

CALIFORNIA DEPARTMENT OF TRANSPORTATION

ROUTE CONCEPT FACT SHEET DISTRICT 8

STATE ROUTE 173



**08-SBd-173
PM SBd L0.0/23.0**

**DIVISION OF PLANNING
MARCH 2000**

**ROUTE CONCEPT FACT SHEET
STATE ROUTE 173**

I approve this Route Concept Fact Sheet, as the guide toward which today's decisions and/ or recommendations for highway capacity improvements should be directed.

Original signed by S. Lisiewicz

March 29, 2000

S. LISIEWICZ
DISTRICT DIRECTOR
CALTRANS DISTRICT 8

DATE

**2000 Route Concept Fact Sheet
State Route 173
08-SBd-173 (PM L0.0/23.0)**

ROUTE DESCRIPTION/PURPOSE/CLASSIFICATION

State Route 173 (SR-173) is a two-lane undivided conventional highway. The route begins within the city limits of Hesperia at its junction with Route 138 near Silverwood Lake. It traverses the San Bernardino Mountains through mostly National Forest land. It passes through the eastern portion of Mojave River Forks Regional Park and terminates at its junction with Route 18 near Skyforest. SR-173 is entirely within District 8 in San Bernardino County. Total route length is 25 miles of which 6.8 miles (PM L5.9/12.7) are unpaved.

Segment 1 of SR-173 (Route 138 to Arrowhead Lake Road) links to Route 138 providing access to the Lake Silverwood State Recreation Area and the community of Crestline. Its connection to Arrowhead Lake Road provides access to the high desert communities of Hesperia and Apple Valley. Segment 2 is unpaved and traverses mountainous terrain. The unpaved section is generally closed in the winter and often restricted to one-lane width. The closures normally occur between the months of November and April depending upon weather conditions. Traffic volumes on this segment are extremely low. Only about 50 vehicles traverse this segment per day and many of them are public vehicles (Caltans, sewer districts, and utility companies, etc). Segments 2 and 3 primarily have no State highway purpose and are considered by the mountain communities to serve as a backdoor fire escape even though the route has not been needed for this purpose since it entered the State highway system in 1933. Segments 4 and 5 (Hook Creek Road to Route 18) connect the mountain communities of Cedar Glen and Lake Arrowhead with the San Bernardino metropolitan area.

The Primary purpose of Route 173 is local travel. Its secondary purpose is intraregional travel. It is federally functionally classified as a rural minor arterial (PM L0.0/13.6) and an urban collector (PM 13.6/23.0).

SR-173 is not part of the Freeway and Expressway System or the Interregional Road System (IRRS). It is not included in the Federal Highway Administration's (FHWA) Final Designation of Routes for larger trucks. The route is included in the State Scenic Highway System but has not been officially designated.

ROUTE CONCEPT/CONCEPT RATIONALE

SR-173 is an atypical State highway. A significant portion of the route is unpaved (PM 5.9/12.7). Average daily traffic currently ranges from 50 to 5,600 vehicles. Most of the traffic on the route is concentrated in the Lake Arrowhead area and is comprised of local trips. Other State highways (SR-138, 189 and 18) provide alternate service and links to State Route 173. The route traverses through National Forest, the City of Hesperia, and the County of San Bernardino. Relinquishment of SR-173 to these jurisdictions should be considered.

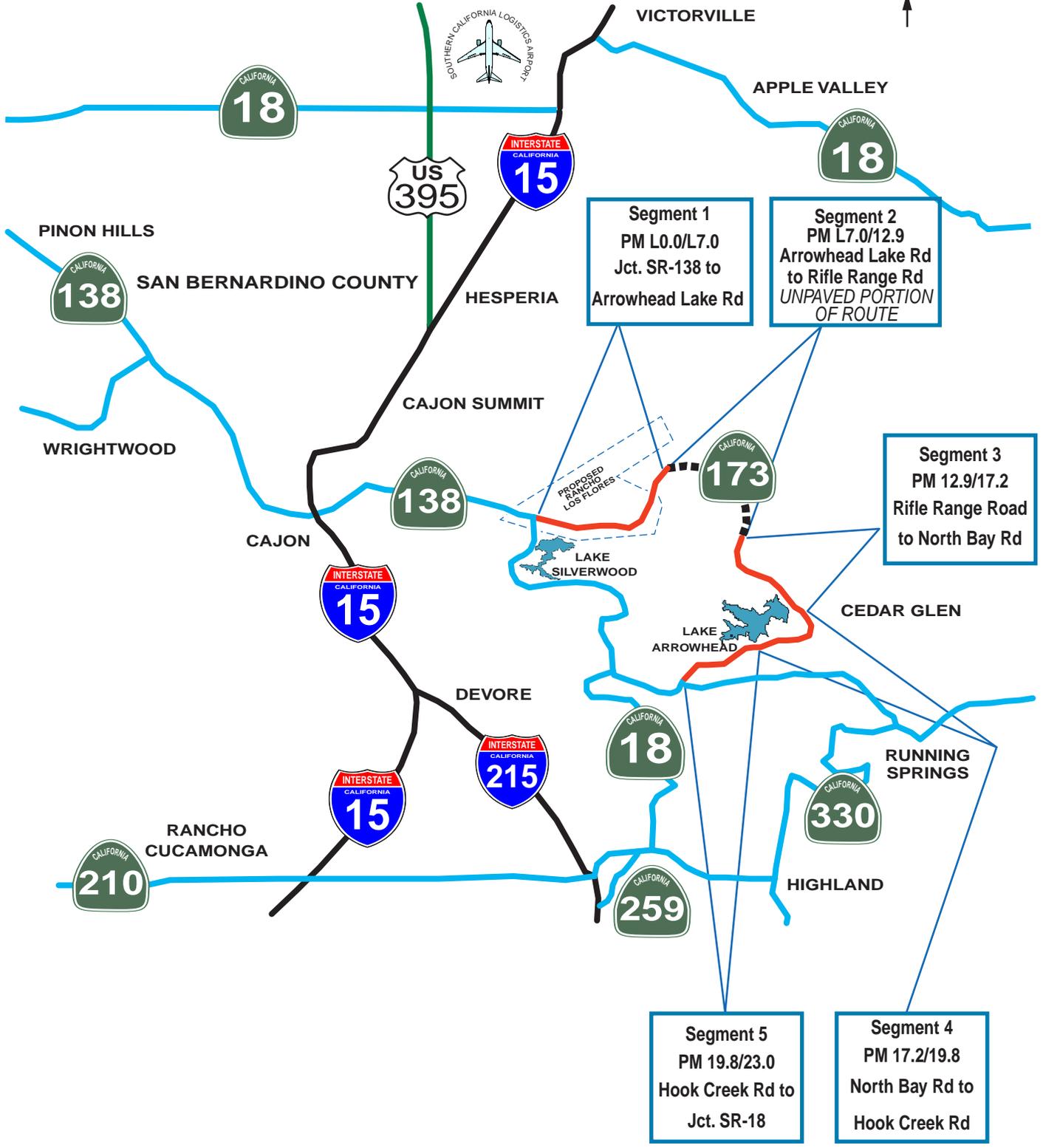
SR-173 is neither an IRRS "High Emphasis," "Focus," or "Gateway" route and would normally be designated as "Maintain Only" for its entire length. "Maintain Only" provides operational and safety improvements for lower priority routes. However, several developments that combine



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Segment Map



Segment 1
 PM 0.0/7.0
 Jct. SR-138 to
 Arrowhead Lake Rd

Segment 2
 PM 7.0/12.9
 Arrowhead Lake Rd
 to Rifle Range Rd
 UNPAVED PORTION
 OF ROUTE

Segment 3
 PM 12.9/17.2
 Rifle Range Road
 to North Bay Rd

Segment 5
 PM 19.8/23.0
 Hook Creek Rd to
 Jct. SR-18

Segment 4
 PM 17.2/19.8
 North Bay Rd to
 Hook Creek Rd

residential, office, commercial, and recreational uses are planned adjacent to SR-173 near its junction with SR-138. A project called the Rancho Las Flores Planned Unit Development proposes a 41,000-population community and is supported by the City of Hesperia (see map, segment 1). Average daily traffic in this area is expected to grow to more than five times its current level. It is expected to become an urban area within the 20-year planning period and SR-138 will become a major access road. The projected growth will necessitate the upgrade of SR-138 from I-15 to SR-173 and SR-173 from SR-138 to Arrowhead Lake Road (Segment 1).

From SR-138 to Arrowhead Lake Road, the concept facility is a four-lane conventional highway. The route concept is Level of Service "E". Because the projected growth is being created by local development and SR-173 is neither a "High Emphasis," "Focus," or "Gateway" route, facility improvements will have to be funded through the local government development process and by other local/private sector means. From Arrowhead Lake Road to SR-18 (segments 2-5), the concept facility remains a two-lane conventional highway. The route concept is "Maintain Only". This portion of the route is not subject to major local development and Caltrans has no plans to make capacity improvements. "Maintain Only" allows for maintenance, operational and safety improvements.

ULTIMATE TRANSPORTATION CORRIDOR (UTC)

The ultimate facility is a four-lane conventional highway from SR-138 to Arrowhead Lake Road and a two-lane conventional highway from Arrowhead Lake Road to SR-18. For major capacity improvements, right of way acquisition and construction are to be locally funded.

FUNDING

The June 1998 Caltrans "Interregional Transportation Strategic Plan" (ITSP) concentrates on improving rural interregional routes to a minimum standard (freeway/expressway) within the 20-year planning period. The plan earmarks "High Emphasis," "Focus," and "Gateway" routes as a priority for improvement and most Interregional Improvement Program (IIP) investments will be used for these routes. Caltrans receives twenty-five percent of the State Transportation Improvement Program (STIP) funding for IIP projects. Regional Transportation Planning Agencies (RTPAs) are responsible for the allocation of local, state, and federal funds for highway improvements within urbanized areas. They receive seventy-five percent of STIP funding for Regional Improvement Program (RIP) projects.

The State may partner with regional agencies on a route by route basis for selected route improvements; however, interregional "High Emphasis," "Focus," and "Gateway" routes are currently a Caltrans priority. SR-173 is not part of the Interregional Road System. Should capacity improvements become necessary as a result of local development, they will have to be funded through the local development process or other private/regional means.

Safety projects, operational improvements, and pavement rehabilitation are eligible for State Highway Operations and Protection Program (SHOPP) funding. Maintenance, operational and safety improvements will be programmed as warranted and financially feasible.

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DATA SHEET

<u>1997 Existing Facility</u>											
<u>Seg</u>	<u>Limits</u>	<u>Post Mile</u>	<u>Existing Facility</u>	<u>R/U UB</u>	<u>1997 ADT</u>	<u>Pk Hr %</u>	<u>Design Hr Volume</u>	<u>Trk %</u>	<u>Dir Split</u>	<u>V/C Ratio</u>	<u>1997 LOS</u>
1	Rte 138/Arrowhead Lake Rd	L0.0/L7.0	2C	R	1,200	16	190	4	60	0.11	B
2	Arrowhead Lake Rd/Rifle Range Rd (Unpaved portion of Route)	L7.0/12.9 5.9/12.7	1-2C	R	50						****
(Primarily used for service and emergency needs)											
3	Rifle Range Rd/North Bay Rd	12.9/17.2	2C	U	600	16	95	21	60	0.07	B
4	North Bay Rd/Hook Creek Rd	17.2/19.8	2C	U	2,750	12	330	15	60	0.23	C
5	Hook Creek Rd/Rte 18	19.8/23.0	2C	U	5,680	12	682	4	60	0.40	D

<u>2015 No Build</u>											
<u>Seg</u>	<u>Limits</u>	<u>Post Mile</u>	<u>Existing Facility</u>	<u>R/U UB</u>	<u>2015 ADT</u>	<u>Pk Hr %</u>	<u>Design Hr Volume</u>	<u>Trk %</u>	<u>Dir Split</u>	<u>V/C Ratio</u>	<u>2015 LOS</u>
1	Rte 138/Arrowhead Lake Rd	L0.0/L7.0	2C	R	20,000*	10	2,000	2	65	0.93	F
2	Arrowhead Lake Rd/Rifle Range Rd (Unpaved portion of Route)	L7.0/12.9 5.9/12.7	1-2C	R	500	10	50				****
(Primarily used for service and emergency needs)											
3	Rifle Range Rd/North Bay Rd	12.9/17.2	2C	U	1,200	10	120	18	60	0.09	B
4	North Bay Rd/Hook Creek Rd	17.2/19.8	2C	U	6,000	10	600	12	60	0.40	D
5	Hook Creek Rd/Rte 18	19.8/23.0	2C	U	12,000	9	1,200	3	60	0.61	E

<u>2015</u>		
<u>Concept Facility</u>	<u>Lanes Added</u>	<u>Concept LOS</u>
4C****	2***	E
1-2C	0	Maint Only**
2C	0	Maint Only**
2C	0	Maint Only**
2C	0	Maint Only**

*Large increase in projected ADT is result of proposed Rancho Las Flores project.

**SR-173 is not a "High Emphasis", "Focus" or "Gateway" route. The concept for SR-173 is "Maintain Only" (provides for operational and safety improvements). It does not preclude local government or private sector funding for needed major improvements resulting from significant local development.

*** Proposed Rancho Las Flores development will generate need for locally funded capacity improvements. As a result of local development, this could become an urbanized area within the 20-year planning period.

****Typical level of service evaluation not applicable to unpaved segment.

TERMS

- Seg Segment
- 2C 2-Lane Conventional Highway
- R Rural
- U Urban
- UB Urbanized
- Trk % Truck Percent of ADT
- Dir Directional Split
- V/C Volume to Capacity Ratio
- LOS Level of Service
- ADT Average Daily Traffic
- Pk Hr% Peak Hour Percent

CONVERSION TABLE**SR -173**

SEGMENTS	DESCRIPTION	POSTMILE	KILOMETERS
1	Rte 138/Arrowhead Lake Road	L0.0/L7.0	L0.0/L11.2
2	Arrowhead Lake Road/Rifle Range Road	L7.0/12.9	L11.2/20.7
	(Unpaved portion of Route)	5.9/12.7	9.5/20.4
3	Rifle Range Rd/North Bay Road	12.9/17.2	20.7/27.7
4	North Bay Road/Hook Creek Road	17.2/19.8	27.7/31.8
5	Hook Creek Rd/Rte 18	19.8/23.0	31.8/37.1