

STATEMENT OF WORK

Task 1: Project Approval and Environmental Document (PA&ED)

Task 1.1: Perform Preliminary Engineering Studies and Draft Project Report: **COMPLETE**

Task 1.2: Perform Environmental Studies and Prepare Draft Environmental Document:
COMPLETE

Task 1.3: Circulate Draft Environmental Document and Select Preferred Project Alternative:
COMPLETE

Task 1.4: Prepare and Approve Project Report and Final Environmental Document:
COMPLETE

<i>Deliverable</i>	Documentation
Final Environmental Document	Document - COMPLETE
Final Project Report	Document – COMPLETE

Task 2: Plans, Specifications and Estimate (PS&E)

Task 2.1: Prepare Base Maps and Plan Sheets for PS&E Development: Work during PS&E development involved in the preparation of geometric base maps and functional base plan sheets, including review of existing project information, gathering appropriate mapping, and conducting additional studies.

Task 2.2: Obtain Permits, Licenses Agreements, and Certifications (PLACs) during PS&E Component: Work conducted during Project Phase 1 (PS&E Component) involved in identifying and obtaining necessary permits and agreements for project construction.

Task 2.3: Prepare Draft PS&E: Work involved in the preparation and review of draft roadway plans, specifications and estimates. Includes roadway design and preparation of functional PS&Es. Also includes incorporation of the Draft Structures PS&E into Draft District PS&E.

Task 2.4: Draft Structures PS&E: Work involved in the development of Draft Structures Plans, Specifications, and Estimate.

Task 2.5: Final Structures PS&E Package: Work involved in addressing comments from the District and DES Office Engineer for the Draft Structures PS&E (SPS&E) and incorporating them into the final Structures PS&E package. This task also includes the compiling of the Structure Resident Engineer's (RE) Pending File.

Task 2.6: Circulate, Review and Prepare Final District PS&E Package: Work involved in the circulation and review of the Draft District PS&E package. Includes addressing review comments and preparing the Final District PS&E package.

Task 2.7: Contract Bid Document Ready to List: Work involved in the preparation of draft contract bid documents. Completion of this activity is the finalized submittal package to DES-OE for advertisement.

Task 2.8: Awarded and Approved Construction Contract: Work involved in the advertisement, bid opening, award, and approval of a construction contract.

<i>Deliverable</i>	Documentation
Final PS&E Package	PS&E Package
Construction Contract	Awarded/Approved Contract

Task 3: Far Northern California Consolidated Goods & Freight Hub Study

Task 3.1: Project Initiation & Administration

Task 3.1.1: Prepare request for proposals, administer procurement process, consultant contracting.

Task 3.1.2: Grant contract and fiscal management, including quarterly reports and invoicing.

Task 3.1.3: Project kick-off between consultant and project partners.

Task 3.1.4: Review and benchmarking of best practices related to food hubs and coordinated aggregation and wholesale distribution transport.

Task 3.2: Data Development

Task 3.2.1: Aggregate and merge agriculture and transportation related data for spatial analysis, travel demand modeling.

Task 3.2.2: Fill essential data gaps (note: to be coordinated with outreach performed under Task 3.3.3)

Task 3.2.3: Prepare data for input into Shasta County's regional travel demand model (ShastaSIM) and the California Statewide Travel Demand Model (CSTDM).

Task 3.2.4: Prepare and publish data on www.farnorcalgis.org

Task 3.3: Outreach and Stakeholder Coordination

Task 3.3.1: Organize and manage project technical advisory committee.

Task 3.3.2: Communications between project partners, including project updates, presentations, web-posting, etc.

Task 3.3.3: Administer focus groups, interviews, site visits, and other targeted stakeholder communications and document input (note: to be coordinated with filling data gaps under Task 3.2.2).

Task 3.4: Technical Analysis & Logistics

Task 3.4.1: Data processing/mining: convert data to spatial data, perform queries and other analysis to validate qualitative findings from Task 3.3.

Task 3.4.2: Cluster analysis: identify and map patterns and clusters of industry and support industries that have congregated for mutual benefit and support and that are most likely to benefit from coordinated transportation of outputs and inputs.

Task 3.4.3: Economic impact analysis and USDA tool post-processing.

Task 3.5: Agricultural Goods Movement Demonstration Project

Task 3.5.1: Planning and design of demonstration project, including: communications protocols, transportation logistics, partner responsibilities, and operational procedures/guidelines.

Task 3.5.2: Perform demonstration project, including detailed documentation of all aspects of communications, transportation logistics, data collection, and other transactions between project participants.

Task 3.6: Final Report

Task 3.6.1: Prepare draft final report, circulate for review and make revisions as appropriate.

Task 3.6.2: Final report printing and circulation.

Task 3.6.3: Present final report to project partner governing bodies and regional stakeholders.

<i>Deliverable</i>	Documentation
Project Initiated; Administration Complete	• RFP • Consultant Contract • Quarterly reports and invoicing • Kick-off meeting agenda and minutes • Benchmarking technical memo
Data Developed	• Data acquisition plan and technical memo summarizing results • Data gap acquisition plan and technical memo summarizing results. • Data files. • Online map viewer.
Coordination of Outreach and Stakeholders	• TAC membership list • Sign-in sheets • Agenda, minutes • Project Updates • Presentation material • Web-postings • Coordination meeting notes • Task 3.3 technical memo.
Technical Analysis & Logistics	• Economic impact analysis report • Task 3.4 technical memo
Final Report	• Draft final report • Final report • Distribution list

Task 4: Alternative / Renewable Fuel Infrastructure Planning

Task 4.1: Assess Current Heavy Duty Fleets and Operators

Task 4.1.1: Assess the region's current heavy duty truck fleet composition based on available data and sampling of fleet operators.

Task 4.1.2: Extrapolate to estimate larger fleet mix.

Task 4.1.3: Evaluate California Air Resources Board and other state regulations governing heavy duty vehicles and make projections regarding the retirement and replacement thereof.

Task 4.1.4: Produce a report summarizing the findings and methodologies of Tasks 4.1.1, 4.1.2 and 4.1.3.

Task 4.2: Evaluate Alternate Fuel Technologies

Task 4.2.1: Evaluate available alternative fuel technologies and applicability to regional context and intended usage.

Task 4.2.2: Produce a report summarizing the findings and methodologies of Task 4.2.1.

Task 4.3: Logistical Analysis

Task 4.3.1: Utilize commodity type, volume, and origin-destination data generated through the Caltrans funded Food Hub study (see Task 3 above) to identify infrastructure locations needed to support alternative fuel good and freight movement within Shasta County and along interregional corridors within the eight-county Far-Northern California region.

Task 4.3.2: Consider needs and applicability of other alternative fuel vehicles, including transit, refuse, school, and similar heavy duty vehicles.

Task 4.3.3: Produce a report summarizing the findings and methodologies of Tasks 4.3.1 and 4.3.2.

Task 4.4: Phased Cost and Benefit Estimates

Task 4.4.1: For each technology being considered, develop capital cost estimates for phased implementation of alternative fuel infrastructure corresponding to projected adoption of alternative fuel heavy duty vehicles.

Task 4.4.2: For each technology being considered, identify and quantify to the extent possible all potential benefits from the alternative fuel infrastructure, including life cycle, environmental, economic, social, and safety.

Task 4.4.3: Identify and describe any unquantifiable costs or benefits that may result from the alternative fuel infrastructure.

Task 4.4.4: Produce a Benefit Cost Analysis on the alternative fuel infrastructure options, for each technology itemizing costs and benefits and determining a benefit-to-cost ratio, and including descriptions of unquantifiable costs or benefits.

Task 4.5: Secure Renewable Power Source

Task 4.5.1: Draft terms and conditions with Shasta Wheelabrator Energy for the purchase of biomass renewable energy (Shasta Wheelabrator Energy's current exclusive contract with Pacific Gas & Electric expires in 2016).

Task 4.6: Consolidate Food Hub and Alternative Fuel Infrastructure reports

Task 4.6.1: Combine Food Hub report (Task 3.6) and Alternative Fuel Infrastructure reports (Tasks 4.1.4, 4.2.2, 4.3.3 and 4.4.4) to produce a Final Consolidated Report.

<i>Deliverable</i>	<i>Documentation</i>
Current Heavy Duty Feet Assessment	Assessment Report
Summary of Key ARB regulations	Highlight of Regulations Report
Alternative Fuel Evaluation	Evaluation Report
Logistical Analysis	Analysis Report
Benefit Cost Analysis	BCA report
Energy Purchase Agreement Terms	Energy Purchase Agreement
Consolidate Report of Food Hub & Alternative Fuel Infrastructure	Consolidated Report

Task 5: Right of Way

Task 5.1: Utility Relocation: All work involved in the protection, removal and relocation of utility facilities necessary to clear and certify Right of Way. Includes coordination with utility companies, review of utility plans, establishing liability, Federal Highway Administration (FHWA) Authorization and processing payments per utility agreements.

Task 5.2: Perform Right of Way Engineering: Right of Way Engineering work performed in advance of appraisal and acquisition activities. Includes preparing appraisal maps.

Task 5.3: Obtain Right of Way Interest for Project Right of Way Certification: Work involved in assuring that the State has legal and physical possession and right to enter on all land for the project necessary for deliverance of the Right of Way Certification.

Task 5.4: Post Right of Way Certification Work: Work involved in assuring that all Right of Way deliverables are completed after the project has been certified.

Task 5.5: Final Right of Way Engineering: Work that is normally performed after construction of the project is complete and accepted by the Resident Engineer. Work involved is normally the monumentation of the right of way, relinquishments and vacations, preparation of right of way record maps, and preparation of deed packages for excess land transactions.

<i>Deliverable</i>	<i>Documentation</i>
Relocated or Removed Utilities	Utility Joint Use Agreements
Final Right of Way Engineering	• Filed Monumentation Record of Survey • Right of Way Record Maps

Task 6: Construction

Task 6.1: Construction Engineering and Contract Administration: Work involved in the construction of a project. Work includes performing construction surveying and staking, contract administration, construction inspection, quality assurance of materials, regulatory compliance and technical support. The end product of this activity is the acceptance of the construction contract.

Task 6.2: Administration of Permits, License, Agreements, and Certifications (PLACs) and Environment Stewardship: Work involved in the administration of permits, licenses, agreements, and certifications (PLACs), as well as other environmental stewardship responsibilities, during the construction of a project. Work includes ensuring compliance with PLACs, responding to alleged violations, updating environmental commitment records (ECR), technical support or guidance on PLACs from other support functions, updating PLACs, and the monitoring of environmental commitments during construction. The end product of this activity is the acceptance of the construction contract.

Task 6.3: Change Order Administration: Work involved in preparing and administering change orders.

Task 6.4: Resolve Contract Claims: Work involved in the documentation and resolution of contract disputes and claims.

Task 6.5: Accept Contract/Prepare Final Construction Estimate and Final Report: Work involved in the acceptance and final documentation of a construction contract.

<i>Deliverable</i>	Documentation
Accepted Construction Contract	Contract
Construction	End of Project