

Information on Findings of the Clean Miles Standard

2018 Base Year Emissions Inventory of TNCs



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Transportation Authority Board Agenda Item 15

February 25, 2020

SB 1014

(Skinner 2018)

- 2019: CARB must establish an inventory of emissions per passenger mile for TNCs for the year 2018
 - 2021: CARB must develop annual emissions targets per passenger mile for TNCs
 - 2023: CPUC must implement annual emissions targets developed by CARB
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- CARB: California Air Resources Board
 - CPUC: California Public Utilities Commission



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- **September 2019: Workshop with draft methodology and findings**
- **December 2019: 2018 Base Year Emissions Inventory Report published**



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Emissions per-passenger-mile:

$$\frac{\text{Grams } CO_2}{\text{PMT}} = \frac{\text{VMT (miles)} \times \text{In Use Fuel Consumption} \left(\frac{\text{gal}}{\text{mi}} \right) \times \text{Conversion Factor} \left(\frac{\text{g}CO_2}{\text{gal}} \right)}{\text{Ride VMT (miles)} \times \text{Occupancy} + \text{Active/Transit PMT}},$$



- 1. Collect driving information by period from TNCs**
- 2. Account for drivers using multiple platforms**
- 3. Estimate passenger occupancy**
- 4. Develop emissions profiles**



Table 1. Summary Statistics of TNC Trips vs California Trips

| | <i>TNC California</i> | <i>California Passenger Vehicles (EMFAC2017)</i> |
|--|---------------------------------|---|
| <i>Total number of vehicles</i> | 642,000 ²² | 25.6 million |
| <i>Total VMT</i> | 4.3 billion miles | 342.3 billion miles |
| <i>Number of trips (only P3)²³</i> | 365 million* | 41.4 billion |
| <i>Average Trip Length</i> | 12 miles per trip ²⁴ | 8.3 miles per trip |
| <i>Cars vs. Trucks (percent)</i> | 79 vs. 21 | 63 vs. 37 |
| <i>VMT-weighted Avg. MY</i> | 2010.5 | 2009 |
| <i>Average Age</i> | 7.5 | 9 |

Results

TNCs have higher emissions per passenger mile than the CA fleet

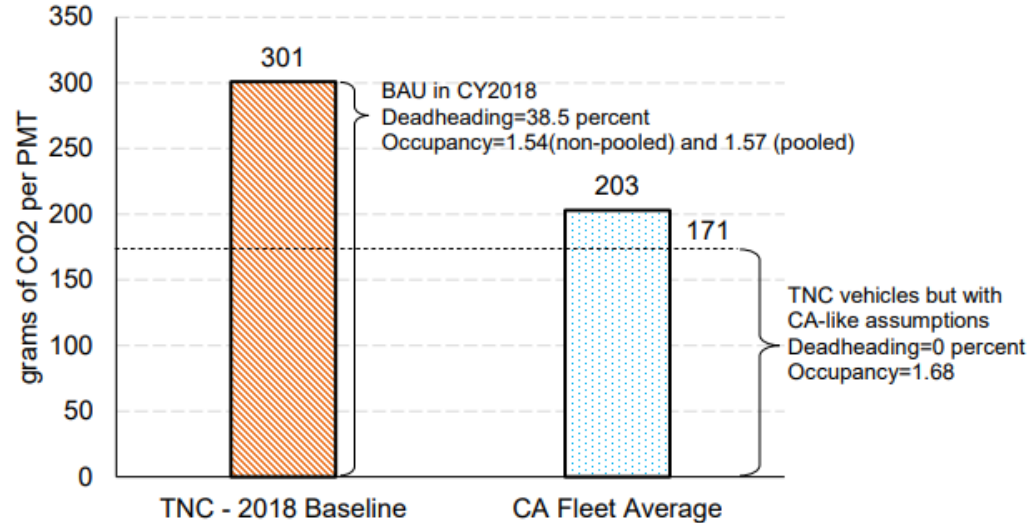


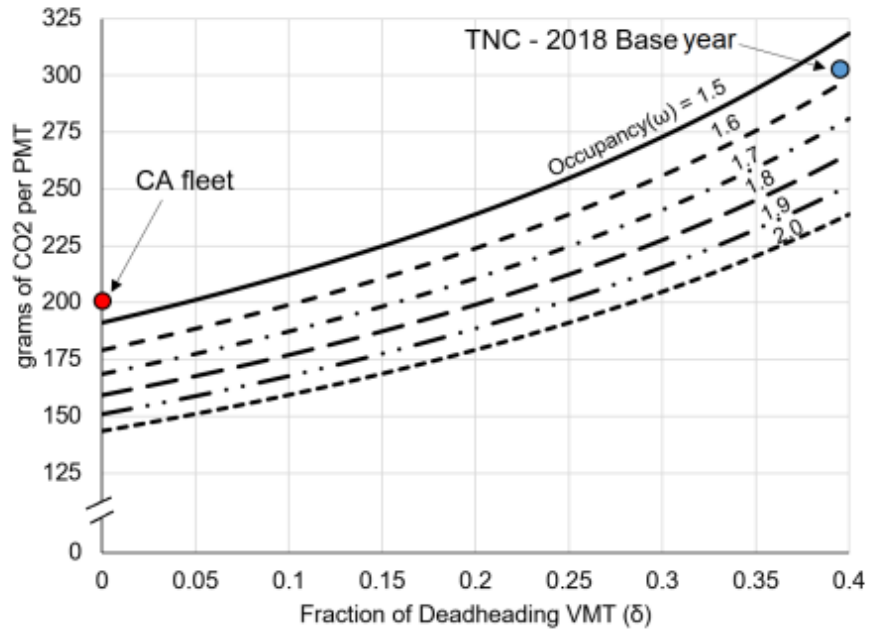
Figure 14. Base year grams CO2 per PMT



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Results

TNCs would need to reduce deadheading and increase occupancy



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Source: CARB 2018 Base Year Emissions Inventory

Next Steps

- **2021: CARB must develop annual emissions targets per passenger mile for TNCs**
- **2023: CPUC must implement annual emissions targets developed by CARB**
- **Transportation Authority and SFMTA staff to continue to engage with CARB**



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Thank you.
For more information:

<https://ww2.arb.ca.gov/our-work/programs/clean-miles-standard>



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