

6. Recommendations

The major recommendations of the evaluators have been grouped into three categories as summarized below.

6.1 Planning and Policy

1. Road construction contractors be made aware early in the planning process for the need to allocate sites for the surveillance, and perhaps ramp meter, trailers in the construction zones;
2. Additional or supplemental relay sites be designed and deployed in areas from which Caltrans desires video imagery and VIP data;
3. Contractors be allowed a more direct method of parts procurement, perhaps through a project credit card, for items costing less than some predetermined amount;
4. Schedules in future programs reflect the possibility for some added requirements and for testing of all subsystems prior to system integration;
5. Cutoff dates be established after which further requirements are not permitted to be added;
6. A clear delineation between the goals for a concept validation program versus a program to develop operational equipment be established;
7. Cost centers be created for all stakeholders to participate in the design and execution of future programs;
8. A regular trailer maintenance schedule be established and executed;
9. Additional personnel, especially engineers, be trained in operating and diagnosing causes of problems in the electrical and mechanical equipment in the trailers and TMC.

6.2 Technical

10. Problems with polling 170-controllers in the surveillance trailers and displaying their output data on TMC workstations be resolved;
11. A method of compensating for mainline vehicle overcount by the VIPs be developed in order to report valid mainline traffic volumes and levels of service;
12. A technique to ensure onramp vehicle presence detection approaching 100 percent be found.

6.3 Hardware Upgrades

13. The pan and tilt assembly used for the color surveillance cameras be replaced with a model that can support more weight;
14. Cables and wires that are associated with the security camera be enclosed in metal conduit;
15. Higher sensitivity color cameras be purchased for any future surveillance needs.

6.4 Optimization of Existing Equipment

16. Stops on the surveillance camera be adjusted during trailer setup to ensure that the camera can rotate to provide imagery of the mainline upstream and downstream traffic flow;
17. Camera sun shields be moved as far forward as possible to minimize sun glint and rain from interfering with camera operation.