

## ***Interactive comment on “MOVEIM v1.0: Development of a bottom-up motor vehicular emission inventories for the urban area of Manaus in central Amazon rainforest” by Paulo R. Teixeira et al.***

### **Anonymous Referee #2**

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1) It is important to emphasize the methodology used to extrapolate the VTK information, obtained at peak times, for the others hours (off-peak period).

2) Why not use fleet age in the categorization and emissions factors? For example, the CO EF used (1.2 g / km) is very high for the fleet age that the author mentions in the introduction (“...average age of 5 years attributed to the timing of rapid urban growth during the economic expansion between 2009 and 2015...”). This can lead to an overestimation of emissions. The author can use a Top-down approach to age distribution (From a national database like ANFAVEA) or local information from DETRAN.

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3) The authors considered evaporative emissions?

4) With regard to fuel, the authors can estimate from consumption (local information) or from the national inventory (This hypothesis - top-down approach - is more subject to overestimation).

5) Please, check the NO<sub>x</sub> emission factor used to trucks (0.5 g/km). I am thinking there is an underestimation of NO<sub>x</sub> emission by heavy vehicles.

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