



It depends on whether you bicycle near and with a lot of fossil-fuel-burning automobile traffic. Accumulating research is confirming a common-sense notion — breathing tailpipe emissions cannot be that good for you. In fact, it is bad for you. One short-term effect is that it reduces your heart rate variability—it's capacity to quickly change it's rate and respond to stress. [Read the article!](#)

My roughly written comment on the article follows:

The simple and common sense solution is to choose less crowded streets. But there are larger implications for bike planning. Many cities' as a matter of sustainable transportation policy plan to increase the mode-split (percent of trips) for bicycles. In addition to normal considerations of planning routes, addressing parking issues, etc., bike planners now need to consider the health effects of mixing bicycles in close proximity to tailpipe exhaust, or maybe any proximity(?).

Only the simplest implication and band-aid solution is to choose less crowded routes. But why should a bicyclist have to do that when it might mean choosing a non-bike route after the city has gone to so much trouble and investment to create formal and safe bike routes a la the SF Bike Plan?

The larger policy and planning issues arise in the arena of the health impacts of bike planning:

- (1) increasing bike commuting as a mode-split policy goal of the city would mean what for increased air-pollution health effects;
- (2) of formally designated bike routes in the bike plan—does the air pollution effect need to be considered in choosing/designating a route?;
- (3) and more generally, the issue of combining or separating bikes and cars (instead of bikes sharing the gutter with cars, maybe we need to dedicate some streets entirely to bikes?), and ultimately,
- (4) to fossil-based vehicle fuel (maybe one of the mitigations for increased bike mode split has to be decreased emissions or some type of tailpipe filter to reduce the worst effects of close-in inhaling of exhaust.

Given that the SF Bike Plan EIR did not even assess the air quality impacts on human (bicyclist) health, and the accumulating research of negative health effects, this issue seems ripe for some cross-department and citizen collaboration (Public Health-SFTA-MTA-Planning-Bike Coalition).

In addition, there seems to be an implication for CEQA here too. Any plan or policy that



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proposes an increase in bicycle trips would need to assess the health implications on bicycle riders and at least acknowledge, if not quantify, the increased incidence of various health effects, short-term and long term. But not only identify impacts, but drive the innovation required to mitigate the impact to net zero, even better, to eliminate the existing impact. Mitigations could go in the direction of tailpipe controls, but smarter innovations would be more whole system, and go to the source-(de)combining bicyclist with fossil-fuel-burning vehicles. The innovative options for solving this problem are multiple, many of which would be considered “infeasible” under CEQA because they would not be considered realistic. However, most sustainability “solutions” are “infeasible” and “unrealistic” within our current frame of reference, but sustainability success involves doing the impossible, changing the frame, etc., maybe not all at once, but developing a phased policy solution for instance. However, forcing the issue by focusing on eliminating impacts and considering all of the connected associated causes requiring change, is the most beneficial, productive, and innovative route.