

L4 March 2017

Chair and Members
Civic Works Committee

I have prepared the following motion as an added item for the next CWC meeting. I have also included the fact that there are no previous reports on this matter, alignment with the strategic plan, as well as some background information on what a Zipper Merge is.

Thank you for your consideration,

Councillor Virginia Ridley

MOTION

- a) That Civic Administration include information about Zipper merging in London Road Safety Plan public education campaign
- b) That the Civic Administration pilot including signage about using a Zipper Merge where/near signage indicating a merge ahead sign would be present.

PREVIOUS STAFF REPORTS ON THIS MATTER

There are no previous reports.

ALIGNMENT WITH THE 2015-2019 STRATEGIC PLAN

The 2015-2019 Strategic Plan identifies this objective under:
Building a Sustainable City - 2C Convenient and connected mobility choices - Improve travel by managing congestion and increasing roadway safety.

BACKGROUND

A zipper merge is a technique used in construction zones to speed up traffic and avoid congestion.

“In traffic engineering, the late merge or zipper method is a convention for merging traffic into a reduced number of lanes. Drivers in merging lanes are expected to use both lanes to advance to the lane reduction point and merge at that location, alternating turns.”¹

In other words, once one spots a ‘lane closed ahead’ sign and traffic is backing up, they are to continue in their current lane up to the merging point and then alternated in ‘zipper’ fashion smoothly into the remaining lane.² Drivers of vehicles in the merging lane must signal and drivers in the remaining lane are to each let one vehicle merge.³

¹ Wikipedia, 2016

² Kansas Department of Transportation, 2016

³ City of Saskatoon, 2017

There are several dangers that present themselves once a 'lane closed ahead' sign is implemented. Lane switching can become hazardous, leading at times to serious crashes and/or road rage. It is precisely these dangers that research shows decrease once vehicles merge in a "zipper" fashion into the open lane.⁴

The benefits of applying the zipper merge to London roads are numerous. First of all, it has been proven to reduce traffic backup by as much as 40%⁵ and allows for up to 50% shorter lines.⁶ This can translate into many minutes saved from sitting in traffic. It can make the difference between being late to a function or work, or being on time. Likewise, the zipper merge creates a sense of equity and fairness on the road - the speed of both lanes will be more balanced and traffic will be moving at about the same rate in both lanes.⁷ The alternative would be what currently happens: one lane moving steadily and the drivers of the second lane stopping that flow by merging early. Lastly, the zipper merge also increases safety for those outside the vehicle. A reduction of speed around construction workers will lower the chances of an onsite accident, as well as ensure that drivers feel less anxious when driving near construction workers.⁸

Minnesota state too found that some groups of people, such as the elderly, were not always on board with this new traffic flow improvement but with a little bit of public outreach many more individuals showed support for the idea. When a study was conducted back in 2012, "80% of Minnesota drivers still considered themselves "early mergers" but an advertising and public outreach campaign followed, and a follow-up study in 2012 showed a massive turnaround in thinking in which 73% of respondents thought zipper merging was a good idea after all⁹. It is proven that though individuals may be reluctant at first, no doubt due to lack of information on the unquestionable and undeniable benefits and convenience of a zipper merge, they prefer it to an 'early merge' once they become familiar with the system. In fact, a similar study showed that a large percentage of young drivers were very keen on the idea of a zipper merge¹⁰. It is important to accommodate and consider the views of the younger population, as by 2030 it is predicted that only 1 in 5 drivers will be the Baby Boomers¹¹. The rest will be largely made up of novice drivers. It is imperative to create safety on the roads when many new drivers are joining the streets and the zipper merge is the ideal way to create that safe space.

All in all, the pros for a zipper merge indisputably outweigh the cons. It is time for London to face the reality of slow traffic and safety issues and approach it from a new angle. Time and time again previous initiatives have not produced sufficient results so now is the moment to look into a new and compelling alternative - the zipper merge.

⁴ Minnesota Department of Transportation, 2017

⁵ Minnesota Department of Transportation, 2017

⁶ CBC News, 2016

⁷ Minnesota Department of Transportation, 2017

⁸ CBC News, 2016

⁹ Cars Technica, 2014

¹⁰ How Stuff Works - NOW, 2016

¹¹ CR Consumer Reports, 2012