



Disaster-Response Demo Video Timeline with Dialogue and Images

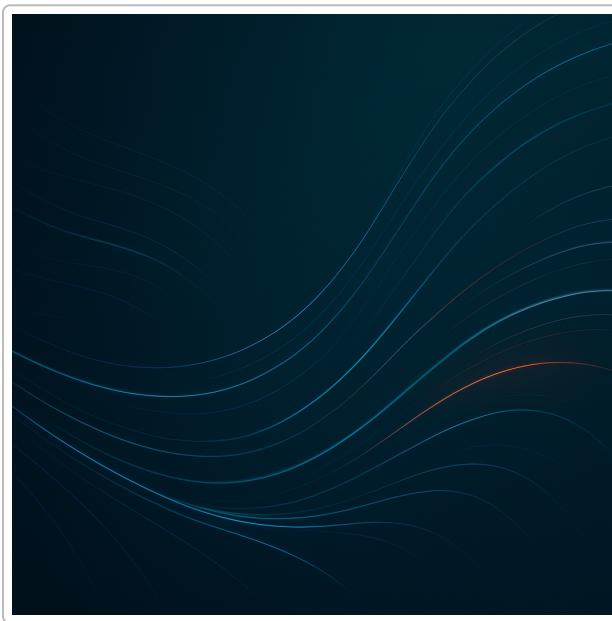
This document breaks down your extended briefing into **time-block segments** for a four-minute demo. Each block lists the approximate time range, provides a suggested narration that you can modify to match your style, and includes a reference image to display on screen at that moment. Feel free to adjust the durations slightly while keeping the total runtime under four minutes.

⌚ 0:00-0:15 — Introduction

Suggested dialogue:

Hi, I'm **Ian Frelinger**, and I'm excited to share my Palantir Building Challenge project. I've built a disaster-response platform that helps **incident commanders** and their teams coordinate faster and safer when minutes matter.

Visual: Use the abstract swirling graphic to set the mood for the demo. This generated illustration evokes the complexity of emergency response without showing real-world responders:

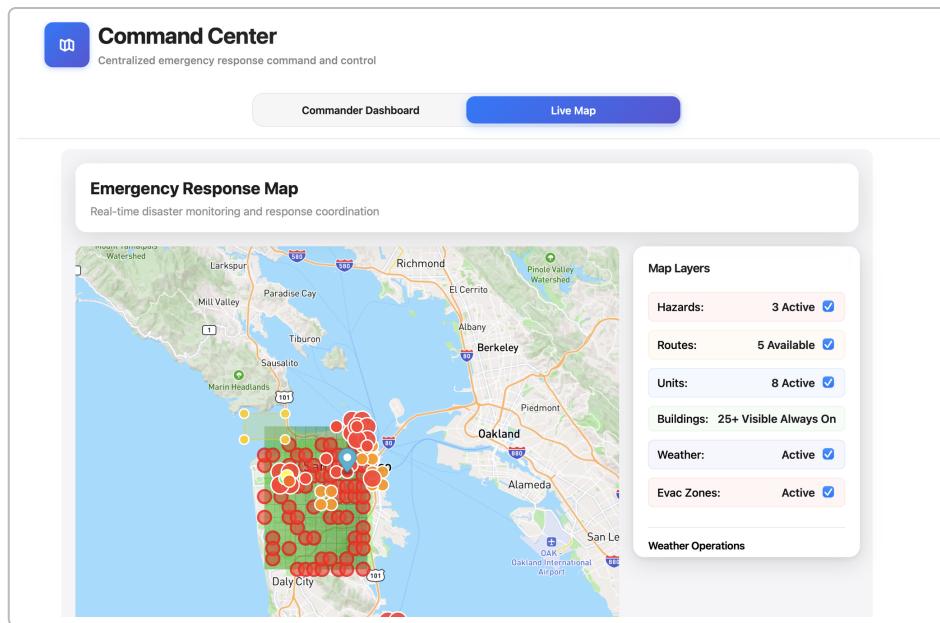


⌚ 0:15-0:40 — Problem Statement & Motivation

Suggested dialogue:

Emergency responders have to juggle radios, maps, spreadsheets and more, which slows them down when every minute counts. **Common operating pictures** often **overload** them with data. In many cases, lower-level responders lack access to the high-level tools reserved for **Incident Commanders** ¹. I wanted to build something that brings everyone onto the same page, providing a **baseline of critical information** without substituting the responders' judgment. At the same time, it extends the capabilities once reserved for senior decision makers to all ranks, so teams can react faster and safer.

Visual: Show the **hazard detection** screen so viewers see the starting point of the problem. The Live Map highlights active hazards, routes, units and evacuation zones:



⌚ 0:40-0:55 — Target User Persona

Suggested dialogue:

This system is designed for **Incident Commanders**, **Operations and Planning chiefs**, dispatchers and field units. We keep the **Incident Commander** at the top of the chain of command ², but we also give front-line teams tools previously reserved for senior decision makers. By democratising situational awareness and AI recommendations, every responder performs better, while leadership retains clear authority.

Visual: To make the user roles more relatable, display a simple vector illustration representing a firefighter, a medic and a police officer. This image makes clear that the platform serves a range of responders:



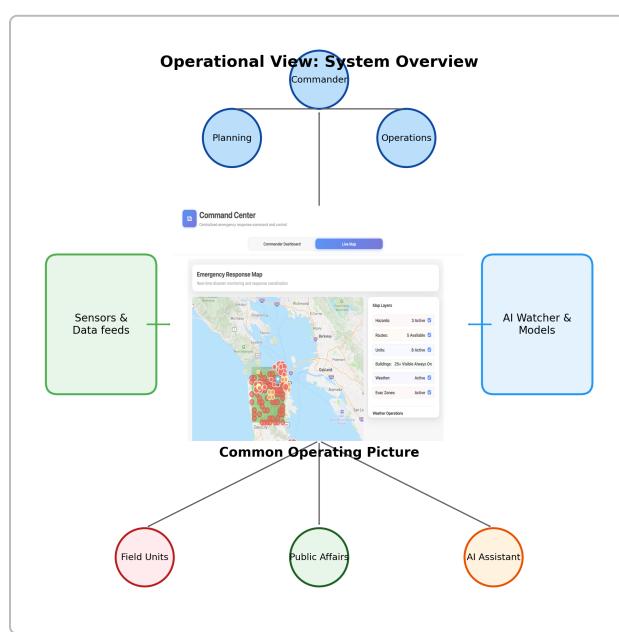
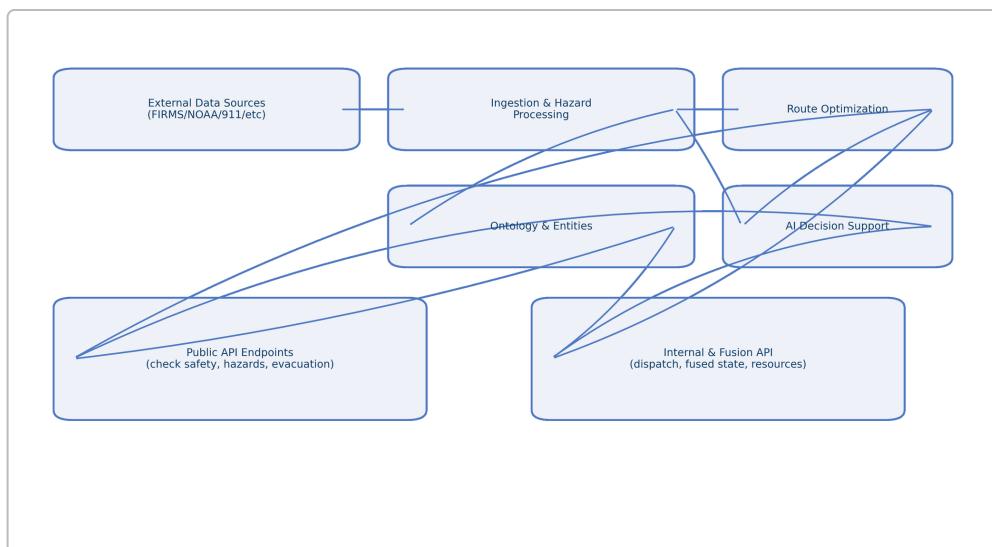
⌚ 0:55-1:25 — Technical Architecture & API Data Flow

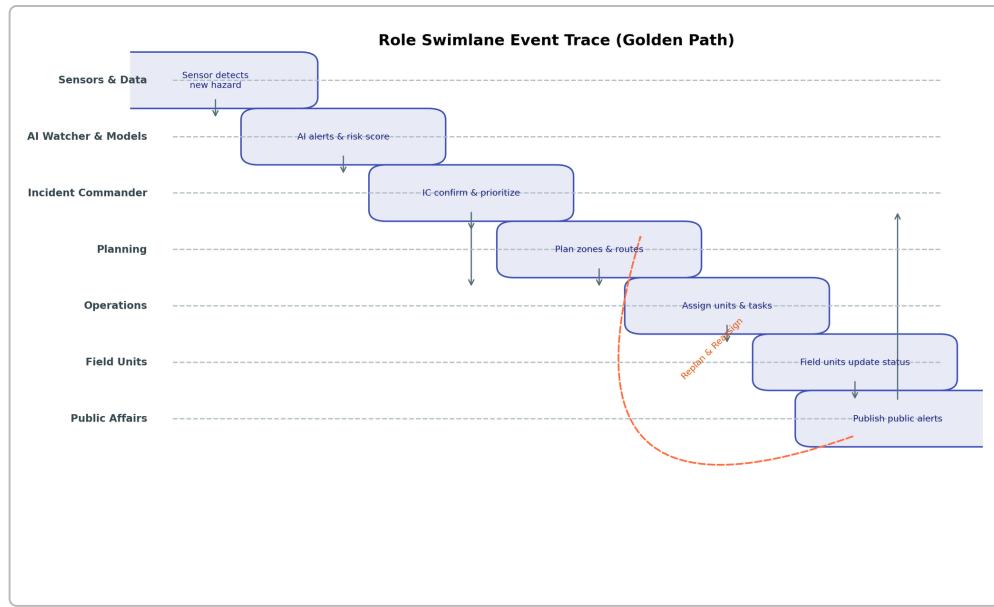
Suggested dialogue:

Under the hood, the front end uses **React** and **Mapbox** for a fast, 3-D map. The backend runs on **Python/Flask** with WebSockets and Celery to handle real-time updates. Everything sits on **Palantir Foundry**, which streams live data from NOAA, NASA and USGS and powers the AIP assistant. To make this concrete, I built three diagrams. First, an **API data-flow diagram** that illustrates how external feeds flow into ingestion and hazard processing, feeding **route optimisation, ontology & entities**, and **AI decision support** [3](#) [4](#). Second, an **operational overview** that shows the **Incident Commander** sitting above Planning and Operations and connecting to each, along with the sensors and AI watcher feeding the common operating picture. Third, a **role swimlane event trace** that captures how detection, planning, operations, field units and public comms interact over time. By focusing only on essential components and relationships, these diagrams stay clean and easy to follow [5](#).

Visual:

Show the **API data-flow diagram** first, then briefly display the **Operational Overview** and **Role Swimlane** diagrams. Here are the three images you can use in sequence:



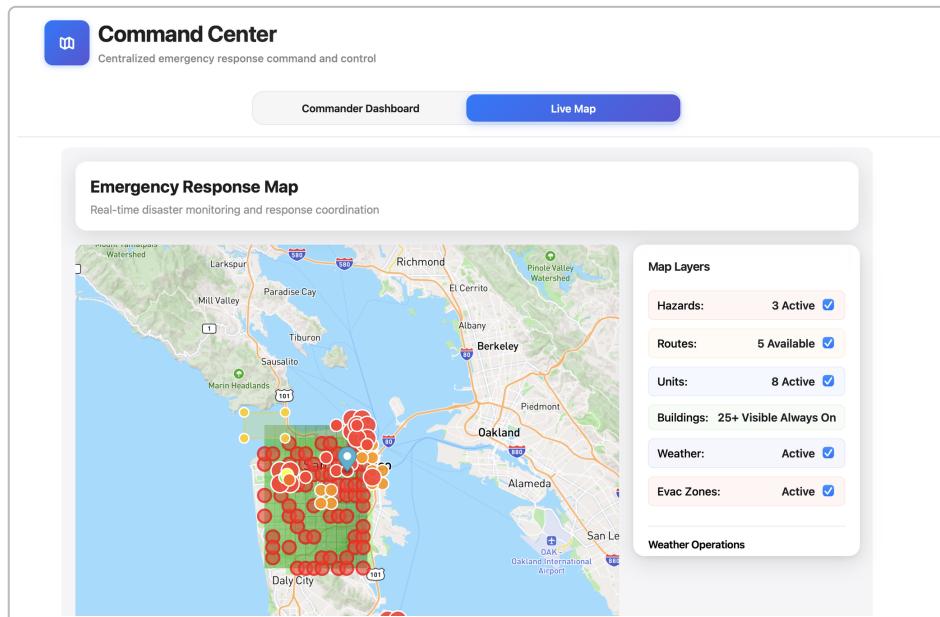


⌚ 1:25-1:40 — Detect & Verify

Suggested dialogue:

A satellite feed shows a new fire on the map. I click on the red hazard icon to open its detail card. The system automatically calculates a risk score using population data and weather. As the **Incident Commander**, I tap the **Confirm Incident** button to acknowledge that this is a real emergency.

Visual:

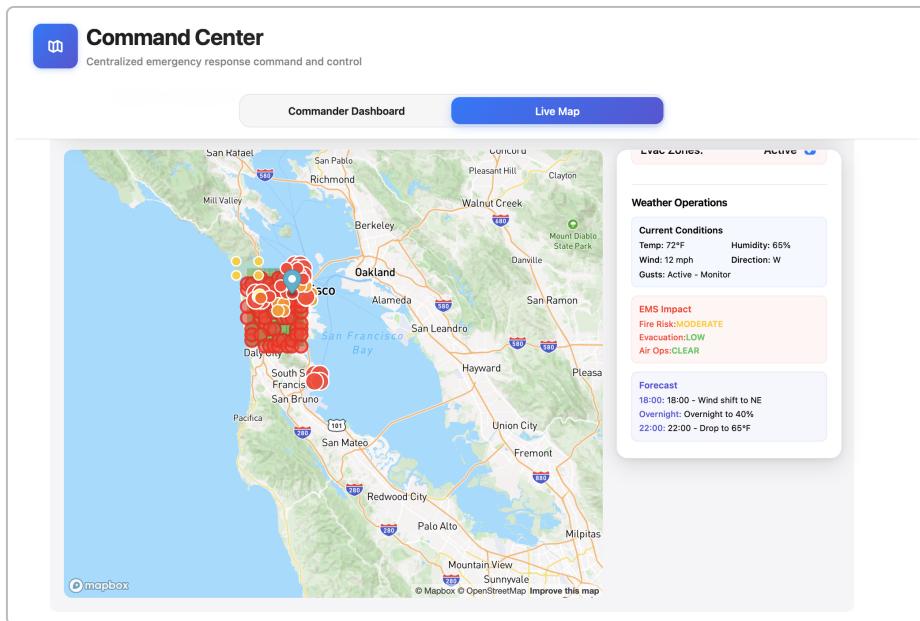


⌚ 1:40-1:50 — Triage & Risk Scoring

Suggested dialogue:

On the right-hand panel, I review the risk indicator and check the wind direction arrow. The fire is creeping toward critical infrastructure, so I pick the **Evacuate** option instead of shelter-in-place. The AI recommends this path too, highlighting the buildings and residents that will be affected.

Visual:

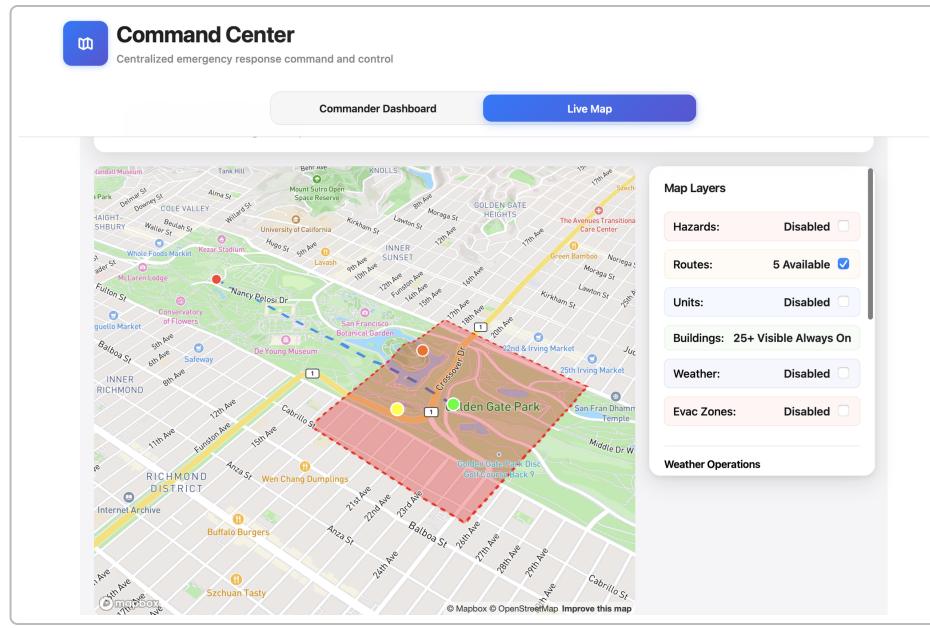


⌚ 1:50-2:00 — Define Zones

Suggested dialogue:

Next, I choose the polygon drawing tool from the map controls. I click around the affected area to outline the evacuation zone, adding points to trace its boundary. When I close the shape, the zone appears in red. I open its info panel and set the priority to **Immediate**, which tells the system to treat it as highest urgency.

Visual:

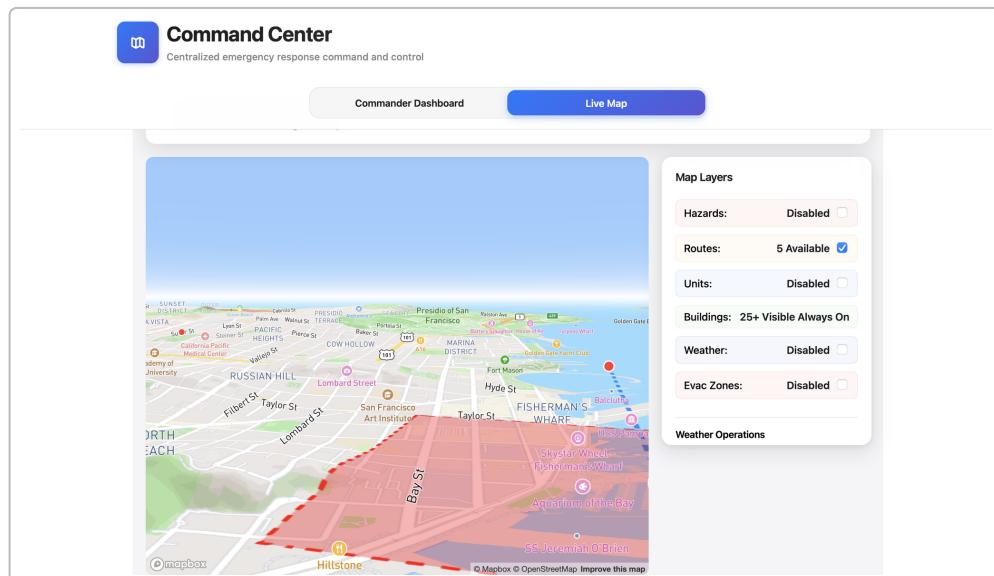


⌚ 2:00–2:20 — Plan Routes

Suggested dialogue:

In the Routes panel, I open the **Profile** menu and choose between **Civilian**, **EMS**, **Fire**, and **Police** options, each balancing safety and speed differently. For a civilian evacuation, the app draws a blue line showing a hazard-aware path calculated using **A Star** search. The path animates from the origin to the evacuation point, avoiding hazard zones and showing estimated travel time.

Visual:



⌚ 2:20–2:30 — Assign Units & Track Assets

Suggested dialogue:

I click open the **Units** panel and select available engines and medics. I drag each unit's icon onto the map to assign it to the route and zone; the app updates their tasks and shows their estimated arrival times. In the **Building Status** panel, I see real-time updates as units mark buildings **evacuated**, **in progress**, **refused** or **no contact**.

Visual:

The screenshot displays the Command Center application. At the top, there is a header with a logo and the text "Command Center: Centralized emergency response command and control". Below the header, there are two main sections: "Asset Management & Status" and "Zone Summary".

Asset Management & Status: This section includes "Overall Statistics" and "Zone Summary".

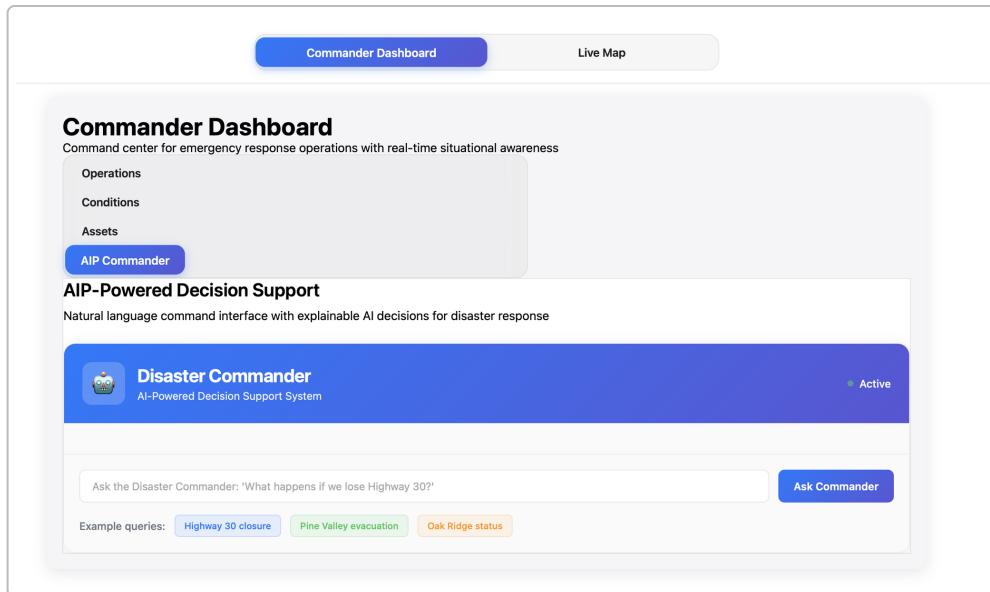
- Overall Statistics:** Total Buildings: 3, Total Population: 770, Evacuated: 1, Special Needs: 3.
- Zone Summary:** Three zones are listed:
 - Zone A:** Status: IMMEDIATE. Details: 0 buildings, 1500 people, 0 evacuated.
 - Zone B:** Status: WARNING. Details: 0 buildings, 2200 people, 0 evacuated.
 - Zone C:** Status: STANDBY. Details: 0 buildings, 800 people, 0 evacuated.

⌚ 2:30–2:50 — AI Support & Replan

Suggested dialogue:

When I have a question, I click into the AI assistant's text box and type, for example, "What happens if we lose Highway 30?" I press the **Ask** button and, within seconds, the AI suggests a reroute and displays it on the map with a dashed line. If a new hazard or weather update arrives, a notification pops up. I click **Recalculate Routes**, and the system redraws the zones and paths, looping back to zone definition as needed.

Visual:



⌚ 2:50–3:20 — Value Proposition & Impact

Suggested dialogue:

This platform speeds up decisions and reduces the staffing needed for manual data fusion, making all responders perform better. It provides a baseline of critical information while keeping the **Incident Commander** firmly in control ¹. It doesn't replace responders or their judgment—rather, it frees them to focus on the actions that directly save lives and property, instead of sifting through overloaded COPs.

Visual: You can reuse the **asset management** screen or remain on the hazard map to underscore the benefits. Here's the asset dashboard again for reference:

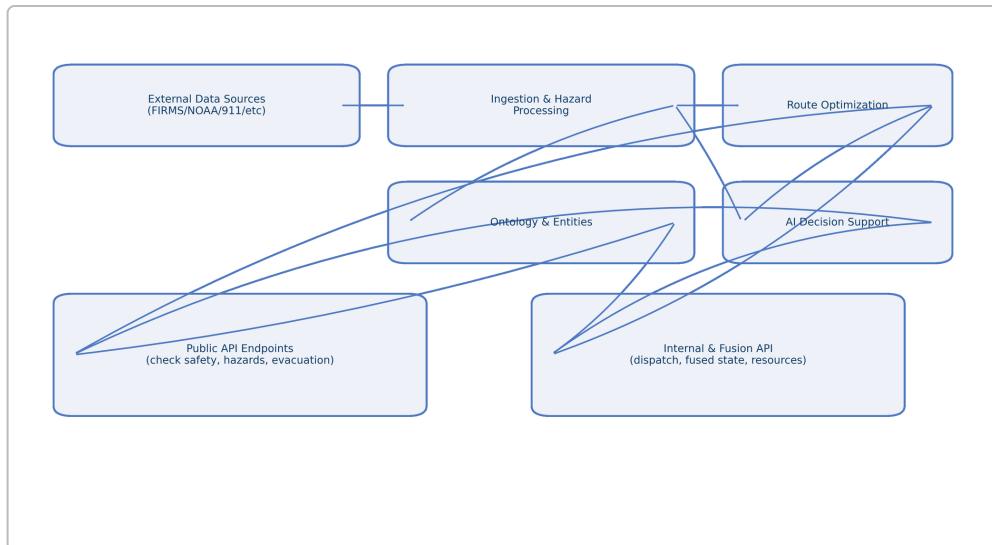
The screenshot shows the 'Command Center' interface. At the top, there's a navigation bar with a blue icon, the text 'Command Center', and a subtitle 'Centralized emergency response command and control'. Below the navigation bar are two tabs: 'Commander Dashboard' (highlighted in blue) and 'Live Map'. A sub-header reads 'Command center for emergency response operations with real-time situational awareness'. Underneath are four categories: 'Operations', 'Conditions', 'Assets' (highlighted in blue), and 'AIP Commander'. The main content area is titled 'Asset Management & Status' and includes 'Overall Statistics' (Total Buildings: 3, Total Population: 770, Evacuated: 1, Special Needs: 3) and a 'Zone Summary' section. The 'Zone Summary' section contains three zones: Zone A (IMMEDIATE priority, 0 buildings, 1500 people, 0 evacuated), Zone B (WARNING priority, 0 buildings, 2200 people, 0 evacuated), and Zone C (STANDBY priority, 0 buildings, 800 people, 0 evacuated).

⌚ 3:20–3:40 — Foundry Integration & AI Assistance

Suggested dialogue:

Thanks to **Foundry's data pipelines and ontology**, we ingest and fuse multiple feeds quickly without building custom data pipelines. We can also execute **actions** on the ontology—like issuing evacuation orders or updating zone priorities—which automatically update all connected objects and relationships. The AIP assistant sits on top of this ontology, so it can deliver context-aware recommendations like rerouting around a blocked highway or predicting fire spread.

Visual: You may display the API diagram again or stay on the AI support screen to remind viewers how Foundry and the AI fit together. For clarity, here's the **API data flow** once more:

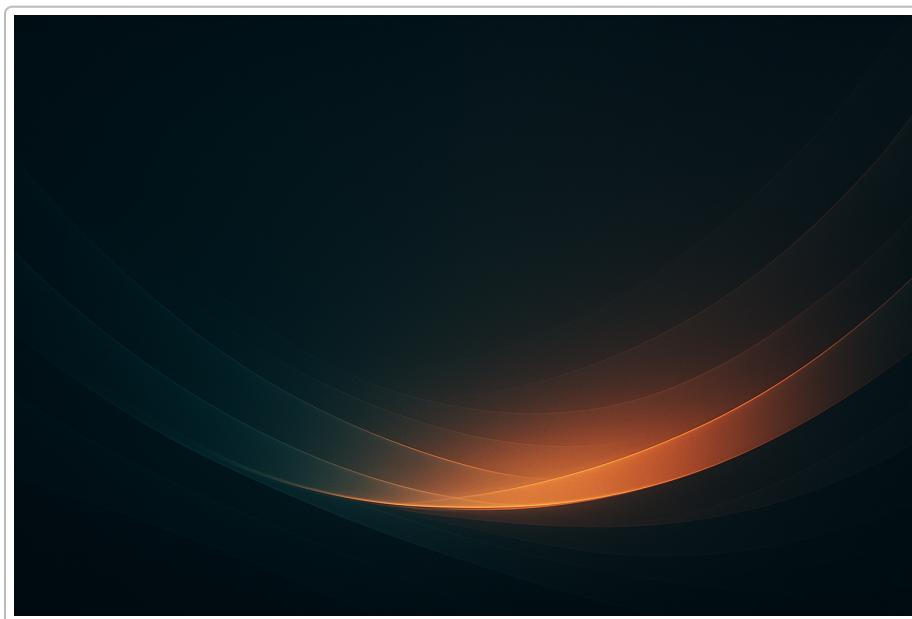


⌚ 3:40–4:00 — Conclusion & Call to Action

Suggested dialogue:

To wrap up, this project shows how real-time data, AI assistance and a streamlined chain of command can modernize emergency response. I'd love to talk about piloting this with your teams.

Visual: Close on an optimistic note with this minimalist sunrise graphic symbolising hope and resilience. It's a gentle way to end the story:



How to use this timeline

Use these timeblocks as a flexible guide. Each segment pairs an example narration with a relevant image, so you can see at a glance what to say and what to show. Adjust the wording, durations or visuals as needed to fit your own style and ensure that the final video stays within the four-minute limit.

1 2 emilms.fema.gov

https://emilms.fema.gov/is_0200c/groups/450.html

3 4 5 API Flow Diagram: Best Practices & Examples | Multiplayer

<https://www.multiplayer.app/distributed-systems-architecture/api-flow-diagram/>