

Additional Information for Carson Transportation Management Systems Project

The transportation management systems and roadside safety improvements that would be included for the Carson Transportation Management Systems project are:

Location	County	State Route	Postmile	Proposed Project Work
1	Amador	88	R38.24	One closed-circuit television camera system, and one maintenance vehicle pullout, replace existing metal beam guardrail with Midwest guardrail, replace one vehicle detection system, and replace and update the existing changeable message sign.
2	Amador	88	53.99	One streetlight
3	Amador	88	54.11	One changeable message sign with controller cabinets, one vehicle detection system, one closed-circuit television camera system, one roadway weather information system, one highway advisory radio, two extinguishable message signs, and one maintenance vehicle pullout. The replacement of Midwest guardrail would extend from location 2 to location 3.
7	Alpine	88	2.30	One vehicle detection system
8	El Dorado	89	8.39	One vehicle detection system, one closed-circuit television camera system, one highway advisory radio, one extinguishable message sign, one maintenance vehicle pullout, replace existing metal beam guardrail with Midwest guardrail, and replace and update the existing changeable message sign.
11	Alpine	88	24.94	One closed-circuit television camera system, one highway advisory radio, two extinguishable message signs, one guide sign, and replace and update the existing changeable message sign.

Transportation Management Systems Definitions and Images

Changeable Message Sign

An electronic sign structure with changeable messages, lit with amber lighting, used to alert the traveling public. Changeable message signs provide motorists with advance warning of conditions ahead and inform them of alternative routes when necessary. Changeable message signs can provide advance notice of upcoming roadwork or special events that will affect travel, and to notify the travelling public of work zones ahead. The image below is of a changeable message sign.



Streetlight

A light mounted on a pole used to illuminate the highway. The image below is of a streetlight.



Vehicle Detection Systems

A system of loop detectors buried underneath the roadway that connect to a controller cabinet. The purpose of the loop detectors is to detect car movement on the state highway system. Vehicle detection systems collect and report valuable, real-time traffic volumes, occupancy, and speed data. The image below is of a cabinet used for a vehicle detection system.



Closed-Circuit Television Camera System

A camera system in which signals are not publicly distributed. The purpose of the closed-circuit television camera system is to monitor and verify roadway conditions and, in the case of incidents or congestion, assist in dispatching appropriate resources for incident response. The image below is of a closed-circuit television camera.



Roadway Weather Information System

These are meteorological measurement stations positioned strategically to collect local atmospheric data. This data will be utilized to automate Changeable Message Signs in order to provide travelers with advance notice of adverse weather conditions. In addition, accurate and reliable weather information helps Maintenance and Operations personnel prepare for and mitigate costly delays, closures, and accidents due to weather conditions. The image below is of a roadway weather information system.



Extinguishable Message Sign

A moveable sign with fixed messages to alert the traveling public of the highway advisory radio's activation. The image below is of an extinguishable message sign.



Maintenance Vehicle Pullout

A parking area adjacent to the highway that provides a safe area for the maintenance personnel to park their vehicles during routine maintenance for the elements. The image below is of a maintenance vehicle pullout under a changeable message.



Midwest Guardrail Systems

Railing used as a barrier along the edge of the road. The image below is of a guardrail system.



Highway Advisory Radio

A low-powered, noncommercial radio station used to broadcast real-time information to the motorists traveling in the area. The image below is of a highway advisory radio.

