



DRAFT Mountains 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 Mountains subarea (Figure 1).

The Mountains subarea includes the City of Big Bear Lake and has the slowest growth rate in terms of number of households and jobs in the county. The subarea had 22,050 households in 2019 and is projected to increase to 22,076 in 2035 and to 22,089 households in 2050 (Southern California Association of Governments [SCAG] 2024). Additionally, the number of jobs in the Mountains is expected to increase from 10,876 jobs in 2019 to 11,552 jobs in 2035 and 11,980 jobs in 2050 (SCAG 2024). The Mountains subarea is characterized by preserved open space with single-family residential and commercial development primarily concentrated in Big Bear Lake and the unincorporated community of Lake Arrowhead.



Figure 1. Mountains Subarea

Source: Existing Conditions StoryMap

2 Unique Challenges

The Mountain Area Transportation Study (MATS) provides an extensive overview of some of the transportation challenges in the Mountain Subarea (San Bernardino County Transportation Authority [SBCTA] 2016). A comprehensive list of transportation challenges was identified, as well as solutions. State highways are the primary routes up and down the mountains, and are where the most significant congestion levels can occur. Congestion particularly occur on weekends in the winter due to the combination of many recreational visitors as well as drivers ill-prepared for winter conditions.

Unfortunately, funding for this subarea is limited, and Caltrans has limited options for improving mountain roadways. But local jurisdiction staff working with Caltrans could prioritize some of the lower-cost improvements.

Tourism and Seasonal Congestion: The primary access roadways to the mountain communities experience unique traffic patterns associated with visitors to the area. While the full-time population and associated employment are relatively low, substantial increases in traffic occur during the peak winter and summer seasons. As a result, traffic congestion occurs for extended periods as visitors and seasonal employees travel to the San Bernardino Mountain communities. Peak conditions, related to traffic congestion or weather, can result in cut-through traffic on local roads. During summer and winter months, particularly near popular snow area and hiking locations, illegal parking impacts traffic conditions.

Limited Roadway Connections: The three main roads to Big Bear Valley and the Rim of the World communities are State Route 330 (through Highland), State Route 38 (through Redlands) and State Route 18 (through Lucerne Valley). Roadway conditions are subjected to weather conditions and natural events like wildfires, floods, and landslides, and connections are geographically constrained. In the case of an emergency or disruption, there are limited route alternatives in the mountain communities.

Limited Transit Options: Mountain Transit provides six local routes that operate throughout the week with free fare in Big Bear Valley and Rim of the World communities and two routes between the San Bernardino Mountain communities and the city of San Bernardino, making connections with Omnitrans, Metrolink, Greyhound (Figure 2 and Figure 3). The off-the-mountain services are limited to Monday, Wednesday, and Friday. Mountain Transit also operates on-demand service and a Seasonal Weekend Trolley service providing transportation between local restaurants, hotels, ski resorts, and shopping venues throughout the City of Big Bear Lake and RIM Communities in the summer and winter. There are limited transit options for travel between Big Bear Valley and the Rim communities and for connections to other subareas.



Figure 2. Mountain Transit Big Bear Routes

Source: Mountain Transit



Figure 3. Mountain Transit Rim Routes



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 Mountains subarea.

Multimodal Connectivity: The rural and geographic characteristics of the Mountains subarea results in larger lot sizes, limited sidewalks and bike lanes, minimal street crossings, which are challenges to improving connectivity for residents and visitors. The primary mode of travel is personal automobile, however, Mountain Transit provides shuttle and trolley service in addition to their fix routes to key destinations in Big Bear Lake and the Rim communities.

Goods Movement: The three primary routes to travel through the Mountains subarea (State Routes 18, 38, and 330) are also designated as truck routes. Commercial and industrial development tends to be local-serving, with no large warehouses or regional commercial centers in the subarea, so trucks traveling through the Mountains generally serve local retail and resorts. The topography can be difficult for truck drivers to traverse, and trucks can be restricted on Caltrans facilities if the roadway conditions are poor.

Climate Change and Resiliency: As mentioned above, weather conditions and natural events can affect roadway conditions and safety. There are limited route alternatives if there are closures due to snow or landslides.

Disadvantaged Communities: Census tracts in the Mountains subarea have lower CalEnvironScreen scores compared to the county (Figure 4), suggesting a lower pollution burden and reduced vulnerability to pollution. Residents do experience high level of ozone in the subarea and sensitive populations are at risk for asthma and cardiovascular disease.

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



Figure 4. CalEnviroScreen Percentile for the Mountains Subarea

Source: CalEnviroScreen 4.0

4 Strategic Priorities Action Plan

The final LRMTP report identifies the projects being considered for the forthcoming 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 1 lists highway projects being pursued by local jurisdictions in the Mountain Subarea over the next 10 years. Additional details are available in the SBCTA 2025 10-Year Delivery Plan. No improvements are listed for state highways, but local officials can work with Caltrans to prioritize some of the improvements proposed on those highways and can request Caltrans funding, even though it would be a number of years before the improvements may receive funding attention. Mountain Transit is in the process of updating its short-range transit plan. The most recent plan can be found at: Mountain Transit Short Range Transit Plan FY 2021-22 to FY 2025-26.

Table 1. Mountain Subarea - Major Local Highway Program Projects Thru 33/34

Mountains Major Local Highway Program		Cost
1	Moonridge Road Realignment and Roundabout	\$9,318
2	Stanfield Cutoff Roundabout	\$6,963
3	Stanfield Cutoff Pavement Improvement	\$11,057
TOTAL:		\$27,338

Table 2 through Table 6 summarizes the strategic priority and key actions for each of the issues described in the previous section.

Table 2. Mobility Action Plan for the Mountains Subarea

Strategic Priority	Key Actions
Further develop the Mountain Transit Network	Existing Mountain Transit services represent 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.
	Invest in the Mountain Transit systems based on priorities in the Short Range Transit Plans
	Position the Mountain Transit's priorities to be competitive for additional state and federal funding
	Pursue operating funds for increased service using strategies described in key issue 5
Incremental transit enhancements in rural areas	Identify unmet or underserved needs in rural communities
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
	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	Work with Caltrans to prioritize and eventually fund projects on state highways accessing the mountains, based on the Mountain Area Transportation Study and other input.
Promote strong vanpool, carpool, and TDM initiatives	Continue and expand partnerships with employers in the Valley and Victor Valley to promote multimodal alternatives to single-occupancy vehicle commutes for mountain residents, including telecommuting

	Promote awareness of mobility alternatives and communicate the quality-of-life benefits of 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

Table 3. Goods Movement Action Plan for the Mountains Subarea

Strategic Priority	Key Actions
Accelerate transition to clean vehicles	Partner with zero-emission (ZE) charging/fueling companies to accelerate the transition to ZE vehicles and supporting infrastructure needs
	Partner with the private sector to seek grant funding for ZE vehicles 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
Prioritize investments in mountain highways	Deliver key highway improvements in the Measure I 10-Year Delivery Plan. Work with Caltrans to prioritize and eventually fund projects on state highways accessing the mountains, based on the Mountain Area Transportation Study and other input

Table 4. Climate Adaptation and Resiliency Action Plan for the Mountains Subarea

Strategic Priority	Key Actions
Encourage redundancy across	Implement recommendations from the forthcoming Emergency Evacuation Network Study (EENR)
the transportation network and improve operational resiliency on major arterials	Continue and expand transit partnerships with mountain area resorts to provide an alternative to driving congested routes to, from, and within the mountains
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 with steep grades in the Mountain subarea
Prioritize state-of-good-repair on highways and arterials	Collaborate with Caltrans and local jurisdictions on criteria for prioritizing maintenance of alternate routes need for incident traffic management and emergency evacuation
Establish emergency procedures	Complete the Emergency Evacuation Network Resilience Study in cooperation with WRCOG 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

Strategic Priority	Key Actions
Continue to operate the local	Analyze potential improvements in transit service to disadvantaged communities.
bus and demand-responsive transit systems that	Provide adequate maintenance, security, schedule information and cleanliness at local bus stops.
particularly serve residents without access to cars	Consider needs of all users as electronic fare payment systems are further developed.
without access to cars	Assist jurisdictions with guidelines for implementation of AB 98, to include identification of corridors that may be designated as truck routes
Take advantage of available	Deliver transit priorities identified in the LRMTP that particularly benefit disadvantaged communities
funding focused on disadvantaged communities	Ensure that transit and TDM programs are highlighted at employment sites where lower-wage workers tend to be employed
	Continue to leverage state GHG reduction fund sources such as TIRCP and SB 1 funds, including TCEP to accelerate the ZE transition
Free and reduced fare	Expand targeted programs to improve transit affordability for students, seniors, and low-income individuals
programs	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	Prioritize transit corridors that connect disadvantaged communities to key destinations
improvements to improve mobility in disadvantaged	Invest in high-comfort off-street active transportation corridors
communities	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 5. Disadvantaged Communities Action Plan for the Mountains Subarea

Strategic Priority	Key Actions
Secure additional state and	Increase availability and flexibility of future Measure I funding for use in transit operations
regional funding for 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
Partner with community-based	Maintain relationships with CBO leaders and business sector partners
organizations (CBOs) and the business sector to build support for projects and promote alternatives	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

Table 6. Funding Action Plan for the Mountains Subarea

5 Conclusion and Next Steps

Future land use is expected to remain largely the same and no major transit investments are forecast; as such, determining ways to serve existing development and seasonal visitors with transit is a key priority for this subarea. Mountain Transit's Short Range Transit Plan (SRTP) for 2021–2026 establishes a five-year plan to support continuing ridership growth and sustainable expansion of service days and frequencies, while building facilities to meet current and future vehicle maintenance and administrative needs. The SRTP supports immediate seven-day-a-week service for all Big Bear routes, while continuing to increase service frequencies to 30 minutes on its core route and 60 minutes elsewhere, across a 12-hour operating day. For Rim of the World services, the SRTP provides for increased frequency and more operating days over its five-year horizon. Priority projects to improve operations of the transportation network are identified in the 10-Year Delivery Plan and the Mountain Area Transportation Study and projects to improve active transportation facilities are included in the Non-Motorized Transportation Plan, Points of Interest Pedestrian Plan, and the Regional Safe Routes to School Plan.

6 References

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