

**Unsafe on any street; unsafe on any sidewalk.
Rented e-scooters in Seattle.
News from the WTSC/HIPRC Report and elsewhere.**

For the Cooper Jones Active Transportation Safety Council
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If you were among the vast majority of people in Seattle who have never ridden one of the thousands of stand-up rental e-scooters, mostly Lime green, sponsored by the Seattle Department of Transportation (SDOT) you would know this topic well. They're everywhere, riding on the sidewalks, weaving with and between cars on the streets. You've wondered, "Aren't those e-scooter riders risking a lot of injuries?"

Then you might also have asked: "Does SDOT actually know the injury risks to its e-scooter riders?"

And finally: "If SDOT does know, are they telling anybody?"

The answers are: Yes, those SDOT e-scooters are very dangerous for riders. Yes, SDOT knows how bad the injury risk is and has known for more than three years. And no, SDOT is not telling us what they know, and has no intention of doing so anytime soon.

That adds up to a very bad look for SDOT. This is an agency that tirelessly proclaims that safety is its core value. Its cherished Vision Zero safety program is anchored in the mantra that every fatality and serious injury on Seattle's streets and sidewalks is unacceptable. Or so they say.

In January, the Washington Traffic Safety Commission in Olympia published an extraordinary report from Harborview Injury Prevention and Research Center, generally shortened to HIPRC. [Electric Scooter Related Injury in Seattle](#) examined patient records of injured e-scooter riders at the Harborview emergency department and other UW Medicine-affiliated locations. Researchers found just a handful of injuries for 2020, when SDOT late in the year launched its e-scooter rentals. Then for 2021, about 50 patient injury records. For 2022, just under 80. For 2023, about 150. All told, 280 or so patient records of injured e-scooter riders quickly ramping up over just three years, 2021 to 2023.

Probing the patient medical records yielded a fact even more important than the number of the injuries. How do the injuries occur? The report found that the injuries overwhelmingly occur – 87 percent - from riders falling off the scooters, and only rarely from collisions in traffic, just five percent.

This simple fact, firmly quantified from the patient records, opens a very troubling backstory for SDOT. Because it comes to SDOT as no surprise and highlights the utter failure of SDOT to account to itself or burden the public with inconvenient truth.

SDOT has known at least since November, 2021 that there are many more scooter injuries overall than there are scooter/car collision injuries. They learned that when they opened about 4900 returns from e-scooter riders to a broadside rider survey aimed at information of its scooter rental program's first year: age of riders; number of rides taken by typical riders; riders' gender and income levels, and so on. In the survey SDOT also included questions about injuries – whether you had been injured and whether you had sought medical attention; also, a blank space for an optional tell-us-what-happened narrative response.

The [startling results](#) SDOT certainly never expected. More than 500 of their e-scooter riders respondents indicated they had sustained some injury, some more than once. Well over a hundred reported they had sought professional medical attention for their care. The narrative responses, never completely published by SDOT but obtained by Public Disclosure Request, told individual riders' grisly tales: broken bones, sprains, concussions, lacerations, lost teeth, contusions, long recuperations. The narratives were replete with references to hitting potholes, sidewalk uplifts, skidding on wet pavements, failed brakes. Car collisions were a rarity.

This led SDOT on a search of alternative facts to prepare its first year evaluation of the e-scooter rental program finally [published in April 2022](#). SDOT therefore scoured a body of 8000 Seattle Police Department documents called Traffic Collision Reports that are obligatorily prepared by SPD officers for every single traffic collision in Seattle to which an officer responds. The reports are prepared on a standard form and must be regularly submitted to the Washington State Patrol for use in statewide traffic collision data aggregation and analysis. But a rider pitched off an e-scooter by a big crack in a sidewalk? No police officer, and no Traffic collision Report. So SDOT's alternative facts came from the needles it found by looking in obviously the wrong haystack. For the first year of the e-scooter rental program, SDOT only located 17 Traffic Collision Reports involving e-scooters; one was an e-scooter fatality; five were coded by SPD officers as serious injuries.

The gap between the tiny injury picture pulled from Traffic Collision Reports and the big injury picture reported by hundreds of its own riders needed some comment, of course. The SDOT dodge was to bemoan that its original intention to collect emergency room data for its own understanding of e-scooter injury risk had been sidelined by the pandemic. It wrote in its report, now 36 months ago: "In the near future, SDOT hopes to engage with medical researchers to better understand rate and severity of injuries."

So SDOT did what, finding itself in this pickle? In June, 2022, it turned to whom else but its own hometown Harborview Medical Center and the highly regarded injury research and prevention specialists at HIPRC to try to revive the pandemic-foiled program of emergency room data collection. From SDOT:

“We are very interested in bringing whatever we can to the table to expedite this – e.g. hiring a consultant, supporting hiring a research assistant, etc. Would that be helpful. We appreciate your efforts on this so far and are eager to help get it across the finish line.”

That was 34 months ago. Through the remainder of 2022, SDOT and HIPRC jointly polished a research methodology. SDOT’s e-scooter program manager committed to providing \$75,000 to fund the study. SDOT drafted a Memorandum of Agreement for the study, tweaked into final form after vetting through the University of Washington Office of Sponsored Programs. Research staffers were identified and even began work. The SDOT program manager even praised the study to federal Centers for Disease Control in November 2022, 29 months ago.

“Our partnership with the HIPRC to develop a shared mobility injury study will help us better understand injury rates across demographics and meet the safety needs of our program going forward.”

Indeed, SDOT’s research program with HIPRC was poised to lead the way to nationally-significant improvements in data collection practice. Not just Seattle had encountered the inadequacy of traffic collision report data for e-scooter injuries. It was a national problem. So much so that an aptly titled report, [Data Challenges Associated with Assessing the Prevalence and Risk of Electric Scooter and Electric Bicycle Fatalities and Injuries](#) was issued by the National Transportation Safety Board in November 2022.

But was leading the way nationally to better data collection on e-scooter related injuries what SDOT really wanted? Something seemed to go amiss. The internal emails (dozens of emails obtained under a Public Disclosure Request are the source of this account) show that a key SDOT e-scooter manager was pulled away on temporary assignment to write the Vision Zero Top-to-Bottom Review document that the new SDOT Director arriving in October had commissioned. By the time the Top-to-Bottom Review draft was completed and she returned to e-scooters, the project apparently had stalled, as revealed in an internal email dated February 9, 2023, 26 months ago:

“Wanted to flag this as we have not officially signed the MOA, but HIPEC has been working. I know we’ve talked about going a different direction, which I think is certainly worth at least considering, but just feels like we need to make headway on that sooner rather than later so we’re not having them do more work.”

A scheduled progress meeting was abruptly postponed. HIPRC was told that some questions were being “run up the chain.” Answers must have come back down the chain pretty quickly, although neither executive accountability nor a defensible rationale are revealed in the internal emails.

On February 15, 2023 HIPRC was handed the bad news. The study had been red-lighted. “Our leadership is concerned that without some key pieces of information, the study results will not be actionable for us as a city department of transportation,” the email said.

And that was the end of that, regardless of what SDOT had promised the public and even boasted of to the federal CDC.

Except that matters then took an unexpected turn.

National discussion had caught up traffic safety and public health professionals in e-scooter data topics, especially the need for more information from hospital emergency departments. The recent NTSB report had been anticipated. An alert research director at the Washington Traffic Safety Commission had been paying attention to the development of the SDOT/HIPRC proposed research. She immediately recognized its opportunity to contribute to the national need to demonstrate better data collection practice, especially from emergency room records for which the SDOT/HIPRC proposal had been designed. She quickly found dollars to backfill for SDOT's funding withdrawal.

What had been an SDOT project became a Washington Traffic Safety Commission project. SDOT was left at the station. The work by HIPRC regained momentum very quickly in 2023 and was brought to conclusion by the end of 2024. Results were shared as a courtesy with SDOT prior to publication late in 2024. SDOT chose to keep its distance, making no comment.

The research report was elegant, simple and short. Apart from its two main findings, the sheer volume of injuries and their 87% connection with falls off the e-scooters and only rarely in traffic collision, there was much more.

First, the total number of e-scooter related injuries in Seattle to be located in emergency room records was surely even higher than the 282 that the HIPRC had identified at UW Medicine-affiliated locations. Because the HIPRC records search did not cover the emergency departments at Swedish or Virginia Mason, where many other injuries were surely seen.

Second, from the sizable sample of the records from which HIPRC could determine the fact, 97 percent of the e-scooter related injuries were sustained by riders of e-scooters in SDOT's shared scooter rental program. The big injury upsurge flowed directly and overwhelmingly from the SDOT program, not privately-owned e-scooters.

Third, while there are lots of ways to be injured riding an e-scooter, and surely, they span a big range of severity. But head and neck injuries are key telltales of significant and serious injury, and they were noted in 47% of the e-scooter injury records, a much higher rate than for injured bicycle riders. It's a lot easier to fall off an e-scooter than to fall off a bicycle. And that's not good, because pitching of an e-scooter is such a likely way to hit your head. A third of the e-scooter injuries were fractures, also always a serious injury.

Fourth, with such a high incidence of head injuries, it was clearly noteworthy so far as the pertinent sample of patient records could be determined, that helmets were worn by only 18 percent of the injured riders. A big problem, given that the Seattle City Council approving the e-

scooter rental program back in 2020 wrote into law an e-scooter riding helmet requirement in Seattle. Anyone can plainly see that neither SDOT nor SPD has taken any meaningful initiative to see that safety law observed.

Fifth, impairment from alcohol use and substance use is a huge problem among enough e-scooter riders to show up to an extraordinary degree among the injured. From the sizable share of the patient records from which the question could be answered, alcohol use was involved in 64 percent of the injuries and other substance use in 23 percent of the injuries.

From SDOT's standpoint, the actual injury count for Seattle in the report might just as well not exist. No one in Seattle, not a rider, nor a prospective rider, nor a mere passerby, nor the City Council or the media has heard one word from SDOT about what highly-qualified researchers at our own city's most preeminent public health institution have learned about the quantifiable e-scooter related injury risk in Seattle.

Yet this is in a study SDOT itself had basically initiated, helped design and proposed to fund just over two years ago. Before SDOT tried, but failed, to kill it.

This week, there is actually more news to add to the published study. First results have just become available from HIPRC's pressing into 2024 its examination of e-scooter related injuries at the UW Medicine-affiliated locations, including the emergency department at Harborview. For 2024, the preliminary count is 128, a slight decline from 150 in 2023. But that pushes the total number of e-scooter related injuries identified by HIPRC in four years, 2021 – 2024 to over 400. Add to that number the injuries very likely seen at Swedish and Virginia Mason. It is almost certainly the case that an all-in number for injured e-scooter riders in Seattle seen in the medical system is over half a thousand. Trusting the sampling from the 2020-2023 report, that's 97 percent made up of people riding SDOT's e-scooters. Recall that in the 2021 rider survey, only one scooter rider in five who reported some kind of injury had actually sought professional medical care. There has been an e-scooter injury epidemic in Seattle.

Meanwhile, SPD officers continue their business-as-usual filling out of hundreds and hundreds of Traffic Collision Reports, capturing every traffic collision they respond to. As you recall, in the only evaluation of its e-scooter program SDOT has ever published, SDOT located five Traffic Collision Reports indicating e-scooter rider serious injuries in the program's first year, plus one fatality. HIPRC found in the next few years, the emergency room tallies of e-scooter related injuries went up. Wouldn't it be logical that e-scooter injuries found by SDOT searching for needles, even if rare, in those haystacks of Traffic Collision Reports would have gone up, too? So long as SDOT was still searching those haystacks, SDOT should have found more e-scooter injuries, even though only a fraction of the injuries treated in the emergency rooms? Of course. Thanks to SDOT's release of 2024 Traffic Collision Reports in response to Public Disclosure Requests we know that SDOT reviewed at least nineteen Traffic Collision Reports reflecting e-scooter riders seriously injured in Seattle in 2024. Up from SDOT's first-year tally by about the proportion that the much larger emergency room tallies have gone up in the HIPRC review.

There was also one SDOT e-scooter rider fatality in Seattle in 2024. SDOT learned the circumstances only after it received a copy of a special police investigation that Lime itself asked SPD for. Won Jae Ro age 24, died at Harborview on October 9th. According to the King County Medical Examiner, the cause of death was blunt force injury to the head as a result of falling from a Lime e-scooter, not wearing a helmet. His friend told the SPD interviewer that he and Ro had been drinking together the night of October 5th; they had shared a bottle of wine and Ro himself consumed five or six hard liquor drinks. They then went to Dave's Hot Chicken Restaurant at 12th and E. Pike, visiting with friends before its closing. Ro then at 2:00 am on October 6th rode a Lime e-scooter southbound in the bike lane on 12th. According to his friend riding another scooter behind him, in the 700 block Ro just seemed to topple over for no apparent reason. The fire department responded to the friend's 911 calls and Ro was transported to Harborview, dying three days later. SDOT has never established a protocol for the fire department to contact SDOT regarding its aid responses to SDOT's injured e-scooter patrons. For the obvious reasons that there was no traffic collision, there was no Traffic Collision Report. The SPD investigator's report prepared for Lime somehow made its way to SDOT and was caught in the net of a Public Records Request. I can find no public-facing reference by SDOT to this fatality. This was the fourth death of an SDOT rental e-scooter rider in Seattle.

When will we ever see even a glimmer of transparency, never mind accountability, from SDOT about the injury risk of its shared e-scooter program? Don't hold your breath.

A few weeks ago, on March 4th, SDOT's Chief Safety Officer presented to the City Council Transportation Committee a progress update for 2024 on SDOT's Vision Zero initiative to eliminate fatal and serious injuries on Seattle's streets. It included a PowerPoint slide with a line graph depicting serious injuries to people walking and people biking, including in 2024.

Where on the slide could be seen the number of people seriously injured people riding e-scooters, asked Council Member Rob Kettle. SDOT replied that the presentation obstacle lay in outmoded coding conventions on the Traffic Collision Report form. Translated: SDOT knows the facts of the e-scooter serious injury collisions, since SDOT has read the nineteen individual Traffic Collision Reports it produced under multiple Public Records Requests. But the old form has no specific box for e-scooters. Therefore, some of the e-scooter injuries had been tucked into the people walking category and some into the people biking category. End result: inaccurate, artificially inflated tallies of both the seriously injured walkers and bikers. And complete invisibility in the presentation to the Council for all the seriously injured e-scooter riders. As for the 2024 e-scooter fatality, it is also nowhere to be seen.

None of this should come as a surprise. When finally completed in July, 2023, the Vision Zero Top-to-Bottom Review staved off any questions about serious injuries on, or falling off, SDOT's own shared e-scooters by simply whitewashing the topic out of the report. That was the document the new SDOT Director had promised in October 2022, in a *Seattle Times* op-ed, would be data driven, and would share the data, good and bad.

Just days prior to the SDOT Chief Safety Officer showing the misleading slide to the City Council, Mayor Harrell had appointed a new Interim Director at SDOT. [Adiam Emery](#) is eminently qualified and experienced. But there is a lot of hard work ahead. Few of the challenges facing SDOT are as problematic as its own sponsorship of a program that is injuring its own patrons, left and right, week after week and month after month.

It is time for years of dissembling and cover-up to stop. From fresh leadership at SDOT, the public deserves full disclosure of rental e-scooter injury risks.

There's more. Something has to be done to cease-and-desist the hundreds of e-bikes and e-scooters at any given hour of any day abandoned willy-nilly blocking sidewalks, bus stops and street furniture, all in contravention of the explicit terms of the vendors' permits. No other city in America can touch Seattle for e-scooter trashing of the pedestrian environment. No one on the sidewalk should have to jump aside and out of the way of an oncoming e-scooter rider appropriating the sidewalk – even worse, unseen from behind. Anyone can see that neither SDOT nor SPD has taken any interest in observance of the City Council's having written into law that e-scooter sidewalk riding is illegal. Nor should abandoned e-scooters litter the sidewalks, tripping hazards for the unwary, and worse for people with vision or mobility impairment for whom SDOT under the American with Disabilities Act must guarantee accessible sidewalks.

Then there is one more question SDOT has never answered for the public or the Council. How does the money actually work in the e-scooter concessions SDOT has conferred for conducting a private rental business on city streets and sidewalk? Take Lime, which is actually a privately owned San Francisco firm called Neutron Holdings, Inc., reputedly heavily invested in by both Uber and Google. Last summer, in August, it held virtually a monopoly of SDOT scooters, with a 78 percent share of e-scooters deployed and 87 percent share of e-scooter rides. How much money is Lime collecting in Seattle from its SDOT concession to use the public's streets and sidewalks for renting its e-scooters and e-bikes?

Probably SDOT itself doesn't know the answer for sure, although it ought to be able to make a well-educated guess. But anyone can make a rough back-of-the-envelope calculation based on Lime's pricing formula which is based on minutes of ride duration and distance-traveled, and can be matched to the number of trips, average trip durations and average trip distances drawn from [SDOT's data dashboard](#). That calculation conservatively suggests Lime in 2024 likely collected in Seattle something well north of \$20 million. How much did Lime return to the City of Seattle for that valuable concession under an SDOT permit authorized by the City Council? And further, what are the sources and uses of funding and their dollar amounts that support SDOT's management of the program? Is funding adequate so that SDOT can enforce Lime's compliance with permit conditions, such as the good repair of its scooters and their adherence to the permit's e-scooter parking conditions? How often, and how much, has Lime, or the City, paid in injury claims or damage claims arising out of the rented e-scooter program, not only for riders' injuries, but for third parties' property damage occasioned by SDOT e-scooters?

The last semblance of an actual report produced by SDOT on its shared e-scooter and e-bike program was published in April, 2022, three years ago. The City Council has never reviewed the program authorization, voted by the City Council in August, 2020, nearly four and a half years ago. It has never revisited SDOT's rosy representations of program expectations that have never been met to this day.

It's time for a full-on independent performance review of the entire program, starting with its safety record. Or rather, its injury record. Then moving to other public interest issues. That review cannot be performed by SDOT when its own shared mobility program manager, responsible for administering the program on the public's behalf, not the vendors' behalf, also wears a second hat. She is a board member of a national industry association, of which Lime is a dues-paying member, dedicated to promoting the expansion of shared e-scooter and e-bike programs around the country.

It's the City Council that has to call the question. Seattle, like Paris, which shut down its rental e-scooter program 18 months ago, has seen enough. In Seattle, fix it, if possible. Or end it.