san bernardino county transportation authority

Victor Valley Subarea Plan

San Bernardino County Long Range Multimodal Transportation Plan

San Bernardino County, CA

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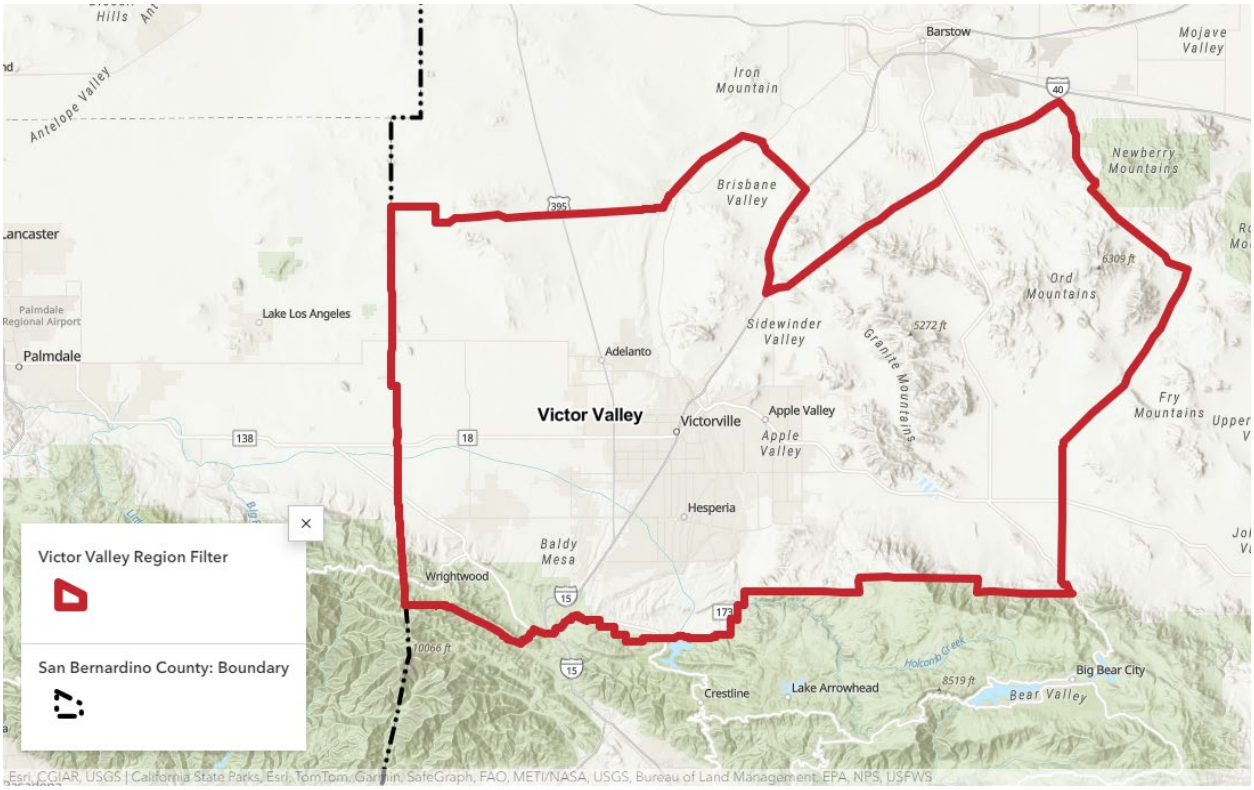
1 Subarea Overview

As the largest county in the contiguous United States in land area, San Bernardino County is geographically diverse, and each subregion has unique needs. This is recognized in the county's half-cent sales tax for transportation improvements, Measure I, which allocates funding to six subareas. In developing the Long Range Multimodal Transportation Plan (LRMTP), the six subareas identified by Measure I were analyzed to ensure issues facing San Bernardino County's unique geographic areas are adequately addressed. This subarea plan focuses on the Victor Valley subarea (Figure 1-1).

The Victor Valley subarea consists of four incorporated communities: the cities of Adelanto, Hesperia, and Victorville and the Town of Apple Valley. The subarea had 122,934 households in 2019 and is projected to increase to 171,986 in 2035 and to 197,550 households in 2050 (Southern California Association of Governments [SCAG] 2024). Additionally, the number of jobs in the Victor Valley is expected to increase from 106,438 jobs in 2019 to 135,498 jobs in 2035 and 153,699 jobs in 2050 (SCAG 2024). Victor Valley is the fastest growing subarea in terms of percentage growth in households and employment in the county. In the SCAG region, the cities of Adelanto, Victorville, and Hesperia are the top ten growing jurisdictions in terms of percentage of households, and Adelanto and Hesperia are the top five fastest growing jurisdictions regarding the percentage of employment (SCAG 2024).

Figure 1-1. Victor Valley Subarea



Source: Existing Conditions StoryMap

2 Unique Challenges

Rapid Population Growth: Victor Valley is expected to be the fastest growing subarea in San Bernardino County. Between 2019 and 2050, the number of households is expected to increase 38 percent, and the number of jobs is expected to increase by 31 percent, which is at a greater rate than that of San Bernardino (SCAG). Commensurate with these projected relatively high rates of growth for the area's demographics, vehicle hours traveled are expected to disproportionately increase over vehicle miles traveled, indicating increasing delay and congestion in the future due to the projected relatively high growth rates for this subarea.

Limited Transit Options: The Victor Valley Transit Authority (VVTA) provides local transit services for the core cities and towns in the Victor Valley subarea (Figure 2-1). Although Victor Valley Transit Authority (VVTA) provides connections to other regional transit agencies including Mountain Transit, Riverside Transit Agency, Beaumont Transit, and Sunline Transit, riders have to make these transfers at the San Bernardino Transit Center, located in the Valley subarea. Service frequency ranges from 30 minutes to two hours depending on the route and frequency does not vary for peak, weekday, or weekend service. Transit options for longer distances and interregional travel and service for rural communities are limited, though the high-speed rail projects from Brightline West and the High Desert Corridor Joint Powers Agency will further link the Victor Valley to the state's growing rail network.

Figure 2-1. VVTA Bus Routes

Source: San Bernardino Countywide Zero-Emission Bus Study

Reliance on Key Arterials and Roadway Congestion: Interstate 15 (I-15) links Victor Valley to destinations in Riverside, Los Angeles, and Orange counties, and well as jobs and services in the county's Mountain and Valley subregions, passing through the Cajon Pass. I-15 is an economic gateway connecting ports on the west coast and the nation and is a key route for those traveling to Las Vegas from Southern California. As there are limited north-south routes to serve as an alternative, the corridor is a major travel route for commuters and truck drivers and experiences significant congestion during peak commuting hours. Preliminary travel demand modeling conducted for the LRMTP using the future network with improvements that are currently planned and expected to be funded indicated that I-15 through Victor Valley to be a congestion hotspot. The US 395 is a critical

link for goods movement for inland counties and an important agricultural route to and from the Central Valley and experiences congestion in the Victor Valley due to truck volumes, steep grades, roadway design limitations, and a lack of alternative travel options.

3 Strategic Priorities

In developing the LRMTP, five areas of concern were identified throughout the county: mobility, goods movement, climate adaptation and resiliency, disadvantaged communities, and funding. The areas of concern are related to the goals and objectives of the LRMTP. This section describes how these areas relate to the Victor Valley subarea.

Mobility: Developed areas in the Victor Valley are primarily residential, with limited (but growing) job opportunities for the population. The number of jobs per household for the Victor Valley is 0.87, which is less than that of the county's (1.31) and the SCAG region's (1.42). Many residents must commute outside the subarea to reach job centers in the San Bernardino Valley or further afield in Los Angeles, Orange, or Riverside counties. This creates long commutes and, due to limited transit options, auto-dependency. However, VVTA has one of the more robust vanpool programs in the state, and continuation of that strategy, along with carpool formation, should continue to be a high priority.

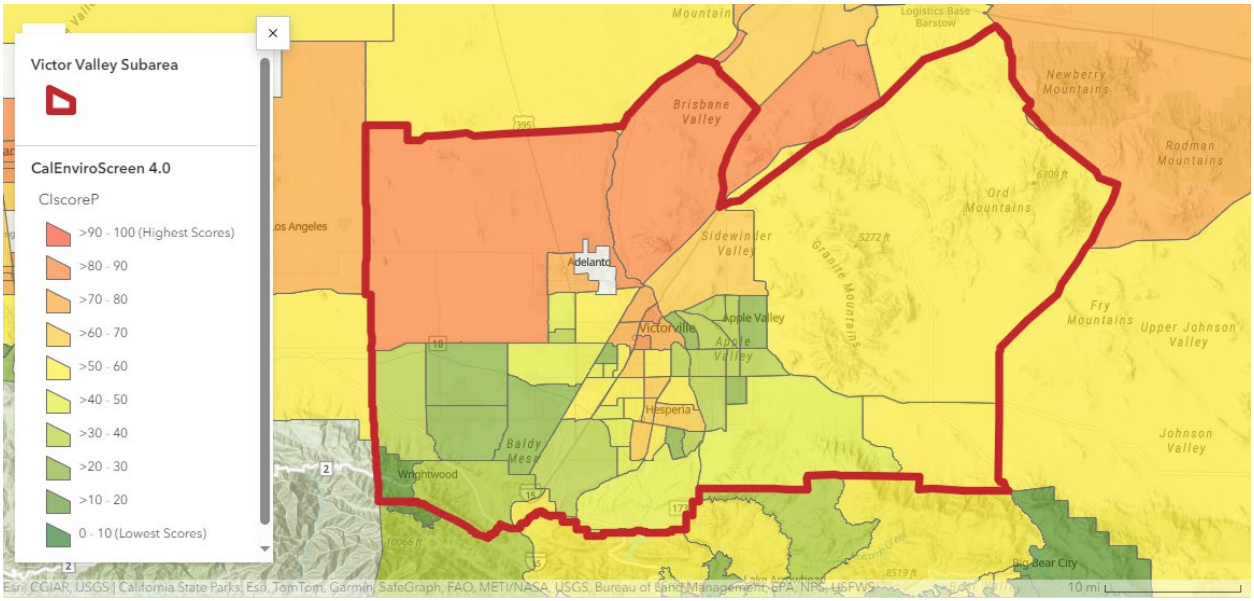
Goods Movement: Goods movement in the Victor Valley is accommodated by designated truck routes (I-15, U.S. Route 395, SR 18, SR 247, SR 138, SR 2, and SR 173) and an extensive rail network (Union Pacific Railroad and BNSF). Commercial and industrial zoning is found along I-15 and the railroads and adjacent to the Southern California Logistics Airport in Adelanto. Warehouse development impacts overall access and non-motorized mobility as these uses generate urban sprawl and large gaps within communities. While these land uses are important for the economy of the region, locating them near transit-heavy areas limits the potential for new transit-oriented and walkable development.

Climate Adaptation and Resiliency: Communities in the Victor Valley experience extreme heat days and areas of Victorville and Hesperia are located in Federal Emergency Management Agency 100-year floodplains, impacting individuals who walk or bike or use public transit. Infrastructure and operational resiliency against the changing climate are imperative for the transportation network, particularly for the mobility of vulnerable populations.

Disadvantaged Communities: Census tracts in Adelanto, Victorville, Apple Valley, Hesperia, and unincorporated areas in the Victor Valley have low median household incomes and/or census tracts receiving the highest 25 percent of overall scores in CalEnviroScreen 4.0 (Figure 3-1), indicating higher pollution burden and vulnerability. Census tracts in Victorville and Adelanto are classified as disadvantaged by Senate Bill 535. Sensitive populations in the region have an increased risk of asthma and cardiovascular disease, and experience high exposure to ozone and diesel particulate matter. As shown in Figure 3-2, the pollution burden percentile is higher for communities near Adelanto and the Southern California Logistics Airport.

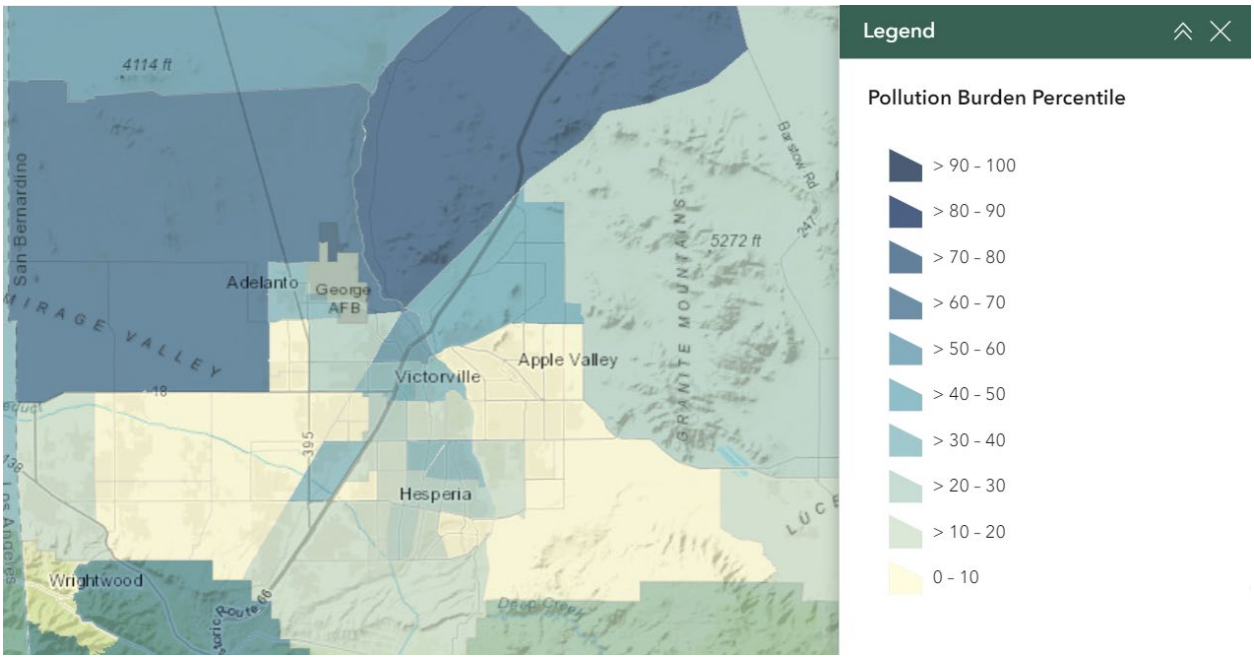
Funding: Funding issues are not restricted to one geographic area, however, securing funding for transit operations and expanding active transportation facilities are priorities for the Victor Valley subarea.

Figure 3-1. CalEnviroScreen Percentile for the Victor Valley



Source: CalEnviroScreen 4.0

Figure 3-2. Pollution Burden Percentile, Victor Valley



Source: CalEnviroScreen 4.0

4 Strategic Priorities Action Plan

The final LRMTP report identifies the projects being considered for the forthcoming San Bernardino County Transportation Authority (SBCTA) 2025 10-Year Delivery Plan, and presents projects listed for the “Baseline Level” of investment and additional projects at the “Aggressive Level” that can be considered with additional revenue for all subareas. Table I lists highway projects being pursued by local jurisdictions in the Victor Valley over the next 10 years. Additional detail is available in the SBCTA 2025 10-Year Delivery Plan.

Table I. Victor Valley Subarea - Major Local Highway Projects Program Through FY 2033/34 (1,000s)

	PROJECT	COST
1	El Mirage Road from US 395 to Koala Road	$13,586
2	Bartlett Avenue from Aster Road to Richardson Road	$9,621
3	Bellflower Street from Chamberlaine Way to Air Expressway	$8,255
4	Bellflower Street from Cactus Road to Air Expressway	$6,992
5	Bear Valley Road Bridge Over Mojave River	$50,662
6	Central Road Widening from SR 18 to Bear Valley Road	$4,318
7	Dale Evans Parkway Phase 1 (Waalew Realignment)	$2,891
8	Yucca Loma Road Widening from Apple Valley Road to 1200' East	$3,250
9	Yucca Loma Road Widening from 1200' East of Apple Valley Road to Rincon Road	$6,909
10	Yucca Loma Road Widening from Rincon Road to Navajo Road*	$13,864
11	SR 18 Widening from Apple Valley Road to Tao Road*	$30,718
12	Deep Creek Road from Bear Valley Road to Tussing Ranch Road	$4,814
13	Ranchero Road Corridor Widening	$54,696
14	Main Street Widening from I-15 to Fuente Avenue and Aqueduct Bridge	$16,503
15	Mojave Drive Widening from US 395 to 7th Avenue*	$41,521
16	Bear Valley Road Widening from Monte Vista Road to US 395*	$14,131
17	Rock Springs Road Bridge over Mojave River	$34,938
18	Phelan Road Widening from SR 138 to Hesperia City Limits**	$5,181
19	US 395 - Phase 2 Freight Mobility and Safety Project	$102,283
20	SR 18 Safety and Operational Improvements - Project Development**	$12,000
TOTAL:		**$437,133**

* Project is not fully funded.
** Project development only.

	Cajon Pass Program	COST
1	I-15 Cajon Pass Northbound Corridor Freight Project*	$111,000
TOTAL:		**$111,000**

* Project is not fully funded.

In addition, VVTA has conducted a similar long-range planning effort. VVTA's 2024 Comprehensive Operational Analysis (COA) presents a "Vision Plan" that sets forth route level and program level improvements that will represent a 156 percent increase in annual revenue hours and doubling the number of vehicles (VVTA 2024). Part of the plan in the COA includes a restructuring of routes that will feed the new Brightline West high-speed rail stations in Apple Valley and Hesperia. This 218-mile passenger rail service will operate from Las Vegas to Rancho Cucamonga, with 96% of its alignment within the median of Interstate 15. Construction is expected to take about 4 years with service beginning in 2028. It will provide a new means for making the commute from the Victor Valley, down the Cajon Pass, with transit connections to other destinations in the San Bernardino Valley and to Los Angeles. The COA can be found at: VVTA Comprehensive Operations Analysis - June 2021.

Table II through Table VI below summarize the strategic priority and key actions for each of the issues described in the previous section.

Table II. Mobility Action Plan for the Victor Valley Subarea

Strategic Priority	Key Actions
Further develop the Core Transit Network	Existing VVTA service represents the backbone of transit mobility. Their ability to deliver these services needs to be maintained.
	Continue to manage and improve other alternate mode initiatives, including vanpool, carpool, and active transportation modes.
	Coordinate service planning to provide connections to Brightline West
	Invest in VVTA transit system based on priorities in the Comprehensive Operational Analysis
	Position the priority transit network to be competitive for additional state and federal funding
	Pursue operating funds for increased service using strategies described in key issue 5
Incorporate Core Network into local land use plans and policies	Coordinate with transit operators and corridor jurisdictions on land use plans that address state housing targets and local economic development goals along the core transit network
Incremental transit enhancements in rural areas	Identify unmet or underserved needs in rural communities, such as connections from Needles to Arizona for grocery and pharmacy access
	Secure funding to implement new/enhanced service to meet rural travel needs
Develop coordinated program of first/last mile improvements	Build on the Non-Motorized Transportation Plan to define an active transportation priority list and advance project development to position for funding
	Deliver priority improvements
	Build on current efforts by SCAG to develop design guidelines for a tiered mobility hub network that co-locates transit and active transportation amenities such as bike sharing
Invest in multimodal connectivity and customer experience	Continue to coordinate service planning between transit providers to schedule convenient connections between modes
	Actively promote fare integration and adoption of interoperable fare payment and trip planning technology across San Bernardino County and regional public transportation services and modes
	Invest in physical improvements at bus stops to improve rider safety and comfort, such as shelters, benches, and lighting

Manage congestion on freeways and arterials	Implement the San Bernardino County portion of the regional multimodal managed lane system, with dynamic pricing, as included in the RTP/SCS
	Implement the Smart Intersection and Smart Corridor recommendations from the Smart County Master Plan
	Coordinate overall signal system improvements with priority treatments for the Core Transit Network
	Define and deliver priority highway/rail grade separations
Promote strong vanpool, carpool, and transportation demand management (TDM) initiatives	Continue and expand partnerships with large and medium-sized employers to promote multimodal alternatives to single-occupancy vehicle commutes, including telecommuting
	Continue partnering with regional partners to share data and technology tools to support shared-ride opportunities for long-distance commuters
	Review transit fare structures and carpool/vanpool programs to provide flexibility that encourages hybrid workers to use alternative modes on days they must travel to an office
	Promote awareness of mobility alternatives and communicate the quality-of-life benefits of bus and rail transit, vanpool, and carpool as alternatives to driving alone
Develop vehicle miles traveled (VMT) mitigation bank	Leverage existing plans and work on strategic priorities to identify multimodal projects that can reduce VMT
	Implement the proposed “mode-choice based VMT mitigation bank” to incentivize commuters to reduce their VMT and make VMT credits available for purchase by proponents of highway and development projects.

Table III. Goods Movement Action Plan for the Victor Valley Subarea

Strategic Priority	Key Actions
Develop plan for designated freight corridors	Identify potential routes within and between major logistics hubs such as the Southern California Logistics Airport
	Assist jurisdictions with guidelines for implementation of Assembly Bill 98, to include identification of corridors that may be designated as truck routes
	Identify improvements to improve safety and operational efficiency along these corridors
	Work with Caltrans and California Highway Patrol to enhance current incident management and monitoring systems to actively manage traffic along key freight corridors, such as the Cajon Pass
	Coordinate with local jurisdictions on a set of guidelines and plans to incorporate proposed truck routes into their circulation elements as required by Assembly Bill 98
Collaborate with logistics industry to shift freight from truck to rail, where practical and cost-effective	Prioritize connections to intermodal facilities in development of designated highway freight corridor plan
	Collaborate with BNSF and Union Pacific to address key bottlenecks in the freight rail network to increase rail capacity
Accelerate transition to clean trucks	Partner with logistics and zero-emission (ZE) charging/fueling companies to accelerate the transition to ZE truck operations and supporting infrastructure needs consistent with the California Transportation Commission's Senate Bill 671 designated zero-emission corridors
	Partner with the private sector to seek grant funding for ZE trucks and charging/fueling stations
	Continue to coordinate with local jurisdictions and regional partners to build on goods movement decarbonization efforts such as the Riverside-San Bernardino-Ontario MSA Priority Climate Action Plan
	Collaborate with state, regional, and local partners to locate and fund hydrogen production hubs and an affordable hydrogen fueling supply chain to support both the logistic industry and transit needs
Prioritize investments in high-volume highway freight corridors	Deliver key highway improvements in the Measure I 10-Year Delivery Plan, such as the I-15 Corridor Freight and Managed Lane Projects, and strategic improvements on other state highways such as SR-18 and US 395
	Strategically invest in improvements to key highway freight bottlenecks and that minimize conflict between trucks and other road users, such as the Cajon Pass I-15 Northbound Truck Climbing Lane Extension.

Table IV. Climate Adaptation and Resiliency Action Plan for the Victor Valley Subarea

Strategic Priority	Key Actions
Encourage redundancy across the transportation network and improve operational resiliency on major arterials	Implement recommendations from the forthcoming State Route 247/62 Emergency Bypass Study and the Emergency Evacuation Network Study (EENR)
	Extend the I-15 truck climbing lane through the Cajon Pass
	Continue development of managed lanes on I-15 consistent with regional plans
Coordinate connections to Brightline West	Coordinate public and private bus connectivity to the Hesperia and Apple Valley Brightline stations
	Partner with VVTA to coordinate feeder service to the Apple Valley and Hesperia stations, such as new fixed routes or expansion of Micro-Link on-demand service as appropriate
Accelerate transition to clean trucks	Partner with trucking and zero-emission fueling/charging companies to accelerate the transition to zero-emission in the Senate Bill 671 corridors and for local logistics operations.
	Seek grant funding for ZE trucking and transit
Transition transit operations to zero-emissions	Implement transit zero-emission plans, taking advantage of lessons learned as agencies deploy new technologies, in particular regarding operating zero emission vehicles long distances and in hot conditions
Support development of hydrogen hubs and fueling	Partner with Metrolink, Omnitrans, and VVTA to identify opportunities for leveraging economies of scale in the sourcing of hydrogen fuel
	Partner with the state and utility industry to site green hydrogen production in accessible Inland Empire locations
Prioritize state-of-good-repair on highways and arterials	Reinvest new toll revenue into maintaining the managed lane system as well as excess revenue on transit, zero-emission and affordable housing
	Collaborate with Caltrans and local jurisdictions on criteria such as pavement condition index for prioritizing maintenance of alternate routes and need for incident traffic management and emergency evacuation

Establish emergency procedures	Complete the Emergency Evacuation Network Resilience Study in cooperation with Western Riverside Council of Governments and partner to implement key recommendations of the study
	Aid transit agencies, where possible, during periods of emergencies due to extreme events such as fire and flooding, as they support evacuation of local residents (and their pets) to safe centers and evacuation shelters.
	Collaborate with local and state emergency service agencies to establish and maintain strong and clear communication pathways so that in times of emergency, San Bernardino County residents are knowledgeable about where to turn for immediate transportation-related information

Table V. Disadvantaged Communities Action Plan for the Victor Valley Subarea

Strategic Priority	Key Actions
Continue to operate the local bus and demand-responsive transit systems that particularly serve residents without access to cars	Analyze potential impacts of major transit investments on transit service to disadvantaged communities.
	Provide adequate maintenance, security, schedule information and cleanliness at local bus stops.
	Consider needs of all users as electronic fare payment systems are further developed.
Take advantage of available funding focused on disadvantaged communities	Deliver transit priorities identified in the LRMTP that particularly benefit disadvantaged communities
	Ensure that transit and TDM programs are highlighted at employment sites where lower-wage workers tend to be employed
	Take advantage of equity-oriented programs like the Reconnecting Communities Pilot
	Continue to leverage state greenhouse gas reduction fund sources such as Transit and Intercity Rail Capital Program (TIRCP) and Senate Bill 1 funds such as Trade Corridor Enhancement Program (TCEP) to accelerate the ZE transition
Free and reduced fare programs	Expand targeted programs to improve transit affordability for students, seniors, and low-income individuals
	Promote electronic fare payment options, particularly to support fare-capping, including for low-income individuals who otherwise pay more for successive trips than the cost of a monthly pass
	Communicate fare incentives to the public
Prioritize multimodal improvements to improve mobility in disadvantaged communities	In developing the Core Transit Network, prioritize corridors that connect disadvantaged communities to key destinations
	Invest in high-comfort off-street active transportation corridors
	Build on the Non-Motorized Transportation plan to deliver improvements in disadvantaged communities
Prioritize inclusive communications	Translate promotional materials, trip planning information, and other information on SBCTA programs into the most common languages for the targeted audience
	Develop target-group focused communications strategies – such as to seniors, to rideshare commuters, to potential transit users – that can promote mobility choices.
	Use the Public & Specialized Transportation Advisory and Coordination Council (PASTACC) to coordinate delivery of services to disadvantaged communities.

Table VI. Funding Action Plan for the Victor Valley Subarea

Strategic Priority	Key Actions
Secure additional state and regional funding for transit operations	Increase availability and flexibility of future Measure I funding for use in transit operations
	Lobby for greater predictability of state and federal transportation revenue streams and flexibility to use new and existing state and federal transportation funding sources for operating expenses
Align future funding sales tax measures with the priorities of the LRMTP	Ensure that a potential Measure I renewal or additional tax measure would allow the key actions for the strategic priorities as eligible expenditures, including capital investments for all modes and ongoing operating costs for transit
	Ensure that a potential Measure I renewal provides flexibility in future allocations to allow SBCTA and its partners to adapt to the uncertain future and changing investment needs
Use excess toll revenue for transit improvements	Identify transit needs along planned express lane corridors such as I-15 and fund solutions with toll revenue
	Expand use of tolled express lanes to manage congestion while providing additional revenue for investment in alternate modes of travel
Partner with community-based organizations (CBOs) and the business sector to build support for projects and promote alternatives	Maintain relationships with CBO leaders and business sector partners
	Leverage CBO and private sector contact networks to disseminate information in a targeted manner and collect feedback from communities and businesses affected by projects
	Leverage CBO and business sector networks to disseminate information about new and existing multimodal services and incentives available to the public
Support local agency grant pursuits	Monitor grant funding opportunities at federal, state, and regional levels and connect collaborate with local partners on grant pursuits
	Provide technical support for local grant applications

5 Conclusion and Next Steps

VVTA recently revised their bus routes to improve service performance and to address the evolving needs of the Victor Valley region. Future investments are laid out in VVTA's Comprehensive Operational Analysis. As travel demand grows due to projected increase in households and employment, roadway capacity and conditions will be impacted. There is an opportunity for SBCTA and VVTA to maintain rideshare initiatives, particularly for commuting to other subareas and connecting to other transit options like rail. Additionally, SBCTA has developed a high level zero-emission bus (ZEB) rollout plan for the VVTA (SBCTA 2020). VVTA is working with SBCTA to review the rollout plan and determine the optimum form of ZEBs (i.e. combination of electric and hydrogen) based on costs, service requirements, and availability of technology. Additionally, the rapid growth of transit in the Victor Valley, such as the construction of Brightline west with stops in Apple Valley and Hesperia, is an opportunity to integrate land use and transportation planning.

The active transportation plans (Non-Motorized Transportation Plan, Points of Interest Pedestrian Plan, Regional Safe Routes to School Plan) detail recommendations for a school site or neighborhood for each jurisdiction; however, these recommendations are largely unfunded. The implementation of pedestrian and bicycle improvements should prioritize areas of high use by commuters and students or where high accident rates occur. SBCTA has been collaborating with the San Bernardino Department of Public Health to implement educational campaigns and workshops for students. SBCTA can support coordination between cities for interjurisdictional improvements, where necessary. The pursuit of grant application opportunities is one of the areas identified in several plans to bring these projects from concept to reality.

Construction of warehousing and logistics facilities in the Victor Valley has accelerated in recent years. It will be important to locate such facilities adjacent to freight corridors and in designated areas such as the Southern California Logistics Airport and the future Barstow International Gateway (BIG Project) southwest of Barstow. The purpose of BNSF's BIG project is to bring freight directly from the ports of Los Angeles and Long Beach via rail, as much as possible, to reduce the volume of trucks that travel up and down the Cajon Pass and through the Victor Valley. SBCTA is also working with local jurisdictions and the private sector to locate charging/fueling facilities for zero-emission trucks to minimize freight-related impacts to communities.

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