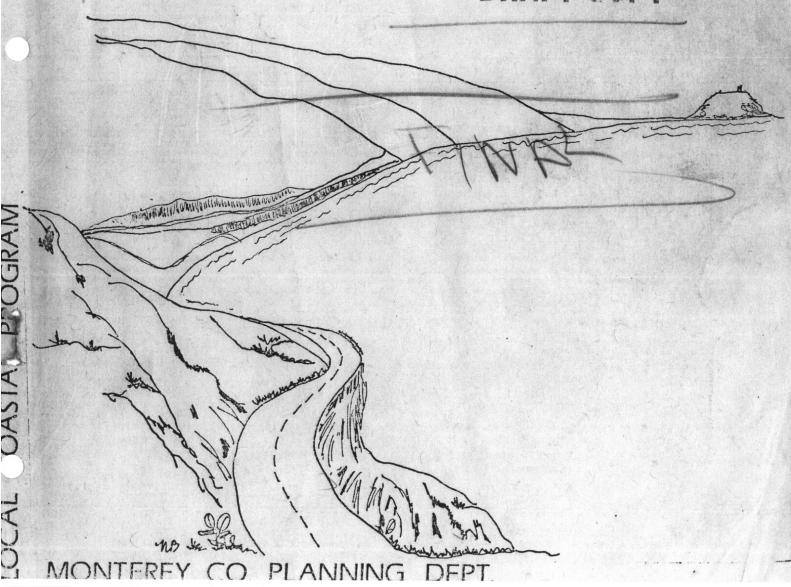
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BIG SUR COAST TRANSPORTATION AND HIGHWAY ONE

BACKGROUND REPORT

DRAFT GOPY



INTRODUCTION

1.1 COASTAL ACT REQUIREMENTS

The prime transportation emphasis of the Coastal Act is to maintain the coast highway, State Highway Route 1, as a scenic two-lane road in rural areas, and to preserve highway capacity for priority uses.

Section 30254. New or expanded public works facilities shall be designed and limited to accommodate needs generated by development or uses permitted consistent with the provisions of this division; provided, however, that it is the intent of the Legislature that State Highway Route 1 in rural areas of the coastal zone remain a scenic two-lane road. Special districts shall not be formed or expanded except where assessment for, and provision of, the service would not induce new development inconsistent with this division. Where existing or planned public works facilities can accommodate only a limited amount of new development, services to coastal-dependent land use, essential public services and basic industries vital to the economic health of the region, state, or nation, public recreation, commercial recreation, and visitor-serving land uses shall not be precluded by other development.

1.2 TRANSPORTATION ISSUES

The relationship of Highway One to future development of the Big Sur coast is a key issue as it is already near capacity during peak use periods. The ultimate capacity of the highway will, therefore, be a major constraint on the long range development of Big Sur itself. How the road capacity can be increased without damage to the intrinsic values of Big Sur and how the remaining capacity is to be allocated between visitor and local use represents a major issue of the revised plan.

A closely related issue is what can or should be done to ultimately regulate use levels of the highway between Carmel and Cambria, particularly as need to protect the priority uses of the Coastal Act. This appears necessary to insure that acceptable service levels are preserved so that the highway can meet its essential functions of serving as the sole transportation and emergency route up and down the coast, and in providing a safe, pleasurable scenic and recreational travel experience.

1.3 EXISTING TRANSPORTATION POLICIES

Policies addressing the preservation of Highway One as a scenic, rural highway are contained in the Monterey County Transportation Plan, the Monterey County Coast Master Plan, and the Scenic Highways Element of the Monterey County General Plan. In addition, Caltrans has a policy of maintaining

Highway One as a scenic two-lane highway with improvements limited to maintenance and alterations facilitating the safe orderly flow of traffic. Existing policies are adequate to maintain Highway One as a rural two-lane highway. Recommendations for preserving the scenic quality of land adjacent to Highway One are addressed in the Coastal Visual Resource and Special Communities Background Report.

Caltrans is in the process of constructing bicycle paths along the shoulder of Highway One between Carmel and the Big Sur Valley. This is a continuation of the Bicentennial Bike Route program along the Pacific Coast. Policies contained in the Monterey County Transportation Plan propose the separation of bicycle paths from the highway in scenic areas. However, in Big Sur a separate bicycle path would be difficult in most areas to construct and maintain. In addition, a separate bicycle path would probably conflict with resource protection objectives. Adequate programs should be adopted to provide safe bicycling conditions along designated bicycle routes.

The Monterey County Coast Master Plan addresses some of the issues of improving Highway One to decrease traffic congestion and increase capacity in the following policy:

"That turn out areas be developed wherever practicable. These areas should be used to the fullest extent possible to meet traffic demands before attempting to increase the width of the entire highway."

Additional policies need to be adopted to address remaining transportation issues and problems.

1.4 BIG SUR SUBREGIONAL ANALYSIS: FINDINGS AND CONCLUSIONS

The California Coastal Commission conducted a study of development commitment, recreation, transportation, water supply, wastewater treatment, and natural resources for the Big Sur coast. The results were published in The Big Sur Coast: A Subregional Analysis of the Coastal Portion of Monterey and San Luis Obispo Counties, 1977, hereafter referred to as the Big Sur Subregional Analysis. The chapter on transportation provided data and findings that were used as a base to analyze circulation conditions and conflicts in Big Sur. The major findings and conclusions, shown below, were evaluated and where necessary revised in the preparation of this background report.

Major Findings of the Big Sur Subregional Analysis

- "The automobile is the principal mode of transportation in the study area. Public transportation, bicycling, hiking, and equestrian modes are in use, but are insignificant in comparison to automobile use."
- 2. "On Route 1, traffic volumes rise sharply in the summer months. Summertime average daily traffic volumes are nearly double the year round average. Moreover, weekend daily traffic volumes are consistently higher

than weekdays for all seasons. Sections of Route 1 near Garrapata Creek which carry significant recreational traffic already experience traffic volumes exceeding Level of Service D and dipping into an unacceptable Level of Service E for several hours on summer weekend days."

- 3. "Pleasure driving and day-use activities are recreational activities which account for the majority of recreational travel in the Big Sur area. Pleasure driving alone may represent two-thirds of recreational travel in the area; pleasure driving and day-use activities combined may account for a total of 90 percent."
- 4. "The State and Federal agencies which plan for recreation in the Big Sur area seem comfortable with the expectation that recreational demand for access to the Big Sur area may roughly double over the next 20 to 25 years. Should that materialize, the future recreational travel demand could easily consume all remaining summer weekend roadway capacity on key sections of Route 1, even if there were no additional residential development."
- 5. "If residential development even approached the scale contemplated by full buildout, the character of the area would be much different from what it is today, and neither the frequency nor the pattern of residential travel would necessarily resemble the present trip-making associated with residents of the current isolated and dispersed 512 dwelling units. The traffic implications of a dwelling unit occupied year round by a family whose household head commutes to Carmel or Monterey for employment differ radically from a dwelling unit which serves as a summer or weekend home."
- 6. "Based on the consideration of several plausible projections, the impact of full buildout on Route 1 has been estimated by assuming: --that, on the average, each dwelling unit contributes at least one vehicle round trip per summer Sunday to Route 1 (a very conservative estimate subject to further analysis).

--that, these trips would be equally likely to head north as to head south on Route 1 to their future destinations.

- --that, if a single trip distance had to be selected as representative of all such trips, a distance of five miles (one way) might be a reasonable approximation."
- 7. "The critical section of Route 1 is the 30 mile segment leading south to Big Sur from Malpaso Creek. For the planning purposes of this analysis only, a reasonable upper bound capacity value for this section of roadway was established at 10,000 vehicles per day. By comparison, present peak summer Sunday daily traffic is approximately 7,000 vehicles per day. These figures imply that Route 1 might accomodate additional traffic loads up to but not exceeding 3,000 additional vehicles per day on summer weekends."
- 8. "The relevant transportation planning issue is the competition between anticipated recreational growth and potential residential growth for the scarce remaining capacity on Route 1.

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- 8. "The relevant transportation planning issue is the competition between anticipated recreational growth and potential residential growth for the scarce remaining capacity on Route 1.

"Since the capacity of the existing highway cannot even support the projected recreational trayel demand, no significant capacity appears to remain for future residential development, and future recreational use must be regulated as well."

Major Conclusions of the Big Sur Subregional Analysis

- "Route 1 is not capable of supporting a full buildout population, and hence transportation is the key service constraint on the level of future development. Reasonable assumptions indicate that a maximum number of units which could be accommodated by the existing coast highway fall in the range of up to 8,100 units with considerably fewer units if their occupants generate more than one round trip on peak travel days. However, this much residential development would preclude the anticipated expansion of recreational use of the road and severely alter the visual character and social structure of the region. In fact, with no increased residential use of Route 1, only a small percentage of the anticipated increased recreational demand (33%) could be accommodated. Addressing such circumstances the Coastal Act of 1976 states, "Where exisitng . . . public works facilities can accommodate only a limited amount of new development, services to . . . public recreation. commercial recreation, and visitor-serving land uses shall not be precluded by other development." Thus, a literal compliance with this policy would require a limit on residential development at its current level."
- 2. "Any new development in Big Sur should possibly be of a recreational nature. There is currently a deficiency of accommodations, support facilities (e.g., public rest rooms, information facilities), and non-motorized travel routes (bicycle paths, continuous hiking trail). Some of this development should accommodate persons of low income as specified in the Coastal Act."
- 3. "Monitoring traffic volumes should be a part of continuing implementation, coupled with a phased growth system for any future development. The remaining development budget could then be periodically adjusted based on actual traffic volumes.

6. TRAFFIC REGULATION

6.1 ALTERNATIVES

Congested traffic conditions during peak traffic periods have occurred along Highway One for a number of years, resulting in considerable community interest towards alleviating this problem. An educational and signing program designed to discourage visitor use during peak periods would encourage a voluntary change in travel patterns to decrease traffic congestion. However, if highway use increases beyond an acceptable service level as projected, regulation will be necessary to preserve the quality of the scenic driving experience and ensure optimum access.

A range of possible alternatives regulating the flow of traffic along Highway One is discussed below. The effectiveness and feasibility of the alternatives are evaluated briefly in relation to the general objective of maximizing highway capacity and access while maintaining an enjoyable scenic traveling experience.

Alternative A: No additional regulation or signing; traffic flow will become self-regulating as volume approaches capacity. People will become more aware of congested traffic conditions in Big Sur and demand will decrease to tolerable levels. This approach may work given a long period of time, but will degrade the traveling experience of large numbers of visitors and residents until a balance is reached. This alternative does not address the current traffic congestion problems in Big Sur. Alternative A is, therefore, not an adequate approach to improve traveling conditions along Highway One.

Alternative B: Place signs along major approach routes warning of potential congested conditions on Highway One in Big Sur. Alternative routes will be suggested with estimates of travel time savings. Basically an educational approach, this program will inform travelers of potential conditions, but may not accurately reflect actual conditions at the time. Information booths at the north and south ends of Big Sur will provide additional traffic information. This program provides a start towards educating travelers to reroute their trips and should be inexpensive and easy to implement. However, the impact of the program on traffic patterns will probably not be sufficient to end serious congestion problems in Big Sur.

Alternative C: Place automated signs along major approach routes warning of current congestion and delays on Highway One in Big Sur. Information will be shown relating the expected length of delays and resultant travel times on Highway One compared to other routes, mainly Highway 101. Signs should be located before highway intersections that provide alternate routes including Highway One intersections with Highways 156, 183, and 68 in the north and Highways 101, 41, and 46 in the south. This program provides current traffic condition information which could more effectively influence trip routes and travel patterns than alternative B. While the construction of automated signs and the implementation of a Big Sur traffic condition reporting system would be relatively expensive, Alternative C will provide a valuable service to travelers desiring to avoid congestion while driving

to a recreational area. Travellers deciding from the sign information that unacceptable traffic conditions exist in Big Sur can then drive to other recreation areas in the region. Alternative C could be used as an addition to other traffic regulation programs.

Alternative D: Place signal lights to regulate the flow of traffic during peak use periods into Big Sur from the north and the south at a rate that would sustain an acceptable service level and travelling experience. The lights will regulate the rate and therefore the volume of flow into Big Sur. However, traffic could periodically become congested inside of Big Sur. Regulation of traffic flow within Big Sur would be more complicated but will in part be affected by the signal lights at the entrances to Big Sur. This alternative should be used in conjunction with Alternative C which will inform approaching visitors of waiting times at the signal lights. The use of signal lights to regulate traffic flow has been used for years on bridges in California. This program will actively regulate traffic by controlling the volume of vehicles per hour travelling into Big Sur on Highway One. The signal lights will only be used during times when traffic demand exceeds the acceptable capacity of the highway. Traffic within Big Sur will not be regulated by signal lights under this alternative. The implementation of the signal light program is most desirable and effective when traffic demand increases to a point frequently exceeding the capacity of the highway.

Alternative E: Designate Highway One a controlled access state scenic parkway regulating vehicle entrance especially trucks, RV's, and other slow-moving vehicles. Management of the parkway will be consistent with the preservation of a scenic highway providing access to a recreation area of national and international importance. This alternative will require new legislation designating the highway as a controlled access parkway and setting regulations to control its use. Commercial vehicles would be guaranteed highway access to serve the community and the recreational and visitor-serving facilities. Management policies have to address visitor and resident entrance priorities during peak use periods. A similar approach was initiated in the past by the Counties of Monterey and San Luis Obispo resulting in the adoption of a joint resolution in 1960. The resolution recommended that Highway One from Carmel to San Simeon be studied by the federal government for designation as a "Wonderful One" National Park-Designation of Highway One as a state parkway with controlled access is advisable if traffic congestion reaches a point where access to Big Sur becomes seriously constricted, diminishing the quality of the recreational travelling experience. A state parkway may be objectionable to many people desiring unrestricted access to Big Sur, however, the program will help preserve the quality of experience that attracts millions of visitors. A thorough study of the management alternatives for a parkway and its impacts should be conducted before this program is initiated. A solid base of public support also should be present to make the implementation of this alternative feasible.

Alternative F: Designate Highway One a federal parkway or park with controlled vehicle access with similar charactieristics of Alternative E. This alternative may not be as desirable to residents opposing an increased federal role in Big Sur.

An effective traffic regulation program for Big Sur may necessitate a variety of diverse education and traffic regulation approaches responding to changes in traffic conditions.

6.2 CONCLUSIONS AND RECOMMENDATIONS

- 1. A program implementing Alternative B, placement of signs warning travelers of congestion in Big Sur and suggesting alternate routes, should be initiated by Caltrans as a first step towards reducing undesirable peak period traffic congestion. The program, developed in coordination with Monterey and San Luis Obispo Counties, the Department of Parks and Recreation, the U. S. Forest Service and other appropriate agencies, should also include the establishment of roadside visitor centers at the north and south ends of the Big Sur coast. These centers will provide information on road and traffic conditions, recreation opportunities, visitor accommodations and facilities, coastal access locations, and the environmental responsibilities of the public.
- 2. A progressive program of increasing traffic regulation measures should be implemented if traffic congestion seriously effects access and travel conditions. The program should start with alternative C, the placement of automated traffic condition and route option signs. If traffic continues to increase causing unacceptable Highway One service loads, then the flow of traffic into Big Sur should be regulated by devices such as signal lights, Alternative D. If traffic congestion problems persist and cannot be effectively handled by signal lights regulating traffic flow, then Alternative E or F, designation of Highway One as a controlled access scenic parkway, should be initiated.

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have many benefits. A management plan for the Carmel Valley watershed would be one major concern of the sub-regional plan.

Recreational Opportunites. Implementation of Coastal Plan policies establishing management areas along the shoreline and a coastal trail system will require special consideration in the Fort Ord-Sand City area, Pebble Beach, and south of Point Lobos. State acquisition of oceanfront meadows is underway, and will preserve a beautiful landscape from Carmel Point to Point Lobos. Another important recreation policy will seek to improve access to excellent diving areas such as Cannery Row and Carmel Bay in a manner consistent with resource protection and public safety.

Special Study Area — Monterey Bay Dunes. The Monterey Bay Dunes area is literally a sea of sand. Cattle, begonias,

rare dune plants, vernal ponds, commercial sand mines, Army rifle ranges, three sewage treatment plants, a hotel, a freeway, and residential developments share the sandy environment. A special study of this area is recommended to establish appropriate levels of residential and commercial development, public access and recreational use, and wastewater treatment.

The study will involve residents, local jurisdictions, and the U.S. Army in joint efforts to plan for the housing needs of Fort Ord, orderly community growth and concentration of development, effective management of water resources, avoidance of geologic hazards, and protection of the massive dunes and other natural features in the study area. Recommendations for protection of the scenic bay frontage, and for potential restoration of bay views from the freeway will be made.





SUBREGION 8: BIG SUR COAST

[See Plan Maps 27 and 29-32]

The scenic Big Sur area is world-famous for its rugged beauty. Highway 1 from Carmel to San Simeon is a recreational area of national significance, visited each year by more than a million people. Existing conventional and wild-erness camping facilities are used to capacity, and thousands of visitors are turned away every year.

Scenic and Recreational Resources. Grazing remains an important land use, and is a primary factor in the maintenance of vast scenic landscapes. Access to the shoreline is limited to a very few locations; there is no publicly owned access north of the Big Sur River. Thus, the most popular attraction is the recreational motoring experience, enhanced by brief stops at scenic vistas, restaurants, and craft galleries along the highway.

The U.S. Forest Service manages much of the back country, part of which is protected as the Ventana Wilderness. Between the ocean and Los Padres National Forest, the prime scenic corridor and day-use area of Highway 1, development conflicts are most acute. Although the existing Monterey County Coast Master Plan calls for the maintenance of scenic quality through "low-density" residential zoning, its 2½- to 10-acre minimums could permit as many as 10,000 residences to be built within a 100-square mile coastal watershed area. Water supplies may be inadequate for such growth.

Because of inadequate public facilities, the lack of a public information center, and no public agency with overall management authority, the recreational promise of the Big Sur coast is unfulfilled; problems of trespass, litter, vandalism, stream pollution, and overuse often go unchecked. Disastrous forest fires and mudslides in 1970 and 1972 underline the need for improved, unified resource protection. Nevertheless, because of outstanding scenic qualities, unspoiled beaches, old-growth redwood forests, and central location within a few hours drive of both the State's major population centers, the Big Sur coast represents one of the nation's best remaining preservation opportunities.

Highway 1 Capacity Constraints. In addition to possible water supply problems, however, the most obvious constraint on future development is the capacity of Highway 1. Expansion of the road would be very costly and cause severe environmental impacts, conflicting with Coastal Plan policies. Peak weekend traffic is already congested, causing competition between residential and recreational users. Virtually a closed system, the 90-mile stretch of Highway 1 along the Big Sur Coast must serve several major purposes, both in response to traditional demands and to meet Coastal Plan policies.

Special Study Area — Carmel River to Cambria. A special study of the Big Sur Coast, from Carmel River to Cambria, is required to resolve access issues, particularly the priorities between recreational and residential use of the remaining capacity of Highway 1, and to establish preservation measures for the scenic landscape. Participation by the U.S. Forest Service, Monterey and San Luis Obispo Counties, and coastal property owners will be essential.

The study should consider several options for achieving the objectives of the Coastal Plan: (1) improve service facilities within existing communities such as Big Sur Village and San Simeon Acres; (2) create alternative development patterns, particularly the clustering of permitted uses outside the viewshed; (3) reduce ultimate residential buildup through substantial acquisitions of land (or development rights) by State or Federal agencies; (4) initiate management actions, such as parking restrictions, to improve the quality of the recreational experience while protecting sensitive areas from overuse; (5) provide Yosemite-style public transportation, the use of which could be encouraged through a modest toll on private recreational vehicles; (6) convert the existing highway to a Big Sur State Parkway in order to provide a practical means of controlling automobile access, providing visitor information, improving fire protection, and funding acquisitions and improvements; and (7) create a system of reserves for management of sensitive areas such as the Malpaso Beach-Soberanes Point area.