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Evaluating Equity in Transportation and Hazard Preparedness Plans: A Multi-Level Governance Approach

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Issue

Environmental justice (EJ) principles are essential for addressing inequities in transportation and hazard preparedness; however, they are often applied in a fragmented manner. Historically, urban planning in the United States has created racial and economic divisions, particularly through policies like redlining and freeway construction that displaced communities of color. These practices have systematically and disproportionately exposed marginalized groups to environmental harms. The EJ movement has advocated for addressing these disparities through equity-focused policies. However, the integration of EJ principles into plans remains incomplete, with prior studies focusing on individual plans or jurisdictions, failing to consider broader governance systems and the need for equity to bridge multiple plan types.

These challenges are compounded by the shift from centralized to decentralized governance, creating a fragmented landscape where different levels of government and departments operate with distinct priorities. *Multi-level governance* (MLG) creates both opportunities and challenges for equity-centered planning. While it enables state funding, regional planning, and local implementation to align, fragmented jurisdictions often leave transportation, hazard, and climate plans in silos. Intentional coordination is needed to embed

EJ principles across all levels of planning. Our analysis focuses on Los Angeles due to its overlapping jurisdictions, large transit system, and history of environmental injustice making it a critical test case for how MLG can both enable and constrain equity-centered planning. This policy brief is based on our evaluation of 16 climate action, racial equity, transportation, and hazard preparedness plans in Greater Los Angeles, which we systematically scored based on three existing EJ pillars: Recognition Justice, Procedural Justice, and Distributive Justice.

Key Research Findings

Recognition Justice is Inconsistent Across Plans.

Our study found that climate action and especially transportation plans scored lowest on average in the *Recognition Justice* pillar, which is the dimension of EJ that requires acknowledgment of historical injustices and ongoing disparities. While some jurisdictions have made strides in addressing various dimensions of EJ in climate action and especially racial equity plans, infrastructure planning on average still lags in its integration of Recognition Justice.

Multi-Level Governance (MLG) Increases Coordination and Capacity, but EJ Remains Underemphasized. Hazard plans demonstrated the strongest multi-level coordination,

reflecting federal and state requirements, yet they frequently fell short in embedding equity. By contrast, transportation plans more often integrated equity due to legal mandates and advocacy pressure but lacked the cross-departmental and cross-jurisdictional coordination achieved in hazard planning. This highlights the paradox of MLG: it builds institutional capacity but does not ensure consistent integration of EJ principles.

Community Engagement is Correlated with Equity Integration in Planning. *Collaborative* and *Vertical Engagement* (i.e., horizontal collaboration across agencies and vertical inclusion of community voices in decision-making, respectively) emerged as key factors of *Engaged Planning* (an approach that prioritizes inclusive and participatory processes). Plans with strong community involvement – particularly through *advisory boards* (resident-based groups providing guidance and feedback) and *community steering committees* (formal groups that shape policy and implementation) – showed better integration of the pillars of *Procedural Justice* (which ensures fair participation in decision-making) and *Distributive Justice* (which ensures fair distribution of benefits and burdens). Few of the evaluated plans, however, adopted these inclusive strategies, leaving substantial room for improvement across all levels of government.

Social Movements are Associated with Equity Integration as EJ in Planning Increases Post-2019. Following the Black

Lives Matter resurgence in 2020 and the simultaneously increased attention to climate justice, there was a noticeable improvement in the integration of equity into planning from 2020 to 2023. Post-2019 hazard preparedness and climate action plans demonstrated more significant strides in applying EJ principles, particularly along both dimensions of Distributive Justice and Procedural Justice. These trends suggest that social movements and political shifts may have positively influenced equity integration into planning documents and processes.

Recognizing that community and agency engagement are key to integrating EJ principles into planning, agencies can shift power to communities through opportunities to actively participate in identifying solutions and outcomes, especially in infrastructure plans like transportation and hazard preparedness. Fostering coordination across federal, state, and local levels is an important step toward creating cohesive, equitable policies.

More Information

This policy brief is drawn from the report titled “Beyond Infrastructure: Patterns of Environmental Justice and Multi-Level Governance in Greater Los Angeles Transportation and Hazard Planning,” which can be found at: <https://escholarship.org/uc/item/91d25399>. For more information, please contact Dr. Elisa Borowski at borowski@uci.edu.

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