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We propose a large-scale dashboard that explores the intricate relationships between housing market trends, environmental health, and the economic well-being of Hispanic households and communities, while ensuring that privacy is protected. By integrating CoreLogic’s long-term housing data with various external datasets—such as air pollution levels, natural hazards, and socio-economic factors—the research will provide comprehensive insights into how these factors have historically influenced housing prices, ownership patterns, and urban development in Hispanic communities.

CoreLogic’s data offers detailed records of housing prices, owner transfer histories, and property features, which will be combined with geospatial datasets on environmental risks such as air quality and natural hazards (floods, hurricanes, earthquakes, and wildfires). The research focuses on identifying how these environmental factors disproportionately impact housing values and transfer histories over time in Hispanic communities.

Using advanced spatial econometric models and machine learning techniques, the study will reveal key patterns and correlations at local and regional levels. Geographic Information Science (GIS) methods will be employed to visualize spatial relationships, providing a clearer understanding of how environmental risks intersect with housing markets.

The large-scale dashboard will present a holistic view of how environmental factors influence real estate markets, providing valuable insights for policymakers, urban planners, investors, and homeowners. This approach will support the development of strategies to mitigate environmental risks, promote equitable urban development, and enhance resilience in Hispanic communities. Additionally, it will guide informed decision-making in real estate investments, insurance policies, and urban growth strategies.