

**BICYCLE SAFETY:
RECOMMENDATIONS TO UBER REGARDING PASSENGER DOOR USE**

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ISSUE

Uber commercial vehicles pick up and drop off passengers frequently, yet appear as normal passenger vehicles. They often have tinted windows, lack of signage, and do nothing to signal passengers exiting.

Perhaps because of controversy over vehicles parking in bicycle lanes in the District of Columbia (DC), drivers too often let passengers out into bicycle travel lanes, an inherently dangerous practice made more dangerous by the lack of warning.

Uber risks liability and public outrage if it does not rapidly correct this situation. Striking passing traffic of any kind is the liability of the person opening the door,¹ Uber has a responsibility to ensure its passengers do not strike cyclists. Yet this is reportedly happening frequently today.

BACKGROUND

I have been involved in bicycle policy, bicycle safety research, and education for over two decades. I have worked for the European Union as well as local government, nonprofits and universities in California, including bicycle and pedestrian safety research at UC Berkeley's School of Public Health where I completed my dual Master's in Transportation Planning and Public Health (MCP/MPH). I am a lifetime transportation cyclist and once worked as a bicycle messenger in Washington, DC.

I was recently struck by the right-rear passenger door of an Uber delivering a passenger as I rode a bicycle legally in a marked bicycle lane in DC. I suffered disabling injuries as a result of the crash which I am still recovering from. After speaking with local advocates and attorneys I have learned that these types of collisions are now very commonly caused by Uber. Uber has a clear responsibility to take immediate strong action to cease and desist inflicting these serious preventable and potentially fatal injuries. I am writing these recommendations to Uber for increasing bicycle safety in answer to the request of Colin Hughes of JUMP/Uber after reflecting on my own experience.

I am available for further consult on this matter via phone, email or in person. I would be happy to work with Uber on resolving this and other risks to the public.

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¹ DC code Section 2214.4 reads, "No person shall open a door of a vehicle on the side where traffic is approaching unless it can be done without interfering with moving traffic, bicyclists, or pedestrians and with safety to himself or herself and passengers."

RECOMMENDATIONS

Overarching recommendations fall into several cross-cutting strategies: driver training, passenger awareness, equipment upgrades, and providing warning and awareness to approaching cyclists. Note that these recommendations are not necessarily in order of priority or effectiveness.

- I. **Clearly prohibit drivers from dropping passengers off into travel lanes**
Never let passengers out into a bicycle or other travel lane. This would have completely prevented my injury. If Uber finds it cannot pull to the curb at some destinations because of a bicycle lane, the driver must find the closest/most favorable next location possible.²
- II. **Display to all sides of every Uber vehicle clear notice whenever it is in service**
This could take the form of a lighted sign such as some drivers use to the front, but in this case would be visible from the rear and ideally sides. Taxis typically have a lighted sign on the roof. Providing this awareness helps alert other traffic of frequent stops for passengers.
- III. **Provide rear-view mirrors for passengers**
Some taxis already provide this safety feature. Add-on mirrors are available for under \$20 each. Uber can require this for all vehicles.³
- IV. **Do not allow tinted windows.**
Bicyclists are alert to motion in cars to warn of possible risk of opening doors. The Uber that struck and injured me had extreme tinting (estimated 5% light transmittance) in the rear windows which may not even be street legal in DC (minimum 50%, D.C. Code § 50-2207.02). If I could have seen the occupants I would much more likely have known there was passenger activity and thus would have slowed down and gone around the vehicle.
- V. **Signal when the Uber is stopping to let passengers out in traffic**
Hazard lights and/or something more effective should be used when stopping for passengers. NOTE: the Uber which struck me had no turn signal or hazard light on and was in a line of cars at a red light. All indications were that it would move forward.

IDEA: Hazard lights automatically wired to activate when passenger doors are unlocked.
 - Drivers would be required to keep doors locked until preparing to drop off passengers
 - Driver must unlock the door – after checking for oncoming traffic including bicyclists
 - Unlocking the door would activate hazard lights

² The recent efforts to teach drivers not to stop in bike lanes seems to have created confusion leading to injuries such as mine when Uber drivers stop adjacent to a bike lane and let passengers out into the bike lane. It is inherently unsafe to drop passengers off into a travel lane and widely discouraged and often illegal. The recent DC legal change should not be taken as permission to violate this long-established safety principle.

³ Example of an inexpensive passenger rear-view mirror (not tested by author, found in simple web search) is: <https://www.amazon.com/Secondary-View-Mirror-Protection-Blind/dp/B00QTRXW4E>

- Doors would only unlock when vehicle is stopped
- This would protect passengers as well as bicyclists and other approaching roadway users

VI. Train and provide physical notice to passengers

Pop-up warnings in the Uber app cannot be relied on. Physical notice in the vehicle in the places a person would look when exiting should be paired with passenger rear-view mirrors

- Passengers can greatly reduce risk if they are aware and use both a provided rear-view mirror (mentioned above)
- Passengers also reduce risk if they are taught to use the “Dutch door” opening method of always reaching across the body to reach the door handle, forcing the body to turn to see. (This method may not work on some model cars that have limited visibility to the rear, and for passengers who have physical limits on twisting their body.)

VII. Prohibit cars with the most dangerous doors

Not all car doors are alike. The safest are doors which open least – such as a sliding door on a van. The most dangerous are those that open widest and quickest.⁴ Consider:

- Doors which are short
- Doors which open with the least projection outside of the vehicle
- Some way to slow the speed at which doors open
- Additional mirrors and lights on doors
- Doors with a shape that helps avoid collision with handlebars

CONCLUSION

Uber has a number of effective available options to eliminate preventable injuries its vehicles are currently inflicting on the bicycling public. These options will increase safety for Uber’s passengers and other roadway users as well.

<p>SUMMARY</p> <p>A. It is essential to communicate to approaching traffic that passengers are being transported, particularly when they are being dropped off. Hazard lights, lighted Uber branding to the rear and sides, and clear windows so that passenger activity is visible.</p> <p>B. It is important to train and equip both drivers and passengers to watch for bicycle traffic and to control passenger doors until it is safe to open them.</p> <p>C. Also essential is never letting passengers out into a marked bicycle lane.</p>

⁴ NOTE: The Uber which hit me has an unusually long door which opens to almost 90 degrees from the car. It opens near-instantaneously. The shape of the door is widest at the handle. This maximizes risk of contact because it is widest where the bicyclist is widest. In my case the impact of the edge of the door hit my fingers on the handlebars sending me spinning into the ground and against a parked car where I suffered a concussion, scrapes bruises and lacerations to both knees, the side of my right leg and a deep injury to my index finger on my dominant hand.