



## **IRF WORLD ROAD MEETING 2017**

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# **Qualitative methodology for road safety risk rating and ranking**

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# Content

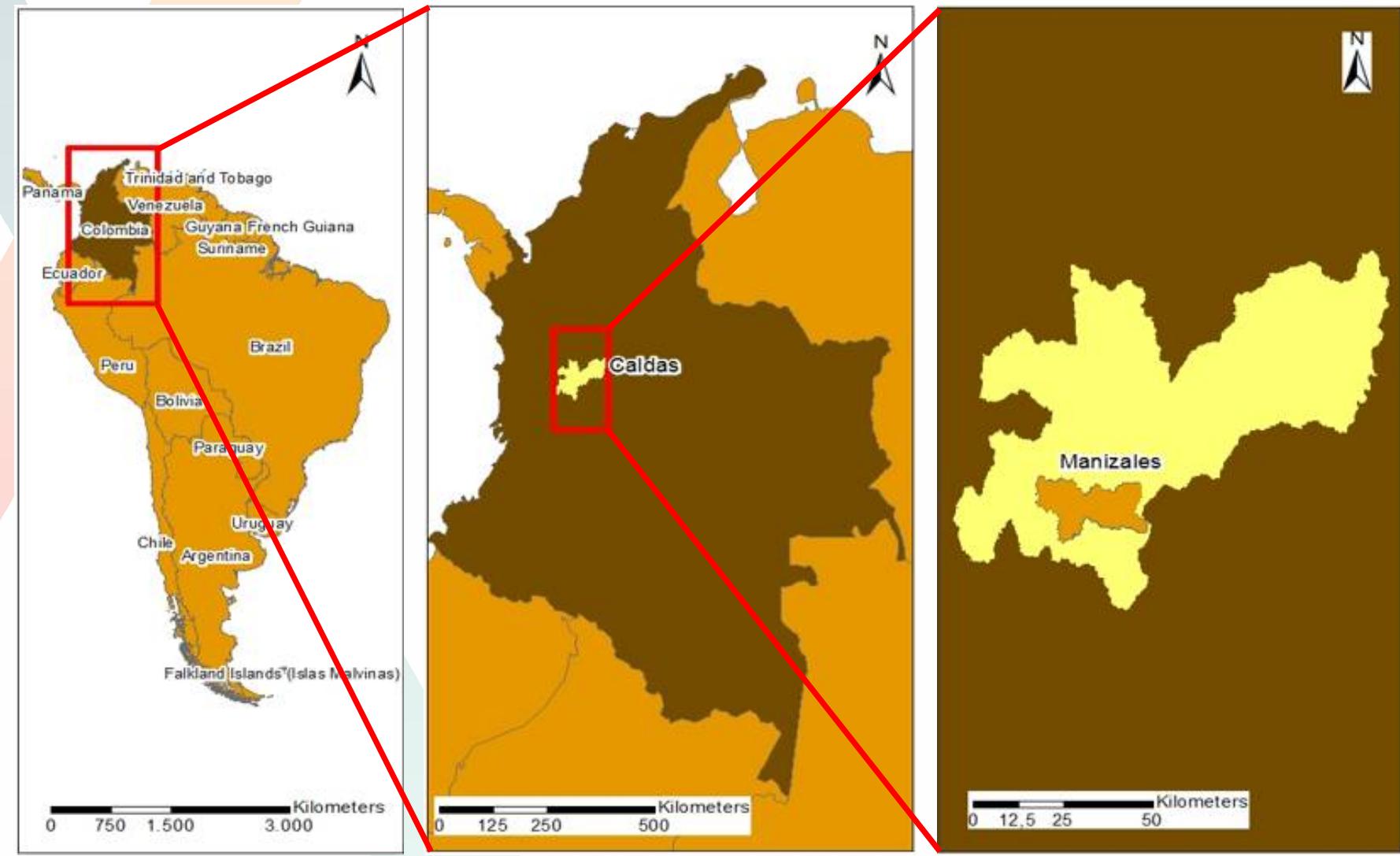
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# Introduction

- Road safety audit methodology was developed in Manizales.
- Twenty-eight (28) points evaluated considering twelve (12) variables.
- Risk analysis based on organized information.
- Weighted ratings.

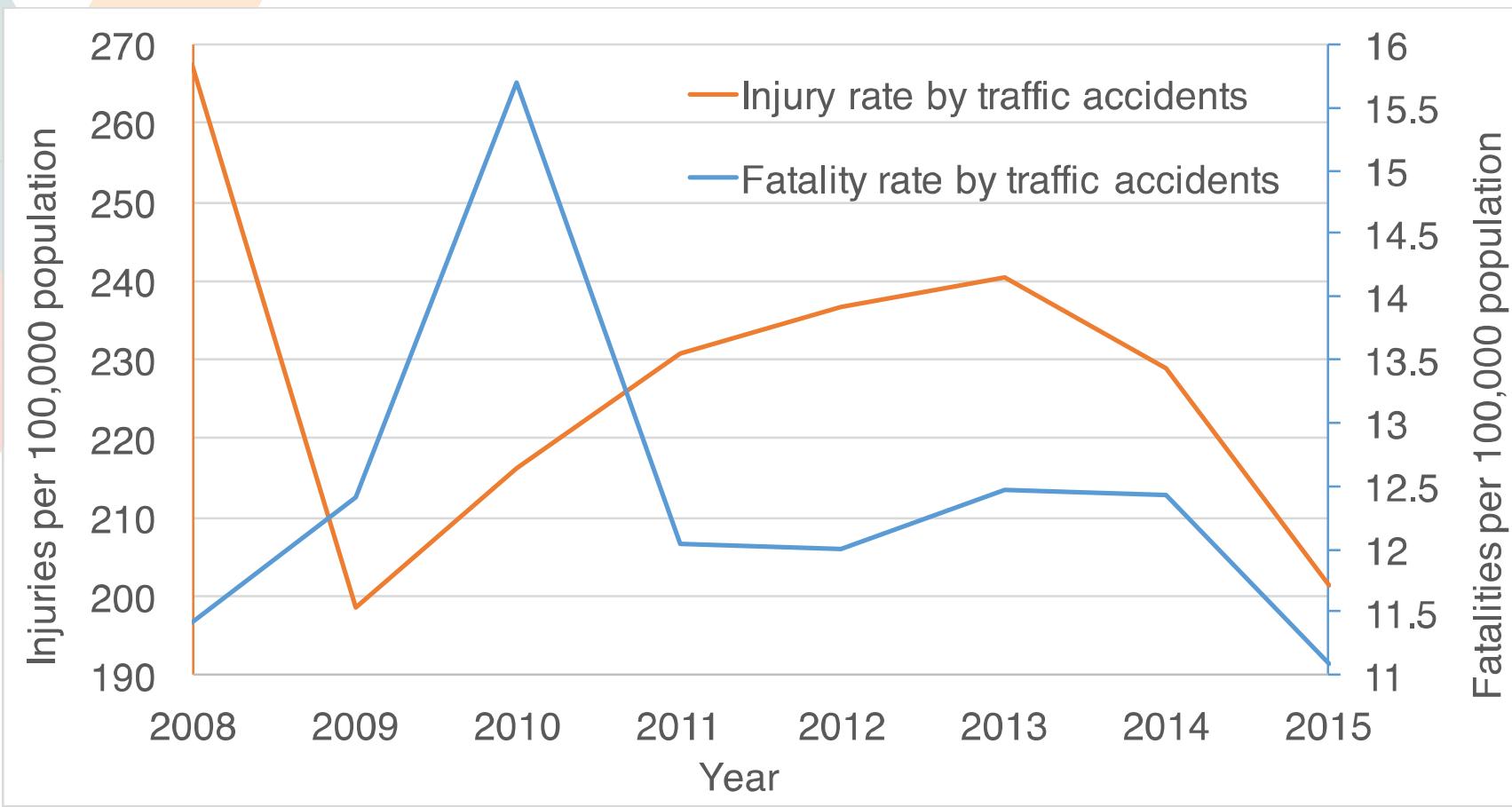
# Manizales Overview

Manizales is located in the central western region of Colombia (South America),  
2150 m.a.s.l.; Mountainous topography; 400' population; 6222 inh./km<sup>2</sup>





# Traffic accident rates in Manizales



# Road Safety Audit Methodology

## Stage 1: Field works

- Checklists
- Descriptive Sheets
- Findings Record
- Vehicle and Pedestrian Counting
- Operating Speed

## Stage 2: Vulnerability, Threat and Risk Analysis

- Vulnerability Classification
- Threat Classification
- Risk Calculation

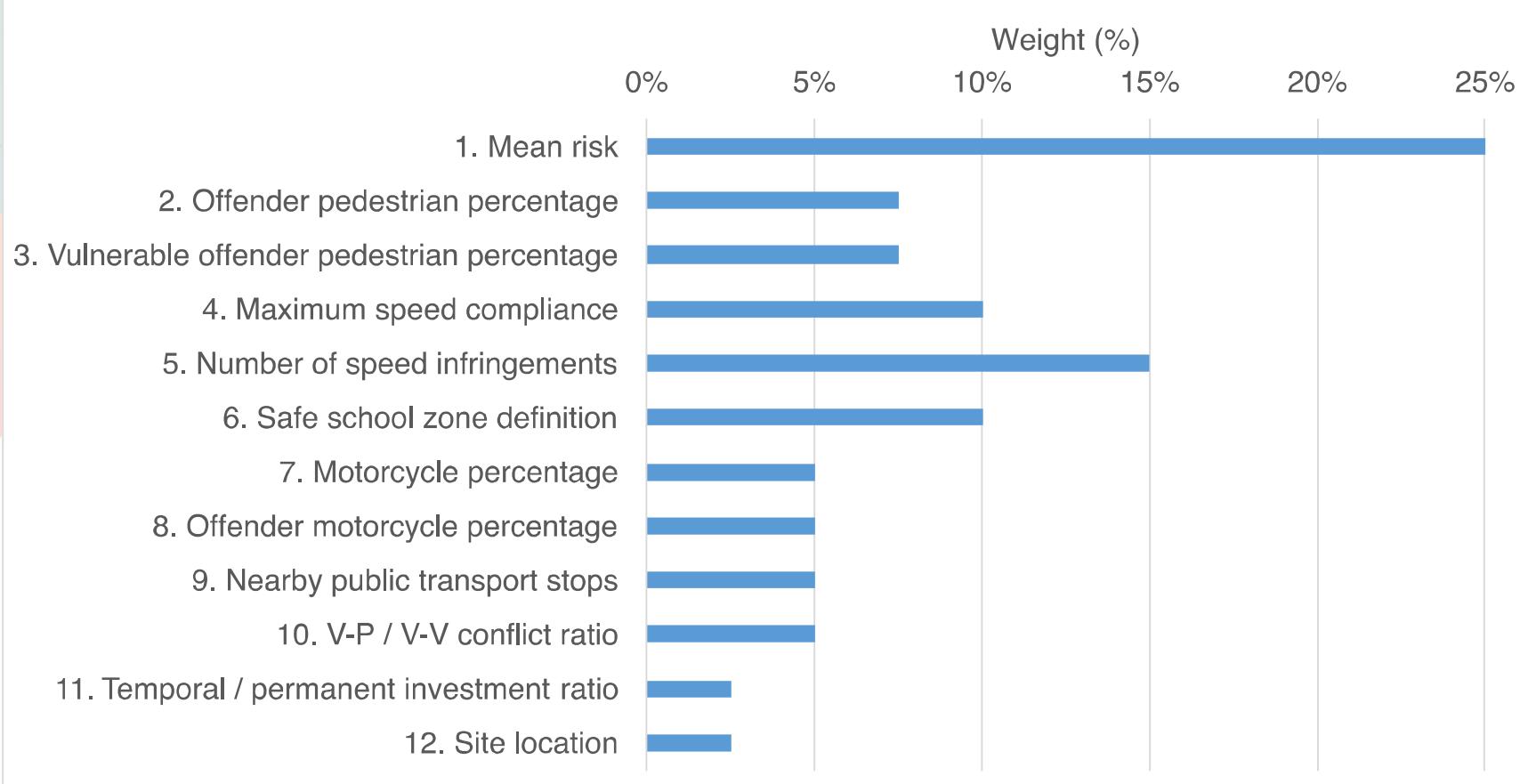
## Stage 3: Ranking

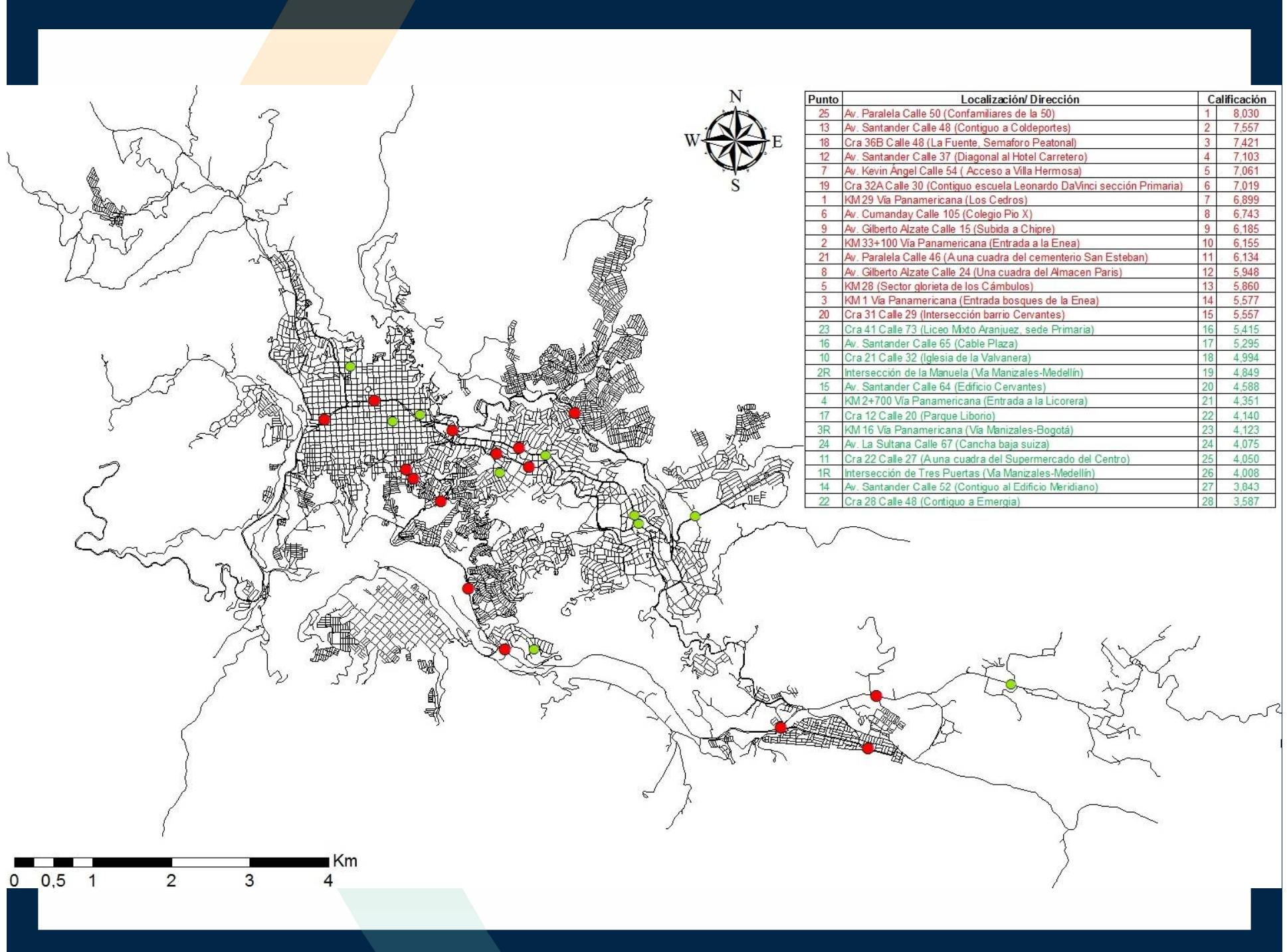
- Define variables
- Define variables' weights
- Prioritization calculation

# Risk Calculation

RISK		VULNERABILITY		
THREAT	High (3)	Low (1)	Medium (2)	High (3)
	Medium (2)	2	4	6
	Low (1)	1	2	3

# Variables' weights





# Main Conclusion

Although the methodology has limitations of subjective considerations, it can be a helpful tool for town administrations as it rates and prioritizes the points to have a technically supported investments plan.

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# **THANKS FOR YOUR KIND ATTENTION!!!**

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