



LaHouse
Research & Education Center

7th Global Summit of GADRI Networking Institutes Slide Template

Bridging Research and Outreach to Improve Resilience and Sustainability of Louisiana Homes and Communities

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Background

Communities in flood- and wind-prone regions face increasing risks due to extreme weather events. Strengthening homes through scientifically backed, cost-effective resilience measures is critical for reducing disaster impacts and long-term sustainability.

Objects

The LaHouse Research & Education Center at LSU AgCenter aims to provide a comprehensive platform for researching, demonstrating, and implementing disaster-resilient housing solutions.

Expectation from a future partner

Validation & Data Integration – Partnering with institutions to validate resilience strategies using real-world hazard impact data and predictive modeling.

Technology-Enhanced Risk Reduction – Developing and testing innovative materials, construction techniques, and smart home adaptations for disaster resilience.

Scaling Implementation – Working with policymakers and industry leaders to refine and promote resilience standards at local, state, and national levels.

Seeds and Needs

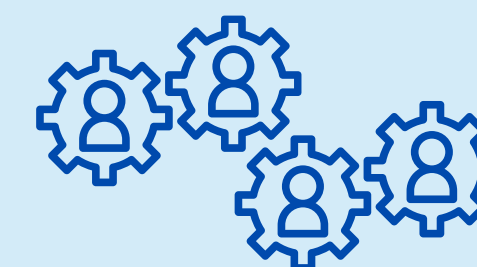
Seeds

- High-quality research and digital tools: Research on the best methods to protect a home from extreme weather and anticipated savings information from mitigation
- Construction Performance Data & Methodologies: Evidence-based evaluations of fortified roofing, flood-resistant retrofits, and material durability under extreme conditions.
- Risk Communication & Outreach Strategies: Established networks for translating research into public policy, industry best practices, and homeowner education.
- Statewide & Regional Engagement: Involvement in hazard mitigation planning, floodplain management, and building code advancements.



Needs

- Interdisciplinary Partnerships: Engagement with experts in hydrology, engineering, material science, and economics to enhance the effectiveness and affordability of mitigation strategies.



By bridging research, technology, outreach and policy, LaHouse seeks to drive meaningful advancements in disaster resilience, reducing long-term risk and enhancing community sustainability.