

Commentary: **Should We Lose Trees to Bike Lanes? That's 100% Stupid!**

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Yes, that was my answer when Paul Hollingsworth of CTV News put the question to me on 2021-09-09 during an interview. Why would I be so blunt with my answer? That's not what you would normally expect of a professor (now retired), is it? It's because I believe that so strongly based on many years of thought and research on the interactions between green and grey infrastructure in sustainable cities, particularly this sustainable city of Halifax as it continues to cope with the uncertain forces and dynamics of the 21st century.

It's also because I know well the trees and the streets of Halifax because I live and work here and therefore spend the vast majority of my life here. I walk the streets daily, I cycle pretty much daily, I use the bus frequently, and I drive less and less (no longer having a car, by choice).

With my student David Foster at Dalhousie University, a few years ago we looked into the ecosystem services provided by trees in four settings: streetside, near buildings, in city parks, and in hinterlands (rural). When we analyzed the range of ecosystem services (or benefits) provided by trees in these general locations, the street environment won, hands down. Why is this? It's because the streetscape is where people spend so much, perhaps most, of their outdoor time, and also because trees ameliorate some of the nasty environmental effects of the huge swathes of asphalt laid down in streets.

For me, the rub is this: we want to accommodate more diverse modes of transportation, particularly active transportation, as we make the city more sustainable for the 21st century. That's good. The streets have been designed and re-designed over the decades to cater more and more to cars, with no accommodation for bicycles - their riders were expected to fend for themselves intermingled with the cars. Bike lanes are a pretty good way to accommodate bicycles - I applaud the rebuild of South Park St., for example.

In a tight streetscape, what gives when bicycles deserve special accommodation? There are only so many choices. The sidewalks cannot be forfeited - people need to be able to walk the streets safely. The two remaining choices are these: sacrifice the habitat for streetside trees or the habitat for cars. My vote is the car habitat. I'm no transportation planner, but as a cyclist who frequently uses streets like Morris St., I would support a range of options including a dedicated bike lane, a reduction in speed limit, a reduction in on-street parking, and a consideration of one-way car traffic.

Street trees provide an incredible range of ecosystem services which people appreciate. Our research reveals that the people of Halifax overwhelmingly find trees to be very important to them. Asphalt provides only one service - a smooth pathway for vehicles. It is also responsible for undesirable environment impacts in both production and use. Removing mature trees represents a loss of ecosystem services that cannot be fully replaced for decades. Concrete and asphalt are replaceable in a matter of days.

Let's be green and let's be creative. A reduction of car traffic in downtown Halifax (as well as truck traffic, for that matter) would make it a much more hospitable place to be. A reduction in tree canopy would make it a much less hospitable place to be. There is already a paucity of tree canopy downtown - little do we need yet more initiatives installing grey infrastructure that reduce that canopy in places where it can be so effective in services like shade and local reduction of high summer temperatures.

Let's adopt a different mindset of what a city is. Rather than seeing a city as a sea of grey infrastructure with a few trees sprinkled about, let's see it as a forest with grey infrastructure judiciously placed within.