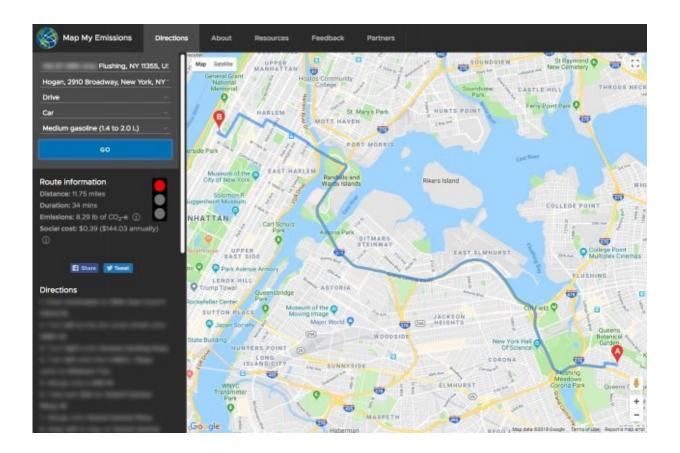


How to calculate the carbon emissions from your daily commute

June 15 2018, by Sarah Fecht



Credit: State of the Planet

The problem with carbon emissions is that they're invisible. Unlike other pollutants, greenhouse gases don't dirty the sidewalk or stink up the air. This makes them easy to forget about and hard to measure in our



everyday lives. That's one of the reasons Romany Webb helped to create Map My Emissions, a website that calculates the impact of different forms of transportation.

"We really wanted to do something to raise awareness about how individuals can help to mitigate climate change," says Webb, a Climate Law Fellow at Columbia's Sabin Center for Climate Change Law. "It's such an abstract concept and often it's kind of overwhelming. People wonder, 'Do my individual choices actually make any difference?' We developed the site to raise awareness about the importance of individual decisions."

If you go to the site (mapmyemissions.com), you can plug in your current location, where you want to go, and how you'll get there—walking, cycling, public transit, or driving. Hit 'Go,' and a moment later the website reveals how many pounds of <u>carbon emissions</u> your trip will generate.

I, for example, learned that if I were to drive a medium-sized car from my home in Flushing, Queens to my office on Columbia's Morningside campus, the trip would generate a whopping 8.3 pounds of carbon dioxide equivalent. That's almost the weight a gallon of milk, floating out the car's tailpipe. The website also estimates the social cost of those emissions; over the course of a year, my 35-minute drive to work would cause \$144 in damages from climate change, such as changes in crop productivity and loss of life and property from floods and suped-up hurricanes.

If I public transportation, on the other hand, my trip generates 1.7 pounds of CO2 equivalent and creates about \$30 in <u>climate change</u> damages per year. Taking the train isn't always pleasant, but knowing that it cuts my commute's emissions by 80 percent certainly provides encouragement to keep at it. And perhaps I should consider biking to



work once in a while, since that wouldn't generate any climate-warming emissions.

Webb and her colleagues created the calculator as part of a project for the New York City Environmental Law Leadership Institute, with support from the Sabin Center and the Earth Institute. Whereas other sites had already calculated the average emissions of different types of vehicles, they weren't location-specific. Combining the emissions data with specific route information was a relatively straightforward calculation, says Webb. A software engineer coded the site pro bono, and the site launched in September.

Next, the team plans to add a flight option to the calculator, and they're considering the possibility of including multi-leg journeys—for instance, if you bike to the train and then take a taxi to your final destination.

The website isn't intended to make you change your commute, but you might be surprised at the difference you could make, or perhaps are already making. Go check it out.

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