Take action

## Resident actions

Residents invoke actions that influence the local infrastructure of the census-block or change the socio-political landscape by protesting.

### House modification

House modifications influence the sensitivity of the house to suffer hazard events. We define the sensitivity of the house as the modulation of the perception of the magnitude of hazards. We assumed also that modifications are cumulative, but it saturates, meaning that there is a limit to adaptation and a rate at which these changes influence the sensitivity. Formally we assume that sensitivity is defined by

(23)

Where

(24)

Is the accumulated times that the action house modification was invoke by the residents of census-block

### Protests

When the procedure protests in a census-block, , are triggered when the valuation of the action protest exposure to infrastructure hazards, the response of the water authority, and the tolerance of local inhabitants to those hazards; accordingly:

(25)

where is the distance to the ideal point related to action protest, .