

CALIFORNIA ASSOCIATION OF ACCIDENT RECONSTRUCTION SPECIALISTS

SKIDEMARKS

SEPTEMBER 2014 – VOLUME 16, NUMBER 3

Lane-splitting, still controversial



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THE BOARD BEAT

It is fall and time to harvest the grapes here in the wine country. The leaves are about to change colors Thanksgiving and Christmas are just around the corner. It also means it is time for the annual CA2RS Conference. This year's conference is in beautiful South Lake Tahoe, CA. Jahna and Sean are the co-chairs of the conference and have promised to make it an event to remember. The location is perfect and the lineup of speakers second to none. There will be something for all in the material that is to be presented. I hope to see all of you up in Tahoe. For those of you who are not familiar with the Sierras in the fall. It is the best time of year to be in the mountains, the crowds are gone the air is cool and crisp and the season is changing.

To receive a discount on your hotel room at the conference you have to register with the hotel by 9/21/14. Registration for the conference is via the website.

WREX2016, have you heard about it? The idea was born during a meeting of 21 collision investigation organizations from around the country and Canada. The meeting was held last year in conjunction with IPTM Special Problems. I attended the meeting as a representative of the CA2RS organization.

So what is WREX2016? Some 20 collision investigation organizations from the United States, Canada, Europe and the South Pacific are coming together in Orlando, FL on May 2-6, 2016 to present a once-in-a-lifetime conference. There will be live crash testing, robust testing, speakers on a variety of subjects and vendors galore. The event will be held at the Rosen Shingle Creek Resort Hotel. The venue is near Disney World so bring your kids. Because CA2RS is a sponsoring organization, you will be entitled to a discount on the conference fee. There is also a very reasonable hotel room rate and a discounted government rate for Military and Active Law Enforcement members. Information about WREX2016 can be obtained by signing up at the website wrex2016.com. By signing up you will receive updated information about the event.

WREX2016 promises to be a world class conference and something that will be bigger and better than any conference you have ever attended. Very soon there will be a "call for speakers". So if you have some research or a presentation that you would like to present to an audience from around the world, get it out and polish it up.

I have been chosen to head the Crash Committee and am open to suggestions and assistance with the crash testing at the event. If you have any ideas or want to help with the event don't hesitate to shoot me an email at wfocha@comcast.net.

Sean Shimada has done an excellent job of coordinating our training this past year, when you see Sean be sure to thank him for his hard work. Sean has already scheduled a speaker for our first quarterly training for 2015 so watch for the announcement in late January or early February.

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CAARS CONTACTS

CHAIRPERSON

Chris Kauderer

chairperson@ca2rs.com

VICE CHAIR

Jahna Beard

vice-chair@ca2rs.com

TREASURER

Nichole Hanley

treasurer@ca2rs.com

MEMBERSHIP

John Crews

membership@ca2rs.com

LIAISON TO ACTAR

Ken Heichman

actar@ca2rs.com

NEWSLETTER

Frank Owen

editor@ca2rs.com

CAARS DIRECTORS

Roman Beck

David Cameron

John Crews

Bill Focha

Sean Shimada



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We lost long-time CA2RS member Terry Morris on May 26, 2014. Terry was a California Highway Patrolman. He retired after 30 years of service in 2000. His last assignment was as Sargent of the Golden Gate Division M.A.I.T. Unit. After Terry retired he worked for the Sonoma County Sheriff's Office for five years as a Deputy Sheriff. Terry was part of the group that conducted the motorcycle vs. passenger research conducted by CA2RS in 2009. We will miss Terry. Please keep him and his family in your thoughts.

At our 3rd quarter board of directors meeting we had reports from each of the committees. Some highlights are :

1. The conference is all set, vendor spaces are going fast so if you want to set up shop you better act quick.
2. Our Treasurers report shows that we are in the black and doing well.
3. The website committee reports the website is working and there are very few complaints. The problems associated with signing up for the conference and renewing your membership have been handled.
4. It was noted that several members were signed up to obtain a printed copy of the news letter. This is something CA2RS no longer offers. Those members will be contacted by John Crews and adjustments to your annual dues will be made.
5. The membership committee reports we have 343 members. We are the second largest collision investigation organization in the U.S, NAPARS is first. We several members from S. CA and one from N.CA who has not renewed their membership yet. Please renew soon we want to keep you as a member.
6. Chairman Kauderer announced he has been in contact with FARO and WAITI. They are our counter parts in Oregon and Washington. We now can attend training at FARO and WAITI events at the same cost as their members and their members can attend CA2RS trainings.
7. Nominations for the Board of Directors election closed on 8/31/14. Up for election this year are the Chairman and two directors at large. As of this writing (08/28/14) Chris Kauderer has been nominated for the Chairman position and Bill Focha and Sean Shimada have been nominated for two of the directors spots.

In closing I would like to point out what a great organization we are. We have some of the finest minds in the collision reconstruction industry included in our membership. I have had the privilege of representing the CA2RS organization at two national meetings of the leaders of collision reconstruction groups. The biggest difference with our group and some of the others is our members. Our members are active and engaged in the organization and take a real interest in the future of CA2RS.

Lastly, remember to vote in the Board of Directors election.

See you in South Lake Tahoe,

Bill Focha

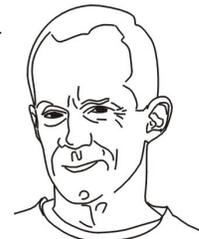
CAARS Board of Directors



Letter from the editor

Dear CAARS members,

I returned from Europe just a few weeks ago and actually was able to visit the Student Formula Competition in Hockenheim, Germany on the return through Frankfurt. It is really amazing what university student teams can do, especially with the level of financial support they receive from the German automotive manufacturers. The Germans realize that an investment in these student teams pays dollars on the penny when they go out to hire the next generation for their design teams. All the manufacturers and automotive suppliers show up regularly in Hockenheim to recruit students for permanent automotive design jobs. This hand-in-glove relationship between universities and automotive companies is the root reason, in my opinion, of why the Germans have been such leaders in automotive innovation over the years. The Germans have figured this out; we Americans could learn a lesson from them.



The Italian research work is Android programming, hooking machines up to tablets and smart phones to monitor and control them from that platform. Fascinating stuff. To try things out, I may write some apps to explore features of Android programming, and a ripe field for this is AR. So maybe I'll have some Android apps to offer the members in the coming months.

In the July/August 2014 issue of the Accident Reconstruction Journal it was gratifying to see topics covered there that also appear regularly in these pages: vehicle recalls (featured in the CAARS June newsletter, distracted driving (regularly featured here), yaw stability (Technical Corner, June newsletter), etc. I do not check the AR Journal prior to writing a newsletter. What I do is search through the California press primarily for stories of interest on topics that I see arise in my involvement with AR and with CAARS. That's the main mine from which I get the ore for our newsletter. But the AR Journal is a sort of the journal of record in our field, and it is gratifying to see that the news I serve up to our readers is quite similar to what's being served up to the national AR readership...except ours has a California slant, as it should.

Last, I need to notify our members that this is my next-to-last issue as editor. I have thoroughly enjoyed this duty. It has brought me in contact with a lot of super people and forced me to deal with a great number of issues in AR, with which I had very little experience. Anyway, we are in need of a new editor, starting with the March 2015 newsletter. Anyone interested in stepping up?

Best wishes,

Frank Owen

editor@ca2rs.com

Upcoming ACTAR Examination Dates and Locations

October 2014

22 October – South Lake Tahoe, CA, sponsor: CAARS. New applications must be received by 22 August. Exam registration cut-off date is 22 September. Held before annual CAARS conference, Embassy Suites hotel.

November 2014

12 November – Salem, OR, sponsor: OSP. New applications must be received by 12 September. Exam registration cut-off date is 12 October. Held at Oregon Public Safety and Standards Training Facility.

There are other tests offered in other parts of the country and Canada. Please go to ACTAR test website listed below for these dates. All test dates above subject to new testing regulations, which prohibit the use of electronic devices for testing. Go to www.actar.org/test.html for additional information.



CAARS THIRD-QUARTER TRAINING

Forensic Mapping with Total Stations

By Nick Salinas

A uniform system of measurements that is repeatable is the foundation for any science. Whether it be mass, length, volume or time it is quintessential that these dimensions have a standard unit for comparison, and also a proper instrument for measuring such units. Without the ability to accurately obtain a desired measurement there is no way to verify ones results or confirm hypotheses.

The CAARS 2014 third quarterly training, which was held this summer in Vallejo (NorCal) and Fontana (SoCal), was presented by Joel Salinas and discussed the topic of Forensic Mapping with Total Stations. Also CAARS Chairman Chris Kauderer briefly covered the topic of crush measurement protocol.

For those new to Total Stations, a background on how the instrument functions and its capabilities were discussed. A

Total Station is actually a combination of several surveying instruments all in one. For starters it functions as a theodolite, which is an instrument used for measuring horizontal and vertical angles. The Total Station is equipped with an Electronic Distance Measuring Instrument (EDMI) for measuring distances. Thirdly, a Total Station contains a micro-processor unit which functions as the brain of the instrument and performs calculations from the measurements it obtains. With the EDM and theodolite functions the Total Station takes direct measurements of the horizontal angle, vertical angle and slope distance. From these results the micro-processor then computes what are referred to as indirect measurements to determine the horizontal and vertical distances.



As with any instrument used for measuring there is always an error which must be accounted for, the Total Station is no different. Systematic error, or errors which can be corrected, were discussed during the training. The environment plays a role in how accurate the Total Station will measure and thus factors like temperature, atmospheric pressure, and humidity should be taken into account. Mr. Salinas demonstrated that for the purpose of forensic mapping these factors can generally be ignored because the error is so small, however any Total Station user should be well aware of these errors for deposition or court. Other sources of error discussed were human errors, such as leveling the instrument or more commonly a rod man that has not plumbed the rod.

It is the consensus among accident reconstructionist that a scaled diagram that accurately represents the scene is often the foundation for any reconstruction. The Total Station provides an efficient and reliable way to gather this information. When used in combination with a data collector and a CAD program a reconstructionist can have a scaled and life like diagram at their desktop, how they choose to use this data to formulate an opinion relies on the innovation of the reconstructionist. For example Mr. Salinas discussed how a 'dynamic drawing' could be developed from the scene diagram, where a car is placed at different slip angles throughout a yaw. Salinas also discussed that a Total Station can be used for more than just measuring a scene and presented a case regarding an officer involved shooting in San Francisco. Trajectory rods were placed on the involved vehicle, the outline of the car and the trajectory rods were then captured with the Total Station to produce a forensic drawing.

Another way a Total Station can be beneficial to accident reconstruction is for damage profiling a vehicle for crush measurement purposes. Mr. Kauderer discussed some of the theory behind crush and the measurement protocols a

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reconstructionist should follow in order to properly measure a damaged vehicle. Some of the topics which Kauderer covered was to measure to the height of the vehicle frame (i.e. bumper height), adjusting for air gap, choosing the number of measurement stations or zones, and to always measure to the deepest point of crush.

The training was concluded by a field demonstration where CAARS members saw firsthand how a Total Station can be used to measure the damage on a vehicle. Additionally, Mapscenes EVR users and PocketZone users were shown how to use the *RESECTION* and *3 POINT LOCATE* routine respectively to measure the damage of a vehicle. Dave Cameron assisted the mFX software users in using the *RESECTION* routine at the northern California training. In order to perform the routine the mapper needs to establish three control points that can be measured from each station. Upon the first station setup the mapper must measure each control point; they can then take the necessary measurements at that station. The mapper then moves and properly sets up the instrument at the next station and then chooses the *RESECTION* or *3 POINT LOCATE* function, whereupon they capture the three established control points and then continue mapping the next section of the vehicle. The software in the data collector will properly orient the Total Station at each instrument setup such that it ties the data together. The *RESECTION* and *3 POINT LOCATE* routines prove to be an efficient way to measure a scene or vehicle when there are several moves involved, and can be more user friendly than the *MOVE INSTRUMENT* routine. Regardless of what software is used, mappers should be especially careful to follow the proper protocol when moving the instrument to prevent any blunders or errors from occurring. While the Mapscenes EVR and Visual Statement mFX software will give the user information regarding their error at each move in the field, the PocketZone software will not. PocketZone will warn you if the computation is not within tolerance.

While the Total Station measures only a few basic things, such as angles and distances, its application in the field of forensics can be limitless. There are always new and innovative ways to use Total Stations, and if accurate measurements are needed then capturing these results and producing a variety of forensic diagrams are left up to the creativity of the mapper.

CAARS annual conference

The CAARS 2014 Annual Conference is scheduled for 23-25 October 2014 in South Lake Tahoe, California. This conference should be one of the best we have had and will likely be a sell-out. We will have a limited number of seats for this event so don't delay in reserving your spot once we open registration.

We have top notch speakers scheduled for the conference this year. Gary Cooper, Roger Barrette and Adam Hyde of Cooper Barrette Consulting (<http://cooperbarretteconsulting.com/>) have agreed to present this year's program. These men are all affiliated with Northwestern University, one of the top institutions in the study of Accident Reconstruction.

Day 1:

Gary Cooper: Accident reconstruction methods using momentum and energy and comparing it to CDR data using case studies.

Day 2:

AM: Roger Barrette: Accident reconstruction methods utilizing the Monte Carlo Method with case studies.

PM: Adam Hyde: Tire Mark Identification with case studies.

Day 3:

Adam Hyde: Accident reconstruction methods using Force Balance with emphasis on energy and stiffness coefficients for side impacts. Also, side impact force balance analysis and comparison to CDR data-case studies.

The ACTAR exam will be offered on Wednesday, October 22, 2014.

LANE-SPLITTING AGAIN IN THE NEWS

California DMV joins motorcycle lane-splitting controversy

by Charles Fleming, *L.A. Times*, 30 July 2014

The California Department of Motor Vehicles has joined the California Highway Patrol in withdrawing safety guidelines for motorcycle lane-splitting.

The agency confirmed late Tuesday that it had removed its online guidelines, and would also be removing guidelines from its printed literature.

"The DMV will not be including lane splitting language in the next revisions of handbooks in the next revision of 2015," said DMV Information Officer Jaime Garza, who added that the DMV had dropped the online language as of July 7.

The sometimes controversial act of lane-splitting, in which riders use the space between lanes when traffic is slow or has stopped, legal in California -- the only state that does not actively outlaw the practice.

Until this month, the two agencies appeared to encourage it, or at least to encourage doing it safely.

"Lane splitting in a safe and prudent manner is not illegal in the state of California," the CHP's online literature began, before going on to recommend multiple safe lane-splitting tactics.

"Lane splitting should not be performed by inexperienced riders," said the DMV's driver handbook, before similarly advising on safe and unsafe lane-splitting techniques.

But sometime earlier this year, the CHP came under fire from a Sacramento-based individual who contended the police agency had exceeded its authority by recommending lane splitting.

The Office of Administrative Law agreed, and told the CHP to take down the guidelines.

Kenneth Mandler, the California state employee who filed the original complaint with the Office of Administrative Law, has not said why he is opposed to lane-splitting, and could not be reached for comment.

But anecdotal evidence suggests many drivers are uncomfortable with, or irritated by, lane-splitting.

So does research.

Lane-sharing saves lives and reduces crashes.

- Motorcycle safety consultant Steve M. Guderian

More than three-quarters of drivers interviewed for a 2012 study conducted by the California Office for Traffic Safety said

they thought lane-splitting was unsafe. Almost half thought it was illegal. Two-thirds said they disapproved, and 7% admitted they had swerved to block a motorcycle trying to lane-split.

Since the CHP's decision was reported, motorcycle safety experts and motorcycling organizations have stepped up to



Photo: Bay Area News Group

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voice their concerns about the future of lane-splitting, which supporters contend decreases traffic and helps motorcyclists' avoid overheating -- as most motorcycles are air-cooled and do not have radiators to keep their engines cool while standing still.

They also believe the practice increases rider safety by reducing the number of accidents involving motorcycles hit from behind while stuck in traffic jams -- the type of accident that accounts, National Highway Safety Transportation Administration research shows, for more than a quarter of all motorcycle accidents.

One study showed that lane-splitting nationally could prevent 18,000 freeway motorcycle accidents and up to 170 motorcyclist fatalities annually.

"Lane-sharing saves lives and reduces crashes," said motorcycle safety consultant Steve M. Guderian, an outspoken supporter of the practice.

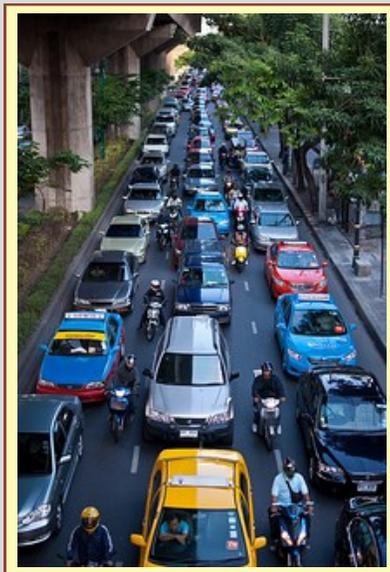
Pointing out that lane-splitting is still legal in California, American Motorcycle Assn. western states representative Nick Haris said: "Motorcyclists are still using this long-recognized riding technique to relieve traffic congestion and improve safety. But now, neither riders nor motorists have a place to turn for authoritative guidelines on the practice."

Lane-splitting guidelines removed from CHP website

Associated Press, 25 July 2014

The California Highway Patrol has taken down safety guidelines for a sometimes criticized but legal driving maneuver in which motorcyclists pass stopped traffic by driving between lanes.

State officials were worried the guidelines for so-called lane splitting could be misconstrued as enforceable laws, the San Francisco Chronicle reported on Wednesday (<http://bit.ly/1ohV5aD>). The CHP took them down from its website about two weeks ago under orders from the state's Office of Administrative Law.



The tips have also been removed from materials distributed by the CHP, the Department of Motor Vehicles and the Office of Traffic Safety, the Chronicle reported.

"People liked the guidelines and appreciated them," CHP Officer Mike Harris, an agency spokesman, said. "But some people had thought they were given as rules or laws that can be enforced by the department."

Lane splitting is legal in California, though car and truck drivers often complain it is dangerous. The guidelines -- published on the CHP's website last year -- were hailed as a way of imposing some order on the practice.

They advised motorcyclists to ride between vehicles at speeds no more than 10 miles-per-hour faster than the vehicles they were passing. They also suggested that motorcyclists not attempt the move at full freeway speeds, or in any traffic going faster than 30 mph, and said it was typically safer to split between the lanes farthest to the left than between other lanes.

Nick Haris, with the American Motorcyclist Association, said he was disappointed to see the guidelines removed.

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"A lot of people put a lot of time and effort into creating those guidelines," Harris told the Chronicle. "It's a pity to see it so quickly removed."

Research suggests lane splitting could be less dangerous to motorcyclists than forcing them during traffic jams to stay in their lane, where even minor contact with a distracted driver could be disastrous, according to the American Motorcyclist Association.

But some drivers say motorcyclists should follow the same rules as everyone else.

Manu Khosla, of San Francisco, said he has seen motorcyclists scrape cars as they drive by.

"It's not just about the cars, though," Khosla, 33, told the Chronicle. "It seems like somebody could easily get hurt."

FROM THE AMERICAN MOTORCYCLIST ASSOCIATION

American Motorcyclist Association Trying To Get Lane-Splitting Guidelines Back On California Websites

by Roadracing World Publishing, Inc. - 23 July 2014

PICKERINGTON, Ohio -- A single complaint from a Sacramento man has forced the California Highway Patrol and other state government agencies to remove information from their websites that was intended to help motorcyclists safely execute the allowed lane-splitting maneuver.

Kenneth Mandler, a longtime state employee who now conducts training sessions on how to get a state job, petitioned the California Office of Administrative Law in 2013, claiming the CHP created an "underground regulation" by formulating and distributing guidelines for safe lane splitting.

Lane splitting, also called lane filtering, is the practice of riding a motorcycle or scooter between lanes of stopped or slowly moving traffic. The practice has been permitted in California for decades and no statute prohibits it. No other state allows the maneuver.

The CHP posted its guidelines with the intention of helping motorcyclists and motorists understand safe practices and to discourage unsafe lane splitting.

"Some have interpreted the recently published Motorcycle Lane Splitting Guidelines as rules, laws or regulations that could or would be enforced by the department," according to a CHP statement. "The guidelines were never intended for this purpose and were prepared simply as common sense traffic safety tips and to raise public awareness."

The Office of Administrative Law sided with Mandler, noting that CHP Commissioner J. A. Farrow certified that his department would not "issue, use, enforce, or attempt to enforce the public education information." The OAL determined that posting the guidelines on the website was "issuing" them.

"By forcing the California Highway Patrol to remove its guidelines, Mr. Mandler and the Office of Administrative Law are denying the public vital safety information," said Nick Harris, AMA western states representative and a member of the California Motorcyclist Safety Program Advisory Committee, which helped write the guidelines.

"Lane splitting is still allowed, and motorcyclists are still using this long-recognized riding technique to relieve traffic congestion and improve safety," Harris said. "But now, neither riders nor motorists have a place to turn for authorita-

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tive guidelines on the practice."

The AMA supports the continued use of safe lane splitting in California and the implementation of lane-splitting laws in other states, coupled with extensive rider and driver education programs.

The AMA position statement reads, in part: "Reducing a motorcyclist's exposure to vehicles that are frequently accelerating and decelerating on congested roadways can be one way to reduce front- and rear-end collisions for those most vulnerable in traffic."

Denny Kobza, of the Bay Area Riders' Forum and a member of the California Motorcyclist Safety Program Advisory Committee, said he was extremely disappointed that the CHP was forced to take down the guidelines.

"It is very disturbing that one person can affect three years of hard work," Kobza said. "We put a lot of hard work into those guidelines, because lane splitting is a safer way to go than waiting for a motorist to make a mistake."

Kobza said he has full faith in the California Highway Patrol's continued advocacy for motorcycle safety, and he hopes the guidelines can be reposted to state government websites soon.

The complete AMA lane splitting position statement is available here: <http://americanmotorcyclist.com/Rights/PositionSt...> (Ed: this link doesn't work.)

The deleted CHP guidelines can still be downloaded here: [http://americanmotorcyclist.com/Libraries/Rights ...](http://americanmotorcyclist.com/Libraries/Rights...)

About the American Motorcyclist Association

Founded in 1924, the AMA is a not-for-profit member-based association whose mission is to promote the motorcycle lifestyle and protect the future of motorcycling. As the world's largest motorcycling rights and event sanctioning organization, the AMA advocates for riders' interests at all levels of government and sanctions thousands of competition and recreational events every year. The AMA also provides money-saving discounts on products and services for its members. Through the AMA Motorcycle Hall of Fame in Pickerington, Ohio, the AMA honors the heroes and heritage of motorcycling. For more information, visit www.americanmotorcyclist.com.

More, from another press release issued by American Motorcyclist Association:

American Motorcyclist Association petition calls for return of lane-splitting guidelines to California government websites, offices

PICKERINGTON, Ohio -- The American Motorcyclist Association initiated a petition drive today to convince the California Office of Administrative Law to allow state agencies to once again disseminate important information on safely and responsibly executing the motorcycling technique called lane splitting.

The online petition can be found here: <https://cqrengage.com/amacycle/app/sign-petition?1&engagementId=55066>.

A recent Office of Administrative Law order resulted in the California Highway Patrol, the Department of Motor Vehicles and other agencies removing CHP lane-splitting guidelines from their websites and ridding their offices of pamphlets, fliers and other documents that contained the safety information.

"Removal of the DMV brochures is a big loss," said Nick Haris, AMA western states representative and a member of the California Motorcyclist Safety Program Advisory Committee, which helped write the guidelines. "The DMV offices and website are the first places California drivers look for information. And this is vital information for them to have."

The CHP also removed references to lane splitting from its online FAQ, where information had been available long

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before the agency released its guidelines early in 2013.

"Lane splitting is still allowed, and motorcyclists are still using this long-recognized riding technique to relieve traffic congestion and improve safety," Haris said. "But now, neither riders nor motorists have a place to turn for authoritative guidelines on the practice."

The AMA supports the continued use of safe lane splitting in California and the implementation of lane-splitting laws in other states, coupled with extensive rider and driver education programs.

The AMA position statement reads, in part: "Reducing a motorcyclist's exposure to vehicles that are frequently accelerating and decelerating on congested roadways can be one way to reduce front- and rear-end collisions for those most vulnerable in traffic."

The guidelines disappeared at the urging of Kenneth Mandler, of Sacramento, Calif., who petitioned the OAL in the fall of 2013, claiming that the CHP guidelines were an "underground regulation" -- a rule that would be enforced, even though it had not been the subject of the Administrative Procedure Act's prescribed process.

In response to Mandler's complaint, CHP Commissioner J. A. Farrow certified to the OAL that his agency would not "issue, use, enforce, or attempt to enforce the public education information." The OAL determined that posting the guidelines on the website was "issuing" them.

Lane splitting, also called lane filtering, is the practice of riding a motorcycle or scooter between lanes of stopped or slowly moving traffic. The practice has been permitted in California for decades and no statute prohibits it. No other state allows the maneuver. Lane splitting is common in other countries around the world.

The CHP posted its guidelines with the intention of helping motorcyclists and motorists understand safe practices and to discourage unsafe lane splitting.

For its part, the Office of Administrative Law says it made no determination regarding Mandler's claim that the guidelines were an underground regulation.

"OAL did not issue a legal opinion as to whether the lane splitting guidelines constitute a regulation," OAL Director Debra M. Cornez wrote in an email to the AMA. "Since CHP notified OAL that it would not issue, use, enforce, or attempt to enforce the guidelines, OAL was precluded under the law from addressing the merits of Mr. Mandler's petition. Therefore, OAL never made a determination that the guidelines constituted a regulation."

Instead, OAL senior counsel Elizabeth Heidig instructed the CHP to remove the guidelines because Farrow agreed not to "issue" them.

The AMA petition seeks to demonstrate to the OAL that its narrow interpretation of Farrow's word choice jeopardizes thousands of California motorcyclists, automobile and truck drivers and visitors to the state, because they are being denied access to safety guidelines that affect their roadway environment.

The CHP guidelines remain available from the AMA here: http://americanmotorcyclist.com/Libraries/Rights_Documents_State/lanesplitting_guidelines.sflb.ashx?download=true.

The complete AMA lane splitting position statement is available here: <http://americanmotorcyclist.com/Rights/PositionStatements/LaneSplitting.aspx>.

BUT THEN THERE'S THIS CONTRADICTION NEWS...

Motorcycle lane-splitting rules unveiled

by Will Kane, *San Francisco Chronicle*, 23 July 2014

Motorcyclists who slide between cars on crowded Bay Area roads and zip to where they're going faster than everyone else - while infuriating more than a few drivers - now have the official blessing of the California Highway Patrol.

The practice, called lane-splitting, has always been legal in California. But state authorities have never, until now, told motorcyclists how to weave the white line safely.

California is the only state in the country where lane-splitting is legal.

"Really, it has been limited anarchy out there," said Sgt. Mark Pope, statewide motorcycle safety coordinator for the CHP. "Nobody has provided any guidance, so we decided it was time to figure that out."

The new rules, which the CHP introduced in January after consulting with other state agencies and motorcycle-rider groups, apply to city streets, highways and freeways across the state.

"Basically, what we're most interested in is the speeds," Pope said. "You should lane-split no faster than 10 mph over the speed of traffic around you, and we recommend (motorcyclists) not split at all if the traffic is faster than 30 mph."

'Guidelines make sense'

Bay Area motorcycle commuters said the rules sounded sane and sensible.

"I used to be a little crazy when I rode, but not anymore," said Alex Bond, 53, who rides a Harley from his home in Richmond to downtown San Francisco five days a week and saves 30 minutes to an hour by lane-splitting most of the way. "I think the guidelines make sense; honestly, I don't lane-split above about 30 anymore."

Jon Jaiks, 50, of Oakland said that if the new rules mean a crackdown on some of his more aggressive fellow riders, that would be all for the good.

"I'm kind of glad they did that, because I've seen some guys go by at 40 mph," he said. "A little clarity helps. I drive respectful, but not everyone does."

CHP officers have always had the legal authority to ticket motorcyclists who were driving dangerously fast, Pope said, but the new rules are designed to provide specifics.

"You can still get a ticket for doing it unsafely," Pope said, referring to lane-splitting. "If a car can get a ticket for it, a motorcycle can as well."



Seen reflected in a side mirror, a motorcyclist lanesplits during evening commute on Highway 24 on Friday, Feb. 8, 2013, in Oakland, Calif. (Photo: Noah Berger, special to the [Chronicle](#))

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Pope isn't just an enforcer - he's also a rider who often lane-splits on his Kawasaki Concours C14 while commuting in Sacramento.

He realizes that some car drivers see lane-splitters as borderline cheaters cutting ahead of others, but he says the practice is actually safer for motorcyclists than politely staying in line in a lane.

Motorcyclists "are not trying to be obnoxious or rude" when they lane-split, Pope said. "They don't have air bags or crash cages, so they're trying to protect themselves. What we see more often than motorcyclists being involved in lane-splitting accidents is we see motorcyclists running into the backs of cars."

Improved visibility cited

Bond, who has been riding since 1986, agrees that the greater threat comes from not lane-splitting.

"If I am on the line, then people can see me in their mirrors," he said. "It's when I get behind them in the lane that the drivers don't see me in their side mirror - all they see is an open space and, whoa, they move right in."

Bond said more than a few angry drivers have cut him off or blared their horns.

"I assume I've startled them," he said. "I mean, I can be noisy revving my engine right there sometimes."

Safety, of course, isn't the only advantage to lane-splitting.

"I wouldn't own a motorcycle if I couldn't do it," said Phil Cramer, 46, a data analyst who rides city streets between Potrero Hill and downtown San Francisco.

"I mean, that's the point."

MOTORCYCLE TRAGEDY IN ENGLAND CAPTURED ON VIDEO

Emotional Road Safety Campaign Message from a Grieving Mother



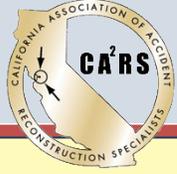
**The final moments of rider David Holms, killed in a high-speed bike crash.
(Photo: David Holmes)**

"It's not speed that kills, but the sudden stop," says a rather gloomy joke bikers often use. While the truth behind these words is obvious, at the end of the day, someone lies in a grave, having left behind mourning parents, a spouse and maybe kids, friends and all. And it makes little to no difference at all what caused the death... honestly.

The video after the jump is a new part of UK's road safety campaign, and tells the story of David Holmes, a 38-year-old rider who was killed on A47 in Norfolk, the UK. A worker for the British Arctic Survey, David was also a keen motorcyclist and owned multiple machines until his untimely demise. He was back from a

15-month mission in Antarctica and had just gotten a new bike he brought home in the back of his father's truck.

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After visiting some friend in King's Lynn, David was riding on A47 with a reported speed of 97 mph (156 km/h) when a car crossed his way and he crashed into it, losing his life. It goes without saying that David was way too fast for the rather bust road section, especially with all the junctions and traffic. Unfortunately, his speed left no room for too much braking or swerving.

His family agreed that the footage recorded that day by David's helmet cam could be used as part of the safety campaign, together with a small speech from his grieving mother.

She admits that David loved speed, but at the same time she's sending out a message to both bikers and car drivers to slow down and exercise more awareness while on the road, stressing out that her son "didn't have time to take evasive actions," which is exactly what's wrong with riding or driving fast. The Norfolk police warns the viewers "that this video contains content which some may find distressing, but it does not show any graphic images of the rider during or after the collision, and they are given the option to refrain from viewing.

See original story with video: http://www.autoevolution.com/news/emotional-road-safety-campaign-message-from-a-grieving-mother-video-86171.html#agal_0

IN THE NEWS

Economic impact of traffic accidents? About \$1 trillion a year

By Charles Fleming, L.A. Times, 29 May 2014

Motor vehicle crashes in the U.S. every year have an economic toll of almost \$1 trillion.

That includes \$277 billion in actual cost, and an estimated \$594 billion in "harm from the loss of life and the pain and decreased quality of life due to injuries," a new U.S. Department of Transportation's National Highway Traffic Safety Administration report said.

Studying crashes in the U.S. in 2010, NHTSA counted up 32,999 fatalities, 3.9 million non-fatal injuries and 24 million damaged vehicles in "The Economic and Societal Impact of Motor Vehicle Crashes 2010."

The sweeping report takes in a lot of ground, particularly in calculating the "quality of life" losses. Among the factors considered in the direct losses of \$277 billion, the report said, were \$93 billion in lost productivity, \$76 billion in property damage, \$35 billion in medical expenses, and \$28 billion in the costs of traffic-related congestion -- like traffic jams and increased air pollution.

The report concluded that drunk driving, speeding and "distraction" were key contributors.

Drunk driving alone, the report said, accounted for 18% of the total economic loss from motor vehicle crashes, costing the economy as much as \$199 billion in direct and quality-of-life losses.

Speeding accounted for 21% of the total economic loss, responsible for as much as \$210 billion in costs.

Distraction contributed another 17%.

The study concluded that the use of seat belts prevented 12,500 fatalities and 308,000 serious injuries, the study said, as well as \$69 billion in medical care, lost productivity and other costs related to auto crash injuries. But the failure to wear seat belts caused \$72 billion in losses.

The study also concluded, though, that driving cars has never been safer. In 2011, 32,367 people died in U.S. automobile accidents, the lowest rate since 1949. Fatality rates per vehicle miles traveled fell in 2011 to 1.1 fatality per 100 million vehicle miles traveled, down from 1.11 in 2010. In 1949, when there were fewer people driving cars that were much less safe to drive, the fatality rate was seven times higher.

INTERNATIONAL

How the Chinese cross the road

The Economist, 3 September 2014

CROSSING the road in a Chinese city sometimes feels a bit like stepping out in front of a firing range. Cars move slowly (for the most part) but drive inexorably forward, with scarcely a care for passing inconveniences such as pedestrians, bicycles, dogs or, indeed, other cars. There appears to be one guiding principle of driving: look straight ahead (glancing to the side or behind is cheating) and keep on going. A sudden nip to the left or right is quite acceptable, even if that necessitates slamming on the brakes to avoid a car that is merely driving in a straight line. China's brake-pad peddlers would be raking it in if more people actually replaced them whenever new ones were needed.

It was ever thus. Twenty years ago urban streets were jammed not with cars but bicycles. Bike jams were a common



Photo: AFP

site. Pedestrians and cycles often became embroiled in a tangles of wheels, clothes and other paraphernalia. The difference now that cars have largely replaced bikes is that it's rather easier to kill someone.

Such talk is not hearsay. Barely a week goes by without a story of some awful crash. Last week six people died and another four were injured in Gongxian county in south-western China, when a minibus and two trucks collided; a bus collided with a truck in Wuzhou in south China's Guangxi region; another bus and truck smashed into each other in Gansu province in the north-west.

Accidents are common for many reasons. Aside from the fact that China's population is so large, most have to do with the fact that China is so new to the business of driving cars. In 2013 it added more cars to its roads than were driving in the whole country in 1999. In China, the number of vehicles has been increasing by 15m cars every single year for a decade. The number of licence-holders has risen even faster; one in five Chinese now has a licence. In the rich world, by contrast, the number of licence-holders is flat or falling.

Speed of development plays a large part. There had been a gradual increase in the number of drivers in rich countries. In China, as in nations such as Indonesia, car ownership has risen so fast that a large portion of those on the road are new drivers with limited experience. In every country insurance premiums for new drivers are high for a reason: people who have only just passed their test are more likely to be involved in an accident than those who have driven for years.

China certainly has some safety regulations in place. Drivers and passengers must wear seatbelts, for example, and mobile phones can only be used hands-free when driving. Unfortunately these laws are entirely ignored. Most taxis value keeping their seats clean over keeping their customers safe, so they cover the back seat and thus block the use of seat belts.

There has been some improvement. Speed limits are more rigorously enforced than they used to be, not least because

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speed cameras and speeding fines are an important source of revenue for local governments in China, as they are elsewhere in the world. Some regions have stepped up fines for overloaded lorries. The incidence of drink driving has been vastly reduced by increasing penalties and enforcing the law.

The high number of accidents is not just about the drivers. China has extraordinarily diverse terrain and weather conditions. However fast the country builds roads, it cannot keep up with its own development. Many are in poor condition after only a few years, because of shoddy workmanship, poor materials, little maintenance, bad weather or all a combination of these.

Despite the high number of accidents, the incidence of deadly collisions has been falling even as the number of cars has increased. According to official statistics, the number of road traffic deaths has fallen from 9 per 100,000 of the population in 2002 to 5 per 100,000 now, compared with 3 per 100,000 in Britain, for example.

The official statistics look extremely positive, even miraculous. Since new road-safety laws were introduced in 2003, the number of accidents has fallen by 70%, according to the government. The question is whether the data are correct. An article in the *Lancet* in 2011 questioned the verity of those numbers: it reported that the number of fatalities the traffic police counted was less than half that derived from death certificates at the ministry of health. The incentives may be wrong for traffic cops too: they are penalised if a large number of accidents happen on their turf, so may underreport.

Even if the official numbers are over-hopeful, the trend looks to be in the right direction. Every 30 seconds, someone, somewhere in the world dies in a road crash and ten others are seriously injured. It is encouraging if China's contribution to that awful toll is falling. But it may still be advisable to pay close attention when crossing the road.

The last rescue — part 2

by Richard von Frankenberg, *Gute Fahrt*, October 1956, translated from the German by Frank Owen, Alpha Omega Engineering, Inc.

Editor's note: This article appeared in the German publication Gute Fahrt (Nice Driving, which describes itself as "the magazine for VW drivers"). The first part of the article was published in the June 2014 newsletter. The article is interesting, in part, because it illustrates how far we have come in our thinking about vehicle safety since the 1950s. That article ended with the author just having avoided being in a crash, which would have been caused by another driver, passing cars where he should not have been.

Now I had two passengers with me. One of them belonged to Group 1, the other to Group 4. I'll explain that now: Group 1 is the "ideal group" that behaves correctly. In this case, it was my wife, who certainly already has sat next to me for a half million kilometers and knows how one does it—namely pressing the feet as fixed as possible against the car floor (or against whatever the feet find themselves on), hands or arms outstretched, bracing against the dashboard, if one is sitting in the front. Press with all the force you can and try to keep all the parts of the car that come toward you away from your body.

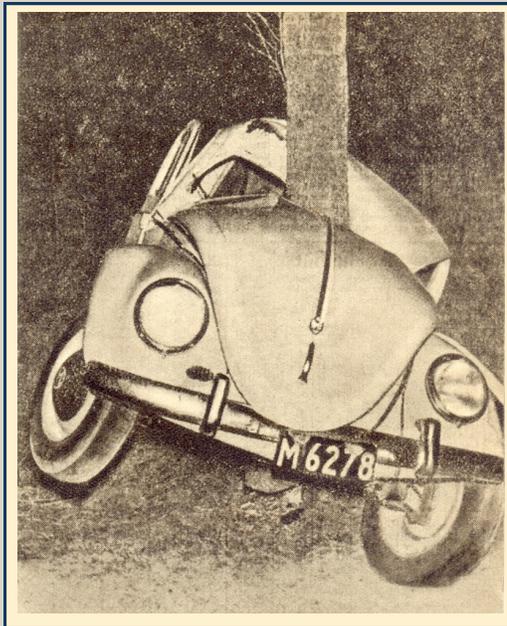
Group 2 are the people who, during an accident, put their hands in front of their face to protect it but don't do anything else. If one asks them why they do this, they answer: The head is the most important part of the body and must be protected at all costs: eyes, nose, forehead.

It is impossible to talk them out of this belief. But by putting their hands in front of their faces, they are not protecting the head enough. What matters regarding the severity of the injuries is above all the crash impact (really the kinetic energy of the car occupants in the moment of the car crash), and it is important to dampen the impact. It enlightens everyone to know that this can be done, if at all possible, only with really vigorous bracing, while an un-

Continued next page...

braced body collides with its full collision impact against the pieces of the car that injure us: roof, windshield frame, steering column, dashboard, doors (which then usually open, so that one falls out). One protects his head best when he tries to brace his entire body.

Group 3 are those who neither brace nor put their hands in front of their faces. Rather they give up before the crash, usually scream, but they make no defensive motions, even though they see the crash coming, sometimes in a kind of paralysis. To which one can say: if they had had a conversation about the possibilities in a crash beforehand, they probably wouldn't be so helpless and frightened in a crash.



Now we come to Group 4. In the aforementioned case, it was one of my ignorant cousins who belonged to this group. For as we were again on the road, returning after our dare-devil snow expedition, and I braked and swerved, she asked me with her angel-like face: "Tell me, why did you stop so suddenly? Is something wrong?" Group 4 contains the pure idiots who understand so little about traffic, that they are never conscious of a danger, or if they are, it is only after the fact.

It is self-evident that the bracing therapy applies equally to the driver, who must at any cost keep the steering wheel away from his chest. Also, the closer you sit to the steering wheel, the harder it is to brace. Anyone who's involved in an accident and is driving with one hand will find it naturally hard to do this. Furthermore, it is better to have the hands outside on the steering wheel rather than inside on the steering wheel spokes.

(Ed: At the time, power steering was not as common as it is today, so the steering wheels were larger in diameter than they are on today's cars.)

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Things set up in and on the car, of secondary importance in a methodical overview of accident prevention, I shall explain at the end of this article. In the USA, where doubtless they have already gone further than we have in Germany, the big companies carry out extended tests, where they unsympathetically sacrifice entire autos: they run them into stone walls at 80 or 100 kph, with dummies that have the same weight as normal car occupants, and they film and measure this in detail. Thus they determine which parts of the car most often cause injuries to people. Padded dashboards are one of the results from these tests. Also, in the USA there are intensive tests being conducted on new steering wheel shapes. Also a part of this program is that all objects with sharp corners are removed from the interior crash zone, beginning with hand-brake levers and including sun visors, rear-view mirrors, knobs and handles.

Seat belts are without doubt an effective safety device, if one drives a closed car. For the belt—proven a thousand times in airplanes—does nothing more than take over the act of bracing, where it keeps the occupant in his seat. Better protection than the lap belt would be the shoulder harness, but one must say that such a "full belting" of the occupant is really not very comfortable. Also the shoulder harness is much harder to fasten and much more expensive than the normal lap belt. Such belts should be easy to open with a hand grip or with a short blow, which is important after an accident when one wants to exit the vehicle.

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If I may add another remark to this theme “seatbelt”: one hears very often, that in a rollover but also in just a strong swerving, the occupants of the car fly out of the opening doors and then are more severely injured than they would have been had they stayed in the car during the crash. The latching of the doors from the inside offers no adequate protection, since even locked doors come open even with slight bending of the car body. The forces in play are just extraordinarily high. If one refrains from focusing on seat belts as protection measures, there is only one other thing that prevents this flying out from the sides of the car: the unconditional bracing with hands and feet in the car.

Fire! Out and get out! These are both thoughts that one must muster after an accident—the “get out”, yes, because the car could burn. One must, by the way, break windows (something that’s harder than you think!), so one uses in an emergency a shoe.

It’s better if one has already made thoughts about this, where there is, if needed, a hard object nearby, for example a combination wrench or a big flashlight or also...a fire extinguisher. For one can indeed use it for other than its intended purpose to break a window.

A fire extinguisher in a car makes then only sense if it is fastened then immediately accessible to the driver—in the forward luggage compartment (Ed: think VW bug, since this magazine covers the VW beetle) fire extinguishers really don’t make sense, because in most cases, one cannot get to them quickly enough, and especially not when there is a fire in the gas tank. And speed is all that counts in case of fire! For with a little hand fire extinguisher of the customary type, one can fight only when it starts. An auto completely in flames is with this impossible to put out—one shouldn’t have any illusions about this.

Another case worth considering is this: what should I do if I drive or fall into a body of water? From experience we’ve learned, that a Volkswagen in most cases will continue to float until the occupants have calmly thought over the situation and dealt with it. “To deal with” here means: close the windows, so that no water can get in, and then open them only when all preparations have been made to get out. In general, the water pressure shouldn’t be so great that one cannot open the door. But I say this with all caution, because I haven’t had enough reports available about this event to say much, and I have never had this happen to me.

Finally a word pro-Volkswagen against a mistaken opinion. Many people believe that, because “there is nothing up front” besides the gas tank and the spare tire, VW drivers will be more severely injured than drivers of front-engine cars, because up front there is no resistance offered in a crash. But exactly that is an advantage! If I have a frontal collision with a wall and push the car in by 10 cm that is considerably more unpleasant for the occupants than is the case if the car is pushed in by 30 cm. Why? In the first case the energy is dissipated in a “braking distance” of 10 cm and in the second case in 30 cm. The kinetic energy with which the occupants are thrown forward will be higher, the more abruptly the braking process happens. So if I have a little bit of “braking distance”, this reduces the kinetic energy somewhat. I won’t be thrown forward so violently.

You must admit to me that a chapter about accidents isn’t so pleasant. But what helps: one must speak about them.

AND NOW A VERY DANGEROUS CAR FROM TODAY

Tata Nano safety under scrutiny after dire crash test results

India's low-cost answer to the VW Beetle fails to live up to 'frugal engineering' hype after receiving no stars for adult protection

by Philip Oltermann and Paige McClanahan, *The Guardian*, 30 January 2014

As the workers strap the crash-test dummies into the front seat of the little car, they look concerned. Not about the vehicle, they insist, they are worried about the dummies.

Each of the figures, engineered to resemble the height, weight and bone structure of a human being, are worth about €100,000 (£82,000). For the same sum, you could buy the vehicle they are sitting in 60 times over.

When it was launched in 2009 at a cost of roughly \$2,000 (£1,210), the Tata Nano was heralded as the low-cost vehicle that would motorise the Indian masses, a kind of Asian equivalent of the Volkswagen Beetle. If the car proved a success in India, the industrialist Ratan Tata hinted at the time, a European and US version would be rolled out within a couple of years.



The car passed a crash test in England, and Tata claimed to be confident of a four-star rating in the Global New Car Assessment Programme (Ncap).

But the results of the Ncap test, conducted last month at ADAC, the German equivalent of the AAA, in Landsberg, Bavaria, raised serious questions about the risks posed by Tata's so-called frugal engineering approach to car safety.

The Tata Nano received a zero-star adult protection rating and failed to meet even the most basic UN safety requirements.

After hitting a wall at 40mph, the vehicle pirouetted around its axis by about 150 degrees and skidded a couple of metres to the left. Its nose folded like a cardboard box, wrapping around the dummy in the driver's seat. The right-hand wheel burst through the floor of the vehicle, crushing the dummy's legs. By the time the car had come to a standstill, the right wrist of the driving dummy was protruding from the burst intersection between the windscreen and side windows.

About 50 cars are crash-tested at the Landsberg laboratories each year. Makeup is applied to the dummies before a test – to the nose, brows and lips – to determine the initial impact, which will leave a smiley face blotted on to the inflated airbag. The Nano, crucially, does not have an airbag, so there were only smudges of paint on the dashboard.

The results were unequivocal. While the dummies were not quite beyond further use, the test centre reported that human passengers in the front seats would not have survived the crash. The vehicle was also given a zero-star rating for child protection, since it was not possible to install child seats in the car. So far, Tata Motors has not commented on the results of the test.

See [full story](#).



SOME GOOD NEWS FOR BICYCLISTS

Editorial: Drivers, start your eyeballs, the three-foot rule for cyclists is here

By the Times editorial board, *L.A. Times*, 8 September 2014

Next week, you'd better give cyclists three feet of space; it's the law

A California law requiring drivers to maintain a distance of three feet when passing cyclists on the road goes into effect next week. The Three Feet for Safety Act, passed last year by the Legislature, is the latest sign of an important cultural shift in a state famously dominated by automobiles.



The building of a bike-friendly society is a long, slow process. Officials in Los Angeles are in the midst of a 35-year project to build out 1,684 miles of bikeways. But as more people opt to get out of their cars and onto their bicycles, it is increasingly important to figure out how motorists and cyclists can share the road safely.

Hence the new law. Initially, its specificity is bound to cause some confusion and frustration among drivers and bicyclists alike. How exactly does a driver know whether he's three feet away from a cyclist? What if moving three feet to the left means going into the oncoming traffic lane? Will some cyclists really carry yardsticks, as they have vowed to do, to make sure the law's requirements are being met?

But drivers will figure it out. Laws similar to this one are already on the books in 22 states. The California Department of Motor Vehicles has long instructed drivers to pass at a safe distance and has recommended three feet. Now it's the rule. However, the new law also states that if a driver is unable to give a cyclist three feet, due to traffic or road conditions (including the weather and width of the highway), the driver must instead slow to a reasonable speed and pass when doing so would not endanger the bicyclist. A violation carries a base fine of \$35, unless the violation causes a collision and injury to the bicyclist. Then the fine is \$220.

The law is a smart first step toward rational road-sharing, and it's imperative that motorists — and, just as important, law enforcement agencies — take it seriously. Los Angeles police and California Highway Patrol officials have said that the emphasis in the first few months will be to educate drivers on the law, not necessarily to write a lot of tickets. That's fine. But eventually drivers will have to be held accountable for careless or reckless passing. Likewise, cyclists also need to be held accountable when they break the rules of the road.

Virtually every urban bicyclist has a story about a driver who whizzed by too closely. If we want to coax more people out of their gas-guzzling cars, they have to feel confident that riding a bike is not a death-defying experience.



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