

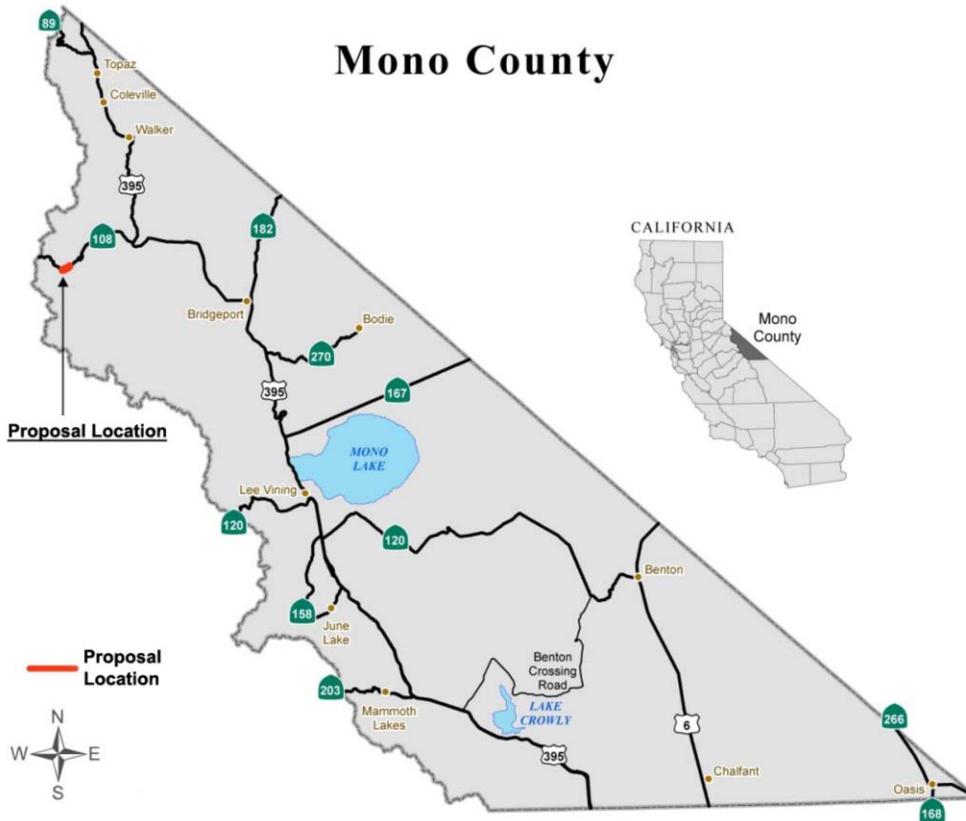
Truck Restriction Report California State Route 108



In Caltrans District 9 in Mono County on State Route 108 near Sonora Junction from the Tuolumne/Mono County Line to the Winter Closure Gate at Postmile 9.8

TRUCK RESTRICTION REPORT FOR MONO COUNTY DRAFT RESOLUTION 15-___.

LOCATION MAP



In Caltrans District 9 in Mono County on State Route 108 near Sonora Junction from the Tuolumne/Mono County Line to the Winter Closure Gate at Postmile 9.8

1. PROPOSAL

The proposed project involves implementing a restriction in truck length on the westerly portion of State Route (SR) 108 in Mono County from the Mono/Tuolumne County line, postmile (PM) 0.0, to the winter closure gate at PM 9.8; west of the Marine Corp Mountain Warfare Training Center (MCMWTC). The restriction would prohibit vehicles longer than 38 feet kingpin to rear axle (KPRI) west of the MCMWTC, which is a terminus for the Surface Transportation Assistance Act (STAA) portion of SR 108. This restriction would prohibit all STAA sized vehicles and the majority of CA Legal sized trucks.

The STAA allows large trucks to operate on Interstate and certain Federal Aid Primary System routes - collectively called the National Network. In California the STAA Network consists of the National Network and Terminal Access routes. STAA trucks are limited to the STAA Network routes.

California Legal (CA Legal) trucks can travel on STAA, CA Legal, and CA Legal Advisory routes. CA Legal trucks have access to the entire State highway system except where prohibited. California statutes limit the overall length of a tractor semi-trailer combination to 65 feet for truck operation on all highways in California unless National Network provisions apply. For the designated CA Legal tractor semi-trailer combination, the law limits the KPRI length to 40 feet for semi-trailers with two or more axles and 38 feet for a single axle semi-trailer.

SR 108 in Mono County, from the MCMWTC at PM 11.073 to the junction of US 395 at PM 15.15 is considered a Terminal Access route and part of the STAA network. Therefore, lawful access by the longer federally legal STAA combination vehicles is allowed.

Between PM 0.0 and PM 11.073 STAA trucks are prohibited and only CA Legal combination vehicles are currently allowed. SR 108 in Mono County between PM 0.0 and PM 11.073 has an existing advisory 30 foot maximum KPRI length designation per the Caltrans Truck Networks on California State Highways Map. SR 108 in Tuolumne County between PM 31.3 and PM 46.4 has an advisory 30 foot maximum KPRI length designation on the Caltrans Truck Networks on California State Highways Map (see Attachment A - *Truck Networks on California State Highways – Districts 9 & 10*).

Caltrans is not unilaterally authorized to prohibit truck travel on State highways. California Vehicle Code (CVC) sections 21101 through 21104, 35400 through 35401 and 35701 through 35715 allow cities and counties to restrict, by ordinance or resolution, commercial vehicles subject to the specific conditions in those sections. In conjunction with Caltrans, Mono County has drafted a resolution, 15-xxx, to prohibit travel by trucks greater than 38 feet KPRI from PM 0.0 to PM 9.8 (see Attachment B - *Mono County Draft Resolution* and Attachment C - *Relevant CVC*).

2. JUSTIFICATION

Trucks have difficulty navigating SR 108 from PM 0.0 to 9.8 due to small radius curves, steep grades, and power loss experienced at high altitude. The warping of the roadway through the superelevation transitions of the reversing curves at PM 4.5 also creates traction problems that compound these factors. Trucks must off-track into the opposing lane and onto the unpaved shoulders to navigate many of the curves between PM 0.0 and 9.8. Trucks blocking the road interrupt the flow of traffic including any potential emergency response vehicles or equipment on SR 108. When trucks get stuck they frequently end up crushing roadside vegetation and risk spilling their load. Traffic can be blocked for several hours while Caltrans, California Highway Patrol (CHP), and tow services attend to the situation. The approximate average per hour cost for delay and response is \$1981.00.

Existing Geometrics:

Between the Tuolumne/Mono County line and US 395 there are several grades steeper than 20%, and seven curves with radii less than 100 feet that turn through more than 80 degrees. Of all of the locations on SR 108 in Mono County the curves between PM 4.5 and 4.6, have the most extreme geometrics. This location consists of reversing curves, a 91 foot radius curve to the right followed immediately by an 89 foot radius curve to the left. The superelevation rotation compounded with the steep longitudinal profile results in an instantaneous gradient of 29% at about PM 4.56, the point where the curve reverses. Both of the curves turn over 80 degrees. There are 11 foot wide lanes with no paved shoulders along this section. There is only about 2 feet of dirt shoulder which is restricted by a rock escarpment on one side and a steep embankment on the other.

Operational and Safety Considerations:

According to Bishop, Sonora and Merced CHP dispatch records, stuck trucks have blocked SR 108 for one to six hours, approximately eighty separate times between January 2005 and February 2010 (see Attachment D - *Mapping of Frequency of Stuck Vehicles on SR 108 By Location* and Attachment E - *Summary of CHP Dispatch Logs - Stuck Vehicles*). Forty one of the eighty incidents occurred at PM 4.5. Nearly every one of these incidents involved five axle truck and trailer combinations. At least 78% (32 of 41) of the trucks stuck at PM 4.5 were STAA sized trucks. According to CHP radio logs only 7 trucks became stuck to the west of PM 0.0 and 4.5. The exact location of 11 of the 80 incidents could not be determined by the CHP dispatch records. There is no evidence that busses get stuck on SR 108.

A video camera study at PM 4.5 between August 7, 2010, and August 30, 2010, recorded a total of 39 trucks during that period for an average truck volume of 1.70 trucks/day. Of the 39 trucks that passed PM 4.5, two became stuck and all 39 off-tracked into the opposing lane. That would indicate an average rate of 5% of the trucks that get to PM 4.5 get stuck at PM 4.5. All stuck trucks were travelling uphill, westbound.

Westbound trucks have no opportunity to turn around once past PM 9.8. Trucks risk getting stuck if they stop; due to insufficient traction, power, or truck turning radius.

Stuck trucks often completely block the road; causing major delays and requiring Caltrans and/or CHP personnel to direct traffic. Tow trucks from Lee Vining or Walker often cannot get around the truck trailer to access the cab, and must come from Tuolumne County on the west side of the Sierra. The response time from Tuolumne is usually more than 1 hour.

Off-tracking occurs when the rear wheels of a vehicle do not follow the same path as the front wheels as a vehicle negotiates a turn. Longer vehicles off-track more than shorter vehicles. Additionally, off-tracking increases as curve radius decreases. The short curve radii combined with long trucks negotiating curves along SR 108 can result in significant off-tracking. The photo below illustrates the off-tracking that occurs at PM 7.0, the first short radius curve that a west bound truck will encounter. The green lines simulate the inner and outer most wheel tracks for a 40’ King Pin-to-Rear Axle (KPRA) truck. As seen in this photo, the truck occupies the opposing lanes in order to make the turn. Trucks are making this move while unable to see approaching traffic.



MNO 108 – Example of Truck Off-Tracking at PM 7.0

Current Regulations, Policy, and Signage on SR 108

SR 108 Trucking Route Designations – Districts 9 and 10

Begin PM	End PM	Trucking Route Designation
TUO 31.3	MNO 11.073	CA Legal Advisory Route – 30 foot KPRA Advisory
MNO 11.073	MNO 15.1	Terminal Access Route – STAA allowed

There are yellow and black warning signs posted on US 395 northbound and southbound just before SR 108 which caution drivers; “Tractor-Semis over 30 feet King Pin to Rear Axle Not

Advised on 108 Over Sonora Pass”. Four yellow and black advisory signs are posted on westbound SR 108.

Advisory Signs on SR 108

Location	Message/Description of Sign
PM 15.1	“ Steep grades ahead not advisable for trucks or trailers ”
PM 14.6	“ 26% grade 10 miles ahead ” / This is a pictorial sign showing a tractor and trailer on a grade.
PM 11.2	“ Tractor-semis over 30 feet kingpin-to-rear axle not advised ” “ End STAA Truck Route ” symbol posted on both sides of the road
PM 7.3	“ Sonora Pass Ahead Steep and Narrow Grade Not Advisable to tow House Trailers ”

Note: All signs face westbound drivers

At PM 11.2 there is a blue and white “End T” sign indicating that Terminal access to the STAA trucks stops at the USMC MWTC. According to the CHP this California sign is not understood by most out-of-state truck drivers. As a result, some STAA trucks continue beyond this point into the sections of SR 108 where STAA trucks are prohibited.

The *Trucker Road Atlas Map Book* and the STAA maps delineate the highway as being restricted to STAA combination vehicles. However, common road atlases and maps produced for the general public do not show that restriction. In addition, programs for laptop computers and GPS devices do not show the restrictions. With the high cost of fuel and maintenance, trucking companies and drivers seek out shorter routes of travel from the Eastern Sierra to the west side of the mountains. The STAA restriction and the advisory signing are not effective at stopping over length trucks using SR 108.

Alternatives Considered

In the past, trucks towing "Trailerhouses" frequently departed the road at PM 4.5 due to brake failure, thus the name “Trailerhouse Curve” was given to the reversing curves at this location. In 1990, the District 9 Traffic Engineer drafted a Traffic Report which discussed two build and two no build alternatives. The alternatives proposed in the report were to straighten curves at PM 4.5 and 7.0, and/or to install regulatory signage and turn-arounds for trucks. As a result of this report, a project to realign SR 108 at Trailerhouse Curve was proposed in 1999 for the District 9 Minor Program. Initial scoping was completed on this project, but it was not developed to the point of having an approved Project Report with an Environmental Document. The project was never funded and was ultimately dropped due to environmental concerns and lack of funding.

Advisory signage was installed around the year 2000, however trucks continue to use SR 108 at a rate of about 1.7 trucks/day. About 5% of the trucks that manage to get to PM 4.5 from the east, travelling westbound, get stuck at PM 4.5.

In 2011, Caltrans District 9 Project Development wrote a Feasibility Study to look at alternative project ideas for realigning SR 108. Five alternatives were presented and analyzed. Alternative 4 was a truck length restriction and is being pursued with this proposal.

The effectiveness of a maximum KPRA length restriction is dependent upon enforcement by the CHP. There are four advisory signs posted for west bound traffic which warn truckers of the geometric restrictions ahead (see table “Advisory Signs on SR 108” above). A regulatory restriction on STAA sized trucks currently exists on SR 108 in Mono County between PM 0.0 and 11.4 (CVC Sections 35400 (a), 35401 (a) and 35401.5 (a)). With the current regulatory restriction and the four advisory signs posted for westbound traffic STAA trucks still travel or attempt to travel over Sonora Pass. 78% (32 of 41) of the vehicles stuck at PM 4.5 were STAA trucks, trucks that are already statutorily prohibited.

Environmental Conditions :

It is anticipated that this project will require a Categorical Exemption under the California Environmental Quality Act (CEQA). Mono County determined the following : the proposed regulation is exempt from CEQA as a Categorical Exemption Class 1, existing highway operation with no expansion of use; addition of safety devices for existing structures (including navigational devices); and new copy on existing signs. Also as a Class 8 regulatory agency action for protection of the environment; and as a Class 11 exemption for signs appurtenant to institutional facilities. The project is also covered by the general rule exemption (section 15061), which provides that where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

Land Use :

SR 108 begins at SR 132 in Modesto (Stanislaus County) and ends at Sonora Junction in Mono County. 15.15 miles of SR 108 is within Mono County, Caltrans District 9. Within Mono County the elevation of SR 108 varies from approximately 9,628 feet at Sonora Pass to 6,900 feet at US 395. SR 108 is a 2 lane conventional highway classified as a minor arterial. It is an Interregional Road System route and is eligible for status as a State Scenic Highway. The existing 2-lane conventional highway has 11 foot lanes and no shoulders in the area of potential restriction. Caltrans has a Federal Highway Administration easement, 100 feet wide centered on the existing alignment.

SR 108 is also a Forest Highway (FH-038) serving the Stanislaus and Toiyabe National Forests. There are 21 United States National Forest Service (USFS) owned campgrounds on the route. The USFS owns most of the land along SR 108, with an easement for the MCMWTC. The USFS Bridgeport Ranger District has indicated that there is no logging or mining operations in Mono County that are dependent upon use of SR 108. Cattle graze the pastures along SR 108 in Mono County where fencing prevents them from entering the highway.

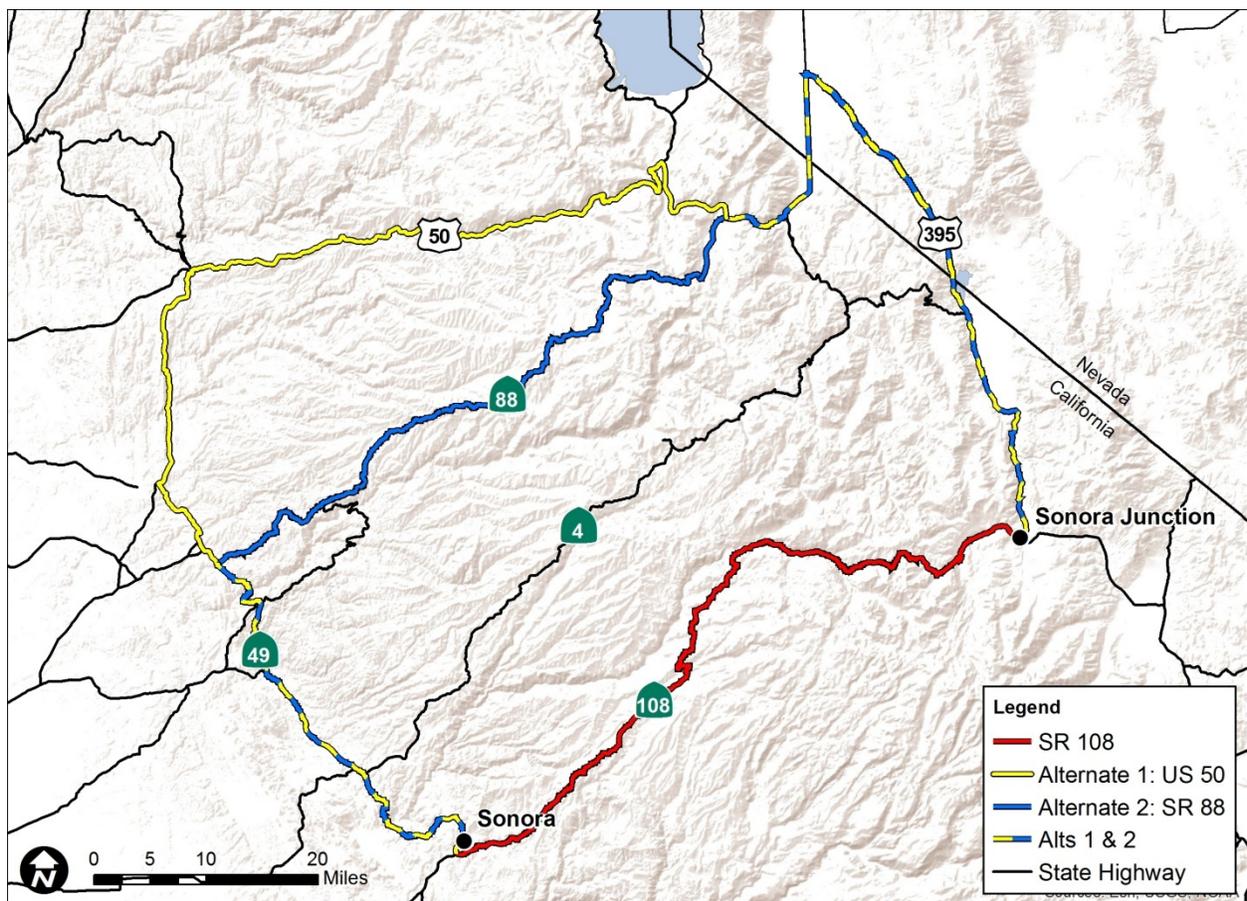
In Mono County SR 108 primarily serves recreational and MCMWTC traffic during the summer months. The *US 395 Origination and Destination Study* conducted during the summer of 2011 showed that approximately 50% of the trips on SR 108 are for recreational purposes. Due to severe winter weather conditions, SR 108 between PM 0.0 to PM 9.84 is usually closed from

November to May, for an annual average of 177 days. Only the section from US 395 to the MCMWTC is kept open year round.

In Tuolumne County, on the west side of the Sierra, SR 108 is typically closed in the winter between PM 37.40 at the first closure gate beyond Strawberry and PM 66.97 at the Mono County Line. Truck traffic volume tapers down to about 2% by the time it nears the Mono County Line. Truck traffic on SR 108 west of Sonora Pass is a mixture of timber hauling trucks, delivery trucks, and recreational vehicles.

SR 108 is currently operating at a Highway Capacity Level of Service (LOS) C. There are no capacity increasing projects being proposed for SR 108 due to the steep mountainous terrain and environmental constraints; therefore the concept LOS D is acceptable. Because SR 108 is in an environmentally sensitive area and funding constraints, the highway will likely remain a 2-lane conventional highway between PM 0.0 and PM 15.15, the entire length of SR 108 in Mono County, for the foreseeable future.

Alternative Routes



If a truck restriction is put in place on SR 108, existing routes already approved for truck use will be recommended. SR 108 and nearby routes all traverse the same alpine terrain and high mountain areas. US 50 is the recommended truck route under the proposed restriction. US 50

remains open year-round and is subject to winter driving conditions. US 50 is predominately 4 lanes from Carson City, NV to the junction with US 99 in California. When traveling north on US 395 and then west, many travelers use SR 88 and SR 89 to get to US 50. This route is shorter than using US 395 to US 50 and is open year round and approved for trucks. The SR 88 and SR 89 portions are 2 lane with few passing opportunities.

SR 88 is also open to trucks and is open year round, but is 2 lane conventional highway with few passing opportunities and is subject to winter driving conditions. Interstate 80 is also a trans-Sierra route, but it is considerably longer than either US 50 or SR 88 to get to Sonora . If a truck destination is Sacramento, the Bay Area or points north, Interstate 80 is the most appropriate route.

Economic Analysis

If trucks greater than 38 feet are prohibited on US 108, the driving distance between the US 395/SR 108 junction and the SR 108/SR 49 junction (in Sonora) would be 91 and 113 miles longer by the two shortest alternatives. The distances are :

- Via SR 108 - 80 miles.
- Via SR 88 - 171 miles.
- Via SR 89 to US 50 - 196 miles.

There are approximately 2 trucks per day that use SR 108 to get to Sonora. The extra fuel cost to drive SR 88 would be \$273 at \$3.00 per gallon for fuel and to drive SR 88 to US 50 would be \$339.00 more than SR 108 at \$3.00 per gallon for fuel.

Some stuck truck incidents last only 1 hour and some go as long as 6 hours. Assuming a stuck truck incident averages 3 hours, the number of vehicles caught in a 3 hour delay would be approximately 150 (50 cars per hour). According to the Caltrans Traffic Management Plans delay costs, the cost per car per hour for delay is \$12.07. This would result in a cost of \$3620.00 per incident just for delay for cars (50 cars for 3 hours, 50 cars for 2 hours and 50 cars for 1 hour). The cost per hour per Truck from the same source is \$29.86, resulting in a cost of \$90.00 per incident for the truck delay. The cost for a tow truck capable of moving an STAA size semi-truck is \$300 per hour according to the single local tow company. The tow company starts the charges when they leave their facility. For a 3 hour incident, there will generally be 5 hours charged for the drive time plus the time to move the truck. The average cost of stuck truck incidents for a tow is \$1500.00.

The cost for Caltrans and CHP response has been calculated to be \$90.98 per hour for CHP and \$152.25 per hour for Caltrans labor and equipment resulting in a cost of \$730 for each incident. The total cost estimate for an average 3 hour incident is \$5940.00 for vehicle delay, tow charges and CHP and Caltrans response time. The average per hour cost for delay, tow charges and response would be \$1981.00.

The cost to an individual truck is substantially less than the cost to the State, the trucking company and the travelling public for any one incident.

Stakeholder Consultations

Research into the feasibility of a maximum KPRA length restriction has been completed already. On April 7, 2010, the Caltrans District 9 Director met with the Policy Development committee for the California Truckers Association to discuss the effects a reduction of the maximum KPRA length would have on their membership. The committee indicated that there would be minimal effect on their members since most trucking companies avoid SR 108 and route deliveries on alternative routes. In addition, the committee indicated that they would not oppose a reduction of the maximum KPRA length. Caltrans District 10 Maintenance, operations and public information have indicated support for a maximum KPRA restriction.

Caltrans District 9 planning and traffic operations staff met with the Mono County Local Transportation Commission (LTC), the Mono County Board of Supervisors (BOS), the Antelope Valley Regional Planning Advisory Committee (RPAC) and the Bridgeport RPAC. All of the consulted boards and commissions have voiced support for the proposed truck length restriction. The California Highway Patrol, the Mono County Sheriff's department and the MCMWTC have been informed of the proposed truck restriction and have written letters and emails of support. (see Attachment F - *Process for CVC Restriction and Recommendations for the Final Truck Restriction Report*).

Public Hearings

In order to pass a resolution to restrict the length of trucks in Mono County, the Board of Supervisors has to undergo a public reading of the draft resolution, take public comment and then read the final draft at a public hearing. The public process has been initiated via conceptual concurrence from the Mono County BOS. Public outreach to potentially impacted communities has occurred through the RPACs and Mono LTC. (see Attachment G - *Process for CVC Restriction and Recommendations for the Final Truck Restriction Report*).

3. LIST OF ATTACHMENTS

Attachment A	Map, “Truck Networks on California State Highways – Districts 9 & 10”
Attachment B	Mono County Draft Resolution
Attachment C	Relevant CVC
Attachment D	Mapping of Frequency of Stuck Vehicles on SR 108 By Location
Attachment E	Summary of CHP Dispatch Logs – Stuck Vehicles
Attachment F	Letters of support
Attachment G	Process for CVC Restriction and Recommendations for the Final Truck Restriction Report

ATTACHMENT A

Truck Networks on California State Highways – Districts 9 & 10

TRUCK NETWORKS

on

California State Highways

DISTRICT 9

Map 9 of 12

Not to scale

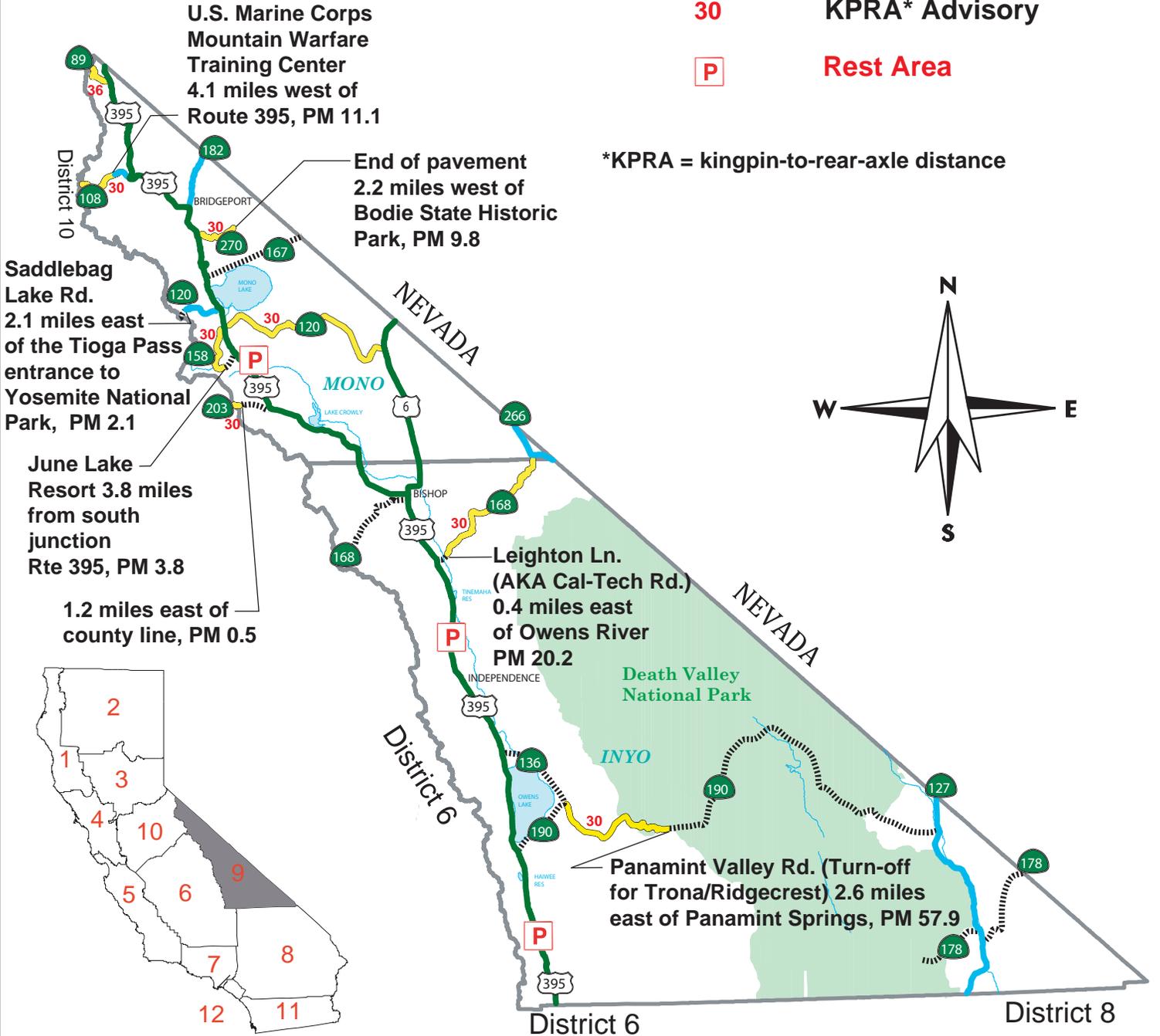
Last revised April 23, 2014

LEGEND

(CLICK HERE FOR MORE DETAILED LEGEND)

-  National Network (STAA)
-  Terminal Access (STAA)
-  California Legal Network
-  Ca Legal Advisory Route
- 30** KPRA* Advisory
- P** Rest Area

*KPRA = kingpin-to-rear-axle distance



California Department of Transportation
Legal Truck Access Branch



TRUCK NETWORKS on California State Highways

DISTRICT 10

Map 10 of 12

Not to scale

Last revised March 20, 2013

Rte 104 near Ione: Begin Advisory at Michigan Bar Rd., 3.3 miles west of Jct Rte 124 (PM 2.4). Begin California Legal at Foothill Blvd., 0.5 miles east of Jct Rte 124 (PM 6.3). End California Legal at Jct Rte 88 (PM 8.2).

Rte 124 near Ione: Begin Advisory 1.5 miles south of Ione, 0.2 miles north of Ione-Buena Vista Rd. (PM 1.0). Begin California Legal at Waterman Rd. 1.2 miles north of Jct Rte 104 (PM 3.5).

Port of Stockton Expressway (Daggett Rd.), PM 12.6

Tracy Blvd., PM 6.0

West access road to Podesta Farms, 1.35 miles east of Fine Rd. (turn left at "Podesta Packing" sign), PM 14.0

Escalon-Bellota Rd. PM 15.1

Rte 140 in Gustine: Advisory 30 from S. Jct 33 (PM 4.4) to N. Jct 33 (PM 6.1)

Cottonwood Rd. PM 22.4

TURNING RESTRICTION: STAA trucks on eastbound 104 may not turn right onto southbound 49.

Schneider Rd., PM 2.2

Main St. in Plymouth, PM 17.2

Markleeville, PM 14.8

Pine Hill Resort, 2.5 miles north of Jct Rte 4, PM 12.5

Silvertip Campground Entrance, PM 3.0

District 9

Herring Creek Ln. in Strawberry, PM 31.3

Rock Creek Rd. at O'Byrnes Ferry Rd. near Copperopolis, PM 8.1

Pondorosa Dr. in Sonora, PM 17.3

S. Jct Rte 49, PM 23.9

Turn-around at 1.25 miles north of Bear Valley, PM 30.7

NOTE: Commercial trucking through Yosemite is prohibited. For vehicle size limits see: www.nps.gov/yose/planyourvisit/restrictions.htm

NOTE: Rte 140 has been closed temporarily due to a landslide. A temporary detour was constructed; however, vehicles MORE THAN 45 feet in length MAY NOT use the Rte 140 detour. All vehicles more than 45 feet in length MUST use Rte 120 or Rte 41 to enter Yosemite.

La Grange Rd. in La Grange (County Rd "J59") PM 45.8

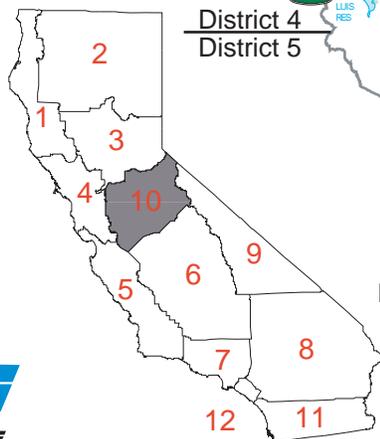
Triangle Rd. 2.1 miles west of Midpines, PM 26.3

LEGEND

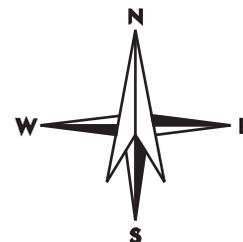
(CLICK HERE FOR MORE DETAILED LEGEND)

-  National Network (STAA)
-  Terminal Access (STAA)
-  California Legal Network
-  Ca Legal Advisory Route
-  KPRA* Advisory
-  Port
-  Rest Area

*KPRA = kingpin-to-rear-axle distance



California Department of Transportation Truck Size Unit



ATTACHMENT B

Mono County Draft Resolution



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RESOLUTION NO. 15-__
A RESOLUTION OF THE MONO COUNTY
BOARD OF SUPERVISORS RECOMMENDING THE PROHIBITION OF
VEHICLES AND COMBINATION VEHICLES WITH AN OVERALL LENGTH
GREATER THAN 38 FEET KING PIN TO REAR AXLE FROM ACCESSING AN
EASTERLY SEGMENT OF STATE ROUTE 108

WHEREAS, the California Department of Transportation (Caltrans) has determined that certain large vehicles and combination vehicles described herein, cannot travel on the westerly segment of State Route 108, specified herein, without crossing over the center stripe; and

WHEREAS; Caltrans has determined that this problem can only be resolved by imposing the herein identified restrictions; and

WHEREAS, the County of Mono is requested to support Caltrans' findings and recommendations regarding State Route 108, a highway within the exclusive jurisdiction of the State of California;

WHEREAS, the County of Mono determined the following: the proposed regulation is exempt from CEQA as a Categorical Exemption Class 1, existing highway operation with no expansion of use; addition of safety devices for existing structures (including navigational devices); and new copy on existing signs. Also as a Class 8 regulatory agency action for protection of the environment; and as a Class 11 exemption for signs appurtenant to institutional facilities. The project is also covered by the general rule exemption (section 15061), which provides that where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

NOW, THEREFORE, the Board of Supervisors of the County of Mono **RESOLVES** as follows:

SECTION ONE: The County of Mono concurs with Caltrans and recommends that vehicles and combination vehicles with an overall length greater than thirty eight (38) feet king pin to rear axle (KPRI) be prohibited access to State Route 108 from postmile (PM) 0.0 (Mono County/ Tuolumne County line) to PM 9.8 (closure gate west of Marine Corps Mountain Warfare Training Center).

SECTION TWO: This action, taken at the request of the California Highway Patrol and Caltrans, shall have no effect on the continuing legal responsibilities of the State of California, by and through Caltrans, for the continued and future maintenance



1 of the subject highway and for its duty to the users of said State highway.

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7 **SECTION THREE:** This resolution shall become effective upon appropriate State
8 action and notification of all involved enforcement agencies and the installation of
regulatory roadside signs.

9 **PASSED, APPROVED and ADOPTED** this ____ day of _____, 2015, by the
10 following vote, to wit:

11 AYES:
12 NOES:
13 ABSENT:
14 ABSTAIN:

13 _____
14 Timothy E. Fesko, Chair
Mono County Board of Supervisors

15 ATTEST:

APPROVED AS TO FORM:

16
17 _____
ROBERT MUSIL, Clerk

17 _____
COUNTY COUNSEL

ATTACHMENT C

Relevant CVC

The California Vehicle Code (CVC) Section 21101 allows the restriction of certain vehicles, by stating that, "*Local authorities...may adopt rules and regulations by ordinance or resolution... (c) Prohibiting the use of particular highways by certain vehicles...*" CVC Section 21104 further states "*...an ordinance or resolution which is submitted to the Department of Transportation...in complete draft form for approval...is effective as to any state highway...*"

CVC Section 35702 requires Caltrans approval, and the designation of an alternate route, by stating that, "*No ordinance proposed under Section 35701 is effective with respect to any...state highway, until the ordinance has been submitted by the...local authority to, and approved in writing by, the Department of Transportation. ...the local authority shall designate...an alternate route...*"

Restrictions on the length of vehicle allowed on California State Highways are outlined in the California Vehicle Code (CVC) under Division 15, Chapter 4, Section 35401, "Combination Vehicles". The method for achieving a restriction is described in sub sections (e) and (f).

Restrictions below the 38 foot maximum KPRA are explicitly prohibited by this statute.

The CVC states under sub-section (e),

"A city or county, upon a determination that a highway or portion of highway under its jurisdiction cannot, in consideration of public safety, sustain the operation of trailers or semitrailers of the maximum kingpin-to-rear-most axle distances permitted under Section 35400, may, by ordinance, establish lesser distances consistent with the maximum distances that the highway or highway portion can sustain, except that a city or county may not restrict the kingpin-to-rear-most axle measurements to less than 38 feet on those highways or highway portions. A city or county considering the adoption of an ordinance shall consider, but not be limited to, consideration of all of the following:

- (1) A comparison of the operating characteristics of the vehicles to be limited as compared to operating characteristics of other vehicles regulated by this code.*
- (2) Actual traffic volume.*
- (3) Frequency of accidents.*
- (4) Any other relevant data.*

In addition, the city or county may appoint an advisory committee consisting of local representatives of those interests that are likely to be affected and shall consider the recommendations of the advisory committee in adopting the ordinance. The ordinance may not be effective until appropriate signs are erected indicating the highways or highway portions affected by the ordinance.

This subdivision shall only become operative upon the adoption of an enabling ordinance by a city or county."

The CVC states under sub-section (f),

"Whenever, in the judgment of the Department of Transportation, a state highway cannot, in consideration of public safety, sustain the operation of trailers or semitrailers of the maximum kingpin-to-rear-most axle distances permitted under Section 35400, the director, in consultation with the Department of Highway Patrol, shall compile data on total traffic volume, frequency of use by vehicles covered by this subdivision, accidents involving these vehicles, and other relevant data to

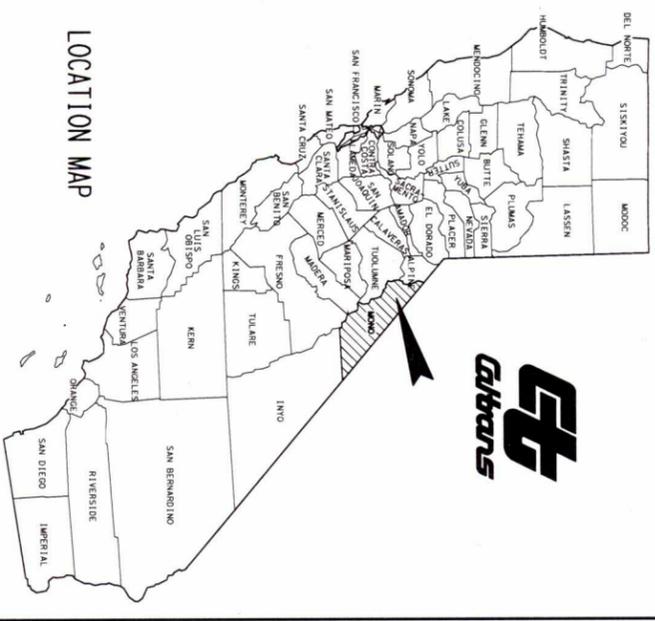
assess whether these vehicles are a threat to public safety and should be excluded from the highway or highway segment. The study, containing the conclusions and recommendations of the director, shall be submitted to the Secretary of the Business, Transportation and Housing Agency. Unless otherwise notified by the secretary, the director shall hold public hearings in accordance with the procedures set for in Article 3 (commencing with Section 35650) of Chapter 5 for the purpose of determining the maximum kingpin-to-rear axle length, which shall be not less than 38 feet, that the highway or highway segment can sustain without unreasonable threat to the safety of the public. Upon basis of the findings, the Director of Transportation shall declare in writing the maximum kingpin-to-rear axle lengths which can be maintained with safety upon the highway. Following the declaration of maximum lengths are provided by this subdivision, the Department of Transportation determines to be necessary to give adequate notice of the length limits.

The Department of Transportation in consultation with the Department of the California Highway Patrol, shall compile traffic volume, geometric, and other relevant data, to assess the maximum kingpin-to-rearmost axle distance of vehicle combinations appropriate for those state highways or portion of highways, affected by this section, that cannot safely accommodate trailers or semitrailers of the maximum kingpin-to-rearmost axle distances permitted under Section 35400. The department shall erect suitable sights appropriately restricting truck travel on those highways, or portions of highways.”

ATTACHMENT D

Mapping of Frequency of Stuck Vehicles on SR 108 By Location

DIST	COUNTY	ROUTE	KILOMETER POST TOTAL PROJECT	SHEET TOTAL
09	MNO	108		

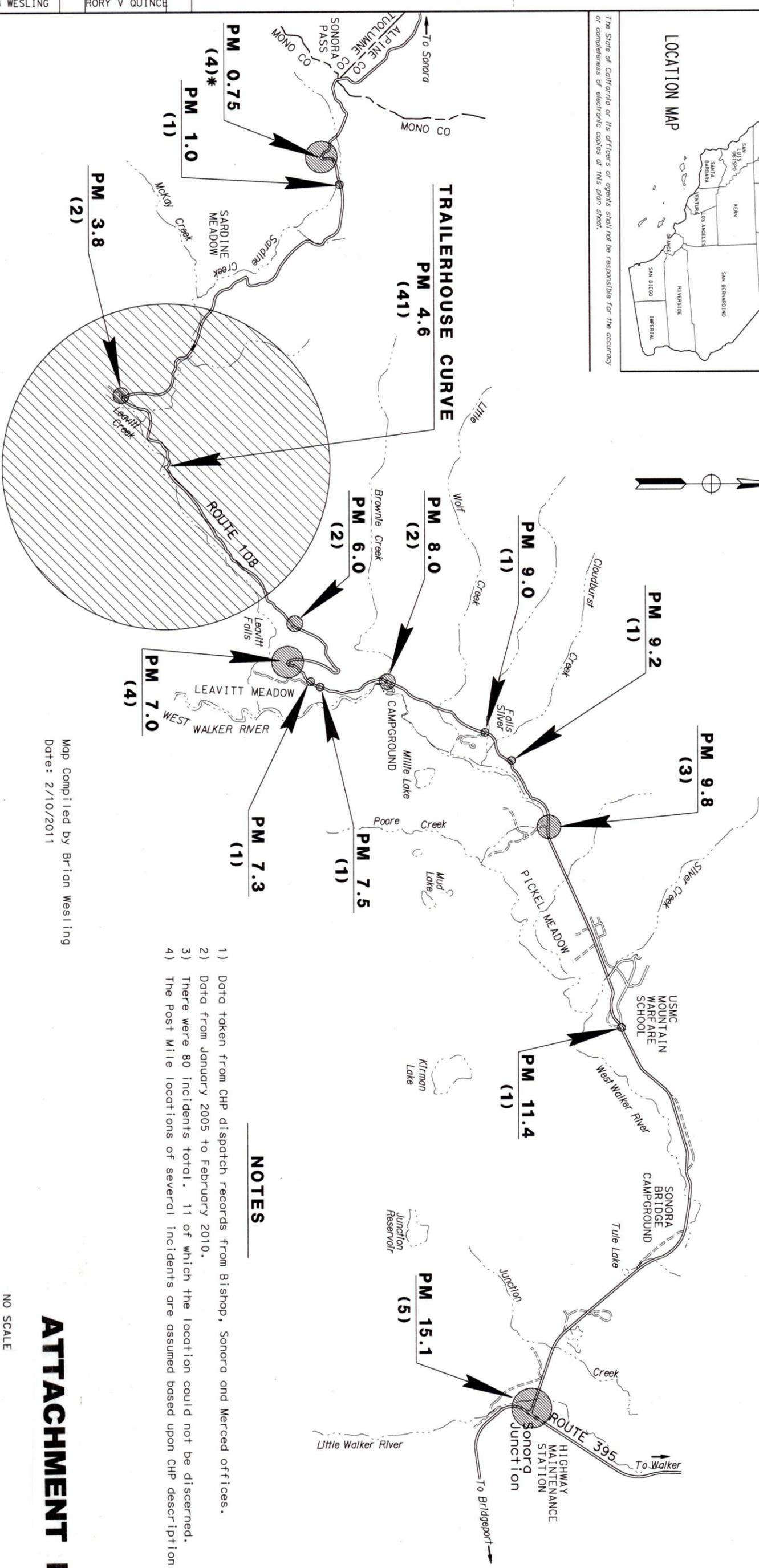


The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

MAPPING OF FREQUENCY OF STUCK VEHICLES ON SR 108 BY LOCATION

LEGEND

- ⊙ = One Incident of a Stuck Vehicle
(Size of circle is proportional to frequency of stuck vehicles)
- PM X.X = Top Number is the Post Mile
- (X) = Bottom Number is the Number of Stuck Vehicles
- * = CHP reports say "just east of summit" PM 0.75 is assumed.



NOTES

- 1) Data taken from CHP dispatch records from Bishop, Sonora and Merced offices.
- 2) Data from January 2005 to February 2010.
- 3) There were 80 incidents total. 11 of which the location could not be discerned.
- 4) The Post Mile locations of several incidents are assumed based upon CHP description.

PROJECT ENGINEER	DATE	PROJECT MANAGER	DATE
B WESLING		RORY V QUINCE	

Map Compiled by Brian Wesling
Date: 2/10/2011

ATTACHMENT D

NO SCALE

ATTACHMENT E

Summary of CHP Dispatch Logs – Stuck Vehicles

Summary of CHP Dispatch Logs - Stuck Vehicles
2/10/2011

Incident #	Post Mile	Location	Incident	Vehicle Type	Duration of Hwy Blockage	Trailer Weight	Notes
26	0.75	JEO pass	Block	Type 9	5	67k#	PM 0.75 assumed
14	0.75	JEO summit	Block	53' T-9	5.5	40k#	PM 0.75 assumed
32	0.75	JEO summit	Block	Type 9	3		PM 0.75 assumed
55	0.75	JEO summit	Block	Type 9	?		PM 0.75 assumed
39	1	PM 1	Block	Type 9			No Chains - Escorted Down Hill
75	3.8	Leavitt Lake	Block	Type 9			
76	3.8	Leavitt Lake	Block	Type 9	5	70k	
49	4.5	In Curves		46' T-9	3		PM 4.5 is assumed
5	4.5	PM 4.5	Block	Type 9	2		
6	4.5	PM 4.5	Block	53' T-9	4		Tried 3 pt Turn in dirt and Jack Knived
7	4.5	PM 4.5	Block	bus	4.5		
11	4.5	PM 4.5	Block	53' T-9	5		
12	4.5	PM 4.5	Block	2 axle van	1.5		
16	4.5	PM 4.5	Block	Type 9	5	7k#	
18	4.5	PM 4.5	Block	53' T-9	3	20k#	
25	4.5	PM 4.5	Block	Type 9	?		
27	4.5	PM 4.5	Block/2	Type 9	3.5	35k	
29	4.5	PM 4.5	Block/2	53' T-9	1.5	76k	
30	4.5	PM 4.5	Block	Type 9	6		
34	4.5	PM 4.5	Block/2	Type 9	2		
38	4.5	PM 4.5	Block	Type 9	1		
44	4.5	PM 4.5	?	Type 9	3	?	Big Rig
46	4.5	PM 4.5	Block	50' T-9	1	e	
47	4.5	PM 4.5	Block	Type 9	2		
48	4.5	PM 4.5	Block	53' T-9	2.5		Managed U-turn
52	4.5	PM 4.5	Block	Type 9	2		
53	4.5	PM 4.5	Block	?	0.5		
54	4.5	PM 4.5	Block	Type 9	0.3		
56	4.5	PM 4.5	Block	53' T-9	2.5	42k	
57	4.5	PM 4.5	Block	53' T-9	3.5	19k	
59	4.5	PM 4.5	Block	53' T-9	5	12k	
62	4.5	PM 4.5	Block	53' T-9	12	44k	
64	4.5	PM 4.5	Block	53' T-9		18k	
65	4.5	PM 4.5	Block	53' T-9	1		
66	4.5	PM 4.5	stuck	Type 9	4	30k	
67	4.5	PM 4.5	stuck	Type 9	1.5		
68	4.5	PM 4.5	Block/2	53' T-9	1.5	10k	
70	4.5	PM 4.5	Block	Type 9	1		
72	4.5	PM 4.5	Block	Type 9	1.5		
77	4.5	PM 4.5	Block	48'	4		Towed from the West
78	4.5	PM 4.5	Block	53' T-9	3	e	
79	4.5	PM 4.5	Block		3		
80	4.5	PM 4.5	Block				
13	4.5	PM 4.5	Block	Type 9	2.5		Towed from the West
81	4.5	tollhouse?	Block	Type 9			
45	4.5						same as 44
60	4.5						same as 59

Summary of CHP Dispatch Logs - Stuck Vehicles
2/10/2011

Incident #	Post Mile	Location	Incident	Vehicle Type	Duration of Hwy Blockage	Trailer Weight	Notes
63	4.5						same as 62
41	6	PM 6.0	Block/2	53' T-9	0.5	22k	EB
42	6	PM 6.0			5		pg 41 see note about duration
37	7	PM 7.0	Stuck	Type 9			Driver managed u-turn
71	7	PM 7.0	Block	Type 9	2.5		
83	7	PM 7.0	Block	Type 9			
40	7	PM 7.0	Block	5th Whl	?		
73	7.3	Pack Station	Block	Type 9	0.3		
4	7.5	JEO Leavitt Meadow	Block	53' T-9	1.5	e	
24	8	PM 8	Stuck	Type 9			CT assisted
28	8	PM 8	Block	Type 9	4		
74	9	PM 9	Block	Type 9	2.5		
50	9.2	7000' elev	Block/2	40' T-9	0.5		
20	9.8	JWO Base	Block				??
23	9.8	JWO Base	Stuck	53' T-9			Trying to U-turn
82	9.8	JWO Main Gate					
9	11.4	Marine Base	Block	Type 9	0.5		
36	15.1	395					
43	15.1	395					
61	15.1	395					
69	15.1	395					
22	15.1	108@395	?	Type 9			Not Blocking
21		?	Block	Type 9	1.5	?	
31		?	Block	Type 9	2		Trying to U-turn
33		?	Block/2	Type 9	2		
35		Billie Mine					Cement Mixers unable to make grade
8		Moving	Slow	53' T-9	na		
10		Unknown	Block	Type 9	1		
15		Unknown					Duplicate of 1814/1910
17			Block	Type 9	3		
19							Slippery Road - not specific
51							Unknown
58							

Legend

JWO = Just West Of
JEO = Just East Of

Data from CHP dispatch records from Bishop, Sonora and Merced offices.

Data from January 2005 to February 2010

The Post Mile locations of several incidents are assumed based upon CHP description.

ATTACHMENT F

Letters of Support

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

Bridgeport Area
125 Main Street
Post Office Box 158
Bridgeport CA, 93517-0158
(760) 932-7995
(800) 735-2929 (TT/TDD)
(800) 735-2922 (Voice)



March 25, 2015

File No.: 820.14702.18227

Ms. Terry Erlwein
District Traffic Operations Engineer
California Department of Transportation, District Nine
500 S. Main Street
Bishop, CA 93514-3423

Dear Ms. Erlwein:

The California Highway Patrol (CHP) Bridgeport Area recently reviewed the California Department of Transportation's draft resolution report entitled "Truck Restriction Report California State Route 108." This proposal would prohibit truck/trailer combination traffic on State Route (SR) 108 through Sonora Pass for vehicles in excess of 38 feet, kingpin to rear axle. According to the report, "This restriction would prohibit all STAA [Surface Transportation Assistance Act] sized vehicles and the majority of the CA [California] legal sized trucks."

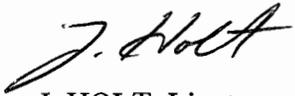
Large truck/trailer combination traffic on SR-108 through Sonora Pass has been a historic problem for the CHP Bridgeport Area. State Route 108 has extreme grades and curves, and is generally not conducive to large truck/trailer combination traffic. As the report notes, "According to Bishop, Sonora and Merced CHP dispatch records, stuck trucks have blocked SR-108 for one to six hours, approximately eighty separate times between January 2005 and February 2010 [...]." Each one of these disabled large truck/trailer combinations that occurs within Mono County requires a response from the CHP Bridgeport Area, and generally results in lengthy roadway closures. These closures present a significant safety hazard to the motoring public, the involved truck driver and the officers who respond. Additionally, these roadway closures usually produce extended traffic delays, deplete and limit CHP resources within the Bridgeport Area, and cause avoidable overtime expenditures to CHP.



Ms. Terry Erlwein
March 25, 2015
Page 2

In essence, this proposal would allow the motoring public to travel safely over SR-108 (Sonora Pass) and greatly assist the CHP Bridgeport Area. Therefore, the California Highway Patrol Bridgeport Area is in full support of the proposed truck restriction on SR-108 within Mono County.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Holt". The signature is written in a cursive style with a large, sweeping initial "J".

J. HOLT, Lieutenant
Commander

cc: Inland Division

Erlwein, Terry J@DOT

From: Jim Leddy [jleddy@mono.ca.gov]
Sent: Monday, April 27, 2015 3:34 PM
To: Erlwein, Terry J@DOT
Subject: FW: SR 108 truck restriction report
Attachments: image003.gif; image004.png

[Here is feedback:](#)

Jim:

The report looks good. Our comments (with input from Wendy and Gerry) are minor, as follows:

- The second paragraph on the page 3 describes the term "off-tracking," and all or a portion of the paragraph could maybe be moved earlier in the document to the first time the term is used.
- Attachment B, the Mono County draft Resolution, is incomplete (only has page 1).
- On page 5, the text should probably reflect the Attachment B Resolution regarding the project qualifying for CEQA exemptions 1, 8, 11 and the general rule exemption.
- Typo on the Antelope Valley RPAC on page 7.
- The map in attachment D needs to be re-sized to fit the page.

Thanks

Scott

[And](#)

My only comment would be on the second line of page 3, the report references "Tow trucks from Bridgeport or Walker..." There is no tow service in Bridgeport. It should read "Lee Vining or Walker"

Other than that, I have nothing to add other than I fully support the truck restriction on 108.

Ingrid Braun
Mono County Sheriff-Coroner

Jim Leddy

County Administrative Officer
Mono County
PO Box 696
Bridgeport, CA 93517
(760) 932-5414 Bridgeport
(760) 924-1703 Mammoth Lakes
(707) 529-4510 cell

Erlwein, Terry J@DOT

From: John Vallejo [jvallejo@mono.ca.gov]
Sent: Thursday, February 26, 2015 12:36 PM
To: Erlwein, Terry J@DOT
Cc: Jim Leddy; Sburns@mono.ca.gov
Subject: MCMWTC SR 108 and Truck traffic
Attachments: image001.jpg; image002.png; 01 20 2015 Caltrans request for limitation of truck traffic on SR 108 Cover memodocx.docx; SR 108 stuck vehicles map.pdf

FYI from the MWTC below.

John-Carl Vallejo
Deputy County Counsel
County of Mono
P.O. Box 2415
Mammoth Lakes, CA 93546
760.924.1712 (Phone)
760.924.1701 (Fax)

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-----Original Message-----

From: Power Civ Douglas E [mailto:douglas.power@usmc.mil]
Sent: Monday, January 26, 2015 1:17 PM
To: Jim Leddy
Subject: MCMWTC SR 108 and Truck traffic

Jim, from a mutual aid perspective, a jack-knifed big-rig is considered an accident even though it may not involve a collision. Consequently, they are a drain on our resources because our FD is usually the first on scene, whether or not the mono-county dispatcher mentions human casualties. If the accident blocks 108 then certainly timely EMS ground response is degraded for service calls further uphill. Also if the road is closed it can limit access to the training area.
So, overall this proposed change restricting the size/length of the trucks is good for us. We fully support this effort. Please let me know if you need anything else from me.

R/S
Doug
Douglas E. Power
Community Plans and Liaison Officer
Marine Corps Mountain Warfare Training Center Bridgeport, CA 93517
(760) 932-1661
douglas.power@usmc.mil

ATTACHMENT G

Process for CVC Restriction and Recommendations for the Final Truck Restriction Report

TRUCK RESTRICTION PROCESS

The following suggested procedures are in accordance with CVC Sections 21101, 35701, 35702 and their related sections.

1. **Local Agency Prepares a Draft Truck Restriction Ordinance or Resolution.** The local agency prepares a draft ordinance or resolution of the proposed truck restriction and informs the appropriate [Caltrans District Truck Coordinator](#). The ordinance or resolution must cite the CVC Section providing the justification for the truck restriction. Caltrans districts should notify the Headquarters Office of Truck Services (see Caltrans Contacts at end of these guidelines) in writing as soon as possible after learning of a truck restriction proposal. Districts should request and forward copies of local agencies' draft ordinances or resolutions to Headquarters Office of Truck Services, Legal and Environmental Programs for review.
2. **Local Agency Prepares Initial Study.** The initial study provides the information necessary to justify the proposed restriction, and may also indicate if the proposed restriction is subject to California Environmental Quality Act (CEQA) review. The initial study allows the preliminary submittal of information by Caltrans, local agencies, and California Highway Patrol staff, as well as initial comments from the trucking industry, affected industries, and citizen groups. It should include the proposed restriction type, location, existing conditions, alternatives, maintenance and safety considerations on the alternative route(s), any initial public comment, and conditions that may involve further CEQA compliance.
3. **Local Agency Provides Public Review and Comment Period.** During the public review period, the local agency gives public notice of the proposed truck restriction, and public hearings can be advertised and held. All documentation acquired to date regarding the proposed truck restriction should be available for public review prior to the public hearing.
4. **Local Agency Receives Comments and Prepares Final Truck Restriction Report.** The local agency considers all comments received. If the local agency still wants to proceed with the proposed restriction, a final truck restriction report is prepared and forwarded to the Caltrans district office. This final report includes any comment revisions, and the draft restriction ordinance or resolution. The Caltrans District Director forwards the report with the District's recommendations to the Caltrans Traffic Operations Division Chief at Headquarters. (See the checklist for the contents of the truck restriction report, following these guidelines).
5. **Caltrans Traffic Operations Submits Recommendation to the Director's Office.** The Traffic Operations, Office of Truck Services, in cooperation with Caltrans Headquarters Environmental and Legal Divisions, prepares a recommendation regarding the truck restriction and submits it to the Caltrans Director's Office.
6. **Caltrans Director Issues Written Approval.** If approved, the Caltrans Director issues a written approval of the draft ordinance or resolution for the truck restriction.
7. **Local Agency Passes Final Truck Restriction Ordinance or Resolution.**
8. **Local Agency Erects Restriction Signs, and Restriction is Enforced.**

TRUCK RESTRICTION REPORT CHECKLIST

Approval of restriction requests is contingent upon a complete identification and documentation of impacts on highway safety, structural integrity, environment and operational efficiency. Some items may not apply. This checklist is a guide only.

I. COVER

_____ The document cover clearly states the Caltrans District, County, Route and postmile limits of the proposal. Any proposed local ordinance or resolution number should also be placed on the cover.

II. PROPOSAL STATEMENT

_____ The proposed restriction and references to specific codes, regulations and any local ordinances or resolutions are clearly presented in the proposal statement. If exemptions to general rules apply; cite appropriate statutory law or regulations.

III. JUSTIFICATION FOR THE PROPOSAL

Justification depends on rationale: safety, hazardous materials, bridge weight limit, construction zones, seasonal operation, etc.

_____ Analyses of present and future safety, operational (capacity, geometrics) and/or structural adequacy supporting the restriction. A description of existing versus proposed conditions. Include supporting data tables, maps and/or photographs.

_____ List of alternatives considered, e.g. truck advisory, restriction of 39-foot vehicles, or restriction of all trucks over a certain gross weight. Statement of the proposed restriction selected.

_____ Analysis of environmental considerations for the restriction proposal with an explanation of impacts and mitigation measures.

_____ Existing and future land use plans.

_____ Analysis of the impact on interstate and intrastate commerce. Analysis of the economic impact on communities, shippers and trucking companies due to increased travel distances.

_____ Analysis and recommendations of any alternative routes that can safely accommodate any California legal commercial motor vehicles and serve the proposed restriction area.

_____ Evidence of consultation with the local or adjoining state governments affected by the proposed restriction.

_____ Results of any public hearings.

IV. APPENDICES

_____ Copies of any draft local restriction ordinances or resolutions.

_____ Copies of any supportive correspondence or documents for the restriction.

_____ Minutes of public hearings (audio or videocassette tape).