

Interactive comment on “Strategies to increase the accessibility of tsunami shelters enhances their adaptive capacity to risks in coastal port cities: The case of Nagoya City, Japan” by Weitao Zhang et al.

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Thank you for your question about the paper. Nagoya City is a very specific and inspiring case study. It effectively represents cities that have a high level of agglomeration, but have different distributions of both hazard-product factors (elevation, soil, river, dangerous source...) and hazard-affected factors (population, socio-economic capital...). This complex situation presents more challenges for these types of cities, making insufficient safety practices a major problem. City repair and renewal is needed to address problems in this type of complex city environment.

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This paper discusses the spatial relationship between tsunami shelters and road systems in different hazard-risk situations. The recommended accessibility-related strategies can be applied to inform both city repair and renewal planning and practice. These strategies match two core elements of city repair and renewal: the city's response to the high agglomeration of hazard-risk factors using meso/micro-strategies, and the city's response to different distributions of hazard-risk factors using a classification strategy.

First, because most of the city construction is already completed and saturated, the recommended accessibility-related strategies do not relate to city-level macro-structural adjustment, or large-scale demolition and reconstruction. Instead, they focus on shelter and road reorganization and improvement. Second, the strategies are proposed separately for the hazard-product and for the hazard-affected environment, as these are very different from each other.

In summary, this study's results and conclusion significantly contribute to practices associated with city repair and renewal planning.

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