

Tribal Corridor Management Planning: Model, Case Study, and Guide for Caltrans District I



MTI Report 10-01



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MTI REPORT 10-01

TRIBAL CORRIDOR MANAGEMENT PLANNING: MODEL, CASE STUDY, AND GUIDE FOR CALTRANS DISTRICT 1

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EXECUTIVE SUMMARY

California Department of Transportation (Caltrans) District 1 personnel and members of the North Coast Tribal Transportation Commission propose to develop interpretive “tribal transportation corridors” along stretches of state highways that cross tribal lands in Northern California. This report presents a guide to tribal corridor management planning and a model for the segment of California State Route 96 that lies within the boundaries of the Hoopa Valley Indian Reservation in eastern Humboldt County. The project team included members of the Hoopa Valley Tribe and other local tribes, community residents and stakeholders, research associates of the Mineta Transportation Institute (MTI) of San José State University (SJSU), staff from Caltrans District 1, and representatives of other local transportation agencies.

By incorporating elements such as tribal symbols, informational kiosks, native plantings, bilingual signage, and other features along state highways, travelers will experience a greater sense of place when traveling through tribal lands and will gain a greater awareness and appreciation for the history, culture, and vitality of these communities. The guide also outlines transportation needs such as traffic calming, safety enhancement measures, aesthetic treatments, and strategies for reducing vandalism and maintenance. A unique aspect of this study’s approach is an emphasis on innovative solutions that simultaneously address multiple concerns (for example, communication strategies that bring Caltrans and tribal organizations into planning activities or safety infrastructure that is designed to enhance interpretative opportunities as well as the aesthetic quality of the roadway).

The Hoopa Valley case study is intended to serve as a pilot project for future tribal corridor management plans (TCMPs) throughout District 1. Therefore, it is one element within a larger endeavor to envision a coordinated and holistic approach to corridor management in tribal territories, one that specifically involves interpretation, design, and context-sensitive solutions.

The first chapter introduces the concept of corridor management and describes its relevance to transportation projects involving Native American communities. A corridor management plan (CMP) typically provides an inventory of corridor resources and intrinsic qualities, describes issues and challenges identified by stakeholders, and outlines an action plan for addressing the issues and a framework for implementation. For this study’s purposes, TCMPs are distinctive from other CMPs in that the authors propose an explicitly interpretive approach that will provide the public with a stronger “sense of place” when traveling through tribal lands. They envision a TCMP as a strategy to encourage coordinated management of state highway corridors between governments, and within Native American reservations and rancherias, which will preserve, protect, and restore the areas’ unique cultural and natural qualities while ensuring the continued safe and efficient operation of the highways.

Also in the first chapter are findings from a series of focus group interviews with Caltrans personnel and ethnographic interviews with individuals who participated in the development of the 2006 *Conceptual Plan for Downtown Hoopa*. Based on their responses, the authors’ first identified key challenges confronting tribal transportation projects in District 1, including improving government-to-government relations between Caltrans and tribes,

enhancing public safety, conveying and preserving local sense of place, and improving internal communication between and among Caltrans District 1 functional units. They then propose strategies for fostering collaborative relationships between Caltrans and local tribes—particularly through early and frequent collaboration on tribal transportation plans, projects, and proposals—and provide suggestions for corridor management in tribal areas, particularly through the installation of non-standard design elements. Provided are several examples from Humboldt County and beyond in which interpretive design is integrated into public safety enhancements, accommodations for pedestrians and non-motorized transportation, aesthetic improvements, and visitor orientation materials (such as signage and gateway monuments).

The second chapter is a case study presenting an interpretation-based tribal corridor management plan for the Hoopa Valley Indian Reservation, based on the ideas generated during interviews, as well as ideas presented in the tribe's 2006 *Conceptual Plan for Downtown Hoopa*. In addition to modeling a successful public participation process and innovative approaches to transportation challenges, developing the Hoopa Valley TCMP (HV-TCMP) allowed the authors to apply and demonstrate the various recommendations that emerged from our interviews with Caltrans District 1 personnel, participants in local transportation planning efforts, and local residents.

Also provided in this chapter is a high-level overview of the study's findings. Included are lists of general recommendations for consideration when developing a TCMP, based on experience developing the preliminary HV-TCMP and the best practices identified through our research.

The third chapter is the guide which explains how to initiate the corridor management planning process and what elements a community might include in its TCMP. The recommendations presented are based on the "lessons learned" during development of the HV-TCMP, a review of existing corridor management plans, and analysis of various professional guides and resources related to corridor management.

Appendices A and B are additional resources that will be useful to communities developing their own local TCMPs. Appendix A provides a brief cultural history of the Hupa people and their territory, revealing how various management strategies and design elements selected for the HV-TCMP are connected and responsive to the unique human and physical geography of the region. Appendix B is a list of recommended resources to consult for further information.

I. CONTEXT-SENSITIVE CORRIDOR MANAGEMENT AND TRIBAL INVOLVEMENT IN TRANSPORTATION PLANNING

CORRIDOR MANAGEMENT PLANS AND CONTEXT-SENSITIVE DESIGN

The narrowest conception of a highway “corridor” within California is the state highway right-of-way, which technically varies in number of feet from segment to segment for a variety of reasons. However, the experience of traveling the corridor is felt primarily through a combined effect of elements viewed from the highway, which together create a lasting impression.¹ Thus, the Federal Highway Administration, recognizes a more general definition of a corridor as including “the road or highway right-of-way and the adjacent area that is visible from and extending along the highway.”² This experience-based formulation highlights the importance of a broad context in road planning.

The California Department of Transportation (Caltrans) has defined a corridor management plan as “a document that identifies the recommended system management strategies for a given State Highway System facility based on comprehensive performance assessment and evaluation.”³ A corridor management plan (CMP) typically provides an inventory of corridor resources and intrinsic qualities, describes issues and challenges identified by stakeholders, and outlines an action plan for addressing the issues and a framework for implementation. It provides the various agencies, organizations, and individuals who have an interest in the corridor with an overarching vision and a set of common goals and objectives for managing and developing the highway and adjacent property. A CMP is intended to serve as a flexible, community-based “living document” that can accommodate future developments and proposals for the highway corridor.⁴ A CMP is key to defining context, and therefore key to achieving context-sensitive design.

This guide and other recent collaborative efforts in Caltrans District 1 reflect a planning philosophy known as context-sensitive solutions (CSS). Caltrans defines CSS as “the use of innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders.”⁵ Context-sensitive solutions “use innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance and performance goals.”⁶ Furthermore:

A successful CSS implementation process can drive proactive, collaborative, and intelligent behaviors among vested stakeholders that can result in repeated innovations. These innovations are further fueled by the synergy and efficiency of focused direction and sustainable decisions, as well as the increased ownership of the process by engaged stakeholders.... Adherence to these principles creates leadership that significantly influences stakeholders by building credibility and trust, while empowering those in the transportation arena to be more productive partners and intelligent risk takers.⁷

In rural areas, including many Native American communities, highway corridors often function as “main streets,” further necessitating a holistic, coordinated approach to

transportation planning and management. Caltrans recognizes the value of a main street to local residents in its commitment to developing context-sensitive solutions that incorporate a community's values into the planning and design of projects through early and continuous public participation. Thus, an effective CMP serves not only to enhance the performance of the state highway, but to enhance and preserve the "livability" of surrounding areas. This approach ensures that local needs are in balance with broader, multimodal transportation system needs, builds consensus early in the planning process, fosters public support and partnerships for plans and projects that serve the public interest, and minimizes opposition, litigation, and the need to redesign or relocate, which in turn reduces costs.

Despite agency-wide efforts to encourage public participation, implement context-sensitive solutions, and foster positive working relationships, there are challenges inherent in most any attempt to collaborate among multiple government bureaucracies. A TCMP can be an important tool for communication and collaboration between stakeholders and a step toward achieving solutions specifically in the context of tribal governments and communities.

COLLABORATION BETWEEN CALTRANS AND TRIBAL GOVERNMENTS

The state of California has the largest population of Native Americans in the U.S., representing 109 federally recognized tribes. In addition, there are approximately 55 terminated or unacknowledged tribes, as well as urban Indian communities.⁸ Whether or not members of federally recognized tribes, California Natives comprise a socially, economically, culturally, and politically significant group of citizens whose needs and concerns must be considered in transportation planning.

Lands in California were under the control of American Indian nations prior to contact with Spanish and American settlers. Today, state and federal agencies are mandated to consult with sovereign tribes in transportation planning, programs, design and development.⁹ Caltrans increasingly depends upon communication with tribal governments, as representatives of sovereign tribal nations, to meet its responsibilities for consultation. Caltrans Director's Policy Number 19, "Working with Native American Communities," established and recognized the government-to government relationship between tribes and the Department. It "acknowledges these tribes as unique and separate governments within the United States; ensures that [Caltrans] programs and activities avoid or minimize adverse impacts to cultural and other resources; recognizes and respects important California Native American rights, sites, traditions, and practices; [and] consults with Tribal Governments prior to making decisions, taking actions, or implementing programs that may impact their communities."¹⁰ Further, the policy stipulates that all Caltrans employees "ensure that the Department is represented in a knowledgeable, sensitive and respectful manner when engaging in activities that impact Native American communities."¹¹

Figure 1 is a map depicting geographical distributions and extent of California Indian tribes prior to European-American settlement. The fragmented physical geography of Northwestern California has contributed to the diversity and significant concentration of tribes in this portion of the state.



Figure 1. Native American Lands Within California

(Source: California Indian Library Collections, accessed online at: www.kstrom.net/isk/maps/ca/calprecontact.gif)

To meet its objective of working with the tribal governments in California, Caltrans created a Native American Liaison Branch and a Director's Native American Advisory Committee. The Native American Liaison Branch (NALB), established in 1999, serves as an interface between Caltrans and federal, state, regional, and local transportation agencies to establish and maintain government-to-government working relationships with Tribal Governments. The NALB also serves as staff to the Native American Advisory Committee (NAAC), which was established in May 1997 to advise the Department Director regarding matters of interest or concern to the Tribes and their constituents. In addition, some positions have been created at the program or district level to address Native American issues.

Native American Liaisons within the districts have various roles, while Native American Coordinators specifically handle cultural resource issues.¹²

In its “Transportation Guide for Native Americans,” Caltrans acknowledges that it, like other state transportation agencies, has “increasingly experienced problems in the planning, project development, construction, and operation of state highways across and near Indian reservations.”¹³ Many of these problems are attributed to the unique situation resulting from tribal self-determination: “Tribal sovereignty and, at times, the reluctance of state and local agencies to accept tribal sovereignty are at the root of the conflict. Many agencies find it difficult to accept the notion that rules, which seemingly apply to everyone, may not apply to tribes or may be applied differently in some cases.”¹⁴ Caltrans reports that “Tribal Governments recognize that the Director’s Policy reflects a respect for their sovereign rights and a commitment to building more effective working relationships [however] Tribes are concerned that regional acceptance of their status, by and large, is resisted. They see communication and education between and among all agencies as a major part of the solution to addressing Tribal transportation needs.”¹⁵

A TCMP is a significant tool for facilitating the kind of communication needed in this relationship. As noted above, a CMP can be used to coordinate a wide range of specifically defined needs, including geographic challenges and particular community interests, and it can be particularly useful for collaborative planning on roads that present both challenges and opportunities far beyond the roads themselves, including land use, the economy and cultural vitality. Tribal governments often serve communities that have similar needs, many of which are intimately connected to highway management. These needs include the stewardship of natural and cultural resources, localization of government services, stimulation of employment and community wealth, streamlining of operations and services, and complex requirements for a productive and inclusive relationship between levels within local governments and with neighboring governments and the public. Significantly, the sovereign status of tribes means that they may employ processes and goals that differ from those of other governments. Because so many tribal issues can be addressed in this type of planning, a tribal corridor management can be an excellent mechanism to support tribal consultation and to fully engage tribes while at the same time addressing critical transportation issues such as safety and efficiency. Successful transportation collaboration in Caltrans District 1 provides evidence for potential efficacy of these plans.

PURPOSE AND NEED, AS DEMONSTRATED IN CALTRANS DISTRICT 1

The primary purpose of the TCMP approach is to encourage coordinated management of state highway corridors within Native American reservations and rancherias in Caltrans District 1, which will preserve, protect, and restore the areas’ unique cultural and natural qualities while ensuring the continued safe and efficient operation of the highways. A model TCMP integrates and supports organization-wide strategic goals for accomplishing the Department’s mission of enhancing mobility throughout the state. These strategic goals are:

- Safety: Provide the safest transportation system in the nation for users and workers.

- Mobility: Maximize transportation system performance and accessibility.
- Delivery: Efficiently deliver quality transportation projects and services.
- Stewardship: Preserve and enhance California's resources and assets.
- Service: Promote quality service through an excellent workforce.¹⁶

In District 1 alone, there are more than 30 federally recognized tribal governments, and Caltrans has many transportation projects occurring within reservations and tribal ancestral areas.¹⁷ Figure 2 depicts the location of major reservations and rancherias within District 1.

Caltrans District 1 and tribal governments in the area have made concerted efforts to develop more effective and productive working relationships that support innovative context-sensitive solutions. Interviews with participants on both sides of this relationship have proposed several process improvements that will facilitate the development of interpretive tribal corridors as well as supporting ongoing collaboration to ensure safe, efficient, and high-quality highway transportation within tribal areas.

Because it is intended to reflect a distinctive cultural heritage and unique sense of place, the development of tribal corridors will necessarily involve the design, installation, and maintenance of nonstandard features. Caltrans has described its philosophy regarding flexibility in the design and operation of highways that function as main streets as follows:

Caltrans advocates enhancements to state facilities that promote a community's vision and needs. Recognizing that meeting these needs may require flexibility, a process for approving alternative designs exists. This process evaluates each requested deviation for its potential effects on highway safety, regional needs, and the surrounding environment. Deviations from Caltrans policy or standards to meet community requests may require approval of an exception to a policy or non-standard feature.¹⁸

The development of tribal corridors discussed in this document is distinctive from other approaches to corridor management plans in that we propose an explicitly interpretive approach that will provide the public with a stronger "sense of place" when traveling through tribal lands. The inclusion of culturally appropriate design elements along the corridor will inform motorists that they are traveling through a Native American community, raise their awareness of the area's cultural history, and remind them to respect the significance of these places to local residents. Thus, we hope that this unique approach to transportation planning will directly and indirectly promote beautification, stimulate economic growth, and deter vandalism, all of which would enhance community and tribal pride.

In sum, the TCMP approach provides guidelines that will assist Caltrans personnel in efficiently conducting transportation planning and maintenance activities in ways that support community development goals and respect tribal needs and customs. At the same time, the TCMP development process supports and reflects the mission and goals of Caltrans, particularly as they pertain to Native American communities.

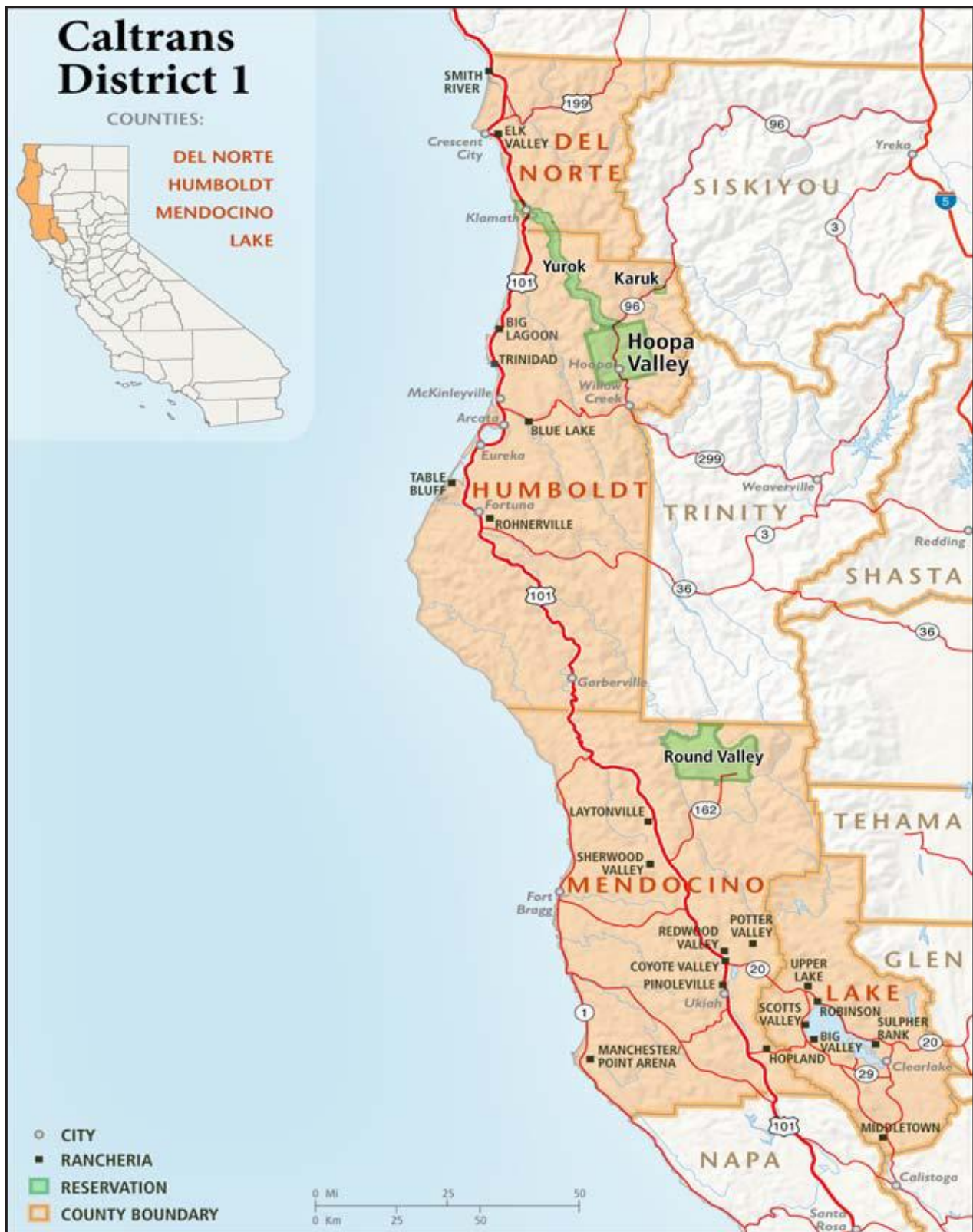


Figure 2. Map of Native American Lands Within Caltrans District 1

(Cartography by Michael Boruta, HSU Institute for Cartographic Design)

AUTHORITY AND APPLICABILITY

The development of the this guide and the SR-96/Hoopa Valley pilot project reflect a concerted, coordinated effort between Northern Californian tribes and Caltrans District 1 to address the aforementioned concerns and to develop more efficient, proactive, and collaborative approaches to transportation planning. The preparation of the guide was developed as a good faith effort to address long-standing issues in the State Route 96 (SR-96) corridor that affect a variety of stakeholders and to disseminate strategies that might be applicable to other highway corridors. While the model plan in this document, the HV-TCMP, refers primarily to one tribe and one reservation, the federal mandate to consult with tribes applies to all tribes and all lands in California and beyond.

While many of the strategies and actions proposed in this document are mainly the responsibility of Caltrans, success will depend upon participation by others. Recommendations presented in the HV-TCMP are based upon stakeholders' shared concerns and general consensus regarding ways to preserve and protect the highway, corridor resources, and the visitor experience. Shared ownership over decisions in the corridor entails shared responsibility for carrying out its provisions. Thus, full realization of the TCMP's goals will largely depend upon the continuing cooperation, voluntary participation, and goodwill of property owners and other stakeholders who have supported the project since its inception.¹⁹

A TCMP does not impose requirements on any organization, agency or individual; rather it sets forward a vision and framework for inclusive decision-making, improved interagency coordination, and better community involvement. The HV-TCMP is not a regulatory document, nor is it intended for use by regulatory agencies for regulatory purposes. There is no intent, either implied or explicit, to change existing lines of authority or the jurisdiction or responsibility of any entity or organization over land use decisions or activities conducted on private or public property. Thus, ongoing collaboration, cooperation, and communication among stakeholders will be essential to the long-term success of any corridor management plan.

No community is static, so the reader must be reminded that a TCMP is intended to serve as a flexible, "living" document. It should be adapted, revisited, and revised as the community's needs change in response to shifting economic, social, environmental, and political contexts. As various proposals are tried and tested, performance measurement and evaluation can help to identify successful efforts meriting continued support as well as unsuccessful efforts requiring modification or discontinuation.

CHALLENGES AND STRATEGIES FOR TRIBAL TRANSPORTATION CORRIDOR PLANNING

Collaborative planning on roads in tribal areas presents both challenges and opportunities that go far beyond the roads themselves to land use, the economy, and cultural vitality. This section discusses the local experience in Humboldt County, highlighting challenges and advancing recommendations based on successful strategies already being developed and implemented within District 1. The data gathered here were collected through a literature

review, observation in tribal settings and public meetings over a period of two years, and a series of interviews conducted in 2008 with Caltrans staff and local residents who have been active in the transportation planning process.

Like the potential solutions, some of these challenges are place-specific and reflect the unique local context of northwestern California, while others are more structural and possibly representative of administrative relations on a larger scale. In addition to presenting some of the most challenging environments for highway maintenance in the state, District 1 contains the broadest range of administrative interface, from the Federal Highway Administration (FHWA) and the Bureau of Indian Affairs to the agencies of nearly thirty tribal governments, in addition to county and municipal agencies located in the area. Therefore, the underlying concerns and suggestions presented here should prove informative for other tribal areas and transportation districts, as will the innovative solutions and approaches being undertaken in District 1.

District 1 as a model for tribal collaboration

While Native people and population centers are located throughout the state, they are not evenly distributed. District 1 currently includes approximately 30 tribes (one-third of the entire state's federally recognized tribes), with another eight to ten actively pursuing recognition.²⁰ As a result, a large number of its transportation projects take place on reservations, rancherias, and tribal ancestral lands.

The unique and often challenging geography and history of the region have necessitated collaboration and innovation and deepened local ties to place, both of which further distinguish District 1—and Humboldt County specifically—from other parts of California. As one Caltrans employee explained:

We are outside Caltrans standard policy culturally, physically, and geographically. Our district drains six rivers into the ocean and our roads are always falling off the face of the earth. We have a geology no other district has and the culture to match it. It has always been isolated [from larger bureaucratic powers], including the Spanish [and] the Russians before the United States. As a result, our tribes are connected to our lands here in a way no one else is, and an interest in culture and politics [is] more intense than in other places, and we put our money into it.

As evidence of this commitment, District 1 alone has more Tribal Historic Preservation Officers (THPO) than all but two states (Wisconsin and Washington), and it has a full-time Native American Liaison. According to Caltrans staff, District 1 has a “higher profile” than other districts for its success and innovation in its relations with local tribes. Throughout this project, the authors have repeatedly and consistently observed that District 1 personnel are proud of the good working relations and successful projects they have developed with local tribal governments, a sentiment often echoed by roads management teams of specific tribes, particularly those most active in the Tribal Transportation Commission described below. Based on this record, it is felt that the concerns and recommendations presented here reflect a significant degree of expertise and experience that may prove

insightful and beneficial to consider when working on transportation projects involving and/or impacting Native communities and territories throughout the state of California.

The Hoopa Downtown Plan as a model for tribal transportation planning

In 2006 the Hoopa Valley Tribe presented its *Conceptual Plan for Downtown Hoopa* (henceforth referred to as the “Downtown Plan”). The project involved the participation of numerous governments, agencies, and organizations, along with a wide representation of interested Hoopa residents. The plan’s development was funded by a grant, secured through the Caltrans Environmental Justice program, to “involve the community in crafting design solutions to traffic safety problems, specifically the ‘critical injury cluster sites’ along Highway 96, while supporting existing community development efforts. The project was also consistent with economic development, tourism planning, injury prevention programs and other efforts to improve the quality of life currently underway in the Hoopa Valley.”²¹ The 2002 award was the first such grant extended to a Native American tribe in California. It reflects a high level of concern about unacceptable safety levels along SR-96 that have been echoed in all relevant roads documents over the past decade, as well as in the interviews and meetings examined over the period of this study.

Specifically, the Hoopa Downtown Plan concentrated upon the half-mile stretch of SR-96 that runs straight through the heart of the reservation, including the densest area of social and commercial activity. The project brought as many stakeholders to the table as possible to generate comprehensive ideas about how to improve the existing design and structures.

While the project itself included a number of different activities and phases, the resulting Downtown Plan document expresses four main areas for improvement: (1) safety; (2) environmental protection and enhancement; (3) improved sense of place and economic activity, including tourism development; and (4) a framework for continuing inclusive participation in the development of “Downtown Hoopa.” These four areas are outlined below, with an emphasis upon strategies that can be generalized to other tribal areas.

1. **Safety:** The Hoopa Downtown Plan advocates a mix of physical and social measures to calm traffic and to enhance the visual character of the corridor through the application of design features. Because many residents do not have access to cars and because bicycle use is very low owing to safety concerns, strategies to encourage and protect users of non-motorized transportation are a major emphasis. Suggested safety enhancements include fairly standard improvements, such as lighting, striping, painting, and bulb-outs, but they also advocate employing colors, plantings, and symbols that reflect Hupa culture and community preferences in these features (as noted below).²²

The social component of the Downtown Plan makes extensive use of the design work of Dan Burden, who promotes “traditional neighborhood development,” described as an orientation to a “human scale, to make a walkable community with moderate to high residential densities and a mixed-use core.”²³ Communities designed to accommodate the human scale promote social interaction and with “many eyes on

the street” report “low crime, low pollution, [and] low road maintenance expense [while] residents express very high satisfaction with their community.”²⁴

2. **Environmental protection and enhancement:** The Downtown Plan invokes the community’s status as a leader in natural resources management and as an active steward of the Trinity River, wetlands, old-growth Douglas fir, and dependent species such as the spotted owl and salmonids. As “one of the first Tribes to take over forestry, road maintenance and construction, and wildland fire management from the Bureau of Indian Affairs,” Hoopa has a full-service natural resource support network.²⁵ The Downtown Plan recommends specific native species for planting along the corridor and in new installations. In addition, recommended design features are intended to draw attention not only to the beautiful natural features of the valley but also to the Tribe’s active role in natural resource management.
3. **Sense of place:** Establishing and displaying a “sense of place” is a central mission of the Hoopa Downtown Plan. The proposed gateway monument, unifying “themes” for design features, new village center and cultural center, and streamlined “Main Street” plan are all directed towards the interpretive goal of creating and expressing a sense of place unique to Hoopa. The plan includes many pages of beautiful illustrations of proposed elements, including gateway monuments, lighting, and other fixtures. Cultural motifs can be expressed through the use of traditional geometric patterns and symbols along sidewalks, on signage, and in public murals (Figure 3). Centrally located commercial areas are re-visioned to provide public gathering spaces with seating, lighting, shade trees, parking, and walkways. Many features of the plan expand upon internal cohesiveness to include outreach: “Interest in Native Americans by non-native Americans is generally high in the state of California and around the world. However, for most people, knowledge about the Hoopa Valley Indian Reservation and the culture it represents is largely limited to the view of the town from the windshield of vehicles.”²⁶ Relocation of the Hoopa Tribal Museum to a more prominent and accessible location, adding bilingual signs, installing informational kiosks, creating picnic areas, and constructing a new welcome center will all serve to celebrate cultural heritage and provide interpretation for potential visitors.
4. **Inclusive participation:** The Hoopa Downtown Plan upholds the motto: “Tribal people working together to solve problems.” Throughout the document, the importance of outreach and communication—to and from tribal leadership and members, between agencies, to and from the public, and between the local community and outside agencies—is consistently emphasized. To this end, the impressive number of organizations referenced in the plan’s acknowledgements may serve as one indicator of the broad community participation. Other indicators of ongoing public participation include continued community forums through Radio KIDE and Q;0;so:s, a tribal network organization.

The following figure is a visually compelling mural depicting the Hupa creation story appears on the side of a local business. It is just one example of several existing murals that help to create and sustain a tribal “sense of place” along the segment of SR-96 that also serves as Hoopa’s Main Street.



Figure 3. Mural Depicting the Hupa Creation Story

(Photo by Joy Adams)

The creation of the Hoopa Downtown Plan is a model for inclusive participation in corridor management. Many participants expressed that it would be easy and desirable to extend the principles developed for the downtown plan throughout the highway corridor. Frank Starkey of the Hoopa Department of Realty and Land Management commented:

It was fascinating to see how people can be enthusiastic and do so much! This was real—not just ideas but a good, solid, realistic plan. No one got bogged down in competition. There was a rational division of labor and very good cooperation for that project. And there is more talent to tap for this sort of goal.

Rhody Cook, a participant in the 2006 Hoopa Downtown Design Fair, described the process as emblematic of her own “dream” future of the Hoopa Valley in terms of the way stakeholders can interact in similar projects: “The project was so inclusive. It was that way

by design and some real effort to make sure not just the usuals (welcome and hard-working as they may be) [participated] but a real cross section of the community was involved.”

Bill Carpenter, an Elder who contributed a repertoire of cultural motifs to the project, skillfully wove all four features of the Downtown Plan into ideas for extending its recommendations throughout the highway corridor. In his view, acorns, ferns, and salmon symbolize elements in the environment that tribal members use for activities that are both economic and cultural, such as medicine (e.g., herbal remedies such as angelica root, pepperwood, and madrone leaves), cooking, and basket weaving. These species and their habitats need some degree of protection, but they can be also utilized for educational purposes. This education includes learning about the plants as well as learning the names of the local places they inhabit. The absence of addresses in some areas, along with ambiguous place names, has hampered emergency efforts. Specifically, locations need to be communicated clearly enough that dispatchers can identify accident sites. As a Hupa language teacher, Carpenter strongly advocated the addition of bilingual signs, both to address the above concerns about ambiguous toponyms as well as to reinvigorate endangered elements of Hupa culture: “The day you hear Hoopa spoken in the grocery store, then we will know that the language lives.” His frequently repeated mantra, “Whatever is needed,” applies equally to individuals making a living in the community and to cooperative efforts between families, tribes, agencies and governments to enhance local quality of life, including the Downtown Plan.

MUTUAL CHALLENGES AND OBJECTIVES

As the following discussion will reveal, some significant problems and challenges confront roads administration on tribal territories and transportation planning affecting Native communities. In District 1, however, concrete experience provides a unique opportunity to build a model. Tribal representatives and Caltrans staff have taken a uniquely collaborative and proactive stance, including supporting the development of this tribal corridor management guide, that promises to address and hopefully resolve many of the concerns presented below.

The pilot project, the Hoopa Valley Tribal Corridor Management Plan (HV-TCMP), is contained in the next chapter and provides a “snapshot” of one point in time at which a number of local agencies experienced relatively dramatic changes in administrative relations. Tribal agencies had achieved a level of growth and stability that allowed them to actively spearhead new plans. County and local governments were increasingly considering and entering into political and technical collaboration with tribes. District 1 was assisting and producing more tribal roads and research projects.

As noted in several interviews, “success has its price.” Raised expectations and attention necessitate intense scrutiny. Caltrans and the Hoopa Valley Tribe, each having invested successfully in their mutual relationship while taking stock of future needs, chose this moment to deliberately and consciously evaluate standard operating procedures in hopes of facilitating continuous improvement and ongoing innovation. The subsections that follow focus on identifying and contextualizing areas in which improvement or enhancement is desirable. Proposed strategies and solutions for each identified area of concern are

discussed in detail in the next chapter. The reader is reminded that action is already under way in regard to many of these matters at the time of writing, and some issues may be partially or fully resolved as of the publication and dissemination of this report.

Improving active government-to-government relations

There are challenges inherent in most any attempt to collaborate among multiple government bureaucracies, as was noted by both Caltrans staff and Hoopa tribal representatives alike. At a basic level, the geography of tribal territories and jurisdictional boundaries is complicated and often confusing to those on both sides of the relationship. While reservation boundaries are sharp and clearly defined, ancestral tribal territories are more amorphous, often overlap, and may not be publicly disclosed in order to protect culturally significant resources. This situation makes it challenging for Caltrans staff to identify and include all affected tribes as stakeholders in transportation projects. From the tribal perspective, much confusion surrounds the issue of jurisdiction, which could involve federal, state, tribal, county, or municipal entities. The sovereign status of tribes often entails processes and goals that are different from those of their neighboring governments. From the perspective of Caltrans, the usual policies and regulations do not always apply, some policies must be modified, tribal compliance with certain regulations is contingent or voluntary, and tribes are immune from litigation in certain circumstances.

The situation is exacerbated by the large number of tribes (30) and agencies (15) in the region, all of which have their own policies, procedures, and regulations that need to be addressed and integrated into transportation projects. Tribal structures and organization vary, which leads to difference between tribes regarding how and to what extent they share information with Caltrans and other agencies, especially regarding ceremonies, sacred places, and culturally or environmentally significant areas that require confidentiality and sensitive handling. For example, the Yurok Tribe has multiple contacts who each work with Caltrans on specific activities while the Hoopa Valley Tribe has a single point of contact through whom requests and information are disseminated to the appropriate tribal staff and offices. Furthermore, administration can lack continuity due to changes in elected officials and staff turnover. As a result, transportation projects and processes involving tribes can be inconsistent even within the same district, which may in turn reinforce perceptions of unequal treatment. Establishment of the North Coast Tribal Transportation Commission is regarded as an important first step toward improved communication, integration, and consistency in transportation planning and projects in tribal territories (see previous chapter); however, Caltrans and tribal representatives agree that these remain significant areas of concern with great potential for improvement.

All parties report frequent miscommunication regarding which government or agency is responsible for addressing specific concerns and/or for managing specific locations and resources. To note one frequently mentioned example, tribal governments and organizations are often keenly interested in taking on parts of Caltrans projects that could be contracted locally, including risk management, education, and media outreach and sometimes entire mitigation contracts. However, they may find that state law, while allowing Caltrans to work with individuals, severely limits the ability of Caltrans to contract with tribes. The agency strives to treat local tribes equitably and is concerned about perceptions that some

tribes receive more attention and effort than others; thus, the possibility of inadvertently excluding tribes from projects is a significant concern among Caltrans staff. An accessible TCMP can be an important document to streamline just these sorts of areas with high potential for misunderstanding and communication problems.

A final concern, related to both of the above, is the need to establish trust between federal, state, and municipal governments and tribal governments. A history of broken treaties characterizes much of the American West, and past injustices have not been erased from collective memory. While positive relationships are being established today, forging these ties requires all parties to invest time and effort, which are in ever-shorter supply with the current state budget crisis in California and the resultant staffing shortages and reduced hours for many employees. Caltrans staff have pointed out that the nature of their work is schedule-driven and heavily oriented toward product delivery, which leaves little time to reflect upon and address process improvements proactively. Because of the number of tribes in District 1, and the range of expertise required for all Caltrans functions, it is neither desirable nor feasible to have the Native American Liaison handle all tribal issues. District 1 has displayed a much-needed commitment to tribal relations and projects through its creation of a full-time Native American Liaison position, but it must also require all staff to work with tribes in specific circumstances.

Enhancing public safety

In terms of transportation system priorities, both the Caltrans staff and Hoopa residents interviewed agreed that public safety is their most significant concern. SR-96 is the principal road within the valley as well as the chief access route to areas outside the Hoopa Valley Indian Reservation (HVIR). As such, this stretch of highway presents a number of operational concerns related to pedestrians, bicyclists, and motor vehicle operators on and near the reservation.

SR-96 is a major route for people as well as trucks and automobiles. However, there are no sidewalks, bikeways, or formal public trails dedicated to non-motorized traffic. In many places, narrow shoulders have proven inadequate for the safe passage of pedestrians, cyclists, horses, and others. In addition to the risks posed by high-speed vehicular traffic, travelers along the gravel shoulder are exposed to dust and debris from the roadway, vehicle emissions, and inclement weather. At some points along the highway, the physical environment restricts the width of the shoulder to a very narrow strip, increasing the risk of vehicle-pedestrian collisions. Anecdotal evidence reveals that pedestrians are often forced to wait for vehicles to pass before navigating around protruding rocks or slides that place them too close to the roadway (figure 4), and many parents remove their children from strollers before attempting such risky maneuvers. Official and unofficial accident reports confirm these perceived hazards for pedestrians walking along or crossing the highway, as there have been a number of vehicle-pedestrian collisions reported in recent years, including several fatalities. The narrow shoulders and steep drop-offs also pose a risk for Caltrans crews performing work along the highway, so any measures that can reduce maintenance demands will increase the safety of transportation workers as well as highway users.

Figure 4 reveals as the highway parallels the Trinity River valley, it clings to rocky ledges that are subject to slides, posing challenges for highway safety, maintenance, and operations. While generous turnouts appear regularly throughout the corridor (as seen in foreground), the rugged topography forces the shoulders to become very narrow at points, hugging the mountain or dropping off steeply toward the river. In addition, visibility is limited by the frequent, often tight, curves of the roadway.



Figure 4. A Section of SR-96 Revealing the Difficult Topography of the Corridor

(Photo by Joy Adams)

In the decade preceding publication of the Hoopa Downtown Plan, 163 accidents, including several fatalities, were documented within the proposed tribal corridor.²⁷ Contributing factors may include: excessive speed, high pedestrian and bicycle traffic, congestion, insufficient warning signs (such as those alerting drivers to the presence of children playing or heavy pedestrian/bicycle traffic), inadequate or absent lighting, lack of pedestrian/bicycle lanes forcing travel along the gravel shoulder, lack of turning lanes, poor sightline, and inadequate access or controls for traffic entering or leaving businesses on both sides of the highway. Even within the village center, foot travel can be dangerous and difficult. As a result of community input through the Downtown Plan, the single striped crosswalk in the mid-downtown area that was hard to see and too often ignored by both pedestrians and motorists was replaced by two crosswalks in more user-friendly locations. Public safety is an issue that clearly benefits from an ongoing open channel of consultation.

Conveying and preserving local sense of place

Perhaps the most unique and innovative aspect of this project is its emphasis on interpreting Hupa cultural history and sovereignty to both residents and visitors through the use of non-standard design features that incorporate tribal themes and symbols. Both Caltrans staff and Hoopa residents expressed strong support and enthusiasm for the interpretive aspects of the proposed tribal corridor. To date, the main challenge associated with the use of non-standard design features has been a lack of information regarding the appropriate processes and paths of communication to initiate such projects. Furthermore, because of the relative newness of corridor management plans as a concept and the geographical isolation of the region, local examples of non-standard design features are just emerging in tribal communities in Northern California and neighboring areas. Thus, a major element of this plan involves identifying opportunities for the implementation of interpretive design elements in tribal areas and providing basic information to assist communities and agency staff in initiating such projects.

AGENCY-SPECIFIC CHALLENGES AND OBJECTIVES

The Hoopa Valley Indians were one the first tribes to enter into a self-government compact. Twenty years ago, many of the functions previously administered by the BIA were transferred to tribal departments. This move instigated a major transformation in the way the tribal government works, and, while significantly shifting or “outsourcing” administrative loads from BIA to the tribe, also necessitated the cultivation of a new set of tribal administrators and administrative methods. Since then, increasing capacity for self-government has been a trend in non-tribal as well as tribal governments; the adjacent subnational governments (counties and municipalities) have also localized some government functions and instituted competitive grant procedures for state and federal funding.

Operating in the same environment, some aspects of the political culture of tribal agencies are similar to that of their neighbors. Common goals that are intimately connected to highway management include the stewardship of natural and cultural resources, localization of government services, stimulating employment and community wealth, streamlining operations and services, and facilitation of a productive and inclusive interface between governments and the public for specific projects and issues. Over the recent period of expanding functions in self-government, many tribal organizations (again, the HCTTC is a prime example) report that their mission is, in part, to interact with other communities and governments. These organizations form ready-made channels for government-to-government communication. In this emerging climate, collaborative planning helps communities to prepare “shovel-ready” projects and funding. Creating TCMPs is a way to envision and communicate highway goals and impacts among all the different stakeholders in a way that facilitates consultation between governments and publics, makes efficient use of local talents, addresses community needs and desires, and encourages practical, realistic, and fundable innovation in highway management.

In discussions with Caltrans employees, the authors learned that the major internal challenges associated with tribal transportation projects center on the issue of communication. At the agency level, District 1 staff report that Caltrans policies and

initiatives do not always match local needs and concerns because District 1 is geographically, politically, and demographically very different from the rest of the state. When Caltrans personnel, consultants, and contractors from outside the region work on projects in District 1, they are often unaware of local needs, issues, and sensitivities related to tribal communities and territories. Within the District offices, employees stated that Caltrans staff in general need an on-the-spot channel to educate themselves on tribal concerns and working with tribal governments. Having this information at hand would enable them to provide answers and information to clients as well as allow them to “ask the right questions” during project planning and delivery. For example, some information that is gathered at Caltrans for one purpose may prove useful for a different purpose, but it is often inaccessible. This disconnect is attributed to the fact that departments maintaining databases containing tribal information do not have processes in place to share this information, even with other Caltrans departments. Sometimes this silence can be a function of the need to maintain privacy and confidentiality, especially in areas where tribes conduct cultural activities.

In addition to the challenges of navigating new legislation and its shifting interpretation and application to projects, Caltrans focus group participants also stated that front-line employees and administrators sometimes have different expectations and concerns for tribal transportation projects. Thus, there is a perceived need for enhanced internal communication and education hierarchically through the various levels of the agency’s organizational chart, laterally across departments within District 1, and externally to contractors and other affiliates. Furthermore, successful implementation of context-sensitive solutions requires a “top-down” commitment and may require change in any of three areas: changes in thinking, changes in roles and responsibilities, and changes in work processes.²⁸ Therefore, it is important that both agency management and staff share the vision for, and have committed to achieving the objectives of, the TCMP. As previously discussed, Caltrans policy explicitly supports the application of CSS to transportation projects, so such a commitment would align with the agency’s goals and mission.

MEETING THE CHALLENGES: PROPOSED STRATEGIES

Improving government-to-government relations

Communication

Federal policy, as noted in the previous chapter, requires Caltrans to consult with tribes in all aspects of transportation planning, programs, design and development. Communication begins with making sure the channels in the government to sovereign government relationship are open and clear. Since each tribe is a separate sovereign government, and since many tribal governments, like Hoopa Valley, has significantly transformed its own structure over the past twenty years, this is a complex challenge. Interviews conducted in 2008 with Caltrans District 1 staff representing a variety of functional units and organizational levels revealed that a common source of frustration for entities working with the agency is a mismatch between the community’s vision for the roadway and what can be physically, economically, environmentally, and politically accommodated at that location. In addition to managing the expectations of stakeholders, collaboration between tribal representatives

and Caltrans in all phases of corridor management planning can minimize the potential for unnecessary delays, costs, and budgetary issues associated with the processing of change orders.

Perhaps most importantly, the decisions made early in the planning process will necessarily guide and possibly constrain future development. As the FHWA notes:

It is during the first three stages, planning, project development, and design, that designers and communities, working together, can have the greatest impact on the final design features of the project. In fact, the flexibility available for highway design during the detailed design phase is limited a great deal by the decision made at the earlier stages of planning and project development.²⁹

According to Caltrans staff, a TCMP is an excellent mechanism through which Caltrans staff can begin the process of consultation as early as possible in the planning process, and ensure that proposed modifications to the corridor conform to existing state and federal highway policy and adhere to safety guidelines. In interviews conducted for this study, Caltrans personnel representing all major functional units agreed that their staff should be involved with tribal transportation projects at the earliest possible stages. As one respondent observed: “Issues are not issues when they are known in advance.” Hoopa’s Downtown project is an example of planning that begins before become problems. Tribal roads coordinators can, of course proactively contact the District’s Native American Liaison for referrals to the appropriate Caltrans personnel.

Caltrans staff are encouraged to be proactive in offering assistance when news of upcoming tribal transportation projects is received. The personnel interviewed suggested that each division and/or office within the agency designate an employee to serve as an informal tribal liaison. The individual would serve as the first line of contact to receive referrals from the District’s Native American Liaison and for answering direct queries from the tribes related to their unit’s functions. Because of the complexity of the government-to-government relationship between Caltrans and the tribes, having a single contact charged with staying abreast of tribal concerns would streamline the unit’s interaction with tribes and foster more efficient collaboration. When disseminating information about tribal concerns, projects, and opportunities, the Native American Liaison could contact the informal liaisons, who would then share this information within their functional units. The result could be a clearer path of communication and the accrual of “expert” knowledge within each functional unit pertaining to transportation projects in Native American communities.

Public outreach and participation

In addition to consultation with tribal governments on a government-to-government basis, Caltrans has a policy to include tribal communities in its public outreach efforts. Public participation and input confer a variety of advantages for transportation planning efforts, including promoting trust between agencies and communities, ensuring that plans and proposed solutions are not overly vague and that they address specific local needs, providing opportunities to solicit a range of potentially innovative and organic ideas from community members, minimizing risks of miscommunication and misperception, fostering

community “buy-in,” and stimulating advocacy efforts among residents.³⁰ In addition, public input is central to both Caltrans’s vision and its mission, reflecting its level of importance to the agency’s efforts.³¹

The *California Transportation Plan 2025* describes the critical role of broad and inclusive participation as follows:

Transportation planning and programming in California is a complex process shared among multiple public and private entities. It requires collaboration among transportation providers and governmental entities as well as community-based organizations, urban planners, developers, social, community, and emergency service providers, the environmental and business communities, permitting agencies, system users, and others. All of these voices must be heard and considered in order to achieve an integrated transportation system that promotes economic vitality and community goals.³²

Additionally, public participation is regarded as essential to achieving context-sensitive solutions that are responsive to local needs. A report from the Transportation Research Board states:

Often stakeholders, including staff from the sponsoring agency, enter the project development process with a set of fixed ideas about the best solution. Such ideas often vary widely from one group to another. In some cases, potential solutions are not even considered because they fall outside the ideas initially brought to the table. “Best practices” [in context-sensitive design and context-sensitive solutions] suggest seeking outside known channels for potential solutions. This requires a willingness of all parties to become educated on a broad range of solution sets. Of course, just because a concept works in one place does not automatically make it appropriate for another. The project team should work collaboratively with stakeholders to ensure mutual understanding of potential solutions and their applicability to the identified problems.³³

Both the Caltrans personnel and Hoopa representatives who participated in interviews for this project expressed a desire for more frequent and improved public outreach efforts, especially regarding informal and/or emergency employment opportunities for local residents. Emergency work on the state highway is done through local contractors. For emergency opening work that does not go out to bid, local contractors are chosen on a rotating basis according to civil service procedures. Caltrans maintains a list of local contractors, including contractors who are tribal members. Announcements made via local broadcast media (such as Radio KIDE), posters placed in public areas, postings on agency and tribal websites, and articles in tribal newsletters (such as the *Yurok Today* newsletter³⁴) were cited as potential outlets that could be better utilized for this purpose. The development of the North Coast Tribal Transportation Commission is seen as a promising step toward enhanced inter-tribal and agency-tribal communication as its monthly meetings provide regular opportunities for sharing announcements and discussing emerging opportunities.

Process improvements

In addition to potential improvements to communication and outreach efforts, our interviews yielded several other suggestions that would further enhance collaborations involving Caltrans and tribes. At a basic level, one set of recommendations focuses on the need for increased transparency to better equip tribes to navigate Caltrans policies and procedures. While many agency manuals and websites are publicly available, they are not always easy to locate and/or comprehend. One employee suggested that the Native American Liaison website include a list of links to the most frequently used manuals and documents to make these materials more readily available and easily accessible. However, this step alone will not be sufficient; a number of personnel observed that, in some cases, the manuals are “not too helpful,” suggesting that agency staff also find them to be difficult to comprehend and use. As one interviewee stated, “Sure you can consult the design manuals, but it’s better if you talk to the right people. Many planners are inexperienced on both sides [Caltrans and tribes] and you may have to consult the manuals together.” Furthermore, several respondents noted that tribal representatives do not always understand Caltrans processes and timelines, particularly as they pertain to construction projects; therefore, further education and training would be beneficial. Currently, tribal staff can attend the Caltrans Tribal Transportation Academy as part of their training and professional development. The above observations reinforce the need for early and proactive collaboration on transportation projects affecting tribal areas as well as clearer communication and continued outreach efforts.

Caltrans staff suggested that the development of ongoing local corridor-based plans may help standardize some aspects of improvements. Referencing applicable state and federal regulations and/or incorporating examples (whenever possible) into tribal transportation guidelines and procedures will help streamline processes and approvals. For example, the Caltrans Project Development Procedures (PDP) Manual was identified by Caltrans staff as an especially useful reference and a resource for examples of “standard” planning documents and specifications.

Although some standardization is possible and potentially desirable, Caltrans personnel acknowledge that a “one-size-fits-all” approach to tribal transportation projects would not be appropriate for District 1. Tribal symbols, information needs, environmental concerns, and the like are highly variable between tribes, and each tribe’s organizational structure and political culture require individualized measures. Embodying the spirit of context-sensitive solutions, interview participants repeatedly stressed the uniqueness of the area and its tribal heritages and the need for flexible and responsive interaction with tribal communities. This study’s authors were advised that any attempts to develop “fast-track” procedures for non-standard design elements in tribal areas would be very difficult and would detract from the District’s ability to interact flexibly and responsively with tribal communities. Instead, the Caltrans District 1 staff recommended that tribes and other groups pursuing the use of non-standard design elements begin by gaining ideas and inspiration from existing local examples. (See the following chapter for a discussion of how neighboring tribes’ efforts inspired portions of the HV-TCMP.) Such “riding the coattails” of successful projects will avoid or mitigate many challenges related to compliance and approvals, process development, and unforeseen constraints.

Enhancing public safety

Public safety is a central concern of the *Conceptual Plan for Downtown Hoopa* and it was a recurring theme throughout our interviews, among both transportation professionals and local residents. SR-96 is the principal road within the valley as well as the chief access route to areas outside the reservation. As such, this stretch of highway presents a number of operational concerns related to pedestrians, bicyclists, and motor vehicle operators on and near the HVIR. The most significant area of concern is speed management, particularly as speed is a contributing factor in the high number of fatalities that have occurred in the corridor. (A more detailed discussion of these issues is contained in the following chapter.)

Traffic calming

According to the FHWA, “traffic calming” usually refers to a combination of mainly physical measures that reduce the negative effects of motor vehicle use and improve conditions for non-motorized travel.³⁵ Traffic calming slows vehicles on streets where drivers travel at higher speeds than desirable, and these measures are often undertaken in an effort to correct conditions on an existing street where the original design was inappropriate for or no longer matches current usage. In addition to increasing the safety of motorists, traffic calming improves the quality of life for residents, property owners, business operators, pedestrians, and cyclists. Less tangibly, it is intended to encourage citizen involvement by incorporating residents’ preferences and requirements in the development of strategies and solutions.³⁶

Presently, according to the residents and transportation professionals interviewed for this study, SR-96 through downtown Hoopa lacks traffic control or traffic calming measures, except for posted speed limits, which are largely ignored. Drivers entering the downtown area at unsafe speeds are likely to encounter other vehicles entering or exiting the highway as well as bicyclists, people on horseback, and pedestrians traveling along and across the highway. Fast-moving vehicles might also be unable to avoid the livestock, wildlife, and domestic pets that can often be observed traveling within the corridor as well as debris from rockslides, fallen trees, and other natural hazards. Only a California Highway Patrol investigation will be entered into the official accident record system, but not all incidents, even serious ones, are reported. If accidents are not reported to the CHP they are not reflected in the statistical data used to allocate highway safety funds. No segment of SR-96 has a reported accident rate greater than 150 % of the average of similar road facilities throughout the state.³⁷ However, the frequency of unreported and informally resolved incidents keeps “official” accident rates artificially low, masking an issue of significant concern to local residents and transportation planners. Jurisdictional boundaries between tribal police and the California Highway Patrol can be unclear, further complicating officials’ ability to monitor highway safety, identify critical injury cluster sites, and implement necessary improvements.

The Downtown Plan recommends a combination of physical modifications to improve the safety of the highway corridor as it passes through the village center. The proposed treatments include bulb outs, medians with dedicated turn lanes down the center of the highway, and consolidating and defining driveway ingress and egress to businesses in

the downtown Hoopa area. While these modifications are suitable for the “Main Street” segment of SR-96, these strategies would not be appropriate for the rest of the proposed tribal corridor. As one Caltrans engineer noted, a bulb-out, median, traffic table, or other physical barrier on a highway can become a hazard in itself—“one more thing to hit.” Other, more suitable traffic-calming strategies suggested included the installation of additional warning signs, landscaping of the shoulder to narrow the perceptual width of the roadway, public and visitor education about highway safety, and stricter enforcement of speed limits and other traffic regulations.

Pedestrian connections and accommodations for non-motorized transportation

SR-96 is a major route for people as well as trucks and automobiles. However, there are no sidewalks, bikeways, or formal public trails dedicated to non-motorized traffic, only gravel shoulders along both sides of the highway. These shoulders pose problems for the safe passage of pedestrians, cyclists, horses, and others. In addition to the risks posed by high-speed vehicular traffic, travelers along the gravel shoulder are exposed to dust and debris from the roadway, vehicle emissions, and inclement weather. At some points along the highway, the physical environment restricts the width of the shoulder to a very narrow strip, increasing the risk of vehicle-pedestrian collisions. Anecdotal evidence reveals that pedestrians are often forced to wait for vehicles to pass before navigating around protruding rocks or slides that place them too close to the roadway, and many parents remove their children from strollers before attempting such risky maneuvers. Official and unofficial accident reports confirm these perceived hazards for pedestrians walking along or crossing the highway, as there have been a number of vehicle-pedestrian collisions reported in recent years, including several fatalities.

The Hoopa Valley Indian Reservation Transportation Plan (1996) has established a long-term goal of developing bicycle and pedestrian trails, including river crossings, that are physically separated from reservation highways and roads. To improve walkability along the SR-96 corridor through central Hoopa, the Downtown Plan further recommends installation of sidewalks, grass planting strips, pedestrian crosswalks and bike lanes. To improve pedestrian safety and comfort, lighting, seating and landscaping will be installed within the grass planting strips. The grass planting strips will not only improve pedestrian access; vegetation planted along roadways can also serve to narrow the perceptual width of the highway corridor, thus resulting in lower travel speeds by motorists.

Additionally, a five-foot wide pedestrian zone would be designated along the Trinity River bridge crossing. Bridge safety could be further enhanced by raising the height of the railing to meet current pedestrian and bicycle safety standards and by installing a flashing beacon that would alert motorists to the presence of foot or bicycle traffic as they approach the bridge. Figure 5 demonstrates how visualization software was used to show residents and stakeholders “before” and “after” images of what how these proposed changes would impact the appearance of the bridge.

The photo at left shows the current condition of the Trinity River Bridge while the image at right is a computer-generated image of how the bridge would appear following implementation of the proposed improvements.



Figure 5. Before and After Images of Proposed Trinity River Bridge Improvements

(Source: Conceptual Plan for Downtown Hoopa, p. 3.2-8)

Integrating design with public safety improvements

Transportation personnel and residents alike expressed strong support for the possibility of integrating design themes into the safety and traffic-calming features identified above. Recently, Caltrans District 1 and the Yurok Tribe enlisted local school children to paint tribal motifs on the reverse (blank) sides of highway signs, to enhance place identity and convey a tribal sense of place to travelers moving in the opposite direction (figure 6). The Yurok Reservation also features a number of bridge guardrails painted or stamped (impressed) with tribal patterns (figure 7). The idea of launching similar efforts in Hoopa was enthusiastically received, as were suggestions to incorporate tribal motifs into other safety features.

The interviews with Caltrans personnel and local residents to develop this TCMP also produced a new idea for the Hoopa Valley corridor, the installation of patterned crosswalks to convey tribal heritage while improving pedestrian connections. Applying patterns to crosswalks (discussed in more detail below) could also increase their visibility for motorists while enhancing their aesthetic appeal. Hoopa residents suggested that a pattern involving salmon, an important part of the traditional subsistence economy of the Hupa people, would be an appropriate cultural symbol, as well as evoking the crosswalk's function as a place where people cross over, much as the salmon cross the rapids as they follow the river upstream during the spawning season.

The Downtown Plan proposes creating access controls to direct motorists to exit and enter the highway at designated driveways, thus eliminating hazards associated with uncontrolled access and egress to the highway. Pedestrian crossing points at driveways could also be striped or designated with different materials and/or colors to further reduce hazard conditions by increasing their visibility and to enhance the tribal character of the corridor.



Figure 6. Article from *Caltrans District 1 News* on Painting of Highway Signs by Yurok Youth (January 2004, Vol. 4, Issue 1)

During discussion at a NCTTC meeting in 2007, several different tribal representatives were enthusiastic about using heat-transfer treatments in various projects, but expressed concerns about cost and quality arising from research by the Hoopa Valley Roads Department. Less than a year later, Caltrans maintenance staff reported advances in the technology that increased the feasibility of these treatments. The Caltrans staff interviewed for this study were highly receptive to suggestions of applying patterned treatments to crosswalks, guardrails, and other highway installations where and when possible. However, communities considering these design elements are strongly advised to consult with Caltrans as early as possible when proposing such projects. Staff pointed out that any patterned elements or other non-standard design elements on highway infrastructure must be accompanied by plans and agreements for replacement, repair, and maintenance and must be budgeted prior to installation. They also advise the use of durable materials to



Figure 7. Guardrail with Painted Tribal Design on SR-169

(Photo by Joy Adams)

reduce long-term maintenance demands and costs. For example, stamping into concrete guardrails is a more permanent and therefore potentially lower-maintenance treatment than painting, but with a similar aesthetic effect (see figure 25 for an example).

Preserving and enhancing a tribal sense of place

Applying unifying design themes to enhance sense of place

Geographers use the term “place identity” to refer to the combination of physical and cultural characteristics that makes each locale unique and distinctive. Raising travelers’ and residents’ awareness of local place identity through the use of non-standard design features will enhance the “sense of place” they experience in their interaction with the highway corridor.

Design features created by tribes and implemented through collaborative processes “help give the public a sense of place when entering tribal lands, and an awareness of the cultural history in the area. [These features] also reflect a tribe’s strong sense of pride.”³⁸ The Hoopa Downtown Plan advocates the use of cultural motifs to convey a “unifying theme” for the highway corridor, which would clearly convey to highway users that they are traveling through tribal territory. Section 3.2 of the plan states:

Results from focus group interviews as well as public input during the community meeting suggested that a formal sense of arrival and welcome to the downtown area was needed. There was also consensus that a theme composed of cultural icons could unify the area in ways that each area or element could be perceived as part of a common whole. Through the focus groups, downtown business and property owners suggested that “beautification” could improve the business climate and property values by making the area more inviting. Others expressed the need for reinforcing a “sense of place”—that you have just arrived somewhere—that you are in a different place than the main highway and will need to “behave differently”; and, clearly define the town—the “beginning as well as the end”

.... The point to be made is that “You are in Hoopa Territory!” as distinct from Willow Creek, or Weaverville or some other community. This is home to the Hoopa People, a sovereign, self-sufficient and independent nation.³⁹

Using tribal icons and symbols throughout the highway corridor is expected to confer many practical benefits, in addition to these aesthetic and cultural benefits. Caltrans staff and Hoopa residents alike acknowledged that vandalism, particularly of regulatory signs managed by state and federal agencies, is a significant local concern. In addition to the costs of repair and maintenance incurred, vandalism detracts from the aesthetic quality of the corridor and may pose a public safety concern when warning signs are defaced or removed or when Caltrans personnel perform repairs and installations in the narrow highway shoulder. Caltrans personnel noted that signage incorporating a tribal imprint is far less likely to be the target of vandalism and can foster a sense of ownership for the signs themselves. Perhaps most importantly, these projects actively reinforce and reintroduce elements of tribal culture into everyday life and foster community and tribal pride.

As the statement regarding the Yurok youth program to paint basketry designs on highway signs (see figure 6) eloquently states:

We’ve taken an old way and we are using it in today’s world. Maybe an Elder will see the design and remember their grandmother, or other ancestor, who once wove that design. This might help them remember something they may have forgotten and then they will tell us... It’s a warning, a precaution, to tell you to slow down, not only for your safety, but the entire community. Working on these signs helped us feel good about ourselves because all of the people will see them. And maybe those that wanted to vandalize them won’t do it, because they’ll know their family helped work on them...because it took hard work to make them.

The Yurok sign project, along with the painting of guardrails illustrated in figure 6, is an excellent model for the application of design to required safety features to achieve management objectives and to enhance sense of place. By building upon these existing initiatives (or “riding the coattails,” as previously described), tribes should find that the planning and implementation processes will be smoother, owing to the fact that these non-standard elements have already been successfully implemented within District 1. Drawing inspiration and ideas from existing community development plans and ensuring the proposed interpretive elements are consistent with current transportation plans and

guidelines will make development of a TCMP more efficient, will incorporate existing public input, and will better align highway maintenance and construction with community needs, economic development goals, and protection of culturally significant activities and spaces.

As the Hoopa Downtown plan suggests, cultural motifs can be used in other ways to depict “unifying themes” for tribal corridors.⁴⁰ For example, the plan recommends the addition of gateway monuments at the two highway entrances into “downtown” Hoopa.^{41, 42} The plan acknowledges that this suggestion is inspired by the golden bear statutes that mark the Klamath River bridge on the Yurok reservation (figure 8), again revealing how local tribal initiatives can inspire further design innovations in neighboring communities. Additional suggestions obtained through the public participation process included the use of traditional geometric patterns along the edges of sidewalks, cultural features incorporated into signage, and public art. (See “Guide to Developing a TCMP” for further details about these proposed elements for the SR-96 corridor.)

The philosophy of context-sensitive solutions recognizes a central role for local initiatives and ideas in transportation planning, including highway aesthetics. The Caltrans Landscape Architecture Program [www.dot.ca.gov/hq/LandArch/] provides consultation and advice on the use of aesthetic treatments and non-standard design elements along state highways.⁴³

In figure 8, golden bears on the Klamath River bridge on U.S. Highway 101 welcome travelers and remind highways users that they are traveling through the Yurok Reservation.



Figure 8. Golden Bear Gateway Markers on Yurok Reservation, US-101

(Photo by Joy Adams)

Protection of culturally sensitive resources

Interpretive tribal corridors present an invitation to the traveler, and developing a modest tourism-based economy is a long-term goal of the HVIR that can be supported by context-sensitive transportation planning.⁴⁴ However, a major concern of the tribal representatives we interviewed is “screening” some cultural resources and events from public view. While signage can play a critical role in deterring unwanted tourist behaviors, some residents expressed concern that signage could have the opposite effect by drawing attention to sites and activities the tribe would prefer to keep private or protected. For example, placing signage near archaeological sites could actually attract souvenir and relic hunters to these locations.

Caltrans personnel offered several potential management strategies. For example, Caltrans currently uses Environmentally Sensitive Area (ESA) signs to alert construction and maintenance crews of areas that should not be disturbed. The signs do not indicate the nature of the resource being protected and may offer some protection for plants, animals, or cultural resources. Signs placed and maintained by the tribe do not fulfill a public safety function and would not be subject to state or federal guidelines for their appearance and/or context. Therefore, they could be designed to incorporate local materials, tribal symbols, and/or bilingual messages as appropriate and desired so that their presence would potentially contribute to, rather than detract from, the “sense of place” along the corridor. Maintenance staff also expressed a willingness to install vegetation that would help to screen ceremonial grounds and similar sites from public view. Multiple employees suggested that monitors of various kinds, including cultural experts, are becoming increasingly important participants in agency projects. Salaries for “tribal monitors” are budgeted into proposals, ensuring that cultural resources are properly handled; these positions also provide local job opportunities for qualified tribal members.

While the above suggestions are all steps in the right direction, a central concern that remains is how to communicate potentially confidential tribal information, such as gathering and archaeological sites or information about ceremonies, for Caltrans to consider when planning and scheduling construction and maintenance activities. Again, Caltrans staff offered a number of strategies, recognizing that each tribe will need to consider its own customs and traditions when choosing an appropriate course of action. For example, some tribes provide advance notice of upcoming special events. Working with the Caltrans Native American Liaison, they have each created a simple Excel spreadsheet of dates, times, and locations that is updated annually. The Native American Liaison shares this information with other Caltrans offices on a “need-to-know” basis, with the consent and at the discretion of these tribes. In cases where tribes share information less widely, Caltrans staff stated that very general information will suffice in most cases (i.e., notification that there is a resource or area that needs protecting and its general location), and they strongly encouraged tribes to let them know about the presence of sensitive areas. Information about cultural sites is collected from many sources, including site records of previous archaeological investigations, ethnographic literature, site inspections, and, very importantly, consultation with tribal people. All information about cultural sites is protected. The District 1 archaeologists collect the information and store it in a locked room. The Native American Coordinator has access to this information, but the Native American

Liaison does not. Maintenance staff are provided with a list of ESAs with no comment on the nature of the specific resource needing protection. The list notes prohibited activities and includes the phone number of the Caltrans District Environmental Branch to contact for further assistance. These procedures all follow from “need to know” policies concerning confidential information.

When notifying Caltrans of sensitive areas and upcoming events, tribes are advised to contact their District Native American Liaison as early as possible. With advance notice, work stoppages and other necessary actions can be included in specifications given to contractors. Contracts often request specific lead times. In some cases maintenance and construction projects need one year’s advance notice in order to plan around special events, while lane closures may be scheduled with just one week’s notice. A concern we heard on multiple occasions was that contractors and Caltrans staff from outside District 1 often are not well-informed about cultural sensitivities and significant locations, so improved communication across project teams is desirable.

For funerals, unexpected events, or infrequently scheduled events and activities, the tribes are strongly encouraged to contact the Native American Liaison so that Caltrans can make any last-minute accommodations that are reasonably possible. Again, very general information about the event is sufficient—duration, date(s), mile marker(s)—if the event is of a private nature.

Based on observation of the focus group discussions, it is clear that Caltrans District 1 staff sincerely seek to minimize disruptions and, whenever feasible, will coordinate their activities to avoid potentially negative impacts on tribal events and resources. The District has an established record of innovative tribal collaboration of which its employees are very proud. District 1 was the first to adopt a special provision to stop work during tribal ceremonies, and in 1976, the agency installed a removable road patch at Somes Bar to permit the spirit to flow through the highway corridor during ceremonies.

At present, there is no centralized process for soliciting information from the tribes about the locations of sensitive resources and the timing of special events. District 1 is unique in that it has a full-time Native American Liaison, and numerous transportation initiatives are taking off amid a large and diverse tribal constituency. As one Caltrans employee observed: “This district is rich in cultural heritage, and we need even more people dedicated to keeping up the rapport we’ve built.”

Caltrans District 1 must meet this need by requiring all staff to become familiar with tribal policies as necessary. At the same time, tribal organizations are in a position to: (1) determine what types of information they can provide and how the information could be managed to best reflect tribal customs and address concerns regarding confidentiality, and (2) initiate consultation with the Native American Liaison to develop and implement a mutually workable process. The authors of this study do not advocate development of a general policy that would attempt to manage tribal cultural resources uniformly throughout Caltrans District 1; instead they recommend a case-by-case, context-sensitive approach.

Protection of environmentally sensitive resources

In interviews conducted for this study, two key issues related to environmental management of the proposed tribal corridor emerged: (1) perceptions of Caltrans's vegetation management practices, and (2) the protection of ecologically sensitive areas. The latter discussion resulted in similar recommendations to those presented above, including the use of signage to divert visitors and deter collecting, notifying Caltrans about the presence and general location of sensitive resources (such as gathering sites or habitats of threatened species), and the use of tribal monitors. Therefore, the following comments focus on perceptions of vegetation management.

Vegetation is especially important to local residents in places where natural materials are still collected regularly for food, basketry, spiritual, and medicinal purposes. In the Hoopa Valley, there is widespread misperception about Caltrans vegetation management practices, including purported "spraying" of roadside vegetation and the installation of non-native species. Our interviews revealed that Caltrans does not spray in most of Humboldt County, owing to an agreement reached with the Humboldt County and Mendocino County Boards of Supervisors, under which the agency has actively implemented non-toxic methods of weed control. These practices were understood and praised by the Hoopa residents interviewed; however, both they and Caltrans staff reported that public perceptions are often in error, probably because the local utility company has the authority to spray under its lines outside the Caltrans right of way. Caltrans has also occasionally been blamed for damage to cultural sites caused by other agencies, underscoring the widespread confusion regarding jurisdiction previously discussed in this document.

Interviews revealed that Caltrans personnel and policies generally take a proactive, ecologically sensitive approach to vegetation management: genetic diversity is considered an asset; native plants are used while introduced and invasive species are avoided; botanists are involved in project review and monitoring; and non-toxic treatments are used. However, a challenge lies in the fact that the agency sometimes contracts out installation and early maintenance tasks, which can result in a disconnect between local/agency knowledge and "outsider" perspectives. Early and regular communication between the tribes and Caltrans about the presence of ecologically sensitive resources would permit better communication between Caltrans and its contractors about best practices.

Agency-specific strategies

Most of the suggested "best practices" that emerged from interviews and literature review will necessitate a commitment and active involvement by both tribal communities and Caltrans. However, a few ideas that fall primarily within the purview of Caltrans emerged, and they are discussed below.

The Caltrans employees and the Hoopa residents interviewed strongly conveyed a desire to improve employment opportunities in the HVIR. In addition to contributing to the local economy, Caltrans staff noted that hiring locals could help to bridge communication gaps between the agency and its constituents and improve institutional knowledge regarding tribal concerns and sensitivities.⁴⁵ Additional perceived benefits include reduced theft and

vandalism owing to the community's "investment" in transportation projects. A potential limitation concerns state contracting rules: interview participants noted that they can be very complicated and sometimes politicized. Caltrans has staff who specialize in helping small businesses get certification and bid contracts, and they will help Indian-owned businesses obtain Disadvantage Business Enterprise Certification. However, this service is not well known locally. It was also suggested that contracts be kept smaller when possible to allow local businesses to be competitive.

Communication, both internal and external, was cited as a concern throughout the project. As many respondents noted, Caltrans manuals and guidelines can be confusing and the state-level documents do not always reflect the unique context of Northwestern California. Additionally, both Caltrans resources and local resources are often unknown or unrecognized. It is recommended that the District pursue development of guides such as the forthcoming *District 1 Guide to Protecting, Using and Managing Native Plants within the Caltrans Right-of-Way*. The manual, whose goal is "to protect and promote California Native Plants traditionally used by Native People that meet Caltrans' needs," provides useful flowcharts and instructions (figure 9 and figure 10) to help tribes navigate agency policies and procedures related to native vegetation.

Caltrans is encouraged to continue its public outreach efforts regarding transportation plans and projects. Local media outlets are recommended channels for reaching a broad representation of local residents. This study's authors recommend that tribes consult Caltrans early and often, and they strongly encourage Caltrans staff to communicate with tribal communities early and often. The Transportation Research Board advises that communication be maintained and public participation be cultivated on an ongoing basis through the construction phase of any given project. It notes:

Many public involvement processes conclude at the end of the alternative selection process. This ignores the continuing interest many stakeholders have in the details of final design and construction. It also ignores importance to maintaining agency credibility for communicating any changes in the project that occur during these post-planning activities. Staff from some of the pilot states indicate this is a painful lesson learned—that hard work to achieve credibility and buy-in can be erased by ignoring stakeholder concerns or important project activities after a decision is reached.⁴⁶

Finally, many respondents expressed an interest in some form of official designation for tribal transportation corridors that follow from the development of this TCMP project for District 1. State Scenic Highways are designated with a special sign, as seen in figure 11. In keeping with CSS principles and recognizing the diverse tribal identities within the state and region, official tribal corridor signage should include symbols and design motifs that convey a pan-tribal theme and a local "sense of place," such as the NCTTC logo, pictured in figure 12. The North Coast Tribal Transportation Commission's Logo is a model for incorporating regionally appropriate tribal design and local place identity into graphic design. This icon – or a similar design – could be used to designate official Tribal Transportation Corridors at the state or District level. If State Scenic Highway land use regulations are unacceptably restrictive, the agency could pursue legislation to develop a

District 1 Tribal Corridor Program following the State Scenic Byways Program as a model of designation, perhaps in concert with the Federal Scenic Highway program.

HOW TO USE THIS GUIDE

This guide is intended to provide the tools and information needed for Caltrans and Native American communities to work together to achieve the goal of “protecting and promoting California native plants traditionally used by native people and that meets Caltrans’ needs.” Achieving our goal will involve Native Americans as well as the Caltrans Division of Environmental Analysis (cultural and biology), Maintenance and Operations, Landscape Architecture, and Encroachment Permits.

Native American Community – If you have a gathering site that you want to protect

1. Contact the District Native American Coordinator (DNAC)
 - Barry Douglas 707.445.6417
 - Darrell Cardiff 707.445.5335
2. The DNAC will –
 - Help you with the forms necessary to protect the site and to gather on Caltrans Right of Way.
 - Work with you and Caltrans Maintenance staff to determine the boundaries of the site and how you want to manage the site.
 - Work with you, Caltrans Environmental staff and Caltrans Maintenance staff to determine if/how the site can be protected. At some locations plants must be cut for protection of the motoring public – to prevent blocking the motorist’s sight of other cars or highway signs. Also, Caltrans may be limited by endangered species laws.

Caltrans Staff –

1. District Native American Coordinator is the contact for Native Americans who wish to protect a site. Native American gatherers may approach other Caltrans staff with requests to protect gathering sites. The DNAC should be notified and should contact the gatherer to begin the process detailed above.
2. Caltrans staff will work with the DNAC and the gatherer to implement the procedures detailed in processing a request to protect a gathering site on pages 3 and 4.

Figure 9. Sample “How-to” Instructions from Forthcoming *District 1 Guide to Protecting, Using, and Managing Native Plants*

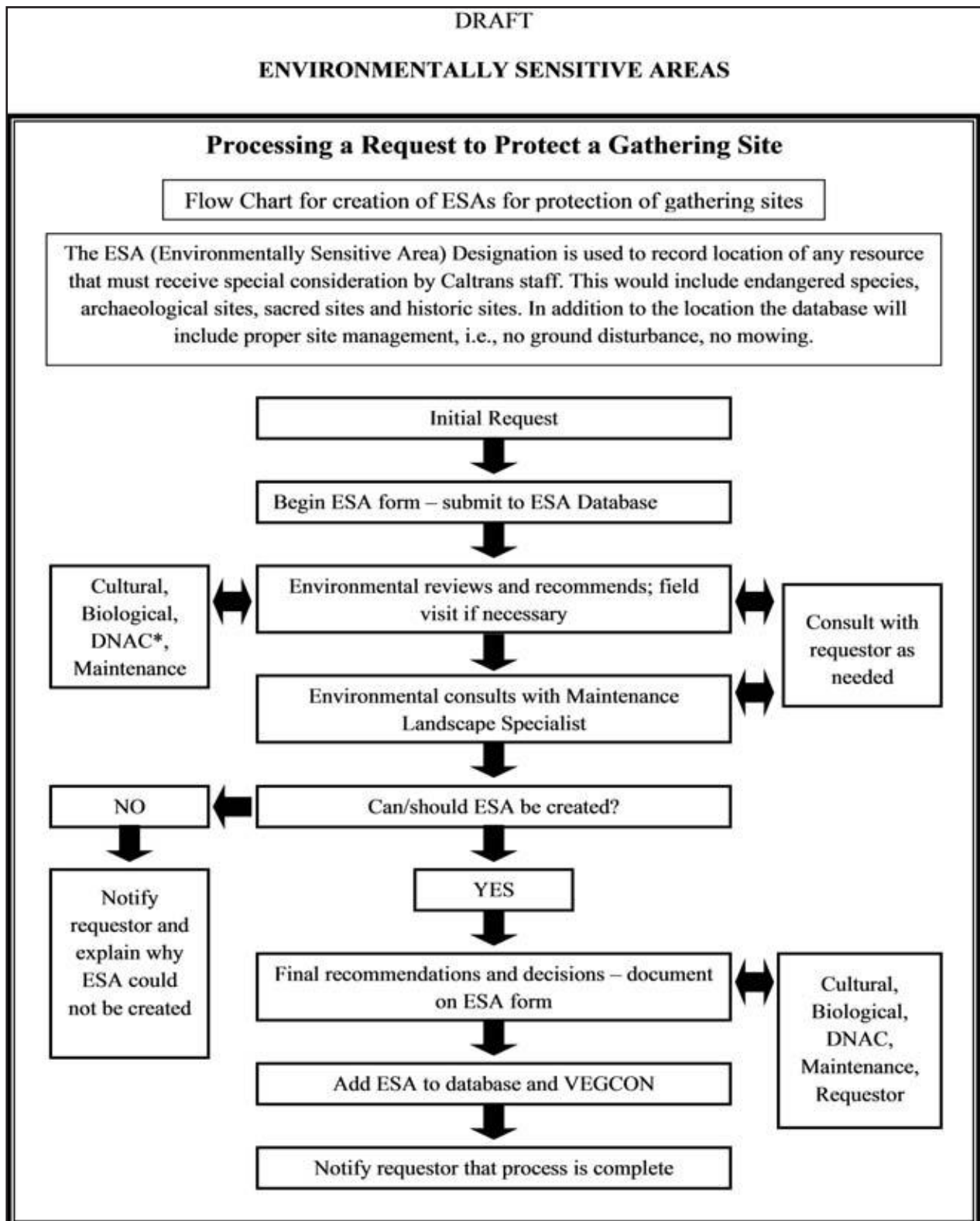


Figure 10. Sample Process Flowchart from Forthcoming *District 1 Guide to Protecting, Using, and Managing Native Plants*



Figure 11. Sign Along California State Route 1 Indicating its Designation as a California State Scenic Highway Within the California State Scenic Byway Program.

(Source: Wikimedia Commons)



Figure 12. The North Coast Tribal Transportation Commission's Logo

II. THE HOOPA VALLEY TRIBAL CORRIDOR MANAGEMENT PLAN

INTRODUCTION AND OVERVIEW

This chapter presents a sample Tribal Corridor Management Plan for the segment of State Route 96 (SR-96) that runs through the heart of the Hoopa Valley Indian Reservation (refer to figure 2 for locator map). This Hoopa Valley TCMP (HV-TCMP) incorporates the recommendations presented in Section 1 of this document to create the framework upon which the Hoopa Valley Tribe can to continue to continue develop its vision and goals for the roadway. It also provides an illustrative case study that could serve as a model for future TCMP development efforts in Caltrans District 1 and beyond.

The HV-TCMP begins with an inventory of corridor's resources and its "intrinsic qualities," to articulate what makes it unique, identify its key resources, and suggest possible motifs and symbols that could be used in interpretive design. Next, a series of transportation-related issues and challenges within the highway corridor and strategies for mitigation through context-sensitive solutions is described. Finally, a high-level "interpretation plan" is presented for the proposed corridor, which was synthesized from interviews with tribal representatives, local residents, and Caltrans staff; a content analysis of existing CMPs associated with tribal areas; and "best practices" gleaned from a review of recent scholarly and professional literature.

The authors hope that by outlining the community's needs and vision for the roadway they can help to facilitate efficient, proactive, and mutually beneficial collaborations between Caltrans, tribal governments, and other transportation stakeholders within District 1. It is important to note that this interpretive TCMP for SR-96 does not outline prescriptions for the themes or design elements to be used within the highway corridor or for the interpretation of its features and resources. Rather, it compiles a variety of ideas for consideration and possible implementation. The intention is for specific strategies to be developed by the community at its discretion at a later date, as implementation is beyond the scope of most corridor management plans.⁴⁷

PROJECT HISTORY AND FUNDING SOURCES

In 2002, on behalf of the Hoopa Valley Tribe, the Local Government Commission, a statewide nonprofit membership organization that provides technical assistance to local governments and communities, submitted a grant proposal to Caltrans under the "Environmental Justice: Context Sensitive Planning for Communities" grant program. The grant provided funds to conduct planning to improve transportation mobility, access, equity and quality of life.

The purpose of the grant-funded project was to involve the community in crafting design solutions to traffic safety problems, specifically the critical injury cluster sites along SR-96, while supporting existing community development efforts. A grant was awarded in 2003, the first for a Native American tribe in California. Implementation began in November 2004

as preparations began for the Hoopa Design Fair, which would inform development of the *Conceptual Plan for Downtown Hoopa* published in 2006.

The Tribal Corridor Management Pilot Project emerged from an internal consensus among planners at Caltrans District 1 that local collaborative efforts in coordinating road projects for SR-96 in Humboldt County appeared promising for obtaining funding for intermodal improvements. Planner Eddie Isaacs and Jan Bulinski, chief of the District 1 Division of Local Assistance, envisioned that such a project could serve as a potential model “for the consistent application of nonstandard design features relating to Native American tribes” through District 1 and perhaps beyond.⁴⁸ Their proposal argued that developing interpretive tribal transportation corridors would:

give the public a sense of place when entering tribal lands, and an awareness of the cultural history in the area. This will help reflect a tribe’s strong sense of pride, which can help deter vandalism and help reduce maintenance/repair cost. Once completed, this project will serve as a blueprint for other corridors in District 1 and the State.⁴⁹

Critically, this proposal identified the *Conceptual Plan for Downtown Hoopa* (2006) as providing an excellent starting point and pilot study for such an endeavor. The project was accepted for funding by the Mineta Transportation Institute (MTI) at San José State University (SJSU). MTI Research Associates Joy Adams and Mary Scoggin, both from Humboldt State University (HSU), were charged with preparing the reports, including setting existing and proposed local projects within the context of new tribal-government partnerships and Native Californian history and heritage. Research techniques including cartography, landscape analysis, content analysis, and qualitative research were incorporated into the initial proposal to provide greater insight into local sense of place and how it can be appropriately interpreted for both resident and transient transportation users.

As the project progressed, the tribal corridor management plan (TCMP) was envisioned as a handbook for planners, and especially tribal transportation planners, to provide models and exemplars that will inform the development of plans for tribal communities throughout the state of California, which will necessarily vary significantly with each set of actors and objectives. Thus, the Hoopa-specific plan (HV-TCMP) presented here serves not only as the template for an interpretive TCMP for State Route 96, but can be consulted as an example of how to apply this study’s recommendations to develop corridor management plans for tribal communities throughout the state of California and beyond. Because the two TCMP documents have been developed simultaneously through an iterative process, the general guidelines have been informed by the actual experiences of and the “lessons learned” by a tribe just beginning its corridor management efforts.

STAKEHOLDER INVOLVEMENT AND PUBLIC PARTICIPATION

The HV-TCMP is the result of a collaborative project undertaken by representatives of the Hoopa Valley Tribe and other tribes of Northwestern California, community residents and local stakeholders, MTI, Caltrans and local transportation agencies, and research associates from the California State University system. The following discussion outlines

how the ideas and information contained in this TCMP were gathered from the general public as well as from key stakeholders involved in local, regional, and state transportation planning and management activities.

Hoopa Design Fair and resulting *Conceptual Plan for Downtown Hoopa*

In 2005, a design team from the Local Government Commission worked with the Hoopa Valley Roads Department (HVRD), tribal leaders, residents, and businesses in the Hoopa Valley Indian Reservation through an intensive design charrette (workshop) process, resulting in a conceptual plan to improve the safety of motorists, pedestrians and bicyclists.⁵⁰ Design table sessions held on Saturday, June 25, 2005, involved seven teams and an estimated 45 to 50 people. Based on the information gained in earlier focus group meetings and a community meeting, each design team developed ideas and drawings for the conceptual plan.

The resulting *Conceptual Plan for Downtown Hoopa* (2006), or “Downtown Plan,” provides a blueprint for implementing ideas related to traffic calming and pedestrian safety along SR-96 through downtown Hoopa. Additionally, the plan presents ideas related to enhancing the pedestrian environment throughout downtown Hoopa, as well as providing a basis for acquisition and development of land in the downtown area for public and private use. As such, it provided the foundation for the much of the HV-TCMP.

Ethnographic research and participant observation

In late 2006, the Humboldt State University researchers met with Caltrans District 1 staff, the MTI research director, and key personnel from the HVRD to determine the scope of work and secure permissions to conduct various kinds of participant observation and interviews in connection to this project. Over the subsequent two-year period, researchers attended a number of relevant meetings, including many of the monthly meetings of the Humboldt County Tribal Transportation Commission (now the North Coast Tribal Transportation Commission, or NCTTC) where roads projects and strategies were shared among local tribes. Other highlighted meetings included a kickoff ceremony for the Hoopa Downtown Plan and the by-laws signing ceremony for the newly chartered NCTTC. In addition, the researchers made trips and informal visits throughout the area to study and photograph key sites, including roadway areas, community features, and institutions that had been identified as significant, such as the Hoopa Valley Tribal Museum and shopping center.

Interviews and focus groups

To gain perspectives on local perceptions of tribal transportation needs and desires, the study’s authors conducted a significant amount of in-depth qualitative research. Most of these activities occurred during the summer of 2008 when the researchers compiled about sixteen hours of recorded interviews with Caltrans District 1 personnel and Hoopa Valley Tribe members. Some of these interviews involved a single informant, such as a Hoopa Elder, but many were conducted as group interviews or “focus groups.” For example, Caltrans staff representing different functional units came together to discuss specific topics of mutual interest, such as “design,” “maintenance,” or “tribal environmental

planning.” Altogether, approximately 10 tribal representatives and 20 Caltrans employees participated in formal interviews, in addition to the numerous informal interactions we engaged in during events, in meetings, and while conducting field observations.

Member-checking and peer review

Because regular feedback provides better quality control, each entity agreed that it would be important to triangulate views on the data by consulting with different agencies and individuals to evaluate core products throughout the project. The first major benchmark of the review process occurred in spring of 2008 when the researchers presented a general outline of the project to HVRD planners. A very rough draft of the report was shared with Caltrans personnel in August 2009 to evaluate the progress of the project relative to the agency’s needs. Review of the final draft of the completed project began in June 2010. The complete report was circulated to key Caltrans staff, Hoopa Valley Roads Department employees, and tribal representatives who participated in focus groups and/or interviews. The final report was then peer-reviewed by MTI research associates in a blind review process. After final revisions, the report was published in 2011.

DESCRIPTION AND LOCATION OF THE CORRIDOR

The HV-TCMP applies to the 44-mile (71-km) section of SR-96 that runs from its intersection with Highway 299 to the Siskiyou County line, which also serves as the boundary between Caltrans Districts 1 and 2 (figure 2). As shown in figure 13, the highway bisects the reservation in a north-south direction, following the course of the Trinity River. While the proposed corridor lies mainly within the boundaries of Hoopa tribal territory, it also crosses through a small section of the Yurok Reservation and many miles of Karuk territory and is the primary access route for the neighboring Yurok tribe, raising unique challenges for the interpretation of the corridor.

The Hoopa Valley Indian Reservation is a square of territory roughly 12 miles per side, bisected by the Trinity River. It lies just north of Willow Creek, approximately 50 miles inland from the coastal city of Eureka and 300 miles north of San Francisco. The community of Hoopa is not only the geographic center of the valley, but the political, social, and economic center of the reservation as well. Because the steep mountains leave only the valley floor and benches along the Trinity River as suitable areas for development, the settlement pattern within the reservation is linear, paralleling the river.⁵¹

Owing to the importance of oral traditions within the tribe, the written history of the Hupa people dates only to the late nineteenth century.⁵² However, the tribe and its homeland have historical roots and a rich culture that extend much deeper into the past. Hupa cosmology identifies the Hoopa Valley as the origin of the tribe, who are believed to have lived there for thousands of years. Although linguistic evidence suggests that the ancestors of the Hupa are derived from Athabaskan stock who immigrated into Northwest California from western Canada, the belief that the Hupa originated in and have continuously occupied the Hoopa Valley provides a spiritual connection to their territory that is unusual among

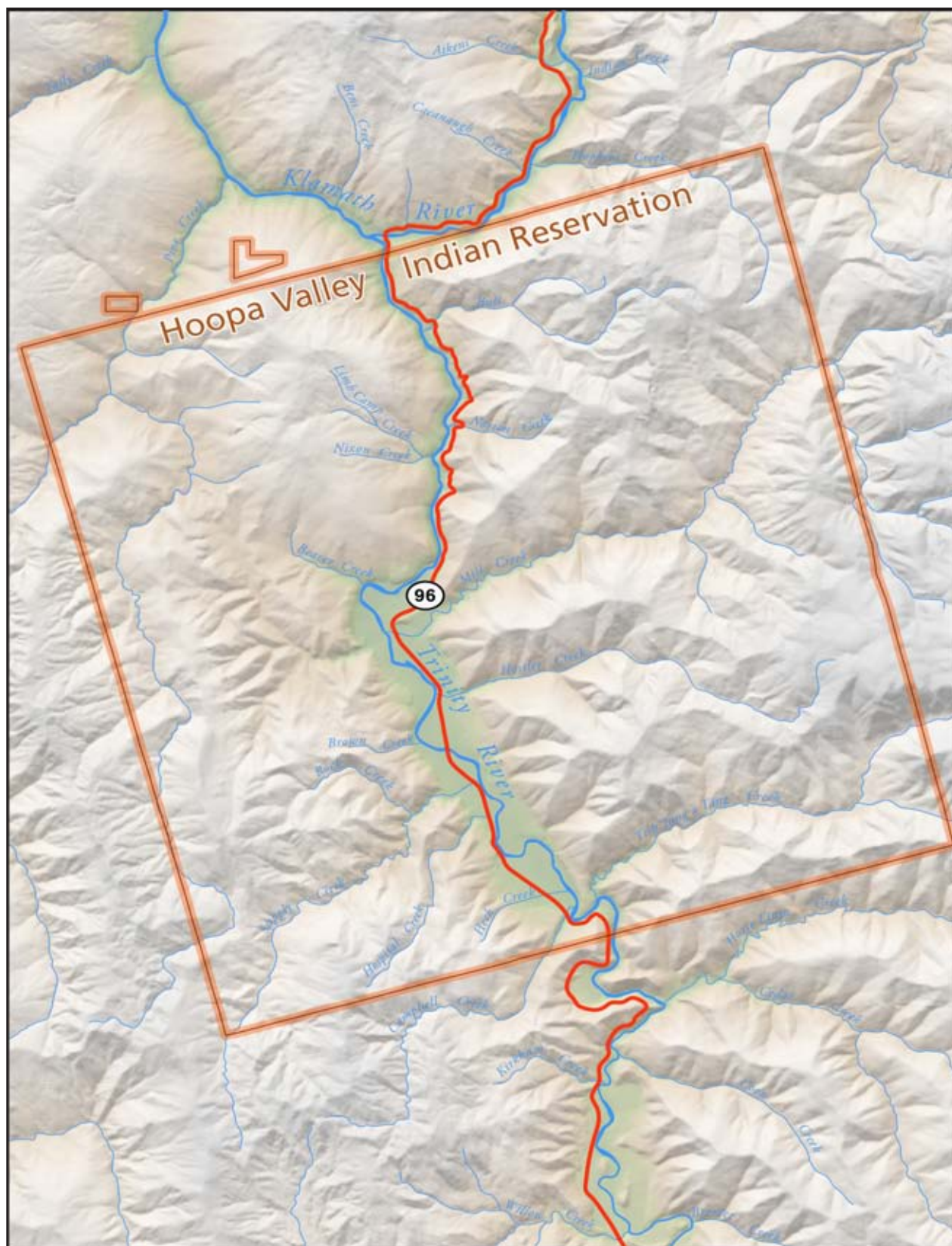


Figure 13. Boundaries of the Hoopa Valley Indian Reservation and the Proposed SR-96 Tribal Corridor.

(Cartography by Michael Boruta, HSU Institute for Cartographic Design)

the majority of North American aboriginal peoples, many of whom were forcibly removed from their homelands to facilitate European-American settlement.⁵³ For more information regarding the cultural history of the Hupa people, see Appendix B.

Today, 2,589 Americans claim full or partial Hupa ancestry, and the Hoopa Reservation continues to be the focal point of their culture. The reservation contains 1,001 households and a total population of 2,633 people. Nearly 90% of residents claim at least partial Native American ancestry, and most are members of the Hoopa Valley Tribe.⁵⁴ Overall, the population is quite stable, experiencing a moderate growth rate.⁵⁵

Although the tribe is a major employer in Humboldt County, the Hoopa Valley Indian Reservation “represents an isolated pocket of extremely high unemployment.”⁵⁶ Nearly one-third of the reservation’s total population lives below the poverty level, with slightly higher levels of unemployment among Native American and Hispanic subpopulations than among whites.⁵⁷ Relative to California Indians as a group, the Hupa are twice as likely to be unemployed (20.6% versus 11.0%) and significantly more likely to live in poverty (27.5% versus 20.8%).⁵⁸ The lack of local economic opportunity is related to the reservation’s geographical isolation and its distance from regional urban centers (120 miles round-trip to Eureka/Arcata), along with the contraction of primary and secondary industries, particularly timbering, throughout the Pacific Northwest over the past three decades. Thus, in addition to bolstering Native and community pride, increasing public safety, and enhancing the scenic character of the byway, the Hoopa Valley Tribal Corridor Management Plan has the potential to address an acute need for economic development and job creation in the region.

DESCRIPTION AND CONDITION OF ROADWAY

State Route 96 is classified as a two-lane conventional highway on existing alignment, extending approximately 44 miles through Caltrans District 1. The road is functionally classified as a Rural Minor Arterial and is eligible for designation as a Scenic Highway.⁵⁹

Roadway condition and maintenance

No segments of SR-96 having “level of service” or safety concerns were noted in the 1999 Route Concept Report. According to current “3-R rehabilitation standards” in the Caltrans Highway Design Manual, most segments are wide enough to permit rehabilitation at present width with “rehabilitate as necessary” concepts. Widening the roadway to accommodate non-motorized traffic is considered to be appropriate in some communities along the highway. However, widening segments not meeting 3-R width standards is not considered prudent for the following reasons:

1. Costs to widen narrow sections would be inordinately high because of rugged terrain;
2. Existing vertical and horizontal alignment does not meet current standards;
3. Environmental impacts would be significant, owing to the presence of old-growth redwoods and Hoopa, Karuk, and Yurok archaeological and cultural sites; and

4. Committing extensive funds for widening in conjunction with correcting pavement deficiencies would divert funds from higher-priority capital improvement on other routes.⁶⁰

The SR-96 Route Concept Report specifies that the road may be resurfaced as necessary through the Capital Preventive Maintenance Program. Further, safety improvements at spot locations, bridge replacement, storm damage repair, and operational improvement projects will be considered as necessary.

Traffic volumes

Caltrans monitors traffic along SR-96 by post mile from the southern limit of the Hoopa Reservation (post mile 10.95) to its northern limit (post mile 12.83). Table 1 displays the most current data available. No significant increases in traffic volumes are anticipated in the immediate future.

Table 1. Caltrans Traffic Volumes in Proposed Corridor, 2008

Post mile		Back			Ahead		
		Peak hour	Peak mo.	Average Annual Daily Traffic	Peak hour	Peak mo.	Average Annual Daily Traffic
10.95	South Limits Hoopa	370	4050	3600	330	3750	3300
12.83	North Limits Hoopa	230	2600	2300	210	2600	2300

Source: "Traffic and Vehicle Systems Data Unit: 2008 All Traffic Volumes on CSHS." www.dot.ca.gov/hq/traffops/saferesr/trafdata/2008all.htm (accessed May 25, 2010). These are the most recent data available as of June 2010.

VISION AND GOALS FOR CORRIDOR MANAGEMENT

This plan focuses on three key areas of concern that emerged from our interviews with local residents, participant observation at public and organizational meetings, and our analysis of the findings presented in the Conceptual Plan for Downtown Hoopa and other reports related to the SR-96 corridor:

- Safety, with particular attention to pedestrian connections and traffic calming;
- Protecting and enhancing intrinsic qualities, particularly sensitive environmental and cultural resources; and
- Enhancing tribal "sense of place" throughout the highway corridor through the application of interpretive design and the installation of non-standard highway features.

SAFETY REVIEW AND PROPOSED CORRECTIONS

The *Conceptual Plan for Downtown Hoopa* provides a blueprint for implementing ideas related to traffic calming and pedestrian safety along SR-96 through downtown Hoopa. As such, it provides the foundation for this portion of the HV-TCMP. The reader is advised to consult the plan document for specific details.

Critical injury cluster sites

In 2001, the tribe's Injury and Violence Prevention Program analyzed official accident data and anecdotal evidence to identify three "critical injury cluster sites" within the Hoopa Valley. Each lies along SR-96 within Caltrans District 1 jurisdiction, as reported in the Downtown Plan:

1. Highway 96 near Seven Tribes Trading Post
2. Highway 96 near Trinity River bridge
3. Highway 96 through downtown Hoopa from old Club Hoopa to Laura's Kitchen.

Contributing factors included: excessive speed, high pedestrian and bicycle traffic, congestion, lack of warning signs (such as those alerting drivers to the presence of children playing or heavy pedestrian/bicycle traffic), inadequate or absent lighting, lack of pedestrian/bicycle lanes forcing travel along the gravel shoulder, lack of turning lanes, poor sightline, and inadequate access or controls for traffic entering or leaving businesses on both sides of the highway.⁶¹

Proposed corrections to safety hazards

The charrette process used to develop the Hoopa Downtown Plan revealed that safety is a key concern for residents of the Hoopa Valley. The plan provides several recommendations for safety-related improvements, including traffic calming, creating and enhancing connections for pedestrians and non-motorized transportation, the realignment of Tish Tang Road, and controlling access to SR-96, which are presented below.

Traffic calming

Traffic calming usually refers to a combination of mainly physical measures that reduce the negative effects of motor vehicle use and improve conditions for non-motorized travel. Traffic calming slows vehicles on streets where drivers travel at higher speeds than desirable. In addition to increasing the safety of motorists, traffic calming improves the quality of life for residents, property owners, business operators, pedestrians, and cyclists.⁶²

More appropriate traffic calming strategies for the higher-speed stretches of the roadway might include erecting additional warning signs (particularly in areas with large amounts of non-motorized traffic and wildlife); public education via local media and in interpretive materials created for visitors; and stricter enforcement of speed limits and other traffic

regulations.⁶³ Appropriate interpretive and aesthetic elements, such as decorative plantings, lighting and banner poles, trees, and interpretive signage can give the visual perception of a narrower roadway and therefore encourage slower driving speeds.

The right-of-way for SR-96 is approximately 100 feet. Currently, that right-of-way incorporates a 12-foot travel lane northbound, a 12-foot travel lane southbound, and a 12-foot turn lane, leaving 64 feet (32 feet on each side of the highway) of gravel or pavement. This area provides sufficient room for the traffic calming features proposed above and the pedestrian enhancement treatments proposed in the following section.

Improved connections for non-motorized traffic

To improve walkability along the SR-96 corridor through central Hoopa, the Downtown Plan recommends installation of sidewalks, grass planting strips, pedestrian crosswalks and bike lanes. To improve pedestrian safety and comfort, lighting, seating and landscaping will be installed within the grass planting strips. Additionally, a five-foot wide pedestrian zone would be designated along the Trinity River bridge crossing. Bridge safety could be further enhanced by raising the height of the railing to meet current pedestrian and bicycle safety standards and by installing a flashing beacon that would alert motorists to the presence of foot or bicycle traffic as they approach the bridge.

The *Hoopa Valley Indian Reservation Transportation Plan* (1996) has also established a long-term goal of developing bicycle and pedestrian trails, including river crossings, that are physically separated from Reservation highways and roads in order to address these safety concerns.

Realignment of Tish Tang Road

The Downtown Plan recommends re-alignment of Tish Tang Road to create a four-way intersection with the newly configured access drive to the shopping center (which houses the grocery store, cultural museum, and casino), Tsewenaldin Inn, and the post office. This modification would involve closing off the existing entry drive to the Tsewenaldin Inn. The new intersection will include pedestrian crosswalks and medians with turning pockets to safely direct pedestrian and vehicular traffic accordingly.

Access controls

Uncontrolled access and egress to SR-96 is a key concern for public safety. There are no dedicated driveways to area shops and businesses, no sidewalks or planter strips separating the highway from adjacent driveways and parking areas, and no dedicated turn lanes. In the absence of dedicated access points and controls, motorists exit and enter the highway at will, creating a hazard for motorists who may already be driving too fast and for any pedestrians in the vicinity. This condition is aggravated by the lack of safe and convenient pedestrian facilities (i.e., sidewalks and crosswalks) and forces people to use vehicles for even short trips that could easily be done on foot.

The Hoopa Downtown Plan proposes access controls to direct motorists to exit and enter the highway at designated driveways eliminating hazards associated with uncontrolled access and egress to the Highway at three major conflict points:

1. North of the Trinity River Bridge where Tish Tang Road enters the east side of SR-96;
2. At the driveway to the Tsewenaldin Inn, which enters and exits along the west side of the highway just north of the Tish Tang Road intersection; and,
3. West side access drive to the grocery store, casino, post office, tribal police and emergency medical facilities.

Dedicated entry and exit drives, defined by curb cuts and aprons, have been recommended for these locations. Access controls could also eliminate the conflict point at the Tsewenaldin Inn by combining the existing driveway with a reconfigured access drive to the shopping center. A tapered median will slow traffic crossing the bridge from the south and a left-lane turning pocket will allow safer cross-traffic turning movements into the shopping center. A median to the north of the new intersection (with a left-lane turning pocket to Tish Tang Road) will further control access and egress from SR-96.

The same access controls can be applied to other areas of downtown where uncontrolled access and egress allow vehicles to enter and exit the highway at will rather than at designated driveways. Pedestrian crossing points at driveways will be striped or designated with different materials and/or colors to further reduce hazard conditions.

IDENTIFICATION AND DESCRIPTION OF INTRINSIC QUALITIES

To be designated as a National Scenic Byway, the Federal Highway Administration requires that a road or highway significantly meet at least one of six categories of “intrinsic qualities” that “are considered representative, unique, irreplaceable, or distinctly characteristic of an area.”⁶⁴ Here the concept of “intrinsic qualities” is used to demonstrate the diverse features and interpretive possibilities within the proposed SR-96 tribal corridor. Utilizing this framework will streamline the process of pursuing designation of the roadway as a National Scenic Byway in the future, should the community so choose.

Scenic quality

Of the six categories of intrinsic qualities, perhaps the least tangible is “scenic quality.” The FHWA defines it as:

the heightened visual experience derived from the view of natural and manmade elements of the visual environment of the scenic byway corridor. The characteristics of the landscape are strikingly distinct and offer a pleasing and most memorable visual experience. All elements of the landscape—landform, water, vegetation, and manmade development—contribute to the quality of the corridor’s visual environment. Everything present is in harmony and shares in the intrinsic qualities.⁶⁵

Despite the broad and rather subjective nature of this category, the Hoopa Valley clearly qualifies as a scenic landscape. Writing in 1924, photographer Edward Curtis remarked, “Altogether Hoopa Valley is so beautiful that it is mildly astonishing that Indians have been allowed to remain in possession.” More recently, in 2001, an 89-mile section of SR-96 extending from Willow Creek to Happy Camp—including the entirety of the proposed Hoopa Valley Tribal Corridor—was formally recognized for its scenic value through its designation as the “Bigfoot Byway” by the U.S. Forest Service.⁶⁶ The route parallels the Klamath River and the North Fork of the Trinity River, both of which have been nationally designated as Wild and Scenic Rivers and both of which provide habitats for a wide variety of wildlife that are among the area’s leading tourist attractions (see the discussion of “Natural Quality” that follows).

A variety of spots within the tribal corridor have been identified as scenic viewsheds by Hupa tribal members. About 3.8 miles south of the Hoopa shopping center, travelers will encounter a large gravel turnout that overlooks the Trinity River, providing a convenient photo opportunity and views of the salmon migration during the spawning season (figure 14). Smaller gravel turnouts are located 4.1 and 4.2 miles south of the shopping center; although the views here are largely obstructed by vegetation, they provide opportunities to hear songs of the canyon wrens that make their home in the valley.⁶⁷ Farther north, 10.3 miles from the shopping center is the confluence of the Trinity and Klamath rivers, the



Figure 14. A Scenic Overlook on the Trinity River along SR-96

(Photo by Joy Adams)

site of the unincorporated community of Weitchpec. After crossing the Weitchpec bridge, drivers continuing three more miles along SR-96 will find another turnout with a picturesque view of the river.

Land uses adjacent to the roadway generally contribute to its scenic quality. Outside of clusters of low to moderate density rural residential settlement, travelers will encounter sparsely populated timber production land. Minimal development in or adjacent to existing communities is expected in the near future.⁶⁸

Natural quality

Contributing significantly to the scenic quality of the SR-96 corridor are the area's unique physical and biological characteristics. According to the FHWA, features in the visual environment that are in a relatively undisturbed state and predate the arrival of human populations contribute to a byway's "natural quality."⁶⁹ In the proposed tribal corridor, these natural features include the surrounding mountains, the river and its valley, and the abundant flora and fauna.

The Hoopa Valley Indian Reservation lies within the Klamath Mountains Geological Province of Southwest Oregon and Northwest California. This mountain complex includes the Trinity Alps, Salmon Mountains, Marble Mountains, and Siskiyou Mountains.⁷⁰ The Klamaths are older than the neighboring California, Oregon, and Coast ranges, and they have been subjected to a longer history of tectonic activity, resulting in "a knot of jagged peaks and steep gorges" that have buffered the landscape from the impacts of human settlement (figure 15).⁷¹ Approximately 97% of the Hoopa Valley Indian Reservation is covered in mountainous terrain, and many steep slopes are able to support only native vegetation and timber.⁷² Therefore, only about 3,000 acres along the valley floor (roughly 4% of the reservation's total area) is suitable for development or agricultural production. As a result of the difficult topography, development is constrained to the flat valley bottom. The roadway is fairly straight through "Downtown" Hoopa, but closely follows the sinuous curves of the surrounding mountains at the north and south ends of the reservation, where the floodplain narrows.

Both the Klamath and Trinity rivers have sections that have been federally designated as "Wild and Scenic." In addition to enhancing the marketing of water-based recreation, this designation also helps to protect these "beleaguered waterways."⁷³ There are no dams on either river as they flow through Hupa, Karuk, and Yurok territories; however, farther upstream their courses have been dammed to create reservoirs to supply irrigation water to agricultural operations in the Central Valley. The dams' effect on water levels has had negative impacts on the recreation industry as well as commercial fisheries. For example, recent research has demonstrated that most steelhead populations show evidence of decline in recent years, with independent assessment identifying 10 stocks at moderate or high risk of extinction within the Klamath Province.⁷⁴ This development is especially troubling where it concerns the salmonid species that have long held great cultural and economic importance for the Hupa people.⁷⁵

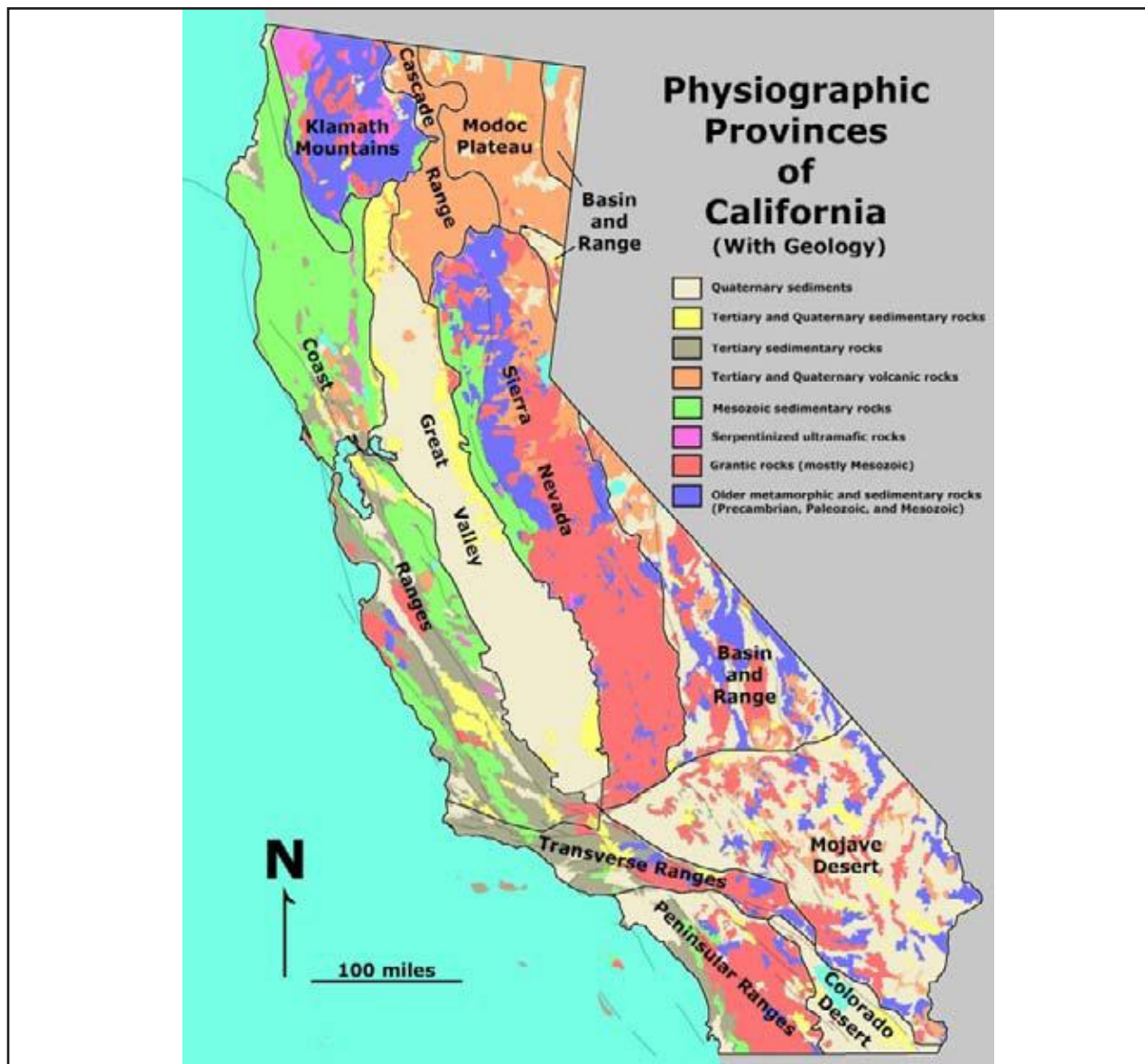


Figure 15. Physiographic Provinces of California

Note: the diverse and fragmented geology of the Klamath Mountain Province

(Source: United States Geological Survey, <http://education.usgs.gov/california/maps/provinces1.htm>)

Ecologically, the region includes diverse localized climates including cool, wet coastal areas and hot, dry interior valleys. Overall, the region is cool and moist enough to allow the commingling of plant species that are typically segregated by altitude and latitude, as well as supporting a variety of endemic species that have evolved amid its long-term climatic stability.⁷⁶ Thus, parts of the Klamath Province have been described as being “among the richest botanical areas of the West.”⁷⁷ Tree species include a combination of deciduous trees and conifers, such as Douglas fir, ponderosa pine, white fir, Port Orford cedar, sugar pine, Pacific madrone, canyon live oak, tanoak, Oregon white oak, California black oak, bigleaf maple, red fir, mountain hemlock, Jeffrey pine, incense-cedar, and western white pine.⁷⁸ Other types of vegetation present include wildflowers (including Indian paintbrush, wild irises, columbine, California Indian pink, false Solomon’s seal, orange wallflowers,

yarrow, *Triteleias*, and red ribbons or *Clarkia concinna*), ferns, and grasses.⁷⁹ According to a conservation assessment by the World Wildlife Fund, the biodiversity of this ecoregion is classified as “globally outstanding,” and it is described as “one of the four richest temperate coniferous forests in the world due to its complex biogeographic patterns and unusual community assemblages.”⁸⁰ Unfortunately, it is also classified as being “endangered.” Only about 25% of the ecoregion remains intact, and the WWF attributes this to the fact that “the importance of this region is not well appreciated.”⁸¹ Interpretation of biophysical features could thus play a significant role in enhancing public awareness and generating support for conservation of this unique landscape.

In addition to enhancing the area’s scenic quality and biodiversity, many plant species also have cultural significance to the Hupa people and therefore enhance interpretive opportunities within the corridor. Of particular importance are the willows, ferns, and beargrass that are used in the tribe’s distinctive basketry.⁸² The variety of ecological niches represented within the corridor also provides ample recreation opportunities, such as bird watching, wildlife viewing, hunting, and fishing. Native species of interest include elk, deer, black bears, the elusive Pacific fisher, raptors, Northern spotted owls, California quail, salmon, trout, sturgeon, and the increasingly rare Western pond turtle.⁸³

Recreational quality

According to the FHWA’s criteria, recreational quality “involves outdoor recreational activities directly [in] association with and dependent upon the natural and cultural elements of the corridor’s landscape.”⁸⁴ As would be expected in an environment of such natural beauty and diversity, a wide variety of recreational opportunities abound within the HVIR, and most are accessible from SR-96. Possible outdoor activities include bird watching and wildlife viewing, fishing and hunting, camping, hiking and backpacking, swimming, boating, biking, and picnicking. In addition to these self-guided activities, local river guides are available to facilitate fishing and rafting trips and to provide interpretation of the area’s natural features for recreationalists.⁸⁵

While considered an “open” reservation, visitors should be made aware that tribal land is not the same as public land. Non-tribal members are free to travel on state and county roads; however, access to areas beyond the roadways is at the tribe’s discretion.⁸⁶ See table 2 for detailed information regarding the types and locations of recreational opportunities within the proposed Hoopa Valley Tribal Corridor.

Archaeological quality

The FHWA defines archaeological quality as “those characteristics of the scenic byways corridor that are physical evidence of historic or prehistoric human life or activity that are visible and capable of being inventoried and interpreted.”⁸⁷ The Hoopa Valley was once home to as many as 13 villages extending along seven miles of the Trinity River, and physical evidence of these settlements is visible today. Furthermore, several of these villages contain sacred ceremonial sites that are still used for prayer, meditation, and

Table 2. Recreational Activities and Sites Within Proposed SR-96 Tribal Corridor

Site	Activity								
	Bird	Picnic	Hike	Camp	Backpack	Bike	Hunt	Fish	Swim/ Boat
Redwood Grove	✓	✓	✓						
Dowd Road	✓		✓	✓		✓		✓	
Big Hill Road	✓								
Box Camp	✓	✓	✓	✓	✓				
Road to Mill Creek Lakes Trailhead	✓					✓	✓		
Mill Creek Lakes Trail	✓	✓	✓		✓		✓	✓	
Horse Linto Area	✓	✓	✓	✓	✓	✓	✓		S
Hostler Ridge Trail	✓	✓	✓						
Lacks Creek Area	✓	✓	✓	✓	✓	✓	✓		
Tish Tang Campground	✓	✓		✓				✓	S/B
Fish Lake	✓	✓	✓	✓	✓			✓	S/B
Bald Hills (general)	✓	✓	✓			✓			
Lyons Ranch/Coyote Creek Area	✓	✓	✓		✓				
Redwood Creek (RNSP)	✓	✓	✓		✓			✓	S/B
Dolason/Emerald Ridge/Tall Trees Trails	✓	✓	✓						
Trinity River	✓	✓						✓	S/B

Note: Reproduced from Steinberg et al., *In Hoopa Territory*, p. 4.

world healing ceremonies by tribal members.⁸⁸ Village sites offer rich opportunities for interpretation related to cultural history and archaeology. However, sites also need to be protected from trampling, trespassing, vandalism, artifact hunting, and other adverse impacts. For this reason, specific locations are frequently kept confidential.

Like other Native American peoples, the Hupa were largely dependent upon their physical environment for sustenance. During the warm, dry summer months, the Hupa spent the majority of their time outdoors, living in simple brush huts located near important resources, such as the river or places for gathering wild plants.⁸⁹ However, during the rainy winter season, the Hupa traditionally occupied more permanent cedar plank houses (*Xontahs*) (figure 16). The proximity of diverse riparian, forest, grassland, and montane habitats provided an abundant diet of acorns, salmon, deer, and berries that sustained an aboriginal population of approximately 1,000.⁹⁰

The Hupa supplemented their local bounty by trading with neighboring tribes, particularly the Yurok and Karuk, and these three groups also forged cultural connections by participating in each other's ceremonies and dances, despite their linguistic differences.⁹¹ In general, relations among the region's indigenous tribes were peaceful; only two major conflicts have been recorded in the valley's history, as most inter-tribal disputes were settled through non-violent negotiations and the rich environment made conflicts over territory and resources unnecessary.⁹²

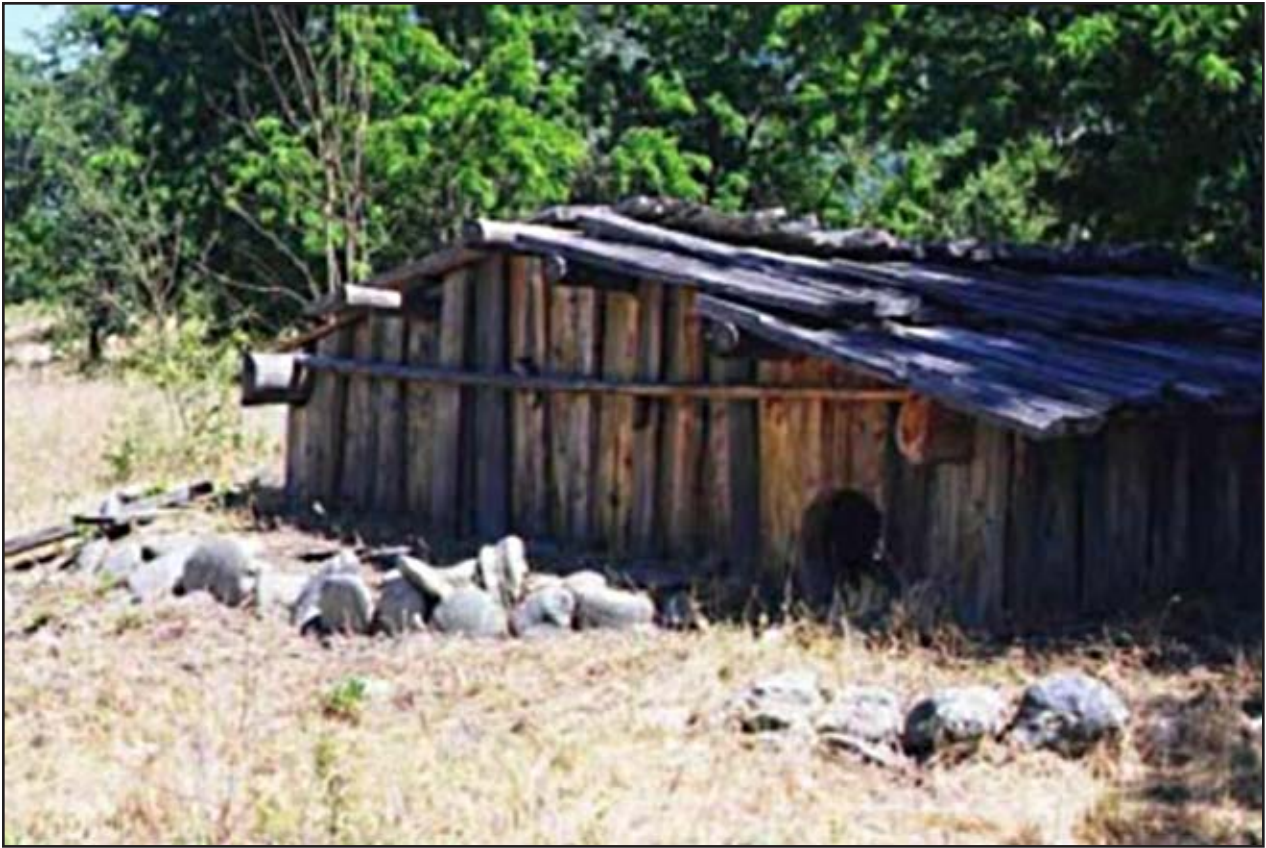


Figure 16. A Traditional Hupa Plank House, or *Xontah*

While a few white settlers and explorers traveled through Hupa territory during the California gold rush, their geographical isolation and self-sufficiency permitted the Hupa to remain largely untouched by western influences until the early 1900s.⁹³ Some of the remaining Hupa archaeological sites and structures can be viewed from SR-96 and serve as potential tourist attractions, in addition to their cultural significance. Visitors can look across the Trinity River at the Vista Point at the south end of the valley to view several traditional houses within the restored village site (*Metildin*), which was the largest of the Hupa settlements at the time of European contact (figure 17).⁹⁴ For those wanting a closer look, tours of the restored village can be arranged through the Hoopa Tribal Museum with advance notice. Museum tours also visit the Hostler Flat (*Takimildin*) Jump Dance grounds, site of the annual “autumn ceremony” to ward off outbreaks of disease and illnesses.⁹⁵

Historic and cultural qualities

According to the FHWA, historic quality “encompasses legacies of the past that are distinctly associated with physical elements of the landscape, whether natural or manmade, that are of such historic significance that they educate the viewer and stir an appreciation for the past.”⁹⁶ Cultural quality refers to “evidence and expressions of the customs or traditions of a distinct group of people.”⁹⁷ Because the history and culture of the Hupa are inextricably intertwined, the following discussion addresses both of these considerations.

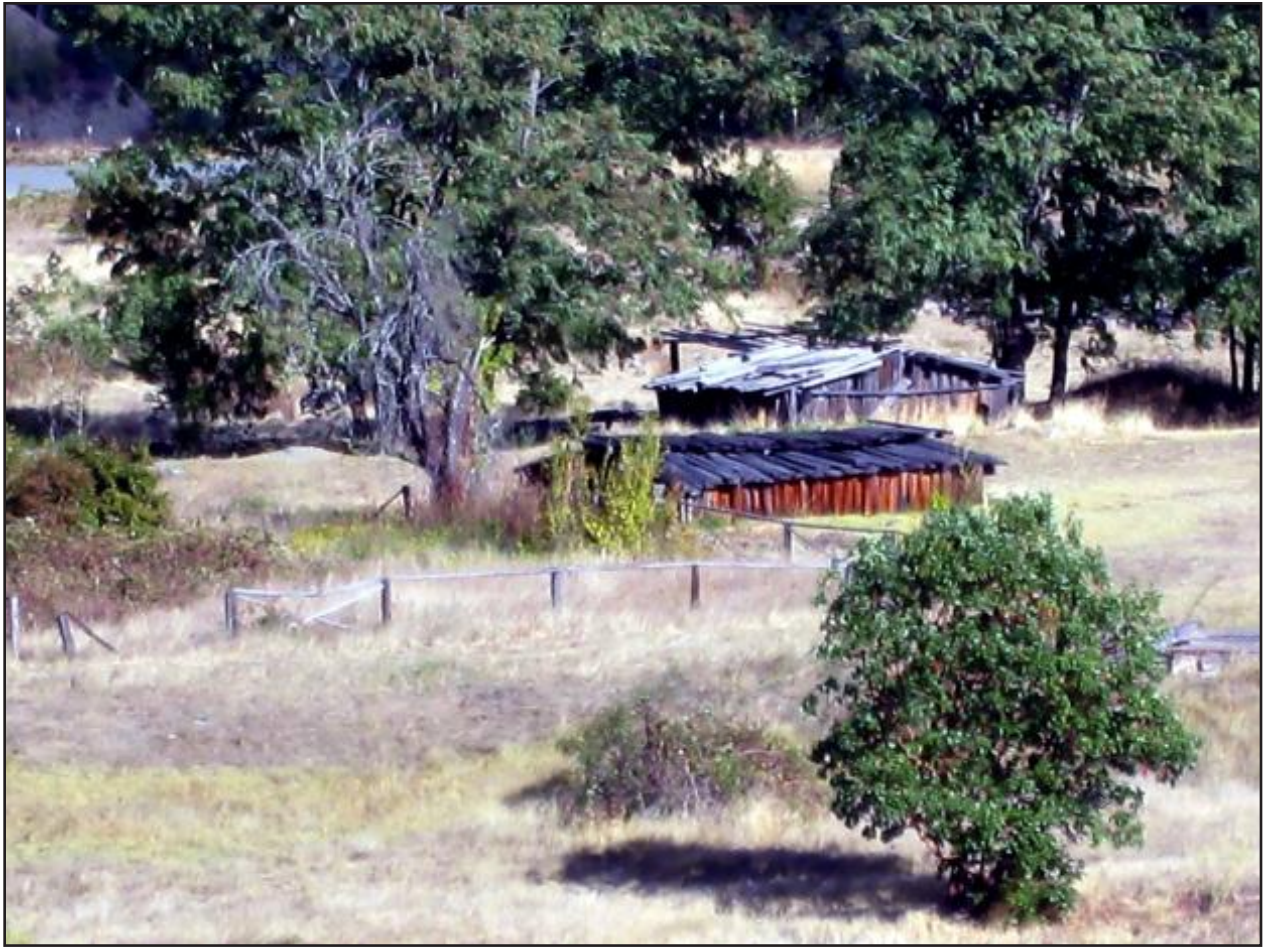


Figure 17. A View of the Restored *Metildin* Village Site from a Trinity River Vista Point

(Photo by Joy Adams)

The Hupa people are the southernmost representatives of the Northwest Coast culture region, as evidenced by common archaeological and cultural artifacts such as cedar-planked houses, dugout canoes, basket hats, and mythological elements. However, several customs and elements of Hupa material culture, such as the use of sweat houses for ceremonies and the manufacture of acorn bread, are distinctive.⁹⁸ Thus, features within the study area enlighten the observer about the customs of a larger Native American cultural complex while also revealing cultural attributes endemic to the Hupa people.

Within the Hoopa Reservation are 24 known historic/cultural sites, including four cemeteries, nine archaeological sites, two historic sites, and eight dance sites. All of these sites are located on the valley floor and are generally located adjacent to the Trinity River. Because these sites are important to preserving the history and maintaining the culture of its members, the Hoopa Valley Tribe has insisted that any road improvement projects or new segments of the road system do not infringe upon or jeopardize these sites.⁹⁹

The Hoopa Tribal Museum, located on SR-96 and currently housed in the Hoopa Shopping Center, features an extensive display of Hupa artifacts along with some Yurok, Karuk,

early settler, and Fort Gaston artifacts. It is a “living museum” in that clothing and regalia are lent to community members for use during special occasions and ceremonies. Exhibits highlight examples of Hupa “twined basketry” which served a multitude of purposes, including toting wood or gathering acorns, winnowing grain, cooking, storage, vessels for eating, headwear and ceremonial garb, and carrying babies. Hupa basketry (figure 18) is regarded as among the finest in the world, owing to its “clean, esthetic decorative designs” that are especially well demonstrated by traditional women’s basketry caps.¹⁰⁰

In sum, the study area embodies all six of the intrinsic qualities identified by the FHWA as criteria for designating a corridor as a potential National Scenic Byway. The diverse combination of physical, cultural, historic, recreational, and scenic features provides numerous opportunities for interpretation as well as inspiration for context-sensitive design elements.



Figure 18. Hupa Woman's Cap (Late 1800s), Currently on Display at Stanford University

(Source: Wikimedia Commons)

PROPOSED STRATEGIES FOR PRESERVING AND ENHANCING INTRINSIC QUALITIES

Natural quality

1. Notify Caltrans of areas of ecological significance and/or sensitivity so that transportation projects can be planned accordingly. Minimally, provide a general location (mile marker) and any temporal information (such as relevant season/duration). Other information may be kept confidential, at tribal discretion.
 - a. Budget tribal monitors into forthcoming contracts and grant proposals. (Caltrans pays for monitors on Caltrans projects. The need for monitors is determined through consultation with the Tribe.)
 - b. Provide regular informational updates to Caltrans Native American Liaison
2. Install non-specific “sensitive area” signage to divert the public from areas of ecological sensitivity, including habitat, gathering areas (for human use as food, medicine, and basketry materials), and restoration areas.
 - a. Signage can incorporate tribal designs and symbols to convey local sense of place.
 - b. Signage can include bilingual and/or Hupa-language messages to encourage preservation of indigenous languages and tribal pride (Fig. 19).¹⁰¹
3. Use native and non-invasive species for public landscaping projects and highway vegetation maintenance within the tribal corridor.
 - a. Whenever possible, plant with local strains to promote genetic diversity.
 - b. Where appropriate, include native species of cultural significance in landscaping projects.
 - c. Continue to use non-toxic amendments and controls whenever/wherever possible.
4. Raise awareness of ecological sensitivities and best practices within tribal corridor, using local media outlets and visitor education materials where appropriate (figure 20).¹⁰²



Figure 19. Painted Guardrail on SR-96, Within the Yurok Reservation

(Photo by Joy Adams)

Cultural/historical/archaeological qualities

1. Notify Caltrans of areas of cultural, historical, or archaeological significance and/or sensitivity so that transportation projects can be planned accordingly. Minimally, provide a general location (mile marker). Other information may be kept confidential, at tribal discretion.
 - a. Budget tribal monitors into forthcoming contracts and grant proposals.
 - b. Provide regular informational updates to Caltrans Native American Liaison.
2. Notify Caltrans of areas of upcoming events and ceremonies so that transportation projects can be planned and scheduled accordingly. Minimally, provide a general location (mile marker), dates, and duration of the event. The nature of the event may be kept confidential, at tribal discretion.
 - a. Provide one year's notice for annual events, whenever possible.
 - b. Allow more than a week's notice for lane closures, whenever possible. Tribes should complete the Caltrans Encroachment Permit process in order to close a lane on a state highway. Doing so ensures safety and proper notification of the traveling public.



Figure 20. Information Kiosk at Tish Tang Campground

(Photo by Joy Adams)

- c. Contact the Tribal Liaison for unexpected needs, such as funerals or ceremonies.
 - d. Provide regular informational updates to the Caltrans Native American Liaison.
3. Install non-specific “sensitive area” signage to divert the public from areas of archaeological, cultural, and historical significance, such as ceremonial grounds, cemeteries, and village sites.
 - a. Signage can incorporate tribal designs and symbols to convey local sense of place.
 - b. Signage can include bilingual or Hupa-language messages to encourage preservation of indigenous languages and tribal pride.
4. Provide visitor education about cultural norms and appropriate behavior within Reservation boundaries.

Recreational quality

1. Develop connections for bicycle, pedestrian, and equestrian traffic (including river crossings) that are physically separated from reservation highways and roads.
 - a. Use trails to connect points of interest to enhance the visitor experience.
 - b. Clearly mark public access points to rivers and trails to reduce trespassing on private/tribal land.
 - c. Screen, close, or block “unofficial” trails or decommissioned roads that may pose safety hazards or impact sensitive areas. Maintain access for local use (e.g., gathering) as appropriate.

Scenic quality

1. Seek to bury new and existing utilities underground as feasible. Conduct cost-benefits analysis to reveal circumstances where costs of burial would be offset by savings in repair, maintenance, and/or safety mitigation.
2. Evaluate the placement and number of signs periodically to avoid visual pollution and obstruction of scenic vistas.
3. Mark additional vista points within corridor as appropriate.
4. Install/maintain trash receptacles and landscaping at visitor facilities/sites, such as pullouts, scenic overlooks, and picnic areas.
5. Install/maintain public art throughout the corridor (e.g., murals, sculptures, water features).
6. Identify emerging land use patterns from the applicable General Plan, adjusting either the Plan or the land use patterns as needed to preserve visual quality. Current patterns include: downtown, residential, industrial, and connecting access.

PROPOSED STRATEGIES FOR CONVEYING A TRIBAL “SENSE OF PLACE”

Applying design themes throughout the corridor

1. Use design motifs and symbols to the extent possible/appropriate in signage, aesthetic treatments, and interpretive materials (see figure 21 and figure 22).¹⁰³
 - a. Tribe should determine key themes to ensure consistency throughout the corridor and to ensure elements are appropriate for public view/use. Elements suggested in public input processes and in interviews with tribal representatives include salmon, acorns, ferns, and basketry designs. As previously discussed, the *Xontah* is already established as an important symbol of place identity and could be used as a unifying symbol throughout the corridor (figure 23).



Figure 21. Tribal Mural at Hoopa Valley Youth Center

(Photo by Joy Adams)

- b. Hold “design fairs” and “design contests” to receive input and to increase community ownership and buy-in, especially among youth.
 2. Work with Caltrans staff to incorporate local symbols and/or materials into transportation enhancements and safety improvements where possible.
 - a. Employ patterned striping for new crosswalks, such as salmon motif.
 - b. Use patterned, stamped, or colored pavement for trails/sidewalks as feasible, possibly to include tribal basketry designs.
 - c. Emboss/paint new guardrails with tribal designs (figure 24).¹⁰⁴
 - d. Use spaces under bridge crossings to display public art, create gathering spaces, and discourage vandalism (figure 25).¹⁰⁵



Figure 22. Tribal Mural on Cinder Block Wall, Downtown Hoopa

(Photo by Joy Adams)



Figure 23. Hoopa Tribal Seal and Marquee at Hoopa Valley Elementary School, Both Featuring Xontah

(Photo by Joy Adams)



Figure 24. Embossed Guardrail on SR-96 Within the Hoopa Valley Reservation

(Photo by Joy Adams)



Figure 25. The Trinity River Bridge Underpass

(Photo by Joy Adams)

3. Install decorative banner poles and lighting fixtures in the downtown area. Banner poles can be used to display information about upcoming events (to assist in public communication and marketing) and/or to display tribal symbols, language, and motifs (thus enhancing sense of place).
4. Incorporate interpretive elements into redevelopment of Tsewenaldin shopping center (figure 26).¹⁰⁶
 - a. Install covered outdoor display case for interpretation/orientation materials and public announcements/public education materials.
 - b. Install and maintain picnic/seating areas and appropriate street furniture to create public gathering spaces.
 - c. Construct/install bike racks, bus stop, and benches for alternative transportation users.

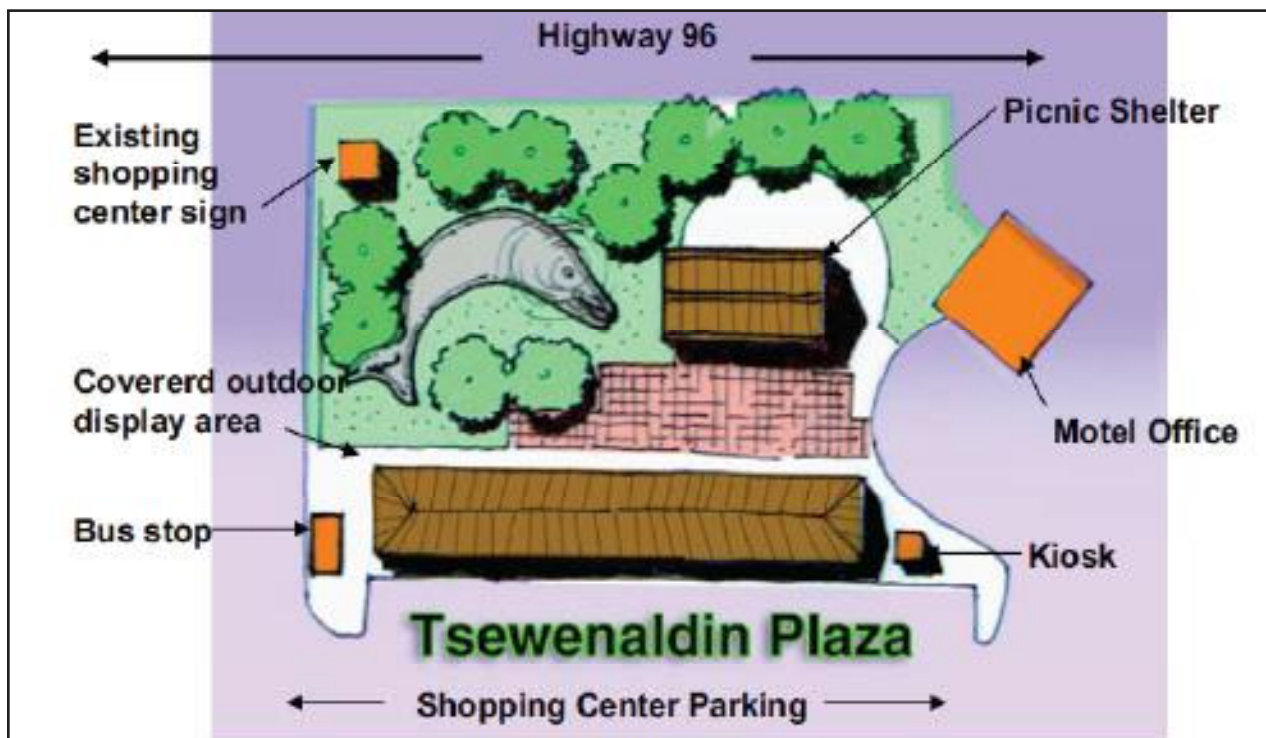


Figure 26. A Sketch of the Proposed Tsewenaldin Plaza

(Source: Conceptual Plan for Downtown Hoopa, 3.3-4)

Interpretation and signage plan

1. Maintain welcome signs at north and south boundaries of HVIR (figure 27).
2. Install gateway monuments at the south end of Trinity River Bridge and at Hostler Field Road to indicate arrival in “downtown” Hoopa. (See “Natural quality” above for suggested motifs and symbols.)



Figure 27. Gateway Marker, Hoopa Valley Indian Reservation

(Photo by Joy Adams)

3. Develop/review local sign ordinances to ensure consistency and visual quality of the corridor.
 - a. Encourage use of tribal designs, symbols, and local materials where appropriate to enhance sense of place (figure 28).¹⁰⁷
 - b. Recommend use of the *Xontah* motif as a unifying theme for interpretive signage (figure 29).¹⁰⁸



Figure 28. Signage at the Hoopa Shopping Center

(Photo by Joy Adams)



Figure 29. Interpretive Signage Incorporating the Xontah Motif

(Photo by Joy Adams)

4. Construct welcome/cultural center on the site vacated by the realignment of Tish Tang Road (figure 30).¹⁰⁹
 - a. Relocate Hoopa Tribal Museum to new cultural center to enhance visibility/access.
 - b. Install information kiosk(s), restrooms, and picnic area to create a public gathering space.
5. Utilize existing kiosks by installing maps and interpretive materials. Install additional kiosks at overlooks, waysides, and public access points as appropriate.
6. Install additional identification and interpretive signs as appropriate.
 - a. Encourage use of tribal designs, symbols, and local materials where appropriate to enhance sense of place.
 - b. Use bilingual signage when possible/as standards permit to enhance tribal sense of place (figure 31).¹¹⁰



Figure 30. A Sketch of the Proposed Tish Tang Cultural Gardens

(Source: Conceptual Plan for Downtown Hoopa, 3.4-4)



Figure 31. Bilingual Signage Along SR-96 in Hoopa

(Photo by Joy Adams)

- c. Space additional features between existing visitor sites when possible to create a sense of connection and to develop a “critical mass” of attractions along the corridor.
- 7. Incorporate decorative elements into existing signage when possible (e.g., adding patterns to reverse of safety signs, as seen in figure 32). Contact the Caltrans Native American liaison before making any modifications to state highway signage.
- 8. Pursue installation of tourist information signage (“brown signs”) at major highway access points to encourage exploration of the tribal corridor by highway users (figure 33).



Figure 32. Painted Tribal Motif on Reverse of Highway Sign on SR-96 at Post Mile 6.3

(Photo by Joy Adams)



Figure 33. Tourist Information Sign, Karuk Spiritual Trail, SR-96

MARKETING PLAN AND ENHANCEMENTS TO VISITOR FACILITIES

The 1996 *Hoopa Valley Indian Reservation Transportation Plan* sets three long-term economic goals for the HVIR: (1) adding retail businesses at a rate of two per year; (2) actively promoting Hoopa as a local tourism destination; and (3) establishing a log-sorting deck to enhance opportunities in the timber industry. Establishment of the SR-96 Tribal Corridor would directly address the second goal and indirectly contribute to achieving the first. The transportation plan sets a modest target of “two hundred (200) or more visitors per year” but does not prescribe specific marketing or tourism development strategies. The target also does not distinguish between day visitors and overnight visitors, which could be useful to clarify in future economic development planning efforts.

When evaluating the availability of the corridor to meet the needs of travelers, the FHWA suggests that the following elements be considered:

1. **Orientation**, including portal entry or gateway monument, maps, visitor centers, and visitor contact stations;

2. **Identification and interpretation**, including site identification signs, interpretive signs, interpretive waysides (e.g., overlooks, turnouts, viewpoints), and kiosks;
3. **Amenities and facilities**, including rest areas, restrooms, picnic areas, and parking; and
4. **Accommodations for non-motorized transportation**, including trails, paths, sidewalks, and bike lanes.¹¹¹

The FHWA also recommends an integrated approach to design, including clustering visitor services whenever possible, to enhance their utility and convenience for the visitor as well as to reduce construction and maintenance costs.

The Hoopa Downtown Plan explicitly addresses each of the considerations above. Proposed strategies relating to “orientation” include: (1) Retaining/maintaining welcome signs at reservation limits; (2) adding new gateway monument(s) where SR-96 enters/exits “downtown”; and (3) developing a new cultural center that will provide visitor services and house the Hoopa Tribal Museum. “Identification and interpretation” are addressed in the recommendations to apply an overarching design theme based on local indigenous cultures and to install informational signs and kiosks at sites yet to be determined. Additional “amenities and facilities” recommended include designated gathering places, picnic areas, parking lots, on-street parking spaces, and public transportation facilities (i.e., bus stops).¹¹² “Accommodations for non-motorized transportation” are explicitly detailed and described, as discussed in Section 2.7.3.2.

The SR-96 corridor already currently includes many of the FHWA’s recommended elements; however, at present they are not well-integrated, generally lack an overarching design theme, and are often scattered along the highway corridor. Therefore, future development should seek to achieve “critical mass” in the clustering of attractions (such as the proposed Tish Tang Cultural Gardens and Tsewenaldin Plaza) and facilities and strive to improve connections between them (such as the proposed hiking and biking trails).

Marketing strategies for the corridor could include improved public outreach, such as public announcements made through local media and through tourism outlets and enterprises, such as online calendars of events, visitor centers, and the newly launched Redwood Coast Geotourism MapGuide. Caltrans employees we interviewed noted that advertising opportunities at existing roadside facilities are underutilized; they recommended that local attractions, amenities, events, and the tribal corridor itself be publicized at rest areas and overlooks within a one- to two-hour driving distance of the HVIR. As the tribal corridor is developed, signage marking it as a tribal byway will be important to establishing its identity. “Official signage” would accompany designation as a federal or state scenic byway (figure 34).¹¹³ Instead of, in addition to, or in the interim prior to byway designation, the community could choose to install its own informational signs, which should include appropriate tribal designs and/or symbols. Signage placed outside the Caltrans right-of-way would not require permits; however permission from the landowner would be needed.



Figure 34. Bigfoot Highway Sign, Central Hoopa

(Photo by Joy Adams)

INDICATORS OF SUCCESS AND ONGOING MANAGEMENT

Any corridor management plan should be regarded as a “living document.” This TCMP provides a framework for determining if the designation of a scenic byway, particularly its vision and guiding principles, remain relevant for the community or if adjustments are necessary. Over time, new goals and objectives will be added and others will be deleted in response to changing community needs and desires. The vision, goals, and strategies proposed should be reviewed and revised periodically by the local steering committee, in consultation with appropriate Caltrans staff, to maintain accuracy and to track the progress of each project. It is the responsibility of the byway steering committee to track the progress of the goals and objectives and make appropriate revisions as necessary.

III. GUIDE TO DEVELOPING A TCMP

This section of the document proposes a process through which tribal communities, working in collaboration with Caltrans, can develop Tribal Corridor Management Plans (TCMPs) for portions of state highways within reservation/rancheria boundaries and/or within ancestral tribal areas. The steps outlined here are not formal requirements, but rather a set of “best practices” gleaned from existing corridor management plans, published guides to corridor management, interviews with Caltrans personnel and participants in the development of the Conceptual Plan for Downtown Hoopa, and “lessons learned” during the preparation of the Hoopa Valley Tribal Corridor Management Plan (HV-TCMP), presented in the previous chapter.

INITIATING COLLABORATION WITH CALTRANS

Interviews conducted in 2008 with Caltrans District 1 staff representing a variety of functional units and organizational levels revealed that a common source of frustration for entities working with the agency is a mismatch between the community’s vision for the roadway and what can be physically, economically, environmentally, and politically accommodated at that location. Especially in the early stages, it is important to remember that a CMP must identify overarching goals for the management of the corridor, but it will not be able to suggest solutions for every problem nor must it specify plans for implementing the goals.¹¹⁴

The FHWA also outlines five basic stages in the highway development process: planning, project development (preliminary design), final design, right of way, and construction (table 3).¹¹⁵ It is recommended that tribes consult with Caltrans staff as early as possible in their stage-one planning process to ensure that proposed modifications to the corridor conform to existing state and federal highway policies and adhere to safety guidelines.

Table 3. Summary of the Caltrans Transportation Planning and Project Development Process

Stage	Description of Activities
System and Regional Planning	Route Concept Report (RCR)/Transportation Concept Report (TCR): 20-year minimum long-range plan, including multi-modal considerations, developed with involvement of regional and local agencies and Native American Tribes.
	Project Initiation Document (PID) or Project Study Report (PSR): This document is used to obtain funding for the project. It defines the purpose and needs, lists the full range of alternatives, identifies environmental concerns, estimates right of way needs, and provides cost estimates and schedule.
Project Development	Project Approval and Environmental Document (PA&ED): The project report develops alternatives and selects the preferred alternative. The environmental document identifies archaeological, cultural, and biological resources and lists potential impacts, such as noise and community impacts.
	Plans, Specifications, and Estimates (PSE): Plans are developed in accordance with the PA&ED. Specifications reflect design requirements and conditions noted in the environmental document.

Source: Kathleen Sartorius, District 1 Tribal Liaison

Conversely, Caltrans representatives are encouraged to be proactive in offering assistance when news of upcoming tribal transportation projects is received. In addition to managing the expectations of stakeholders, collaboration between tribal representatives and Caltrans in all phases of corridor management planning can minimize the potential for unnecessary delays, costs, and budgetary issues associated with the processing of change orders.

Perhaps most importantly, the decisions made early in the planning process will necessarily guide and possibly constrain future development. As the FHWA notes:

It is during the first three stages, planning, project development, and design, that designers and communities, working together, can have the greatest impact on the final design features of the project. In fact, the flexibility available for highway design during the detailed design phase is limited a great deal by the decision made at the earlier stages of planning and project development.¹¹⁶

The Native American Liaison Branch (NALB) of Caltrans, established in 1999, serves as an interface between Caltrans and federal, state, regional, and local transportation agencies to establish and maintain government-to-government working relationships with tribal governments. Each Caltrans district has a Native American Liaison, who is the first line of contact for requests for information and assistance. For the most up-to-date contact information, visit the District 1 Native American Liaison webpage (www.dot.ca.gov/dist1/d1native/) or the NALB webpage (www.dot.ca.gov/hq/tpp/offices/orip/na/).

Table 4. Overview of Corridor Management Planning Process

Contact District 1 Caltrans Native American Liaison to initiate partnership
Secure funding for plan development
Identify stakeholders and create project team
Develop general vision and goals for corridor
Compile TCMP
Update/modify plan as needed

FUNDING THE PLAN'S DEVELOPMENT

In the Tribal Transportation Element of its 2008 Regional Transportation Plan, the Humboldt County Association of Governments (HCOAG) identifies several funding sources from which the tribes of the Humboldt County region may benefit. The following program descriptions have been excerpted from the complete document, which is available online at hcaog.net/docs/.

The State Transportation Improvement Program (STIP) is a five-year capital improvement program to assist state and local entities to plan and implement transportation improvements and to utilize resources in a cost-effective manner. From passage of SB 45, the STIP is split, with 75% dedicated to the Regional Transportation Improvement Program (RTIP) and 25% dedicated to the Interregional Transportation

Improvement Program (ITIP). Use of the RTIP funds is decided by regional agencies, such as the Humboldt County Association of Governments (HCAOG), and ITP funds are awarded to projects nominated by Caltrans. With HCAOG as a project sponsor, the tribes could be eligible for some of these resources.

The Environmental Enhancement and Mitigation Program (EEM) offers funding to remedy environmental impacts of new or improved transportation facilities. The related transportation facility must be modified or constructed in 1990 or later, and the EEM project must be over and above the required mitigation for the related transportation project. All participating costs incurred on a project are funded in arrears on a reimbursement basis of the state's proportionate share of actual costs. No matching funds or cost shares from the applicant or other funding sources are required to apply for an EEM grant; however, projects that include the greatest proportion of other monetary sources of funding will be rated highest. Grants are generally limited to \$350,000.

The BIA Indian Reservation Roads (IRR) Program is intended to provide safe and adequate transportation and public road access to and within Indian reservations, Indian lands, communities for Native Americans, visitors, recreational and resource users, and others while contributing to economic development, self-determination, and employment of Native Americans. IRR Program funds are authorized as part of the surface transportation authorization acts as part of the Federal Lands Highway Program (FLHP). The BIA Department of Transportation and the Federal Land Highway Office of the FHWA administer the program.

Indian Reservation Roads Maintenance Program funds are intended for maintenance activities on roads serving the tribes. Unfortunately, the funding levels of the program are exceedingly inadequate for the work needed. Nationally, BIA receives about \$26 million per year, with only \$700,000 of that earmarked for the entire State of California.

The Hazard Elimination Safety (HES) Program provides funds for safety improvements on any public road, any public surface transportation facility, any publicly owned bicycle or pedestrian pathway or trail, or for any traffic-calming measure. The tribes could be eligible for these funds if another agency, such as a city, county or state government, acts as the project sponsor and administers the project on behalf of the tribe. Exceptions to this requirement will be reviewed on a case-by-case basis.

The Bridges on Indian Reservation Roads Program provides funding for rehabilitation or replacement of bridges or culverts on public roads meeting the definition of an Indian Reservation Road (IRR). Each BIA Regional Office works with tribal, state, and local governments to develop a priority list of bridge replacement projects and identify sources for the 20% matching funds required by the program.

The Caltrans Environmental Justice Grant promotes context-sensitive planning in diverse communities and provides means to help low-income, minority and Native

American communities, including community-based organizations (CBOs), become active stakeholders in transportation planning and project development.

The Caltrans Community Based Transportation Planning (CBTP) grant program is primarily used to seed planning activities that encourage livable communities. CBTP grants assist local agencies to better integrate land use and transportation planning, to develop alternatives for addressing growth, and to assess efficient infrastructure investments that meet community needs.

When seeking funding, it is highly recommended that tribes consult with Caltrans at the earliest stages of the process. Tribes have different organizational structures and systems for communication with other governmental agencies. Each District's Native American liaison can refer tribes to the appropriate contacts for assistance with grant applications and proposals. Caltrans District 1 provides ample evidence of the benefits in supporting grant success for tribes.

IDENTIFYING STAKEHOLDERS AND FORMING THE PROJECT TEAM

The FHWA recommends forming a multidisciplinary team to assist in establishing a new design "theme" for the road or articulating the existing character of a corridor that needs to be maintained. It notes:

Design consistency from the perspective of physical size and visual continuity is an important factor when making such improvements, and a multidisciplinary design team can assist in maintaining that consistency. The earlier the multidisciplinary team is formed, the better. As with the public, various professionals need to be involved in the decision-making process early, when they can have the most effective impact on the eventual design of a project.¹¹⁷

Broad input from both professional and the general public is essential during the earliest stages of project development, when there are the greatest opportunities for changes in the design. However, public participation throughout the project is advised to gain input on possible alternatives that emerge as the project progresses.¹¹⁸

The FHWA (1997, 2002) recommends including people with knowledge or expertise in the following areas on the TCMP project team whenever possible:

- Interpretation and accessibility
- Facility design
- Landscape and site design
- Site engineering design
- Transportation and traffic engineering
- Cartography and/or GIS (geographic information systems)

- Cultural/historical resource management
- Social sciences
- Natural resources management and ecology
- Recreation
- Tourism/community development
- Environmental laws and regulations
- Law enforcement
- Public involvement and marketing
- Local/urban/regional planning
- Transportation planning
- Architecture and landscape architecture
- Archaeology
- Geology
- Visual arts.¹¹⁹

In many of these areas, Caltrans staff from the appropriate District office will be among the individuals best-equipped to provide assistance and information. However, project teams could include representatives or consultants with a wide variety of affiliations (e.g., other government agencies, community organizations, regional partnerships, and educational/academic institutions). Identifying stakeholders can be difficult as the most influential community leaders may not always be elected or appointed officials. Therefore, knowledge and understanding of the local community is essential to this process.¹²⁰

In addition to ensuring that the plan is comprehensive and will generate community support, forming a planning team whose members contribute different skills, interests, and abilities also supports Caltrans's goals. As the agency's Public Participation and Engagement web page states: "Caltrans supports a balanced representation of all stakeholders in the planning process and considers it good planning practice to seek and consider the needs of all stakeholders, especially those that are traditionally underserved."

The *California Transportation Plan 2025* describes the critical role of collaboration as follows:

Transportation planning and programming in California is a complex process shared among multiple public and private entities. It requires collaboration among transportation providers and governmental entities as well as community-based organizations, urban planners, developers, social, community, and emergency

service providers, the environmental and business communities, permitting agencies, system users, and others. All of these voices must be heard and considered in order to achieve an integrated transportation system that promotes economic vitality and community goals.¹²¹

While there is no single formula for achieving successful public participation, practitioners of context-sensitive solutions at the 1998 conference “Thinking beyond the Pavement” identified seven “characteristics of the process that will yield excellence in transportation design”:

- Communication with all stakeholders is open, honest, early, and continuous.
- A multidisciplinary team is established early, with disciplines based on the needs of the specific project, and with the inclusion of the public.
- A full range of stakeholders is involved with transportation officials in the scoping phase. The purposes of the project are clearly defined, and consensus on the scope is forged before proceeding.
- The highway development process is tailored to meet the circumstances. This process should examine multiple alternatives that will result in a consensus of approach methods.
- A commitment to the process from top agency officials and local leaders is secured.
- The public involvement process, which includes informal meetings, is tailored to the project.
- The landscape, the community, and valued resources are understood before engineering design is started. A full range of tools for communication about project alternatives is used (e.g., visualization).

As the Hoopa Valley/SR-96 TCMP (previous chapter) demonstrates, adherence to these recommendations will encourage broad public participation, ensuring that the resulting TCMP addresses a wide range of community needs and interests.

Table 5. Roles and Responsibilities of CMP Stakeholders

-
- The **role of community members** is to raise concerns regarding the corridor and to provide ideas and suggestions to address them.
 - The **role of tribal representatives** is to develop goals for the corridor, compile and report public feedback, select appropriate design themes and elements, and implement proposed solutions for the corridor.
 - The **role of Caltrans** is to provide technical support, consultation, and local assistance.

When in doubt, stakeholders should contact their Caltrans District's Native American Liaison for clarification, general assistance, and direction to appropriate contacts.

DEVELOPING A PURPOSE, VISION, AND GOALS FOR THE CORRIDOR

Federal and state agencies' support for broad and regular public participation has been echoed by the planning philosophy discussed at the outset of this document, context-sensitive solutions (CSS). Caltrans defines CSS as "the use of innovative and inclusive approaches that integrate and balance community, aesthetic, historic, and environmental values with transportation safety, maintenance, and performance goals. Solutions are reached through a collaborative, interdisciplinary approach involving all stakeholders."¹²²

CSS takes into account: "the constructed and natural environment of the area; environmental, scenic, aesthetic, historic, community, and preservation impacts of the activity; access for other modes of transportation; and traditional considerations regarding safety, traffic capacity and accessibility."¹²³ This approach to transportation planning recognizes that the "design of the road establishes the relationship connecting the traveler with the landscape" and regards design as a conscious effort to holistically meet the demands and challenges affecting the highway corridor (figure 35).¹²⁴ The diagram of the "design challenge" depicts factors to consider in context-sensitive transportation planning. It illustrates the holistic nature of CSS, which seeks to address multiple concerns through integrated planning that is responsive to local conditions, challenges, needs, expectations, and desires.

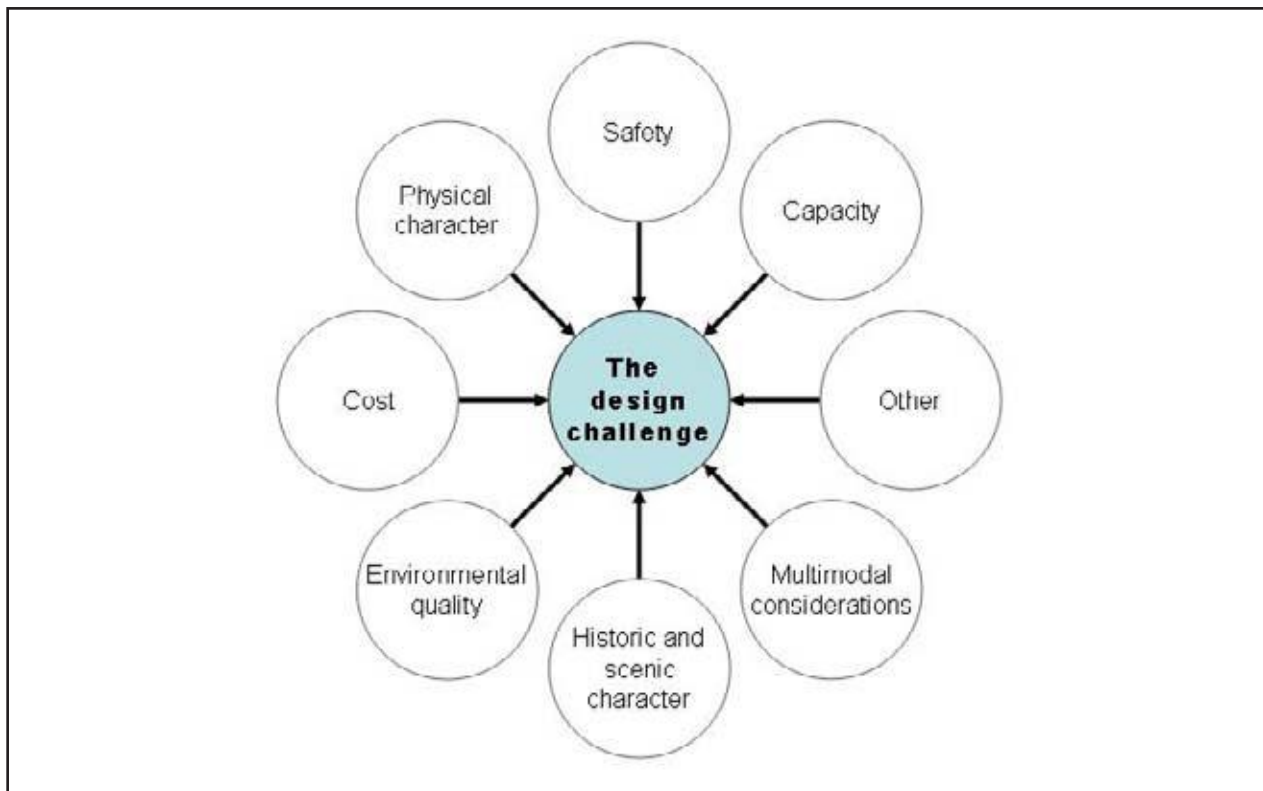


Figure 35. Diagram of the "Design Challenge"

(Adapted from FHWA, *Flexibility in Highway Design*, 32)

Once feedback has been gathered from a variety of diverse stakeholders, the project leadership should identify a limited number of major goals with a list of specific concerns and suggestions related to each. The resulting vision and goals will compose the framework for the TCMP. The vision and goals for the SR-96 tribal corridor are presented later in this chapter.

COMPILING THE TCMP

Each highway corridor is unique, as is each community located within the corridor. As such, there is not a single prescribed model for what a corridor management plan should achieve and what its elements should contain. As a review of existing CMPs in tribal areas revealed, corridor management plans are “flexible living documents” that vary widely in their scope, goals, and contents, based on local needs and conditions.¹²⁵ The following discussion describes the most common—and therefore potentially most useful—elements that should be considered for inclusion in a TCMP.

Supporting documents and resources

Begin development of the TCMP document by consulting the Route Concept Report (RCR) for the highway corridor. An RCR is “a planning document which describes [Caltrans’] basic approach to development of a given transportation route or corridor.”¹²⁶ It defines appropriate transportation facilities for each route or corridor over a 20-year planning period, based on reasonable financial constraints and projected travel demand. Development of an RCR is a preliminary planning phase that supports subsequent programming and project development. RCRs are prepared by Caltrans staff in cooperation with local and regional agencies and are updated as conditions change or new information becomes available.

Additional information describing roadway conditions and identifying needed improvements can be found in the tribe’s Reservation Transportation Plan:

Through an agreement with the Federal Highway Administration (FHWA), the Bureau of Indian Affairs (BIA) is required to prepare transportation plans for all Indian Reservations in order to receive Highway Trust Funds (HTF) for road construction on the Indian Reservation Road (IRR) system.¹²⁷

From 1993 through 1996, the BIA updated the transportation plans for all California reservations and rancherias; however, their utility is somewhat limited. Since then, tribes have increasingly taken over the task of updating these plans, as well as the responsibility for controlling access to them. Furthermore, the plans address roadways of federal-tribal jurisdiction and thus are not directly applicable to state highways. Nevertheless, these plans identify known transportation needs and public safety issues on tribal lands, and they outline planned maintenance and construction projects with estimated costs and completion dates. Perhaps the most helpful section for the purposes of corridor management planning proposes each community’s “vision” for recommended long-term improvements, unrestricted by practical constraints such as time, financing, and resources.

Additional sources to consult when developing a TCMP might include tribal, county, and community planning documents (such as management plans, zoning ordinances, and related maps); land management plans from state and federal natural resource agencies; local transportation and utility departments; and promotional plans and materials from travel councils, convention and visitors bureaus, and other marketing agencies.¹²⁸

Defining and evaluating the highway corridor

Before identifying and inventorying its intrinsic qualities, the transportation corridor first must be defined. The narrowest conception of the corridor is the state highway right-of-way, which varies in width depending upon the number of lanes, terrain, and other factors. However, the experience of traveling the corridor is felt primarily through a combined effect of elements viewed from the highway, which together create a lasting impression.¹²⁹ Therefore, the inventory of features should address the larger visual and geographical contexts within which the roadway is situated. Neither Caltrans nor any public or private land management entity is free to act completely independently. Thus, identifying the corridor's boundaries will help to determine which entities and stakeholders need to be involved as partners in corridor management and planning efforts.¹³⁰

As the roadway itself is the key defining feature of the transportation corridor, planning efforts should begin with a review of its current condition and maintenance plans. This process will determine what steps are under way or forthcoming to improve and maintain the highway and to identify options and limitations regarding road design, geometry, and interpretive or safety elements. Furthermore, this review will assist in managing stakeholder expectations and ensuring that the proposed vision and goals for the corridor are realistic in light of existing conditions.

Elements to address in a CMP

While the content of existing Corridor Management Plans varies widely, depending on the geographical and administrative context of the specific byway involved, general guidelines exist that can assist planners in identifying appropriate elements to include. The most widely cited listing of potential CMP elements was developed by the Federal Highway Administration (FHWA) in 1995 as criteria for the designation of roadways as National Scenic Byways.¹³¹ While a corridor management plan is only required to address all 14 criteria when seeking designation as a National Scenic Byway or All-American Road, the following list provides a comprehensive accounting of the sections that might be considered for inclusion in a CMP:

1. A map identifying the corridor boundaries and the location of intrinsic qualities and different land uses within the corridor.
2. An assessment of intrinsic qualities and their context. As defined by the FHWA, intrinsic qualities are "scenic, historic, recreational, cultural, archaeological, or natural features that are considered representative, unique, irreplaceable, or distinctly characteristic of an area."¹³²

3. A strategy for maintaining and enhancing those intrinsic qualities to ensure travelers' safety and comfort while preserving the corridor's visual integrity and attractiveness.
4. A schedule and a listing of all agency, group, and individual responsibilities in the implementation of the CMP and a description of enforcement and review mechanisms, including a plan for continuing review.
5. A strategy describing how existing development might be enhanced and new development might be accommodated while preserving the intrinsic qualities of the corridor.
6. A plan to ensure on-going public participation in the implementation of corridor management objectives.
7. A general review of the highway's safety and accident record to identify any correctable faults in highway design, maintenance, or operation.
8. A plan to accommodate commerce while maintaining a safe and efficient level of highway service, including convenient user facilities.
9. A demonstration that intrusions on the visitor experience have been minimized to the extent feasible and a plan for making improvements to enhance that experience.
10. A demonstration of compliance with all existing local, state, and federal laws on the control of outdoor advertising.
11. A signage plan that demonstrates how the state will insure and make the number and placement of signs more supportive of the visitor experience.
12. A narrative describing how the corridor will be positioned for marketing.
13. A discussion of design standards relating to any proposed modification of the roadway, including an evaluation of how the proposed changes may affect the intrinsic qualities of the byway corridor.
14. A description of plans to interpret the significant resources of the byway.

As the number, variety, and scope of possible elements suggest, CMPs can vary in length and detail depending on how the plan will be applied and the plan's potential audience. For example, a plan intended for local use only will be significantly briefer and less comprehensive than a plan that will be used to support grant applications or federal designation efforts. In an attempt to identify "best practices" we performed a content analysis of existing corridor management plans and documents available from specific tribal roads projects. In general, these were not specifically styled as tribal corridor management plans, but rather plans that involved tribal areas and/or projects. Most plans, especially those associated with Scenic Byways, showed evidence of at least some agency collaboration

and public input from tribes. More than half of all plans evaluated contained nine common elements (table 6), which are the focus for the sections that follow.

Table 6. Common Elements of Existing Corridor Management Plans in Tribal Areas

Element ^a	% of plans in which present (N=24)
Identification and assessment of intrinsic qualities	87.5
Signage plan	83.3
Implementation, enforcement, review plan	75.0
Public participation plan	75.0
Strategies to maintain intrinsic qualities	70.8
Map of locations, intrinsic qualities, land uses	70.8
Marketing plan	70.8
Plan to enhance/maintain visitor experience	70.8
Safety/accident record	66.7

^aTable includes only those elements present in at least 50% of plans analyzed.

Identification and assessment of intrinsic qualities

To be designated as a National **Scenic Byway**, the Federal Highway Administration requires that a road or highway significantly meet at least one of six categories of “intrinsic qualities” that “are considered representative, unique, irreplaceable, or distinctly characteristic of an area.”¹³³ Regardless of whether a long-term goal of the TCMP is to seek designation as a National Scenic Byway, describing the intrinsic qualities of the roadway and locating important features and sites that reflect these qualities can help transportation planners and stakeholders visualize the corridor’s assets and identify areas in need of special attention. Identifying and understanding the byway’s intrinsic qualities will help in determining appropriate design and interpretive themes and in choosing projects that will complement and contribute to the byway experience.¹³⁴

Scenic Quality is “the heightened visual experience derived from the view of natural and manmade elements of the visual environment of the scenic byway corridor. The characteristics of the landscape are strikingly distinct and offer a pleasing and most memorable visual experience. All elements of the landscape—landform, water, vegetation, and manmade development—contribute to the quality of the corridor’s visual environment. Everything present is in harmony and shares in the intrinsic qualities.”

Scenic quality is “based on the existence of significant scenic views from the road and the absence of features that detract from the overall image of the road.”¹³⁵ The

byway's scenic qualities must be "representative, unique, irreplaceable, or distinctly characteristic of the area."¹³⁶ Scenic features and views should also: (1) be frequent enough to give a sense of continuity to the drive along the byway; (2) relate to each other to create coherent image of the byway; and (3) provide a variety of viewing opportunities to enhance the experience of the byway.¹³⁷

Natural Quality "applies to those features in the visual environment that are in a relatively undisturbed state. These features predate the arrival of human populations and may include geological formations, fossils, landform, water bodies, vegetation, and wildlife. There may be evidence of human activity, but the natural features reveal minimal disturbances."¹³⁸

Criteria for assessing the corridor's "natural intrinsic qualities" include: (1) The significance of the natural resources along the byway; (2) the visibility of those resources from the byway; and (3) the integrity of the resources in their "original state" (i.e., pre-European settlement).¹³⁹ Again, the resources under consideration should be "unique, irreplaceable, or distinctively characteristic of the area."¹⁴⁰

Historic Quality "encompasses legacies of the past that are distinctly associated with physical elements of the landscape, whether natural or manmade, that are of such historic significance that they educate the viewer and stir an appreciation for the past. The historic elements reflect the actions of people and may include buildings, settlement patterns, and other examples of human activity. Historic features can be inventoried, mapped, and interpreted. They possess integrity of location, design, setting, material, workmanship, feeling, and association."¹⁴¹

Consideration for byway designation on the basis of historic quality depends on the connections between the road and the historic resources along the corridor.¹⁴² The byway should have a sufficient number of features to create a coherent "story," which in turn provides linkages between the resources and a means of interpreting them for the visitor. Keep in mind that the road itself can be historically significant, especially within the context of developing a national and/or regional transportation network.

Cultural Quality "is evidence and expressions of the customs or traditions of a distinct group of people. Cultural features including, but not limited to, crafts, music, dance, rituals, festivals, speech, food, special events, vernacular architecture, etc., are currently practiced. The cultural qualities of the corridor could highlight one or more significant communities and/or ethnic traditions."¹⁴³

The FHWA recognizes that not all cultural qualities are necessarily expressed materially in the landscape. Aspects of culture that might contribute to the byway or its interpretation might include (among others): geography (e.g., settlement patterns, architectural styles, place names, stories, and legends), economy (e.g., occupations, products, yearly cycles, land-use patterns), community life (e.g., civic and religious buildings, institutions, festivals, customs, and rituals), domestic life (e.g., households, foods, gender/age relations/roles, family traditions), and artistic genres (e.g., folklore, music, dance, drama, games, art, crafts, dress, and architecture).¹⁴⁴

Archaeological Quality “involves those characteristics of the **scenic** byways corridor that are physical evidence of historic or prehistoric human life or activity that are visible and capable of being inventoried and interpreted. The **scenic byway** corridor’s archaeological interest, as identified through ruins, artefacts, structural remains, and other physical evidence have scientific significance that educate the viewer and stir an appreciation for the past.”¹⁴⁵

In assessing potential archaeological quality, the FHWA requires that the corridor’s resources be both accessible and important. The artefacts should be scientifically significant and not commonly found throughout a region or elsewhere across the country. The physical evidence must be visible and capable of being inventoried and interpreted. If travelers cannot see or make direct contact with the resources, a byway may not be designated on the basis of its archaeological quality, even if it has great scientific or cultural significance.¹⁴⁶

Recreational Quality “involves outdoor recreational activities directly association with and dependent upon the natural and cultural elements of the corridor’s landscape. The recreational activities provide opportunities for active and passive recreational experiences. They include, but are not limited to, downhill skiing, rafting, boating, fishing, and hiking. Driving the road itself may qualify as a pleasurable recreational experience. The recreational activities may be seasonal, but the quality and importance of the recreational activities as seasonal operations must be well recognized.”¹⁴⁷

Recreational quality depends upon three factors: significance of the recreational resource(s), their visibility from the byway, and the relationships between resources and between resources and the road. There should be a variety of activities offered in many places along the corridor. Recreational activities should be available throughout the year and suitable for participants of a variety of ages and abilities.¹⁴⁸

Information and data to support descriptions of intrinsic qualities can be obtained from a variety of sources, including state agencies, government documents, tribal entities, academic research (including unpublished theses and dissertations), and local archival collections, among others. For an example of a narrative addressing the intrinsic qualities of the Hoopa Valley/SR-96 tribal corridor and the various sources from which it was developed, see the previous chapter.

Inventory and mapping of intrinsic qualities and existing resources

The next step is to inventory and map the byway’s existing resources and the elements that define the key intrinsic qualities of the corridor. During this process, it is important to document features that positively contribute to the visual environment and should be preserved, enhanced, or maintained as well as features that detract from the byway and might require mitigation.¹⁴⁹

When conducting this inventory, stakeholders might keep in mind the following elements related to the intrinsic quality of the highway corridor:

- Characteristics of the road itself (e.g., alignment, design, traffic volumes);
- Design of towns, historic districts, commercial areas, and neighborhoods;
- Natural resources, along with any plans for their use or protection;
- Landscaping and vegetation management;
- Off-premise, on-premise, and roadway signs;
- Built features and structures, including visitor facilities and roadside improvements;
- Visible infrastructure, such as wireless communication towers, night lighting, and overhead utility wires;
- Opportunities to implement context-sensitive highway, street, and bridge solutions;
- Maintenance and preservation of views, vistas, and open spaces, including “working landscapes” and parks that contribute to intrinsic qualities;
- Visitor demographics and use patterns;
- Management opportunities and constraints; and
- Local community needs and desires.¹⁵⁰

Of these, perhaps the most important considerations relate to the presence, condition, and usage of existing roadside improvements, design elements, and visitor facilities. This section of the TCMP might analyze opportunities along the corridor (e.g., for interpretation, vegetation management, and scenic views) and recommend sites most suitable for these activities. It could also identify areas requiring special protection or management based on existing patterns of visitor access and use.

Note that developing an inventory of resources that contribute to the corridor’s intrinsic qualities is distinct from the responsibilities for managing these resources. Management responsibilities derive from specific authority granted by constitutional rights, laws and regulations. Such authority and attendant responsibilities remain with the various regulatory agencies, public and private property owners, and managers. No aspect of the TCMP will alter existing authority or these management responsibilities.

Strategies to maintain intrinsic qualities

Once the inventory has been completed, stakeholders will need to evaluate these resources in terms of their quality, current condition, and use. In its publication *Conserving Our Treasured Places: Managing Visual Quality on Scenic Byways*, Scenic America (2004) recommends the use of a “Byway Intrinsic Resources Grid” to identify and evaluate existing byway resources and to guide future projects and activities for the corridor.

Table 7 is based upon the model presented in *Conserving Our Treasured Places*. In the first column, the letters “E” and “P” indicate whether the resource should be “enhanced” or “protected.” Resources designated for enhancement will be developed and maintained in a sustainable manner and/or will be promoted in byway-related materials. This category will include sites, activities, and events in which public participation is welcomed or encouraged. Resources designated for protection are to be preserved as-is and will be protected from future impacts. They will be down-played in or completely excluded from promotional efforts, depending on their sensitivity.

This study’s Hoopa case study provided several examples of how distinguishing between resources appropriate for enhancement and those requiring stricter protection could assist in corridor planning and management. Therefore, the authors propose adding a third category (“Discourage,” indicated by the letter “D”) as a means of identifying existing resources that the tribe would like to “screen” from potential visitors or existing activities that the tribe would like to discourage or eliminate.

The second column of the Byways Intrinsic Resources Grid includes the name of the resource. In the model from *Conserving Our Treasured Places*, commercially owned resources are designated with an asterisk (*) to distinguish them from non-profit or publicly managed resources. Based on our experience developing the HV-TCMP, much confusion surrounds jurisdiction. Therefore, we have instead added a column (third from left) in which the owning or managing entity is indicated.

Table 7. Sample Byway Intrinsic Resources Grid

Byway Intrinsic Resources Grid										
Area from: North Reservation boundary					To: South Reservation boundary					
Strategy	Resource	Owner/ mgr	Post mile	Info/ Interp	ESA/ CSA	Intrinsic qualities				
						S	N	R	H	C A
P	USFS Scenic Highway	USFS	0.0–15.3			x		x		
E	Scenic overlook	CVB/ Caltrans	0.8	Interp		x	x			
P	Tribal Museum	Tribe	2.3	Interp/ Info					x	x x
D	Ecological restoration area	Tribe/ Caltrans	2.4		ESA	x	x			
P	Tribal Welcome Center	Tribe	2.8	Info/ Interp				x	x	x
P	Tribal Offices	Tribe	2.8	Info						x
D	Former village site	Tribe	Undisclosed, between 3.0–5.0		CSA					x x

Note: Adapted from Scenic America, *Conserving Our Treasured Places*, 2004, 140.

Entries and data are for demonstration purposes only and do not correspond to actual locations.

The fourth column, “Post mile,” is intended to provide an approximate location of the resource for planning and communication purposes. Tribes may wish to develop alternative means of indicating locations both for their own ease of use and to maintain confidentiality of sensitive resources. In the fifth column, the “info” indicates sites to provide information that would be useful and/or necessary for byway visitors, while “interp” designates resources that have an interpretive display or information onsite. In the sixth column, environmentally sensitive areas (ESA) and culturally sensitive areas (CSAs) can be indicated. Alternatively, the column could be headed “Sensitive area?” and the boxes could be marked for presence/absence, as appropriate.

The remaining six columns correspond to the six FHWA-defined “intrinsic quality” categories (scenic, natural, recreational, historic, cultural, and archaeological). These columns are marked to indicate only the presence or absence of that intrinsic quality in table 7. However, using plus signs (+) to indicate presence and minus signs (-) to indicate need might also be useful in prioritizing future projects. Unmarked columns would then indicate acceptable absences of an apparent intrinsic quality within/at a given resource.

In addition to determining what resources the corridor already has and how they will be managed to meet the goals and vision for the corridor, stakeholders will want to consider other modifications and enhancements to achieve a balanced road design and resolve existing design issues. The FHWA recommends the following:

- Use the flexibility within the standards adopted for each state.
- Recognize that design exceptions may be optional where environmental consequences are great.
- Be prepared to reevaluate decisions made in the planning phase.
- Lower the design speed when appropriate.
- Maintain the road’s existing horizontal and vertical geometry and cross section and undertake only resurfacing, restoration, and rehabilitation (3-R) improvements.
- Consider developing alternative standards for each state, especially for scenic roads.
- Recognize the safety and operational impact of various design features and modifications.¹⁵¹

Safety/accident record

This section of the TCMP should consist of “a general review of the road’s safety record to locate hazards and poor design, and identify possible corrections.”¹⁵² Basic information used to develop the HV-TCMP was obtained from the Route Concept Report (RCR) for SR-96 and the HVIR’s 1996 Transportation Plan; similar documents should be available to most tribes considering development of a CMP.

Review of the RCR for SR-96 revealed that the plan and geometry of the roadway and its associated right-of-way are significantly constrained by topography, financial considerations, and adjacent sites of environmental and cultural significance. Therefore, it is practical to focus only on 3-R improvements (resurfacing, restoration and rehabilitation) in the HV-TCMP. However, engineering of the roadway is only one strategy for improving public safety along transportation corridors. Scenic America recommends that TCMP efforts identify ways to implement context-sensitive highway design practices that to accommodate safety needs while preserving and enhancing the road's visual character.¹⁵³ Thus, much of the HV-TCMP emphasizes the use of design elements, signage, and interpretation to enhance public safety rather than construction-intensive strategies.

Additionally, public education and increased enforcement have proven to be important elements in enhancing transportation safety.¹⁵⁴ Erecting additional warning signs (particularly in areas with large amounts of non-motorized traffic and wildlife); installing “rumble strips” to alert drivers who have strayed from the roadway; outreach via local media and in interpretive materials created for visitors; and stricter enforcement of speed limits and other traffic regulations are examples of short-term strategies that can contribute to improved public safety.

One challenge noted by both Caltrans personnel and tribal representatives is the lack of reliable accident data as many minor collisions are not reported to state or local authorities. As noted in the previous chapter, in 2001, the Hoopa Valley Tribe's Injury and Violence Prevention Program analyzed official accident data as well as anecdotal evidence to identify three “critical injury cluster sites” within the Hoopa Valley corridor that are the focus of many public safety elements of the HV-TCMP. This example underscores the value of public participation, which can yield additional insights into key areas of concern and solicit potential solutions related to highway safety.

Signage plan

Improved signage is one strategy for enhancing public safety. However, signs can also play an important role in corridor design, protection of sensitive natural and cultural resources, and interpretation. When developing a TCMP, an analysis of existing signage will determine whether (1) signs are adequate in terms of their number and placement, (2) they are functional and in good condition, (3) they communicate intended messages and accurate information, and (4) they contribute to the scenic quality of the corridor.¹⁵⁵

In addition to significantly affecting the scenic quality of the corridor, thoughtful, high-quality signage enhances the overall experience of traveling the highway. Signs can be used to help orient travelers, to highlight unique features and intrinsic elements, and to contribute to the overall sense of place through the use of design elements and motifs and by interpreting features for highway users. Signs can also be used creatively to achieve management objectives, as demonstrated in the previous chapter. For example, signs can be used to designate environmentally and culturally sensitive areas, advising visitors not to disturb these resources. Signs can also play an obvious role in public safety efforts by advising motorists of potential hazards, including the presence of non-motorized traffic such as pedestrians, cyclists, and horses. When not well-managed, signs can be too tall,

too large, or too numerous, contributing to visual clutter and detracting from the visitor's experience.¹⁵⁶

Scenic America contends that “managing scenic quality involves encouraging well-designed and well-placed signs that complement the valued character of the area, working with public agencies on the appearance of their signs, and adopting local sign controls.”¹⁵⁷ The organization recommends development of a database to manage the corridor's sign and exhibit inventory, including the following categories of information: location, type of sign, composition/construction/design details, jurisdiction, dates of installation and updates, easement/permissions/access rights, and a photo. Reflecting upon the utility of this resource, a planner involved with the development of the Colorado River Headwater Scenic Byway observed: “When a sign needs to be updated, changed, or replaced, we'll know who is responsible and what's involved in the process. We feel that this will be an essential tool in maintaining the quality of interpretation along the byway and provide a framework for consistent design.”¹⁵⁸

Marketing plan

This section of the TCMP evaluates the transportation corridor from the perspective of current or potential visitors and considers how the community can balance local needs with those of tourists. Here, the plan should consider not only visitor demands and expectations, but how tourism can be managed to support community goals, enhance local pride and sense of place, and reflect residents' desires and preferences.

Data regarding travel and tourism—and domestic tourism in particular—are often difficult to collect and interpret.¹⁵⁹ Many rural communities, reservations, and rancherias will not have ready access to current, reliable tourism statistics, and commissioning a tourism study is a time-consuming and often expensive undertaking. However, stakeholders may have sufficient existing knowledge or access to information to adequately address the following key considerations:

1. What are the current visitor uses? In other words, what do travelers do when visiting your community? What resources/facilities are available to visitors, where are they located, and what is their current condition?

To evaluate this concern from the community's perspective, the questions could be rephrased as follows:

What do we want visitors to do and experience when they visit our community? What visitor uses and activities should be discouraged or prevented? How are local facilities and resources impacted by visitor use? Are these impacts acceptable or is mitigation needed?

2. In what ways does the community need to expand or develop its tourism infrastructure? What facilities or activities are necessary and at which locations?

To evaluate this concern from the community's perspective, the questions could be rephrased as follows:

What types of tourism infrastructure improvements could also support community needs? How can we use tourism revenues and projects to enhance our local quality of life? What facilities or activities should remain private and how can we communicate our needs while maintaining confidentiality? How much and what kinds of interactions with tourists are acceptable to residents?

3. How will attractions and activities be interpreted for potential visitors and in what medium (e.g., roadside features, signage, face-to-face interpretation, exhibits, special events, maps, brochures, etc.)? How will these elements be coordinated to create a coherent tourism experience (e.g., themes, slogans, color schemes, symbols, etc.)?

To evaluate this concern from the community's perspective, the questions could be rephrased as follows:

What is the overall message we want to communicate to highway users—both travelers and local residents? How can we communicate this message in ways that are authentic and culturally appropriate? How is the corridor currently marketed and what marketing strategies should we retain, improve, eliminate, or add? What designs and symbols best represent our community? Are proposed designs and symbols appropriate for use in tourism promotion? How can we use design to address other transportation challenges (such as traffic calming, reducing maintenance, preventing vandalism, etc.)?

Plan to enhance/maintain byway experience

Interpretation enhances the visitor's appreciation for the byway's intrinsic qualities and in doing so helps to attract travelers, encourages longer visits, and supports management objectives.¹⁶⁰ It should focus on unifying themes that reveal the meaning of the area while distinguishing it as being special and unique from other places. If the byway is short, one or two themes might suffice, while longer, more complex byways may be able to convey several complementary interpretive messages.

An interpretive plan, developed as part of a TCMP or as a stand-alone document, discusses how the chosen themes will be expressed within the corridor through the use of design elements. The plan can be a very brief, high-level overview or a lengthy, specific document, depending on the needs and goals of the community. Regardless of its level of detail, the FHWA recommends that a byway interpretive plan address six basic questions, at a minimum:

1. **Who** is the audience? Who uses the corridor now? Whom would the community like to attract as potential visitors?
2. **What** do you want travelers to understand about your byway? What do they already know (or think they know)? What do they want to learn?

3. **When** do most travelers visit? Which seasons, dates, days, or times see the greatest use of the byway?
4. **Where** are the best places to show visitors in order to tell the byway's story?
5. **Why** should people be interested in the byway? Why does the community want to interpret this place for visitors?
6. **How** will you get your message across? What media and locations will be used?¹⁶¹

The FHWA also recommends an integrated approach to design, including clustering visitor services whenever possible, to enhance their utility and convenience for the visitor as well as reducing construction and maintenance costs. Specific suggestions for interpretive elements are presented in its 2002 publication *Scenic Byways: A Design Guide for Roadside Improvements*.¹⁶²

For ideas and strategies regarding the development of interpretive themes and design elements within Caltrans District 1, see the previous chapter and review other transportation projects taking place in your area. Consultation with local landscape architects and transportation planners will also prove useful. Your District's Native American liaison can connect you with the appropriate Caltrans staff to assist in these efforts.

Public participation plan

Public involvement has been described as a two-way process, in which planners first explain their initial plan and goals to community members then provide opportunities for feedback regarding residents' needs and aspirations.¹⁶³ Public participation and input confer a variety of advantages for transportation planning efforts, including promoting trust between agencies and communities, ensuring that plans and proposed solutions are not overly vague and that they address specific local needs, providing opportunities to solicit a range of potentially innovative and organic ideas from community members, minimizing risks of miscommunication and misperception, fostering community "buy-in," and stimulating advocacy efforts among residents.¹⁶⁴ In addition, public input is central to both Caltrans's vision and its mission, emphasizing its level of importance to the agency's efforts.¹⁶⁵

The National Transportation Board clearly differentiates public involvement ("providing meaningful participation in the evolution of the project and the decision process") from "public relations (selling a *fait accompli*) or public information (telling how, when, and why a project will be built)."¹⁶⁶ Per the FHWA a successful highway design process will include the following elements, each of which should incorporate public participation and input:

- Early and continuous public involvement throughout the project
- The use of visualization techniques to aid the public
- Early and continuous use of a multidisciplinary design team
- The application of flexible and creative design criteria.¹⁶⁷

See the text box below for information about the public participation process used to develop the *Conceptual Plan for Downtown Hoopa* (2006).

**THE HOOPA DOWNTOWN CONCEPTUAL PLAN DESIGN FAIR:
A VEHICLE FOR PUBLIC INPUT**

In 2003, the Hoopa Valley Indian Tribe received a Caltrans grant to involve the community in crafting design solutions to traffic safety problems, specifically the "critical injury cluster sites" along SR-96, while supporting existing community initiatives focusing on economic development, tourism planning, injury prevention programs and other efforts to improve the quality of life underway in the Hoopa Valley. This award, offered through the Environmental Justice: Context Sensitive Planning for Communities Grant Program, was the first of its kind to be granted to a Native American Tribe in California.

Implementation of the project began in November 2004. A team of consultants, planners, and Caltrans staff worked with the Hoopa Valley Roads Department (HVRD), tribal leaders, residents and business owners in the Hoopa Valley Indian Reservation through an intensive design charrette (workshop) process, resulting in a conceptual plan to improve the safety of motorists, pedestrians and bicyclists on a half-mile stretch of SR-96.

Additional public input was gathered during Design Table sessions held on June 25, 2005, involving seven teams and an estimated 45 to 50 people. Each design team was asked to develop ideas and drawings for the conceptual plan, based on the information collected during the earlier rounds of focus-group and community meetings.

The Project Design Team reviewed the ideas and drawings contributed by each of the seven Design Tables to develop its recommendations. The resulting Conceptual Plan provides a blueprint for implementing ideas related to traffic calming and pedestrian safety along SR-96 through downtown Hoopa. Additionally, the plan presents ideas related to enhancing the pedestrian environment throughout downtown Hoopa, as well as providing a basis for acquisition and development of land in the downtown area for public and private use. In addition, the Conceptual Plan and its public input process identified a variety of transportation-related concerns and suggested design themes that can be applied along the entire SR-96 corridor, thus providing a strong foundation for development of the Tribal Corridor Management Plan.

Together, the Conceptual Plan for Downtown Hoopa and the Tribal Corridor Management Plan for SR-96 continue the Tribe's proactive approach to community and economic development in addition to improving roads, and builds upon the recent accomplishments in furthering the Tribe's mission:

To promote and defend the Hoopa Valley Tribe's rights, culture, lands, resources, and integrity by strengthening government, elevating the quality of life, developing human resources and creating economic growth and financial security for the future.

Adapted from Conceptual Plan for Downtown Hoopa 2006

Implementation and review plan

While specific strategies for implementation will lie beyond the scope of most corridor management plans, your TCMP should include general recommendations to ensure that future developments support the goals and objectives of the corridor management plan. The review of 24 existing CMPs revealed a strong reliance upon federal and state Scenic Byways guidelines, both during projects' inception and in developing implementation plans. As this documents illustrates, Scenic Byways guidelines have provided a useful framework for capturing the elements of context-sensitive planning and will provide a good starting point for local corridor management projects.

The TCMP is not a regulatory document, nor is it intended for use by regulatory agencies for regulatory purposes. There is no intent, either implied or explicit, to change existing lines of authority or the jurisdiction or responsibility of any entity or organization over land use decisions or activities conducted on private or public property. A TCMP does not impose requirements on any organization, agency or individual; rather it sets forward a vision and framework for inclusive decision-making, improved interagency coordination, and better community involvement. Therefore, the success of implementing a TCMP depends upon "local commitment," which the National Scenic Byways program defines as: "Assurance provided by communities along the... byway that they will undertake actions... to preserve the scenic, historic, recreational, cultural, archaeological, and natural integrity of the... byway and the adjacent area as identified in the corridor management plan."¹⁶⁸

As numerous planning guides and documents note, recommendations arising from the corridor management planning process should be based upon stakeholders' shared concerns and general consensus regarding ways to preserve and protect the highway, corridor resources, and the visitor experience. Shared ownership over decisions in the corridor entails shared responsibility for carrying out its provisions. Thus, full realization of the TCMP's goals will largely depend upon the continuing cooperation, voluntary participation, and goodwill of the stakeholders who have supported the project since its inception.¹⁶⁹

UPDATE AND MODIFY PLAN, AS NEEDED

Any corridor management plan should be regarded as a "living document."¹⁷⁰ Over time, new goals and objectives will be added and others will be deleted in response to changing community needs and desires. The vision, goals, and strategies proposed should be reviewed and revised periodically by the local steering committee, in consultation with appropriate Caltrans staff, to maintain accuracy and to track the progress of each project. It is the responsibility of the byway steering committee to track the progress of the goals and objectives and make appropriate revisions as necessary.

FUTURE DIRECTIONS IN CORRIDOR MANAGEMENT

Increasingly, active tribal innovation and involvement in transportation is a strong, welcome trend in corridor management, both within in District 1 and beyond. The Hoopa Downtown Plan, representing ground-up collaboration between Caltrans District 1 and

the Hoopa Valley Indian Tribe from the very beginning, exemplifies a growing local and tribal investment in planning processes. Over the course of the two years this study was conducted, several other local tribes began work on general plans and transportation plans that include comprehensive environmental, social and interpretive components. We hope that this document supports continued efforts and innovations in transportation planning in tribal communities and within tribal territories.

IV. CONCLUSIONS, SUMMARY, AND RECOMMENDATIONS

In conclusion, the development of Tribal Corridor Management Plans (TCMPs) supports Caltrans's mission and goals, particularly as they pertain to government-to-government relations with Tribes. Caltrans and tribal governments share common concerns for improving public safety, developing their working relationship, and protecting and enhancing local resources through the application of context-sensitive solutions. To maintain and foster the effective collaboration currently under way between Caltrans District 1 personnel and local tribes, it is recommended that there be early, frequent, and ongoing communication regarding transportation projects of mutual concern, from the proposal stage through construction. Tribes are encouraged to fully utilize the District Native American Liaison for assistance with initiating contact with Caltrans and locating information and resources. It is also recommended ongoing public outreach through local media and through continued participation in the North Coast Tribal Transportation Commission.

Tribal representatives, Caltrans staff, and local residents and stakeholders shared enthusiasm for the application of tribal designs and motifs throughout the highway corridor, citing lower maintenance costs, reduced incidents of vandalism, increased tourism potential, and aesthetic enhancement as potential benefits. This study identified patterned crosswalks, decorative guardrails, bilingual signage, gateway monuments, and landscaping with native plants, among others, as context-sensitive design elements that would enhance local sense of place while contributing to other corridor management objectives, such as improved public safety and protection of sensitive resources.

Focusing on the Hoopa Valley as a case study, the authors propose the following general recommendations for tribal consideration when preparing a tribal corridor management plan:

To preserve and enhance intrinsic qualities:

- Develop an appropriate process for notifying Caltrans of special events and areas of cultural and/or ecological significance so that maintenance and construction can be scheduled and planned accordingly. To maintain confidentiality, specific details may be generalized or omitted as necessary.
- Budget tribal monitors into contracts and proposals.
- Install non-specific "sensitive area" signage to divert the public from sensitive resources while maintaining confidentiality.
- Utilize local materials and species in roadside improvements.
- Raise awareness of appropriate behavior and best practices through public outreach and visitor education.
- Develop connections for non-motorized transportation and pedestrians, including signage.

- Supplement and maintain aesthetic enhancements to the corridor, including vista points, signage, landscaping, and public art.

To convey a tribal sense of place:

- Use appropriate tribal design motifs and symbols in signage, aesthetic treatments, and interpretive materials whenever possible.
- Work with Caltrans staff to incorporate local symbols and/or materials into transportation enhancements and safety improvements where possible.
- Install gateway monuments and signage to announce arrival at, entry into, and passage through tribal area(s).
- Apply unifying design themes to create a cohesive visual effect throughout the corridor.
- Enhance identification and interpretation of significant features for travelers as appropriate.
- Use pan-tribal symbols and themes where territories are shared and/or overlap.
- Install bilingual signage where appropriate to promote indigenous language use and convey tribal presence.

APPENDIX A: A BRIEF CULTURAL HISTORY OF THE HOOPA VALLEY TRIBE

Before white settlement, the Hupa referred to themselves as *Natinook-wā* and their valley as *Natinook*, or “the place where the trails return.”¹⁷¹ European Americans derived the name “Hoopa/Hupa” from the word “Hoopah,” which used by the neighboring Yuroks to describe the tribe. Today, the spelling “Hupa” is often associated with the people and tribal entities, while “Hoopa” is the spelling frequently applied to the valley, the reservation lands, the town, and local geographical features.¹⁷²

Owing to the importance of oral traditions within the tribe, the written history of the Hupa people dates only to the late nineteenth century.¹⁷³ However, the tribe and its homeland have historical roots and a rich culture that extend much deeper into the past. Hupa cosmology identifies the Hoopa Valley as the origin of the tribe, who are believed to have lived there for at least several thousand years. Although linguistic evidence suggests that the ancestors of the Hupa are derived from Athabaskan stock who immigrated into northwest California from western Canada, the belief that the Hupa originated in and have continuously occupied the Hoopa Valley provides a spiritual connection to their territory that is unusual among the majority of North American aboriginal peoples, many of whom were forcibly removed from their homelands to facilitate European-American settlement.¹⁷⁴

The Hupa traditionally occupied cedar plank houses (*Xontahs*), clustered into 13 villages along seven miles of the Trinity River.¹⁷⁵ Like other Native American peoples, the Hupa were largely dependent upon their physical environment for sustenance. The proximity of diverse riparian, forest, grassland, and montane habitats provided an abundant diet of acorns, salmon, deer, and berries that sustained an aboriginal population of approximately 1,000.¹⁷⁶ The Hupa supplemented their local bounty by trading with neighboring tribes, particularly the Yurok and Karuk, and these three groups also forged cultural connections by participating in each other’s ceremonies and dances, despite their linguistic differences.¹⁷⁷ In general, relations among the region’s indigenous tribes were peaceful; only two major conflicts have been recorded in the valley’s history, as most inter-tribal disputes were settled through non-violent negotiations and the rich environment made conflicts over territory and resources unnecessary.¹⁷⁸

While a few white settlers and explorers traveled through Hupa territory during the gold rush period, their geographical isolation and self-sufficiency permitted the Hupa to remain largely untouched by western influences until the early 1900s.¹⁷⁹ Prior to the 1850s, northwest California was one of the few remaining frontiers in United States. Fur traders had begun to venture inland beyond the coastal ranges as early as the 1820s, but the rugged territory was difficult to traverse, the supply of beaver and otter was relatively poor, and the native people were feared.¹⁸⁰ Jedediah Smith was responsible for the Hupa’s first contact with whites. His arrival in 1828 marks what some call “the end of Indian Time” for the Hupa; his expeditions were the first to map the region and facilitated the expansion that was yet to come.¹⁸¹

By 1848, gold had been discovered along the Trinity River and the ensuing rush of miners and settlers ultimately led to the extermination or relocation of the majority of the indigenous

population. Between 1850 and 1860 the total population of California nearly tripled. The booming lumber and fishing industries encouraged the growth of coastal towns, pushing farmers and ranchers farther inland to search for fertile pastures. One early resident described the moral character of these newcomers: "They are loaded to the muzzle with vagabonds from every quarter of the globe, scoundrels from nowhere...assassins manufactured in Hell for the express purpose of converting highways and byways into theaters of blood."¹⁸²

In the thirty years following the gold rush, California did in fact become a "theater of blood." The indigenous population of the state dropped precipitously from an estimated 250,000 to approximately 30,000.¹⁸³ In 1855, settlers in Shasta could earn \$5 for a severed Indian head; a scalp in Honey Lake in 1863 would bring in just 25 cents.¹⁸⁴ In 1851 the state of California spent over \$1 million funding these scalping missions. Native retaliation in response to the murder, rape, kidnapping, and enslavement perpetrated by whites only incited further violence. In some cases, the government blatantly supported organized volunteer cavalries to take care of the Native American "problem." To mitigate the potential for both direct conflict and indirect impacts, such as the spread of disease into tribal communities, the federal government proposed to create Indian reservations within California to separate the indigenous and white populations and to open new territory to European-American resource exploitation and settlement.¹⁸⁵

As mining claims began cropping up in the 1850s, most of the major trails connecting these new settlements skirted the Hoopa Valley.¹⁸⁶ While miners infiltrating the surrounding areas were met with various retaliation attempts by neighboring tribes, the Hupa maintained relatively neutral relations with the influx of newcomers. However, the whites feared the Hupa because of their large population and any possible alliances they might have had with "hostile" neighboring tribes.¹⁸⁷ In an attempt to preclude any possible uprising, the valley's first white settler, Captain Snyder, took one of tribe's most respected leaders, Captain John, to San Francisco to demonstrate the size and resources of the white population. The booming city was home to more than 50,000 people; its harbors were filled with large ships from all over the world; and hotels, restaurants, and factories abounded. The intimidation plan worked. Upon returning to the valley, Captain John "told the Hupa they had better not fight the whites, and scooped up dry sand from the Trinity's bank and let it trickle through his fingers to show how numerous [the whites] were."¹⁸⁸

In December 1859, Fort Gaston was established in the valley to serve as a buffer between the peaceful, but feared, Hupa tribe and the white settlers who were staking claims in neighboring areas. After a few isolated incidents escalated tensions, the troops at Fort Gaston demanded that the Hupa people give up all of their weapons. It was the respected Captain John who advised his people to comply.¹⁸⁹ This restraint is but one example of the mediation that was crucial in keeping violence out of the valley and preserving the size and influence of the Hupa people.

While diplomacy and geographical isolation were key factors in keeping white settlers at bay, it was the establishment of the Hoopa Valley Indian Reservation in 1864 that secured the Hupa's rights to the center of their universe and eventually paved the path toward sovereignty. The 1864 "Peace and Friendship Treaty" negotiated with the federal

government defined the boundaries of the reservation as “the whole of Hoopa valley” and “sufficient area of the mountains on each side of the Trinity River as shall be necessary for hunting grounds, gathering berries, seeds, etc.”¹⁹⁰ On June 23, 1876, an executive order from President Ulysses S. Grant expanded the reservation to encompass the majority of the Hupa’s traditional grounds, a total of nearly 90,000 acres.

While the establishment of the reservation carried several limiting clauses (e.g., the Natives were not allowed to leave the reservation without written permission from the agent in charge), it represented a significant achievement that distinguished the Hupa from other tribes in the area. Not only did the treaty create the largest land base for any tribe in California, it did so without relocating the Hupa. Meant to contain the Natives and secure the most valuable lands for white settlement, most reservations resulted in removal of indigenous people from their homelands. Considering the wealth of the Hoopa Valley and its desirability to settlers and miners, the establishment of the Hoopa reservation represents a uniquely positive situation for the Hupa.

However, this good fortune did not come without a price. Without the option of forced relocation, white settlers adopted a policy of assimilation that was intended to inculcate the Hupa to European-American society, thus eliminating the need for the reservation over time.¹⁹¹ While the Hupa did adopt some aspects of white culture, they retained many of their core religious beliefs and customs. As the years passed, the government agents charged with the reservation’s administration changed quite frequently. This instability is a testament to the ultimate failure of the assimilation efforts.

Establishment of a tribal council in 1911 further protected the integrity of the Hupa culture and marked the formation of “one of the first successful self-governance tribal structures in the nation.”¹⁹² Superintendent Jesse B. Mortsof, who initially endorsed the council’s formation, hoped that it would help him eliminate the “customs that are withholding progress.”¹⁹³ However, rather than simply mirroring and perpetuating European-American governmental structures, the tribal council became a forum that facilitated further protection of Hupa land and customs.

In 1922 and 1923, dwindling government funds encouraged the Hupa to promote private industry, road construction, power projects, and tourism in an effort to stimulate the economy.¹⁹⁴ Road construction from Orleans to Happy Camp, along the Trinity River between Hoopa and Weitchpec, and along the Klamath River to the coast connected previously isolated communities. Although government assistance continued to play a large role in supporting the reservation, local industries emerged, including blacksmithing, carpentry, public service, logging, milling, packaging, home crafts, and construction.

In the years that followed, the national political climate shifted in favor of increased Native sovereignty. John Collier, Commissioner of Indian Affairs under President Franklin D. Roosevelt, outlined his goals for an “Indian New Deal” in 1933, arguing that Indian societies “must be given status, responsibility, and power” and the federal government should safeguard Native cultures and land.¹⁹⁵ Although the impacts of assimilation could never be fully reversed, the local school began to offer courses in traditional crafts in 1935, and the Hupa helped to design a curriculum aimed at reviving tribal relations, customs, and native

art.¹⁹⁶ Thus, despite the Hupa people's steady progress toward a lifestyle more similar to that of the American mainstream, their "quiet, persistent refusal to abandon ancient belief had itself become a way of life in Hoopa Valley" by mid-century.¹⁹⁷

Official federal recognition of Hupa sovereignty finally occurred in 1988 when President Ronald Reagan signed the Hoopa-Yurok Settlement Act. The explicit intent of the bill was to clear up a long-standing dispute between the tribes, as the original reservation boundaries had combined their lands and had become a growing source of contention following the lumber boom of the 1950s. Not only did the bill create two distinct reservations, it also officially recognized them as sovereign territories.¹⁹⁸ The anniversary of this watershed event is now celebrated every August during Hoopa's "Sovereign Days" festival. The Hoopa Valley Tribe entered into a "compact" with the United States government in July 1990, allowing it to transition from its status as "one of the most regulated tribes controlled by the United States to a position of freedom from such regulation unprecedented among Indian Tribes."¹⁹⁹

APPENDIX B: RECOMMENDED RESOURCES

The following resources proved especially useful in the preparation of this report and are recommended reading for entities considering developing a Tribal Corridor Management Plan:

Conserving our Treasured Places: Managing Visual Quality on Scenic Byways. Available upon request from National Scenic Byways Program State Coordinators (listed at: www.bywaysonline.org/contacts/states.html).

This manual, developed by *Scenic America*, guides communities through the scenic conservation planning process, including how to engage key partners; assess, inventory, and map visual resources along the byway; identify and prioritize scenic issues; and develop a scenic conservation strategy.

Flexibility in Highway Design. Available online at: www.fhwa.dot.gov/environment/flex/index.htm.

This FHWA guide “is written for highway engineers and project managers who want to learn more about the flexibility available to them when designing roads and illustrates successful approaches used in other highway projects. It can also be used by citizens who want to gain a better understanding of the highway design process.”

A Guide to Best Practices for Achieving Context Sensitive Solutions. Available online at: http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_480.pdf.

This guide, by the Transportation Research Board of the National Academies, demonstrates how state departments of transportation (DOTs) and other transportation agencies can incorporate context sensitivity into their transportation project development.

Main Streets: Flexibility in Design and Operations. Available online at: www.dot.ca.gov/hq/oppd/context/mainstreets2005.pdf.

This booklet by the California Department of Transportation identifies context-sensitive solutions that balance community values with transportation concerns on portions of State Highways that function as “main streets.”

Scenic Byways: A Design Guide for Roadside Improvements. Available online at: www.fs.fed.us/eng/pubs/pdf/hi_res/fhwa02001hi.pdf.

This FHWA design guide provides examples of improvements, outlines the planning process, and describes design principles to assist the planners, designers, and managers of scenic byways.

www.ContextSensitiveSolutions.org

This website, funded by the FHWA, is intended to serve as a clearinghouse for information regarding context-sensitive solutions, including projects, case studies, cutting-edge research, information, and policy documents.

ENDNOTES

1. California Department of Transportation (Caltrans). *Big Sur Coast Highway Management Plan*. www.dot.ca.gov/dist05/projects/bigsur/index.htm. (accessed June 6, 2007).
2. Federal Highway Administration (FHWA). "National Scenic Byways Program." *Federal Register* 60, no. 96 (1995): 26759-26762.
3. Caltrans. *Corridor Management Plan, Route 101: Golden Gate-Oregon Border*, p.1. www.mendocinocog.org/pdf/Willits%20Bypass/Corridor%20Mgmt%20Plan%20by%20Caltrans.pdf (accessed June 6, 2007).
4. Scenic America. "Byways and corridor management plans." www.scenic.org/byways/corridor_management (accessed August 2, 2007).
5. Caltrans, *Director's Policy: Context-Sensitive Solutions*, p. 1
6. Caltrans, *California Transportation Plan 2030 Addendum*. www.dot.ca.gov/hq/tpp/index_files/ctp_2030_oct_2007.pdf (accessed July 24, 2008), p. 6.
7. Ibid.
8. We use the terms Native American, Native Californian, Californian Indian, and Indian interchangeably to refer to native peoples of the Americas. However, it is important to note that individual groups may not take the same view and in building partnerships we strongly recommend beginning by determining and using appropriate language.
9. Although the case study in this document is focused upon the land that comprises the Hoopa Valley Tribe Reservation, the required consultation is not limited to roads that pass through reservations. Thanks to an anonymous reviewer who asked us to note this specifically.
10. Caltrans. *Transportation Guide for Native Americans*. Sacramento: California Department of Transportation, 2002, 107.
11. Ibid., 109.
12. Ibid.
13. Ibid., 19.
14. Ibid.
15. Ibid, 26.

16. Caltrans. "Caltrans Mission and Goals." www.caltrans.ca.gov/hq/paffairs/about/mission.htm (accessed July 6, 2007).
17. Caltrans. "District 1 Native American Liaison." www.dot.ca.gov/dist1/d1native/ (accessed June 17, 2008).
18. Caltrans. *Main Streets: Flexibility in Design and Operations*. www.dot.ca.gov/hq/oppd/context/mainstreets2005.pdf (accessed July 2, 2007), 4.
19. Caltrans, *Big Sur Coast Highway Management Plan*.
20. Caltrans. "Native American Liaison Branch."
21. Hoopa Valley Tribe. *Hoopa Valley Indian Reservation Transportation Plan*. Hoopa, CA: Hoopa Valley Tribe Office of Research and Development, 1996, p. 2.
22. The spelling "Hupa" is often associated with the people and tribal entities, while "Hoopa" is the spelling frequently applied to the valley, the reservation lands, the town, and local geographical features (Nelson 1994).
23. Burden, Dan. *Street Design Guidelines for Healthy Neighborhoods*. Sacramento, CA: Center for Livable Communities, 2002.
24. Burden, Dan. *Streets and Sidewalks, People and Cars: A Citizens' Guide to Traffic Calming*. Sacramento, CA: Center for Livable Communities, 2000.
25. Hoopa Valley Tribe. "Department of Tribal Forestry." www.hoopa-nsn.gov/departments/forestry/forestry.htm (accessed May 17, 2010).
26. Hoopa Valley Tribe. *Conceptual Plan for Downtown Hoopa*. Hoopa, CA: Hoopa Valley Roads Department, 2006, p. 3.4-1.
27. Hoopa Valley Tribe. *Conceptual Plan for Downtown Hoopa*, 1-3.
28. National Cooperative Highway Research Program (NCHRP). *NCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions*. Washington, D.C.: Transportation Research Board of the National Academies, 2002.
29. FHWA. *Flexibility in Highway Design*. FHWA- PD-97-062. www.fhwa.dot.gov/environment/flex/index.htm (accessed June 4, 2009), p. 1.
30. Springer, Nate. "Listen up!" *Planning* 73, no. 5 (May 2007): 30-33.
31. Caltrans, *California Transportation Plan 2025*.
32. Ibid., 4. According to the Caltrans California Transportation Plan 2035 web portal (www.californiainterregionalblueprint.org/) delivery of the next update of the

- California Transportation Plan* (for 2035) has been rescheduled from 2010 to 2015. Therefore, the *2025 California Transportation Plan* and the *2030 Addendum* are the most current long-term state planning documents available at the time of publication.
33. NCRHP, *NCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions*, 17.
 34. Available online at: www.yuroktribe.org/news&issues/news/news.htm.
 35. FHWA. "Traffic calming." www.fhwa.dot.gov/environment/tcalm/index.htm (accessed June 10, 2008).
 36. Ibid.
 37. Caltrans. *Route Concept Report: Route 96*. www.caltrans.ca.gov/dist1/d1transplan/r96.pdf (accessed June 11, 2008), p. 2.
 38. Caltrans. *Main Streets: Flexibility in Design and Operations*, 1.
 39. Hoopa Valley Tribe. *Conceptual Plan for Downtown Hoopa*, 3.2-3 and 3.2-10.
 40. Ibid., 3.2-8.
 41. Caltrans defines a gateway monument as "any freestanding structure or sign, non integral or non required highway feature, constructed within the State right-of-way, which communicates the name of the city, county, or township (Local Entity). Gateway monuments are solely planned, designed, funded, constructed and maintained by the Local Entity." (Gateway monument program – Guidelines. Available on-line at: [\[http://www.dot.ca.gov/hq/LandArch/gateway/index.htm\]](http://www.dot.ca.gov/hq/LandArch/gateway/index.htm)).
 42. Interested communities will find the FHWA-approved gateway monument guidelines online at: www.dot.ca.gov/hq/LandArch/gateway/gm_guidelines_4-28-09.pdf. For more information, the reader is advised to contact your District's Landscape Architect and/or to consult Section 501.3F of the Caltrans Encroachment Permits Manual, available online at: www.dot.ca.gov/hq/traffops/developserv/permits/encroachment_permits_manual/index.html].
 43. For further information and assistance, consult the directory of Caltrans District Landscape Architects, available online at: [\[www.dot.ca.gov/hq/LandArch/dla_map.htm\]](http://www.dot.ca.gov/hq/LandArch/dla_map.htm), and/or Chapter 900 of the Caltrans Highway Design Manual, available online at: [\[www.dot.ca.gov/hq/oppd/hdm/pdf/english/chp0900.pdf\]](http://www.dot.ca.gov/hq/oppd/hdm/pdf/english/chp0900.pdf).
 44. Hoopa Valley Tribe. *Hoopa Valley Indian Reservation Transportation Plan*.
 45. On March 9, 2010, California Attorney General Jerry Brown announced that the California Department of Transportation is not prohibited from granting preferences to members of Indian tribes when hiring for, or contracting out, road construction and

- maintenance work on roads located on American Indian land (Offgang, Kenneth, "Hiring preferences on tribal lands are legal, Brown tells Caltrans," *Metropolitan News-Enterprise*, March 10).
46. NCRHP, *NCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions*, 31.
 47. Scenic America, "Byways and corridor management plans."
 48. Caltrans. State Planning and Research: Tribal Corridor Management Plan Project. Proposal submitted by Eddie Isaacs, Transportation Planner, and Jan Bulinski, Chief of Regional Planning and Local Assistance, 2005. Document obtained from Caltrans District 1 headquarters, Eureka, CA.
 49. Ibid.
 50. According to the FHWA, a charrette is defined as: "a meeting to resolve a problem or issue. Within a specified time limit, participants work together intensely to reach a resolution. The sponsoring agency usually sets the goals and time limit and announces them ahead of time. A leader's responsibility is to bring out all points of view from concerned local residents as well as agency representatives and experts" (<http://www.fhwa.dot.gov/reports/pittd/charrett.htm>).
 51. Hoopa Valley Tribe. *Hoopa Valley Indian Reservation Transportation Plan*.
 52. Hoopa Valley Tribe, "Tribal History." www.hoopa-nsn.gov/culture/history.htm (accessed on July 17, 2007). The spelling "Hupa" is often associated with the people and tribal entities, while "Hoopa" is the spelling frequently applied to the valley, the reservation lands, the town, and local geographical features (Nelson, Byron, Jr. *Our Home Forever: The Hupa Indians of Northern California*. Hoopa, California: The Hupa Tribe, 1994.).
 53. Hoopa Valley Tribe, "Tribal History."
 54. Population statistics obtained from: United States Census Bureau, *Census of Population: Social and Economic Characteristics*, 2000, available at: www.census.gov.
 55. Hoopa Valley Tribe, *Hoopa Valley Indian Reservation Transportation Plan*.
 56. Ibid.
 57. U.S. Census Bureau, 2000.
 58. Ibid.
 59. Caltrans, *Route Concept Report: Route 96*.

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60. Ibid, 2.
 61. Hoopa Valley Tribe, *Conceptual Plan for Downtown Hoopa*.
 62. FHWA. "Traffic calming."
 63. Fehr & Peers Transportation Consultants. "Traffic Calming." www.trafficcalming.org/index.html (accessed June 10, 2008).
 64. FHWA. "National Scenic Byways Program." *Federal Register* 60, no. 96 (1995): 26759-26762.
 65. Ibid., 26759.
 66. National Scenic Byways Online (NSBO). "Bigfoot Scenic Byway." www.byways.org/explore/byways/62352/ (accessed August 3, 2007).
 67. Steinberg, Sabra L., Jeffrey R. Dunk, and TallChief A. Comet. *In Hoopa Territory: A Guide to the Attractions and Human History of the Hoopa Valley Indian Reservation and Surrounding Areas*. Hoopa, CA: Hoopa Valley Tribal Council, 2000.
 68. Caltrans, *Route Concept Report: Route 96*.
 69. FHWA, "National Scenic Byways Program."
 70. Wallace, David Rains. *The Klamath Knot: Explorations of Myth and Evolution*, 20th anniversary ed. Berkeley: University of California Press, 2003.
 71. Ibid, 13.
 72. Hoopa Valley Tribe, *Hoopa Valley Indian Reservation Transportation Plan*.
 73. Steinberg et al., *In Hoopa Territory*, 64.
 74. Busby, Peggy J., Thomas C. Wainwright, and Robin S. Waples. *Status Review for Klamath Mountains Province Steelhead*. Seattle: National Marine Fisheries Service, 1994. www.nwfsc.noaa.gov/publications/techmemos/tm19/tm19.html. (accessed June 30, 2008).
 75. Steinberg et al., *In Hoopa Territory*.
 76. Ricketts, Taylor H., Eric Dinerstein, David M. Olson, Colby J. Loucks, et al. *Terrestrial Ecoregions of North America: A Conservation Assessment*. *World Wildlife Fund - United States and Canada*. Washington, D.C.: Island Press, 1999.
 77. Wallace, David Rains. *The Klamath Knot*, 4.

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78. United States Department of Agriculture (USDA). *California Forest Health in 1994 and 1995*. www.fs.fed.us/r5/spf/publications/fh_94-95/index.htm (accessed August 3, 2007).
 79. Steinberg et al., *In Hoopa Territory*.
 80. Ricketts et al., *Terrestrial Ecoregions of North America*.
 81. Ibid.
 82. Steinberg et al., *In Hoopa Territory*.
 83. Ibid.
 84. FHWA, "National Scenic Byways Program," 26759.
 85. Hoopa Valley Tribal Office. *Hoopa Indian Nation: Home of the Na:tinixwe* [brochure]. Obtained from Hoopa Tribal Museum, Hoopa, CA.
 86. Steinberg et al., *In Hoopa Territory*.
 87. FHWA, "National Scenic Byways Program," 26759.
 88. Hoopa Valley Tribal Museum. "History." bss.sfsu.edu/calstudies/hupa/HISTORYNEW.HTM (accessed July 19, 2007).
 89. Steinberg et al., *In Hoopa Territory*.
 90. Cook, Sherburne F., *The Conflict between the California Indian and White Civilization*, Berkeley: University of California Press, 1976; Kroeber, Alfred L., *Handbook of the Indians of California*, Bureau of American Ethnology Bulletin, No. 78 (1925), Washington, D.C.; Wallace, William J., "Hupa, Chilula, and Whilkut," in *California*, edited by Robert F. Heizer, pp. 91-98, *Handbook of North American Indians*, William C. Sturtevant, general editor, vol. 8 (1978), Washington, D.C.: Smithsonian Institution.
 91. Nelson, Byron, Jr. *Our Home Forever: The Hupa Indians of Northern California*. Hoopa, California: The Hupa Tribe, 1994.
 92. Ibid.
 93. Hoopa Valley Tribe, "Tribal History."
 94. Steinberg et al., *In Hoopa Territory*.
 95. Ibid.
 96. FHWA, "National Scenic Byways Program," 26759.

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97. Ibid.
 98. *The Columbia Encyclopedia*, 6th ed. s.v. "Hoopa." New York: Columbia University Press, 2007.
 99. Hoopa Valley Tribe, *Hoopa Valley Indian Reservation Transportation Plan*.
 100. Steinberg et al., *In Hoopa Territory*, 6.
 101. The painted guardrail on SR-169 shown in figure 20 serves dual functions. The message in Yurok encourages tribal members to protect the ecological integrity of the Klamath River below, while also enhancing the indigenous sense of place within the corridor. Note the sign behind the guardrail, which conveys a similar message in English for the general public ("Respect the Land. Protect the River").
 102. In addition to providing important safety information, the interpretive materials here encourage responsible behavior among both local users and visitors by appealing to their respect for tribal culture. The sign is shaped like a traditional plank house (*Xontah*), a symbol that is frequently incorporated into the built environment of the HVIR to convey a tribal sense of place.
 103. The use of aesthetic treatments on functional elements of the built environment enhances the tribal imprint within the corridor and transforms a potential disruption of the viewshed into a visual asset. Aesthetic treatments and murals, such as those featured on the façade of the Hoopa Valley Youth Center, convey tribal heritage and sense of place along the highway corridor. Using existing features as inspiration for future projects suggests how tribal themes can be incorporated into the built environment in ways that are culturally appropriate and acceptable to the local community.
 104. Embossing railings with tribal designs adds to the visual interest of the corridor while requiring less maintenance than painting or other surface treatments.
 105. The Trinity River bridge underpass was frequently cited in interviews as a prime location for the installation of public art. In addition to beautifying the area and potentially contributing to the corridor's unifying design themes, this strategy would help to deter the frequent vandalism of the bridge, as the overpainting and graffiti seen in the photo reveal. Because this site provides public access to the river, other recommendations included improving directional signage, maintaining footpaths (notice the informal trail through the grass in the foreground), adding trash receptacles and landscaping, and setting up picnic sites or other public gathering spaces at this centralized location, which is heavily utilized by residents and visitors alike.
 106. The proposed plaza will be located in the space between the Tsewenaldin Inn and the Hoopa shopping center in "downtown" Hoopa. The shopping center and its immediate vicinities are the cultural and economic hub for both the town and the

- Reservation. The suggested modifications pictured in the graphic emerged from the public design fairs.
107. The existing signage at the Hoopa shopping center is a prime example of how local materials and tribal motifs can be used to express sense of place.
 108. The Trinity River vista point, located at the south end of the valley, provides interpretive opportunities centering on Hupa culture and archaeology and a clear view of the restored *Metildin* village site located across the river. A newly installed sign incorporates the *Xontah* into its compelling design.
 109. The Tish Tang Cultural Gardens will be developed at the site vacated by the realignment of Tish Tang Road. They will include a dedicated structure for the Hoopa Tribal Museum, which is currently housed in the same building as the Lucky Bear Casino. The new location would enhance the museum's visibility and accessibility to highway travelers.
 110. Bilingual signs encourage the use of endangered indigenous languages and immediately convey a tribal presence to the traveling public. Signage at Hoopa's solid waste facility adds unexpected visual and cultural interest to the highway corridor.
 111. FHWA. *Scenic Byways: A Design Guide for Roadside Improvements*. FHWA-FLH-02-001. www.fs.fed.us/eng/pubs/pdf/hi_res/fhwa02001hi.pdf (accessed June 12, 2008).
 112. In interviews with local stakeholders, the ability to offer additional visitor services, such as restaurants, entertainment, lodging, and retail, was also frequently cited as a desired outcome that would also benefit Hoopa residents; however, the formulation of strategies to develop local businesses is beyond the scope of the corridor management plan and therefore not explicitly addressed in this document.
 113. Federal and state scenic byway signs provide a model for signage that could be developed to mark the tribal corridor. Much of SR-96, including the stretch within the HVIR, was designated as the Bigfoot Highway within the National Forest Scenic Byway System in 2001.
 114. Scenic America, "Byways and corridor management plans."
 115. This document, as well as the larger TCMP project, focuses primarily on Stages 1 and 2: Planning and Preliminary Design. The final design, right of way, and construction stages are beyond the scope of this project and are not explicitly addressed in most CMPs.
 116. FHWA, *Flexibility in Highway Design*, FHWA- PD-97-062, www.fhwa.dot.gov/environment/flex/index.htm (accessed June 4, 2009), p. 1.
 117. *Ibid.*, 11.

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118. Ibid.
 119. Ibid; FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*.
 120. NCRHP, *NCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions*.
 121. According to the Caltrans 2035 California Transportation Plan web portal (www.californiainterregionalblueprint.org/) delivery of the next update of the *California Transportation Plan* (for 2035) has been rescheduled from 2010 to 2015. Therefore, the *2025 CTP* and the *2030 Addendum* are the most current long-term state planning documents available at the time of publication.
 122. Caltrans, *California Transportation Plan 2025, A-44*. The California Transportation Plan 2030 Addendum further describes CSS by stating: “A successful CSS implementation process can drive proactive, collaborative, and intelligent behaviors among vested stakeholders that can result in repeated innovations. These innovations are further fueled by the synergy and efficiency of focused direction and sustainable decisions, as well as the increased ownership of the process by engaged stakeholders....Adherence to these principles creates leadership that significantly influences stakeholders by building credibility and trust, while empowering those in the transportation arena to be more productive partners and intelligent risk takers.” (CTP 2030 Addendum, p. 6).
 123. Scenic America. *Conserving our Treasured Places: Managing Visual Quality on Scenic Byways*. Duluth, MN: America’s Byways Resource Center, 2004, p. 63.
 124. Ibid.
 125. Scenic America. “Byways and corridor management plans.”
 126. Caltrans, *Route Concept Report: Route 96*, ii.
 127. Hoopa Valley Tribe, *Hoopa Valley Indian Reservation Transportation Plan*, 6.
 128. Scenic America. “Byways and corridor management plans.”
 129. Caltrans, *Big Sur Coast Highway Management Plan*.
 130. Scenic America, *Conserving our Treasured Places*.
 131. FHWA, “National Scenic Byways Program,” 26759.
 132. Ibid.
 133. Ibid.
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134. FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*.
135. Ibid, 10.
136. Ibid.
137. Ibid.
138. FHWA, "National Scenic Byways Program," 26759.
139. FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*, 11.
140. Ibid.
141. FHWA, "National Scenic Byways Program," 26759.
142. FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*.
143. FHWA, "National Scenic Byways Program," 26759.
144. FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*.
145. FHWA, "National Scenic Byways Program," 26759.
146. FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*.
147. FHWA, "National Scenic Byways Program," 26759.
148. FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*.
149. Ibid.
150. Ibid; Scenic America, *Conserving our Treasured Places*.
151. FHWA, *Flexibility in Highway Design*, xi.
152. Scenic America. "Byways and corridor management plans."
153. Ibid.
154. Fehr & Peers, "Traffic Calming."
155. FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*.
156. Scenic America, *Conserving our Treasured Places*.
157. Ibid., 71.

-
158. Ibid., 23.
159. Page, Stephen J. and Joanne Connell. *Tourism: A Modern Synthesis*, 2d ed.. London: Thomson Learning, 2006.
160. FHWA, *Scenic Byways: A Design Guide for Roadside Improvements*.
161. Ibid.
162. Available online at: www.contextsensitivesolutions.org/content/reading/byways_design/.
163. Springer, Nate, "Listen up!"
164. Ibid.
165. Caltrans, *California Transportation Plan 2025*.
166. NCRHP, *NCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions*, 23.
167. FHWA, *Flexibility in Highway Design*, 23.
168. Scenic America, *Conserving our Treasured Places*, 2.
169. Caltrans, *Big Sur Coast Highway Management Plan*.
170. Scenic America. "Byways and corridor management plans."
171. Nelson, Byron, Jr., *Our Home Forever*.
172. Ibid.
173. Hoopa Valley Tribe, "Tribal History."
174. Ibid.
175. Hoopa Valley Tribal Museum. "History."
176. Cook, Sherburne F., *The Conflict between the California Indian and White Civilization*; Kroeber, Alfred L., *Handbook of the Indians of California*.; Wallace, William J., "Hupa, Chilula, and Whilkut.
177. Nelson, Byron, Jr., *Our Home Forever*.
178. Ibid.
-

179. Hoopa Valley Tribe, "Tribal History."
180. Norton, Jack, ed. *The California Indians*. Berkeley: Native American Studies Program, University of California, 1989.
181. Ibid., 375.
182. Norton, Jack. *Genocide in Northwestern California*. San Francisco: The Indian Historian Press, 1979, 33.
183. Ibid.
184. Chatterjee, Pratap. *Gold, Greed, and Genocide: Unmasking the Myth of the '49ers*. Berkeley: Project Underground, 1998.
185. Nelson, Byron, Jr., *Our Home Forever*.
186. Ibid.
187. Ibid.
188. Ibid., 68.
189. Ibid.
190. Hoopa Valley Tribe, "Tribal History."
191. Nelson, Byron, Jr., *Our Home Forever*.
192. Hoopa Valley Tribe, "Tribal History."
193. Nelson, Byron, Jr., *Our Home Forever*, 153.
194. Ibid.
195. Ibid., 167.
196. Ibid.
197. Ibid., 162.
198. Ibid.
199. Hoopa Valley Tribe, *Hoopa Valley Indian Reservation Transportation Plan*.

ACRONYMS AND ABBREVIATIONS

BIA	Bureau of Indian Affairs
Caltrans	California Department of Transportation
CBO	Community-Based Organization
CBTP	Community-Based Transportation Planning
CMP	Corridor Management Plan
CSS	Context-Sensitive Solutions
EEM	Environmental Enhancement and Mitigation Program
ESA	Environmentally Sensitive Area
FHWA	Federal Highway Administration
FLHP	Federal Lands Highway Program
GIS	Geographic Information Systems
HCOAG	Humboldt County Association of Governments
HES	Hazard Elimination Safety (program)
Hoopa	Refers to the valley, the reservation lands, the town, and local geographical features where Hupa people live
HSU	Humboldt State University
HTF	Highway Trust Funds
Hupa	Refers to the Native people and tribal entities of the Hoopa Valley
HV-TCMP	Hoopa Valley/SR-96 Tribal Corridor Management Plan
HVIR	Hoopa Valley Indian Reservation
HVRD	Hoopa Valley Roads Department
IRR	Indian Reservation Roads
ITIP	Interregional Transportation Improvement Program
MTI	Mineta Transportation Institute
NALB	Native American Liaison Branch
NCTTC	North Coast Tribal Transportation Commission
RCR	Route Concept Report
RTIP	Regional Transportation Improvement Program
SJSU	San José State University
SR-96	California State Route 96
STIP	State Transportation Improvement Program
TCMP	Tribal Corridor Management Plan

BIBLIOGRAPHY

- America's Byways Resource Center (ABRC). *Byway Findings from the National Survey on Recreation and the Environment (NSRE)*. Duluth (MN): USDA Forest Service and America's Byway Resource Center, 2004.
- Burden, Dan. *Street Design Guidelines for Healthy Neighborhoods*. Sacramento, CA: Center for Livable Communities, 2002.
- . *Streets and Sidewalks, People and Cars: A Citizens' Guide to Traffic Calming*. Sacramento, CA: Center for Livable Communities, 2000.
- Busby, Peggy J., Thomas C. Wainwright, and Robin S. Waples. *Status Review for Klamath Mountains Province Steelhead*. Seattle: National Marine Fisheries Service, 1994. www.nwfsc.noaa.gov/publications/techmemos/tm19/tm19.html. (accessed June 30, 2008).
- California Department of Transportation (Caltrans). *Big Sur Coast Highway Management Plan*. www.dot.ca.gov/dist05/projects/bigsur/index.htm. (accessed June 6, 2007).
- . *California Transportation Plan 2025*. www.dot.ca.gov/hq/tpp/offices/osp/ctp2025_files/CTP_2006.pdf (accessed July 24, 2008).
- . *California Transportation Plan 2030 Addendum*. www.dot.ca.gov/hq/tpp/index_files/ctp_2030_oct_2007.pdf (accessed July 24, 2008).
- . "Caltrans Mission and Goals." www.caltrans.ca.gov/hq/paffairs/about/mission.htm (accessed July 6, 2007).
- . *Corridor Management Plan, Route 101: Golden Gate-Oregon Border*. [www.mendocinocog.org/pdf/Willits%20Bypass/V\)Corridor%20Mgmt%20Plan%20by%20Caltrans.pdf](http://www.mendocinocog.org/pdf/Willits%20Bypass/V)Corridor%20Mgmt%20Plan%20by%20Caltrans.pdf) (accessed June 6, 2007).
- . "District 1 Native American Liaison." www.dot.ca.gov/dist1/d1native/ (accessed June 17, 2008).
- . *Director's Policy: Context-Sensitive Solutions*. November 29, 2001. <http://www.dot.ca.gov/hq/oppd/context-solution.pdf> (accessed April 29, 2011).
- . "Gateway Monument Program – Guidelines." www.dot.ca.gov/hq/LandArch/gateway/index.htm (accessed June 4, 2010).
- . *Main Streets: Flexibility in Design and Operations*. www.dot.ca.gov/hq/oppd/context/mainstreets2005.pdf (accessed July 2, 2007).
- . "Native American Liaison Branch." www.dot.ca.gov/hq/tpp/offices/orip/na/ (accessed May 30, 2010).

-
- . *Route Concept Report: Route 96*. www.caltrans.ca.gov/dist1/d1transplan/r96.pdf (accessed June 11, 2008).
- . State Planning and Research: Tribal Corridor Management Plan Project. Proposal submitted by Eddie Isaacs, Transportation Planner, and Jan Bulinski, Chief of Regional Planning and Local Assistance, 2005. Document obtained from Caltrans District 1 headquarters, Eureka, CA.
- . "Traffic and Vehicle Systems Data Unit: 2008 All Traffic Volumes on CSHS." www.dot.ca.gov/hq/traffops/saferesr/trafdata/2008all.htm (accessed May 25, 2010).
- . *Transportation Guide for Native Americans*. Sacramento: California Department of Transportation, 2002.
- Chatterjee, Pratap. *Gold, Greed, and Genocide: Unmasking the Myth of the '49ers*. Berkeley: Project Underground, 1998.
- Cook, Sherburne F. *The Conflict between the California Indian and White Civilization*. Berkeley: University of California Press, 1976.
- Federal Highway Administration (FHWA). *Flexibility in Highway Design*. FHWA- PD-97-062. www.fhwa.dot.gov/environment/flex/index.htm (accessed June 4, 2009).
- . "National Scenic Byways Program." *Federal Register* 60, no. 96 (1995): 26759-26762.
- . *Scenic Byways: A Design Guide for Roadside Improvements*. FHWA-FLH-02-001. www.fs.fed.us/eng/pubs/pdf/hi_res/fhwa02001hi.pdf (accessed June 12, 2008).
- . "Traffic calming." www.fhwa.dot.gov/environment/tcalm/index.htm (accessed June 10, 2008).
- Fehr & Peers Transportation Consultants. "Traffic Calming." www.trafficcalming.org/index.html (accessed June 10, 2008).
- Hoopa Valley Tribal Museum. "History." bss.sfsu.edu/calstudies/hupa/HISTORYNEW.HTM (accessed July 19, 2007).
- Hoopa Valley Tribal Office. *Hoopa Indian Nation: Home of the Na:tinixwe* [brochure]. Obtained from Hoopa Tribal Museum, Hoopa, CA.
- Hoopa Valley Tribe. *Conceptual Plan for Downtown Hoopa*. Hoopa, CA: Hoopa Valley Roads Department, 2006.
- . "Department of Tribal Forestry." www.hoopa-nsn.gov/departments/forestry/forestry.htm (accessed May 17, 2010).
-

-
- . *Hoop Valley Indian Reservation Transportation Plan*. Hoopa, CA: Hoopa Valley Tribe Office of Research and Development, 1996. ceres.ca.gov/planning/hoopa/transportation.html (accessed July 7, 2007).
- . "Tribal History." www.hoopan-sn.gov/culture/history.htm (accessed on July 17, 2007).
- Humboldt County Association of Governments (HCAOG). *Humboldt County Regional Transportation Plan Update*. Eureka, CA: HCAOG, 2008. hcaog.net/docs/RTP.2008/ (accessed May 17, 2010).
- Kroeber, Alfred L. *Handbook of the Indians of California*. Bureau of American Ethnology Bulletin, No. 78 (1925). Washington, D.C.
- National Cooperative Highway Research Program. *NCHRP Report 480: A Guide to Best Practices for Achieving Context Sensitive Solutions*. Washington, D.C.: Transportation Research Board of the National Academies, 2002.
- National Indian Justice Center (NIJC). "Tribal Employment Rights Ordinances and Transportation Projects." Presentation by Raquelle Meyers, Staff Attorney. www.nijc.org/pdfs/Tribal_Employment_Rights_Ordinances.pdf (accessed August 5, 2009).
- National Scenic Byways Online (NSBO). "Bigfoot Scenic Byway." www.byways.org/explore/byways/62352/ (accessed August 3, 2007).
- Nelson, Byron, Jr. *Our Home Forever: The Hupa Indians of Northern California*. Hoopa, California: The Hupa Tribe, 1994.
- Norton, Jack, ed. *The California Indians*. Berkeley: Native American Studies Program, University of California, 1989.
- . *Genocide in Northwestern California*. San Francisco: The Indian Historian Press, 1979.
- Offgang, Kenneth. "Hiring Preferences on Tribal Lands are Legal, Brown Tells Caltrans." *Metropolitan News-Enterprise*, March 10, 2010. www.metnews.com/articles/2010/agop031010.htm (accessed March 10, 2010).
- Page, Stephen J. and Joanne Connell. *Tourism: A Modern Synthesis*, 2d ed. London: Thomson Learning, 2006.
- Ricketts, Taylor H., Eric Dinerstein, David M. Olson, Colby J. Loucks, et al. *Terrestrial Ecoregions of North America: A Conservation Assessment*. World Wildlife Fund - United States and Canada. Washington, D.C.: Island Press, 1999.
- Scenic America. "Byways and corridor management plans." www.scenic.org/byways/corridor_management (accessed August 2, 2007).
-

———. *Conserving our Treasured Places: Managing Visual Quality on Scenic Byways*. Duluth, MN: America's Byways Resource Center, 2004.

Springer, Nate. "Listen up!" *Planning* 73, no. 5 (May 2007): 30-33.

Steinberg, Sabra L., Jeffrey R. Dunk, and TallChief A. Comet. *In Hoopa Territory: A Guide to the Attractions and Human History of the Hoopa Valley Indian Reservation and Surrounding Areas*. Hoopa, CA: Hoopa Valley Tribal Council, 2000.

United States Department of Agriculture (USDA). *California Forest Health in 1994 and 1995*. www.fs.fed.us/r5/spf/publications/fh_94-95/index.htm (accessed August 3, 2007).

Wallace, David Rains. *The Klamath Knot: Explorations of Myth and Evolution*, 20th anniversary ed. Berkeley: University of California Press, 2003.

Wallace, William J. "Hupa, Chilula, and Whilkut." In *California*, edited by Robert F. Heizer, pp. 91-98. *Handbook of North American Indians*, William C. Sturtevant, general editor, vol. 8 (1978). Washington, D.C.: Smithsonian Institution.

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