Beach, 06/2022–06/2023**

**Project Manager.** Sam is co-leading the development an EV Fleet and Charging Station Assessment Master Plan for the City of Laguna Beach, CA that (1) evaluates the City's fleet and provide recommendations to transition from fossil fuel vehicles to clean transportation options; (2) deploys EV charging stations for City fleet vehicles; (3) provides guidance on how to decommission unnecessary propane and fossil fuel City infrastructure; (4) installs EV charging stations throughout the community for public use; and (5) identifies potential funding sources to facilitate transition to an all-electric fleet

**Citywide Fleet Electrification—City of Lodi, 08/2022–05/2023**

**Project Manager.** Sam led the development of a Citywide Fleet Electrification Plan for the City of Lodi, CA, transitioning their fleet away from fossil fuels and deploying the necessary charging infrastructure to power their EVs. The primary objective of this project was to develop a plan enabling the City to meet the compliance requirements of the Advanced Clean Fleet regulation in the most cost-effective manner possible. As part of this project, Sam helped the City of Lodi to (1) evaluate the City's fleet and provide recommendations to transition from ICE vehicles to EVs; (2) develop recommended charging infrastructure implementation strategies; (3) estimate the costs to transition from ICE vehicles to EVs and to develop and deploy charging infrastructure; (4) discuss the barriers to fleet transition and describe strategies to overcome them; and (5) develop a plan to leverage incentive funding and evaluate options for financing and innovative business models.

**Fleet Electrification Planning—City of Pittsburg, 1/2023–Present**

**Project Manager.** Sam is spearheading the formulation of a comprehensive Fleet Electrification Plan for the City of Pittsburg, CA. The main aim is to shift the city's fleet from reliance on fossil fuels to EVs and to establish the essential

charging framework to power these EVs. Sam's role in this pivotal project encompasses several key tasks. As part of this project, Sam is assessing the City of Pittsburg's current fleet and proposing feasible ways to transition the fleet from ICE vehicles to EVs. Secondly, Sam is leading the team to formulate effective strategies for the installation and operation of the necessary EV charging infrastructure. Third, Sam is leading the task of estimating the financial implications of both transitioning to EVs and setting up the requisite charging network. Fourth, he is also helping the City to identify potential roadblocks to the fleet's transition and proposing viable solutions to navigate these challenges. Lastly, Sam is developing a strategy to capitalize on incentive funding opportunities and exploring various financing options and innovative business models.

**Fleet Electrification Planning—Midpeninsula Regional Open Space District, 6/2023–Present**

**Project Manager.** As the project manager for the two-phase project at the Midpeninsula Regional Open Space District (Midpen), Sam is leading the development of a master plan, focusing on evaluating Midpen's fleet, transportation needs, staffing, and budgetary constraints, along with current operating and maintenance costs. His goal is to strategize the transition of Midpen's fleet to clean transportation options, including zero emission and fossil fuel–free technologies, by 2030. This involves assessing the need for charging and fueling infrastructure, providing guidance on data management tools for efficient fleet operations, conducting cost-benefit analyses, developing a decision-making tool for future vehicle replacements, and identifying potential funding sources for the green fleet transition. Following the successful completion of Phase 1 and upon Midpen's approval, Sam will lead Phase 2, which entails performing a market assessment of available fleet management systems and evaluating their compatibility with Midpen's operational needs. Once a system is selected, he will collaborate with the chosen vendors and Midpen staff to configure the system, preparing training materials and providing guidance to ensure a seamless transition and efficient operation of the new green fleet.

**Fleet Electrification Planning—City of Iowa City, 4/2023–Present**

**Project Manager.** As the project manager, Sam is assisting the City of Iowa City with the development of a fleet electrification and EV infrastructure plan. This ambitious project aims to transition the city's fleet of nearly 200 vehicles to electric vehicles (EVs). In this capacity, Sam is responsible for designing a tailored EV replacement plan, which involves a detailed analysis of each vehicle's usage, lifecycle, and the appropriate timing for replacement. Alongside this, he is developing a comprehensive EV infrastructure plan, ensuring that the necessary charging stations and support systems are in place to facilitate this transition. A key aspect of Sam's role involves conducting an in-depth grid and facility capacity analysis. This task is particularly challenging, as it requires coordination and collaboration with half a dozen utilities serving the city's facilities, necessitating a nuanced understanding of the local energy infrastructure and its capabilities. Through these efforts, Sam is crafting a blueprint that will guide the City of Iowa City in transitioning its fleet to EVs over the next 15 years.

**Fleet Electrification Implementation Rollout Strategy—City of Raleigh, 06/2022–12/2023**

**Technical Lead.** This project is intended to develop a Fleet Electrification Implementation Rollout Strategy for the City of Raleigh, NC to (1) evaluate the City's fleet and provide recommendations to transition from fossil fuel vehicles to clean transportation options; (2) identify potential funding sources and procurement strategies; (3) develop a sustainable EV charging infrastructure plan for City fleet vehicles; (4) provide a training plan and educational guidelines for City staff who will operate EVs; (5) review the City's EV charging software system solution and recommend best practices for aligning software; and (6) provide recommendation to improve accessibility and address equity issues through electrification and charging infrastructure deployment. This plan will serve as a blueprint for how the City can transition its fleet to electric and alternative fueled technologies and deploy the charging infrastructure needed to power them.

**Clean Technology Compendium—Southern California Association of Governments (SCAG), 1/2023–Present**
**Project Manager.** Sam is currently leading a project for SCAG focused on the development of a Clean Technology Compendium spanning multiple transportation sectors, including passenger vehicles, medium- and heavy-duty vehicles, buses, and rail. As part of this initiative, Sam's team has conducted a comprehensive desk research and

vendor survey, gathering information on various commercially available technologies in the market. They have diligently evaluated these technologies based on factors such as the pace of commercialization, environmental impact, costs, and other relevant criteria. The project's objective is to create a technology compendium that not only showcases the available clean technologies but also provides specific recommendations to SCAG and its regional partners on how to expedite the adoption of these technologies in the area.

**Clean Truck Technology Comparative Report—LA Metro, 05/2022–09/2022**

**Deputy Project Manager.** Sam is co-managing a project with LA Metro to provide an objective assessment of four types of vehicle technologies (i.e., diesel, hydrogen, battery electric, and natural gas) over the immediate, short, medium, and long terms, on market maturity, infrastructure and energy supply readiness and needs, the cost of ownership, emissions and public health impacts, and barriers to adoption. As part of this report, Sam provided insights on the level of technology transformation needed for LA Metro to meet its public health and climate goals, as well as the scale of fueling and charging infrastructure buildout to support this transition. The report will serve as a technology and infrastructure roadmap to inform decision-making among policymakers and LA Metro staff.

**Medium- and Heavy-Duty (MD/HD) Vehicle Zero Emission Vehicle (ZEV) Blueprint—San Diego Association of Governments (SANDAG), 06/2022–Present**

**Project Manager.** Sam is leading an effort with SANDAG to develop a MD/HD ZEV blueprint that guides the transition of freight and transit vehicles to zero emission technology and highlight the challenges related to technology readiness, infrastructure availability, and cost. As part of this work, Sam will be forecasting the MD/HD ZEV adoption in the region along with the charging and fueling infrastructure needed to support them. The blueprint will also identify key implementation strategies that the region can take to accelerate the adoption of zero emissions MD/HD vehicles.

**Zero Emission Truck Infrastructure—Southern California Association of Governments, 01/2023–Present**

**Project Manager.** As the project manager on the ICF side for the Southern California Association of Governments' (SCAG) Zero Emission Truck Infrastructure (ZETI) project, Sam plays a crucial role in developing a pioneering and comprehensive plan for a zero-emission vehicle (ZEV) charging and fueling network for medium and heavy-duty vehicles across Southern California. His responsibilities include overseeing assessment of fueling infrastructure needs, siting of zero emission infrastructure, craft strategies for deployment of these infrastructure throughout the region.

**Quantifying the Environmental Justice Impacts of Zero-Emission Vehicles – International Council on Clean Transportation, April 2022 -Present**

**Project Lead.** Sam is leading a team of technical and policy analysts across three different firms (ICF, Forth. and Cenex) to assess the disparity in ZEV ownership and usage across various markets, evaluate current metrics and approaches adopted by different jurisdictions to quantify ZEV equity impacts and examine existing governments' strategies to enhance equity and promote EJ within their ZEV policies. The outcome of this research is to provide International ZEV Alliance with recommendations on additional strategies and mechanisms that can be employed to strengthen the equity aspects of ZEV policies.

**EMPLOYMENT HISTORY**

ICF. Senior Director of Clean Transportation & Energy. San Francisco. 3/2023–Present
ICF. Director of Clean Transportation & Energy. San Francisco. 11/2021–3/2023.
California Air Resources Board. Branch Chief. Sacramento. 02/2012–10/2021.

## Theodora Konstantinou, PhD

### Lead Consultant, Transportation and Energy

Dr. Theodora Konstantinou is a lead transportation and energy consultant at ICF with seven years of experience in transportation electrification and decarbonization. Her work at ICF focuses on developing electric vehicle (EV) roadmaps, charging infrastructure plans, and incentive programs at the state and local levels. Prior to joining ICF, she gained experience at the EV Research Center of the Institute of Transportation Studies at the University of California, Davis, where she led and oversaw research projects related to the used vehicle market and its implications for EVs, equity concerns regarding the impact of incentives on EV adoption, and EV adoption in rural areas. Dr. Konstantinou has worked on projects funded by organizations and agencies, such as the National Science Foundation, the Department of Energy, the California Air Resources Board, and the Indiana Department of Transportation.

She holds a PhD in Transportation and Infrastructure Systems Engineering from Purdue University, specializing in medium and heavy-duty vehicle electrification by examining the barriers to adoption and the proper implementation of EV technology in the trucking industry.

**Years of Experience**
Professional start date: 08/2017
ICF start date: 10/2023

**Education**

- PhD, Civil Engineering, Purdue University, 2022
- MS, Civil Engineering, Purdue University, 2018
- BS, Rural & Surveying Engineering, National Technical University of Athens, 2016

**Technical Skillset:**

- Microsoft Office, ArcGIS, NLOGIT, Python

## PROJECT EXPERIENCE

**City of Lodi Electric Vehicle Charging Infrastructure Master Plan, City of Lodi, 10/2023–Present**

**Project Manager**. Theodora is overseeing the project funded by the City of Lodi to develop a comprehensive and thoroughly considered EV Charging Infrastructure Plan for the City of Lodi. This Plan provides a systematic approach to building a publicly accessible EV infrastructure network to safely facilitate the operation of EVs within the City and surrounding areas.

**Pennsylvania Zero-Emission Vehicle (ZEV) Roadmap, Pennsylvania Department of Environmental Protection, 10/2023-Present**
**Technical Lead.** Theodora is helping the Pennsylvania Department of Environmental Protection to update its 2018 EV Roadmap. Given her experience in medium- and heavy-duty vehicle electrification, Theodora will bridge a significant gap in the current EV roadmap by undertaking a thorough assessment of Pennsylvania's current medium- and heavy-duty zero-emission vehicle (ZEV) landscape, and aiding in the development of near-, mid-, and long-term strategies for the accelerated adoption of ZEVs and their associated infrastructure in Pennsylvania.

**San Diego Regional Zero-Emission Vehicle Incentive Program Strategy, SANDAG, 10/2023-Present**
**Project Support.** Theodora is contributing to the establishment of a zero-emission vehicle incentive program (ZEVIP) for the San Diego region. The ZEVIP has the goal to facilitate the acquisition of more than 100,000 zero-emission passenger vehicles from 2025 to 2035, with a particular focus on increasing ZEV purchases among residents in low- and moderate-income households and those living in disadvantaged and low-income communities. Theodora will help identify participation barriers, lessons learned from existing programs, and devising incentive options for new and used vehicles.

**State of Zero-Emission Vehicle Secondary Market and Accessibility Impacts in California's Underserved Communities, California Air Resources Board, 09/2022-09/2023**
**Project Manager.** The goal of this project is to provide policy recommendations based on a deep understanding of the impact of incentive programs on the light-duty EV market and how the secondary EV market can potentially

increase access to clean mobility options for underserved communities in California. Theodora played a pivotal role in shaping the project's direction, ensuring effective collaboration among team members and providing technical expertise. Theodora also led the design of a survey, distributed to EV and non-EV owners, a crucial step in gathering essential data to support this project and various ongoing research initiatives.

**Understanding the Heterogeneity of Plug-in EV Owners in Rural California, Statewide Transportation Research Program, 10/2022-08/2023**
**Technical Expert**. As California moves toward 100% Zero-Emission Vehicle (ZEV) sales, it is important to characterize the diversity of rural vehicle owners to understand the effect current and future ZEV policies might have on rural areas and inform future policies around rural ZEV adoption. Theodora provided technical expertise and guidance in the appropriate analysis methods and in extracting important insights from the results to understand the heterogeneity of vehicle ownership, enabling the formulation of effective policy support for rural communities.

**Investigating the Influence of Incentives for Low-income and Disadvantaged Households on Electric Vehicle Purchase Decisions in California, California Air Resources Board, 11/2022-08/2023**
**Technical Expert.** Given the widespread availability of incentive programs and the high cost of offering incentives, understanding consumer response to these subsidies and quantifying the benefits and costs of their implementation is essential. Theodora served as a technical expert, offering guidance in the execution of statistical analyses aimed at investigating the impact of income-eligibility-based programs on consumers' decisions to purchase ZEVs. Theodora's expertise was instrumental in ensuring the analyses were conducted effectively and understanding the relationship between incentives and ZEV adoption and its implications.

**Evaluating the Potential of Truck Electrification and its Implementation from User and Agency Perspectives, National Science Foundation & Indiana Department of Transportation (INDOT), 01/2019-08/2022**
**Project Manager.** Theodora organized and directed this research project from inception to completion. Theodora designed the research methodology, managed resources effectively, setting objectives, and ensuring the project's successful outcomes. In this project, Theodora developed a framework to inform policy making and enhance electric vehicle (EV) preparedness in the trucking industry in the United States through the study of two interrelated elements: (a) the adoption of electric trucks and (b) the appropriate implementation of electric truck technology.

**A Strategic Assessment of Needs and Opportunities for Wider Adoption of Electric Vehicles in Indiana, Indiana Department of Transportation (INDOT), 09/2020-03/2022**
**Project Lead.** Theodora led a project team to investigate the challenges and opportunities of developing infrastructure to support EV operations in Indiana. This initiative included creating a strategic plan for INDOT, focusing on EV charging stations and related infrastructure. Theodora also played a leading role in planning the strategic deployment of charging stations for both light and heavy-duty vehicles and designing a framework to assess the impact of EV adoption on fuel tax revenue. Theodora also conducted interviews with key stakeholders to evaluate strategic partnerships and business models for EV charging infrastructure and provided recommendations for enhancing EV readiness.

**EMPLOYMENT HISTORY**

- ICF. Lead Transportation and Energy Consultant. Los Angeles, CA. 10/2023–Present.
- University of California, Davis-Electric Vehicle (EV) Research Center. Researcher. Davis, CA. 09/2023–09/2024.
- Purdue University. Research Assistant. West Lafayette, IN. 08/2017-08/2022.

## Stephanie Kong, PhD

### Senior Manager, Transportation Electrification

Dr. Stephanie Kong is a senior transportation electrification consultant at ICF and has eight years of experience in air pollution measurement, vehicle activity and emissions modeling, GHG and criteria pollutant emissions analysis, and clean transportation policies. Dr. Kong received her Ph.D. from California Institute of Technology, where she focused on air quality modeling using complex statistical and data analytical tools. During her time at the California Air Resources Board (CARB), she led the development of California's transportation emission modeling tools and was the technical lead behind CARB's medium and heavy-duty zero emission fleet regulations. Upon joining ICF, she has been leading multiple projects to help state and local governments to develop zero emission vehicles (ZEV) strategies and ZEV infrastructure deployment planning.

**Years of Experience**
Professional start date: 09/2015
ICF start date: 02/2023

**Education**

- PhD, Chemical Engineering, California Institute of Technology, 2020
- MS, Chemical Engineering, California Institute of Technology, 2018
- BS, Chemistry, Harvey Mudd College, 2015

**Technical Skillset:**

- Python, ArcGIS, SQL, R, Microsoft Office

## PROJECT EXPERIENCE

**Energy White Fleet Electrification Assessment, LAUSD, 12/2023–Present**

**Project Manager.** Stephanie is leading the white fleet electrification plan for the Los Angeles Unified School District (LAUSD), the second largest school district in the country. The project includes evaluating the current fleet characteristics, provide cost-effective and technologically feasible recommendations for electric vehicle (EV) and equipment replacement, and conduct a comprehensive analysis to inform the number, type, and location of electric vehicle supply equipment (EVSE) needed to support full fleet electrification along with their associated cost and schedule for deployment. The project is also intended to provide comprehensive funding and financing strategies tailored around LAUSD's needs to overcome the cost barriers for transitioning the fleet to EVs and building out the needed charging infrastructure to support them.

**Pennsylvania Zero-Emission Vehicle (ZEV) Roadmap, PADEP, 10/2023-Present**

**Deputy Project Manager**. Stephanie is working with the Pennsylvania Department of Environmental Protection (PADEP) to update and expand Pennsylvania's zero-emission vehicle (ZEV) Roadmap. The new version of the Roadmap will update PA's strategy related to light-duty EVs in PA and add sections with analysis and recommendations relating to Medium and Heavy-Duty Electric Vehicles and Hydrogen Fuel-Cell Vehicles. The Roadmap aims to produce informative and actionable recommendations that assist in facilitating increased ZEV adoption and maximize societal benefits to the citizens of Pennsylvania.

**Regional Transportation and Climate Change Multimodal Measures, Met Council, 08/2023–Present**

**Project Manager.** Stephanie is leading the development of recommended methodologies to the Metropolitan Council for estimating GHG impacts. These methodologies will be used for individual projects for the Regional Solicitation and potentially for packages or categories of projects, such as the Transportation Improvement Plan and the Long-Range Transportation Plan. The project provides a holistic overview of GHG emissions from various phases, including vehicle lifecycle or well-to-wheel emissions, construction and system user emissions, embodied materials emissions, as well as emissions from vehicle manufacturing and disposal. In addition, the project also evaluates the impact of induced travel demand from projects such as roadway capacity expansion and corridor speed improvements.

**Assess the Battery-Recharging and Hydrogen-Refueling Infrastructure Needs, Costs and Timelines Required to Support Regulatory Requirements for Zero-Emission Vehicles – CRC, 06/2023–Present**

**Project Manager**. Dr. Kong is overseeing the project funded by the Coordinating Research Council (CRC) to assess the national demands and cost of charging and hydrogen fueling infrastructure in support of transition the light-, medium-, and heavy-duty vehicles to zero emission technologies. The project aims to thoroughly evaluate the infrastructural needs in light of the anticipated surge in ZEVs across the U.S and determine its implications on the energy supply infrastructure.

**San Diego Regional Zero-Emission Vehicle Incentive Program Strategy, SANDAG, 06/2023-Present**

**Project Manager.** Stephanie is leading the establishment of a zero-emission vehicle incentive program (ZEVIP) for the San Diego region. The ZEVIP aims to support the purchase of over 100,000 ZEV passenger vehicles between 2025-2035, while enabling significantly more ZEV purchases by residents in low- and moderate-income (LMI) households and/or people residing in Disadvantaged and Low-Income Communities. In addition, Stephanie is also helping SANDAG to establish inter-regional coordination on ZEV incentive programs with other MPOs and air districts and support local jurisdictions to meet their Climate Action Plan and clean transportation goals.

**Moreno Valley Electric Vehicle Charging Infrastructure Master Plan, City of Moreno Valley, 05/2023-Present**

**Deputy Project Manager.** Stephanie is helping the City of Moreno Valley to develop an EV charging infrastructure master plan that aims to provide a systematic approach for the City to build a public accessible EV infrastructure network to safely facilitate the movement of electric vehicles within the City and surrounding areas. Stephanie is leading the efforts to evaluate EV adoption trends within the City, as well as identify locations and communities where public charging infrastructure will be needed. In addition, Stephanie is also helping the city to identify opportunities and apply for future capital grants through federal and state grant programs.

**Medium and Heavy-Duty Vehicle ZEV Blueprint, SANDAG, 04/2023–02/2024**

**Task Lead**. Stephanie is leading the development of San Diego Association of Government (SANDAG) near-term and long-term ZEV implementation strategies that the region can take to accelerate the adoption of zero emissions medium- and heavy-duty (MD/HD) vehicles and infrastructure deployment. In addition, the strategies will also account for workforce training and development needs for the region to meet the MD/HD ZEV goals.

**California's Advanced Clean Fleets Regulation (ACF) —California Air Resources Board (CARB), 07/2020–02/2023**

**Technical Lead.** The Advanced Clean Fleets (ACF) regulation is part of a comprehensive strategy that accelerates the adoption of zero-emission vehicles (ZEVs) in the medium and heavy-duty truck sector. The regulation requires State and Local government fleets, drayage trucks, high priority and federal fleets to phase in ZEVs over time starting 2024. Dr. Kong oversaw the development of emission benefits analysis and technology mix projection for this regulation. She worked closely with stakeholders from different regulated sectors and conducted numerous research and analyses to quantify the overall emissions, health, and economic benefits of the proposed regulation.

**California's Mobile Source Emissions Inventory—CARB, 07/2020–02/2023**

**Technical Lead.** EMFAC is the official statewide emission inventory model that CARB uses to assess emissions from on-road motor vehicles including cars, trucks, and buses in California, and to support CARB's planning and policy development. Dr. Kong was the technical lead behind the latest EMFAC model updates, where she analyzed and incorporated substantial information on vehicle population, activity, and criteria pollutants and GHG emissions into the model. In addition, Dr. Kong also initiated the efforts to improve the spatial resolution of the existing model using transportation big data.

## EMPLOYMENT HISTORY

ICF. Senior Transportation Electrification Consultant. Sacramento/Irvine. 02/2023–Present.
California Air Resources Board. Air Pollution Specialist. Sacramento. 07/2020–02/2023

## Ambika Coletti

### Senior Manager, Beneficial Electrification

Ambika Coletti has over 9 years of experience as an energy efficiency and beneficial electrification consultant. She specializes in the design and management of beneficial electrification and fleet assessment programs. Her work includes conducting market assessments, running cost-benefit analyses, and developing and executing implementation plans. Ambika also has expertise in project management, data analysis, technical research, program reporting, business development, remote team management, and stakeholder outreach.

**Years of Experience**

Professional start date: 7/2012

ICF start date: 07/2012

**Education**

- BS Environmental Science with Business Minor, Tulane University, 2012

**Certifications/Registrations**

- Microsoft Office Specialist Certification Excel and Access
- ICF Enterprise Program Management (EPM) Certified

**Professional Affiliations**

- Member, Association of Energy Services Professionals (AESP), 2014-Present

## PROJECT EXPERIENCE

**Fleet Electrification Assessments, Multiple Clients, 2020–Present**
**Fleet Assessment Technical Lead and Model Architect.** Ambika led the development and regular updates of ICF's proprietary Fleet Assessment Model which is used to evaluate and identify fleet electrification opportunities. Ambika oversaw the research and development of ICF's electric vehicle library (with over 500 vehicle models, updated monthly), electric vehicle supply equipment assumptions, emission reduction and total cost of ownership calculations, and alternative funding sources (EV incentive and grant programs). She manages a team of eight analysts to conduct fleet assessments and produce meaningful reports used to educate customer stakeholders on the financial and environmental benefits of fleet electrification. To date Ambika has supported fleet assessments for over 50 customer fleets and 45,000 vehicles. Clients include National Grid (2020-Present), Consumers Energy (2021-Present), Duquesne Light Company (2021-Present), Salt River Project (2021-Present), Maryland Energy Administration (2021-Present), Central Hudson Gas & Electric (2021-Present), Avangrid (2021), City of Honolulu (2021), and Colorado Springs Utility (2021).

**Fleet Electrification Program, Seattle City Light, Seattle, WA 2022–Present**
**Program Manager.** Ambika manages Seattle City Light's program to provide fleet advisory services, charging solution incentives, and make-ready infrastructure support to fleet customers. She manages the program team, client relationships, marketing, risk management, outreach, data tracking, key performance indicators, measurement and verification, and finances.

**Clean Air Technologies Program, CenterPoint Energy, Houston, TX, 2014–Present**
**Program Manager.** Ambika manages CenterPoint Energy's program to promote electric forklifts and electric stand-by truck refrigeration units. She manages the program team, client relationships, marketing efforts, outreach, data tracking, progress to goals, key performance indicators, and finances. Ambika helped quadruple the size of CenterPoint Energy's trade ally network, assisted with customer grant applications, and provided monthly client invoices and reports. She provided project technical support from 2014 to 2016, assumed a role as account manager in 2017, and now manages the project and replacement account manager.

**Beneficial Electrification Program Implementation, Multiple Clients, U.S. 2014–Present.**
**Operations Manager**. Ambika supports or supported six of ICF's beneficial electrification programs for electric utility clients, from kickoff meetings through start-up and implementation. She manages a team of five analysts, sharing best practices across programs and coordinating day-to-day program activities between marketing, information technology, account managers, program managers, project engineers, and clients. Clients include Alliant Energy

(2015–2018), Duke Energy (2018–2019), Ameren Missouri (2018–2019), JEA (2014–Present), Entergy (2016–Present), and the Salt River Project (2017–Present).

**NY State EVSE Data Collection and Site Verification Support, New York State Energy Research and Development Authority (NYSERDA), 2021-Present.**
**DCFC Program Administration Lead**. Ambika leads ICF's support of NYSERDA's DCFC Program by coordinating application and site reviews. Provides ongoing program management support, progress reports, and program analytics.

**Beneficial Electrification Opportunity Assessments, Multiple Utility Clients, U.S., 2014–Present.**
**Technical and Modeling Lead.** Ambika led or provided subject matter expertise on 18 utility beneficial electrification opportunity assessments across diverse geographies. She continues to refine and develop ICF's opportunity assessment process by expanding ICF's technology library to over 80 non-road and on-road equipment types, updating the cost-benefit analysis model to accommodate standard energy industry cost-effectiveness tests, and standardizing implementation plan recommendations. She has helped utilities navigate regulatory frameworks and supported four clients in submitting proposals and technical workpapers with their public service commissions to implement beneficial electrification programs. Clients have included JEA (2014, 2019), Entergy (2015), Alliant Energy (2015), the Salt River Project (2017), Ameren (2017), the Public Service Company of Oklahoma (2017), Duke Energy (2018), CenterPoint Energy (2019), American Electric Power West Virginia (2019), PacifiCorp (2019), CPS Energy (2019), SaskPower (2020), North Carolina's Electric Cooperatives (2020), Liberty Utilities (2020–2021), Evergy (2021), and Cleco Power (2021).

**Electrification Potential Study for Canada, Natural Resources Canada, 2020–2021.**
**Model Architect and Technology Subject Matter Expert.** Ambika supported the development of a systematic, informed approach to planning and prioritizing future programs and policies to encourage beneficial electrification across Canada. She managed the development of the technical assumptions and market potential for 56 on-road and non-road vehicle measures.

**Airport Ground Support Equipment (GSE) Study, AirPro Finland, Finland, 2019.**
**Technical Expert.** Ambika conducted a global energy and emission impact study of airport ground support equipment for the second largest ground handler company in Finland. She provided technology assessment and emission reduction methodology guidance and expertise.

## Renee Rainey, MPP

### Senior Manager, Project Management

**Years of Experience**

Professional start date: 04/2005

ICF start date: 12/2012

**Education**

- MPP, University of California, Berkeley, 2006
- BS, Economics and English, cum laude, James Madison University, 1999

Renee Rainey has over 23 years of experience in social science research, organizational assessment, evaluation, and project management. Her areas of expertise include data collection and analysis, workforce development, training and technical assistance, performance data and indicators, and evaluation design. Ms. Rainey brings a range of qualitative assessment, quantitative analysis, and leadership skills to her client engagements with a focus on improving human services and reevaluating systems to better serve people, especially those who have historically been underrepresented and disenfranchised.

In partnership with the California and Nevada International Brotherhood of Electrical Workers (IBEW)/National Electrical Contractors Association (NECA) Labor-Management Cooperation Trust (LMCC), Ms. Rainey led a High Roads Training Partnership California Workforce Development Board (CWDB) grant to expand energy savings and microgrid training and certification (EESAMTAC) and quality jobs in California. She also recently completed a project with the California State Transportation Agency (CalSTA), the California Transportation Commission (CTC), and the California Department of Transportation (Caltrans), conducting a series of equity listening sessions across the state. She was previously the lead technical liaison, developing and implementing the Online CalWORKs Appraisal Tool (OCAT), a work readiness assessment used by all 58 California counties. Prior to her work at ICF, Ms. Rainey was an economic consultant at National Economic Research Associates (NERA) responsible for large-scale data collections and economic analysis of mergers and acquisitions for Fortune 500 companies. Ms. Rainey was also previously a public sector management consultant at Booz Allen Hamilton, where she worked with high-level executives within the federal government to define organizational problems, identify and prioritize solutions, and create roadmaps for organizational change.

### PROJECT EXPERIENCE

**Low Carbon Economy High Roads Training Partnership EESAMTAC—CWDB, Los Angeles, CA, 6/2021–3/2023.**

**Project Manager.** Ms. Rainey was the project manager for the EESAMTAC led by ICF and the California and Nevada IBEW/NECA LMCC to expand training and certification to prepare electricians, electrical apprentices, and electrical contractors for the safe and effective assembly, testing, commissioning, maintenance, repair, retrofitting, and decommissioning of energy storage and microgrid systems. The project will expand training from 6 to 21 electrical joint apprenticeship training centers over a 2-year period.

**Clearinghouse for Labor and Evaluation Research (CLEAR)—DOL, Los Angeles, CA, 8/2016–Present.**

**Senior Evaluator.** Ms. Rainey serves as a senior evaluator for CLEAR, DOL's flagship research and evaluation clearinghouse, the central repository for labor and workforce research and evaluation studies, targeting researchers, practitioner, policy makers, and the general public. The clearinghouse includes impact studies, outcome analyses, process evaluations, and descriptive statistics reports in a range of labor-focused topic areas. Ms. Rainey leverages her significant research, evaluation, and methodological expertise to review individual studies for the clearinghouse, assessing the quality of the evidence through a rigorous process and ultimately summarizing each study's key findings, approach, and quality in a succinct profile to post to CLEAR. Study topic areas have included child labor, mine safety, literacy, and community colleges. In addition, Ms. Rainey provides expertise in developing topic area protocols and reviewing and evolving CLEAR policies and procedures.

**OCAT—California Department of Social Services, Los Angeles, CA, 12/2015–6/2021.**

**Technical Liaison.** Ms. Rainey was the technical lead and liaison with the ICF technology development team for the California Department of Social Services' standardized online appraisal tool developed to assess the strengths and barriers of the California welfare-to-work population. Ms. Rainey led requirement gathering, user acceptance testing, development of the rules and logic behind the tool, the release management process, cataloguing and prioritization of tool fixes and enhancements, the change control board process, report and dashboard design, and help desk operations.

**Asset Mapping Tool—San Bernardino County Workforce Development Department, San Bernardino, CA, 6/2018–3/2021.**

**Project Manager.** Ms. Rainey led an information technology development effort on behalf the San Bernardino County Workforce Development Department to join and analyze disparate workforce related datasets using geographic information system (GIS) maps and Tableau to develop dashboards, maps, and visuals of county related assets, resources, and demographics at a census tract level.

**California's Clean Energy Workforce, California Skilled Energy Workforce Market Assessment—The Energy Skills Collaborative, Los Angeles, CA, 4/2019-7/2019.**

**Project Manager.** Ms. Rainey led a team to conduct a market research assessment articulating the current state of California's Clean Energy workforce and assessing how California clean energy policies will affect occupational demand. The report also examined impacts on clean energy jobs as a result of new and emerging technologies, additional skills needed by new and incumbent workers because of technological advances, and a gap analysis quantifying the difference in supply and demand for workers in energy-related occupations.

**Employment History**

ICF. Senior Manager, Fairfax, VA and Los Angeles, CA,12/2012–Present.
Booz Allen Hamilton, Associate, Washington, DC, 4/2011–11/2012.
ICF. Senior Technical Specialist. Lake Charles, LA and Fairfax, VA, 2/2007–4/2011.
National Economic Research Associates, Washington DC and San Francisco, CA, Senior Analyst, 2/2000–6/2004, 5/2006-11/2006.
loveLife, HIV prevention NGO, Consultant, Johannesburg, South Africa, Summer 2005.
UCSF, Institute of Health Policy Studies, Berkeley, CA, Consultant, Spring 2005.

## Stacy Noblet

### Vice President, Transportation Electrification

Stacy Noblet is a transportation electrification subject matter expert with nearly 20 years of experience helping federal agencies, state and local governments, and utilities to plan, design, and implement clean transportation strategies and programs. Stacy's expertise is in on-road electric vehicles (EVs) and charging infrastructure. She has contributed to national and local efforts to increase EV adoption through supportive infrastructure and policy development since modern-day EVs hit the roads in 2010. Stacy leads EV readiness plans, utility EV charging program design and execution, regulatory and policy tracking, and outreach and engagement. Her work includes the range of fuels and technologies that make up the clean transportation industry. She is well versed in gaseous fuels, biofuels, hydrogen, and fuel efficiency measures to reduce petroleum consumption. Her support of the U.S. Department of Energy's Alternative Fuels Data Center (AFDC) spans more than a decade.

**Years of Experience**
Professional start date: 05/2004
ICF start date: 05/2004

**Education**

- MS, Environmental Sciences and Policy, The Johns Hopkins University, 2012
- BS, Environmental Studies, Western Michigan University, 2003
- BS, Geography, Western Michigan University, 2003

### PROJECT EXPERIENCE

**Transportation Electrification Strategy, Program Design, and Regulatory Support—Pepco Holdings (PHI), 2022–Present**
**Project Manager and Subject Matter Expert.** Stacy is leading the strategy facilitation, program design, internal stakeholder engagement, cost estimation, and testimony development for PHI's proposed transportation electrification programs in the District of Columbia and Maryland jurisdictions.

**EV Charging Make-Ready Incentive Program Implementation—Atlantic City Electric (ACE), 2021–Present**
**Senior Advisor.** Stacy provides subject matter expertise and input to guide ICF's implementation of the ACE EVsmart Program, which provides incentives toward the make-ready infrastructure for EV charging in the residential, multifamily, workplace, fleet, and public charging settings through 2026. ICF provides information technology (IT), customer care, rebate processing, outreach, vendor engagement, and overarching program implementation support.

**EV Charging Station Incentive and Deployment Program Implementation—Baltimore Gas & Electric (BGE), 2019–Present**
**Senior Advisor.** Stacy provides oversight and expertise to inform ICF's implementation of the BGE EVsmart Program, which launched in 2019 and will continue through 2023. The program includes residential EV charger rebates, multifamily EV charger rebates, and a network of public charging stations. ICF's team includes EV subject matter experts working alongside IT, customer care, rebate processing, marketing, and program implementation leads. The team also provides marketing and event support.

**ENERGY STAR EV Charger Product Marketing and Stakeholder Engagement—U.S. Environmental Protection Agency (EPA), 2016–Present**
**Subject Matter Expert.** Stacy provides input to the team supporting EPA's efforts to increase market penetration of energy efficient EV charging equipment. She conducts outreach to EV charger manufacturers, utilities, state agencies, and other organizations to increase awareness of the ENERGY STAR specification for Level 1, Level 2, and DC fast EV chargers.

**Fleet and Transportation Support for Sustainable Operations and Climate Change—U.S. National Park Service (NPS), 2011–Present**
**Project Manager.** Stacy manages the implementation of EV charging station projects with two donors, BMW (past) and the California Energy Commission (present). She provides technical advice, project management support, and coordination with NPS and project partners. She also supports the Clean Cities National Parks Initiative, a partnership between NPS and the U.S. Department of Energy (DOE) that funds and supports projects to reduce petroleum consumption, vehicle greenhouse gases, and other emissions. These projects educate park employees, visitors, and communities about the benefits of using cleaner, more efficient vehicles and alternative fuels.

**Alternative Fuel and Advanced Vehicle Technical Assistance and Data Management—National Renewable Energy Laboratory (NREL), 2004–Present**
**Senior Advisor.** Stacay provides oversight and technical subject matter expertise across ICF's support to a variety of programs and efforts for DOE's Vehicle Technologies Office through our contract with NREL. ICF's Joint Office of Energy and Transportation Technical Assistance team is supporting state departments of transportation and other stakeholders in the implementation of programs funded through the federal Bipartisan Infrastructure Law, signed in November 2021. ICF also manages the daily operations of the Technical Response Service (TRS), which includes responding to inquiries related to EVs, alternative fuels, EV and alternative fueling infrastructure, and other petroleum reduction strategies. In addition, ICF writes and updates Clean Cities publications, including vehicle guides, case studies, and technical white papers, and develops trainings for Clean Cities coordinators and stakeholders. ICF also updates and maintains two databases housed on the DOE AFDC—the Alternative Fueling Station Locator, which includes nearly 60,000 data points, and the Laws & Incentives search, which includes over 1,600 records of laws, incentives, and programs related to alternative fuels and other petroleum reduction strategies.

**Eastern Iowa EV Readiness Plan—City of Iowa City, 2020–2021**
**Senior Advisor.** Stacy guided the development of the Eastern Iowa EV Readiness Roadmap for the City of Iowa City. This included engaging a steering committee of external stakeholders across multiple organizations, conducting research, develping the plan, and providing overall project management.

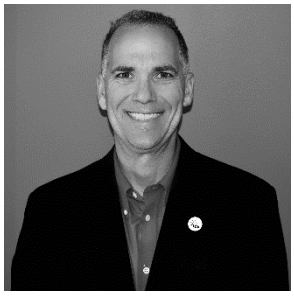
**Transportation Electrification Pilot Program Design and Regulatory Support—Evergy, 2020–2021**
**Project Manager and Subject Matter Expert.** Stacy led the development of Evergy's transportation electrification program design and corresponding filing to the Missouri and Kansas regulatory commissions. She coordinated tasks related to filing scope, program design, cost effectiveness evaluation, and overall project management. She provided research support, stakeholder engagement, and expert witness testimony.

**Transportation Electrification Pilot Program Design and Filing—Liberty-Empire, 2019–2020**
**Project Manager and Subject Matter Expert.** Stacy led the development of Liberty-Empire's transportation electrification program design and corresponding filing to the Missouri Public Service Commission. She conducted research and analyses focused on the EV and charging infrastructure market in Liberty's Missouri service territory, as well as across the country.

**Public EV Charger Incentive Program Design and Implementation—Duquesne Light Company (DLC), 2019–2019**
**Project Manager.** Stacy led the design and operationalization of a rebate incentive program for publicly accessible Level 2 charging stations. She coordinated with DLC staff to develop the program workflow and obtain leadership buy-in. Stacy developed program forms and outreach materials. Additionally, she assisted with site host identification, education, and technical assistance and supported DLC's implementation and evaluation of the program.

## Mark Ouellette, MPP

### Vice President, Workforce Innovation



Mr. Ouellette has more than 23 years of experience designing and improving training programs for vulnerable and under-supported populations. Since 2019, Mr. Ouellette has managed two Office of Apprenticeship funded initiatives to expand and diversity registered apprenticeships. In addition, for 13 years Mr. Ouellette has led the creation and expansion of the California Advanced Lighting Controls Training Program (CALCTP) an effort that has established industry recognized competency-based credential that is backed by electrical utility incentives in 5 states and all of Canada. Mr. Ouellette has designed several work-based learning projects throughout the country. Mr. Ouellette has held several roles in government, the non-profit sector, foundations, and in the classroom as a high school and middle school teacher. He has extensive experience identifying solutions through extensive partnerships including bringing together State and local stakeholders to develop significant and sustainable initiatives in the fields of energy efficiency workforce training, family economic success, education reform, and youth development.

**Years of Experience**
Professional start date: 1995
ICF start date: 2008

**Education**

- M.P.P., Public Policy, University of Michigan, 1999
- B.A., History, magna cum laude, California State University, Long Beach, 1993

### PROJECT EXPERIENCE

**Registered Apprenticeship Technical Assistance Center of Excellence/Apprenticeship Building America Coaching and Technical Assistance, Employment Training Assistance, Office of Apprenticeship, 2022 – Present.**

**Project Manager**. Mr. Ouellette is overseeing the $14.1 million dollar coaching and technical assistance project to the 4 Registered Apprenticeship Technical Assistance Centers of Excellence and the 30 Apprenticeship Building America grantees. The goal of these $145 million investment is to expand the number of registered apprenticeship programs and apprentices, diversify the industries that utilize registered apprenticeship, and increase access to and completion of RAPs for underrepresented populations and underserved communities.

**Cybersecurity Youth Apprenticeships, US Department of Labor, Employment Training Assistance, Office of Apprenticeship, 2019 – Present.**

**Project Manager**. Mr. Ouellette is overseeing a five-year, $10.8 million dollar project expand the number of young people enrolled in a cybersecurity registered apprenticeship program. Mr. Ouellette has developed the marketing and branding strategies, overseeing the work-based research to identify industries and occupations needing cybersecurity professionals, strategies to engage employers, reviewing of curriculum, and conducting outreach to increase the applicant pool.

**Energy Storage and Microgrid Training & Certification (ESAMTAC), California Workforce Development Board, 2021 – 2023.**

**Project Manager**. Mr. Ouellette is responsible for the training of 600 electrical journeyman and apprentices in the ESAMTAC curriculum. Mr. Ouellette oversaw the expansion from 6 to 21 training centers including securing ESAMTAC lab kits and train the trainer activities.

**California Advanced Lighting Controls Training Program (CALCTP), International Brotherhood of Electrical Workers/National Contractors Electrical Association, 2009–Present.**

**Project Manager**. Mr. Ouellette is responsible for ensuring that 3,000+ journey-level electricians are trained in advanced lighting controls. Mr. Ouellette has assisted in the development of a curriculum based on advanced lighting controls technology as well as marketing the programming and expanding services to union and non-union electricians through partnerships with the Chancellor's Office of the California Community College. Mr. Ouellette has

conducted site visits to the 32 training facilities across the State as well as presented information on the program to all of the State's Investor Owned Utilities, the California Energy Commission, the California Public Utilities Commission, and numerous stakeholders. The program has been recognized by the National Governors' Association as a promising practice for energy efficiency workforce training and placement.

**California Advanced Lighting Controls Training Program – Acceptance Testing Program (CALCTP-AT), California Advanced Lighting Controls Training Program Board of Trustees, 2013–Present.**

**Project Manager**. In 2012, the California Energy Commission (CEC) mandated that all lighting retrofits be acceptance tested by a certified technician. As CALCTP Manager, Mr. Ouellette worked with the CALCTP Board and partners to design a training program to train electricians, electrical contractors, engineers, and commissioning agents in the proper ways to determine acceptance test a lighting installation as required by the CEC. The program has certified over 1,200 electricians, electrical contractors, commissioning agents, engineers, and lighting manufacturer representatives.

**National Advanced Lighting Controls Training Program, National Advanced Lighting Controls Training Program Board of Trustees 2012–Present.**

**Project Manager**. Mr. Ouellette has worked to expand the award winning CALCTP program into additional states. Since 2012, Mr. Ouellette has worked with Washington, Illinois, Ohio, and Michigan to recreate the program and ensure the fidelity of the model is maintained. In 2015, the program expanded to all of Canada initially starting in British Columbia. This has included regular communication and site visits to training programs in these four states. The NALCTP program has just entered into an agreement to expand the training program across Canada starting with five colleges in Vancouver, British Columbia.

**Regional Apprenticeship Strategy, Economic and Workforce Development Division, 2018 – 2020.**

**Project Manager**. Mr. Ouellette was responsible for overseeing the development of a Regional Apprenticeship Strategy. This includes identifying existing apprenticeship offerings and developing based on best practices undeveloped apprenticeship programs. The need for additional programming is based on labor market information and employer verification. Mr. Ouellette will also be leading an effort to define the common EWDD participant and encourage others to buy-into the plan.

**Workforce Center Consultant, Los Angeles Harbor Department, 2018 – 2020.**

**Project Manager**. Mr. Ouellette was responsible for developing a Memorandum of Understanding between the Pacific Maritime Association, International Longshoreman Workers Union, and the Los Angeles Harbor Department aground the creation of a pilot safety training program. In addition, Mr. Ouellette oversaw the curriculum development as well as a study on the future employment needs of the goods movement sector.

**Workforce Disparity Study, Los Angeles Metropolitan Transportation Authority, 2018 – 2019.**

**Subcontractor**. Mr. Ouellette examined the demand for construction workers in the Los Angeles region and how women can better access those construction opportunities. The goal is to ensure all LA Metro contractors meet the 6.9% women employed provision.

**Employment History**

ICF, Vice President, 2008 - Present
D.C. Government Special Assistant, Office of the Deputy Mayor for Education, 2007–2008
D.C. Children and Youth Investment Trust Corporation, Director of Programs and Policy, 2004–2007
National League of Cities, Institute for Youth, Education, and Families, Senior Program Associate, 2001–2004
National Governors Association, Center for Best Practices, Policy Analyst, 1999–2001
Claremont Unified School District, Middle School Teacher, 1995–1997

# Appendix B: Support Staff Resumes

## Jonathan Segal, MA

### Associate Program Manager, Beneficial Electrification

Jonathan Segal is responsible for supporting the implementation of Beneficial Electrification client programs. He contributes to program operations through program management, data analysis, technical research, and continuous improvements. Jonathan leads the analyst fleet assessment training program using ICF's proprietary Fleet Assessment Model and manages a database of over 600 electric vehicles. He also develops and implements innovative solutions for Beneficial Electrification programs by automating workflows and reports using tools such as Power Automate and R.

**Years of Experience**
Professional start date: 06/2017
ICF start date: 08/2021

**Education**

- Master of Arts, Transportation Policy, Operations, and Logistics, George Mason University, 2021
- Bachelor of Science, Business Management, Tulane University, 2017

**Professional Affiliations**

- Board Member, Jared's Fund, 2019-Present

## Project Manager. Max Kaffel

### Transportation Specialist

Max Kaffel brings half a decade of expertise in sustainable transportation, greenhouse gas metrics, renewable energy solutions, and transportation strategy. His core strength lies in evaluating transportation electrification potential, aiding in the development of vehicle deployment schedules, and conducting cost analysis for infrastructure implementation.

**Years of Experience**
Professional start date: 09/2017
ICF start date: 03/2019

**Education**
- Bachelor of Science, University of California, Berkeley

### PROJECT EXPERIENCE

**Master Phased Plan for Zero Emission Fleet Transition, New Mexico Gas Company, May 2023 - Present**
Max supported the analysis and documentation of the Master Phased Plan for Zero Emission Fleet Transition for the New Mexico Gas Company. His duties included conducting a thorough analysis of NMGCs existing fleet and identify opportunities for vehicle electrification. Following the fleet analysis and assessment of viable EV replacement vehicles, Max carried out a detailed charging infrastructure analysis, identifying multiple charging infrastructure scenarios.

**White Paper on Clean Marine Fuels for Ocean-Going Vessels, Port of Long Beach, April 2023 – Present**
Max is supporting the development of a white paper on the status of clean marine fuels in the marine shipping sector. He has aided in a detailed analysis for the Port on the transition to clean marine fuels. His involvement spans a comprehensive literature review, which delves into existing clean fuel alternatives, industry trends, commitments from carriers, expected growth, and challenges associated with infrastructure.

**EV Fleet and Charging Master Plan, City of Laguna Beach, March 2023 – July 2023.**
**Analyst.** Max played an instrumental role in shaping the Electric Vehicle Fleet and Charging Station Master Plan for the City of Laguna Beach, California. He thoroughly assessed the City's current fleet, offering insightful recommendations for transitioning to sustainable transport alternatives. Additionally, he strategized the integration of EV charging hubs tailored for City vehicles, provided counsel on phasing out outdated propane and traditional fuel infrastructure, and orchestrated the introduction of community-wide EV charging stations for the public.

**Joint Office Technical Assistance (TA)—National Renewable Energy Laboratory, February 2022-Present**
The TA responds to technical inquiries from state agencies and related entities that are generated as a result of the work of the DOT/DOE Joint Office, whose work expands state EV charging deployment. These inquiries require in-depth research and understanding of EV and EV charging programs under the Bipartisan Infrastructure Law. Mr. Kaffel supports the daily operations of the TA team by responding to inquiries.

**Development of U.S. Greenhouse Gas Emissions Inventory for the Transportation Sector and Transportation GHG Report—United States Environmental Protection Agency, March 2020-Present**
Currently producing the mobile sources section of the official U.S. GHG Inventory. This work includes collection of activity data, research into improved on-road and off-road emissions factors, the use of the MOVES Model and the NONROAD Model, and the development of outreach materials and reports. This work is conducted annually and includes a QA/QC process and an annual consideration of improvements in the methods and data used – for the U.S. Environmental Protection Agency.

**Freight Logistics Transportation Research and Analysis—United States Environmental Protection Agency, October 2020-February 2021**
Served as the analyst for a study of the third-party logistics industry for the EPA SmartWay program. The SmartWay Transport Partnership is an EPA voluntary program that helps industry reduce Greenhouse Gas (GHG) emissions by enabling the environmental and energy benchmarking of carriers, shippers, 3PL and multimodal freight transportation operations. Conducted market research to characterize all of the different 3PL industry segments, including dedicated contract carriage, domestic transportation management, international transportation management and value-added warehousing and distribution. The purpose of the research was to estimate the environmental impact of different 3PL sectors – for the Environmental Protection Agency.

**Renewable Sources of Natural Gas: Supply & Emissions Reduction Assessment Study, American Gas Foundation (AGF), March 2019-February 2020**
Max helped support the resource assessment research as well as assisted on the drafting of multiple report sections. Offering assistance throughout the project, Max utilized his research experience to develop biomass feedstock potential estimates, which informed the scenario-based analysis that the report employs.

**Climate Action Report, California Department of Transportation (Caltrans), March 2019-April 2020**
ICF is providing support with the development of a Climate Action Plan (CAP) for the California Department of Transportation. Max is assisting with the analysis of VMT and GHG transportation mitigation measures. His duties include assessing the technological and cost feasibility of transportation planning improvements that can be applied statewide.

**Infrastructure Carbon Estimator (ICE) Tool, Minnesota Department of Transportation (MnDOT), March 2019-March 2021**
ICF is updating and enhancing the scope of the ICE tool, which is an excel-based model that estimates the lifecycle energy and greenhouse gas (GHG) emissions from the construction and maintenance of transportation facilities. Max is supporting with quality assurance duties for the revised tool as well as preparing an ICE tool instructional webinar and will provide ongoing technical assistance as needed.

**CMAQ Input Data Dictionary, Federal Highway Administration (FHWA), May 2019-June 2019**
Max developed the data dictionary for the transportation demand management (TDM) inputs. With the purpose of giving users a higher level of detail and clarity, the data dictionary provided CMAQ users recommendations on methodology, common errors, resources, and for inputs that were less self-explanatory, clear definitions of what the input should represent.

**LCFS Technical Support, Los Angeles County Metropolitan Transportation Authority, March 2019**
As part of ongoing technical support for LA Metro, Max delivered a memorandum highlighting relevant amendments to the low carbon fuel standard (LCFS) in 2019, including book-and-claim accounting for low-carbon intensity (CI) electricity and new validation and verification requirements.

**EMPLOYMENT HISTORY**

- ICF, Transportation Analyst, March 2019 - Present
- City of Oakland & Climate Corps AmeriCorps, Energy and Sustainability Fellow, September 2018 - February 2019
- The Natural Resources Defense Council, Energy and Transportation Intern, September 2017 - September 2018

# Ramon Molina Garcia

## Transportation Specialist

Ramon is a Transportation Specialist in the Climate, Energy and Transportation group at ICF. His expertise is in fleet electrification assessments, creating vehicle and infrastructure rollout timelines, cost analyses, emissions inventorying, and energy demand modeling. He also has extensive experience reflecting state- and federal-level vehicle and emissions regulations in vehicle and infrastructure studies to reflect likely ZEV adoption rates and funding opportunities to accelerate charging and fueling infrastructure deployment.

**Years of Experience**
Professional start date: 2022
ICF start date: 04/2022

**Education**

- MS, Mechanical and Aerospace Engineering, University of California, Irvine, 2021
- Bachelor of Arts, Physics, Macalester College, 2019

## PROJECT EXPERIENCE

**Battery-Recharging and Hydrogen-Refueling Infrastructure Needs for LD/MD/HD ZEVs, CRC, 06/23 – 09/23**

**Analyst.** Ramon is working with the Coordinating Research Council (CRC) to develop a national battery-recharging and hydrogen-refueling network study in support of the EPA proposed regulatory requirements for light-, medium- and heavy-duty GHG standards. The strategy to meet these stringent GHG and criterial pollutant emission standards centers around increased ZEV penetration through ZEV sales requirements. Ramon co-led the research of EPA's and California's ZEV sales fractions used in this study to project fleet technology mix by state. Ramon also developed a tool to rapidly query NREL's EVI-Pro model to determine the charging port distribution required to meet LDV charging needs by state to illustrate number of charging ports to deploy per year and associated infrastructure costs.

**EV Fleet and Charging Master Plan, City of Laguna Beach, 03/2023 –06/23.**
**Analyst**. Ramon assisted the development an Electric Vehicle Fleet and Charging Station Assessment Master Plan for the City of Laguna Beach in California that a) evaluates the City's fleet and provide recommendations to transition from fossil fuel vehicles to clean transportation options; 2) deploy EV charging stations for City fleet vehicles; 3) provide guidance on how to decommission unnecessary propane and fossil fuel City infrastructure; 4) install EV charging stations throughout the community for public use; and 5) identify potential funding sources to facilitate transition to an all-electric fleet.

**Development of Transportation Travel Demand Model, California Energy Commission, 01/23 – Present**
**Analyst.** Ramon is on the development team for a statewide travel demand model for the CEC Transportation Energy Forecasting Unit to project and estimate transportation energy demand from various travel modes (e.g., passenger vehicles, transit, aviation, rail, marine, micro-transit). Ramon is a primary developer for passenger vehicle, aviation, and marine travel mode models, having conducted research and developing a flexible forecasting tool using Python. The model intends to account for emerging transportation modes and other behavioral changes impacting transportation. These modules will include ridesharing and other mobility services; digital substitution and teleworking; travel cost and pricing strategies; and connected and autonomous vehicles.

**Citywide Fleet Electrification, City of Lodi, 08/2022 – 05/2023.**
**Analyst.** Ramon assisted the development of a Citywide Fleet Electrification Plan for the City of Lodi to transition their fleet away from fossil fuels and to deploy the necessary charging infrastructure to power their electric vehicles. The main objective of this project is to develop a plan for the City to meet the compliance requirements of the Advanced Clean Fleet regulation in the most cost-effective manner possible. As part of this project Ramon is helping the City of Lodi to: 1) evaluate the City's fleet and provide recommendations to transition from ICE vehicles to electric vehicles; 2) develop recommended charging infrastructure implementation strategies, 3) estimate the costs to

transition from ICE vehicles to EVs and to develop and deploy charging infrastructure, 4) discuss the barriers to fleet transition and describe strategies to overcome them, and 5) develop a plan to leverage incentive funding and evaluate options for financing and innovative business models.

**Fleet Electrification Implementation Rollout Strategy, City of Raleigh, 06/2022 – Present.**

**Analyst.** This project is intended to develop a Fleet Electrification Implementation Rollout Strategy for the City of Raleigh to: a) evaluate the City's fleet and provide recommendations to transition from fossil fuel vehicles to clean transportation options; 2) identify potential funding sources and procurement strategies; 3) develop a sustainable EV charging infrastructure plan for City fleet vehicles; 4) provide a training plan and educational guidelines for City staff who will operate EVs; 5) review the City's EV charging software system solution and recommend best practices for aligning software; and 6) provide recommendation to improve accessibility and address equity issues through electrification and charging infrastructure deployment. This plan will serve as a blueprint for how the City can transition its fleet to electric and alternative fueled technologies and deploy the charging infrastructure needed to power them.

**Medium and Heavy-Duty Vehicle ZEV Blueprint, SANDAG, 06/2022 – Present.**
**Analyst.** Ramon is assisting an effort with San Diego Association of Government (SANDAG) to develop a medium- and heavy-duty (MD/HD) zero emission vehicle blueprint that guides the transition of freight and transit vehicles to zero-emission technology and highlight the challenges related to technology readiness, infrastructure availability, and cost. As part of this work, Ramon is forecasting the MD/HD ZEV adoption in the region along with charging and fueling infrastructure needed to support them. The blueprint will also identify key implementation strategies that the region can take to accelerate the adoption of zero emissions MD/HD vehicles.

**Quantifying the Environmental Justice Impacts of Zero-Emission Vehicles, International Council on Clean Transportation, 06/2022 – 01/2023.**
**Analyst**. Ramon is a technical and policy analyst assisting three different firms (ICF, Forth. and Cenex) to assess the disparity in ZEV ownership and usage across various markets, evaluate current metrics and approaches adopted by different jurisdictions to quantify ZEV equity impacts and examine existing governments' strategies to enhance equity and promote EJ within their ZEV policies. The outcome of this research is to provide International ZEV Alliance with recommendations on additional strategies and mechanisms that can be employed to strengthen the equity aspects of ZEV policies.

**Clean Truck Comparative Report—LA Metro, Los Angeles, 05/2022 – 08/2022.**
**Analyst.** Ramon was part of a project with LA Metro to provide an objective assessment of four types of vehicle technologies (i.e., diesel, hydrogen, battery electric, and natural gas), over immediate, short-, medium-, and long-terms, on market maturity, infrastructure and energy supply readiness and needs, cost of ownership, emissions and public health impacts, and barriers to adoption. As part of this report, Ramon provided insights on the level of technology transformation needed for LA Metro to meet its public health and climate goals, as well as the scale of fueling and charging infrastructure build out to support this transition. The report will serve as a technology and infrastructure roadmap to inform decision-making among policymakers and Metro staff.

## EMPLOYMENT HISTORY

ICF, Transportation Specialist, 04/2022 – Present

University of California, Irvine. Graduate Student Researcher. Irvine, CA. 06/2019 – 09/2021.

## PUBLICATIONS

Diaz, A., Molina Garcia, R., Morley, B., Pournazeri, S., (2023). Environmental Justice Impacts of Zero-Emission Vehicles. *ZEV Alliance Publications*. https://zevalliance.org/ej-zevs-jan23/

## Duncan Crowley, MS, EIT

### Senior Transportation Specialist

Duncan Crowley is a Senior Transportation Specialist with the Clean Transportation team at ICF, where he leverages a diverse set of systems engineering skills developed working with Toyota, NASA's Jet Propulsion Laboratory and at Birdi Systems. A recent graduate of the Transportation Technology and Policy master's program at UC Davis, Duncan has experience with modeling, policy analysis and research across multiple transportation disciplines with strong expertise in urban freight, freight electrification, ports, electric vehicles and transportation equity. Currently, at ICF, Duncan focuses mainly on projects related to decarbonization of the transportation sector, especially those related to the adoption of zero emission vehicles (ZEV). Prior to working at ICF, Duncan developed his professional engineering skills as a consultant and project engineer working for public clients at Birdi Systems. This experience with infrastructure projects and project estimation makes him well suited to understanding the complex infrastructure challenges in transportation decarbonization.

**Years of Experience**
Professional start date: 08/2018
ICF start date: 07/2023

**Education**
- MS, Transportation Technology & Policy, University of California Davis, 2023
- BS, Engineering, Harvey Mudd College, 2018

**Certifications and Registrations**
- Engineer in Training (EIT) Lic#: EIT 178466

### PROJECT EXPERIENCE

**Moreno Valley EV Charging Infrastructure Master Plan, City of Moreno Valley, 07/2023 – present**

**Consultant** – Duncan is a lead consultant for the development of a siting plan for new electric vehicle charging infrastructure for the City of Moreno Valley. In this project, he is integrating detailed travel data for the city with GIS data covering existing & planned chargers, parcels, utilities, zoning and transit to identify optimal locations for new charger projects. This is part of a greater effort to build a master plan for the city involving a detailed existing conditions analysis, an evaluation of future needs driven by the growth in demand for EVs, and development of an outreach program to further increase adoption amongst public and private stakeholders.

**Educational Materials for ZEV Trucks, Sustainable Freight Research Center, 04/2022 – 06/2023**
**Graduate Student Researcher** – Duncan was the main researcher on a project for California's Air Resources Board to come up with an educational strategy to pair with California's Advanced Clean Fleet rule. He identified 11 key topics about ZEVs which fleets and truck drivers will need to understand, scouring the internet to find the best available resources for each of the topics. In addition, he developed educational materials, case studies and one-pagers aimed at heavy duty truck fleets on topics which did not have good resources available already. In addition, he developed a survey which was distributed to drivers and other attendees at ZEV truck workshops run by CARB to help evaluate the resources found and get a better sense for what these fleets needed to know and what their pain points were. He also conducted several interviews with OEMs, fleets, NGOs and public agencies to gain their insights on existing materials and better understand the needs of drivers and fleets.

**Yosemite Valley Bikeshare Analysis, Bicycle Plus Research Collective, 12/2021 – 03/2022**
**Graduate Student Researcher** – Duncan conducted a detailed analysis of travel across modes in Yosemite Valley working with the Yosemite Conservancy to help improve the placement of bikeshare. This analysis created origin and destination matrices for all of the main attractions in Yosemite Valley to help understand where visitors were going once they arrived at the park. This analysis was done using cell phone data gathered by Streetlight Data and allowed measurements about the number of trips along each road in the valley by car, walking and by bike. Data was taken from summers during the COVID year (2020) and 2019 to offer a comparison in the traffic when shuttles were being

used and when they were not. Using these results, it was possible to recommend 3 additional locations for the bikeshare bikes, as well as which locations had the greatest utilization.

**Heavy Duty Fuel Cell Truck Clinic Project, Toyota Motors North America, 09/2017 – 05/2018**
**Team Lead** – Duncan led a team of 5 engineers and scientists in a project partnering with Toyota in Gardena, CA developing a concept for a regenerative braking system for the Project Portal hydrogen fuel cell truck. As part of this project, Duncan helped research different technologies for storing the energy generated by braking, and performing battery cycle tests to determine whether the proposed battery would be able to work with the proposed application. In addition, he developed a first-principles model to measure the braking energy generated by a Class 8 truck on several routes originating at the Port of Los Angeles which was used to estimate how much the efficiency of the vehicle would improve through the use of this braking energy. Duncan participated in several instrumented drives to generate data for the model using real-world heavy-duty truck driving conditions.

**Concept of Operations Software Application, Birdi Systems Inc, 03/2019–08/2019**
**Software Engineer.** Duncan co-led the development of an internal software application for the administration of the Systems Facilities Operational Readiness (SFOR) business process. This software was designed to store, manage, and communicate with stakeholders all the information and insights generated as part of the 5 phases of SFOR including (1) Current Conditions Assessment, (2) Future Conditions Analysis, (3) Gap Analysis and (4) Risk Analysis and (5) Risk Mitigation. This system has since been used by the company on multiple major infrastructure projects including the LAX Automated People Mover project and the LA Metro Emergency Security Operations Center project. It was developed using JS and SQL databases.

**Emergency Security Operations Center (ESOC) Design, LA Metro, 12/2020–06/2021**
**Owner's Representative**. Duncan was a key member of the owner's representative team for LA Metro's Emergency Security Operation Center project, helping to ensure that the designs for the systems for the building would support the desired operational outcomes for LA Metro for emergencies and for operations of their bus and rail fleet. He supported design revisions and contributed towards the development of a Concept of Operations for the ESOC. He also helped manage requirements disagreements between LA Metro and the main contractor for the project.

**CCTV Design and Construction for Bradley West Terminal– LAWA, 04/2020 – 12/2020**
**Project Engineer –** Duncan was the main project engineer for installation, inspection, commissionining and design changes for the CCTV camera system installed for the new Bradley West international terminal at LAX. Duncan helped to manage and QC the work of technicians alongside the superintendent to ensure that deadlines were met. He vastly accelerated the pace of inspections and commissioning of cameras and IT hardware by the team and LAX to ensure that the building could be handed over to airlines in operational condition by 2021. Duncan worked with numerous contractors across construction disciplines to ensure that locations were ready for installation as promised. Further, he mitigated the delays caused by the COVID pandemic as much as practicable.

**Concept of Operations for LAX Central Utility Plant, LAWA, 08/2018 – 05/2019**
**Project Engineer** – Duncan helped to develop and implement the Systems Facilities Operational Readiness assessment of the Central Utility Plant at LAX as part of a four-person team. He conducted over a dozen interviews with operational staff in addition to a detailed review of the facility drawings and operational data. He completed a comprehensive gap analysis, risk analysis and risk mitigation plan. He developed several projects with an estimated savings of over $5 million annually and payback period of <3 years.

**EMPLOYMENT HISTORY**

ICF. Senior Transportation Specialist. Sacramento. 7/2023– Present.
UC Davis Sustainable Freight Program. Graduate Student Researcher. Davis. 1/2022–6/2023.
Birdi Systems Inc. Systems Engineer. Pasadena. 08/2018–6/2021.

## Max Litvack-Winkler

### Sustainable Mobility Specialist

Mr. Litvack-Winkler is a transportation electrification subject matter expert with experience in data analysis, research, technical writing, presentation development, and project management. He helps municipalities, companies, and commuters increase their access to electric modes of transportation. Mr. Litvack-Winkler has more than five years of experience conducting multimodal transportation research and analysis to help reduce emissions and improve safety and mobility in the transportation sector.

**Years of Experience**

Professional start date: 07/2018
ICF start date: 01/2022

**Education**

- BA, Economics, Washington University in St. Louis, Class of 2018

## PROJECT EXPERIENCE

**City of Pittsburg Fleet Transition—City of Pittsburg, CA, 02/2023 – Present**

Mr. Litvack-Winkler is overall task lead for the City of Pittsburg's fleet transition. He led data collection of current EV and EVSE inventory, provided recommendations for EV replacements, recommended new charging stations and corresponding power levels to support the City's future EV fleet, and determined the scope and cost of facility and utility upgrades. Mr. Litvack-Winkler presents slide decks to the City with project updates.

**City of Philadelphia Fleet Transition—City of Philadelphia, PA, 07/2023 – Present**

Mr. Litvack-Winkler is a task lead for the City of Philadelphia's fleet transition. He supports data collection of current EV and EVSE inventory and wrote a technical memorandum on EV and EVSE funding opportunities for the City of Philadelphia to apply to presently and in the future.

**511 NY Rideshare Program—New York State Department of Transportation, New York State, 02/2022 – Present**

Mr. Litvack-Winkler is the lead point of contact on behalf of NYSDOT for Electric Vehicle Supply Equipment (EVSE) administration in the NY Hudson Valley region. He develops analyses, contacts EVSE OEMs and industry representatives about maintenance issues, coordinates the installment of new stations and provides updates to NYSDOT on EVSE status. He also provides information to program partners on EVSE vendors, technical details, cost data, and grant opportunities.

**Electric Vehicle Site Verification— New York State Energy Research and Development Authority, New York State, 02/2022 –Present**

Mr. Litvack-Winkler conducts site host outreach and station verification task lead for new EVSE stations implemented through the Charge Ready NY and Direct Current Fast Charging (DCFC) Light Duty Electric Vehicle Supply Equipment programs. He analyzes network dashboards and station utilization to develop criteria for site visits, trains volunteer and develops checklist materials to ensure site visits are properly conducted, and leads outreach to site hosts.

**Electric Vehicle Station Locator Task—National Renewable Energy Laboratory/Department of Energy, USA, 02/2022 –Present**

Mr. Litvack-Winkler calls industry contacts and EVSE owners to update the Alternative Fuels Data Center (AFDC) map. He provides key insights to improve the AFDC data collection process and overall database.

## Brynn Holbrook

### Research Data Analyst II

Ms. Holbrook is an Analyst at ICF and has experience in research and technical assistance. She possesses strong research and evaluation skills, including programming and administering surveys, conducting semi-structured interviews, analyzing quantitative and qualitative data, and working with large datasets. While at The College of New Jersey, Ms. Holbrook served as a research assistant for multiple projects relating to health and poverty. At ICF, Ms. Holbrook works on several projects relating to health, poverty, workforce development, apprenticeship, and training and technical assistance.

**Years of Experience**

Professional start date: 07/2018
ICF start date: 01/2022

**Education**

- BA, Sociology and Public Health, The College of New Jersey, 2018

### PROJECT EXPERIENCE

**Program Life Cycle Evaluation, AmeriCorps, Corporation for National and Community Service (CNCS), 2020 – Present.**
**Analyst.** Ms. Holbrook serves as a Research Assistant of participatory evaluation approach to examine national service programs focused on providing peer recovery coaching to individuals with substance use disorders or are focused on climate change and environmental stewardship. The project incorporates capacity-building and dissemination activities for programs and will assist AmeriCorps to support locally driven and innovative solutions. Ms. Holbrook was responsible for assisting with document reviews, evaluation planning, OMB and IRB submittals, protocol development, participant recruitment, protocol administration, site visit planning and implementation, data analysis, and reporting.

**Community Health Needs Assessment, Casa Colina Hospital and Centers for Healthcare Research Institute, 2020 – 2021.**
**Analyst.** Ms. Holbrook supported the development of Casa Colina Hospital's Community Health Needs Assessment in compliance with federal requirements. This included assessment planning, IRB submittal, protocol development and administration, participant recruitment, primary and secondary data collection and analysis, and reporting.

**Supplemental Nutrition Assistance Program (SNAP) Process and Technology Improvement Grants, State of Maryland, Department of Human Services, 2019.**
**Analyst.** Ms. Holbrook assisted with the evaluation of the integration of workforce assessment tools into multiple agency sites. She was responsible for analyzing training attendees' training assessments and creating data visualizations.

**Evaluation of the Transition Assistance Program, United States Department of Labor, 2019.**
**Analyst.** Ms. Holbrook assisted with a quasi-experimental study of a program designed to transition military service members into career pathways. She was responsible for developing portions of the final report which discussed the program's population and previous iterations of the Transition Assistance Program.

**California Advance Lighting Controls Training Program (CALCTP) - Acceptance Technician (AT) Certification Program, International Brotherhood of Electrical Workers/National Contractors Electrical Association, 2018 – Present.**
**Technical Support Specialist.** The CALCTP-AT Certification Program was developed to ensure compliance with Title 24 standards. Ms. Holbrook provides administrative support to the program and assists quality assurance efforts. Her duties include the review, approval, and payment processing of individual participants and contractors; response to certification inquiries; certification processing; assistance with training development and administration;

renewal of certified technicians and companies; and conducting quality assurance audits of submitted acceptance testing projects to ensure compliance.

**Biannual Convening Planning and Technical Assistance, Office of Family Assistance (OFA) Administration for Children and Families (ACF), U.S. Department of Health and Human Services, 2020.**
**Technical Support Specialist.** Ms. Holbrook supported the planning of the 2020 Regions IV-VIII OFA Tribal TANF Biannual Convening. Ms. Holbrook was responsible for assisting with plenary and workshop development, speaker sourcing, and virtual meeting assistance.

**Workforce Impact Network (WIN), Office of Apprenticeships (OA), Employment and Training Administration (ETA), U.S. Department of Labor (DOL), 2020 – Present.**
**Analyst.** ICF, as a subcontractor to net.America, was awarded a five-year contract to expand registered apprenticeship programs (RAPs) in the health IT and energy sectors. The Workforce Impact Network (WIN) aims to expand current and create new RAPs for career seekers with a 50% focus on minority and vulnerable populations with a commitment to enrolling an average of 750 Registered Apprentices or more a year over the life of the contract. As an analyst, Ms. Holbrook supports data management efforts, apprenticeship research, and stakeholder outreach.

**Low Carbon Economy High Roads Training Partnership Expanding Energy Savings and Microgrid Training and Certification (EESAMTAC), California Workforce Development Board, 2021–2023.**
**Analyst.** Ms. Holbrook served as an analyst for the EESAMTAC project, led by ICF and the California and Nevada IBEW/NECA Labor-Management Cooperation Trust (LMCC), which expanded training and certification to prepare electricians, electrical apprentices, and electrical contractors for the safe and effective assembly, testing, commissioning, maintenance, repair, retrofitting, and decommissioning of energy storage and microgrid (ESM) systems. The project expanded training from six to 21 Electrical Join Apprenticeship Training Centers (JATCs) over a two-year period. Ms. Holbrook assisted with protocol development, participant enrollment, and documentation.

**Regional Apprenticeship Strategy Consultants, Los Angeles Economic and Workforce Development Division (EWDD), 2018 – 2019.**
**Analyst.** Ms. Holbrook provided technical and administrative support in the development of a Regional Apprenticeship Strategy. This included providing note taking and meeting coordination services, contacting and verifying existing apprenticeship programs, researching the growth potential of programs as based on labor market information and real-time job postings, comparing the common EWDD participant with program entry requirements to determine areas where pre-apprenticeship may be most imperative, conducting regional employer outreach through conversations with local employers and presentations to industry groups to verify research findings, drafting reports and other materials for clients and stakeholder groups, and coordinating updates of apprenticeship programs and labor market information.

**Los Angeles Harbor Department, 2018 – 2019.**
**Analyst.** As part of a study on the future employment needs of the goods movement sector, Ms. Holbrook was responsible for determining future employment needs for the Harbor Department. This included studying the projected growth and use of automation, the Internet of Things, telematics, business analytics, and other tools in the sector and examining resulting skill demand and occupations. Ms. Holbrook also examined the use of apprenticeship to train current and future sector workers for future occupations.

**EMPLOYMENT HISTORY**

ICF. Research Data Analyst. 2018-Present.
Lawrence Alcohol and Drug Alliance. Assistant Coordinator. 2017-2018.
New Jersey Audubon. Policy Intern. 2017-2018.
The College of New Jersey. Research Assistant. 2016-2018.
Anti-Violence Initiatives. Community Engagement Intern. 2016.

February 27, 2024
ICF Cost Proposal | RFP NO. 24-002

# Fleet Electrification & Electric Vehicle Master Plan And City Fleet Policies

**Submitted to:**
Michael Ortiz, Acting D.D. Public Works
(Parks, Fleet, Facilities)

City of Santa Ana
Public Works Agency
Parks, Fleet, Facilities Division
20 Civic Center Plaza
Santa Ana, CA 92701

**Submitted by:**
ICF Incorporated, L.L.C.
49 Discovery
Suite 250
Irvine, CA 92618

**Contact**:
Theodora Konstantinou, PhD
Project Manager
(213) 312 1707
Theodora.Konstantinou@icf.com

## Cover Sheet

February 26, 2024

Michael Ortiz, Acting D.D. Public Works (Parks, Fleet, Facilities)
City of Santa Ana – Public Works Agency – Parks, Fleet, Facilities Division
20 Civic Center Plaza
Santa Ana, CA 92701

**Subject: ICF Cost Proposal 2024-162484 in Response to Request for Proposals (RFP) titled "Fleet Electrification & Electric Vehicle Master Plan And City Fleet Policies"**

Dear Mr. Ortiz,

ICF Incorporated, L.L.C., is pleased to submit our firm fixed price (FFP) cost proposal in response to the City of Santa Ana RFP titled "Fleet Electrification & Electric Vehicle Master Plan And City Fleet Policies." The ICF team are committed to fulfilling the entire scope of this important project and adhering to the requirements described in the City's RFP. We believe our team is exceptionally well positioned to accomplish this project as presented in the accompanying Statement of Qualifications.

ICF's estimate is based on experience performing similar work for other clients and reflects the results of the detailed analysis of the different activities to be performed under each task and the total estimated number of deliverables (including drafts and final versions) that will be required. This price reflects what we believe is appropriate to achieve the City's objectives for this study and deliver all the necessary work products. If ICF's price estimate exceeds the available budget for this project, we are open to discussing how our approach could be modified and price reduced to match the available budget.

ICF's proposal remains valid for a period of one hundred eighty (180) days from the date of submission. ICF reserves the right to review its submission, and to extend or revise its offer based on the facts known at the end of the 180-day period. We look forward to hearing from you regarding the status of our proposal and welcome the opportunity for further discussion. We are available to discuss contractual questions and may be contacted at (703) 556-5639 or via email at Rhonda.Hall@icf.com. Technical questions should be directed to our proposed project manager, Dr. Theodora Konstantinou, at (213) 312 1707 or Theodora.Konstantinou@icf.com.

Sincerely,

Joseph C. Moran

Joseph C. Moran
Senior Contracts Manager

# Proposed Fee Schedule Breakdown

Upon execution of this contract, ICF will provide invoices and supporting materials via email to the City's project manager identified during the kick-off meeting. *Table 1* below illustrates ICF's proposed fee schedule breakdown for this contract *Table 2* provides detail on the personnel classifications required to provide the scope of services, as well as their respective billing rates and hours.

***Table 1. Proposed Fee Schedule Breakdown – Level of Effort and Price by Task***

| Task | Tasks | Total Hours | Total Price |
|---|---|---|---|
| Year 1 | | | |
| Task 1 | Project Kick-Off and Project Management | 48 | $11,624.76 |
| Task 2 | Review of Policies, Documents, and Existing City Fleet and Infrastructure | 115 | $21,741.24 |
| Task 3 | Electric Vehicle and Charging Station Assessment | 219 | $40,946.48 |
| Task 4 | Development of City Fleet Policies and Standards | 84 | $17,227.56 |
| Task 5 | Workforce Development and Staffing Levels | 83 | $18,278.94 |
| Task 6 | Fleet Electrification and Vehicle Charging Master Plan | 94 | $19,388.82 |
| **Year 1 Total** | | **643** | **$129,207.80** |
| Year 2 | | | |
| | On-Call As-Needed Technical Support and Fleet Transition Refresh | **49** | **$10,533.02** |
| Year 3 | | | |
| | On-Call As-Needed Technical Support and Fleet Transition Refresh | **49** | **$10,849.06** |
| **Total Proposed Price (Including As-Needed Tasks)** | | **741** | **$150,589.88** |

***Table 2. Proposed Fee Schedule Breakdown – Personnel Classification Hourly Bill Rates by Year***

| Personnel Classification | Year of Contract | | |
|---|---|---|---|
| | Year 1 | Year 2 | Year 3 |
| Project Director | $254.31 | $261.94 | $269.80 |
| Project Manager | $238.14 | $245.28 | $252.64 |
| Senior Consultant | $225.34 | $232.10 | $239.06 |
| Consultant | $169.21 | $174.29 | $179.52 |
| Analyst II | $142.95 | $147.24 | $151.66 |
| Analyst I | $134.61 | $138.65 | $142.81 |
| Senior Advisor | $285.75 | $294.32 | $303.15 |

# Payment Terms/Proposed Invoicing

ICF will invoice based on the payment schedule below in Table 3. Payment terms are net 30 days from date of invoice. Payments shall be made in accordance with the payment section of the contract terms and conditions and upon completion of each task and submission of the deliverables to the City.

***Table 3. Proposed Invoicing/Payment Schedule***

| Deliverables | Total |
|---|---|
| **Year 1** | |
| Submission of monthly progress reports, $968.73 per month for 12 months | $11,624.76 |
| Submission of Task 2 memo | $21,741.24 |
| Submission of Task 3 memo | $40,946.48 |
| Submission of Task 4 fleet policies and standards | $17,227.56 |
| Submission of Task 5 memo | $18,278.94 |
| Submission of Final Report | $19,388.82 |
| **Year 1 Total** | **$129,207.80** |
| **Year 2** | |
| Submission of monthly progress reports, $968.73 per month for 12 months | **$10,533.02** |
| **Year 3** | |
| Submission of monthly progress reports, $968.73 per month for 12 months | **$10,849.06** |
| **Project Total** | **$150,589.88** |

# Price Assumptions

- The price accounts for all activities described in the technical proposal.
- ICF assumes that the City of Santa Ana will provide ICF with fleet inventory data, including vehicle population, vehicle usage, and expected service life, as well as facility listing with existing EV charging infrastructure.
- ICF assumes that all payments will be due within (30) days after receipt of an acceptable invoice.
- ICF's distribution of hours by tasks categories reflects the mix that ICF believes will be most cost effective in completing this work. ICF reserves the right to reallocate hours between labor categories and tasks as we see fit to complete the work in the most efficient manner within the overall ceiling.
- Unless otherwise noted, all submitted deliverables shall be limited to one round of review. City Staff will provide consolidated feedback on each deliverable, if reviewed by multiple individuals. If there are conflicting comments between reviewers, City Staff will provide directions. ICF will then revise the deliverable and incorporate any comments or edits after five business days and submit the revised deliverable, at which point it shall then be considered complete.
- Should ICF be awarded the contract, ICF requests the ability to negotiate the indemnification clause and discuss the inclusion of a limitation of liability clause. ICF's proposal is not conditioned on the City of Santa Ana accepting our proposed edits.
- ICF assumes the ability to add under the auto section "or equivalent" as our policy may not be specifically on the form number specified but would be as broad or broader ISO Form Number CA 00 01

# CITY OF SANTA ANA

## ATTACHMENT A

## PROPOSER'S CERTIFICATION, PROPOSAL PRICING

**Certification -** I certify that I have read, understand and agree to the terms and conditions of this Request for Proposals. I have examined the Scope of Services (Exhibit I) and am qualified to provide services being requested as specified herein. I understand and agree that I am responsible for reporting any errors, omissions or discrepancies to the City for clarification prior to the submission of my proposal.

PROPOSER'S STATEMENT: I have read, understood and agree to the terms and conditions on all pages of the Request for Proposals. Upon request, I will transfer and deliver goods or services to the City in accordance with said terms and conditions.

ICF Incorporated, L.L.C. — 703-225-5639
LEGAL NAME OF COMPANY — PHONE AND FAX NUMBERS

1902 Reston Metro Plaza, Reston, VA 20190
BUSINESS ADDRESS

Rhonda Hall — Sr. Contracts Administrator
PRINTED NAME OF AUTHORIZED AGENT — TITLE

Rhonda Hall — 02/26/2024 — Rhonda.Hall@icf.com
SIGNATURE OF AUTHORIZED AGENT — DATE — E-MAIL ADDRESS

52-0893615
FEDERAL ID NUMBER (IF APPLICABLE) — CONTRACTOR LICENSE NUMBER (IFAPPLICABLE)

CITY OF SANTA ANA BUSINESS LICENSE NUMBER
*(PLEASE PROVIDE IF AVAILABLE, BUT NOT REQUIRED UNTIL AND IF AN AWARD IS MADE TO PROPOSER.)*

**THIS FORM MUST BE COMPLETED AND INCLUDED WITH THE PROPOSAL.**
**PROPOSALS THAT DO NOT CONTAIN THIS FORM WILL BE CONSIDERED NONRESPONSIVE.**

# ATTACHMENT C

# PROPOSER'S STATEMENT

Proposer understands and agrees that this written RFP (or any part thereof specifically designated and accepted by the City of Santa Ana, hereinafter City) shall constitute the entire agreement between proposer and the City only after it has been accepted by the City Council, endorsed by the Clerk of the Council with her signature and official seal noting hereon the action of approval of the Council, signed by the Executive Director or his duly authorized agent, and signed by the City Attorney, denoting his approval of the form of this document, and its execution, and when it or an exact copy of it has been either delivered to proposer or deposited with the United States Postal Service properly addressed to the proposer with the correct postage affixed thereto.

Proposer further agrees that upon delivery (as defined above) of the accepted agreement he/she will furnish City all required bonds and certificate of liability insurance within ten (10) days (excluding Saturdays, Sundays and City's legal holidays), or the funds, check, draft, or proposer's bond substituted in lieu thereof accompanying this proposal shall become the property of the City and shall be considered as payment of damages due to the delay and other causes suffered by City because of the failure to furnish the necessary bonds and because it is distinctly agreed that the proof of damages actually suffered by City is difficult to ascertain; otherwise said funds, check drafts, or proposer's bond substituted in lieu thereof shall be returned to the undersigned.

Proposer understands that a proposal is required for the entire work, that the estimated quantities set forth in the RFP schedule are solely for the purpose of comparing proposals, and that final compensation under the contract will be based upon the actual quantities of work satisfactorily completed.

All terms contained in the specifications, the certification of nondiscrimination by contractors, and the required insurance certificates are to be incorporated by reference into this agreement and are made specifically as part of this RFP.

Firm ICF Incorporated, L.L.C.

Signed and Printed Name: Rhonda Hall

Title Sr. Contracts Administrator

Date 02/26/2024

**THIS FORM MUST BE COMPLETED AND INCLUDED WITH THE PROPOSAL.**
**PROPOSALS THAT DO NOT CONTAIN THIS FORM WILL BE CONSIDERED NONRESPONSIVE.**

# CITY OF SANTA ANA

## ATTACHMENT D

## NON-COLLUSION AFFIDAVIT

(Title 23 United States Code Section 112 and Public Contract Code Section 7106)

To the CITY OF SANTA ANA

In accordance with Title 23 United States Code Section 112 and Public Contract Code 7106 the proposer declares that the proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the proposal is genuine and not collusive or sham; that the proposer has not directly or indirectly induced or solicited any other proposer to put in a false or sham proposal, and has not directly or indirectly colluded, conspired, connived or agreed with any proposer or anyone else to put in a sham proposal, or that anyone shall refrain from bidding; that the proposer has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the proposal price of the proposer or any proposer, or to fix any overhead, profit, or cost element of the proposal price, or of that of any other proposer, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the proposal are true; and, further, that the proposer has not, directly or indirectly, submitted his or her proposal price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham proposal.

Note: The above non-collusion affidavit is part of the proposal. Signing this proposal on the signature portion thereof shall also constitute signature of this non-collusion affidavit. Proposers are cautioned that making a false certification may subject the certifier to criminal prosecution.

Signed Rhonda Hall

State of VA, County of Stafford

Subscribed and sworn to (or affirmed) before me on this 15th day of February, 2024, by Rhonda Hall, proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Notary Public Signature

Notary Public Seal

05/31/25

**THIS FORM MUST BE COMPLETED AND INCLUDED WITH THE PROPOSAL.**
**PROPOSALS THAT DO NOT CONTAIN THIS FORM WILL BE CONSIDERED NONRESPONSIVE.**

# ATTACHMENT E

## NON-LOBBYING CERTIFICATION

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in conformance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such subrecipients shall certify and disclose accordingly.

Signed: Rhonda Hall

Title: Sr. Contracts Administrator

Firm: ICF Incorporated, L.L.C.

Date: 02/26/2024

**THIS FORM MUST BE COMPLETED AND INCLUDED WITH THE PROPOSAL.**
**PROPOSALS THAT DO NOT CONTAIN THIS FORM WILL BE CONSIDERED NONRESPONSIVE.**

# ATTACHMENT F

# NON-DISCRIMINATION CERTIFICATION

The undersigned consultant or corporate officer, during the performance of this contract, certifies as follows:

1. The Consultant shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The Consultant shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment without, regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The Consultant shall, in all solicitations or advertisements for employees placed by or on behalf of the Consultant, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

3. The Consultant shall send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the Consultant's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

4. The Consultant shall comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

5. The Consultant shall furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation, to ascertain compliance with such rules, regulations, and orders.

1. In the event of the Consultant's non-compliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, the contract may be canceled, terminated, or suspended in whole or in part and the Consultant may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Execution Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulations, or order of the Secretary of Labor, or as otherwise provided by law.

2. The Consultant shall include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontract

or purchase order as the administering agency may direct as means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in the event the Consultant becomes involved in, or is threatened with, litigation with a subconsultant or vendor as a result of such direction by the administering agency, the Consultant may request that the United States enter into such litigation to protect the interests of the United States.

8. Pursuant to California Labor Code Section 1735, as added by Chapter 643 Stats. 1939, and as amended, no discrimination shall be made in the employment of persons upon public works because of race, religious creed, color, national origin, ancestry, physical handicaps, mental condition, marital status, or sex of such persons, except as provided in Section 1420, and any consultant of public works violating this Section is subject to all the penalties imposed for a violation of the Chapter.

Signed: Rhonda Hall

Title: Sr. Contracts Administrator

Firm: ICF Incorporated, L.L.C.

Date: 02/26/2024

**THIS FORM MUST BE COMPLETED AND INCLUDED WITH THE PROPOSAL.**
**PROPOSALS THAT DO NOT CONTAIN THIS FORM WILL BE CONSIDERED NONRESPONSIVE.**