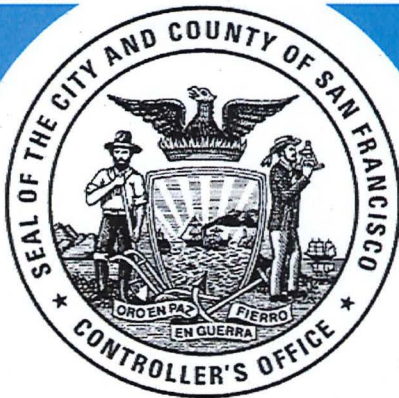


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Traffic Congestion Mitigation Tax: Economic Impact Report



CITY & COUNTY OF SAN FRANCISCO

Office of the Controller
Office of Economic Analysis

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Introduction

- The proposed legislation would place a tax on the fares paid to Transportation Network Companies, and similar transportation companies, for rides within San Francisco.
- The proposal is called the "Traffic Congestion Mitigation Tax"; its revenue would be dedicated to funding transit and transportation safety improvements.
- If approved by the Board of Supervisors, the motion would place the tax on the November 2018 ballot, for voter approval. Because the tax is dedicated to a specific funding purpose and is proposed through the legislative process, it requires approval by a two-thirds majority of voters.
- The Office of Economic Analysis (OEA) has prepared this report after determining that the proposed tax increase might have a material impact on the City's economy.

Details of the Proposed Tax

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- Specifically, the tax covers rides on Transportation Network Companies (TNCs), which include ride-sharing companies such as Uber and Lyft.
- It would also apply to any self-driving autonomous vehicle services introduced in the future.
- Taxicabs and private automobiles would not be subject to the tax.
- The legislation would impose a tax of 1.5% on the fares of shared rides, and 3.25% on all other rides. The tax would become effective in 2020 and last until 2045.
- Rides would be taxed if they originated within San Francisco, and if a rider leaves the city, only the portion of the ride that occurred within the city would be taxed.
- From 2020 to 2024, the tax on all rides on a Zero-Emission Vehicle would be 1.5%.

Proposed Expenditures of Tax Revenue

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- The proposed tax's revenues would be dedicated to two primary purposes, which were detailed as unfunded needs in final report of the San Francisco Transportation 2045 Task Force, in 2017:
 1. Expenditures by the San Francisco Municipal Transportation Agency (SFMTA) for Transit Services, including improving transit service and reliability and maintaining and expanding the fleet and facilities;
 2. Expenditures by the San Francisco County Transportation Agency (SFCTA) for bicycle and pedestrian safety improvements.
- The tax's revenues may not be used for any other purpose, and may not replace existing General Fund support for the SFMTA.

Background: Growth and Congestion

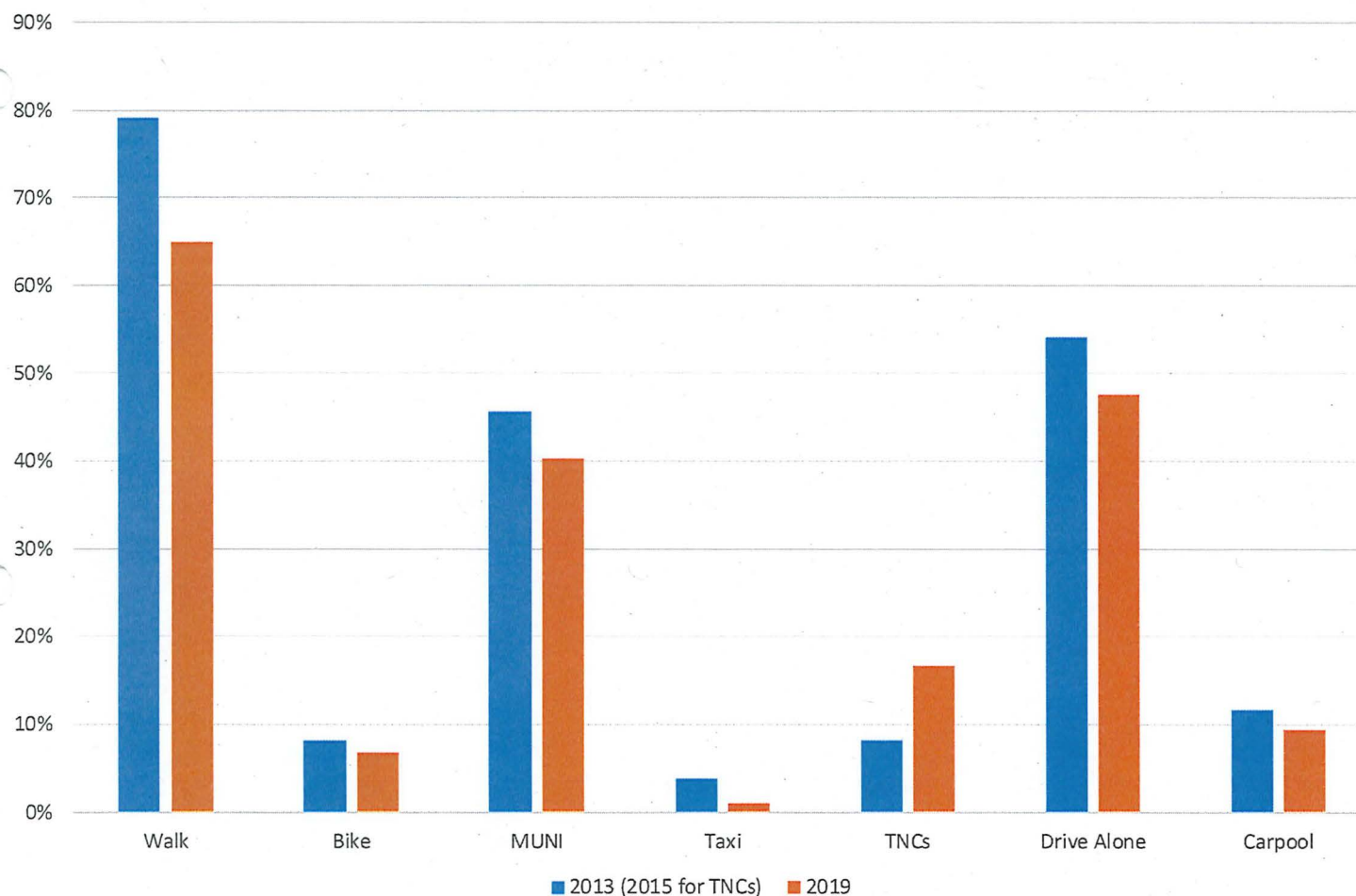
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- The growth of the city's economy since the end of the recession in the early 2010s has been accompanied by an increase in traffic congestion in the city.
- According to the SFMTA¹, the number of registered vehicles in the city increased by 6% from 2011 to 2017. Average evening vehicle speeds slowed by over 20%, because of the increased volume of vehicles.
- According to the U.S. Census Bureau, the average travel time to jobs in San Francisco increased by 15% between 2011 and 2017. At a conventional valuation of workers' travel time (at 50% of average wages), the additional delay costs the city workers \$3 billion more per year².

Background: The Emergence of TNCs

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Percentage of San Francisco Residents Who Use Transportation Modes
3 or More Times Per Week, 2013 & 2019



Source: San Francisco Controller's Office, City Survey, 2013 & 2019

At the same time that the city's economy has been experiencing unprecedented growth, TNCs have changed the way San Franciscans travel. Data from the most recent City Survey from the Controller's Office confirms that frequent use (3 times a week or more) of every mode of transportation *except* TNCs has declined in the city since 2013.

The survey did not ask about TNCs until 2015, but the percentage of frequent users has more than doubled since then.

In 2019, 17% of surveyed residents reported using TNCs at least 3 times a week; 44% of residents reported using TNCs at least once a week.

Background: TNCs and Congestion

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- The growth of the city's workforce and population, the emergence of TNCs, and capacity changes to the city's road network, have all contributed to rising traffic congestion during the same time period
- In 2018, the SFCTA released a report³ that statistically analyzed the separate effects of growth, network changes, and TNCs on congestion.
- The report found that while "TNCs do not purely add to traffic through induced travel or shifts from non-vehicular modes", they have nevertheless been responsible for 51% of the growth in vehicle hours of delay in the city, from 2010 to 2016.
- The SFCTA's analysis suggests that this is due both to the sheer volume of TNCs on the road, and the traffic disruption they create through pick-ups and drop-offs on city streets.

Economic Impact Factors

- The proposed tax on TNC fares can be expected to affect the city's economy directly, through its impacts on spending by consumers, businesses, employees, and the City – but also indirectly, through its impact on the city's transportation system.
- Increasing the tax on rider fares will raise revenue for the City's transportation needs, but the burden of the tax will fall on TNC consumers, contractors, businesses, and suppliers. Those shifts in spending generate multiplier effects in the city's economy, which will indirectly affect other industries, workers, and residents.
- At the same time, raising the cost of one transportation alternative (TNCs) should reduce its use, while subsidizing another (public transit) should increase ridership. It is likely that the net effect would be to reduce congestion, which would be a positive impact for the city's economy.
- However, at present, the data required to estimate the responsiveness of the transportation system to these policy changes is not available. Accordingly, this report will not consider these impacts.

Economic Impact Assessment: Revenue Estimate

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- Our estimate of the revenue of the proposed tax is subject to considerable error, because the City does not currently charge a tax on Net Rider Fares, and the Controller's Office does not have any internal information on which to base an estimate.
- Instead, our estimate, which is detailed on the next page, is based on Census data on the earnings of independent contractors in the Taxi & Limousine Service industry (NAICS 4853), and reside in San Francisco. This was most recently reported (in 2017) at \$229 million; assuming 10% growth since then leads to an estimate of \$277 million for 2019.
- Research from the SFCTA⁴ indicates that 29% of TNC drivers who work in San Francisco live in the city. It has also been publicly reported that TNC drivers receive approximately 75% of rider fares. These two percentages were used to convert resident driver earnings into rider fares for trips within the city. The tax revenue calculations then depend on assumptions about the prevalence of ZEVs, and the split between shared and other rides.
- The overall estimate is \$30-\$35 million per year. Details of the calculation are shown on the next page.

Economic Impact Assessment: Revenue Estimate

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	2019 Estimate
Estimated Receipts of SF Resident TNC Drivers (\$M)	\$277
SF Resident Drivers as % of SF Worker Drivers	29%
Estimated Receipts of SF Worker TNC Drivers (\$M)	\$954
Driver receipts as a % of Rider Fares	75%
Net Rider Fares (\$M)	\$1,272
% of rides from Zero-Emission Vehicles	5%
% Shared Rides	40%
Revenue from ZEVs at 1.5% tax rate (\$M)	\$1
Revenue from Shared Rides on non-ZEVs at 1.5% tax rate (\$M)	\$7
Revenue from other rides on non-ZEVs at 3.25% tax rate (\$M)	\$24
Total Revenue (\$M)	\$32

REMI Estimate of Overall Economic Impact

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- Using the OEA's REMI model of the San Francisco economy, we modelled the net economic impact of:
 - a \$32 million tax (increasing at 5% per year, in real terms, over the 25-year life of the tax).
 - a like amount of spending, split between maintenance, wholesale purchase of equipment, construction, and transit subsidies.
- The REMI results indicate an average negative economic impact over 20 years, of 190 jobs, and a \$25 million reduction to the City's GDP.
- As noted earlier, this does not include benefit associated with reduced traffic congestion.
- Although the REMI model is not sensitive to the particular economics of the TNC industry, it is likely that the great majority of the tax will be passed on to consumers. Both the labor and capital inputs to TNCs appear to be highly elastic; workers and suppliers are unlikely to be forced to bear the brunt of any reduction in demand created by the tax. Consequently, rider fares should rise, irrespective of whether the tax is explicitly included in the customer receipt or not.

Conclusions and Caveats

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- The proposed tax can be expected to have a mildly negative impact on the city's economy, equivalent to about 190 jobs and \$25 million in GDP, in today's dollars.
- Additionally, both the tax on congestion-causing TNCs, and the spending on transit improvements, although we cannot quantify that reduction or the associated economic benefit.
- As noted earlier, the tax includes autonomous vehicles (AVs), as well as TNCs and similar private transit vehicles other than taxis. As of 2019, no mobility service offers paid rides in AVs within San Francisco. Thus the tax revenue associated with AVs is estimated.
- The future impact of AVs on congestion is unclear. While some researchers believe AVs will lead people to drive more (and worsen congestion), others suggest they will allow faster, safer, and less congested driving, especially after they are universally adopted. Since this future technology will generate no revenue in the near term, and its impacts on congestion are unclear, it may be premature to discourage the adoption of AVs in the city, through this proposed tax.

End Notes

1. *San Francisco Mobility Trends Report 2018*, San Francisco Municipal Transportation Agency, 2019.
2. *Proposed Five Year Financial Plan: Fiscal Years 2019-20 through 2023-24*, City and County of San Francisco, 2019
3. *TNCs and Congestion*, San Francisco County Transportation Authority, 2018.
4. *TNCs and Congestion*, San Francisco County Transportation Authority, 2017.

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