



March 14, 2018

Mr. Darin Grossi (dgrossi@co.tuolumne.ca.us)
Tuolumne County Transportation Council (TCTC)
2 South Green Street
Sonora, California 95370

RE: State Route 49 – Columbia to Jamestown – Complete Streets Corridor Plan Proposal

Dear Mr. Grossi,

As requested, this letter contains the Scope of Work, proposed budget, and preliminary schedule for the State Route (SR) 49 from Columbia to Jamestown Complete Streets Corridor Plan Project (Project). Wood Rodgers, Inc. (Wood Rodgers) understands that the Project Area is detailed in the Scope of Work provided, but generally stretches from Jamestown through Sonora to Columbia College. After reviewing the Scope of Work, we understand that the primary goals you would like to accomplish with the Project are to:

- 1) Develop a complete streets corridor plan to achieve state and federal transportation planning goals by improving multi-modal transportation and enhancing access and mobility throughout the corridor;
- 2) Develop consensus among the stakeholders for a preferred non-motorized transportation route connecting Jamestown, Sonora and Columbia;
- 3) Achieve a balance of economic, environmental, and social equity through the implementation of complete streets objectives including, but not limited to, the nine Project objectives listed in the TCTC Scope of Work provided;
- 4) Develop a comprehensive multi-modal corridor plan to meet the goals and objectives of the Solutions for Congested Corridors Program created under SB1 (Spring 2017), and be positioned to apply for funding under that program in the future; and
- 5) Address the deficiencies as outlined in the Scope of Work provided.

Wood Rodgers has provided an approach and cost (see below) for each of the tasks identified in the TCTC Scope of Work provided (also attached to this proposal); specifically, Tasks 3 through 7. Task numbers do not coincide with the TCTC Scope of Work provided because Tasks 1, 2, 8 and 9 are TCTC's specific tasks, and not tasks that would be completed by Wood Rodgers. The following Scope of Work will be accomplished through our existing TCTC On-Call Agreement.

TASK 1 – AGENCY COORDINATION AND MANAGEMENT

This Task entails agency meetings and coordination activities including preparation of agendas and minutes. Task 1 also includes management of the Project's Scope of Work, budget, and schedule. We anticipate one (1) Project kick-off meeting with TCTC and Caltrans; two (2) field review meetings; two (2) meetings among Caltrans, TCTC, and the stakeholders; and (2) additional coordination meetings with TCTC.

The Projects' kick off meeting will also serve as an opportunity to finalize the list of stakeholders, the project schedule, and finalize the Scope of Work proposed herein.

Deliverables:

- Kick-Off Meeting (1)
- Field Meetings (2)
- Stakeholder Meetings (2)
- Coordination Meetings (2)

Task 1 Budget = \$23,500

TASK 2 – DATA COLLECTION AND EXISTING CONDITIONS REPORT

2.1 – Pedestrian, Bicycle, and Automobile Counts

Wood Rodgers will review existing conditions of the corridor by gathering bicycle, pedestrian, and automobile count data. Wood Rodgers assumes that the latest available automobile counts and bike/pedestrian counts will be obtained from Tuolumne County, Caltrans, the *Tuolumne County General Plan and Regional Transportation Plan Update – EIR Traffic Study* (Wood Rodgers, August 2015), and other agencies. Counts may be increased to represent existing (2017-2018) conditions, using growth rates from the latest Tuolumne County Travel Demand Model (TDM), as necessary.

Caltrans will collect vehicle/bicycle/pedestrian counts at study area locations by Spring 2018. Wood Rodgers will collect bike and pedestrian counts to supplement the data collected by Caltrans at the one (1) intersection listed below:

1. Parrotts Ferry Road & Sawmill Flat Road

2.2 – Turning Movement and Operational Analyses

Wood Rodgers will perform existing conditions intersection turning movement analyses for (up to) the following 13 intersections:

1. Parrotts Ferry Road and Sawmill Flat Road
2. SR 49 and Parrotts Ferry Road (Columbia Junction)
3. SR 49 (N. Washington Street) and Shaws Flat Road/Columbia Way
4. SR 49 (N. Washington Street) and School Street
5. SR 49 (N. Washington Street) and W. Snell Street/Elkin Street
6. SR 49 (S. Washington Street)/S. Washington Street and SR 49 (Stockton Road)
7. SR 49 (Stockton Road) and Southgate Drive/Woods Creek Drive
8. SR 49 (Stockton Road) and SR 49-SR 108/SR 108
9. Jamestown Road and Fifth Avenue
10. SR 49-SR 108 and 5th Avenue
11. SR 49-SR 108 and North Main Street/Jamestown Road
12. SR 49-SR 108 and Humbug Street/Rawhide Road
13. SR 49-SR 108 and South Main Street

Turning movement analyses will be performed using standard HCM 2010 methodologies and Synchro software.

Wood Rodgers will perform existing conditions roadway operational analyses for (up to) the following nine roadway segments:

1. SR 49 between Parrotts Ferry Road (Columbia Way) and Shaws Flat Road/Columbia Way
2. SR 49 between Shaws Flat Road/Columbia Way and Dodge Street
3. SR 49 between Dodge Street and Stockton Road/S. Washington Street
4. SR 49 between Stockton Road/S. Washington Street and Southgate Drive/Woods Creek Drive
5. SR 49 between Southgate Drive/Woods Creek Drive and Fairview Lane
6. SR 49 between Fairview Lane and SR 49-SR 108/SR 108
7. SR 49-SR 108 between SR 49 (Stockton Road)/SR 108 and Fifth Avenue
8. SR 49-SR 108 between Fifth Avenue and Rawhide Road/Humbug Street
9. SR 49-SR 108 between Rawhide Road/Humbug Street and South Main Street

Roadway operation analyses will be performed using daily roadway volumes and roadway capacities/LOS thresholds from the HCM 2010 based TCTC Generalized Roadway ADT LOS Lookup Table contained in the August 2015 GP/RTP EIR Traffic Study.

2.3 – Safety Study

Wood Rodgers will review, evaluate, and analyze safety and accident data for study area facilities. All accident data will be obtained from Caltrans. Wood Rodgers will develop visual exhibits of the data and identify any incident clusters.

2.4 – Draft Existing Conditions Report and Presentation of Findings

Wood Rodgers will develop an Existing Conditions Report with maps and graphics that includes, but is not limited to:

1. Community profile and demographics;
2. Existing transportation circulation conditions, roadway characteristics, existing PCI Index (by others), existing non-motorized transportation (bicycling and pedestrian) infrastructure, existing transit stops facilities and routes;
3. Opportunities and constraints;
4. An analysis of relevant studies: reports, plans, planning area characteristics, and other directly relevant documentation and information;
5. Existing transportation facilities;
6. Existing areas of critical environmental concern;
7. Existing land uses, major employers and destinations; and
8. Existing Disadvantaged Communities.

Wood Rodgers will present the Existing Conditions Report and findings to TCTC and the stakeholders.

Deliverables:

- Draft Existing Conditions Report; includes: Count Data, Safety Analysis, Turning and Operational Analysis
- Draft Existing Conditions Presentation

Task 2 Budget = \$17,000

TASK 3 – PUBLIC OUTREACH

3.1 – Outreach Materials

Wood Rodgers will develop outreach materials for the workshops, focus groups, and walking tours including but not limited to posters, graphics, renderings, and collateral materials.

3.2 – Community Workshops

Wood Rodgers will assist TCTC in coordinating and preparing for up to two (2) community workshops. Wood Rodgers will attend and facilitate the planned workshops to engage the communities in the Project. Wood Rodgers will also participate in up to three (3) additional public meetings such as council or commission meetings, business community meetings, or other public meetings as requested by TCTC. Wood Rodgers assumes that TCTC will provide all noticing and advertising for the workshops and other public meetings.

3.3 – Walking Tours

As part of the stakeholder engagement, Wood Rodgers will work with TCTC to coordinate walking tours for each of the respective sections of the Project Area.

3.4 – Public Participation Report

Wood Rodgers will work with TCTC to develop methods to obtain public feedback including but not limited to comment cards, interactive maps, and an online survey. Results and public feedback from the interactive public participation methods will be summarized in a report that includes an appendix containing all the data sheets.

Deliverables:

- Community Workshops (3); includes Exhibits and Agendas
- Public Participation Report

Task 3 Budget = \$30,000

TASK 4 – CONCEPTUAL SITE PLAN MAPS, STREETSCAPES, AND CAPITAL IMPROVEMENT PROJECTS (CIPs)

4.1 – Conceptual Site Plan Maps for Complete Streets, Non-Motorized Transportation Route, and Transit Stop Turnouts

Wood Rodgers will provide up to three (3) conceptual alternative site plan maps that include locations of complete street treatments, non-motorized transportation route alignments and transit pull out locations. The conceptual site plans will include an aerial background with parcel and right-of-way lines, as well as the conceptual depiction of the proposed treatment locations. This will include cross sections for the different treatment sections as opposed to providing line work for the entire corridor section. Transit stop renderings are included under Task 4.2.

4.2 – Conceptual Design and Renderings of Streetscapes for Complete Streets, Non-Motorized Transportation Route, and Transit Stops

Wood Rodgers will develop cross sections and renderings for the proposed improvements in conjunction with Task 4.1. This will include up to two (2) renderings of different transit shelter options and transit turnouts.

4.3 – Conceptual Plan Designs and Renderings of Short-Term and Long-Term CIPs for Complete Streets and Non-Motorized Transportation

Following the Public Outreach process, Wood Rodgers will develop a proposed site plan and renderings of the final preferred alternative from the alternatives developed in Tasks 4.1 and 4.2. Based on the preferred alternative, Wood Rodgers will evaluate the improvements proposed and develop a matrix of potential short-term and long-term CIPs. This will be completed in coordination with Task 4.4. The Draft CIP list will be provided to TCTC for review. Wood Rodgers will finalize that CIP list after receiving comments from TCTC.

4.4 – Planning-Level Cost Estimates for Capital Improvements Projects

Wood Rodgers will provide a general cost comparison of the initial conceptual alternatives and planning-level costs for each of the preferred improvements in the Complete Streets Corridor Plan.

Deliverables:

- Conceptual Alternatives (3)
- Renderings (2)
- Proposed Site Plan and Renderings for Preferred Alternative
- Planning-Level Cost Estimates

Task 4 Budget = \$50,000

TASK 5 – BUILD-OUT, OPERATIONAL, AND GREENHOUSE GAS EMISSION REDUCTION ANALYSES

5.1 – Build-Out Analysis for Jamestown to Columbia Corridor

TCTC staff will extract build-out growth in traffic analysis zones (TAZs) within close proximity to the Jamestown to Columbia Corridor from the UPlan Model. UPlan TAZ data will be provided by TCTC for use in the Tuolumne County TDM.

5.2 – Converting Land Use Data to a Traffic Demand Model

Wood Rodgers will collaborate with TCTC, and the City of Sonora and Tuolumne County Planning Departments to convert UPlan data to Tuolumne County TDM format.

5.3 – Traffic Demand Model Runs

Wood Rodgers will create two future-year TDM scenarios (2030 and 2040) using TAZ data from UPlan. Wood Rodgers will run the two future-year TDM scenarios and generate Year 2030 and Year 2040 forecasts for Tuolumne County and Caltrans use.

5.4 – Future Years Operational Analysis

Wood Rodgers will perform future years 2030 and 2040 conditions intersection turning movement analyses for the 13 intersections listed in Section 2.2. Wood Rodgers will perform future years 2030 and 2040 conditions roadway operational analyses for the 9 roadway segments listed in Section 2.2. The operational analysis results will be used to help determine potential improvements for the corridor.

5.5 – Greenhouse Gasses (GHGs) Emissions Reduction Analysis

Wood Rodgers will qualitatively analyze the effects the candidate non-motorized transportation CIPs will have on GHGs in the Project study area. This will consist of research into similar improvements that have recently been completed and the resulting changes in the number of people traveling by vehicle/bicycle/pedestrian/transit modes, as well as the resulting changes to emissions. Best practice assumptions regarding non-motorized transportation improvements will also be researched. The current Tuolumne County TDM

models multi-modal travel as a simple reduction to vehicular travel that can be defined by the user per TAZ. New multi-modal travel reduction percentages will be developed as part of this analysis and will be input into the TDM to create “plus Project” scenarios as necessary. Additional factors that will be considered in the qualitative analysis include average vehicular speed and occupancy in the study area.

Wood Rodgers will analyze potential change in vehicle miles traveled (VMT) in the study area due to implementation of the candidate non-motorized transportation CIPs under Year 2030 and Year 2040 conditions. “No-Build” conditions (i.e., assuming the candidate non-motorized transportation CIPs are not constructed) study area VMT will be estimated using the two new Tuolumne County TDM scenarios from Section 5.3. The CIPs’ effects on VMT will be estimated through development of typical trip reduction rates based on standard trip reduction rates published by other organizations or agencies, as well as on any data available for similar projects. “Build” conditions study area VMT will be estimated by applying the typical trip reduction rates to trip data from the TDM, or by creating “Build” conditions TDM scenarios by inserting the typical trip reduction rates into the TDM in the study area.

Deliverables:

- Build Out Analysis
- Year 2030 and Year 2040 Model Runs
- Year 2030 and Year 2040 Analysis Memo
- GHG Analysis

Task 5 Budget = \$18,900

TASK 6 – SR 49 JAMESTOWN TO COLUMBIA COMPLETE STREETS CORRIDOR PLAN REPORT

6.1 – Development of the Administrative Draft Corridor Plan

Wood Rodgers will prepare an Administrative Draft Corridor Plan (Draft Plan) for TCTC, Caltrans, and the stakeholders to review. Chapters of the Draft Plan shall include the following as detailed in the attached Scope of Work outlined for each chapter:

- Chapter 1 – Executive Summary
- Chapter 2 – Introduction
- Chapter 3 – Goals, Objectives, and Policies
- Chapter 4 – Complete Streets Plan
- Chapter 5 – Non-Motorized Transportation Route
- Chapter 6 – Transit Facilities Management and Access Plan
- Chapter 7 – Finance and Implementation Plan

6.2 – Public Draft Corridor Plan

Wood Rodgers will address all comments from the Administrative Draft Corridor Plan and prepare a Draft Corridor Plan to be released for Public Review.

6.3 – Draft Corridor Plan Public Presentations

Wood Rodgers will attend one (1) stakeholder meeting and up to three (3) public meetings to present the Draft Corridor Plan. The public meeting presentations are planned for a TCTC meeting, a City of Sonora Council meeting, and a Tuolumne County Commission meeting.

6.4 – Revise and Address Comments on the Draft Corridor Plan, and Develop a Final Corridor Plan

Wood Rodgers will meet with TCTC and Caltrans to discuss all the comments received through the Public Draft Corridor Plan. Wood Rodgers will work with TCTC to address all comments received, and will update the Draft Corridor Plan as necessary.

6.5 – Final Corridor Plan Public Presentations

Wood Rodgers will attend one round (3 locations) of public meetings and present the Final Corridor Plan. These presentations are planned for a TAC/CAC meeting, a TCTC meeting, and a Stakeholder meeting.

Deliverables:

- Administrative Draft Corridor Plan
- Public Draft Corridor Plan
- Final Corridor Plan
- Final Plan Presentation

Task 6 Budget = \$34,000

REIMBURSABLE ITEMS

- Mileage
- Reproductions
- Outreach Materials

Budget = \$2,500

TOTAL BUDGET = \$175,900 (Lump Sum)

Wood Rodgers will deliver the above Scope of Work for a Lump Sum amount of \$175,900. A Project Schedule will be prepared at the kick-off meeting. It is understood that this will be consistent with all terms of our approved Master Agreement. Should you have any questions, please contact me at (916) 826-6420 or via email at mrayback@WoodRodgers.com.

Sincerely,

WOOD RODGERS, INC.



Mark Rayback, PE, QSD/QSP
Vice President

Enclosure