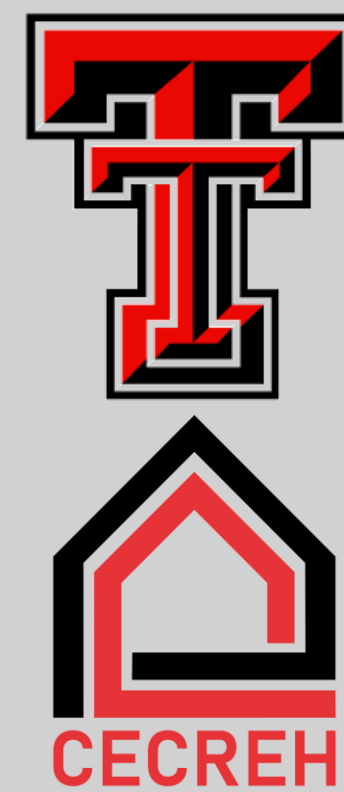


Mapping Flood Risk and Planning Gaps in Harris County, Texas

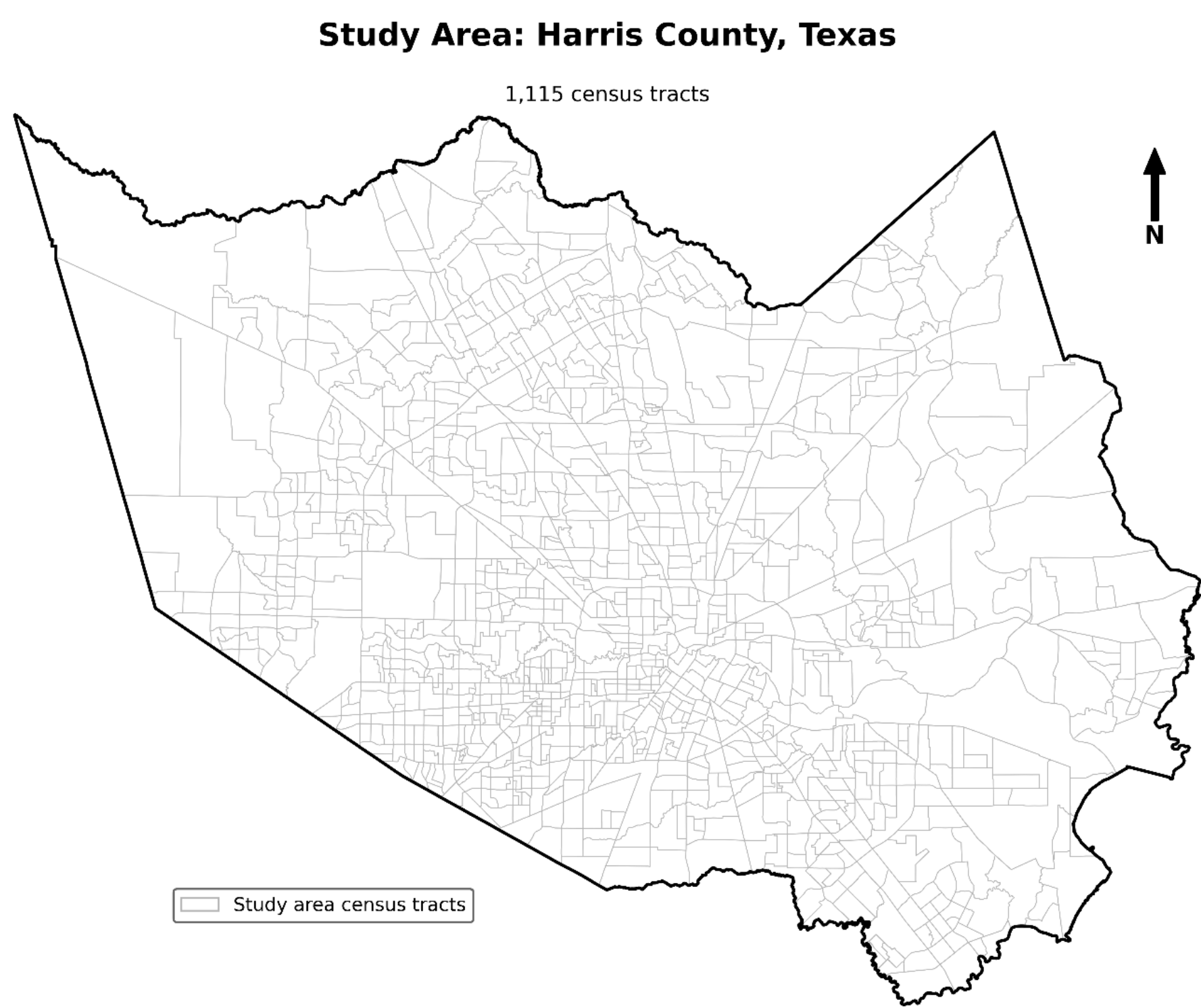
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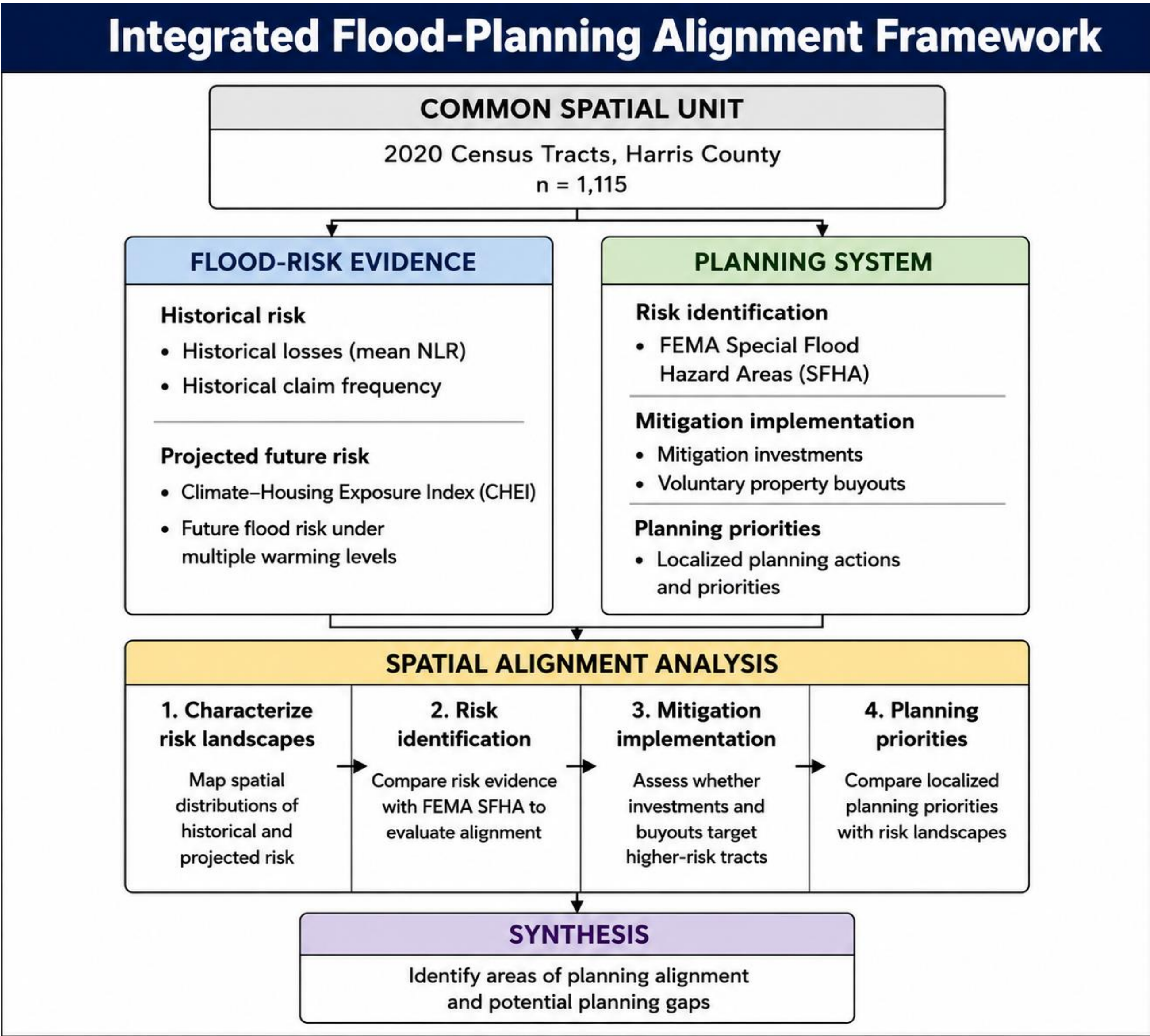


BACKGROUND

- Flood risk is changing with climate and urban development (Sauer et al., 2023; Wang et al., 2024).
- Are flood-planning actions aligned with areas where historical and future flood risk is greatest?



METHODOLOGY

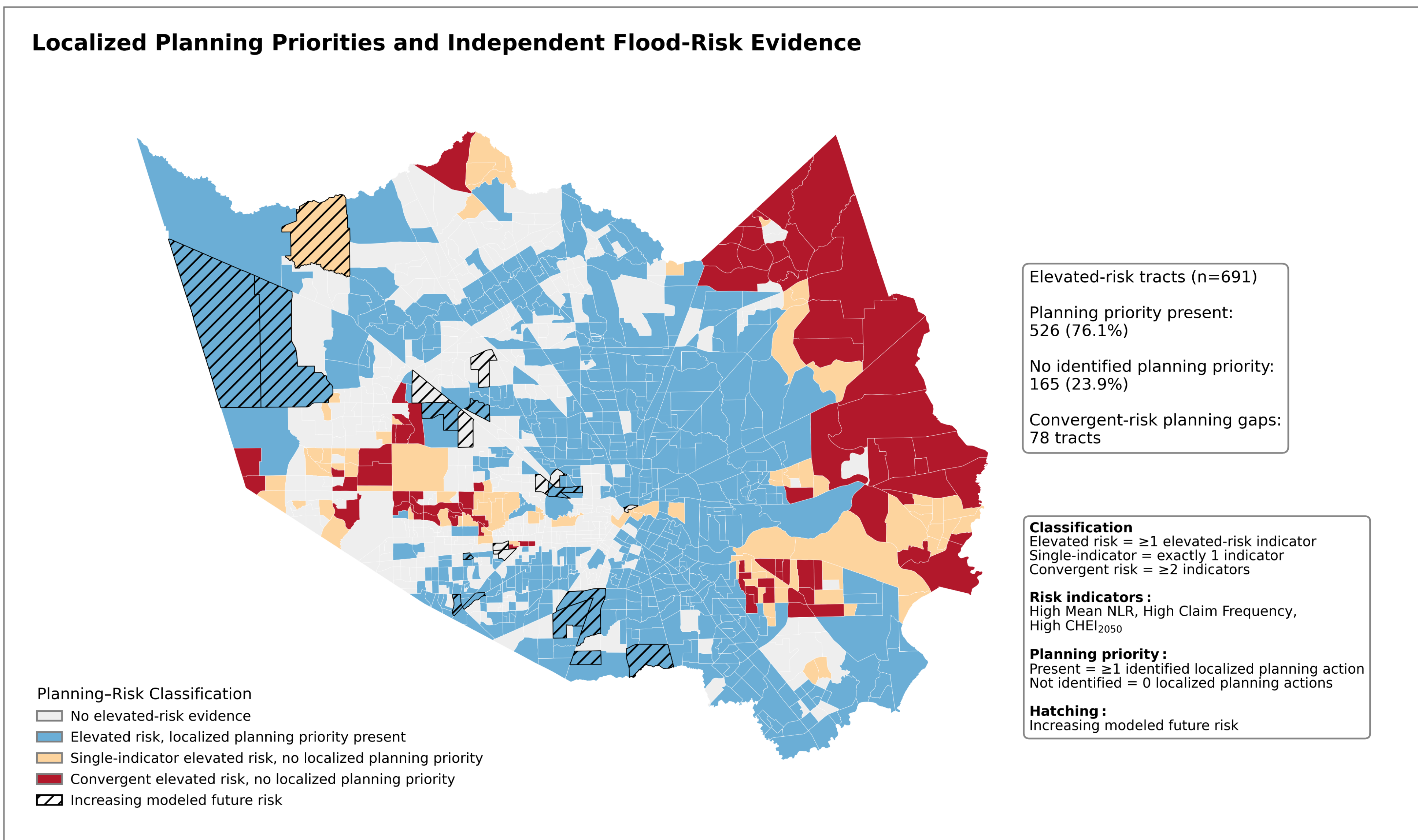


FINDINGS/RESULTS

- Risk identification:** SFHA representation was limited for 78.5% of high future-risk tracts.
- Mitigation:** Stronger alignment with historical flood experience than projected future risk.
- Localized planning:** Broader alignment, covering 76.1% of elevated-risk tracts.
- Overall:** Multiple gaps remain between flood-risk evidence and planning actions.

Combining historical and projected flood-risk evidence can help identify priority areas for more targeted, climate-informed flood planning.

Localized Planning-Priority Alignment with Flood-Risk Evidence



REFERENCES

1) Sauer et al. (2023). *Sustainable Cities and Society*, 99, 104880. <https://doi.org/10.1016/j.scs.2023.104880>

2) Wang et al. (2024). *Sustainable Cities and Society*, 101, 105141. <https://doi.org/10.1016/j.scs.2023.105141>

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