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Opinion Daniel Pink

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We'd all save time by only turning right.

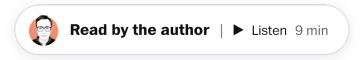


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(Pete Ryan for The Washington Post)



Maybe it was you.

Maybe you're the person in the maroon Subaru Outback who cost me two minutes of my life last month.

Maybe you're the character who was driving north on Wisconsin Avenue — one of Washington's most crowded thoroughfares — and chose to turn left at a packed intersection, thereby pinning me and a half-dozen other drivers behind you.

Maybe you're the dope who couldn't negotiate that left turn until a yellow light provided a momentary gap in the thick oncoming traffic, which meant that I — and soon even more drivers who'd become backed up in your lane — were now trapped at a red light, our journey impeded by your poor choices.

What you were doing, sir or madam, was perfectly legal. It was also utterly wrong. And it's time to put an end to such treachery.

Why not ban left turns on busy streets in U.S. cities?

Anyone who's driven in large urban areas recently has noticed two unhappy trends. Traffic has become <u>slower</u> and more <u>dangerous</u>.

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My fair city is a case study in the problem - and a potential test bed for the solution.

Last year, Washington had the <u>fifth-slowest</u> car travel times of any city in North America, worse than Boston, Chicago or Los Angeles. During rush hour (which is obviously misnamed), D.C. drivers moved at an average speed of 14 miles per hour, forcing us to spend an additional 83 unnecessary hours in our cars over the course of a year.

Slower traffic can often mean safer traffic. But congestion and frustration, spiced with <u>ubiquitous smartphones</u>, turns out to be a toxic brew. Last year, D.C. recorded its <u>most traffic deaths in 16 years</u>. Nationwide, pedestrian deaths have been climbing <u>since 2009</u> and have <u>reached levels</u> not seen <u>since 1981</u>.

Getting stuck behind some schmo turning left on Wisconsin Avenue isn't the only reason Washingtonians have been twiddling in our Toyotas 3½ extra days each year. Nor are frustrated drivers daredeviling across a stream of onrushing cars the only reason for accidents.

But left turns are a major culprit.

Why left isn't right

In 2022, more than 9 million vehicles were involved in a crash, according to the <u>National Highway Traffic Safety</u> <u>Administration</u>. Nearly 11 percent of those vehicles were turning left at the time of the crash, more than double the number turning right. These left turns also resulted in more than eight times as many deaths and nearly four times as many injuries as right turns. When the NHTSA examined <u>crashes that occurred only at intersections</u>, nearly 62 percent of those collisions involved a left.

The answer, though, isn't to ban left turns altogether — only in certain places and at certain times.

And <u>Vikash V. Gayah</u> has the algorithms for the job. Gayah, a civil and environmental engineering professor at Penn State University, has emerged as the Nancy Reagan of left turns, publishing <u>paper after paper</u> demonstrating why we should just say no. "The best design for downtown — for traffic flow reasons but also for safety reasons — is to use two-way streets and just ban left turns at all intersections," he told me.

On most streets in most places at most times, Gayah says people should turn to their heart's content. But on the busiest streets in our busiest cities, nearly everybody will move faster if almost nobody can turn left.

For example, in a <u>2021 analysis</u>, Gayah showed that getting rid of roughly half the left turns at a city's busiest intersections can reduce total travel times by about 15 percent. <u>Other research</u> has found similar effects. <u>One 2019 study</u> discovered that eliminating just 18 left turns in one German city reduced travel time for drivers there by nearly 12 percent.

Consider my journey up Wisconsin Avenue. If the round trip ordinarily took 30 minutes, but I could now shave off 12 to 15 percent, I'd save between 3½ and ½ minutes every time. If I make that trip three times a week, over a year, I'd save 10 hours on that route alone.

Left arrows point the wrong direction

The underlying logic is as straightforward as Gayah's traffic flow algorithms are complex. Left turns without a green arrow, the favored maneuver of my Subaru nemesis, are an unmitigated mess. At large intersections, they produce deep and random delays. Meanwhile, left turns *with* a green arrow, though more efficient, pile up delays that are modest but relentless. These turns require extra "cycles," the traffic engineering term for lights progressing from red to yellow to green. For example, on a north-south route, each intersection has two cycles — one in each direction. But installing a green left-turn arrow adds two more cycles. Even if those cycles are short — say, 30 seconds — they recur every two or three minutes, every hour of the day, creating a massive cumulative delay.

Of course, banning certain left turns means some drivers will occasionally have to take longer paths to their destinations — perhaps even three consecutive right turns. That adds a few minutes of travel time, not to mention a shot of frustration. But according to <u>Gayah's calculations</u>, most of those drivers get those minutes back — and many more minutes on top — because they're saving time everywhere else. It's the transportation equivalent of a Costco membership. The card costs you 60 bucks upfront. But most people save much more than that over a year of discounted purchases.

Fewer cars turning left at major intersections also means fewer nasty collisions and injured pedestrians. One project in British Columbia, for instance, found that reducing left turns <u>cut accidents by more than half</u>. Efficiency enhances safety; safety deepens efficiency.

Even the environment can benefit. In urban areas, cars burn considerable fuel not only when they're moving but also when they're stopped with their engines running. Fewer left turns for some means less idling for many, which means decreased pollution for all. UPS, which deploys some 135,000 vehicles on the road every day, uses routing software designed to avoid left turns wherever possible. That saves UPS a fortune on gas, even if making three right turns instead of one left might sometimes irritate individual drivers. But what's annoying for the guys in brown pants is good for the red, white and blue — fewer carbon emissions in American neighborhoods.

Faster, safer, cleaner. If this idea is a such a no-brainer, why isn't it already widespread?

Because of us.

"It fires people up," Gayah says.

Mental speed bumps ahead

The true challenge isn't traffic engineering but human engineering — because this sensible policy runs headlong into a hornet's nest of cognitive biases that stir many people to oppose it.

The first is <u>status quo bias</u>, our tendency to believe that the way things are now is normal, logical and fair rather than simply the way things happen to be now. Disrupt the status quo — even a counterproductive one — and many people will howl.

Those howls grow louder when the change involves a second cognitive bias: <u>loss aversion</u>. We generally feel the pain of losing something more deeply than the pleasure of gaining that exact same thing. Take away the ability to make left turns where they're now allowed, and the local <u>Nextdoor list</u> will erupt in flames of indignation and threats of lawsuits.

And <u>negativity bias</u> — our tendency to notice the occasional bad stuff that happens but to ignore the consistent good stuff — means that drivers who wanted to turn left but weren't allowed would be outraged in the moment. But those same drivers would be oblivious to the steady advantages of driving on faster-flowing streets.

However, I'm willing to provoke such lizard brain opposition, because the benefits — less stress, improved public safety, cleaner air — are so vast. Besides, many cities have recently pushed through equally contentious road rules. Several, including <u>Washington</u>, have <u>lowered their speed limits</u>. Others, <u>also including D.C.</u>, are eliminating the previously sacrosanct right turn on red.

So, here's a simple proposal that can further establish our nation's capital as a national model for traffic innovation: Ban left turns on the state avenues that serve as the city's main arteries — Georgia Avenue, Massachusetts Avenue, New York Avenue and so on — from 7 a.m. to 9 p.m. every day. On other streets and at other times? Turn, baby, turn.

"It's a good place to start," Gayah told me. "If I had my way, I would probably do that."

How about you, maroon Subaru. Are you in?

What readers are saying

The comments largely discuss the benefits of roundabouts as a solution to traffic issues, particularly in reducing left turns and improving safety. Some commenters highlight the need for better public transportation systems, like those in Britain, to alleviate traffic congestion.... Show more

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