

WORK ELEMENT 701.14

SCS Development & Support (FY 2020/21 Funds)

Hydrogen Study & CTSA Zero Emission Fleet Rollout Plan

Agency: SRTA

Total Budget (FY 2022/23): \$263,301

ESTIMATED EXPENDITURE AND ANTICIPATED REVENUE

Staff Allocations and Funding Requirements	FY 2022/23							
	Expenditures		Revenue by Fund Source (\$)					
	Direct	Indirect	FHWA PL C/O	Toll Credits*	Total FHWA C/O	PPM	SB1 20/21 Formula	LTF
SRTA								
Personnel	\$ 41,433	\$ 55,964					\$ -	\$ 97,397
Services & Supplies	\$ -		\$ -			\$ -	\$ -	
Human Resources	\$ 994						\$ -	\$ 994
						\$ -		
Consultant (Frontier Energy)	\$ 50,000						\$ 50,000	\$ -
Consultant (TBD)	\$ 114,909						\$ 114,909	\$ -
TOTAL:	\$ 207,337	\$ 55,964	\$ -	\$ -	\$ -	\$ -	\$ 164,909	\$ 98,392

Toll Credits are shown for matching purposes only and are not considered revenue

Prior Fiscal Year Work

RFP and consultant contact for Hydrogen Study.

Objective

General Use of SB1 Formula Funds

To lend technical and financial assistance to local agency and private sector partners in identifying projects, performing conceptual design, and carrying out analyses needed to advance projects that support implementation of the Regional Transportation Plan/Sustainable Communities Strategy (SCS) and meeting greenhouse gas emission reduction targets through coordinated transportation investment and land use strategies. As these partnerships and investments begin to yield tangible outcomes, SRTA will continue to align planning and infrastructure investments to achieve the critical mass and intensity of factors known to influence travel behavior - also known as the 5 'D Factors' described in the region's RTP/SCS.

Use of FY 2020/21 SB1 Formula Funds

One of the most cost-effective means of reducing transportation sector greenhouse gas emissions is through the use of zero emission vehicles. Although this does not reduce vehicle miles traveled as SB375 is intended to influence, increasing the number of zero emission vehicles in the regional fleet mix is needed to meet the very ambitious CARB-assigned performance target for the region. Accelerating the development of hydrogen fueling infrastructure will increase consumer and fleet adoption of hydrogen vehicles and allow the Salmon Runner intercity bus service to operate as zero emission. Since the initial attention will be on non-SB375 class vehicles (i.e., freight vehicles) and the region can only count the portion of reduced VMT/GHG for SalmonRunner inside the regional boundaries, the direct and immediate impact on meeting the region's target will be small; however, this foot-in-the-door will lead to increased access for all users in the future. Initial efforts will focus on identifying and bringing together a consortium of government, utility, non-profit, and private stakeholders to discuss challenges, identify opportunities, and seek grant funding for regionally identified projects (TBD).

Discussion/Project Justification

Based on technical modeling performed for the Sustainable Communities Strategy, the single most effective strategy for reducing SB375-qualifying greenhouse gas emissions would be a transition to zero emission vehicles. Downsides are that switching to zero-emission vehicles does not reduce vehicle miles traveled with associated impacts to community livability, safety, and infrastructure demands. The general consensus is that zero-emission charging/fueling infrastructure will lead to public adoption of zero emission vehicles; however, SRTA does not own or control land, facilities, and/or right-of-way needed to build zero-emission infrastructure or network of charging/fueling stations. The SRTA Board of Directors determined that SRTA's current role should be to provide technical assistance, coordination amongst interested parties, and assist in securing funding support to implementing agencies (see December 2021 Agenda). The Shasta Regional Hydrogen Hub Study will provide the foundation of information needed to guide SRTA's efforts in these areas moving forward, as well as support grant seeking efforts.

Alignment with Core MPO Requirements, Performance Measures, and Applicable State Grant Program Objectives

This work element is funded with SB 1 Formula Funds, administered through the Caltrans Sustainable Communities Grant Program. Through this work element, projects are fostered with local jurisdictions and community partners that implement the region's adopted SCS. To aid in the development of projects, SRTA will be identifying a range of potential strategies to prioritize for funding. As projects and deliverables are identified for SB1 Formula funds, the OWP is amended.

Deliverables (anticipated delivery date)

Hydrogen Study: Technical memo summarizing outreach performed and stakeholder input received (June 2023). CTSA Zero Emission Plan: Draft Plan (April 2023) and Final Plan (June 2023).

Task 1: Shasta Regional Hydrogen Hub Study

Task/Activity	Resp. Agency	Schedule
1.1	SRTA	Dec 2021 - Feb 2023
1.2	SRTA, consultant	Feb 2022 - June 2023
1.3	SRTA, consultant	Feb 2022 - June 2023 (as needed)
1.4	SRTA, consultant	Feb 2022 - June 2023 (as needed)

Task 2: CTSA Zero Emission Fleet Rollout Plan

Task/Activity	Resp. Agency	Schedule
2.1	SRTA, consultant	Jul 2022- June 2023