

Interactive comment on “Identification and classification of urban micro-vulnerabilities in tsunami evacuation routes for the city of Iquique, Chile” by Gonzalo Álvarez et al.

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We acknowledge the suggestion made by Dr. Rahayu. We have prepared and additional figure to summarize the proposed methodology so that the reader could better appraise it in a graphical presentation as suggested by Dr. Rahayu. This figure is presented at the beginning of section 4.

We hope that this addition, along with other minor changes introduced to the manuscript also following suggestions made by Dr. González-Riancho, will be useful to improve the description of the methodology presented in the manuscript.

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We thank the positive comments and suggestions made by Dr. Rahayu.

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2017-458/nhess-2017-458-AC2-supplement.pdf>

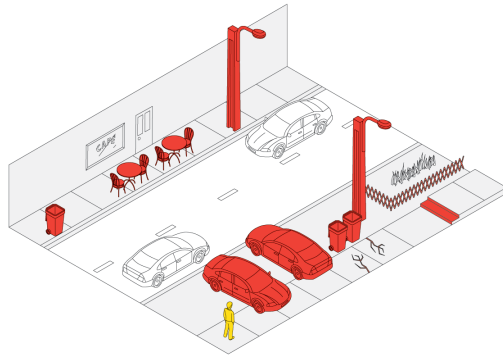
Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2017-458>, 2018.

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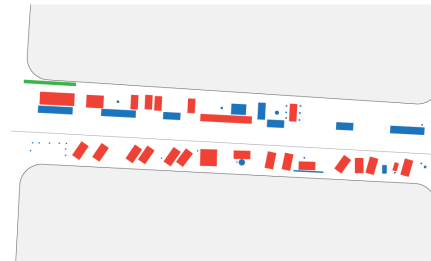
[Discussion paper](#)



①
FIELDWORK
Detailed diagnosis of the current state of evacuation routes, video footage.



②
DATA ANALYSIS
Post-processing stage, micro-vulnerabilities mapping using GIS.



③
EVACUATION ROUTE OBSTRUCTION LEVEL
quotient of the sum of all the areas of *micro-vulnerabilities* on a particular evacuation route, individually weighted by a speed reduction factor and the total surface area of the evacuation route.

$$\text{Friction Factor} = \frac{\sum \text{weighted } \textit{micro-vulnerabilities} \text{ areas}}{\text{Total route area}}$$

④
DETERMINATION of the relative degree of vulnerability of evacuation routes.

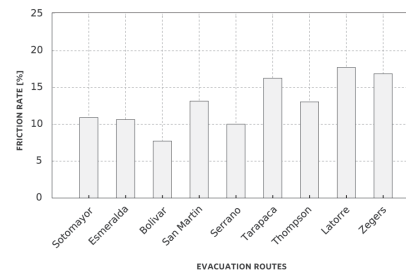


Fig. 1. Graphical representation of the proposed methodology