

Insights from FEMA Disaster Dashboard (Power BI Project)

Dashboard 1: Disaster Activity Intelligence Overview

1. Most Frequent Disaster Type

Fire is the most frequent disaster, accounting for 576 occurrences and contributing more than half of the total disaster records. This indicates that fire incidents are the dominant disaster type.

2. Top Affected State

Texas (TX) has the highest number of disaster declarations, making it the most affected state and a high-risk region.

3. Disaster Trend Over Time

The number of disasters fluctuates over the years, with a significant spike observed around 2024. This suggests an increasing trend in recent disaster occurrences.

4. Incident Type Distribution

Fire incidents dominate, followed by severe storms and floods. Hurricanes and winter storms contribute moderately, while tornadoes, biological incidents, and straight-line winds occur less frequently. Most disasters are weather-related.

5. Geographic Distribution

Disasters are concentrated in states like Texas, California, and Florida, indicating that southern and coastal regions are more vulnerable.

6. Tribal Requests Analysis

The highest number of tribal assistance requests are associated with fire incidents, followed by severe storms and floods, showing a direct relationship between disaster type and relief demand.

Dashboard 2: State Disaster Risk & Response Profile

1. Risk Categorization

Most disaster types fall under the High Risk category, indicating significant vulnerability across states.

2. Disaster Composition

Fire remains the dominant disaster type, followed by floods and severe storms, reinforcing the findings from the first dashboard.

3. Top Disaster-Prone States

Texas ranks highest, followed by Washington, California, Oregon, and Montana. These states require focused disaster management strategies.

4. Risk vs National Average

Certain states show higher disaster counts compared to the national average, indicating localized high-risk zones.

5. Tribal Assistance Breakdown

A majority of tribal requests are approved (847 approvals compared to 153 rejections), indicating an effective disaster response system.

6. State-Level Analysis

The dashboard allows filtering by state, enabling detailed analysis and supporting better

decision-making at the regional level.

Overall Conclusion

Fire is the most dominant disaster type across all analyses. Texas is identified as the most disaster-prone state. Disaster occurrences have increased in recent years, especially around 2024. Weather-related disasters are the most common. High-risk categories dominate across regions, highlighting the need for better preparedness and planning. The high approval rate of tribal assistance requests reflects an effective response mechanism.