CALIFORNIA DEPARTMENT OF TRANSPORTATION

MOTORSPORTS EXEMPTION VEHICLE FIELD TEST

Report to the Legislature

Mandated by Vehicle Code Section 35401.5(g)(2)(A)

Prepared by

Office of Traffic Engineering
Division of Traffic Operations
California Department of Transportation

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EXECUTIVE SUMMARY

Vehicle Code Section 35401.5(g)(2)(A), effective January 1, 2013, mandates the California Department of Transportation (Caltrans) to test motorsports trucks with 56-foot semitrailers on various segments of the National Network and routes leading to the motorsports race tracks, and to report findings and recommendations to the Legislature by January 1, 2014. Five locations were selected for field investigations – four race tracks and one truck stop. The number of locations and events selected for testing was limited to five for the following reasons: (1) time constraints due to the report due date, which allowed Caltrans to collect the field data from February to August only; and (2) scheduling constraints due to the racing events being held at the selected race tracks only once per year. The field investigations included testing a motorsports truck on routes, ramps, and intersections leading to motorsports events, and determining the types and measurements of the vehicles attending the events.

This report provides (1) the locations of the investigations, (2) the test vehicle measurements, (3) the criteria used to determine whether the vehicle passed or failed, (4) the test results, (5) the measurements of other vehicles in attendance, and (6) suggested improvement projects where needed. A motorsports truck with a 56-foot semitrailer was used as a test vehicle along the routes at two of the four selected race tracks – Pomona Raceway and Sonoma Raceway. Vehicles parked at the five motorsports events were measured, including motorsports trucks, recreational vehicles (RVs), and toterhomes. A toterhome is a motorhome on a truck chassis (see definitions on Page 4).

The California Highway Patrol reviewed the pass/fail criteria and the field test results, and made recommendations that were incorporated in this report.

Based on the field test results, this report recommends that Vehicle Code Section 35401.5(g)(2)(A) be reauthorized with the following conditions:

1. Field test all remaining routes at sanctioned race tracks in California. To expedite testing, request that interested racing associations (National Association for Stock Car Auto Racing (NASCAR), the National Hot Rod Association (NHRA), and IZOD IndyCar) prioritize the race tracks for testing. In addition, request that the racing associations provide a test vehicle and driver independent of future race events. This will allow Caltrans to evaluate the prioritized race tracks within approximately two years. The estimated one-time cost to evaluate the remaining 14 transition routes is $300,000.

2. Consider extending the sunset date for the authorizing legislation to January 1, 2018. This extension would allow Caltrans to complete its evaluation and, when cost effective and when funding is identified, implement the required roadway improvements. Caltrans will prioritize these improvement projects, and may temporarily remove the lower-use routes from the approved motorsports route list.

3. Implement roadway improvement projects at the test locations where the motorsports truck encroached into an adjacent or opposing lane. Caltrans estimates the cost of these roadway improvements at the two sites tested at $2.8 million.

4. Develop new approved routes and re-examine existing routes from the National Network to the race tracks once every five years. The estimated cost to re-review the transition routes once every five years is $300,000.

5. Address the issues for RV and motorhome combinations that are longer than the legal limit of 65 feet at the motorsports events.

6. Address the issues for toterhome combination lengths at the motorsports events.

INTRODUCTION

California hosts a number of motorsports racing events throughout the year. The participants include: (1) professional race teams that normally haul their racing vehicles in a truck tractor-semitrailer combination, (2) non-professional hobbyists that normally haul their racing vehicles in a motorhome-trailer combination, and (3) merchandisers that often haul their products and equipment in a trailer towed by a toterhome. The 56-foot semitrailer motorsports exemption applies to events that are sanctioned by the member organizations of the Automobile Competition Committee for the United States.

In January 2013, Vehicle Code Section 35401.5(g)(2)(A) became effective and added a 56-foot semitrailer exemption to the existing 46-foot kingpin-to-rear-axle (KPRA) exemption for motorsports trucks. The bill also allows the motorsports trucks to access the interstates and the State routes that allow the longer interstate trucks. This law will sunset on January 1, 2016. The law also requires Caltrans to perform field tests at various locations and submit a report to the Legislature by January 1, 2014, with recommendations on whether the exemption should be reauthorized**.** (See Appendix A, "Current Motorsports Exemption.")

The motorsports exemption applies to truck tractor-semitrailers, not to recreational vehicles.

DEFINITIONS

Interstate Truck

"Interstate truck" refers to the truck tractor-semitrailer dimensions allowed by the 1982 federal Surface Transportation Assistance Act (STAA). For dimensions of interstate trucks, see Table 1, Truck Types #2 and #3. (See Appendix B, green-colored trucks)

Interstate trucks are often referred to as "STAA trucks." In this report, the term "interstate truck" will be used. Interstate trucks may travel on virtually all interstate routes and on State or local routes where interstate truck access has been approved and the required signs are posted. (See Appendix C, "Interstate Truck Signs")

California Legal Truck

The "California Legal truck" is allowed on (1) virtually all interstates and State routes, and on (2) many county and city roads (see Appendix C, "Truck Route Sign"). This truck route sign is posted on city and county roads that allow the California Legal trucks. See Table 1 below for the dimensions of California Legal truck (see Appendix B, black-colored trucks).

Motorsports Truck

In this report, a "motorsports truck" refers to a motorsports-exempted truck tractor-semitrailer that is allowed a maximum KPRA of 46 feet. Vehicle Code Section 35401.5(g)(2)(A) allows this truck to also have a maximum semitrailer length of 56 feet. See Table 1 below for the dimensions of the motorsports truck. A motorsports truck has a maximum overall length of 65 feet if a California Legal truck, or unlimited overall length if an interstate truck.

Table 1-Maximum Truck Lengths

	TRUCK TYPE	MAXIMUM OVERALL COMBINATION (ft)	MAXIMUM KPRA (ft)	MAXIMUM SEMITRAILER (ft)
1	Motorsports Trucks	Unlimited	46	56
2	Interstate Trucks	Unlimited	Unlimited	48
3	Interstate Trucks	Unlimited	40	53
4	Ca Legal Trucks	65	40	Unlimited

Motorsports Route

The term "motorsports route" is defined as the route that the motorsports trucks travel on to the race track. Motorsports trucks may operate on the National Network and State Terminal Access routes and on other Caltrans-authorized routes.

National Network

The "National Network" consists primarily of interstate routes. For the National Network routes, see the green routes on the Truck Route Map at:
<http://www.dot.ca.gov/hq/traffops/engineering/trucks/truck-length-routes.htm#step-2>.

Terminal Access

The "Terminal Access" (TA) routes are State and local routes that allow interstate trucks. For the State TA routes, see the blue routes on the Truck Route Map at:
<http://www.dot.ca.gov/hq/traffops/engineering/trucks/truck-length-routes.htm#step-2>. The local city and county TA routes are posted as maps or lists on city and county websites.

Transition Route

In this report, the term "transition route" is defined as the route authorized for use by motorsports trucks between the track entrance and the nearest interstate route. "Transition route" includes any authorized State routes, local roads, and connectors, such as ramps, interchanges and intersections, including those authorized by Caltrans in cooperation with local governments after the first motorsports exemption became effective in 1997. For the Motorsport Transition Routes Maps and Descriptions, see:
<http://www.dot.ca.gov/hq/traffops/engineering/trucks/exemptions/motorsports.htm>.

Curve

In this report, "curve" includes turns at intersections and on-ramps where the test vehicle was evaluated.

Motorhome

A "motorhome" is a house car as defined in Vehicle Code Section 362 (see Appendix D, "Motorhomes and House Cars").

House car

A "house car" is defined in Vehicle Code Section 362 and is copied here in part: "…a motor vehicle originally designed, or permanently altered, and equipped for human habitation, or to which a camper has been permanently attached..." (see Appendix D, "Motorhomes and House Cars").

Toterhome

A "toterhome" is a motorhome built on a truck chassis with a living conversion behind the cab. Toterhomes are designed to haul fifth wheel or gooseneck trailers. For more details on toterhomes, see "Related Issue–Toterhomes" on page 13 and Appendix E.

Recreational Vehicle (RV)

According to Health and Safety Code Section 18010, a "recreational vehicle" (commonly referred to as an "RV") is a motorhome, travel trailer, truck camper, or camping trailer with a maximum internal area of 320 square feet, and a maximum gross area of 400 square feet (see Appendix D, "Recreational Vehicle"). Note: To comply with the maximum gross area requirements in this definition, an RV trailer that is 8.5 feet wide cannot exceed 47 feet in length. This maximum length for an RV is significantly less than the 56-foot semitrailer length allowed in the motorsports exemption.

BACKGROUND

Motorsports Trucks

Beginning in 1997, federal and State law allowed a motorsports truck to have a KPRA length of up to 46 feet while traveling on Caltrans-authorized transition routes from the National Network to sanctioned motorsports events (see Appendix A, "Previous Motorsports Exemption").

In 2012, California added a 56-foot semitrailer exemption to the existing 46-foot KPRA limitation, and allowed the motorsports trucks to access both the National Network and the Terminal Access routes. The new exemption became effective on January 1, 2013, and will sunset on January 1, 2016. This new exemption also requires Caltrans to perform field tests at

various locations and submit a report to the Legislature by January 1, 2014, with recommendations on whether the exemption should be reauthorized**.**

FIELD TEST LOCATION SELECTION PROCESS

California has 16 sanctioned race tracks with authorized transition routes allowing access for motorsports trucks. Vehicle Code Section 35401.5(g)(2)(A) mandates that Caltrans test the motorsports truck with 56-foot semitrailers at various locations. The number of locations and events selected for testing was limited to five for the following reasons: (1) time constraints due to the report due date, which allowed Caltrans to collect the field data from February to August only; and (2) scheduling constraints due to the racing events being held at the selected race tracks only once per year.

Selection of Testing Locations

Four racing events and one truck stop were selected based on these five criteria:

1. Tracks that have transition routes with sharper curves and/or narrower pavement width.
2. Major events that attract the longer trucks, such as those with the 56-foot semitrailers, e.g., those events sponsored by major sanctioning organizations such as the National Association for Stock Car Auto Racing (NASCAR), the National Hot Rod Association (NHRA), and IZOD IndyCar.
3. Events scheduled in spring or summer of 2013, in order to provide time for preparing the report by fall of 2013.
4. Tracks with cooperative staff that were willing to arrange for a test vehicle.
5. Locations where motorsports trucks gather.

Table 2 lists the locations selected for field tests and visits.

Table 2 - Locations Selected

#	LOCATION	CITY / COUNTY	DATES	EVENT TYPE
1	Pomona Raceway	Pomona / Los Angeles	February 12, 2013	NHRA
2	Grand Prix	Long Beach / Los Angeles	April 18, 2013	IZOD and LeMans
3	49'er Truck Stop	Sacramento / Sacramento	June 19, 2013	Parade
4	Sonoma Raceway	Sonoma / Sonoma	June 20, 2013	NASCAR
5	Sonoma Raceway	Sonoma / Sonoma	July 24, 2013	NHRA

TEST VEHICLES

The vehicles selected for the field tests were based on the interstate STAA design vehicle in the Caltrans Highway Design Manual; Figure 404.5A (see Appendix F). This truck tractor has a 23-foot wheelbase that is commonly seen at racing events, as verified by measurements taken at the race tracks. The measurements of the test vehicle used at Pomona are shown in Table 3 and Appendix G. The dimensions of the test vehicles used at Pomona and Sonoma are essentially identical.

Table 3 - Test Vehicle Dimensions

Truck Tractor Wheelbase (measured from Axle 1 to center of tandems) (ft)	KPRA (ft)	Semitrailer Length (ft)	Overall Length (ft)	Steering Angle
23	46	56	81	NA*

NA = Not available

FIELD TEST PASS/FAIL CRITERIA

The criteria used to determine whether the test vehicle passed or failed at each test curve were based on the criteria listed in Topic 404.2 "Design Considerations" in the Caltrans Highway Design Manual dated May 7, 2012 (see Appendix H). The terms "must," "must not," and "may not" indicate an absolute and must be followed. The terms "should," "may," or "can" indicate a permissive standard. A "shall" that is not bolded is also a permissive standard. Engineering judgment may override permissive standards where justified. However, "**shall**" that is bold is mandatory. Table 4 lists the guidelines in the HDM that were potentially pertinent to this field test. Most of the guidelines in Table 4 are direct quotes from the HDM, as shown with quotation marks; only a few phrases were edited to improve clarity and avoid technical terms.

Table 4 - Guidelines in HDM Topic 404.2

#	Geometry	Guideline	Requirement
1a	Traveled way	At intersections, the tires and/or body of the vehicle should "not cross into any portion of the lane for opposing traffic."	"Should" is permissive, subject to engineering judgment.
1b	Traveled way	"Along the portion of roadway where there are no turning options, vehicles are required to stay within the lane lines." The body and tires **"shall stay within the lane…"**	"**Shall**" bold is mandatory.
2	Shoulders	Both tracking width and swept width lines may encroach onto paved shoulders to accommodate turning. "… the shoulder pavement structure should be engineered to sustain the weight of the design vehicle."	"May" is permissive. "Should" is permissive, subject to engineering judgment.

3	Curbs and Gutters	"Tires may not mount curbs. If curb and gutter are present and any portion of the gutter pan is likewise encroached, the gutter pan must be engineered to match the adjacent shoulder pavement structure."	"May not" and "must" are absolute, and must be followed.
4	Edge of Pavement	"To accommodate a turn," the body "may cross beyond the edge of pavement provided there are no obstructions." However, the tires "shall remain on the pavement structure, including the shoulder, provided that the shoulder is designed to support vehicular traffic."	"May" is permissive. "Shall" which is not bold is permissive, subject to engineering judgment. However, no tires would be allowed to leave the pavement.
5	Bicycle Lanes	"Vehicles are permitted to cross a bicycle lane to initiate or complete a turning movement." "To accommodate turn movements, e.g., at intersections," both the tires and the vehicle body "may cross over the broken white painted bicycle lane striping in advance of the right-turn, entering the bicycle lane when clear to do so."	"May" is permissive.
6	Sidewalk	The vehicle body and tires "must not encroach onto sidewalks or any area where pedestrians are expected."	"May not" is absolute, and must be followed.
7	Obstacles	The vehicle body "may not encroach upon obstacles including, but not limited to, curbs, islands, sign structures, traffic delineators/ channelizers, traffic signals, lighting poles, guardrails, trees, cut slopes, and rock outcrops."	"May not" is absolute, and must be followed.
8	Appurtenances	Appurtenances, such as side mirrors, "should be considered."	"Should" is permissive, subject to engineering judgment.
9	Multiple Turn Lanes*	"When multiple turn lanes are proposed, the appropriate design vehicle template in the Caltrans Highway Design Manual should be used to ensure adequate lane width. The template should be applied to all turn lanes." Both the body and the tires "of the design vehicle should stay within each lane, and should not encroach into the adjacent turn lane(s)."	"Should" is permissive, subject to engineering judgment.

*This guideline for multiple turn lanes is pending inclusion in the Caltrans Highway Design Manual.

FIELD TESTS

The California Highway Patrol reviewed the pass/fail criteria and the field test results, and their recommendations are incorporated.

Field Test #1-Pomona Raceway – NHRA Event

The field test was performed on the transition route leading to and from the Auto Club Raceway in Pomona on February 12-14, 2013. In this report, the Auto Club Raceway will be referred to as the Pomona Raceway. Table 5 below lists the curves where the motorsports test vehicle was observed and videotaped, and the test results. The numbers in the Pass/Fail column in Table 5 refer to the numbered guidelines in Table 4 that are applicable for each test result (see Appendix I for location map).

Table 5-Pomona Raceway Curves and Test Results

#	CURVE		PASS/FAIL (HDM #)	COMMENTS
	FROM	**TO**		
1	NB Fairplex Drive	Pomona Raceway Entrance	PASS (1a) FAIL (1a) Private Property	**Traveled Way:** Vehicle cleared the intersection**.** **Traveled Way:** When entering into the raceway, the vehicle encroached into adjacent lanes over yellow lane lines. Failure by encroaching across the yellow lane lines at this location is outside State or local government jurisdiction.
2	EB I-10	NB Fairplex Drive	PASS (9)	**Multiple Turn Lanes:** The vehicle occupied two of the three turn lanes during and after the turn. Though the vehicle should not encroach into the adjacent turn lane, this is not a mandatory standard; using two lanes is acceptable at this intersection if done safely.
3	SB Fairplex Drive	EB I-10	FAIL (1a) PASS (1a)	**Traveled Way:** Before the turn, on a single-turn lane, the vehicle occupied about 12 inches of the adjacent through-lane. Encroaching into an adjacent lane before the turn is not acceptable. It is recommended that more space be provided for trucks turning left by widening the single left-turn lane. **Traveled Way:** After the turn, the vehicle occupied two lanes, including the merging lane from NB Fairplex Drive to EB I-10. However, encroaching into adjacent lanes during and after the turn is acceptable at this intersection if done safely.

4	SB Fairplex Drive	WB I-10	PASS (1)	**Traveled Way:** The vehicle stayed within its lane.
5	WB I-10	NB Fairplex Drive	FAIL (1a) FAIL (9)	**Traveled Way:** After the turn, the vehicle's left front tire crossed the double yellow line by about four inches. An improvement project is recommended at this location to widen the lane. **Multiple Turn Lanes:** The vehicle used the left-most lane for the right turn. The right rear tire encroached into the corner of the adjacent lane by about one foot. An improvement project on this curve will improve this turn movement.
6	Pomona Raceway Exit	SB Fairplex Drive	PASS (1a)	**Traveled Way:** The vehicle stayed within its lane.

Field Test #1-Discussion

The motorsports truck passed the field tests on the straight segments of the routes where there are no turning options (see Table 4 #1b, "Traveled Way"), and on three of the six curves.

The failed curves were Curves #1, #3 and #5. On Curve #3, from southbound Fairplex Drive to eastbound I-10, the vehicle occupied about 12 inches of the adjacent through-lane before the turn; a project is recommended at Curve #3 to widen the single left-turn lane before the turn, and also move back a sidewalk curb at the eastbound I-10 ramp entrance, provided that the crosswalk will still comply with American Disabilities Act requirements.

On Curve #5, from westbound I-10 to northbound Fairplex Drive, the test vehicle crossed a double yellow line by approximately four inches when completing the turn. A ramp alteration at Curve #5 is recommended to increase the width of the turning lanes before and after the turn.

The improvement project for Curve #1 is the responsibility of the Raceway.

Field Test #2-Sonoma Raceway* – NHRA Event

On July 24, 2013, the field test was performed on the transition route leading to and from the Sonoma Raceway, which included the State Route (SR) 121 and SR 37 interchange. The test vehicle was essentially identical to the test vehicle at the Pomona Raceway which is described in "Test Vehicles" on Page 6. Table 6 below lists the curves where the motorsports test vehicle was observed and videotaped, and the test results. The numbers in the Pass/Fail column in Table 6 refer to the numbered guidelines in Table 4 above that are applicable for each test result (see Appendix J for location maps).

*The Sonoma Raceway was formerly called Sears Point Raceway and Infineon Raceway.

Table 6-Sonoma Raceway Curves and Test Results

#	CURVE		PASS / FAIL	COMMENTS
	FROM	**TO**		
1	WB 37	NB 121	PASS (2)	**Shoulders:** The vehicle's right rear tires encroached onto four out of five feet of shoulder. Use of paved shoulder is allowed.
2	NB 121	Sonoma Raceway Entrance	PASS (1a)	**Traveled Way:** The vehicle stayed within its lane.
3	Sonoma Raceway Exit	SB 121	FAIL (1a) Private Property PASS (9)	**Traveled Way:** The vehicle occupied both turn lanes before making the turn. Encroaching into adjacent lanes before the turn is not acceptable. However, the failure is on private property and is outside State and local government jurisdiction. **Multiple Turn Lanes:** The vehicle occupied both turn lanes during and after the turn, while also using the entire right shoulder. Though the vehicle should not encroach into the adjacent turn lane, this is not a mandatory standard; using two lanes at this intersection is acceptable if done safely.
4	SB 121	WB 37	PASS (1a)	**Traveled Way:** The vehicle stayed within its lane.
5	EB 37	NB 121	PASS (2)	**Shoulders:** The vehicle's right rear tires encroached onto the paved shoulder. Use of paved shoulder is allowed.
6	SB 121	EB 37	FAIL (9) PASS (2)	**Multiple Turn Lanes:** The vehicle occupied both turn lanes before the turn. Encroaching into an adjacent lane before the turn is not acceptable. An improvement project is recommended at this location to widen the turn lane. **Shoulders:** After the turn, the vehicle encroached onto the shoulder. Use of paved shoulder is allowed.

Field Test #2-Discussion

The motorsports truck passed the field tests on the straight segments of the routes where there are no turning options (see Table 4 #1b, "Traveled way"), and on four of the six turn movements. Curve #3 failed because, before the turn, the truck occupied both lanes on the two-lane right turn from the track exit to southbound SR 121. However, these two lanes are on private property. Any improvement projects would be the responsibility of Sonoma Raceway.

Curve #6 failed because, before the turn, the truck occupied both lanes on the two-lane left turn from southbound SR 121 to eastbound SR 37. The following improvement project is recommended on this SR 121 exit ramp to reduce encroachment into adjacent left-turn lanes: consolidate two left turn lanes into one left turn lane.

FIELD VISITS TO MEASURE VEHICLES

Field Visit #1-Pomona Raceway – NHRA Event

The field test was performed on the transition route leading to and from the Auto Club Raceway in Pomona on February 12-14, 2013. During that visit, Caltrans staff measured the trucks at the Pomona Raceway. (Appendix K, Table 1, "Vehicle Dimensions at Pomona Raceway")

Most of the trucks measured at this NHRA event had 56-foot semitrailers and 46-foot KPRAs and, therefore, required the motorsports exemption in order to travel legally to this event. However, several trucks exceeded the 56-foot motorsports semitrailer exemption limit.

Field Visit #2-Long Beach – Grand Prix

A site investigation at the Grand Prix race track in Long Beach was held on April 18, 2013, to verify the types and sizes of trucks that attend this racing event. A field test was not performed at this event because the transition route from I-710 to the raceway is a major local arterial, and the on- and off-ramps on I-710 can easily accommodate the motorsports trucks (Appendix K, Table 2, "Vehicle Dimensions at Grand Prix Race Track") (see also Appendix L).

The trucks measured at this Grand Prix event had 53-foot semitrailers and 46-foot KPRAs and, therefore, required the motorsports exemption in order to travel legally to this event.

Field Visit #3-49'er Truck Stop – NASCAR Parade

A caravan of motorsports trucks traveled from Nevada to Sacramento on its way to a race at the Sonoma Raceway. On June 19, 2013, the trucks in the caravan stayed overnight at the 49'er Truck Stop. No truck testing was performed at this site, as it was not a race track. Caltrans staff measured three trucks at the 49'er Truck Stop. (Appendix K, Table 3, "Vehicle Dimensions at 49'er Truck Stop") On June 20, 2013, more than twenty motorsports trucks formed a parade in downtown Sacramento and drove around the State Capitol building. The parade route from the 49'er Truck Stop to downtown Sacramento and around the State Capitol is not an authorized motorsports transition route.

All three trucks measured had 53-foot semitrailers. The KPRAs were 46 feet or less and, therefore, required the motorsports exemption in order to travel legally to this event.

Field Visit #4-Sonoma Raceway – NASCAR Event

A field test was not performed on the transition route at the Sonoma Raceway at this NASCAR event because NASCAR did not provide a test vehicle. On June 21, 2013, Caltrans staff measured the vehicles at the Sonoma Raceway (Appendix K, Table 4, "Vehicle Dimensions at Sonoma Raceway - NASCAR Event").

The trucks measured at the NASCAR event had 53-foot semitrailers and 46-foot KPRAs and, therefore, required the motorsports exemption in order to travel legally to this event.

Field Visit #5-Sonoma Raceway – NHRA Event

On July 24, 2013, a field test was performed on the transition route leading to and from the Sonoma Raceway. During this visit, Caltrans staff measured the vehicles at the Sonoma Raceway (Appendix K, Table 5, "Vehicle Dimensions at Sonoma Raceway - NHRA Event").

Most of the trucks measured at this NHRA event had 56-foot semitrailers and 46-foot KPRAs and, therefore, required the motorsports exemption in order to travel legally to this event. One truck exceeded the 56-foot semitrailer length limit. Six of the 11 vehicles measured at the track were toterhome combinations, and two were RV's such as motorhomes with trailers.

CONCLUSIONS

The field test results were favorable for the motorsports exemption. At the two test sites, Pomona Raceway and Sonoma Raceway, the motorsports truck passed the field tests on all the straight segments of the routes where there are no turning options, and also passed nine of the 12 curves. The three failing curves were at (1) Pomona Curve #3, where the test vehicle in a single left-turn lane, fully encroached into an adjacent through lane, (2) Pomona Curve #5, where the test vehicle encroached into the opposing lane, and (3) Sonoma Curve #6, where the test vehicle fully occupied both turn lanes. Although some of the test trucks encroached into adjacent lanes at certain locations, some encroachment into adjacent lanes was considered to be acceptable based on the Caltrans Highway Design Manual criteria and engineering judgment.

Roadway improvement projects, such as re-striping, lane widening, and installing dotted intersection turn markings (known as "cat tracks") could correct the lane encroachments at Pomona Raceway and Sonoma Raceway. Due to time constraints, Caltrans was only able to field test the transition routes at two of the sixteen tracks listed on the Caltrans motorsports exemption web page. The transition routes at the other tracks should be tested as well.

Caltrans staff also observed that: (1) some RVs and motorhomes attending the event were towing a trailer and had a combination length over the 65-foot legal limit, and (2) a significant number of toterhomes attending the event had a trailer over 40 feet in length. The legal status of RVs, motorhomes, toterhomes, and their trailers will require a more in-depth evaluation.

RELATED ISSUE – TOTERHOMES

Toterhome Lengths

Many participants at the racing events travel in toterhomes. These can legally be up to 40 feet in length and can have a 30-foot wheelbase or longer. If the toterhome tows a trailer, the vehicle combination has a maximum allowed length of 65 feet. However, if the toterhome is considered a truck tractor (see "CHP Bulletin–RVs/Motorhomes" (see Appendix M), then the vehicle combination becomes an interstate truck with an unlimited overall length.

Motorsports Truck Exemption for Toterhomes

The motorsports truck exemption applies to vehicles that are involved with merchandising as well as those hauling race cars (see Appendix A). Some toterhome drivers haul race cars in their trailers, while some use their trailers to do business, such as selling auto parts, food, or souvenirs. Toterhomes doing business at events are covered under the exemption, provided that they are considered truck tractors (see Appendix M).

CHP Bulletin – RVs/Motorhomes

According to a California Highway Patrol (CHP) Bulletin, a motor vehicle with a large sleeper berth registered in another state as a recreational vehicle, towing a semitrailer and used in motorsports, would be considered a truck tractor as defined in the Vehicle Code if it complies with all commercial requirements, including log book, alcohol/controlled substance testing, fuel tax permit, etc. That means that an out-of-state commercial toterhome combination that is registered out of state as an RV would be eligible for the motorsports exemption and could, therefore, tow a 56-foot semitrailer (see Appendix M). However, the CHP Bulletin provides guidance for out-of-state RVs only, and not for RVs registered in California.

Toterhomes as Test Vehicles

The test vehicle selected for the field tests has a 23-foot wheelbase tractor. This is the standard truck tractor wheelbase for the interstate or STAA design truck in the Caltrans Highway Design Manual, and is also the most common truck tractor wheelbase at the racing events. However, if commercial toterhomes registered out of state are considered truck tractors by CHP, then the motorsports exemption would apply to them as well. Therefore, commercial toterhome combinations from out of state could be allowed unlimited length with the toterhome up to 40 feet in length, a wheelbase of 30 feet or more, and a semitrailer up to 56 feet. Toterhome combinations are longer than most interstate truck tractor-semitrailer combinations, and require more pavement width for turning.

Therefore, toterhome lengths should be considered when testing transition routes to racing events.

RECOMMENDATIONS

Caltrans recommends that Vehicle Code Section 35401.5(g)(2)(A) be reauthorized, provided that the following recommendations are completed and the issues are resolved before the reauthorization:

1. **Field Testing All Transition Routes**: Due to time constraints with this study, Caltrans could only analyze the transition routes at two race tracks. If Vehicle Code Section 35401.5(g)(2)(A) were to continue as law after the sunset date in 2016, then longer semitrailers can be expected to show up at all the race tracks. Therefore, the transition routes to all sanctioned race tracks in California should be tested using the HDM guidelines in Table 4. To expedite testing, request that interested racing associations (National Association for Stock Car Auto Racing (NASCAR), the National Hot Rod Association (NHRA), and IZOD IndyCar) prioritize the race tracks for testing. In addition, request that the racing associations provide a test vehicle and driver independent of future race events. This will allow Caltrans to evaluate the prioritized race tracks within approximately two years. The estimated one-time cost to evaluate the remaining 14 transition routes is $300,000 (excluding the cost of the motorsports truck and driver).

2. **Sunset Date:** Consider extending the sunset date for the authorizing legislation to January 1, 2018. This extension will allow Caltrans to complete its evaluation and implement the required roadway improvements, when cost effective and when funding is identified. Caltrans will prioritize these improvement projects, and may temporarily remove the lower-use routes from the approved motorsports route list.

3. **Roadway Improvements**: Roadway improvement projects should be planned on the transition routes as follows: (1) at Pomona Raceway, re-stripe a lane and move a curb, and (2) near Sonoma Raceway, re-stripe and/or widen the pavement on a turn lane. The suggested improvements are listed in "FIELD TESTS" on Page 8. Caltrans estimates the cost of these roadway improvements at the two sites tested at $2.8 million.

4. **Development of New Transition Routes:** The authorized transition routes are listed on the Caltrans motorsports truck exemption web page at: <http://www.dot.ca.gov/hq/traffops/engineering/trucks/exemptions/motorsports.htm >. These transition routes were established based on Caltrans historical records from the 1990's. However, transition routes could be rescinded or added due to future local development and roadway improvement projects. Resources should be allocated to Caltrans to re-examine and develop new transition routes to the race tracks once every five years, and these resources should be included in any reauthorization of Vehicle Code Section 35401.5(g)(2)(A). The estimated cost to re-review the transition routes once every five years is $300,000

RV/ Motorhome Study: Vehicle measurements and observations at racing events indicate that a significant number of RV/Motorhome combinations at the events are longer than 65 feet. Commercial toterhome combinations registered out of state as an RV would be eligible for the motorsports exemption and could, therefore, tow a 56-foot semitrailer (see Appendix M).

However, the CHP Bulletin provides guidance for out-of-state RVs only, and not RVs that are registered in California.

5. Caltrans, CHP, and Department of Motor Vehicles (DMV) should study RVs and motorhomes to determine the following:

- ¸ Should RVs and motorhomes be allowed to exceed their 65-foot combination length limit when attending racing events, and should they be allowed access on other State and local routes?
- ¸ Are RVs and motorhomes required to stop at weigh stations and, if so, do they usually stop?
- ¸ If RVs and motorhomes are not required to stop at weigh stations, how does the CHP enforce their length limits?
- ¸ What type of driver license is required, or should be required, for driving a 65-foot RV combination?

6. Toterhome Study: Caltrans, CHP, and DMV should study the toterhome issues because the recent field measurements indicate that the average toterhome combination can be up to six feet longer than the motorsports trucks. The study should address the following issues:

- ¸ Does DMV need to define toterhomes in the Vehicle Code Section?
- ¸ Does the motorsports truck exemption in Vehicle Code Section 35401.5(g)(2)(A) apply to toterhomes?
- ¸ Should toterhomes be considered commercial or recreational vehicles and if so what type of driver license should be required?
- ¸ According to the CHP Bulletin, out-of-state toterhomes that comply with commercial requirements are considered truck tractors and, therefore, qualify for the motorsports exemption. Will this bulletin also apply to in-state toterhomes?
- ¸ Should a reauthorized motorsports exemption impose a maximum length on toterhomes or toterhome combinations?
- ¸ Should the toterhome be used as a test vehicle when approving transition routes to racing events, since toterhomes tend to be longer than the typical motorsports truck?

APPENDIX A. MOTORSPORTS EXEMPTION – CURRENT AND PREVIOUS

Current Motorsports Exemption

Vehicle Code Section 35401.5(g)(2)(A) became effective starting January 1, 2013, per SB 1174 (Walters, Chapter 292, Statutes of 2012).

35401.5. (g)(2)(A) (1) Notwithstanding Sections 35400 and 35401, a combination of vehicles consisting of a truck tractor semitrailer combination with a kingpin to rearmost axle measurement limit of not more than 46 feet, a trailer length of not more than 56 feet, and used exclusively or primarily in connection with motorsports, may operate on the routes identified in subdivision (a) as well as on any other routes authorized for that purpose by the Department of Transportation in consultation with the Department of the California Highway Patrol. As used in this subdivision, "motorsports" means an event, and all activities leading up to that event, including, but not limited to, administration, testing, practice, promotion, and merchandising, that is sanctioned under the auspices of the member organizations of the Automobile Competition Committee for the United States.

(2) (A) The Department of Transportation shall conduct a field test of the tractor truck semitrailer combination authorized under paragraph (1) for motorsport trucks with a trailer length of 56 feet to evaluate their performance on various segments of the National Network and transition routes. The Department of Transportation shall, no later than January 1, 2014, submit a report to the Legislature in compliance with Section 9795 of the Government Code that includes the results of the field test and a recommendation, in consultation with the Department of the California Highway Patrol, as to whether the 56 foot trailer length should be reauthorized.
(B) Notwithstanding Section 10231.5 of the Government Code, the requirement for submitting a report under this paragraph is inoperative on January 1, 2018.
(3) This subdivision shall remain in effect only until January 1, 2016, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2016, deletes or extends that date.

Previous Motorsports Exemption

Vehicle Code Section 35401.5(g)(2)(A) was in effect prior to January 1, 2013.

35401.5(g)(2)(A) Notwithstanding Sections 35400 and 35401, the Department of Transportation or local authorities, with regard to highways under their respective jurisdictions, may, upon application, issue a special permit authorizing the applicant to operate a combination of vehicles consisting of a truck tractor semitrailer combination operated pursuant to subdivision (a) with a kingpin to rearmost axle measurement limit of not more than 46 feet on trailers used exclusively or primarily in connection with motorsports. As used in this paragraph, "motorsports" means any event, and all activities leading up to that event, including, but not limited to, administration, testing, practice, promotion, and merchandising, that is sanctioned under the auspices of the member organizations of the Automobile Competition Committee for the United States.

APPENDIX B. TRUCK MAP LEGEND

TRUCK MAP LEGEND
TRUCK LENGTHS & ROUTES

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

Click here for the Truck Network Map

CALIFORNIA LEGAL ROUTES California Legal trucks (black trucks) can travel on STAA routes (green and blue routes), CA Legal routes (black routes), and Advisory routes (yellow routes). CA Legal trucks have access to the entire State highway system except where prohibited (some red routes).

California Legal Truck Tractor - Semitrailer
Semitrailer length : no limit
KPRA* : 40 feet maximum for two or more axles,
38 feet maximum for single-axle trailers
Overall length : 65 feet maximum *(KPRA = kingpin-to-rear-axle)

California Legal Truck Tractor - Semitrailer - Trailer (Doubles)
Option A
Trailer length : 28 feet 6 inches maximum (each trailer)
Overall length : 75 feet maximum
Option B
Trailer length : one trailer 28 feet 6 inches maximum
other trailer may be longer than 28 feet 6 inches
Overall length : 65 feet maximum

CA LEGAL ADVISORY ROUTES - CA Legal trucks only; however, ***travel not advised*** if KPRA length is over posted value. KPRA advisories range from 30 to 38 feet.

STAA ROUTES The STAA Network allows the "interstate" STAA trucks which are the green trucks shown below. The STAA Network consists of the National Network (green routes, primarily interstates) and Terminal Access routes (blue, primarily State routes). ("STAA" = federal Surface Transportation Assistance Act of 1982.)

(Click here for the Truck Network Map.)

Interstate "STAA" Truck Tractor - Semitrailer
Semitrailer length : 48 feet maximum
KPRA* : no limit
Overall length : no limit *(KPRA = kingpin-to-rear-axle)

Semitrailer length : over 48 feet up to 53 feet maximum
KPRA : 40 feet maximum for two or more axles,
38 feet maximum for single-axle trailers
Overall length : no limit

Interstate "STAA" Truck Tractor - Semitrailer - Trailer (Doubles)
Trailer length : 28 feet 6 inches maximum (each trailer)
Overall length : no limit

Terminal Access - Interstate "STAA" trucks may travel on State highways that exhibit this sign.

Service Access - Interstate "STAA" trucks may travel up to one road mile from the off ramp to obtain services (food, fuel, lodging, repairs), provided the route displays this sign.

SPECIAL RESTRICTIONS - Route restricted for vehicle length or weight, cargo type, or number of axles. Click here for the list of Special Route Restrictions.

APPENDIX C. INTERSTATE TRUCK SIGNS

Interstate Truck Signs
for Interstate Trucks to Use Exits

Terminal Access	Service Access
	
(#G66-56)	(#G66-55)

Truck Route Sign
for California Legal Trucks on Local Streets


(#R14-1)

APPENDIX D. DEFINITIONS IN CALIFORNIA CODE

Motorhomes and House Cars

Vehicle Code Section 362. A "house car" is a motor vehicle originally designed, or permanently altered, and equipped for human habitation, or to which a camper has been permanently attached. A motor vehicle to which a camper has been temporarily attached is not a house car except that, for the purposes of Division 11 (commencing with Section 21000) and Division 12 (commencing with Section 24000), a motor vehicle equipped with a camper having an axle that is designed to support a portion of the weight of the camper unit shall be considered a three-axle house car regardless of the method of attachment or manner of registration. A house car shall not be deemed to be a motortruck.

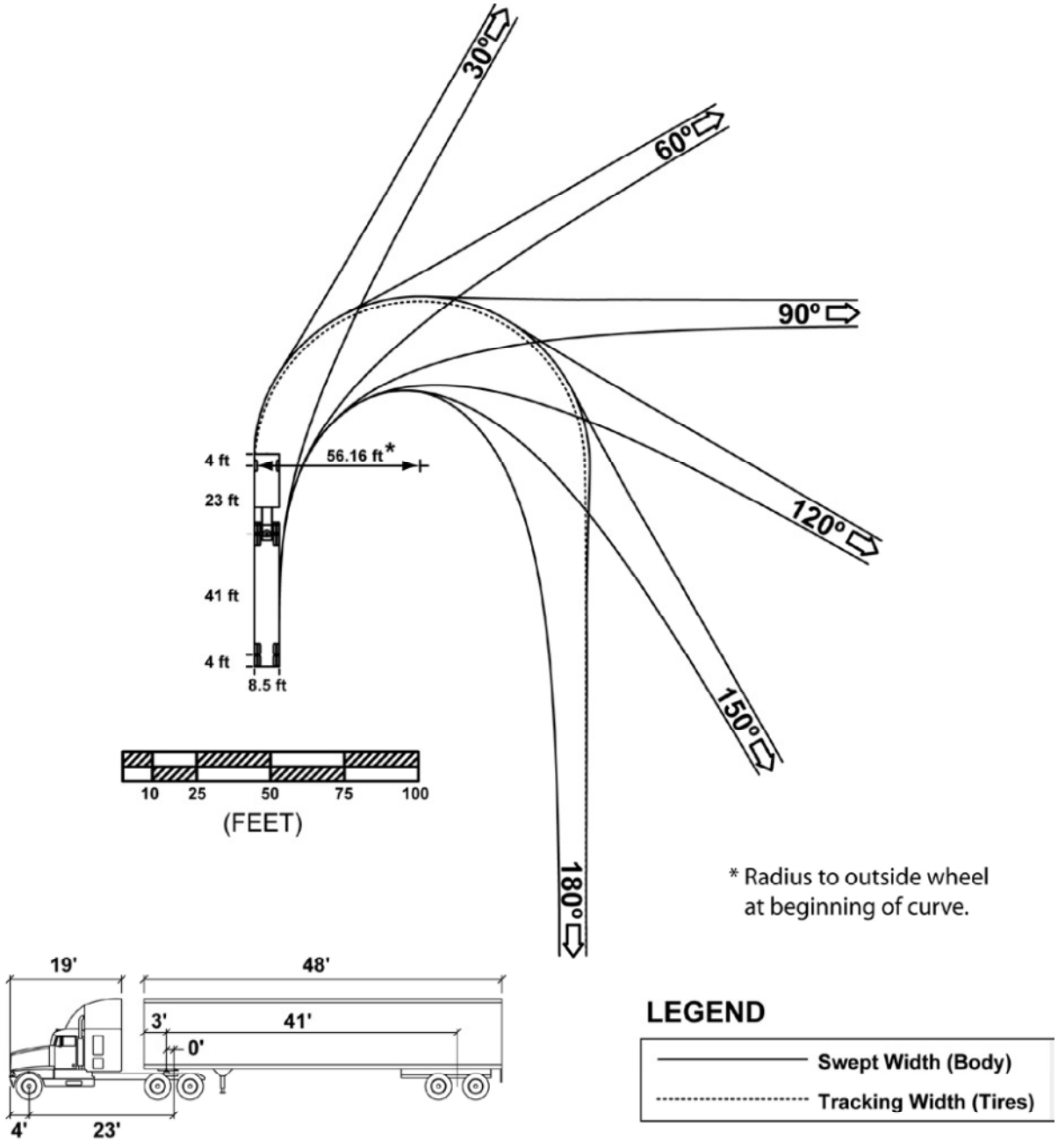
Recreational Vehicle

Health and Safety Code Section 18010. "Recreational vehicle" means both of the following:
(a) A motor home, travel trailer, truck camper, or camping trailer, with or without motive power, designed for human habitation for recreational, emergency, or other occupancy, that meets all of the following criteria:
(1) It contains less than 320 square feet of internal living room area, excluding built-in equipment, including, but not limited to, wardrobe, closets, cabinets, kitchen units or fixtures, and bath or toilet rooms.
(2) It contains 400 square feet or less of gross area measured at maximum horizontal projections.
(3) It is built on a single chassis.
(4) It is either self-propelled, truck-mounted, or permanently towable on the highways without a permit.
(b) A park trailer, as defined in Section 18009.3.

APPENDIX E. PHOTOS OF TOTERHOMES

APPENDIX F. CALTRANS HDM STAA DESIGN VEHICLE

Figure 404.5A
STAA Design Vehicle
56-Foot Radius

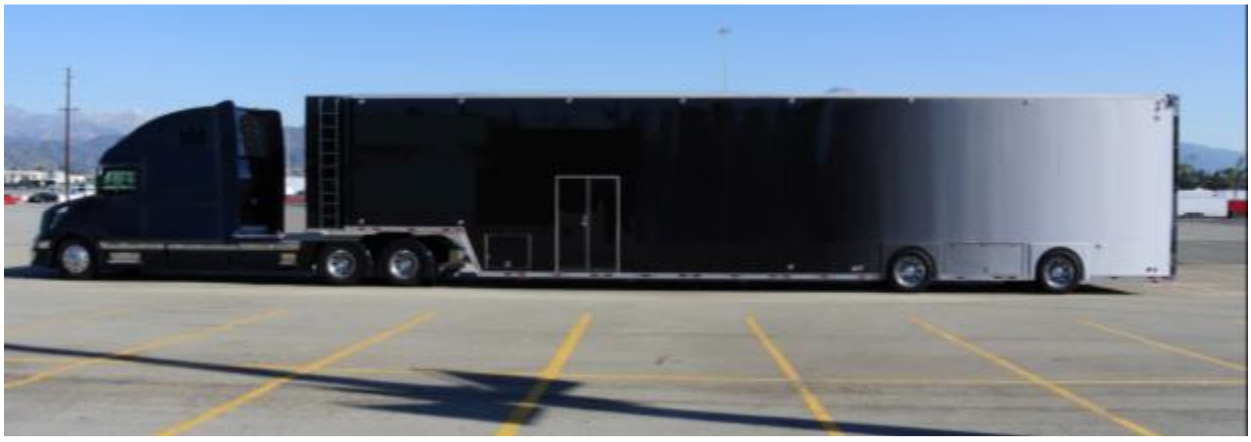


STAA - STANDARD

Tractor Width	: 8.5'	Lock to Lock Time	: 6 seconds
Trailer Width	: 8.5'	Steering Lock Angle	: 26.3 degrees
Tractor Track	: 8.5'	Articulating Angle	: 70 degrees
Trailer Track	: 8.5'		

Note: For definitions, see Indexes 404.1 and 404.5.

APPENDIX G. PHOTOS OF FIELD TEST VEHICLES



Pomona Field Test Vehicle

Sonoma Field Test Vehicle

APPENDIX H. CALTRANS HDM DESIGN CONSIDERATIONS

404.2 Design Considerations

It may not be necessary to provide for design vehicle turning movements at all intersections along the State route if the design vehicle's route is restricted or it is not expected to use the cross street frequently. Discuss with Traffic Operation and the local agency before a turning movement is not provided. The goal is to minimize as much as possible conflicts between vehicles, bicycles, pedestrians, and other users of the street, while providing the minimum curb radii appropriate for the given situation. The designer may reference the AASHTO Green Book to select the design vehicle to analyze turning movements to and from the State route. However, turning movements of the State route design vehicle should also be analyzed to determine the impacts from their occasional use.

Both the tracking width and swept width should be considered in the design of roadways for use of the roadway by design vehicles.

Tracking width lines delineate the path of the vehicle tires as the vehicle moves through the turn.

Swept width lines delineate the path of the vehicle body as the vehicle moves through the turn and will therefore always exceed the tracking width. The following list of criteria is to be used to determine whether the roadway can accommodate the design vehicle.

(1) Traveled way.

(a) To accommodate turn movements (e.g., at intersections, driveways, alleys, etc.), the travel way width and intersection design should be such that tracking width and swept width lines for the design vehicle do not cross into any portion of the lane for opposing traffic. Encroachment into the shoulder and bike lane is permitted.

(b) Along the portion of roadway where there are no turning options, vehicles are required to stay within the lane lines. **The tracking and swept widths lines for the design vehicle shall stay within the lane as defined in Index 301.1 and Table 504.3A.** This includes no encroachment into Class II bike lanes.

(2) Shoulders. Both tracking width and swept width lines may encroach onto paved shoulders to accommodate turning. For design projects where the tracking width lines are shown to encroach onto paved shoulders, the shoulder pavement structure should be engineered to sustain the weight of the design vehicle. See Index 613 for general traffic loading considerations and Index 626 for tied rigid shoulder guidance. At corners where no sidewalks are provided and pedestrians are using the shoulder, a paved refuge area may be provided outside the swept width of turning vehicle.

(3) Curbs and Gutters. Tires may not mount curbs. If curb and gutter are present and any portion of the gutter pan is likewise encroached, the gutter pan must be engineered to match the adjacent shoulder pavement structure. See Index 613.5(2)(c) for gutter pan design guidance.

(4) Edge of Pavement. To accommodate a turn, the swept width lines may cross the edge of pavement provided there are no obstructions. The tracking width lines shall remain on the pavement structure, including the shoulder, provided that the shoulder is designed to support vehicular traffic. If truck volumes are high, consideration of a wider shoulder is encouraged in order to preserve the pavement edge.

(5) Bicycle Lanes. Where bicycle lanes are considered, the design guidance noted above applies. Vehicles are permitted to cross a bicycle lane to initiate or complete a turning movement or for emergency parking on the shoulder. See the California MUTCD for Class II bike lane markings. To accommodate turn movements (e.g., intersections, driveways, alleys, etc. are present), both tracking width and swept width lines may cross the broken white painted bicycle lane striping in advance of the right-turn, entering the bicycle lane when clear to do so.

(6) Sidewalks. Tracking width and swept width lines must not encroach onto sidewalks or any area where pedestrians are expected.

(7) Obstacles. Swept width lines may not encroach upon obstacles including, but not limited to, curbs, islands, sign structures, traffic delineators/channelizers, traffic signals, lighting poles, guardrails, trees, cut slopes, and rock outcrops.

(8) Appurtenances. Swept width lines do not include side mirrors or other appurtenances allowed by the California Vehicle Code, thus, accommodation to non-motorized users of the facility and appurtenances should be considered.

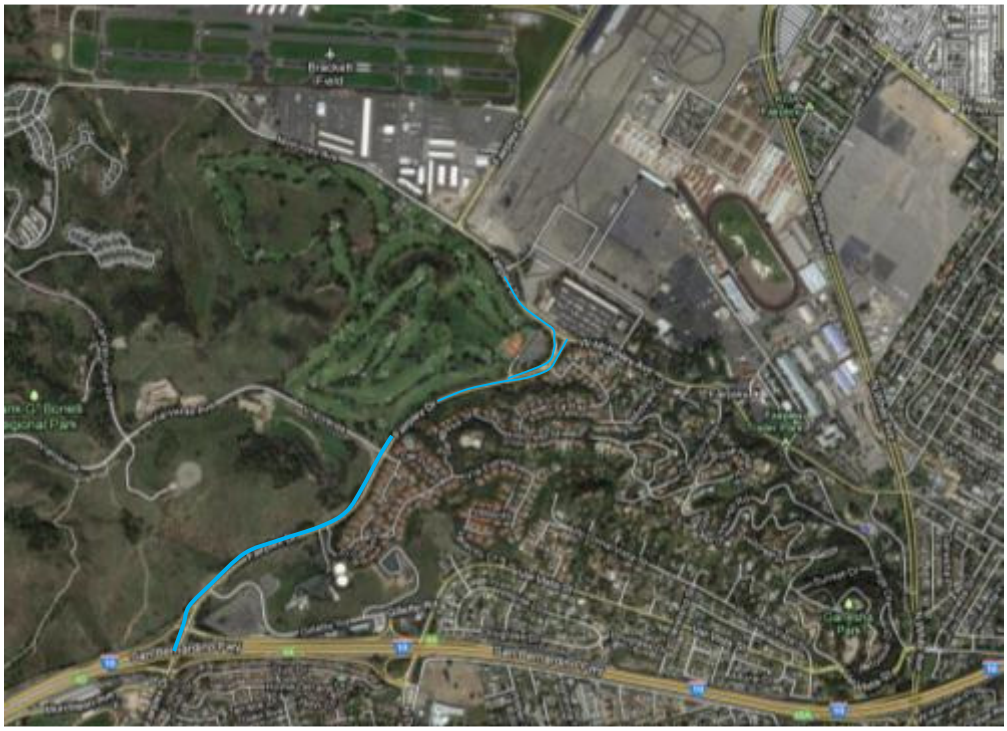
If both the tracking width and swept width lines meet the design guidance listed above, then the geometry is adequate for that design vehicle. Consideration should be given to pedestrian crossing distance, motor vehicle speeds, truck volumes, alignment, bicycle lane width, sight distance, and the presence of on-street parking.

Note that the STAA Design Vehicle has a template with a 56-foot (minimum) and a 67-foot (longer) radius and the California Legal Design Vehicle has a template with 50-foot (minimum) and 60-foot (longer) radii. The longer radius templates are more conservative. The longer radius templates develop less swept width and leave a margin of error for the truck driver. The longer radius templates should be used for conditions where the vehicle may not be required to stop before entering the intersection.

The minimum radius template can be used if the longer radius template does not clear all obstacles. The minimum radius templates demonstrate the tightest turn that the vehicles can navigate, assuming a speed of less than 10 miles per hour.

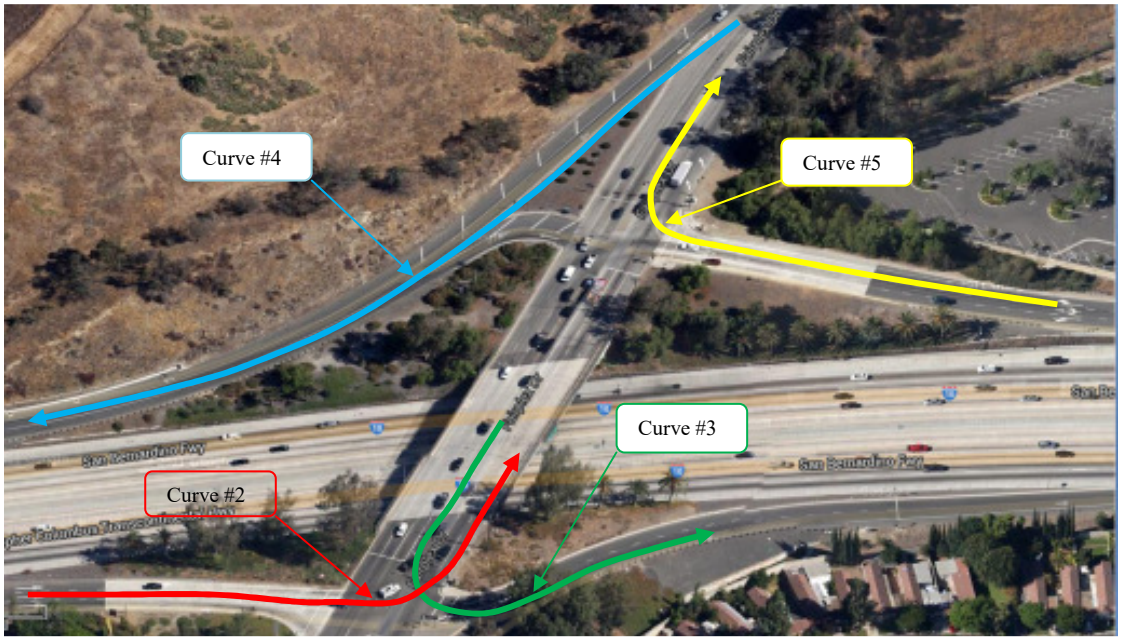
For offtracking lane width requirements on freeway ramps, see Topic 504.

APPENDIX I. MAP OF POMONA RACEWAY AND TEST CURVES



Transition Route to Raceway

Map of Pomona Raceway and Test Curves



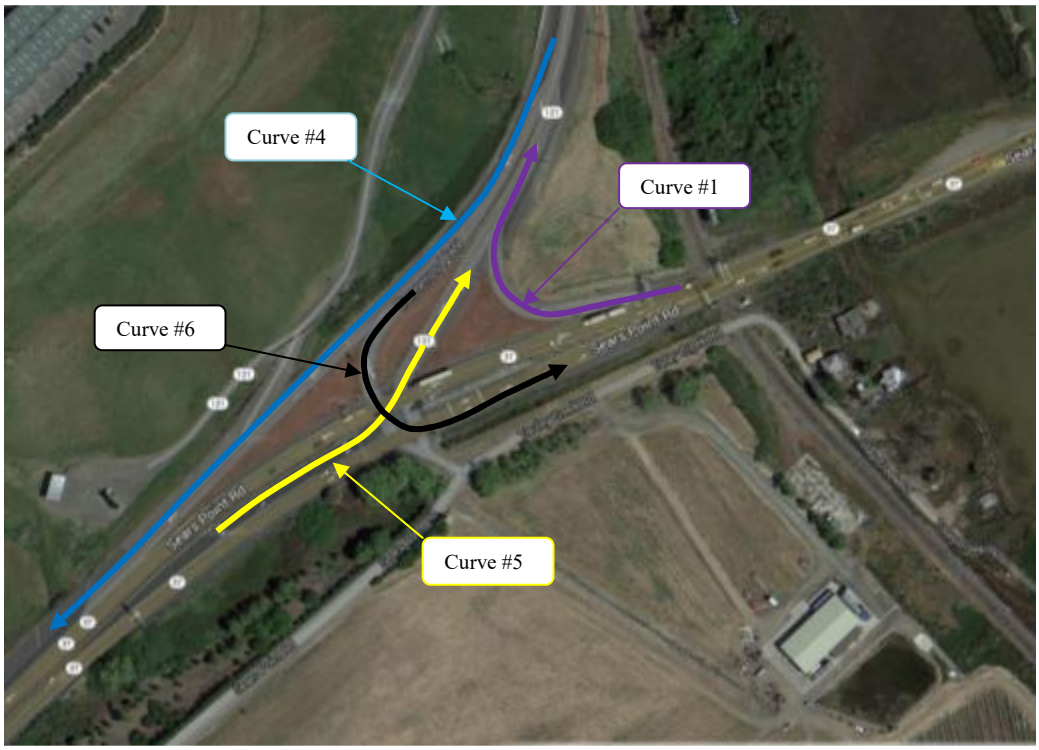
Ramps at I-10 and Fairplex Dr. (Curves 2-5)

Curves at Entrance and Exit of Racetrack on Fairplex Dr. (Curves 1 & 6)

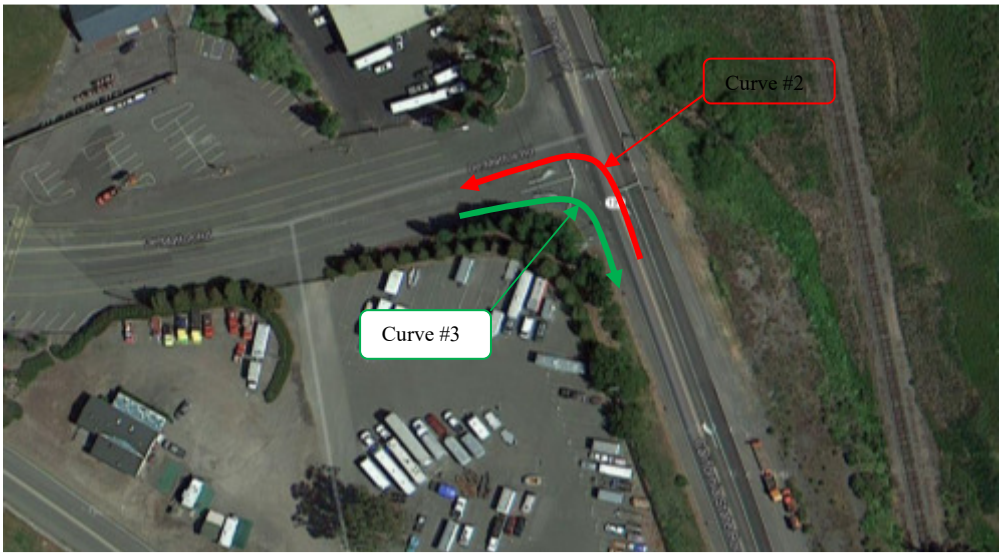
APPENDIX J. MAP OF SONOMA RACEWAY AND TEST CURVES

Transition Route to Raceway

Map of Sonoma Raceway and Test Curves



Ramps at SR 37 and SR 121 (Curves 1 & 4-6)



Curves at SR 121 and Track Entrance (Curves 2 & 3)

APPENDIX K. VEHICLE DIMENSIONS

Table 1. Vehicle Dimensions at Pomona Raceway

#	TRACTOR (ft)	TRACTOR WHEELBASE (WB) (ft)	SEMITRAILER (ft)	KPRA (ft)	OVERALL LENGTH (ft)
1	29	20.5	55	42.5	73.5
2	28	23	56	47	78
3	30	21	60	47.5	80.5
4	31	23	56	46	81
5	31	24	57	46	81
6*	30	24.5	44	36	74
7*	37	31	37	38.5	83.5

*Toterhome.

Table 2. Vehicle Dimensions at Grand Prix Race Track

#	TRACTOR (ft)	TRACTOR WB (ft)	SEMITRAILER (ft)	KPRA (ft)	OVERALL LENGTH (ft)
1	28.5	20.5	53	44	75
2	26.5	19.5	53	44.5	73.5
3	27	20.5	53	41	73
4	28	20.5	53	43	74
5*	29	23	40	31	65

*Toterhome.

Table 3. Vehicle Dimensions at 49’er Truck Stop

#	TRACTOR (ft)	TRACTOR WB (ft)	SEMITRAILER (ft)	KPRA (ft)	OVERALL LENGTH (ft)
1	33	26	53	45	79
2	30	21	53	46	75
3	31	24.5	53	45	77

Table 4. Vehicle Dimensions at Sonoma Raceway - NASCAR Event

#	TRACTOR (ft)	TRACTOR WB (ft)	SEMITRAILER (ft)	KPRA (ft)	OVERALL LENGTH (ft)
1	30	22.5	53	42	75
2	29	20.5	53	46	75
3	33	25.5	53	46	79
4	30	23	53	44.5	75
5	29	22.5	53	45	75
6	30	23	53	45	75.5
7	30	22.5	53	44.5	76
8*	33	27	40.5	31.5	71.5

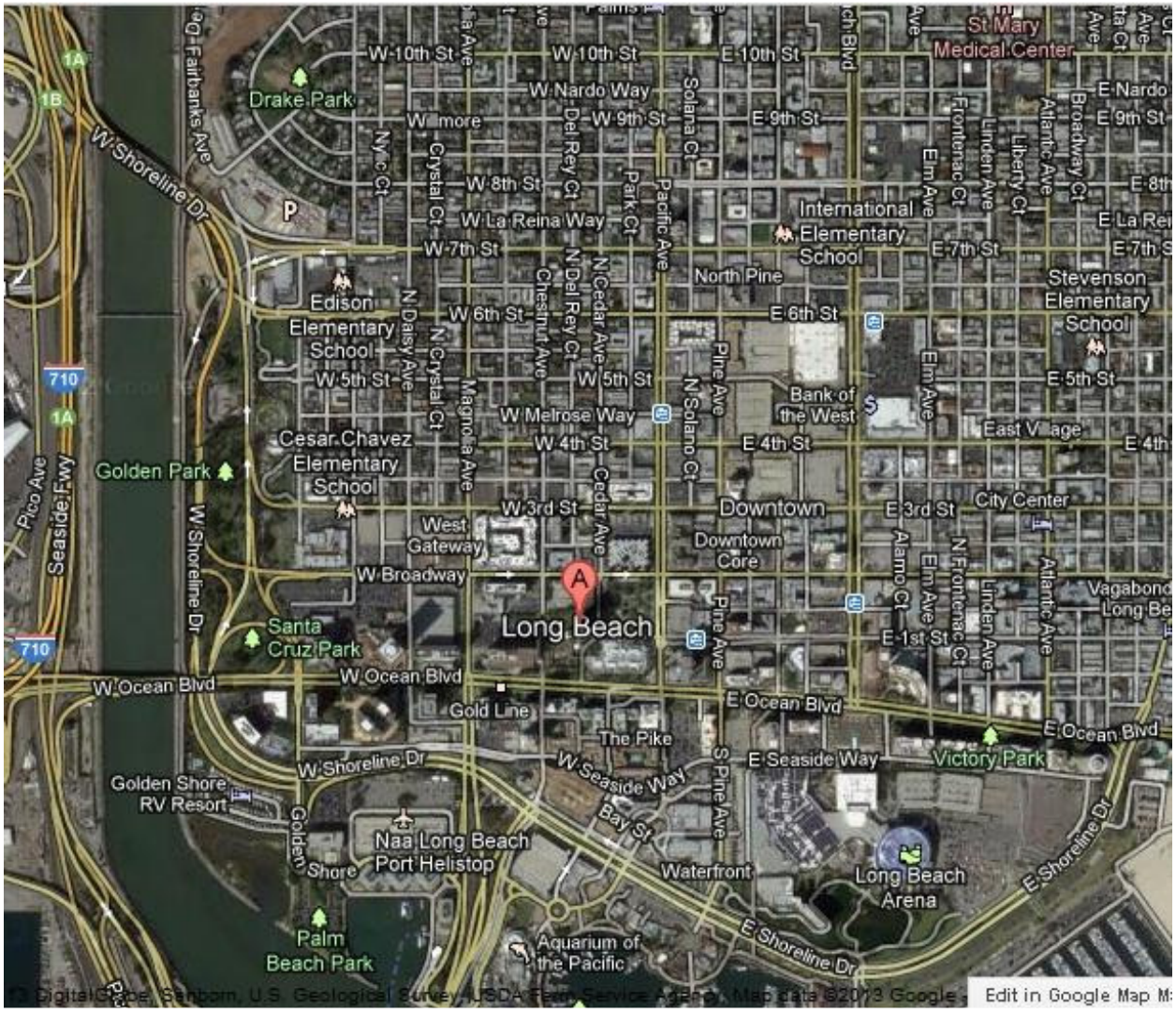
*Toterhome.

Table 5. Vehicle Dimensions at Sonoma Raceway - NHRA Event

#	TRACTOR (ft)	TRACTOR WB (ft)	SEMITRAILER (ft)	KPRA (ft)	OVERALL LENGTH (ft)
1	29	22	57	46	79.5
2	31	23	54	45	79
3	30.5	22	53.5	46	76
4*	38	27	34	25	72
5*	41	26	30.5	21	71.5
6*	34	28.5	40	30.5	71.5
7*	34	28.5	42	30.5	73
8*	45	29.5	41	29	86
9*	42	29	38	28	80
10**	34	18	32.5	22	67.5
11**	43	25	28	20	71

*Toterhome.
**Recreational Vehicle

APPENDIX L. MAP OF GRAND PRIX RACE TRACK



APPENDIX M. CHP MOTORSPORTS INFORMATION BULLETIN

DEPARTMENT OF CALIFORNIA HIGHWAY PATROL

INFORMATION BULLETIN

ISSUES CONCERNING MOTORSPORTS VEHICLE COMBINATION LENGTH AND THE USE OF RECREATIONAL VEHICLES FOR MOTORSPORTS

Commercial Vehicle Section (CVS) has fielded numerous questions from enforcement personnel and from the motorsports industry regarding requirements for vehicle combinations transporting motorsports competition vehicles. The purpose of this Information Bulletin is to provide clarification on several issues concerning the industry.

Effective January 1, 1997, Senate Bill 1463 amended Vehicle Code (VC) Section 35401.5 to permit a truck tractor-semitrailer combination used in connection with motorsports to have a maximum Kingpin to Rear Axle (KPRA) measurement of 46 feet. Offtracking analysis on access routes to 27 California raceways was conducted in an attempt to allow access from the National Network (NN) system for these vehicles without a permit. Attached to this Information Bulletin is a list showing each raceway, the route that must be taken by these longer KPRA vehicles, and any requirements of local governments that have authority over non-state roads along the route. Please note that these vehicles do not have legal access to three raceways: Santa Maria Speedway, Holtville Aerodrome International Raceway, and Thunder Park. Vehicles registered in California and participating in a motorsports event outside of the state may use the NN system within California without a permit.

Some states have issued recreational vehicle (or passenger) plates to these vehicles. While another state may legally register these longer KPRA vehicles as recreational vehicles to operate intrastate, once they leave their home state they come under the guidelines of the International Registration Plan (IRP). The IRP is an agreement among the states to uniformly administer registration laws for commercial vehicles that travel interstate. The IRP agreement defines a recreational vehicle as being exempt from commercial registration when used by an individual or his/her family for recreational purposes. A vehicle used in conjunction with a business endeavor does not meet this definition. A business endeavor can be defined by monetary investments made with the expectation that some return on this investment will occur. If a vehicle is properly registered as a recreational vehicle in another state and is not used for business purposes, then California fees will not be required. However, such a vehicle will be held to the California legal maximum length of 65 foot overall with a 38 foot KPRA (40 foot with dual rear axles).

Several tractor-semitrailer combinations traveling to motorsports competition events were denied entry to California recently due to the size or type of vehicle configuration.

In order for a power unit and semi trailer combination used in connection with motorsports to qualify for the 46 foot KPRA, the power unit must meet the definition of a "truck tractor" per Section 655 VC.

> *655(a) VC: A "truck tractor" is a motor vehicle designed and used primarily for drawing other vehicles and not so constructed as to carry a load, other than a part of the weight of the vehicle and the load so drawn. As used in this section, "load" does not include items carried on the truck tractor in conjunction with the operation of the vehicle if the load carrying space for these items does not exceed 34 square feet.*

Examples of motorsports-exempt vehicles include:

1. A combination in which the length of the semitrailer in exclusive combination with a truck tractor does not exceed 48 feet. A semitrailer not more than 53 feet in length shall satisfy this requirement when configured with two or more rear axles. This vehicle combination must be used exclusively or primarily in connection with motorsports. These trailers may operate with a KPRA to rear axle measurement limit of not more than 46 feet. (See Figure 1)

2. A motor vehicle with a large sleeper berth registered in another state as a recreational vehicle, towing a semitrailer and used in motorsports, would be considered a truck tractor as defined in the Vehicle Code. (See Figure 2)

The above mentioned vehicles and combinations are to be considered commercial vehicles and subject to all motor carrier regulations, including log book requirements, alcohol/controlled substance testing, etc. These operators are subject to Sections 2813, 27900 and 34507.5 VC, Title 13, and must possess a current International Fuel Tax Agreement license or a temporary permit obtained through the California Board of Equalization or purchased at truck stops prior to entering California.

Figure 1

Figure 2

Figure 3

A vehicle built on a bus chassis and registered as a recreational vehicle in another state cannot exceed a single vehicle length of 40 feet and combined length of 65 feet when operated in California. If the same vehicle is registered as a bus and meets all the requirements of a motor carrier of passengers, this vehicle cannot exceed a single vehicle length of 45 feet and a combined length of 65 feet. Additionally, this configuration would be restricted to the NN system routes and terminal access routes that meet the requirements found in Section 35400(b)(9) VC. (See Figure 3)

OUT OF STATE BASED VEHICLE

Operators of out-of-state based vehicles that are used to transport motorsports competition vehicles:

(a) Operated in a business endeavor (regardless of length), or
(b) Which are in excess of 65 feet and registered as a recreational vehicle

are subject to the same commercial motor vehicle laws as California-based vehicle operators with two exceptions:

1. Driver license:

   Another state's driver license of appropriate class is required. Pursuant to Section 12502(b) VC, any person entitled to the exemption contained in subdivision (a), while operating a commercial motor vehicle within this state, as defined in subdivision (b) of Section 15210 VC, shall have in his/her possession a current medical certificate of a type described in subdivision (c) of Section 12804.9 VC which has been issued within two years of the date of operation of that vehicle.

2. Registration:

   Only partial year California vehicle registration fees are required which may be purchased in one of two ways: 1) a valid four-day trip permit for both the power unit and the trailer; or 2) 90 days of California commercial vehicle registration. Operators may also apply for apportioned registration in their base state and pay fees based on the mileage traveled in each state (owners need to inquire with their base state concerning this option).

Any questions regarding this Information Bulletin may be directed to the Enforcement Unit, CVS, at (916) 445-1865.

ENFORCEMENT SERVICES DIVISION ATTACHMENT

OPI: 062

DISTRIBUTION: 3A E S (Holders of HPM 82.6)