

Harris County Flood Resilience Plan

Plan Development Update to Commissioners Court

August 26, 2025



PURPOSE

This transmittal provides an update on the development of the Harris County Flood Resilience Plan from December 2024 to present, including key technical milestones and engagement activities.

OVERVIEW

Harris County's first Flood Resilience Plan (FRP) is a comprehensive framework that establishes clear, actionable, and measurable strategies for flood resilience in the region. This is a county-wide plan, developed through a collaborative process. Plan development is led by the Harris County Flood Control District (FCD) as the lead agency, on behalf of the Infrastructure Resilience Team (IRT), with input/ advice from the Community Flood Resilience Task Force (CFRTF), and in collaboration with Harris County precincts, key local and regional partners, and Harris County communities.

Unique to the Harris County Flood Resilience plan, is the direction from Commissioners Court that the IRT be tasked with developing the Harris County Flood Resilience Plan that sets forth an overall vision and goals for the future of the community along with specific priorities and actions that are needed to proactively mitigate flood risks and strengthen our community's overall resilience to flood hazards.

TIMELINE

The FRP development process was kicked off in December 2024 and is scheduled for completion in late 2026, a 26-month timeline. Implementation is anticipated to begin in early 2027. The FRP development process consists of three key steps: (1) Establish Vision, Values & Vulnerabilities, (2) Refine Goals & Evaluate Strategies, and (3) Prepare to Deliver & Track Outcomes. (See *Figure 1*).

The development timeline has been devised so that each step consists of technical work informed by regular advisory/ technical review and input from the IRT and CFRTF, as well updates and feedback from precincts, and other County stakeholders.

In addition, Steps 1 and 2 each conclude with stakeholder/ public meetings to share progress, and gather feedback from external partners - the public, community leaders, business leaders, and municipal partners. Step 3 concludes with a public Open House to share the draft FRP and gather input prior to implementation.



Figure 1. Flood Resilience Plan development timeline

ROLES & STAKEHOLDERS

The primary drivers and partners of the effort are:

- **FCD** - Owner of the contract with the consultant team. Responsible for scope, schedule, budget and contract; for driving the project and conflict resolution in addition to FCD's IRT role below.
- **IRT** - Responsible for their respective flood resilience actions/ strategies, plan development, internal coordination including communication coordination, and updates to department leadership. Also recommends source data and provides feedback for the Plan Development Team.
- **CFRTF** - Serves in an advisory role to the IRT to help guide the FRP, providing timely review and consolidated feedback.

The FRP development process also relies on consistent and focused engagement with the following stakeholder groups:

- Internal partners (the IRT, non-IRT County organizations, Precincts, and municipal partners)
- Community partners (the CFRTF, community leaders, community-based organizations, academic institutions, professional organizations)
- Regional partners (state and regional agencies)
- General public (residents and businesses)

WORK SO FAR

For an effort as broad and ambitious as the Flood Resilience Plan, it was critical to bring the key partners to establish a collective **Vision** at the outset to develop shared core values, goals, outcomes and a shared understanding of what resilience means.

With this objective in mind, **three FRP Visioning Workshops** were held in December 2024 and January 2025 with FCD staff, the CFRTF, and the IRT. Following these workshops, the team developed a draft definition of resilience. In addition, the stakeholders suggested that the FRP should be a people-centered plan focused on everyday solutions and community benefits, considering nature-based solutions and long-term maintenance needs, policies, and programs in addition to traditional gray infrastructure solutions.

Finally, the plan should adopt a broad understanding of risk, recognizing social, economic, and physical factors that determine flood exposure.

As part of the early work, the team also completed a **literature review of flooding and climate-focused planning efforts** spanning multiple scales (neighborhood, city, county, region-wide, and state-wide). This broadened the team's understanding of available precedents within the field. Examples from Texas include the City of Houston Neighborhood Resilience Plans, Harris County Multi-Hazard Mitigation Action Plans, Texas Water Development Board State Flood Plan, and Texas Coastal Resiliency Master Plan.

Another key task undertaken early in Step 1 was to devise a **cohesive methodology for plan development** –Examples include developing an approach for foundational elements of the plan, such as defining resilience, articulating a collective vision (established through the Vision workshops); operationalizing equity (how does the team apply guidance on equity from Commissioner's Court and the CFRTF to both the technical and the engagement tasks) (see figure 2 below).

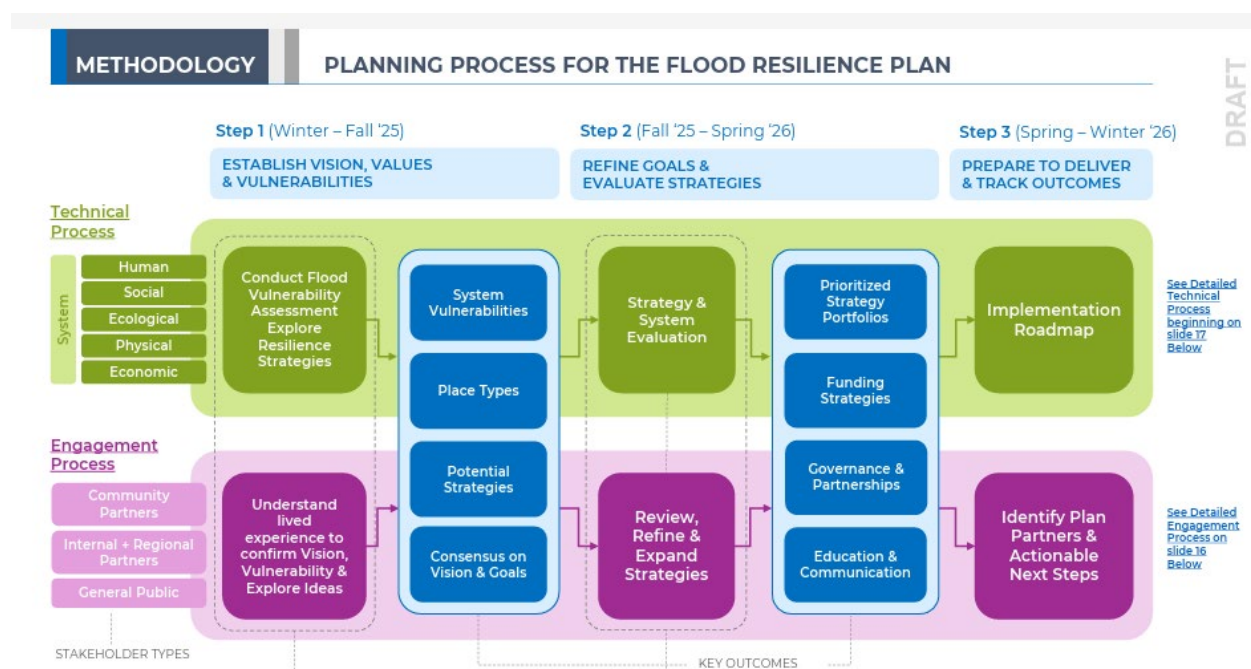


Figure 2: Methodology - Technical and Engagement Process

The FRP methodology also establishes key questions and methods to understand flood vulnerability. The analysis framework considers physical **exposure** to flooding as well as **sensitivity** (physical factors that increase the likelihood of an asset's failure; for example, building age) and **consequence** (impact of an asset's failure on communities; for example, loss of a school or health clinic). (See Figure 3)

Flood risk evaluation draws on the latest available MAAPNext data, the geographic scope of which is watershed-based rather than county-based and extends beyond county boundaries, considered at the 0.2% annual chance event level. This broader view is useful in characterizing upstream influences and nesting the FRP within regional and statewide planning efforts.

Finally, the methodology incorporates guidance from the Commissioner’s Court, CFRTF Bylaws, Visioning Workshops, and CFRTF equity workshop, among other sources detailed in the document’s appendices.

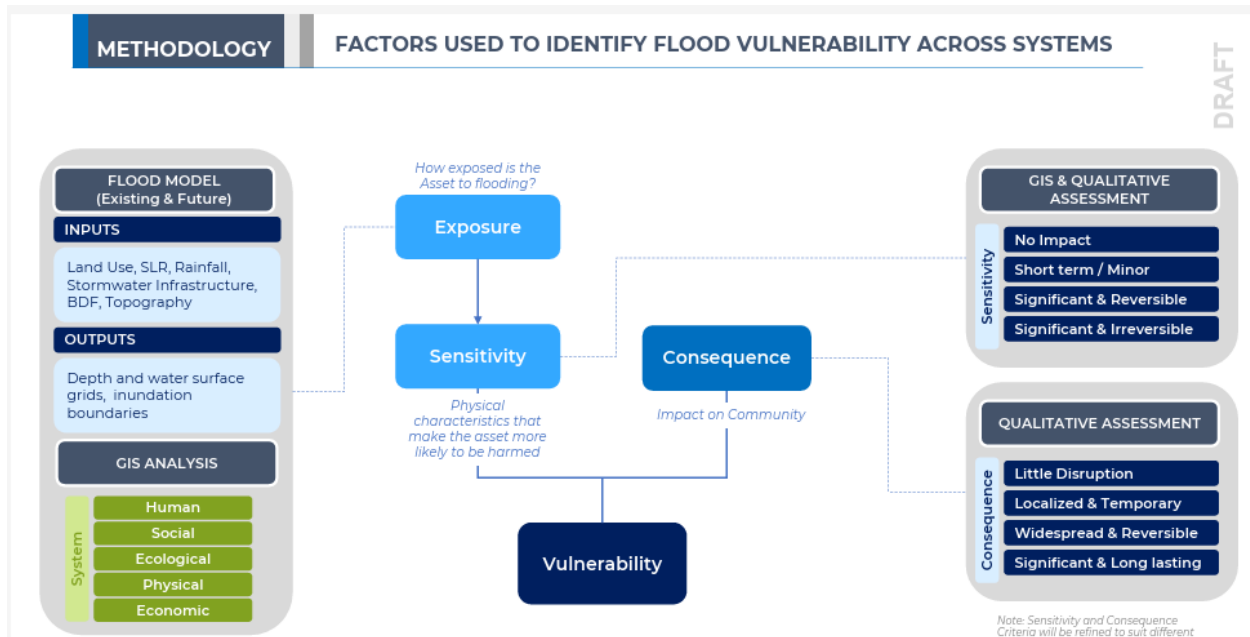


Figure 3: Vulnerability Assessment

COORDINATION WITH CFRTF, IRT, PRECINCTS & COUNTY DEPARTMENTS

The Plan Development Team has met regularly with its planning partners since December 2024:

- Vision workshops and kick-off (December, January 2025)
- Monthly CFRTF meetings
- CFRTF Annual Retreat (April 2025)
- Precinct Briefings (March, August 2025)
- CFRTF Equity Workshops (June to August 2025)

WORK IN PROGRESS

BASELINE EXISTING AND FUTURE CONDITIONS

The Plan Development team is currently conducting an analysis of baseline and future conditions to establish a comprehensive understanding of Harris County’s current and projected flood risks.

VULNERABILITY ASSESMENT

The ongoing Vulnerability Assessment will explore how the five system components in Harris County – human, social, physical, ecological, and economic – shape the flood impacts experienced by residents and the impacts to County assets. The vulnerability assessment will be a GIS-based analysis of county-wide flood exposure that incorporates the sensitivity and

consequence of flooding to select asset categories. The results will guide the development of actionable and context-specific strategies put forward in the FRP.

The CFRTF has been a key partner in providing input into the methodology, and draft deliverables at key milestones have been presented to the CFRTF for their input.

Work on this deliverable is continuing and is anticipated to be complete in late Fall / early Winter.

COMMUNITY ENGAGEMENT

A community engagement strategy has been developed with the goal of allowing the technical work to both inform and learn from the engagement process. There are two primary strategies that are being used for community engagement:

1. **Public meetings** will be the cornerstone of the community engagement effort, with meetings held across Harris County. Each major technical milestone is followed with a series of public engagement milestones to ensure that feedback is sought through the project. Language and physical accessibility will be addressed during all public engagements.
2. Before each round of large-scale public meetings, the team will work with the CFRTF, IRT and the Precinct staff to host **small group workshops** – which will include both community small group workshops as well as technical small group workshops. These small group workshops will allow deeper discussions on specific topic areas that will inform the overall planning process.

The CFRTF has provided guidance on accessibility options which will be used to select meeting locations and guide development of the agenda. These considerations include the following:

- **Language accessibility:** Spanish, Vietnamese, and Chinese translation or interpretation; closed captioning and/or sign language with materials to take on a register consistent with a sixth grade reading level.
- **ADA accessibility:** Meeting locations to be ADA compliant, and layouts will consider ample space for mobility, seating, etc.
- **Transportation accessibility:** Meeting venues to be located close to public transportation stops (METRO routes, bus routes, etc.) and have ample parking.
- **Technology accessibility:** Multiple methods of engagement with the FRP, including digital (email, social media, website) and print versions of key documents. Accessibility will be incorporated into digital materials as practicable (for example, alt text for images and graphics and high-contrast colors for the visually impaired).
- **Stage of life accessibility:** Child friendly activities available at public meetings to encourage parent attendance and participation; transportation options will be coordinated with senior living and community centers.

The first round of community engagement is scheduled to start in **Fall 2025**, with small group workshops starting in August followed by a series of four public meetings that will be held in the October timeframe.