Chapter 1. Introduction

1.1 Background

California's 58 counties and 480 cities[1] own and maintain 141,235 centerline-miles of local streets and roads[2]. This is an impressive 82 percent of the state's total publicly maintained centerline miles (see Figure 1.1 below). Conservatively, this network is valued at $271 billion.

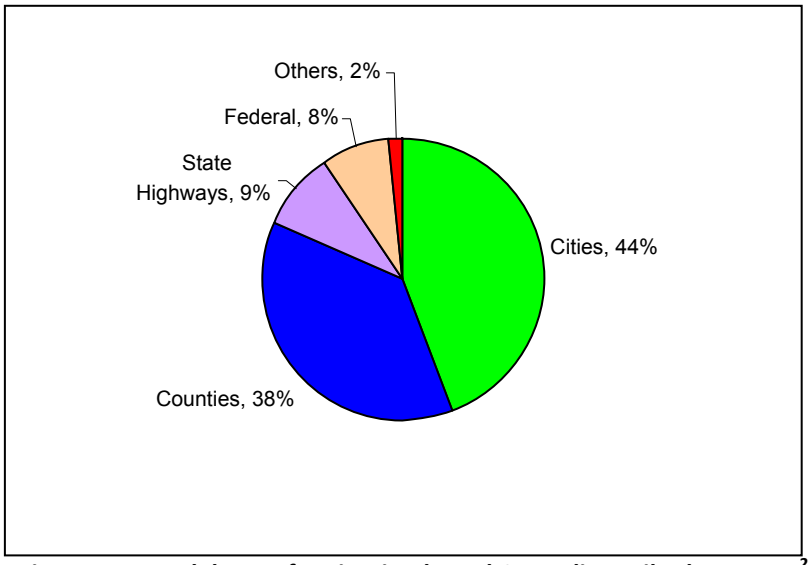

Figure 1.1 Breakdown of Maintained Road Centerline Miles by Agency[2]

Because lane-miles are more commonly used in pavement management analyses (the costs derived are based on areas, and lane-miles are a more accurate depiction of pavement areas), Table 1.1 shows the breakdown of lane-miles for local streets and roads by functional classification, as well as for unpaved roads. Major streets or roads are those that are classified as arterials or collectors, and local streets or roads are those that are classified as residentials and alleys. Unpaved roads are defined as those that have either dirt or gravel surfaces.

In addition, streets and roads are separated into urban and rural classifications. The distinction between urban and rural roads is defined by the U.S. Census Bureau: rural areas have population centers less than 5,000, or are areas with a population density below 1,000 persons per square mile. Urban areas have population centers with more than 5,000 people. However, an urbanized or rural area may or may not contain an incorporated city and the urban boundary does not necessarily follow city corporation lines. Ultimately, however, the decision to determine the miles in either category was left to the individual city or county.

[1] Two new Cities, Wildomar and Menifee, were incorporated in 2008 and were not included in the original 2008 study. They have been included in this update. Note too that San Francisco is traditionally counted as both a city and a county, but for purposes of analysis, their data have been included as a city only.

[2] *2009 California Public Road Data – Statistical Information Derived from the Highway Performance Monitoring System*, State of California Department of Transportation, Division of Transportation System Information, October 2010. The total miles come from a combination of this reference and survey results.

Table 1.1 Breakdown by Functional Classification & Unpaved Roads[2]

	Lane-miles by Functional Class					
	Urban		Rural			
	Major	Local	Major	Local	Unpaved	Total
Cities	73,191	99,233	1,204	2,064	969	176,660
Counties	25,629	36,268	22,700	34,631	12,392	131,620
Totals	**98,820**	**135,501**	**23,903**	**36,695**	**13,361**	**308,279**

Note: San Francisco is included as a city only.

From Table 1.1, it can be seen that 79 percent of the total paved miles are in urban areas, with the remaining 21 percent in rural areas. It should also come as no surprise that almost 95 percent of rural roads belong to the counties. Conversely, almost 74 percent of urban roads belong to the cities. Finally, unpaved roads comprise approximately 4.3 percent of the total network, and over 92 percent of this belongs to the counties.

1.2 Study Objectives

In 2008, a study was conducted to assess the statewide needs for the local streets and roads network and the final report released in October 2009[3]. The intent of the 2008 study was to determine the funding required to maintain the local streets and roads system for the next 10 years, so that the information could be reported to both the Legislature and the California Transportation Commission, as well as other stakeholders.

The specific objectives of the 2008 study were summarized as a series of questions:

- What are the conditions of local streets and roads?
- What will it cost to bring them up to an acceptable condition?
- How much will it cost to maintain them in an acceptable condition for the next 10 years?
- Similarly, what are the needs for other essential components, such as safety, traffic and regulatory items?
- Is there a funding shortfall? If so, how much is it?
- What are the impacts of different funding scenarios?

In this update, the objectives are essentially the same, with the addition of the question highlighted in blue above to address different funding allocations. This is a result of the difficulties that the state is facing with the budget, where a potential deficit of more than $25 billion is projected for FY 2010-11. In addition, the combination of the transportation tax swap enacted by the Legislature in March 2010 and the passage of Propositions 22 and 26 in the November 2010 General Election have the potential to negatively affect transportation funding statewide unless the Legislature acts (see appendix for more information on the status of state transportation funding at the time of this writing).

Finally, since the development of the methodology used to answer these questions were well documented in the 2008 study (in Appendices B and D), they have not been included in this 2010

[3] *California Statewide Local Streets & Roads Needs Assessment*, by Nichols Consulting Engineers, Chtd., October 2009.

update. If the reader wishes to obtain a copy, an electronic version may be downloaded from www.SaveCaliforniaStreets.org.

1.3 Study Assumptions

As before, there were some important assumptions that were made during the analyses of the data received from cities and counties. Most are consistent with those used in the Caltrans 2009 State Highway Operation and Protection Program (SHOPP)[4]. The assumptions include:

1. The analysis period used in this study is 10 years, which is consistent with the SHOPP.

2. All numbers reported in this study are in constant 2010 dollars – this is consistent with the SHOPP.

3. The pavement condition goal was to reach a condition where best management practices (BMP) can occur. This translates to a PCI in the low 80s (on a scale of 0 to 100, where zero is failed and 100 is excellent). Caltrans SHOPP defines performance goals quite differently, i.e., the goal is to reduce the percentage of distressed highways from 28 percent to 10 percent. This is further discussed in Section 4.6.

4. It is assumed that no new streets or roads are added within the analysis period. In addition, capital improvement or expansion projects are not included, e.g. realignments, widening, grade separations etc. This is consistent with the SHOPP.

5. The inclusion of safety, traffic and regulatory components of the roadway system such as sidewalks, ADA ramps, storm drains, etc. is consistent with the SHOPP. Bicycle and pedestrian facilities are also included.

6. Although a detailed bridge needs assessment was not included in this study, a brief summary of the needs has been included in Chapter 5.

Table 1.2 Summary of Assumptions Used in 2010 Study and SHOPP

Assumptions	2010 Study Update	Caltrans SHOPP
Analysis Period	10 years	10 years
Cost Basis	2010 dollars	2009 dollars
Goals	Best management practices (PCI = low 80's)	% of distressed pavements < 10%
Total Scenarios Evaluated	5	1
Capital Improvement Projects	No	Only related to operational improvement
Essential Components*	Yes	Yes
Bridges	Yes	Yes

* Does not include NPDES costs.

[4] *Ten Year State Highway Operation & Protection Plan (FY 2010/11 to 2019/20*), Caltrans, January 31, 2009..

1.4 Study Sponsors

This study was sponsored by the cities and counties of California and managed by the County of Los Angeles Department of Public Works. The Oversight Committee is composed of representatives from the following:

- League of California Cities (League)
- California State Association of Counties (CSAC)
- County Engineers Association of California (CEAC)
- County of Los Angeles, Department of Public Works
- California Regional Transportation Planning Agencies (RTPA)
- California Rural Counties Task Force (RCTF)