

**TRPA
GOVERNING BOARD
PACKETS**

**MARCH
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Preliminary junction
drawing → August 31/79:30
June 21 -

TAHOE REGIONAL PLANNING AGENCY
Staff Summary and Recommendation

7070

Loop Road
Douglas County Portion
Public Works

Summary

Douglas County is proposing to construct a two lane road with center left turn lane from the California/Nevada State line at a point southeast of Harrah's employee parking lot around an adjacent meadow area and the Park Tahoe Hotel to intersect with Highway 50 at a point approximately 500 feet north of the existing entrance to the Sahara Tahoe. The loop would then extend around the Sahara Tahoe parking lot and the parking lot of Harvey's Resort Hotel to the State line, approximately 300' from the intersection of Pine Boulevard and Stateline Avenue in South Lake Tahoe (see Map #1).

Harrah's Hotel would have one access point off the Loop Road. The Park Tahoe, Sahara Tahoe and Harvey's Resort Hotel would each have two access points. Douglas County has provided no additional access on the outside of the loop with the exception of access to the existing Edgewood Golf Course to the north of the Sahara Tahoe. This requirement would force the Park Tahoe to abandon plans to place a portion of its parking on the outside of the loop, as was proposed in the original Park Tahoe application.

The County has commitments from the necessary parties to provide right-of-way for the entire Douglas County portion of the loop with the exception of approximately 100' adjacent to Harrah's employee parking lot, for which the County is negotiating. The County has budgeted for construction of the road this summer, with an optimistic expectation of completion of their portion of the Loop Road by October.

TRPA Plans

The 1971 General Plan of the TRPA did not contain any specific direction for the Stateline area of South Shore. Instead, the Plan called for a detailed study of the area to arrive at short term improvements and called for a major Basinwide Transportation Study to develop a comprehensive Long Range Transportation Plan.

Pursuant to the direction of the General Plan, a Stateline Subregional Study was developed in 1973 by the consulting firms of Eckbo, Dean, Austin & Williams, Inc., VTN, Consolidated, and Economic Research Associates for the TRPA. That study assessed the potential for development within the Stateline area, the environmental and economic impacts of such development, and the transportation impacts. The Plan recommended a Loop Road concept, but along an alignment differing from that of the Douglas County proposal. The loop road recommended in the Subregional Study connected with Montreal Avenue and Pine Boulevard on the California side, as does the current Douglas County proposal, but it recommended an intersection with Highway 50 between Harvey's Resort Hotel and the Sahara Tahoe (see Map #2). Under this proposal the gaming core area would be quartered rather than encircled by the Loop Road. The recommendations of this study were not acted upon by TRPA.

A Comprehensive Long Range Planning Program was begun in cooperation with the Nevada Highway Department, Caltrans and CTRPA in 1973. While this was projected to be a four year comprehensive planning program, the study was dissolved in 1975.

prior to completion of Long Range Plan development. The study did recommend a Short Range Transportation Plan, however, which contained the Loop Road concept proposed by Douglas County. Prior to dissolution of the cooperative study, both the Caltrans and CTRPA representatives to the policy committee of the study endorsed this proposal. The Loop Road was subsequently adopted as part of the TRPA General Plan through Governing Board adoption of the recommended Short Range Transportation Plan in 1975 (see Map #3).

Other Plans

Transportation has been an issue at Tahoe for many years and has been addressed by numerous plans and reports. Of these, several are of particular significance.

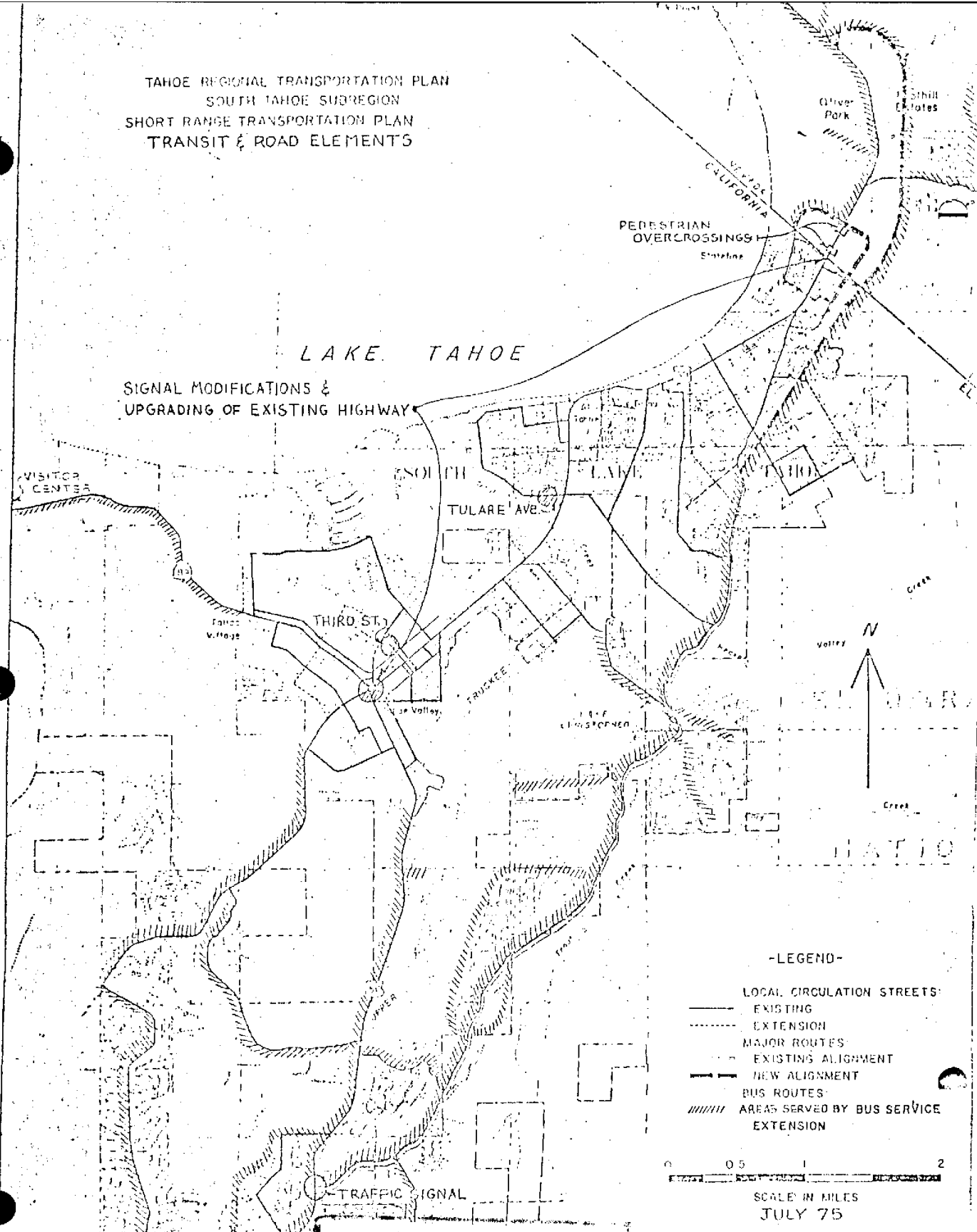
In 1964 the consulting firm of Wilsey, Ham & Blair prepared the Lake Tahoe 1980 Regional Plan for the Tahoe Regional Planning Commissions of Nevada and California, financed by the Lake Tahoe Area Council. This plan projected a 1980 population in the range of 300,000, approximately that projected for build-out under the current General Plan. The transportation system proposal featured the existing highway through South Shore, plus two additional two-lane arterials parallel to Highway 50 in the Stateline area, and a four lane parkway (bypass). With the proposed interconnection of these parallel lanes, the Loop Road proposed by Douglas County represents development of a portion of that plan.

In 1970 the Stanford Research Institute prepared Transportation Planning Alternatives in the Tahoe Basin for the TRPA, with financing provided by the League to Save Lake Tahoe. Among the recommendations of this plan is creation of a pedestrian mall with low speed transit service through the Stateline hotel/casino area, with traffic diverted to a 2-3 lane one-way highway system encircling the Stateline core area similar to the concept of the Loop Road (see Map #4).

The dissolution of the cooperative transportation study in 1975 was precipitated by dissatisfaction of the CTRPA Governing Board with the short range alternatives prepared by that study. Their dissatisfaction focused specifically on the concern that the recommended plan did not sufficiently de-emphasize the automobile. In response to this concern, TRPA secured the services of a team of transportation planners from the Metropolitan Transportation Commission of the Bay Area to develop an auto de-emphasis alternative for consideration by TRPA and CTRPA. An alternative transportation plan for the Tahoe Basin to de-emphasize the use of the personal car was submitted by this team in June, 1975. The plan they developed called for conversion of two lanes of Highway 50 to exclusive bus lanes, the construction of a two lane bypass road along the existing freeway right-of-way across the South Shore Stateline connecting with Pioneer Trail to service the traffic diverted from Highway 50 by the bus lanes, and various local arterial connections and parking restrictions to facilitate efficient transit service and incentives for transit use. This plan did not call for development of the Loop Road system. Neither TRPA nor CTRPA acted favorably on this plan.

The other plan of significance in consideration of the Loop Road is that of the CTRPA. This plan was developed initially in the summer of 1975, following dissolution of the Bistate study previously discussed. The specific target of the plan was de-emphasis of the automobile. It proposes to deal with the traffic congestion at South Shore by

TAHOE REGIONAL TRANSPORTATION PLAN
 SOUTH TAHOE SUBREGION
 SHORT RANGE TRANSPORTATION PLAN
 TRANSIT & ROAD ELEMENTS



SIGNAL MODIFICATIONS &
 UPGRADING OF EXISTING HIGHWAY

LAKE TAHOE

PEDESTRIAN
 OVERCROSSINGS

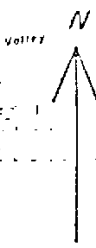
VISITOR
 CENTER

SOUTH

TULARE AVE.

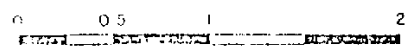
THIRD ST.

TRUCKEE



-LEGEND-

- LOCAL CIRCULATION STREETS:
 - EXISTING
 - EXTENSION
- MAJOR ROUTES
 - EXISTING ALIGNMENT
 - NEW ALIGNMENT
- BUS ROUTES
- AREAS SERVED BY BUS SERVICE EXTENSION



SCALE IN MILES
 JULY 75

MAP #3

TRPA SHORT RANGE PLAN

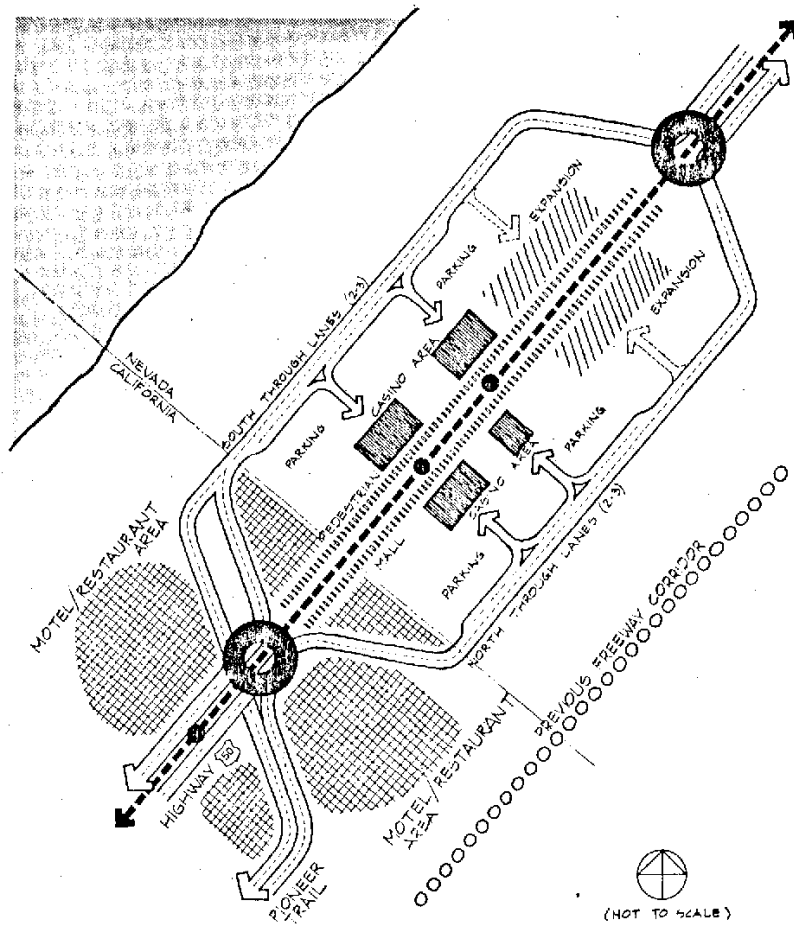


FIGURE 35 CIRCULATION DETAIL FOR STATELINE ACTIVITY CENTER

MAP #4
 STANFORD RESEARCH INSTITUTE

addition of two exclusive bus lanes to Highway 50, in concert with parking restrictions and incentives for transit use. This plan remains the policy of CTRPA, though some limited modifications have been made since its adoption in 1975. With respect to the Loop Road proposal, the most recent update of the CTRPA Regional Transportation Plan expressly rejects the Loop Road on grounds that it would "open up additional land for development prior to the adoption of a definitive land use plan for the area". It is added that this "would create additional growth pressures without addressing underlying environmental issues".

Traffic Impacts

The current circulation pattern in the Stateline area has three access points across the State line: Highway 50, Van Sickle Road which connects Park Avenue with Harrah's parking lot, and the narrow road connecting Pine Boulevard with the Edgewood Golf Course and the Harvey's and Sahara Tahoe parking lots (referred to as "Golf Course Road"). Of these, Highway 50 is the primary route, with Golf Course Road and Van Sickle Road utilized by locals and knowledgeable visitors as back routes to and through the gaming core area, avoiding the congestion of Highway 50 from Park Avenue through the core area (see Map #1).

Despite the fact that neither Pine nor Van Sickle are signed as routes to the core area, they attract significant volumes of traffic. This is evidenced by the fact that the highest traffic volumes on Highway 50 at South Shore traditionally occur just west of Park Avenue, the road accessing both Pine Boulevard and Van Sickle Road. CTRPA traffic monitoring over Washington's Birthday weekend this year, for example, showed as much as 15% of the Highway 50 traffic was diverted onto these back streets at the Park Ave. intersection. A special CTRPA monitoring program in August last year showed surprisingly high volumes of traffic on these two roads, 8,400 and 14,350 cars per weekend day on the Golf Course and Van Sickle roads, respectively. This suggests that as much as 1/3 of the traffic crossing the South Shore Stateline in peak conditions is already seeking and utilizing alternate access. Another interesting finding of the August monitoring was that the total volume crossing the State line on the three access points was 18% greater than the Highway 50 volume west of Park Avenue, suggesting that local circulation between Park and the State line may represent a significant component of traffic crossing the line.

On the Nevada side of the State line, both the Golf Course Road and Van Sickle Road lead directly into the congestion of hotel/casino parking lots. The intent of the Loop Road is to provide free circulation around those parking lots. Nevada Highway Department projections indicate that approximately 50% of the traffic through the Stateline area would be diverted to the Loop Road, with both improved circulation around the gaming core area and improved flow along Highway 50. The improved Highway 50 flow would result from both diversion of traffic and reducing in turning movements to access the hotel/casino parking lots.

The potential for congestion exists at the intersections of the Loop Road with Highway 50. The Douglas County proposal mitigates this potential at the northerly intersection of the Loop Road and Highway 50 through use of left and right hand turn lanes to separate turning movements from the main traffic flow on both Highway 50 and the Loop Road. The Douglas County portion of the Loop Road is designed for a 35 mph traffic flow, with this flow facilitated by the spacing of the access points, the limitation on access points, the continuous left turn lane and the absence of any encumbrances other than the Highway 50 intersection.

The Loop Road's southerly intersection with Highway 50 is the existing Park Avenue Highway 50 intersection. Plans have not yet been developed for the South Lake Tahoe portion of the Loop Road. Consequently, the manner in which turning movements to and from the Loop Road will be accommodated is not certain. However, it is anticipated that a right turn lane could be developed to provide eastbound Highway 50 traffic with access to the upper loop and a left turn lane already exists for eastbound access to the lower loop. Righthand turns off of the lower loop onto westbound Highway 50 poses a more difficult problem because of an existing structure at the intersection.

Air Quality

An air quality assessment was prepared by the Nevada Division of Environmental Protection on the basis of traffic figures provided by the Nevada Highway Department. The traffic volumes and turning movements were identified for the Nevada side only, and assumed full operation of both the Park Tahoe and the expansion of Harvey's Resort Hotel. Traffic volume and turning movement projections were developed for the Nevada side both with and without the full Loop Road to facilitate comparative assessment of the Loop Road impact. The air quality analysis focused on 12 separate receptor sites in the gaming core area, including the valet parking entrances to all four major hotel/casinos and the cross walks at Stateline Avenue, between Harrah's and Harvey's, and between Barney's and the Sahara Tahoe. An assessment was also made of the impacts along both the upper and lower Loop Roads on the Nevada side.

The air quality analysis concluded that:

"The net results of the CO concentrations at the receptor points would show an overall decrease with the completion of the Loop Road. Also, parking lot entrances and exits along Highway 50 would show a decrease in CO emissions due to the redirecting of the traffic into the Loop Road area. The additional effect of the Loop Road would increase the speed of the traffic flows which in turn would allow for a decrease in the CO emissions."

"... Some receptors were evaluated in the area of the Loop Road but their numbers were not of a magnitude to be considered having an impact upon the area as these values were significantly lower than the 35 ppm standard."

No air quality assessment has been developed to project the impacts of the Loop Road on the South Lake Tahoe side, though it is reasonable to anticipate that the greatest potential for adverse impacts exists on the California side of the lower loop. This portion of the loop would likely see the most potential for traffic congestion and also has the most potentially sensitive receptor sites, since existing motels border virtually this entire section of the loop. For this reason the efficiency of the southerly intersection with Highway 50 is extremely important since this will be critical to maintaining smooth flows of westbound traffic along this section of the loop.

Design and Location Impacts

The upper Loop Road on the Nevada side is designed to connect with a linear extension of Montreal Avenue at the State line. The road extends along a straight line across the uppermost portion of a meadow area immediately behind Harrah's employee parking

lot, across a boulder stream and heavily forested knoll, across a minor drainage and out of tree cover into a gentle curve which reaches existing grade in the open pasture land behind the Park Tahoe and maintains grade down to Highway 50. Two points of particular concern regarding the alignment of the upper Loop Road emerged during review of the project by the Development Review Committee: the meadow crossing and the rocky knoll (see Map #1).

The meadow area is between two relatively steep areas which must be traversed by the Loop Road. To minimize the grade change on the road itself a combination of cuts on the higher areas and fills on the lower areas is used. At the subject meadow area this results in a maximum fill of approximately 13 feet. The alignment crosses the uppermost end of the meadow where the stream channel emerges. The proposed plans would transport the stream through approximately 126 feet of culvert under the road and out into the existing channel in the meadow. The maximum intrusion of the road and fill area into the meadow would be approximately 70 feet. All cut and fill slopes are proposed to be stabilized at 2:1 and revegetated pursuant to specifications obtained from the Soil Conservation Service and suggestions from the U.S. Forest Service Hydrologist. Provisions have been made in the plans for control and dissipation of drainage off of the cut and fill slopes and the roadway to prevent erosion and sedimentation.

The rocky knoll is above the meadow area previously discussed. Several outcrops of large boulders will have to be traversed and a steep drop off the northerly face will require a 16 foot cut on the knoll immediately adjacent to a 22 foot fill in order to maintain a reasonable slope on the roadway. This cut and fill situation and the difficulties of removing the rock outcrops stimulated consideration by the Development Review Committee of alternative alignments through this area. The only way to escape the extremes of cut and fill, however, was to relocate the alignment to the north of the proposed route. This would have the disadvantage of removing the road from the screening of the tree cover in the area and would also have forced considerably greater intrusion into the meadow areas to the north of the knoll. In addition, the bypassing of the knoll would have required changes in the design of the curve which begins just below the knoll, potentially reducing the efficiency of the loop in maintaining the 35 mph design speed.

The only other significant concern regarding the alignment proposed for the project involves the location of the northerly intersection with Highway 50 (see Figure #1). As proposed, the alignment in this area would come off the above-referenced curve in the open pasture area, bisect an area originally proposed for parking in the application of the Park Tahoe, cross Highway 50 at a location approximately 500' north of the entrance to the Sahara Tahoe, and continue along that line through an open grass area of the golf course approximately 500' to the initial curve of the lower loop. Of specific concern is the fact that the alignment is located out in the open pasture and grass area in this section with the centerline approximately 75' outside the perimeter fencing of the Sahara Tahoe valet parking area.

In discussions with the County Public Works Director and the engineers on the project it has been indicated that the extension of the alignment out into this open area makes it easier to achieve the design speed and reduce design problems on the upper loop curve approaching this area. Also of import in the proposed location however are the requirement of the County that the Park Tahoe not utilize parking outside the Loop Road, and the

Upper Loop

Park Tahoe

First National Bank

Highway 50

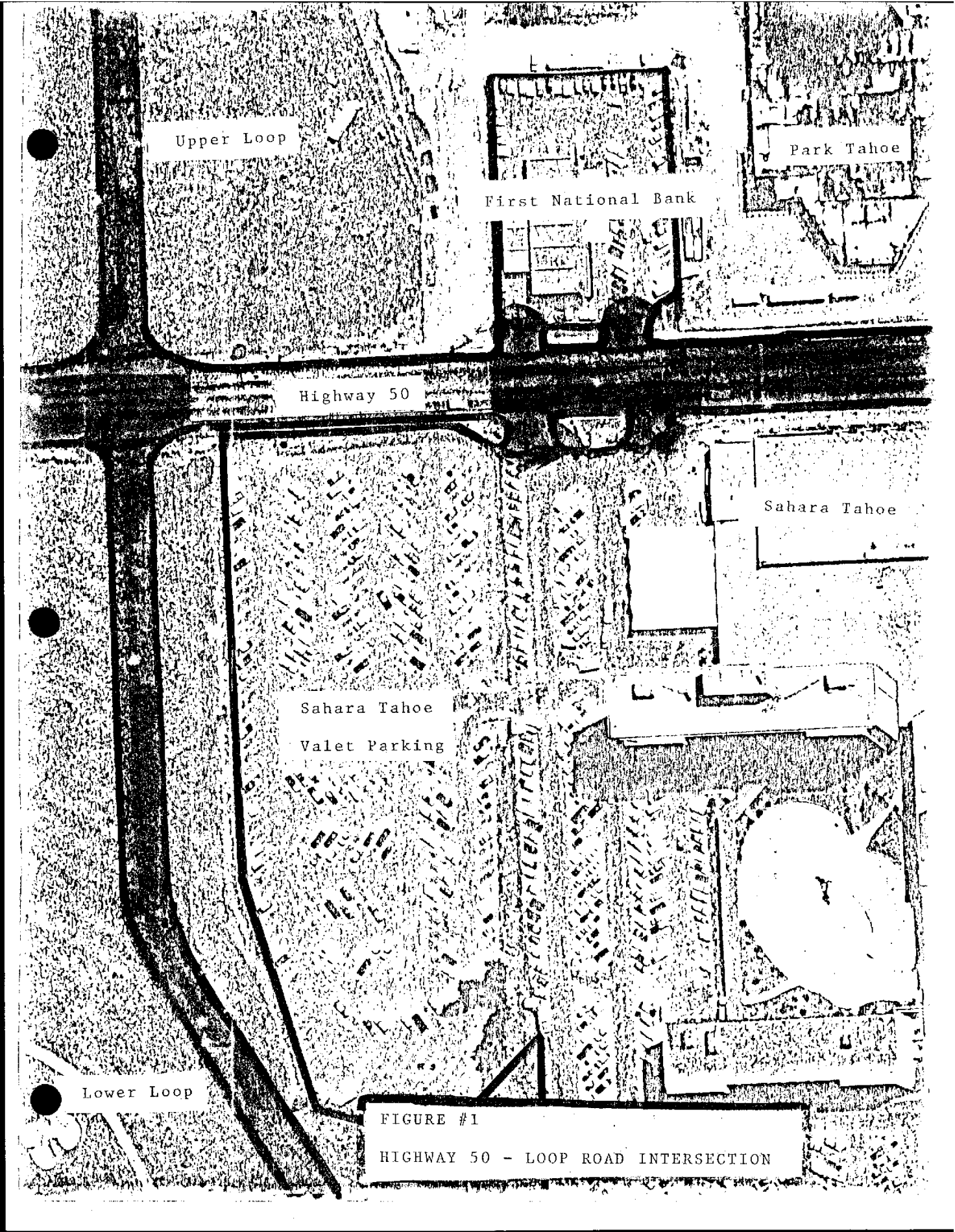
Sahara Tahoe

Sahara Tahoe
Valet Parking

Lower Loop

FIGURE #1

HIGHWAY 50 - LOOP ROAD INTERSECTION



General Plan amendment currently under consideration to allow the relocation of the First National Bank within the Loop Road adjacent to the Sahara Tahoe. It has been indicated that the road can be engineered with the intersection moved closer to the existing impervious surface at the Sahara Tahoe valet parking. This was in fact the original alignment proposed for the project. This would reduce the amount of parking for the Park Tahoe contained within the loop, however, and would probably not allow for relocation of the bank as currently proposed.

Growth Inducement: Park Tahoe and Harvey's Expansion

As earlier indicated, the rationale for rejection of the Loop Road concept by the CTRPA is that it will induce additional growth in the area, negating possible benefits of the improved circulation. The question of growth inducement has an unusual application in the context of the Loop Road, in that two major hotel/casino projects have been approved conditioned upon implementation of the Loop Road. Specifically, both the Park Tahoe and the expansion of Harvey's Resort Hotel were conditioned upon the following by Douglas County:

"That right-of-way and improvements therein shall be constructed prior to the issuance of a certificate of occupancy. Such roads and rights-of-way described shall be sufficient to meet the traffic and transportation requirements as depicted in the Environmental Information Report."

Confusion regarding this condition was subsequently clarified by the County in a resolution stating:

"...no certificate of occupancy will be given to any of the aforementioned hotel casinos until said approved traffic plan is implemented and constructed."

Additionally, the approval of Park Tahoe by the Nevada Tahoe Regional Planning Agency was conditioned upon the following:

"An applicant shall exert all reasonable efforts to cause to be established, and will support and participate in any general improvement district under Chapter 318 NRS, or any other public or private plan, to accomplish...the implementation and financing of a suitable road determined by Douglas County".

The NTRPA approval of Harvey's expansion was conditioned that: "...Douglas County provide an acceptable transportation solution, which is also acceptable to the TRPA and NTRPA; and that Douglas County will construct necessary roads to handle local traffic problems".

Both the Park Tahoe and Harvey's expansion were deemed approved by TRPA because of failure to secure dual majority agreement, with the result that TRPA imposed no additional conditions upon them. Both projects are bound by the conditions of Douglas County and NTRPA, however, and those conditions raise the question as to whether the doors to these projects may be opened if the Loop Road is not constructed. In researching these approvals, staff has concluded that the rationale for these conditions was twofold:

1) It was recognized that these projects would induce more traffic into an already congested area and that some circulation improvements would be required to mitigate these impacts; and 2) though not then adopted policy, the concept of the Loop Road