

Shasta Regional Freight Plan Scope of Work

Scope of Work, Tasks, and Project Deliverables

The RFP should include the following work tasks.

Task 1: Project Management

Work with SRTA staff to manage the project and ensure key deadlines are met. The consultant will:

- Attend a project kick-off meeting.
- Organize regular project management meetings with SRTA staff and a Shasta Regional Freight (SRF, pronounced “surf”) working group (staff from local agencies and interested federally recognized tribes and potential participation by industry representatives at key meetings).
- Provide regular invoice and progress reports, including DBE reporting.

Task Deliverables:

- Meeting agendas and notes; presentation materials
- Invoices; progress reports

Task 2: Vision and Goals

Develop and work with the SRF Working group to identify a vision, goals, and strategic actions for the improvement of goods movement throughout the freight network in the Shasta Region.

Task Deliverables:

- Summary of the statewide and federal freight plans, policies, visions, objectives, and goals; as well as relevant local, state, and federal legislation (current and pending).
- Matrix of existing regional planning efforts/documents/legislation (existing and pending) that highlight areas of need for developing a regionwide freight plan that aligns with the latest state and federal plans.

Task 3: Existing Conditions and Performance Summary

The consultant is responsible for assessing opportunities and constraints, freight infrastructure (including military freight), and projected growth in freight traffic throughout the freight network. Working in cooperation with SRTA and the SRF Working Group, the Consultant shall gather data on existing conditions including an assessment of general plan goals and policies related to freight transportation for jurisdictions in the region, an examination of any local and regional cooperative initiatives that may impact freight movement through the region, and state and regional plans such as the California Freight Mobility Plan (CFMP) 2023, California Statewide Truck Parking Study (2022), California Transportation Plan 2050, Climate Action Plan for Transportation Infrastructure (CAPTI), regional economic studies, airport freight studies or reports including Redding Regional Airport's Master Plan, Caltrans System Investment Strategy (CSIS), and SRTA's Regional Transportation Plan/Sustainable Communities Strategy. The consultant shall also assess regional opportunities and constraints related to local compliance with California Assembly Bill (AB) 98 (Carrillo) signed into law on September 29, 2024, and other applicable freight-related legislation (also considering pending legislation), including assisting the region in identifying and prioritizing critical rural freight corridors. This project should focus primarily on regional corridors and areas which have not already been identified and studied in state planning documents. However, where state reports lack enough detailed data for the region, this effort may augment state reports if data yielded can support regional planning efforts.

The consultant will develop and update freight data which can be used to help refine planning and forecasting data practices and is important in justifying applications for future funding opportunities. Data shall be mapped in geographic information systems (GIS) where possible and geographic data with modeling uses shall be presented at the traffic analysis zone (TAZ) level and industry level where possible. The Consultant shall work with SRTA and the SRF Working Group to collect data to assess the Freight Network, including but not limited to: I-5, SR 299, SR 273, SR 89, SR 36, and SR 44 as well as regional arterials or other local roadways connecting freight-related land uses to the state highway system. Data should also be identified and collected related to air freight activities in the region and the corresponding on-road activities as a result of air freight. The consultant shall analyze electronic data and identify trends. This task shall include the following sub-tasks:

1. Identify and evaluate roadway pavement condition, bridge condition, truck travel speed, truck congestion hours of delay, highway bottlenecks/chokepoints, and reliability buffer indices (e.g. federal truck travel time reliability index). Identify key freight routes with the largest freight traffic in terms of volume and percentage of overall traffic. Using truck count station data, prepare analysis of historical trends and forecast future trends in freight truck volume for planning purposes. Analyze time-of-day and average daily truck traffic (ADTT) trends on these routes.
2. Provide a summary of corridor safety as it relates to freight movement, including summaries of truck-involved crashes, street and rail crossing conflicts related to freight activity, fatalities, and injuries, as well as a delineation of crashes involving more than one mode of transportation and which modes those are. Assess availability and condition of commercial vehicle parking facilities, particularly regarding areas not discussed in state plans and studies.
3. Identify major freight-generating land uses. Analyze the relationship between freight and land use development and assess the impact of future freight growth on land use. Collect and analyze data on land use and freight interactions including types of commodities and data on freight produced, processed, and transported to and from different types of industries and land uses. Propose potential land-use-related projects which may improve freight flow throughout the Freight Network while avoiding freight flow through residential areas and concentrations of sensitive receptors, as defined by AB98.
4. Building off previous local and regional plans and studies, where applicable, analyze how freight affects economic development, including how cities, counties, and other agencies throughout the region have attracted freight-related businesses, and ongoing efforts of these jurisdictions to attract additional freight business. Analyze how freight affects employment and income in the Shasta Region. Analyze North American Industry Classification System (NAICS) Truck Transportation, Messenger Services & Warehousing data relating to truck freight and detail the relationship to the regional economy using graphs, charts, and narrative.
5. Building off previous local and regional plans and studies, where applicable, collect and analyze data which can be used to improve understanding of the Freight Network in consultation with SRTA and/or the SRF Working Group.

Provide an analysis of existing truck and traffic counts and counting facilities, assessing the adequacy of each, including freight traffic proximity to disadvantaged communities and sensitive receptors. Identify intermodal connectors (a.k.a. “first or last mile” linkages” to regional and major freight corridors and zones & designated NHS highways). Collect multimodal data, including railroads, pipelines, air freight, etc.; freight trip mode split; industry data; and vehicle size categories. Collect and compile data on multi-destination freight trips and analyze trip-chaining trends to better understand the lifecycle and supply chain of freight commodities. Identify business-serving trips in cooperation with private partners. Analyze time-sensitivity of mode choice, time-of-day variations, and seasonal specificity in freight. Analyze commuter traffic which may affect freight trips, to the extent such analysis is feasible and relevant. Prepare maps and charts illustrating the state of truck freight commodity flows throughout the Shasta Region including historical and future projected trends. Assess the impacts, challenges, and opportunities of e-commerce, military freight, air freight, etc. on regional traffic and infrastructure. Analyze the United States Department of Transportation (USDOT) Bureau of Transportation Statistics Commodity Flow Survey for data relevant to the Freight Network.

6. Employ the FHWA Freight Analysis Framework (FAF) data to improve freight planning in the area.
7. Identify freight loads based on commodity type and account for specific features of each product, including evaluation of perishable products, whether the product must go to processing, manufacturing, refrigeration, or other facilities, identifying type and location of consumer demand, key markets, and product types going to major ports for export. Identify patterns in freight by volume and load size.
8. Develop charts, graphs, and graphics to illustrate Freight Network data, forecasting changes up to 20-25 years.

Task Deliverables:

- Chapters addressing existing conditions, socio-economic conditions, transportation systems and travel characteristics, goods movement flows, freight

system infrastructure, resiliency, equity, multimodal contributions, safety, and other relevant topics.

- Appendices with data analysis, charts, graphs, and graphics on the Freight Network.
- Copies of original data files (including all GIS files) used to perform analysis for potential future use by the SRF Working Group.

Task 4: Analyze Freight Performance, Identify Potential Projects and Strategic Actions

The consultant shall evaluate and analyze freight performance issues identified in the existing conditions portion of this project. In cooperation with SRTA and the SRF Working Group, the consultant will identify a set of performance measures for regional freight consistent with FHWA and state freight performance management standards. Performance metrics should reflect best practices in freight performance measure tracking.

In cooperation with the SRF Working Group, the consultant will identify best practices for freight planning, constraints and solutions, long- and short-term strategic actions/improvement projects, policy options, and next steps for improving freight movement on key routes throughout the region, including along prioritized, critical, rural freight corridors. This task shall include the following sub-tasks:

1. Freight system performance measures shall be developed, including but not limited to highway pavement condition, bridge condition, truck travel speed and turning movements/sweeps, street and rail crossing conflicts related to freight activity, congestion truck hours of delay, highway bottlenecks/chokepoints, reliability buffer index, and highway truck-involved fatalities and injuries. Performance shall also be evaluated based on project impacts on resiliency, equity, multimodal contributions, and general safety. Consultant may work with Caltrans to determine if they can provide this type of data. Evaluate select projects with a focus on Trade Corridor Enhancement Program (TCEP) performance metrics to produce project data to facilitate grant funding. Produce a set of graphs and maps illustrating performance data to assist in regional and statewide freight planning. Identify highway sections with poor or declining performance, analyze the reason for the reduced performance, and propose potential infrastructural and non-infrastructural solutions.
2. Provide an analysis of capacity needs taking into consideration lane inventory as assessed in the established planning documents, traffic volume, and level of service and how capacity needs relate to commercial trucking. Analyze operational

needs throughout the freight network, taking into consideration commercial trucking needs, congestion, congested-related delay for key corridor segments, volume-to-capacity (V/C) ratios for key corridor segments, and truck freight system demand as measured in VMT. Identify any gaps or issue areas that make accommodation of Surface Transportation Assistance Act (STAA) trucks a challenge. Propose projects which would improve freight flow, particularly during extreme weather events where possible.

3. Analyze existing and planned centers of commercial trucking activity and their relationship to freight movement in the regional freight network, as well as the link between freight and environmental impacts, including impacts to local populations. Assess the potential for projects in and around these activity centers which would improve and increase freight flow through the region in a manner that is not deleterious to nearby disadvantaged communities, residential housing, and concentrations of sensitive receptors. The assessment should note locations where freight traffic and railroad lines could create delays or safety issues and offer solutions to such issues. Explore the development of multimodal freight hubs, where feasible.
4. Develop charts and graphs to illustrate past and future changes in freight performance, forecasting changes out to the year 2050 and identify the most efficient and cost-effective methods to update freight performance measures on a regular basis.
5. Develop a prioritized list of freight projects and strategic actions that should be considered for implementation to improve the safety and movement of goods in the region and, where feasible, reduce air pollutants and maintain the region's good air quality status. Projects and strategies should strive to achieve statewide goals in the areas of climate change, zero emission technologies, innovation, natural resource conservation, and equity, while reducing other negative impacts of regional goods movement system (safety, maintenance costs, etc.)
6. Investigate opportunities to address needs with sustainable highway investment, non-highway modes, or a combination or integration of modes. Evaluate existing/identified freight needs and legacy projects proposed to address those needs and re-evaluate project approaches to incorporate opportunities for innovative changes that increase sustainability and address applicable federal and state climate change and equity goals. Conduct thorough assessment of the CFMP projects to ensure they align with the CAPTI and CSIS, or to determine opportunities to refine projects to better advance CAPTI and CSIS.

- Develop preliminary cost estimates for priority projects and other projects which may benefit the Freight Network.
 - Building off local and regional plans and data collected, identify whether ITS improvements would improve freight movement throughout the Freight Network. Where applicable, identify which improvements should be prioritized, a strategy for deploying ITS improvements, applicable funding sources, and project lead agencies.
7. Identify potential land use conflicts with freight traffic. Analyze how freight growth may affect land-use and the environment and vice-versa.
 8. In cooperation with the SRF Working Group, propose project alternatives and evaluate projects according to evaluation criteria.
 9. Develop a cohesive, long-term plan to improve freight traffic flow and goods movement, future corridor alternatives and prepare an evaluation matrix. Sub-tasks shall include the following:
 - Propose a prioritized list of short-term and long-term strategies to improve freight traffic flow and goods movement through the Freight Network.
 - Integrate freight strategies identified in relevant freight-related local, regional, and statewide plans.
 - Evaluate and propose opportunities for coordinating implementation of prioritized projects with projects of other local, regional, and state plans.
 - Propose funding sources for proposed projects and how they will be implemented, including strategic actions identified in the final plan and a funding plan which evaluates funding sources and provides recommendations on priority funds to target.
 - Provide recommendations for recurring and future work that can build on this plan on an ongoing basis.
 - Identify projects to be added to SRTA's RTP as part of the next RTP update.

Task Deliverables:

- Technical Memo Summarizing Potential Freight Projects and Strategic Actions

- Evaluation Matrix for Freight Projects and Preferred Regional Freight Strategic Actions

Task 5: Public Engagement

The consultant shall perform stakeholder and public engagement to inform the development of the plan, including the following sub-tasks:

1. Convene the SRF Working Group on a regular basis and as directed by the Project Manager to report on progress, take comments, and discuss data needs. Meetings may be organized in person, via phone, or through virtual meeting platforms.
2. Organize quarterly advisory meetings of the SRF Working Group, and potentially, with stakeholders from private industry such as rail, truck, airport, shippers, logistics providers, warehousing and distribution centers, highway enforcement, freight associations (e.g. California Trucking Association, at minimum), and importers and exporters of agricultural and manufactured goods (If not quarterly meetings, then at strategic points in the development of the plan). This group shall provide input to provide a better understanding of industry needs from a commercial perspective, linking that to transportation planning priorities. Propose an approach to convening this group on a regular long-term basis after the project is completed to inform planning on key freight corridors identified.
3. Conduct at least six (6) and up to twelve (12) SRF meetings, including potential SRF meetings with industry stakeholders, to collect stakeholder and/or public feedback. Meetings will mostly be held virtually, but some may be in person as needed. The purpose of these meetings is to inform the plan development and should take input from stakeholders throughout the region. The proposer may indicate the virtue(s) or strategic advantage(s) of holding meetings with all stakeholders versus industry-specific groups, or some other specific group of stakeholders.
 - Participants should include SRF members and appropriate local representatives of rail, truck, shippers, logistics providers, warehousing and distribution centers, highway enforcement, importers and exporters of agricultural and manufactured goods, equity organizations, communities near freight hubs, and the full spectrum of groups with an interest. Where possible, engagement should also include participation from minority and low-income populations, Native American Tribes, Federal Land Management Agencies,

neighborhood and community groups, non-profit organizations, organizations serving rural-area residents advocacy groups, community-based organizations, and elected officials. Meetings shall occur during alternatives development and during the review phase of the draft plan.

- At minimum, the consultant should provide material for SRTA staff to populate a project webpage on the SRTA website. However, SRTA staff is seeking a winning public engagement approach informed by significant experience in freight planning efforts, particularly in small urban and rural contexts. Consultants should propose creative approaches that have the greatest chance of maximizing participation across a broad spectrum of stakeholders. Proposals should articulate which strategies and tools the consultant recommends employing to communicate the goals and initiatives in the plan to wide audiences. Communicate how this will manifest for public information, marketing, and communications efforts?

Task Deliverables:

- Stakeholder list, public engagement materials and activities such as centralized website, web-based comment tool database, newsletters, engagement photos, meeting agendas, and other evidence of public engagement strategies, as applicable
- Agendas, meeting materials, and meeting notes
- Materials related to working group
- Public comment summary
- A Public Engagement chapter for the plan

Task 6: Draft, Revised Draft and Final Plan

Prepare a draft report including but not limited to the required elements listed in this RFP and prepare a draft plan for SRF review. Following completion of the revised draft, project advisors and the SRTA Board of Directors will be given the opportunity to provide feedback. Considering feedback provided, the consultant will prepare the final plan.

Prepare a final plan including but not limited to the required elements listed in this RFP and incorporating all updates from the draft and revised draft. Also, produce a summary

document for the public and decision makers that outlines the challenges facing freight movement and detailing how the study addresses those challenges.

Task Deliverables:

- Draft Plan
- Presentation of Draft Plan to the SRTA Board of Directors.
- Revised Draft Plan with summary of comments and presentation materials/staff report summary
- Final Plan including implementation section with identified potential funding sources
- Summary Document for freight movement challenges and how the plan addresses these.
- Presentations to the SRTA Board of Directors and up to four other boards and councils