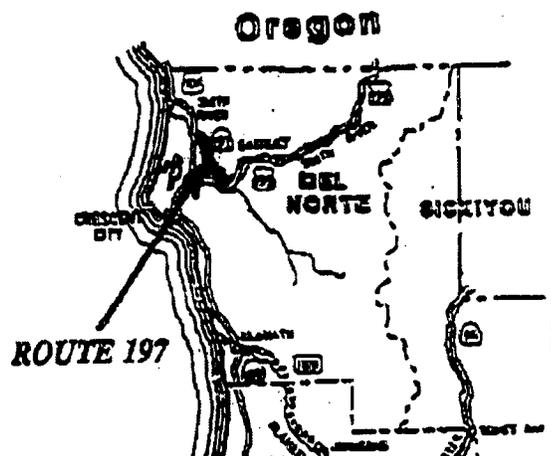


ROUTE 197 RCR

**ROUTE
CONCEPT
REPORT**



ROUTE 197 CORRIDOR

01-DN-197-KP 0.0/11.4 (PM 0.0/7.1)

All information in this Route Concept Report is subject to change as conditions change and new information is obtained.

I approve this Route Concept Report to guide today's route development decisions and/or recommendations.

Approval Recommended:

Approval Recommended:

F. A. Wythe

F. A. WYTHE **Date**
District Division Chief
Project Coordination

Cheryl S. Willis 7/13/99

CHERYL S. WILLIS **Date**
District Division Chief
Planning

Approved:

Rick Knapp 7/19/99

RICK KNAPP **Date**
District Director
District 1

JULY 1999



ROUTE 197 RCR
ROUTE CONCEPT REPORT

Statement of Planning Intent

The Route Concept Report (RCR) is a planning document which describes the Department's basic approach to development of a given transportation route or corridor. Considering reasonable financial constraints and projected travel demand over a 20-year planning period, the RCR defines appropriate transportation facilities for each route or corridor. The objective of the effort is to provide a better basis for the development of the State Transportation Improvement Program (STIP), and for determination of the appropriate concept for future transportation projects.

Route Concept Reports are prepared by District staff in cooperation with local and regional agencies. They will be updated as necessary as conditions change or new information is obtained.

Route Concept Reports are a preliminary planning phase that lead to subsequent programming and the project development process. As such, the specific nature of proposed improvements (e.g., roadway width, number of lanes, access control) may change in the project development stage.

Assumptions

The following assumptions form the basis for the development of Route Concept Reports:

1. The relative importance of State highways in the District is generally based on functional classification. In general, higher priority is given to major improvements on principal arterial routes as compared to minor arterials and collectors.
2. State highways with improvement concepts must have realistic concept levels of service. Concept levels of service are not established on State highways which will only be maintained (since improvements would not be made to address level of service concerns).
3. Level of service calculations are based on the 1994 Highway Capacity Manual (see Appendix A).
4. Determinations of future level of service for State highways in District 1 are based in part upon Statewide and Regional forecasts of State highway travel developed by Caltrans.
5. Route concepts are generally uniform for an entire route or corridor, unless there is a major change in function along the route or corridor.
6. Major projects will be developed to meet standards acceptable to the Federal Highway Administration in order to receive Federal funding for projects. Otherwise, a "design exception" will be prepared during the project development process.
7. Safety projects will be pursued on an on-going basis in order to be responsive to safety concerns as they are identified.
8. No planned or programmed improvements were assumed to be complete in analyzing present and future operating conditions. The Route Concept Report details programmed improvements in the 1998 STIP, with all costs in 1998 dollars.
9. An environmental document will not be required for Route Concept Reports. However, individual improvement projects identified in Route Concept Reports will follow the appropriate environmental process as required by law.

ROUTE 197 RCR
ROUTE CONCEPT REPORT

ROUTE 197

01-DN-197-KP 0.0/11.4 (PM 0.0/7.1)

I. ROUTE CONCEPT AND RATIONALE

FACILITY CONCEPT

ROUTE 197 SHOULD REMAIN A 2-LANE CONVENTIONAL HIGHWAY, GENERALLY ON ITS EXISTING ALIGNMENT.

Route 197 is important as a connecting link between Route 101 and Route 199 for through traffic. It is a minor arterial, serving primarily regional and interregional traffic, and used for both local access and the movement of people and goods between the Route 101 and Route 199 corridors. It is designated as a route for the movement of extra-legal loads, and ultimately is expected to become the route designated for use by large (Surface Transportation Assistance Act - STAA) trucks, in lieu of Route 199 between Route 101 and the Route 197/199 junction.

Route 197 follows the north bank of the Smith River, serving local residents and a few businesses along the route, as well as regional and interregional traffic. The Smith River is designated as a wild and scenic river. Therefore, Route improvement needs must be planned and designed to minimize impacts to the environment.

LEVEL OF SERVICE CONCEPT

THE SELECTED CONCEPT LEVEL OF SERVICE FOR ROUTE 197 IS "E". If level of service at peak hour falls below this concept level, capacity improvements will be considered.

Route 197 currently operates at a "C" level of service during peak hour periods. With projected increases in traffic, this is likely to deteriorate to "D" or "E" level of service within the next 20 years. The selected "E" concept level of service is consistent with future level of service for this facility, and with other minor arterial routes within District 1.

CONCEPT FOR GOODS MOVEMENT

ROUTE 197 SHOULD BE WIDENED AND REALIGNED AS NECESSARY TO SAFELY ACCOMMODATE LARGE (SURFACE TRANSPORTATION ASSISTANCE ACT OR STAA) TRUCKS.

ROUTE 197 RCR

The west-end of Route 199 traverses Jedediah Smith Redwoods State Park, winding through old growth redwood trees on a curvilinear alignment. Significant widening or realignment of this portion of Route 199 is not considered feasible. Therefore, Route 197 is the designated route for the movement of extra-legal truck loads between Route 101 and Route 199 near Hiouchi, and is expected to become the route designated for use by STAA trucks in the future.

There are several locations along Route 197 that are not currently wide enough to allow the use of large (STAA) trucks. These locations should be widened and realigned as necessary to safely accommodate STAA trucks.

CONCEPT FOR REHABILITATION

ROUTE 197 SHOULD BE MAINTAINED AND REHABILITATED AS NECESSARY.

Based on current standards, existing roadway widths on Route 197 should be adequate to allow rehabilitation of most of the Route without widening. As previously noted, widening should be done as necessary to safely accommodate large (STAA) trucks, and consideration should also be given to widening in conjunction with pavement rehabilitation projects where necessary to provide an adequate paved shoulder.

Where current traffic volumes are 1000 to 3,000 vehicles per day, these standards specify a desirable minimum roadway width of 9.6 meters (32-feet), but do allow rehabilitation at the present width if the roadway is at least 8.4 meters (28-feet) wide. Most of Route 197 falls within this AADT range and has a minimum width of at least 8.4 meters (28-feet). A design exception may be requested if the roadway does not meet the minimum width requirement, and physical, financial, or environmental considerations preclude widening. However, if feasible, shoulder widening to accommodate STAA trucks and bicycles should be provided. A sidehill viaduct or cantilevered guard rail may be appropriate to facilitate shoulder widening in some locations.

SAFETY AND OPERATIONAL IMPROVEMENT CONCEPTS

Accident rates on Route 197 do not exceed one and one-half times the Statewide average based on similar facilities, and safety does not appear to be a significant factor in considering the need for improvement for this route. Further, safety improvements at spot locations will be considered as necessary.

Bridge replacement, storm damage and operational improvement projects will also be considered as necessary. These projects, in addition to safety projects, should be constructed to appropriate State and Federal standards.

ROUTE 197 RCR

ROUTE CONCEPT FUNCTION

This Route Concept should serve as a guide for long range planning of Route improvements. It recognizes financial considerations and competing priorities both on this Route and other routes in the District. Efforts have been made to consider local and regional concerns regarding development of the Route.

Route 197 is important as a connecting link between Route 101 and Route 199 for through traffic. It is a minor arterial, serving primarily regional and interregional traffic, and used for both local access and the movement of goods and people between the Route 101 and Route 199 corridors. It is designated as a route for the movement of extra-legal loads, and ultimately is expected to become the route designated for use by large (Surface Transportation Assistance Act - STAA) trucks.

II. CORRIDOR PRESERVATION

It is anticipated that Route 197 will remain a conventional 2-lane highway. Some right of way will be needed to construct the shoulders and curve realignments necessary to accommodate STAA trucks. Much of the existing right of way on this Route does not meet the 40-meter minimum right of way width standard for new 2-lane highways, and a substantial portion of this right of way is through prescriptive rights.

Additional right of way will be needed to upgrade shoulder widths on portions of Route 197. Therefore, Caltrans should encourage Del Norte County not to allow land use conversions that would result in new improvements being constructed in the area that will be needed for right of way to widen and realign portions of Route 197.

III. ALTERNATIVE CONCEPTS CONSIDERED

No concept level of service was established for Route 197 in the previous Route Concept Reports. However, since the last Route Concept Report revision for Route 197, its functional classification was revised from "major collector" to "minor arterial". The "E" concept level of service selected for this route means that capacity improvements would not be considered unless the route was operating at capacity. This is consistent with the concept level of service of other State highways functionally classified as "minor arterial" within District 1.

The previous Route Concept for Route 197, which did not include widening to accommodate STAA trucks, was considered. Since widening Route 199 between Route 101 and Route 197 to accommodate STAA trucks is not considered feasible, improving Route 197 to accommodate STAA trucks appears to be a practical alternative. Therefore, the Concept has been revised to include additional widening to allow the use of STAA trucks.

ROUTE 197 RCR

IV. ROUTE ANALYSIS

DESCRIPTION

Route 197 originates at Route 199, on the east side of the Smith River, near the entrance to the Jedidiah Smith Redwoods State Park campground entrance. It follows the north bank of the Smith River northwesterly until it intersects with Route 101 just north of its crossing of the Smith River. Route 197 is approximately 10.8 kilometers (6.7 miles) in length and has a post mile description of 01-DN-197-KP 0.0/11.4 or PM 0.0/7.1.

ROUTE PURPOSE

Route 197 is important as a connecting link between Route 101 and Route 199 for through traffic. It is used for the movement of goods and people between south-central Oregon and the northern California/southern Oregon coast. It is designated as a route for the movement of extra-legal loads, and is expected to become the route designated for use by large (Surface Transportation Assistance Act - STAA) trucks.

Route 197 also serves local residents and a few businesses located on the north bank of the Smith River.

ROUTE SEGMENTATION

Route 197 consists of only one segment for System Planning Purposes, as follows:

- DN-197-KP 0.0/11.4 or PM 0.0/7.1

LAND USE

Most of the land traversed by Route 197 can be characterized as having relatively low density rural residential development. There are no cities or communities along this Route.

Little change in land use is anticipated in the future, and development activity is likely to continue at a slightly decreased rate.

EXISTING FACILITIES

Route 197 is a 2-lane conventional highway, traversing rolling terrain. Table II below summarizes existing facility characteristics for the Route 197 corridor.

ROUTE 197 RCR

**TABLE II
EXISTING FACILITY CHARACTERISTICS
ROUTE 197**

Existing Facility:	2-lane conventional highway
Functional Classification:	Minor Arterial
Freeway and Expressway System:	No
Eligible for Scenic Highway Designation:	Yes
Subsystem of Highways for Extra Legal Loads (SHELL):	No
STAA Trucks Allowed:	No
Strategic Highway Network:	No
National Highway System (NHS):	No
Interregional Road System (IRRS):	No
Public Airports Served:	None
Rail Service:	None
Intercity Bus Service:	None
Intersecting State Highway Routes:	101, 199
Park and Ride Lots:	None

As previously noted, much of the existing right of way on this Route is by prescriptive right. In addition, a substantial portion of the right of way owned by the California Department of Transportation does not meet the 40-meter minimum right of way width standard for new 2-lane highways.

OPERATING CONDITIONS

Present and future operating conditions, including traffic volume ranges, level of service, and volume to capacity ratios for both existing and anticipated future conditions for Route 197 are shown on Map 1 on the following page. Further information regarding specific operating and geometric conditions may be found in Caltrans source documents (e.g., the State Highway Inventory, the State Highway Log, and Traffic Volumes on California State Highways, etc.)

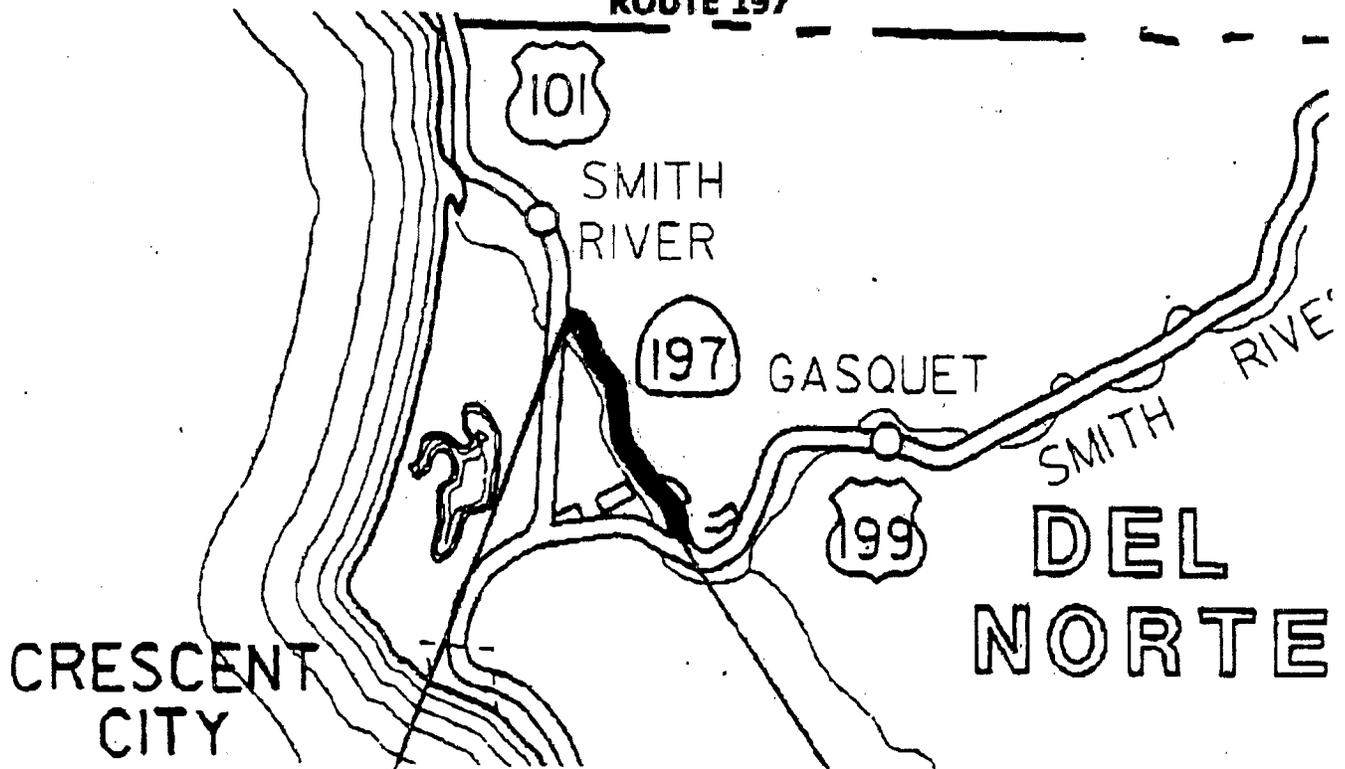
PROGRAMMED IMPROVEMENTS

No major improvement projects are programmed for Route 197 in the 1998 State Transportation Improvement Program. An embankment restoration project for two locations between PM 5.8 and 6.0 (KP 9.3/9.7) is included in the District's Minor Program, at an estimated cost of \$550,000.

ROUTE 197 RCR

MAP 1

**PRESENT AND FUTURE OPERATING CONDITIONS
ROUTE 197**



DN-197-KP 0.0/11.4 (PM 0.0/7.1)

Terrain: Rolling
Gradeline: Rolling

Existing (1998)

2-lane Conventional
3.6 m lanes
8.5 - 9.8m paved w.
1,800 - 2,050 AADT
5% - 7% Trucks
"C" LOS
V/C = 0.16
Accident Rate = less than 1.5 times
the Statewide average

Future (2020)

3,250 - 3,700 AADT
"E" LOS
V/C = 0.29

ROUTE CONCEPT

- The concept for Route 197 from Route 199 to Route 101 (in Del Norte County) is 2-lane conventional highway with intermittent passing lanes, and a "E" concept level of service.

ROUTE 197 RCR

V. ENVIRONMENTAL CONSIDERATIONS

Principal environmental concerns along Route 197 include:

- **Wild and Scenic Rivers:** Route 197 follows the Smith River, which is designated as a recreational Wild and Scenic River.
- **Salmon and Steelhead Habitat:** The Smith River is critical salmon (including Coho) and steelhead spawning and nursery habitat. Water quality is a major concern.
- **Archeological Sensitivity:** Since Route 197 follows the Smith River, some locations along the Route may be archaeologically sensitive.
- **Flooding:** Low areas of Route 197 are vulnerable to flooding.

VI. REGIONAL TRANSPORTATION PLANNING

The Del Norte County Local Transportation Commission, in their Regional Transportation Plan, puts a high priority on improvements to Routes 101 and 199. Development of Route 197 is clearly a lower priority. However, Route 199 through Jedediah Smith Redwoods State Park will not accommodate STAA trucks, and widening does not appear feasible. The Local Transportation Commission cooperated with Caltrans District 1 in a "Comprehensive Study of Routes 197 and 199" which was completed in June 1998, and resulted in the selection of an improvement strategy that included upgrading both Route 197 and 199 to accommodate Long (STAA) Trucks. Subsequently, joint priorities were established to implement this strategy, which included the following improvements to Route 197:

#4 PRIORITY: Other improvements to address safety and truck operating concerns:

- DN-197-PM 3.3 to PM 5.00 (KP 5.3/8.1): widening/possible realignment.
- DN-197-PM 5.6 to PM 6.0 (KP 9.0/9.7): Cantilevered Guard Rail.

#7 PRIORITY: Shoulder widening at other locations (as necessary)

VII. AREAS OF CONCERN

The following considers areas of concern on Route 197 based on an analysis of level of service and accident history:

1. A segment is considered to be a "level of service concern" if the concept level of service (LOS) will not be achieved under present or future traffic conditions, or the segment operates at capacity during peak hour.

ROUTE 197 RCR

2. A segment is considered to be a "safety concern" if the total accident rate for a five year period for that segment exceeds one and one-half times the Statewide average for similar facilities.

Based on these criteria, no areas of concern were identified for Route 197 in District 1.

VIII. IMPROVEMENTS NECESSARY TO ACHIEVE THE ROUTE CONCEPT

Improvements necessary to achieve the route concept for Route 197 include widening and possible realignment as necessary to accommodate large (Surface Transportation Assistance Act or STAA) Trucks. Most improvement needs are within the segment from KP 5.3/8.1 (PM 3.3/5.0).

It is anticipated that improvements identified to accommodate large trucks on Route 197 will cost an estimated \$3,000,000

Safety and operational improvements to Route 197 will be considered as necessary.

IX. TRANSIT AND HIGH OCCUPANCY VEHICLE (HOV) CONSIDERATIONS

Low population densities make it difficult to provide cost-effective transit services for Route 197. Transit service is not being considered for Route 197 at this time.

Due to the rural nature of Route 197, and relatively low peak hour traffic volumes during commute hours, no HOV considerations are necessary.

X. ACCESS MANAGEMENT

Access management involves managing where vehicles are allowed to enter the highway, to improve highway operation and reduce accidents.

While access management may be desirable on Route 197, traffic volumes are relatively low, and access management techniques are not likely to be cost effective. Further, the District feels that funds available for access management should be spent on routes with greater access management needs.

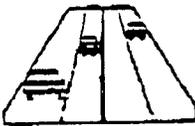
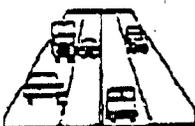
XI. ADOPTIONS, RESCISSIONS AND RELINQUISHMENTS

New or changed highway routings generally require adopting a new route and rescinding the previously adopted route. The Route may also be relinquished to a city, county or other public entity.

No significant adoptions, rescissions, or relinquishments are anticipated on Route 197 in District 1.

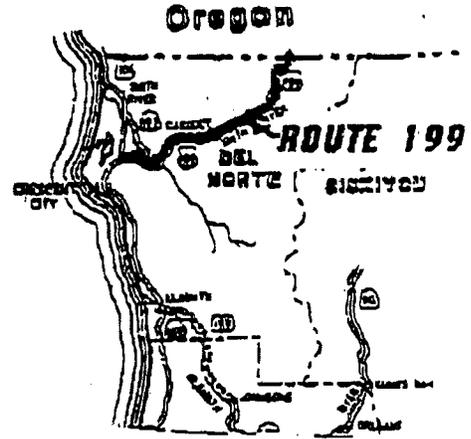
ROUTE 197 RCR

**APPENDIX A
LEVEL OF SERVICE
FOR HIGHWAY SEGMENTS**

Level of Service	Description of Typical Traffic Conditions	Technical Descriptors	
		Delay	Service Rating
A 	Highest quality of service. Free traffic flow, low volumes and densities. Little or no restriction on maneuverability or speed, and a high level of comfort and convenience.	None	Excellent
B 	Stable traffic flow - speed becoming slightly restricted. The presence of others in the traffic stream begins to be noticeable. Low restriction on maneuverability.	None	Very Good
C 	Stable traffic flow, but less freedom to select speed, change lanes, or pass. Comfort and convenience decreasing as density increases.	Minimal	Good
D 	Approaching unstable flow. Speeds tolerable, but subject to sudden and considerable variation. Reduced maneuverability, driver comfort, and convenience.	Minimal	Adequate
E 	Unstable traffic flow with rapidly fluctuating speeds and flow rates. Short headways, low maneuverability and low driver comfort and convenience.	Significant	Fair
F 	Forced traffic flow. Speed and flow may drop to zero with high densities. Queues tend to form behind such locations since arrival flows exceed traffic discharges.	Considerable	Poor

ROUTE 199 RCR

ROUTE CONCEPT REPORT



ROUTE 199 CORRIDOR

01-DN-199-KP T0.8/58.6 (PM T0.5/36.4)

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I approve this Route Concept Report to guide today's route development decisions and/or recommendations.

Approval Recommended:

Approval Recommended:

F. A. Wythe
F. A. WYTHE **Date**
District Division Chief
Project Coordination

Cheryl S. Willis 7/13/99
CHERYL S. WILLIS **Date**
District Division Chief
Planning

Approved:

Rick Knapp 7/19/99
RICK KNAPP **Date**
District Director
District 1

JULY 1999



ROUTE 199 RCR**ROUTE CONCEPT REPORT****Statement of Planning Intent**

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