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GAC Chair (2002–2008)
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Klamath Falls, OR

David Peterson
GAC Chair (2010–2015)
GAC Member (2008–2016)
Oregon City, OR

Courtney Olive
GAC Member (2008–2013)
Portland, OR

February 14, 2019

Dear Co-Chairs Beyer and McKeown and Members of the Joint Committee on Transportation:

We are three former members of the Governor’s Advisory Committee on Motorcycle Safety, including two Chairmen. Between the three of us we have 22 years on the GAC, and have been riding a total of 104 years. Professionally, we are a Retired Professor Emeritus, a Financial Planner, and a practicing Attorney.

We respectfully offer this testimony for your February 20th hearing on HB2314. We strongly support HB2314 and the limited lane-sharingⁱ it would allow, and we urge you to vote in favor of it.

I.

We want to begin by debunking a myth. There is no evidence that lane sharing increases crash risk on highways and freeways, under the conditions laid out in HB2314. On the contrary, the National Highway Traffic Safety Administration (NHTSA) and the Motorcycle Safety Foundation (MSF) state in their National Agenda For Motorcycle Safety: “*There is evidence (Hurt, 1981) that traveling between lanes of stopped or slow-moving cars (i.e., lane splitting) on multiple-lane roads (such as interstate highways) slightly reduces crash frequency compared with staying within the lane and moving with other traffic.*”ⁱⁱ HB2314 applies to exactly these conditions.

Some have incorrectly pointed to the 2015 Berkeley Study “Motorcycle Lane-splitting and Safety in California” as evidence that lane sharing increases crashes. This is wrong. The Berkeley Study explicitly states “our study data cannot be used to estimate the risk of actually being involved in a collision” and “the current data cannot be used to compare the collision risks for lane-splitting or non-lane-splitting riders.”ⁱⁱⁱ Instead, the Spokesman for the California Office of Traffic Safety summarized the Study by stating: “lane-splitting in and of itself — when done in what we refer to as in a safe and prudent manner — is no more dangerous than regular motorcycle-riding.”^{iv}

II.

Next, we want to draw your attention to how significant the safety findings of the Berkeley Study are. As you know, the study found that lane-splitting motorcyclists were “considerably less likely to suffer head injury, torso injury, extremity injury, and fatal injury than riders who were not lane-splitting.”^v These findings are profound.

This is the largest motorcycle crash study ever conducted in the U.S. and was commissioned by the California Office of Traffic Safety, an agency similar to ODOT’s Transportation Safety Division. The Study’s data was collected statewide by the California Highway Patrol. The final Study was provided as a legal document to the California legislature--specifically to inform legislators on their decision of whether to write lane-splitting into law, *see attached* Letter from Study Author, Dr. Thomas Rice, to California Assemblymember Bill Quirk.

We believe this study is robust and we respectfully urge you to rely on it. It is the single most significant study on the safety of lane-sharing, and it demonstrates the benefits.

III.

Third, the limited nature of HB2314 maximizes the safety benefits of lane-sharing and minimizes concerns. HB2314's parameters (traffic at 10MPH or less, rider limited to 10MPH above the speed of traffic) are well within the safety envelope of the Berkeley study, which found that "[l]ane-splitting appears to be a relatively safe motorcycle riding strategy if done in traffic moving at 50 MPH or less and if motorcyclists do not exceed the speed of other vehicles by more than 15 MPH."^{vi} In fact, as noted, NHTSA and the MSF have said that there is evidence that lane-sharing "reduces crash frequency" on highways when traffic is stopped or slow-moving.^{vii} Those are exactly the roads and conditions covered by HB2314.

We have heard a potential concern about pedestrian and bicycle safety. HB2314 does not create any issues here. The bill applies only to highways with posted speed limits of 50 MPH or greater – pedestrian and bicycle use is specifically prohibited on many of these roads. And, when allowed on such roads, pedestrians and bicycles are very rare. As an added precaution, HB2314 specifically prohibits lane-sharing on the righthand side of the far right lane.

As to the concern of car drivers changing lanes suddenly or opening a door, we believe these are non-issues. HB2314 applies to gridlock; in such conditions it is unlikely that cars inching along would be able to change lanes suddenly. And most people do not open their doors when stuck in traffic. In either case, motorcycles traveling at 20 mph or less should be able to stop in time. Moreover, lane sharing allows riders to see farther ahead than if they were directly behind a car, thereby increasing the rider's ability to spot hazards ahead of time and avoid them.

IV.

Finally, all three of us have extensive experience with lane sharing in California, as well as on roads in Europe and Asia. Based on this experience, we have observed the following direct safety benefits of lane sharing:

- A motorcycle that is moving, when surrounding traffic is stopped, is more conspicuous and visible. In places where lane sharing is legal drivers become more likely to look for, and become aware of, motorcycles.
- Takes motorcyclists out of car drivers' "blind spot." A motorcyclist who is lane sharing can be seen in a car driver's sideview mirror at all times.
- Gives motorcycles more maneuverability for accident avoidance. Lane sharing positions motorcyclists in open road, rather than directly behind a vehicle, this gives riders a clear path to avoid hazards.
- Lane sharing increases motorcyclists' "line of sight." Being on open road means a better opportunity to see ahead to predict and avoid hazards.
- None of us have observed a motorcycle crash while lane sharing but, in the event of a crash, a motorcycle that is lane sharing is more likely to have a "glancing" blow to the vehicle rather than a direct hit. As you know, such accidents are less severe because the rider can keep moving forward rather than stopping instantly. The rider is also more likely to remain upright. We believe these points are consistent with the Berkeley study's finding that, when riders crash, the outcomes are better if they were lane-sharing.
- Keeps motorcycle riders moving, which reduces fatigue both from heat and from constant operation of the motorcycle's controls in stop & go traffic (motorcycle controls require more dexterity and focus than operating a car).
- Removes motorcyclists from being rear-ended or, worse, being "sandwiched" by a car in front and behind. With distracted driving a serious concern, anything that reduces a motorcyclists' exposure to these accidents is worth pursuing.

V.

In summary, lane-sharing is a tool that has documented safety benefits. We urge you to give full consideration to this tool. We believe HB2314 is carefully crafted to extract maximum benefit with minimal risk, and we ask you to support this bill.

Sincerely and Respectfully,

/s/ Jim Stewart

/s/ David Peterson

/s/ Courtney Olive

Jim Stewart

David Peterson

Courtney Olive

ⁱ In this letter, we use the terms “lane-sharing” and “lane-splitting” interchangeably.

ⁱⁱ <https://one.nhtsa.gov/people/injury/pedbimot/motorcycle/00-NHT-212-motorcycle/motorcycle51.html>

ⁱⁱⁱ <https://www.ots.ca.gov/wp-content/uploads/sites/67/2018/09/Motorcycle-Lane-Splitting-and-Safety-2015.pdf> at pages 17 - 18; *see also* <https://news.berkeley.edu/2015/05/29/motorcycle-lanesplitting-report/> (Dr. Thomas Rice, author of the Study, stating: “It’s important to note that from the data in our study, we are unable to estimate the risk of getting into a collision in the first place.”)

^{iv} https://www.washingtonpost.com/news/tripping/wp/2016/06/30/california-motorcyclists-look-crazy-splitting-lanes-maybe-we-should-follow-their-lead/?utm_term=.064a80ca140a

^v <https://www.ots.ca.gov/wp-content/uploads/sites/67/2018/09/Motorcycle-Lane-Splitting-and-Safety-2015.pdf> at page 16, *see also* pages 3, 13.

^{vi} <https://www.ots.ca.gov/wp-content/uploads/sites/67/2018/09/Motorcycle-Lane-Splitting-and-Safety-2015.pdf> at page 4. We are aware that the Berkeley study went on to state that “[a] significant number of motorcyclists lane-split in fast-moving traffic or at excessive speed differentials” *Id.* While the number may have been *statistically* significant, the study makes clear that “[m]ost riders exceeded the speed of the surrounding traffic by a small or moderate amount.” *Id.* at 16.

^{vii} <https://one.nhtsa.gov/people/injury/pedbimot/motorcycle/00-NHT-212-motorcycle/motorcycle51.html>



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Assemblymember Bill Quirk
22320 Foothill Blvd, Suite 540
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April 4, 2015

Dear Assemblymember Quirk,

I am writing to share with you some of the results of my research on motorcycle lane-splitting. I have been conducting a study of several aspects of motorcycle safety in California and have completed an analysis of the impact of lane-splitting on the injury outcomes of collision-involved motorcyclists.

In this study, the California Highway Patrol used a one-page supplemental form to record information that is not usually collected during motorcycle collision investigations. Using the form, officers recorded information on whether the motorcyclist was lane-splitting at the time of collision, motorcycle and traffic speed, helmet characteristics, body region of injury, and other factors. We also obtained copies of the original police collision reports. The primary findings of my current data analysis are as follows.

Of the 6,000 motorcyclists I studied, nearly 1,000 were lane-splitting at the time of their collision. When we compare motorcyclists who were lane-splitting with those who were not, we can see that the lane-splitting riders were strikingly different. Compared with other motorcyclists, lane-splitting motorcyclists were:

- Using better helmets
- Traveling at lower speeds
- More often riding on weekdays and during commute hours.
- Less often carrying a passenger
- Less often under the influence of alcohol
- Less likely to suffer a head injury (9% vs 17%)
- Less likely to suffer a torso injury (19% vs 29%)
- Less likely to suffer a fatal injury (1.2% vs 3.0%)

We also found that the manner in which motorcyclists split lanes varies greatly. Most riders exceeded the speed of the surrounding traffic by a small or moderate amount. For example, 69% of riders were exceeding the traffic speed by 15 MPH or less. A significant number were

traveling at excessive speed; 14% had a "speed differential" of 25 MPH or greater, and 3% had a speed differential of 40 MPH or greater. Lane-splitting in such a manner is likely to increase the risk of being involved in a traffic collision - which we are not able to study using our current data set. What we can study is how the injury outcomes are influenced by the manner of lane-splitting, given that a rider has been involved in a collision. We used multivariate regression methods to do this.

We found that both traffic speed and motorcycle speed differential were important in predicting the occurrence of injury. Traffic speed is, of course, a known predictor of injury occurrence in all types of motorcycle collisions, and the situation is no different in collisions involving lane-splitting. Our overall findings with respect to the manner of lane-splitting are:

- There was no meaningful increase in injury incidence until traffic speed exceeded roughly 50 MPH
- Motorcycle speed differential is a stronger predictor of outcomes
- Speed differentials of up to 15 MPH were not associated with changes in injury occurrence
- Above that point, increases in speed differential were associated with increases in the likelihood of injury of each type

I hope you find this information useful. You will be able to access these and other findings when I release my report on this research later this month.

Best regards,



Thomas Rice, MPH, PhD
Research Epidemiologist