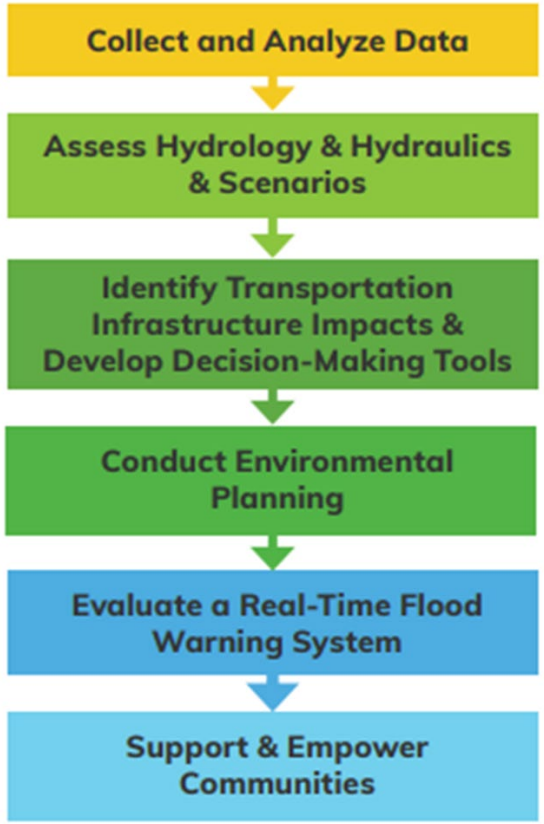
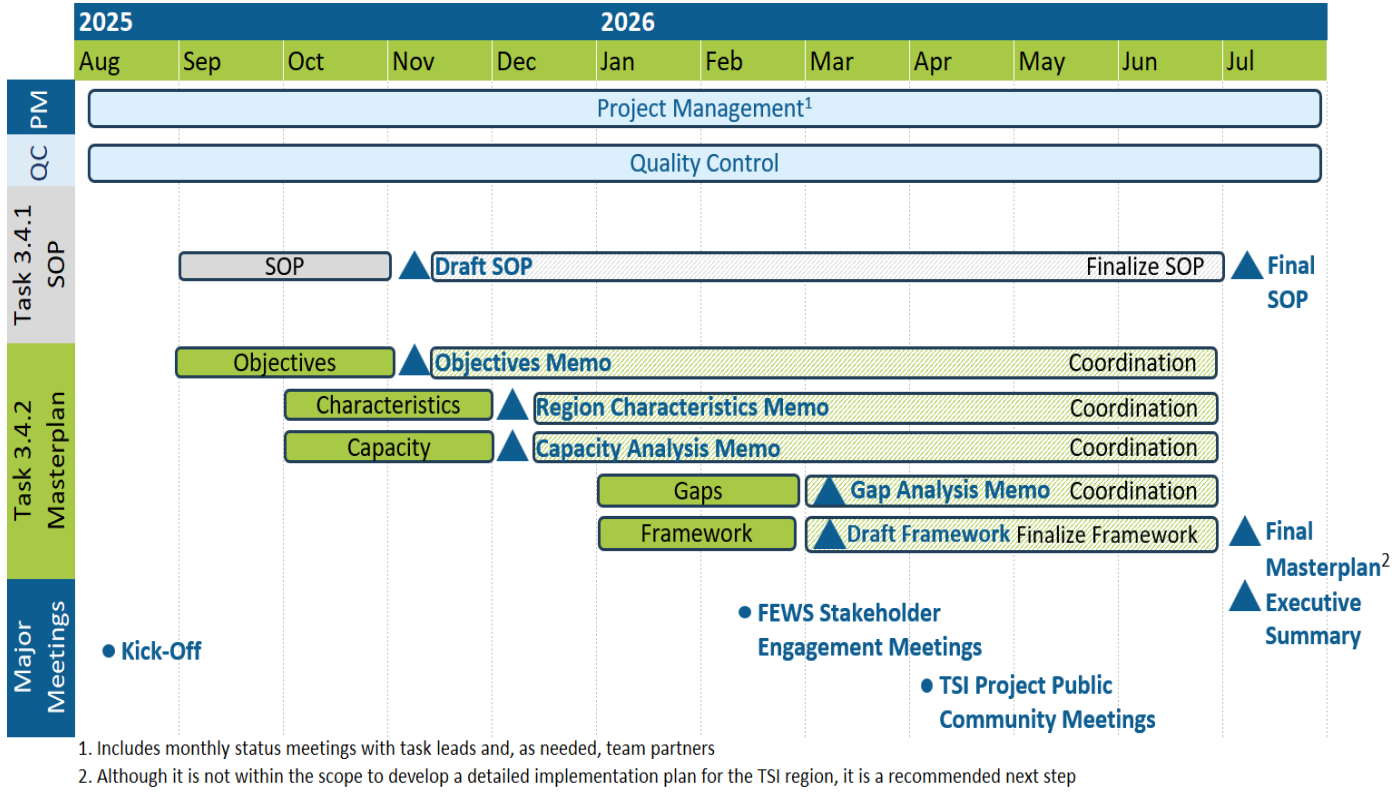
# No Single Entity Can Solve This Alone




- Role of TSI
- How does FEWS fit into it?
- Timeline and results



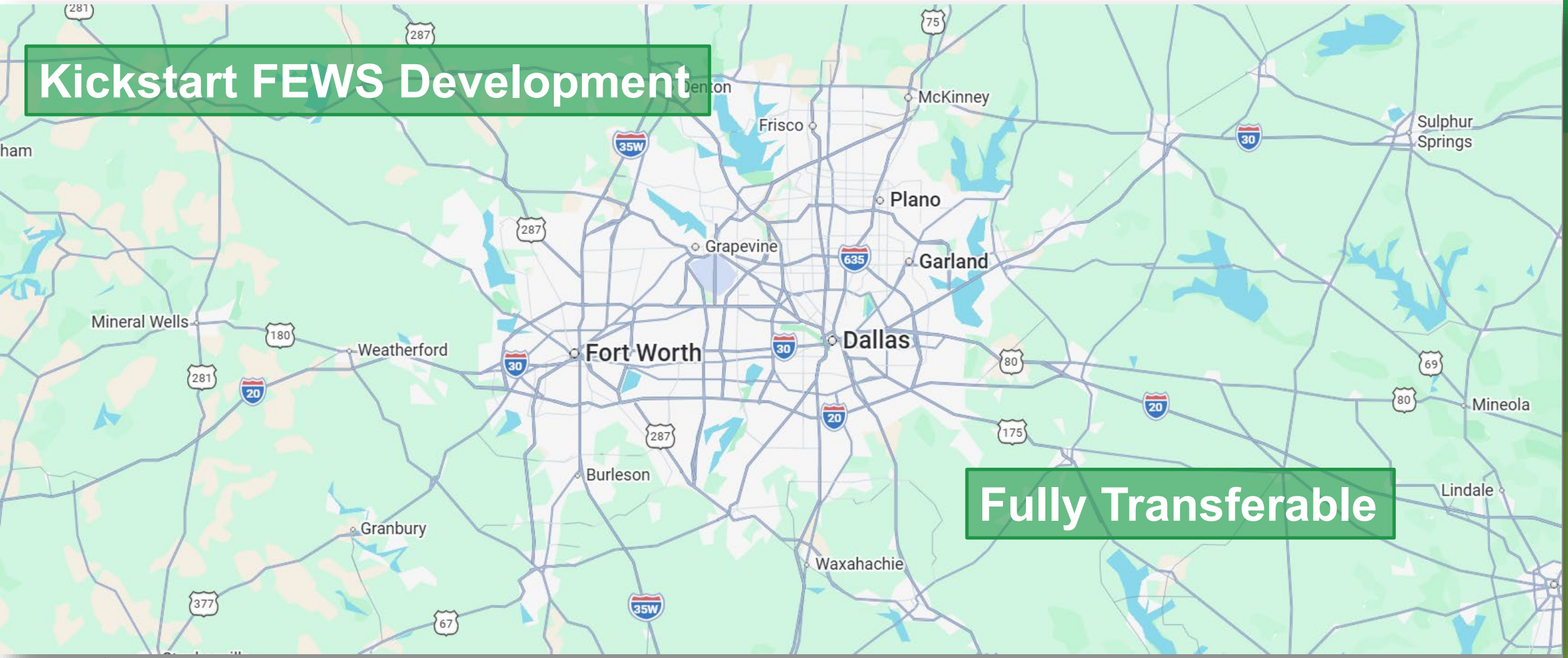

1. Includes monthly status meetings with task leads and, as needed, team partners
2. Although it is not within the scope to develop a detailed implementation plan for the TSI region, it is a recommended next step

# Flood Early Warning Systems
# — End to End —


**1st Mile**

**Last Mile**

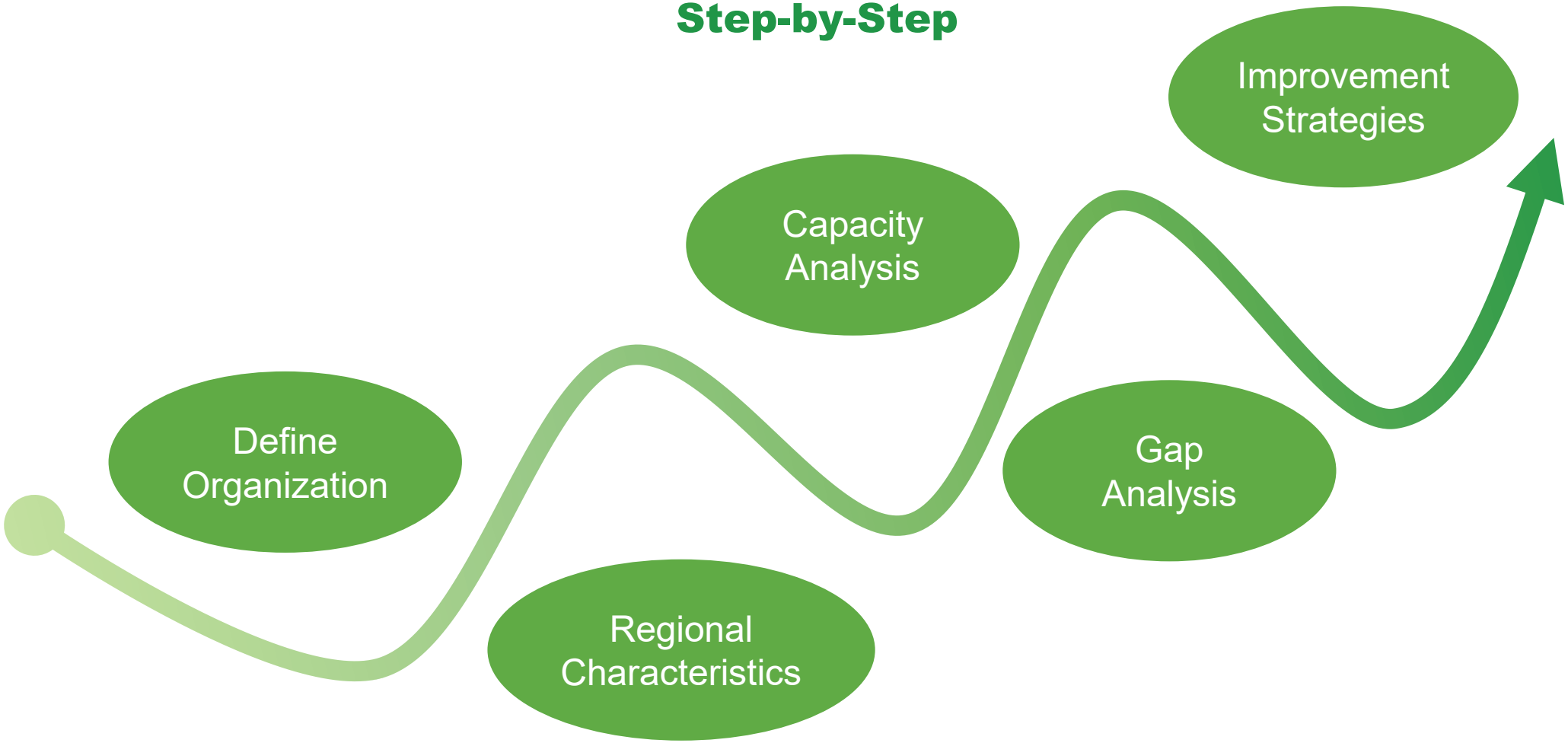
# Roadmap for Success
# — Master Plan —



# TSI Flood Warning Master Plan

## Standard Operating Procedure

### Step-by-Step



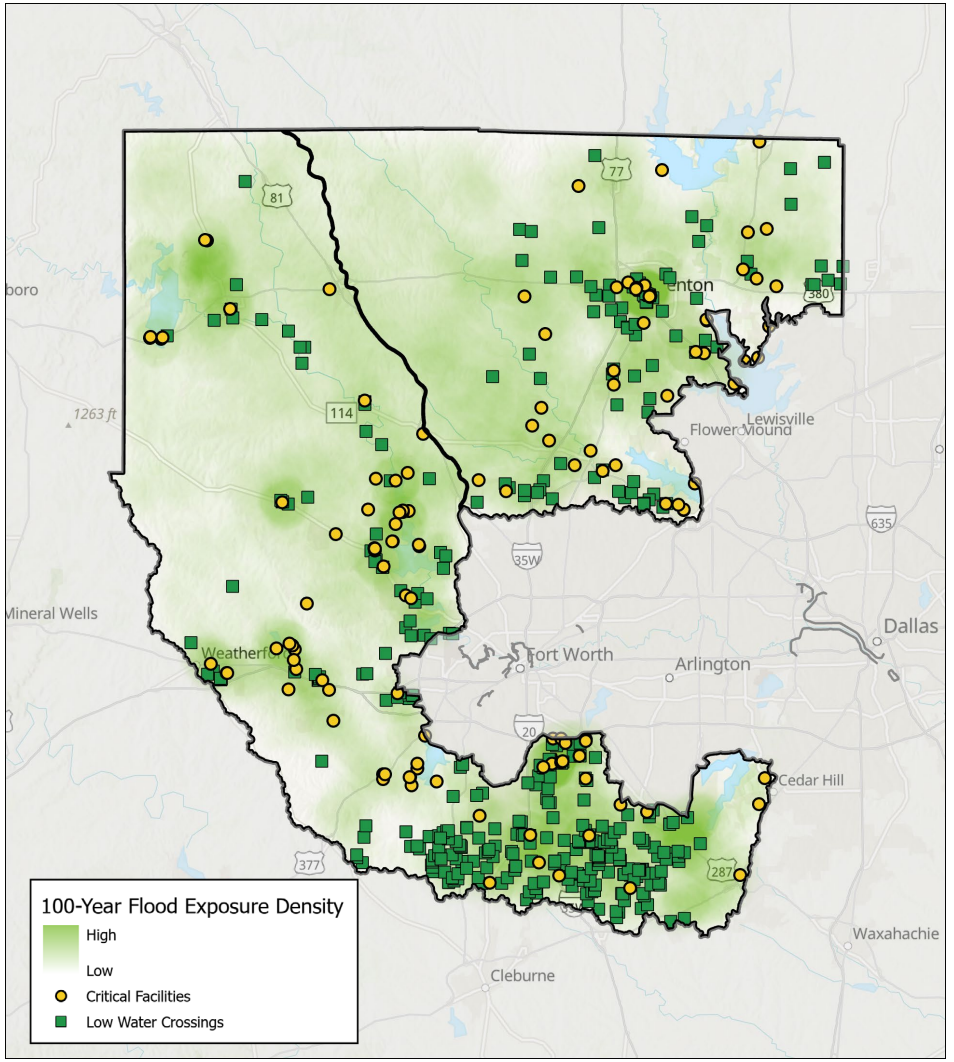
# Objectives Analysis

- Objectives Analysis Memo
  - Document FEWS goals, vision, and expectations for the TSI region.
  - Key memo information includes:
    - Apr 2025 Survey Results
    - Jan 2026 Survey Results
    - Jan 2026, Pre-Workshop Meeting Follow-up
    - Community Site Visits
    - Engagement in Masterplan Process
    - Texas Examples

# Regional Characteristics

- Regional Characteristics Memo
  - Key information:
    - Geographic Extent and Political Boundaries
    - Climate
    - Natural Environment
    - Built Environment
    - Hydrology and Watershed Response

| County | 2025 Population Estimate | TSI Study Region |
|---|---|---|
| Dallas | 2,762,279 | West |
| Tarrant | 2,260,330 | West, North |
| Denton | 1,068,355 | North |
| Ellis | 239,923 | West |
| Johnson | 217,867 | West |
| Parker | 163,878 | West |
| Wise | 72,674 | West, North |
| Hood | 66,549 | West |




*Structures at Risk, Critical Infrastructure, and Low Water Crossings (Source: TWDB)*

# Capacity Analysis

- **Capacity Analysis Memo**
  - **Inventory resources**
  - **Key information includes:**
    - FEWS Hardware
    - FEWS Software
    - FEWS Operations

| Entity | Rain | Stage | Rain & Stage | Weather Stations with Rain | Comms. |
|---|---|---|---|---|---|
| City of Fort Worth (COFW) | 8 | 28 | 34 | 0 | ALERT2 Radio |
| City of Grand Prairie (COGP) | 0 | 39 | 0 | 0 | ALERT2 Radio |
| National Weather Service (NWS) | 0 | 0 | 0 | 33 | GOES? Satellite |
| Tarrant Regional Water District (TRWD) | 12 | 3 | 22 | 0 | Cellular; ALERT2 |
| Texas Department of Transportation (TxDOT) | 0 | 0 | 0 | 80 | Cellular; IP |
| Texas Water Development Board (TWDB) | 0 | 0 | 0 | 6 | Cellular |
| United States Geological Survey (USGS) | 0 | 114 | 0 | 0 | GOES? Satellite |
| Wise County | 0 | 16 | 0 | 0 | Cellular |

# Gap Analysis

Where we want to be…

## Identify flood risk.

### Are key flood hazards and related threats identified?

Summarize what's known about geographical extent, magnitude, intensity, historical data, future risks.
What are the watershed response times at key locations of significant flood impact?
What flood hazard maps are available?

### Are flood risks and vulnerabilities identified?

Critical facilities mapped (e.g., hospitals, water treatment, fire/police stations, etc.)
Impacts to critical infrastructure evaluated.

### Are roles and responsibilities of stakeholders identified?

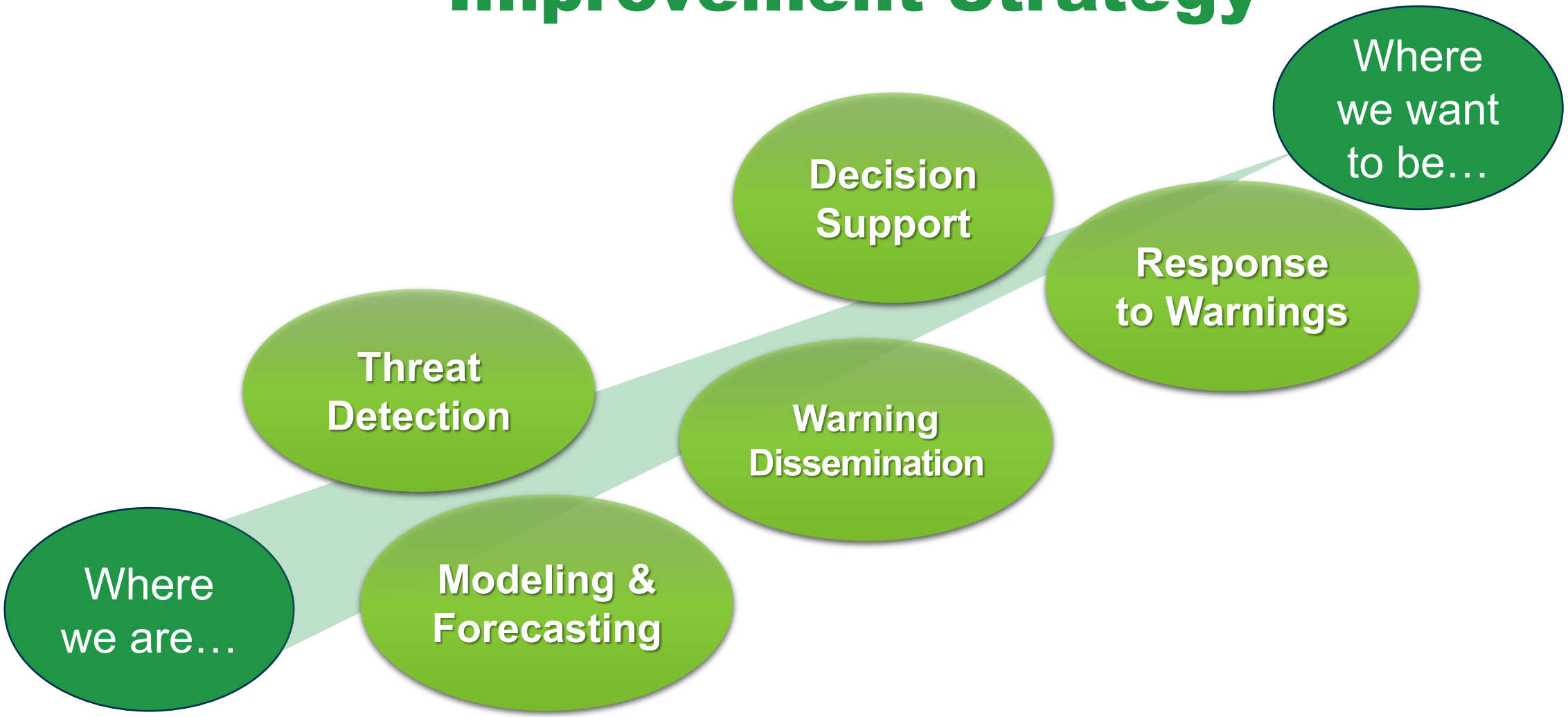
Who are the key agencies. (e.g. Host agency, NWS, NWSRFC, USGS, USACE, etc.)? Describe roles.
Hazard identification and risk information coordination. Who is responsible?
Available experts to assess quality of risk data and information. (e.g., PW Engineer, Consultant, etc.)
Process in place to engage rural and urban communities in risk assessment.

Where we are…

### Is risk information consolidated?

Is there a centralized database of events, disasters, and risk information, including GIS. Where? Who is responsible?
Is process in place for systematic collection, sharing, and assessment of risk data?
Process in place for regular review and updating of risk information, including new or emerging vulnerabilities.

# Improvement Strategy



# TSI Flood Warning Master Plan