National Emergency Response Information System

February 2025

Legacy System NFIRS

NFIRS Begins

America Burning released in 1973 lead to the establishments of USFA in 1974 with the Federal Fire Prevention and Control Act in 1974. NFIRS launches in 1975.

1975

1985

NFIRS 4.0

First public release of NFIRS collected data.

NFIRS 5.0

NFIRS becomes an "all-hazard" data collection system with the addition of EMS data, wildfire data, and juvenile firesetter module.

1999

2025

Sunsetting NFIRS

Driven by security concerns, outdated data models, and costs in maintaining code base, at the start of calendar year 2026, NFIRS will sunset, and decommissioning will begin.

The Road Here

- Things that **have changed** in the fire service over the past 25 years:
  - Bunker Gear & PPE
  - Mission / Incident Types
  - Apparatus and Equipment
  - Communications
  - Tactics and Strategies
  - The workforce
  - Training
  - Available Technology

- **Things that haven't changed in the fire service over the past 25 years:**
  - **Our legacy Incident Reporting System, NFIRS**

NERIS
NATIONAL EMERGENCY RESPONSE INFORMATION SYSTEM

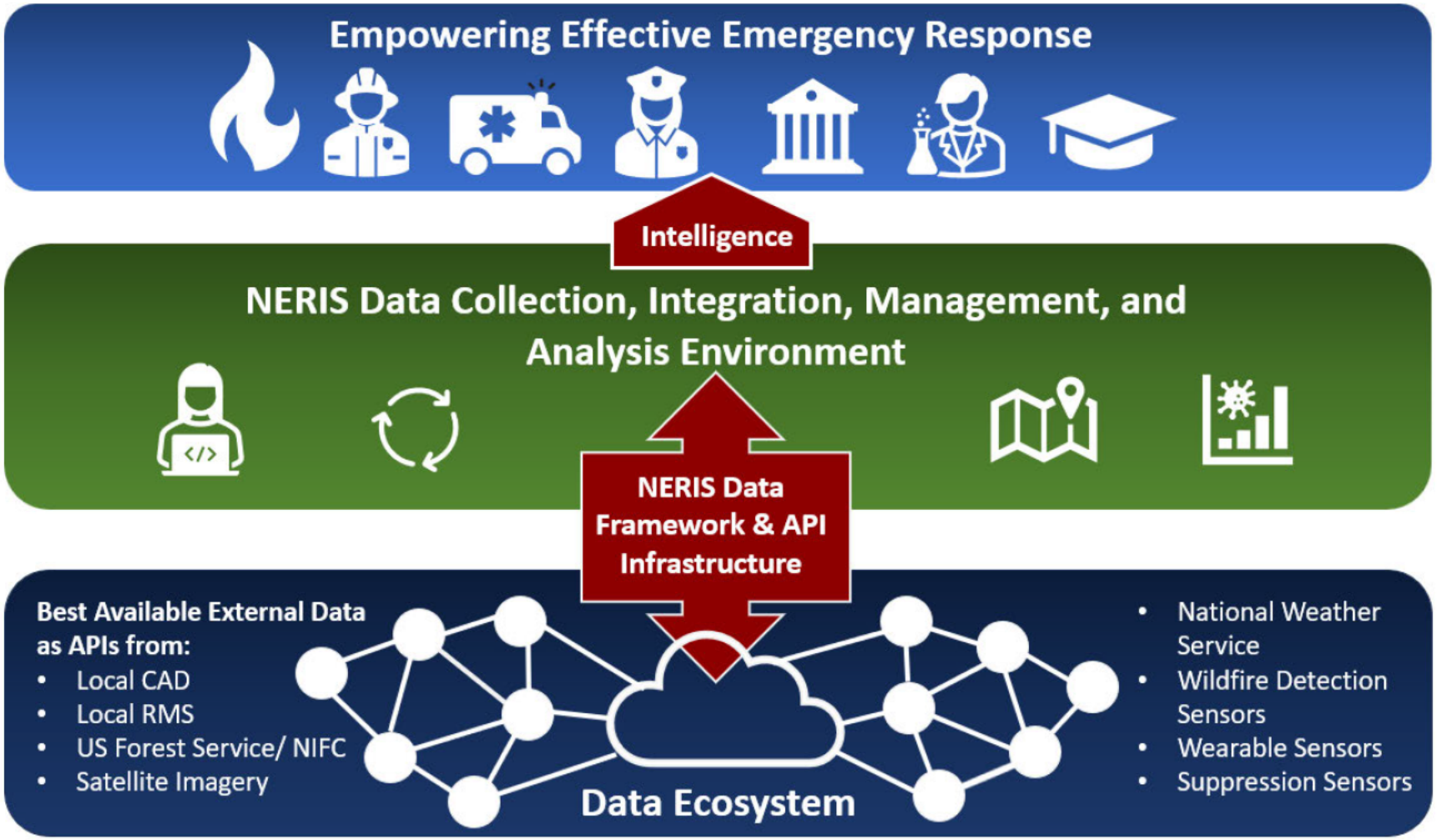
The goal of NERIS is to empower the local fire and emergency services community by equipping them with near real-time information and analytic tools that support data informed decision-making for enhanced preparedness and response to incidents involving all hazards.

Core Functionality

- Secure, highly scalable, cloud-hosted **open solutions architecture**.
- Interoperable, **standards-based data model** and data governance.
- Built on **location-services**, harnessing the power of geospatial science.
- Public, **open-sourced data schemas and API infrastructure** for maximum, appropriate data sharing.
- Publicly available **NERIS data dictionary**.
- Integration of best available, relevant external data for enhanced intelligence.
- **Achieves operational efficiencies by reducing data entry burdens** on firefighters via integration of data from:
  - Computer-aided dispatch systems (CAD)
  - Records Management Systems (RMS)

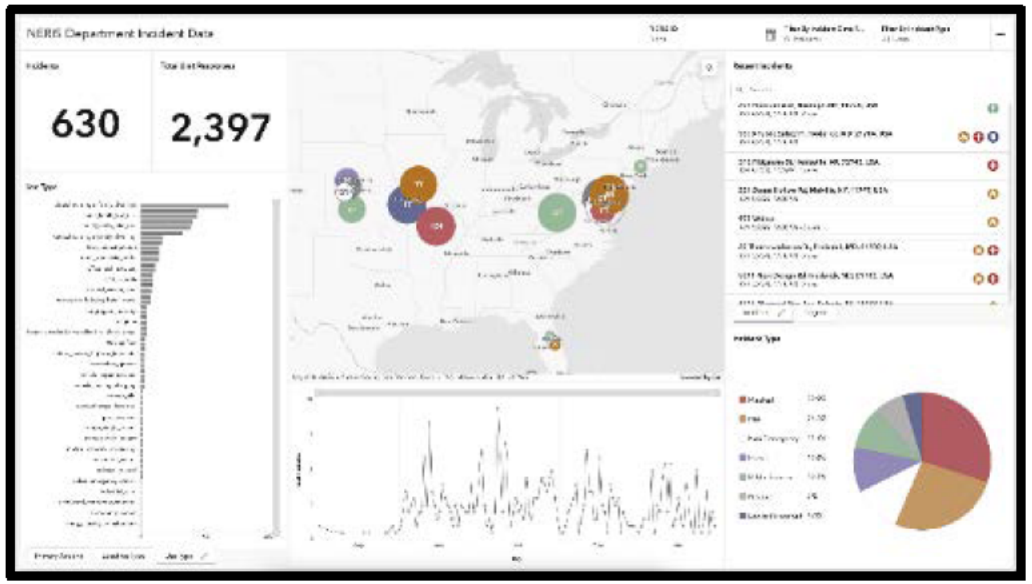
Interconnected Intelligence

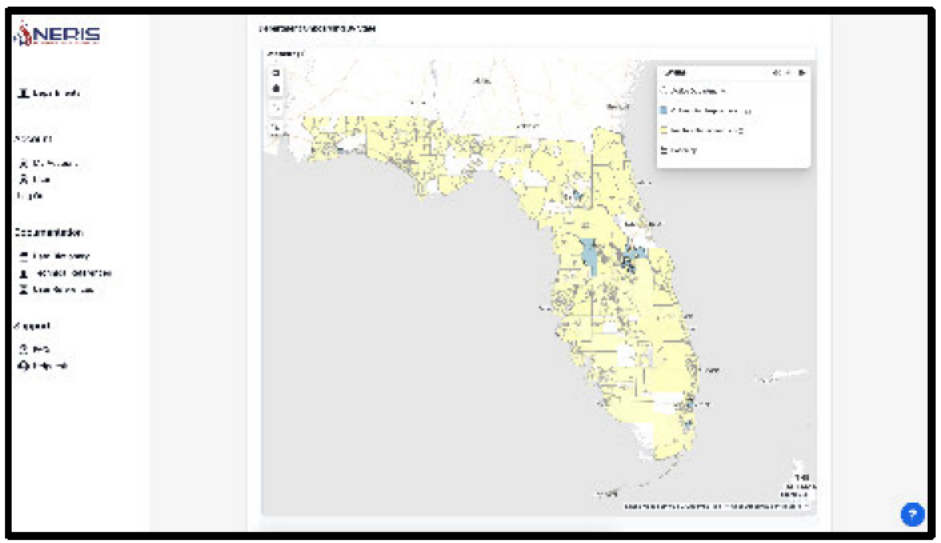
Powered by the National Emergency Response Information System (NERIS)



NERIS Fast Facts

- **Firefighter-first** design
- **Improved data** quality, reliability, and accuracy
- Near **real time, fully geospatial** data
- **Highly flexible**, relying on data integration from best available sources for better intelligence
- **All-hazards:** All incidents local fire & EMS responds to
- **Streamlined and efficient** data collection, data sharing, and analytics
- **Insights on** emerging threats and hazards
- **Agile, development keeping pace** with evolving needs, science, and technology advancements





What Improvements will NERIS Offer?

Enhanced Flexibility with Multi-Hazard Incident Reporting

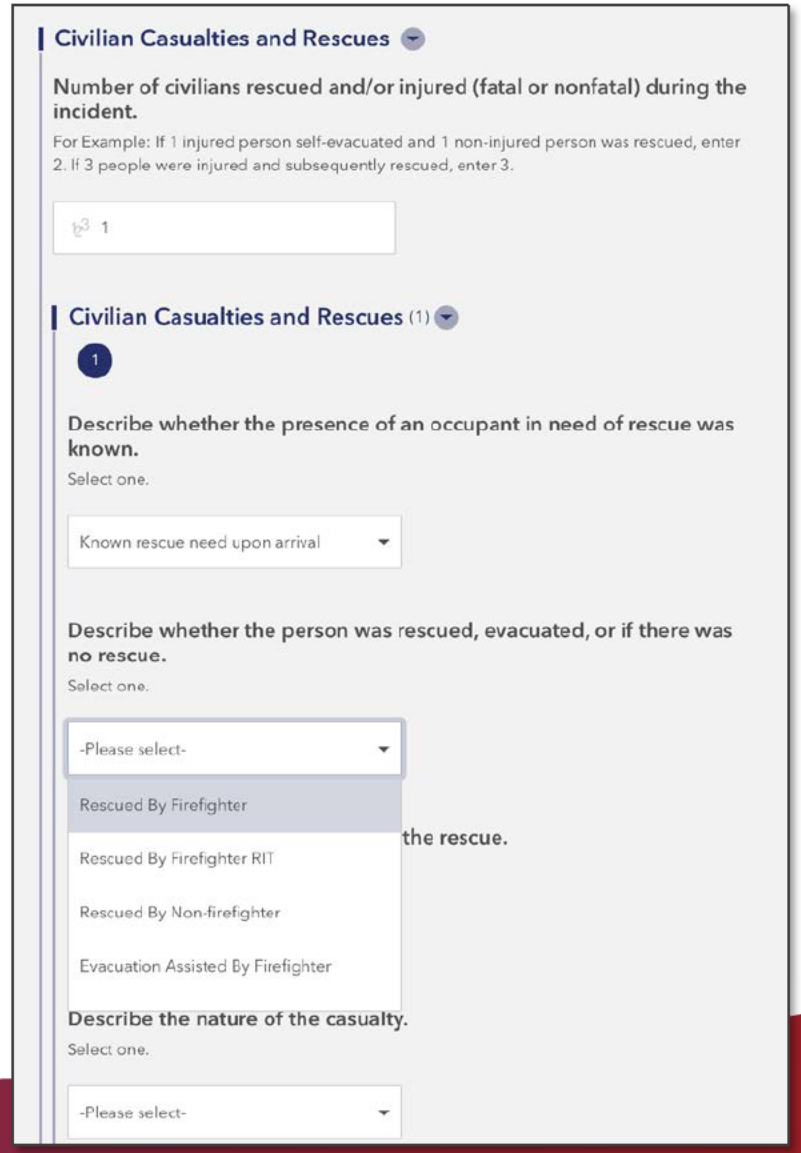
- **Comprehensive Reporting:** Move from a single-category system to a model supporting up to three incident types. This reflects the complexity often faced by fire services in real-world scenarios.
- **For Firefighters:** Simplify reporting by selecting incident types that accurately depict the scene, eliminating the guesswork of single-category constraints.
- **For Chiefs/Data Analysts:** Reduce reliance on interpreting free-text narratives, streamlining data analysis.

NFIRS historically limited incident type selection to only one incident type, whereas NERIS allows multiple types per incident.

What Improvements will NERIS Offer?

Enhanced Reporting for Actions, Tactics, and Incident Outcomes

- **Actions and Tactics:** Modernized to capture comprehensive operational data including suppression techniques, ventilation efforts, and on-scene contamination reduction tactics.
- **Metrics on Rescues, Casualties, and Maydays**: Detailed tracking of key metrics reflecting the vital efforts of firefighters during emergency responses.



What Improvements will NERIS Offer?

Enhanced Emerging Hazards and Structure Exposures:

- **Emerging Hazards:** This module will enable the system to evolve to the dynamic environments we operate in, enabling data collection of evolving threats.
- **Structure Exposures:** Entered as a straightforward addition to the original incident report, streamlining entry even in complex scenarios like urban conflagrations and the wildland-urban interface. This will reduce report completion time and improve accuracy on complex fire incidents.

The Focus of NERIS

- Social Vulnerability
- Structures in First Due
- Code Adoption
- Evolving & emerging hazards

RISK

- Resource Allocation
- Monitor Staffing Levels
- Station & Unit Capacity
- Geographic areas of concern

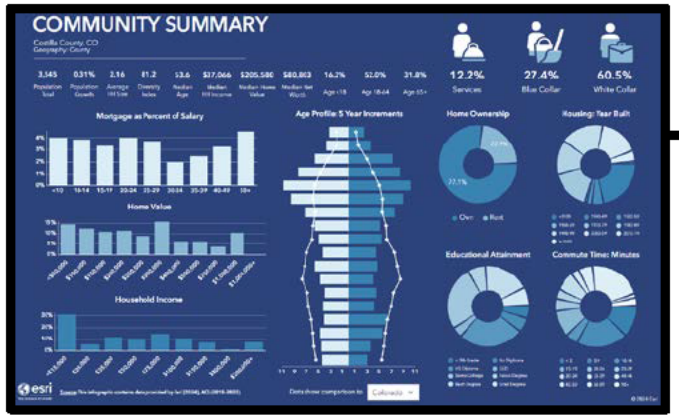
DEPLOYMENT

- Response Time
- Effective Crew Size & Response Force
- Inform Training Needs

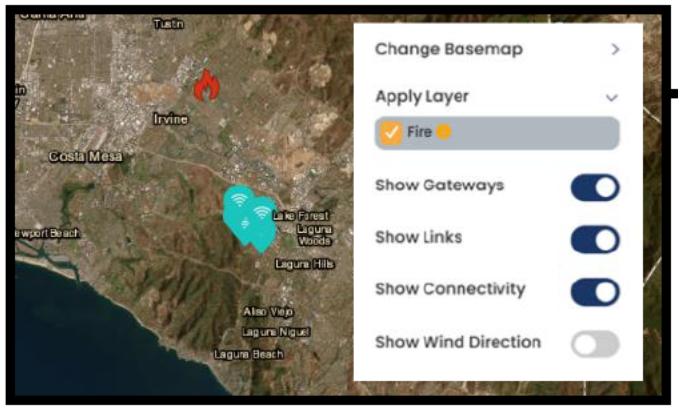
PERFORMANCE

Data Intelligence Powered by NERIS

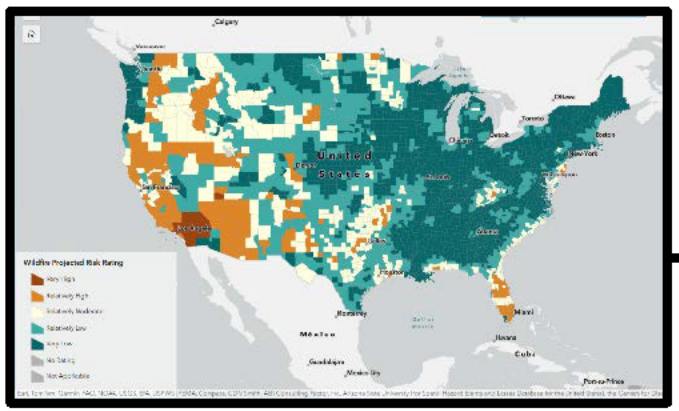
Future Fire Department Fingerprint with NERIS



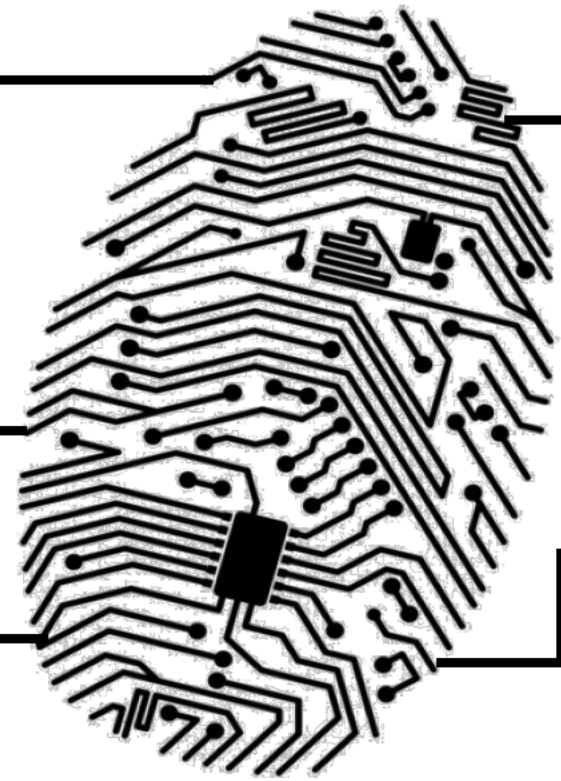
Community Demographics



Early Detection Sensor Data



Current & Future Fire Risk



RIS Fire
partment
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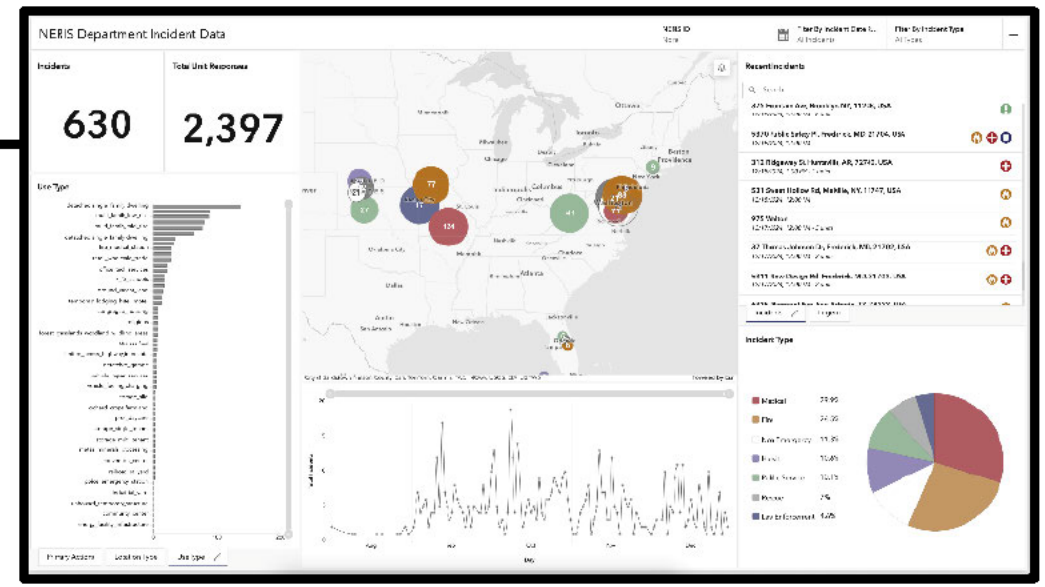
NERIS Intelligence: Community Risk, Performance, Actions & Tactics



12-month Outlook

January 2025

State Fire Marshal Office Onboarding

SFM Training and NERIS Onboarding at National Fire Academy and develop partnership with SFM for NFIRS transition with local departments.

February 2025

Targeted Roll Out

Onboarding ~500 remaining early adopter fire departments and all 50 State Fire Marshals.

May 2025

Broader Adoption

Fire departments onboard in phases and start reporting incident data to NERIS based on the onboarding ramp-up plan.

July-December 2025

National Deployment and ATO

Fire departments onboard in phases and start reporting incident data to NERIS. Increased number of API connections established from local CAD & RMS. July 2025 is the target for ATO.

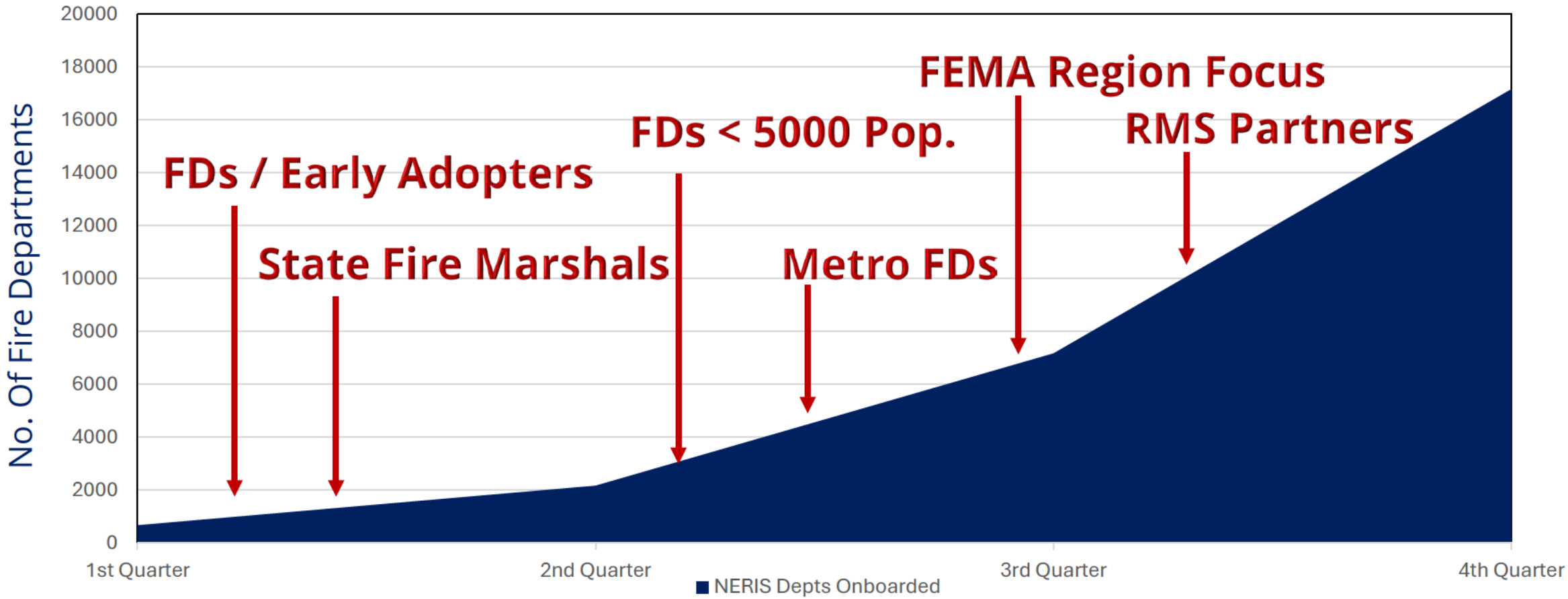
January 1, 2026

Full Transition to NERIS

All fire incident reporting is conducted using NERIS exclusively. Legacy NFIRS application is sunset, and decommissioning begins.

*Dates and timeline are subject to change.

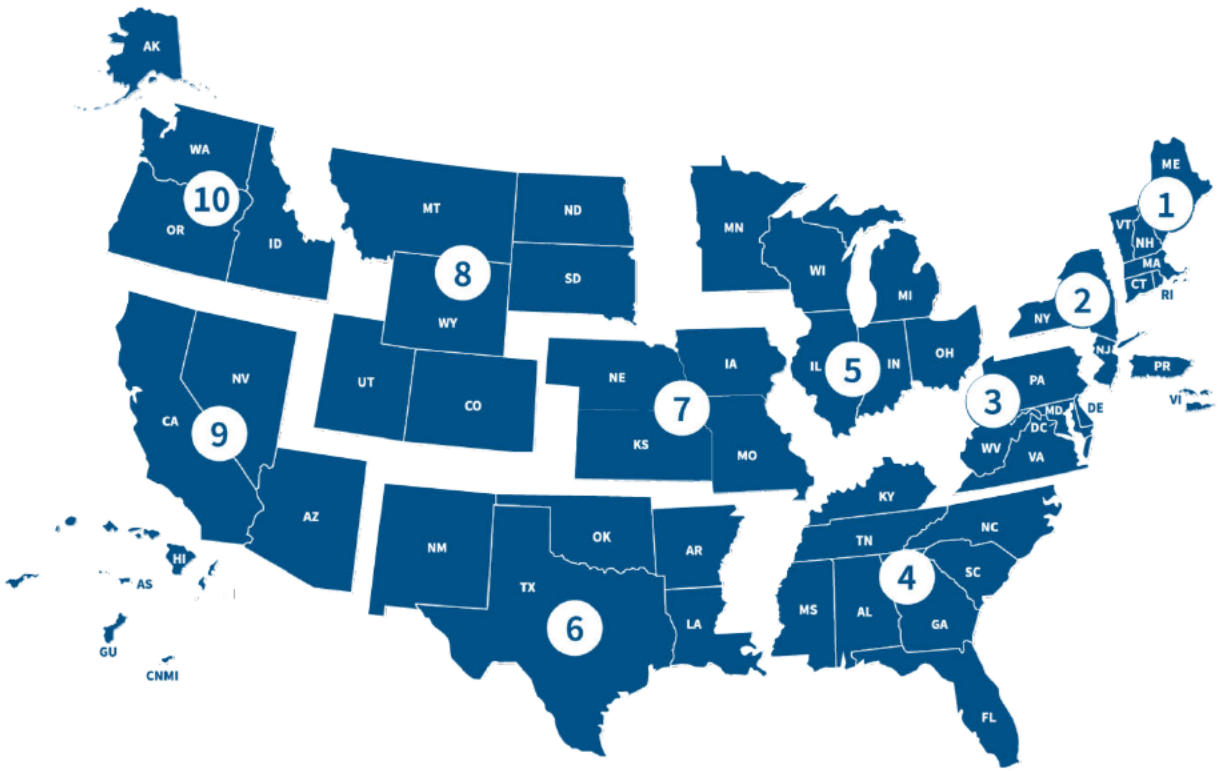
NERIS Onboarding Ramp Up 2025



Platform Launch → Targeted Rollout → Broader Adoption → National Deployment → Widespread Availability

Regional Roll-Out Schedule

Month in 2025	# of Fire Departments
May	
FEMA Region 2	2,385
June	
FEMA Region 4	5,009
July	
FEMA Region 6	3,632
August	
FEMA Region 7	2,400
September	
FEMA Region 3	3,080
October	
FEMA Regions 1 & 10	2,496
November	
FEMA Regions 8 & 9	2,701
December	
FEMA Region 5	5,460



*Dates and timeline are subject to change.

Vendor Readiness

The NERIS-compatible badge signifies that a vendor's software is capable of data exchange with the NERIS platform.

To earn a NERIS compatibility badge, a vendor must:

1. **Create** an integration between their software and NERIS
2. **Submit** a new incident in the test environment to the FSRI Fire Department
3. **Capture** the unique incident number and submit an update to the incident that was created
4. **Establish** a station and add a unit to the FSRI Fire Department

NERIS Data Framework

NERIS' data policy and governance framework

- Local departments retain ownership over their data
- Appropriate data sharing by default within the NERIS platform, stipulated in Terms of Use

NERIS' semantic layer

- Common data definitions and descriptions – web-based data dictionary publicly available
- Data relationships mapping – ontology and metadata

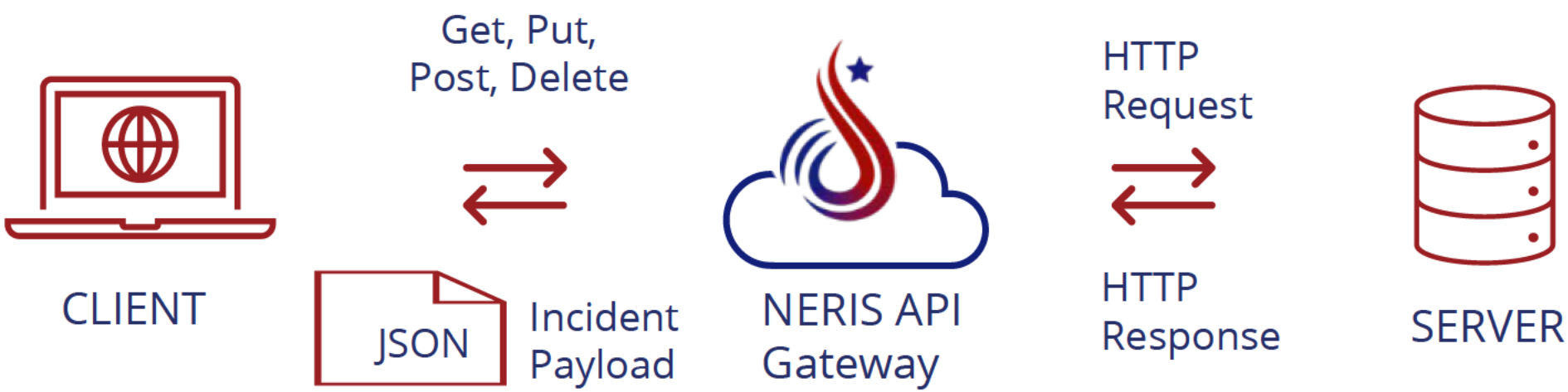
NERIS data model – Cross-walks with applicable standards & National systems

- ANSI-approved NENA Standards: NG911 Data Model and Emergency Incident Data Object
- National Information Exchange Model (NIEM)
- National EMS Information System (NEMSIS)
- DOI's IRWIN and InFORM
- DOI Interagency Data Management Environment
- ATF's Bomb Arson Tracking System
- Fire Department Registry and FEMA GO

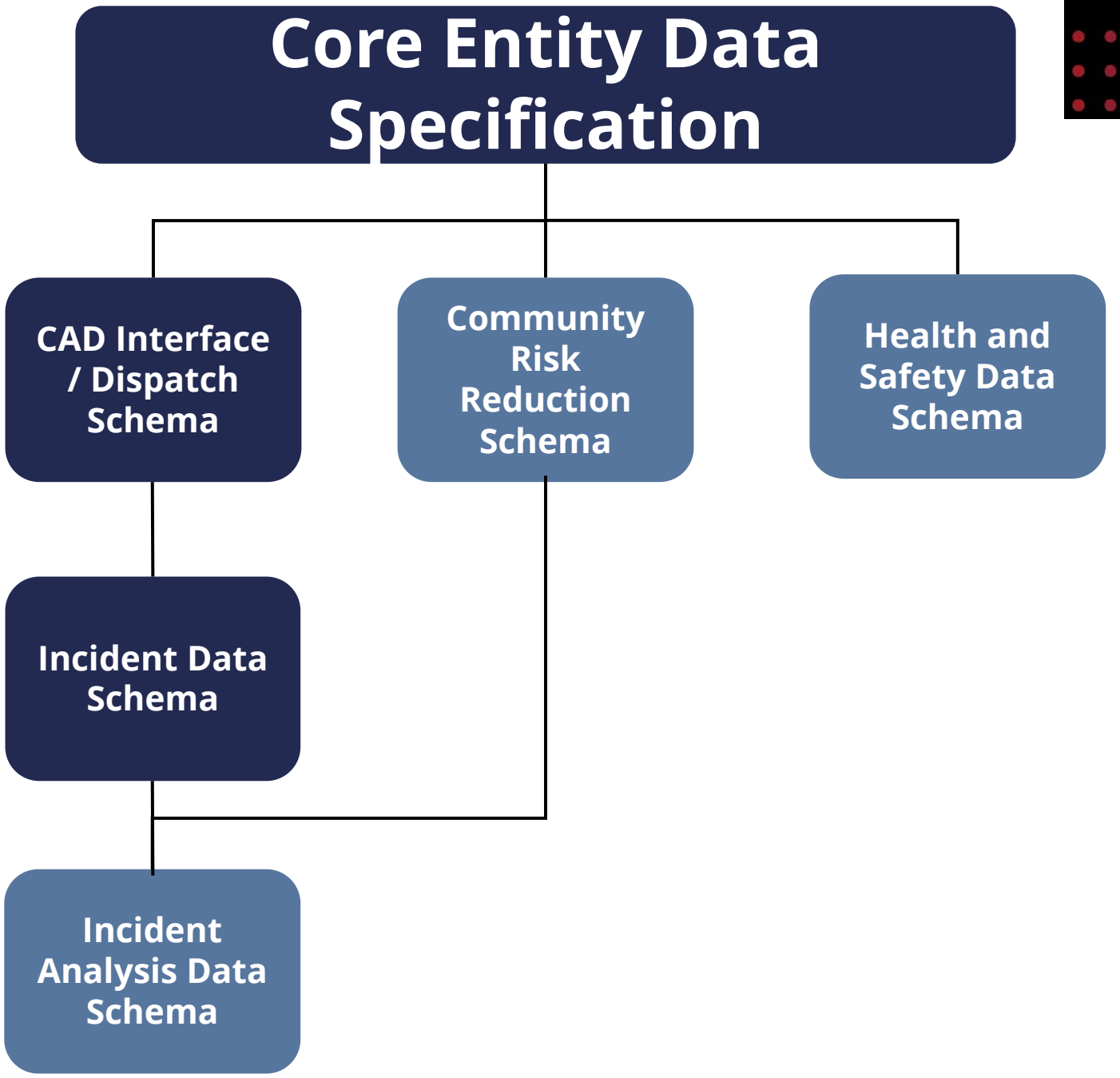
NERIS API Integration

An **Application Programming Interface (API)** acts as the connection between software or systems that allows them to communicate with each other.
Why is this so important?

- **Allows connection between third-party RMS and CAD into NERIS.**
- **Will set the stage for future integrations *from* NERIS into other systems.**
- **Eliminates the need for emailing and uploading of files for incident reporting.**
- **Sets hard parameters on what data elements and information enter NERIS.**



NERIS Data Schemas



Core

Secondary

CRR Vision

- Jurisdictionally in-sync
- Multi-hazard driven
- Complimenting available resources

Changing culture to embrace prevention and mitigation

Fire/CRR Data-Driven Decisions

- The future of Fire based CRR (and fire departments in general) will be shaped by our ability to align with information to inform us about all types of risk, especially the complex interplay related to the public we serve.

- Many of the people at risk for fire-related emergencies are also heavy users of the EMS system.

- Future leaders will have to hone skills in understanding data from a variety of sources to gain a clearer understanding of a community's public safety ecosystem.

The “Triple Aim” with NERIS & CRR

Document	Connect	Provide
Document CRR Activities	Connect Incident Response with CRR (when appropriate)	Provide analytics related to risk

CRR Structure

State of the home assessment.

- Occupants
- Alarms
- Hoarding
- Etc.

Virtual and in-person events.

- Campaigns
- Training
- Prevention
- MIH

Land and structure inspections

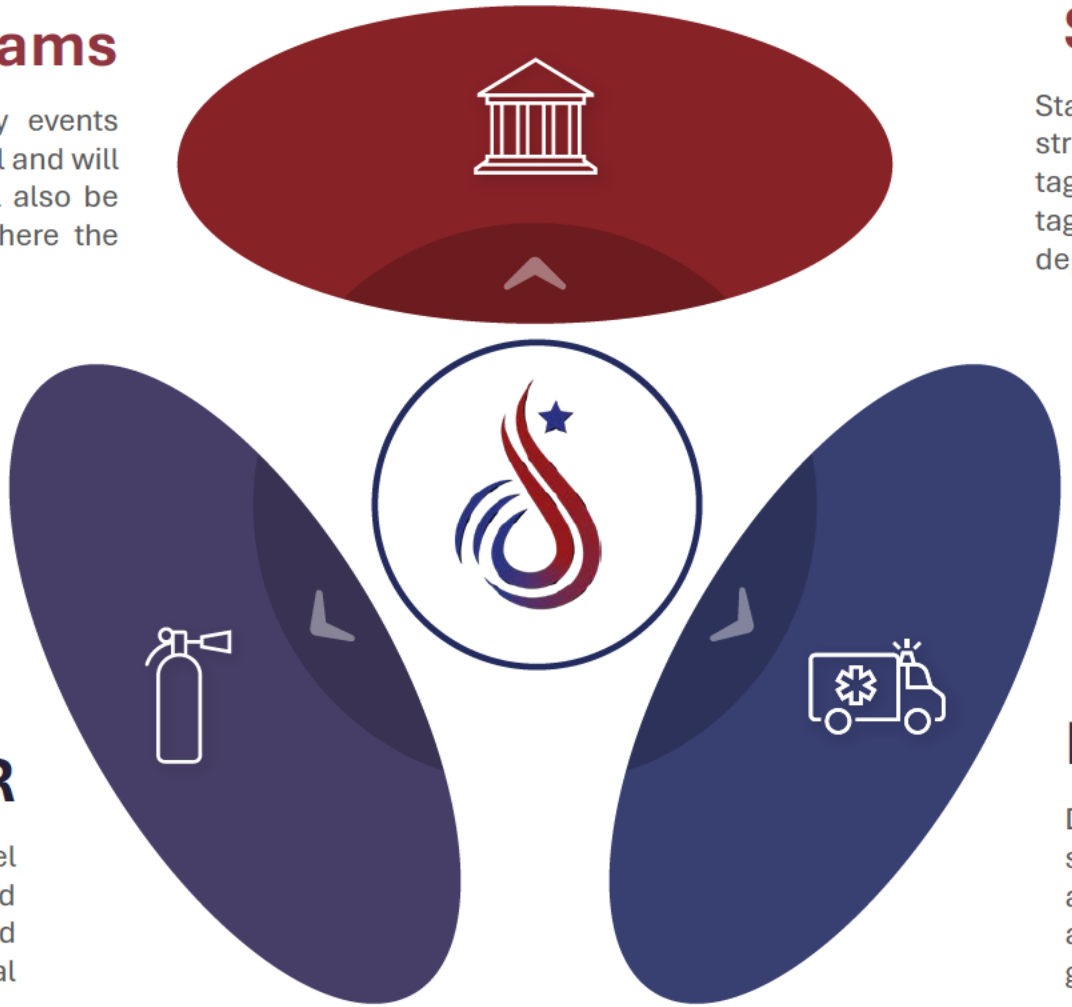
- Codes and Permits
- Maintenance
- Zoning
- Assessments

- Location
- Functionality
- Flow Rates

CRR Data Hub

State-Level CRR Programs

States can log CRR programs and community events directly into the application. The data is geospatial and will be tagged to the state's NERIS ID. This data will also be linked with incidents that occur in the areas where the programs occur.



State-Level Inspections

States can log inspections on parcels and structures to be able to goespatially and temporally tag this information. These inspections can be tagged to the incident response data from the local departments.

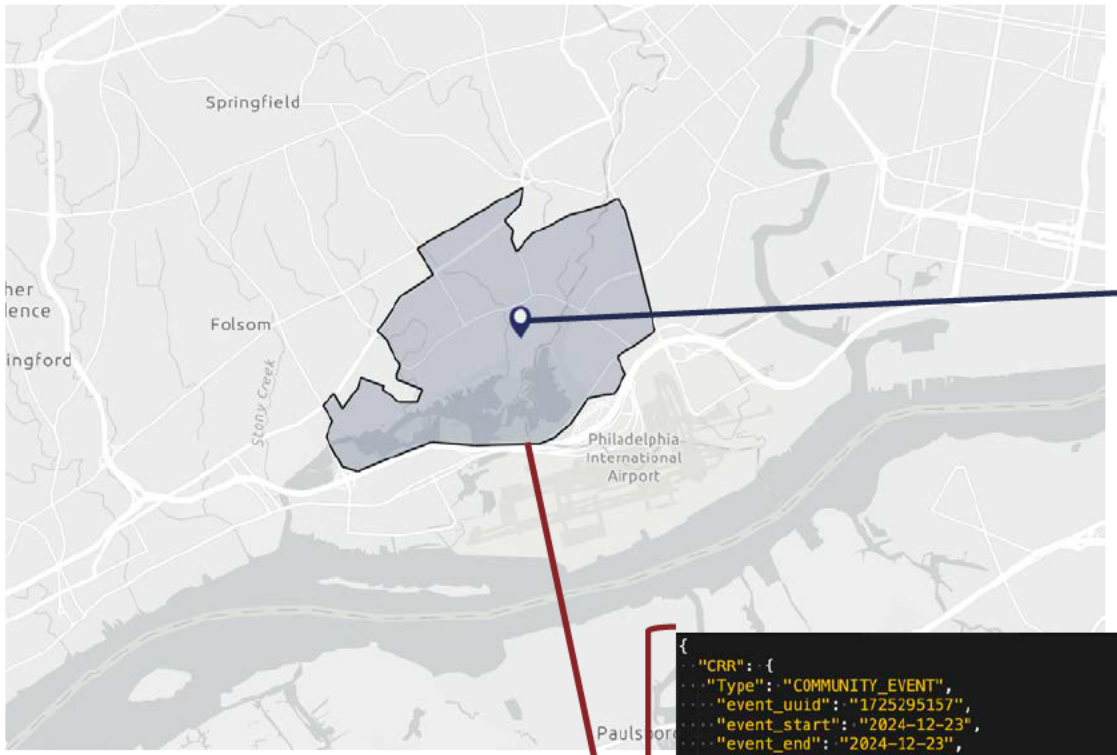
Local-Level CRR

Departments can log home visits (e.g., MIH), parcel and property inspections, hydrant inspections, and community events/programs which can be linked back to the historical incident in the geospatial area.

Local-Level Incidents

Department level data is all geocoded and time stamped. This component tells us the current and legacy hazards a department responds too and the capcity to respond. All CRR data can be geospatially linked to incident data.

Example of Hub




```
{
  "dispatch": {
    "center_id": "1234",
    "incident_number": "1725295157",
    "determinant_code": null,
    "incident_code": "STRF1",
    "type": "FIRE||STRUCTURE_FIRE||ROOM_AND_CONTENTS_FIRE",
    "disposition": "Structure fire suppressed on first alarm, 1 occupant rescued, occ
    "automatic_alarm": false,
    "call_arrival": "2025-01-14T18:49:23+00:00",
    "call_answered": "2025-01-14T18:49:47+00:00",
    "call_open": "2025-01-14T18:50:02+00:00",
    "unit_responses": [
      {
        "type": "DISPATCH",
        "unit_neris_id": "FD24027214S000U001",
        "reported_unit_id": "E84",
        "staffing": null,
        "point": {
          "crs": 4326,
          "source": "DEPT_UPLOAD",
          "geometry": {
            "type": "Point",
            "coordinates": [
              -76.820114,
              39.186229
            ]
          }
        },
        "dispatch": "2025-01-14T18:50:12+00:00",
        "enroute_to_scene": "2025-01-14T18:51:13+00:00",
        "on_scene": "2025-01-14T18:53:54+00:00",
        "canceled_enroute": null,
        "staging": null,
        "unit_clear": "2025-01-14T19:36:33+00:00",
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```


Incident Payload: 1/14/25
Room and Contents Fire


```
{
  "CRR": {
    "Type": "COMMUNITY_EVENT",
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    "event_start": "2024-12-23",
    "event_end": "2024-12-23",
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    "num_people_engaged": "",
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    ],
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      "source": "DEPT_UPLOAD",
      "geometry": {
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        "coordinates": [
          -76.820114,
          39.186229
        ]
      }
}
```


Fire Safety Education Community Event
12-23-24

NERIS Data Governance

Goal:

Develop basic knowledge on data governance, security, and privacy as it pertains to NERIS

Objectives:

- Introduce Data Governance
- NERIS Governance Model
- NERIS Security and Data Privacy Approach

Data Governance – What is it?

A structured framework of policies, procedures, and standards that **define how a fire department collects, stores, manages, accesses, and uses its data** to ensure accuracy, consistency, security, and compliance with regulations, ultimately enabling better decision-making and operational efficiency within the organization.

- Policies
- Definitions
- Metrics
- Lifecycle
- Active and Ongoing Initiative

Graphic Credit: Dama International

Tenants of “Good” Data Governance

Data Governance Principals

- Integrity
- Transparency
- Auditability
- Accountability
- Stewardship
- Checks-and-Balances
- Standardization
- Change Management

Goals

- Enable better decision-making
- Reduce operational friction
- Protect the needs of data stakeholders
- Train management and staff to adopt common approaches
- Build standard, repeatable processes
- Reduce costs and increase effectiveness through coordination of efforts
- Ensure transparency of processes

NERIS Data Ownership & Management

Entities contributing data to NERIS **retain ownership** of their data.

Data management within NERIS adheres to the following principles:

- Contributed data will be preserved in its original form.
- All external data sources used for augmentation will be documented.
- Algorithms applied to data, whether at the entity or aggregate level, will be detailed in NERIS technical documentation.

NERIS Data Sharing Policy

Entities onboarded into NERIS **agree to share data** with their respective State Fire Marshal's office and the United States Fire Administration's (USFA) node within the system.

Shared data will be used to assess aggregate emergency responses at state and federal levels.

Note: While entities may opt out of data-sharing agreements, they should be aware that participation in certain state or federal programs may mandate data sharing within NERIS.

NERIS Data Retention Policy

NERIS is not authorized to serve as an entity's system of record in fulfilling their local jurisdiction's records retention or storage solution.

Retention of **Raw** Incident Data:

- All **raw incident data** collected by NERIS will be retained for a period of **seven (7) years** from the date of collection, as required by FEMA.
- After the initial seven years, raw data will be moved to **long-term archival storage** using solutions designed for infrequent access, using a service optimized for SQL-based data. This ensures data integrity while reducing storage costs.

Retention of **Transformed** Incident Data:

- All **transformed (processed and cleansed) incident data** derived from raw data (e.g., aggregated datasets, normalized datasets, or trend analyses) will be retained and accessible to users **indefinitely**.
- Supports long-term historical and trend analysis to inform public safety initiatives, emergency response planning, and federal reporting requirements.

NERIS User Privacy

Required fields for account:

- E-mail Address
- First Name, Last Name

NERIS Policies:

- Terms of Use
  - https://neris.fsri.org/terms-of-use
- Privacy Policy
  - https://neris.fsri.org/privacy-policy

NERIS Compliance:

- NERIS intends to be fully complaint with states privacy rights regulations including but not limited to: CCPA/ CPRA (CA), CDPA (VA), CPA (CO)

NERIS Data Privacy

Incident Data Privacy

NERIS Incident Data has undergone a privacy threshold assessment and has been determined **not to contain SPII.**

What is PII?

- Personally Identifiable Information; Information that can be used to distinguish or trace an individual's identity, either alone or when combined with other information that is linked or linkable to a specific individual.

What is SPII?

- Sensitive Personally Identifiable Information; like Social Security, Credit Card, Medical Records, etc. that could cause serious harm if disclosed without authorization.

Fire Department - Data Entry Responsibility:

- **Free text fields in incidents should not have SPII or PII information entered.**
- If PII or SPII is entered into an open text field, NERIS automatically scans, identifies, and redacts such data/information.

NERIS Secure By Design

Authorization - Access Control

- ✓ Each entity (or fire department) is responsible for managing access to its data within NERIS.
- ✓ A single User may be affiliated with multiple entities and therefore provided access and assigned roles in multiple entities/departments within NERIS.
- ✓ An initial entity **admin** will be verified by the NERIS team during onboarding.
- ✓ The entity **admin** can invite users, assign roles, and manage permissions as described below:

- **Entity User**: Submits and views incident data, modifies personal attributes, and interacts with system features.
- **Entity Superuser**: Everything a user can do plus can edit/approve incident data.
- **Entity Admin**: Everything a superuser can do PLUS responsible for approving user roles, managing entity attributes, approving 3rd party software integrations, and ensuring secure data handling.

NFIRS to NERIS Transition

NFIRS Transition Basics

- **NFIRS**
  - Planned for sunset and decommissioning in early 2026.

- **NFIRS Public Data Release (PDR) on OpenFEMA**
  - Cleaned and processed annual, national data set made publicly available.
  - Not full, raw data.
  - Data currently available for 1980-2023.
  - Data for 2024 and 2025 will be packaged and released on OpenFEMA
  - Link: https://www.fema.gov/about/openfema/data-sets/fema-usfa-nfirs-annual-data

- **NERIS will not consume or connect with historical NFIRS data**

Tentative NFIRS Sunset Timeline

- **CY2025 will be a hybrid reporting year.**
  - Once a fire department onboards onto NERIS and starts reporting incidents, they do not also have to submit to NFIRS in CY2025.

- **CY2025 incidents can be submitted to either NFIRS or NERIS depending when a department onboards.**
  - January 15, 2026 – End date for CY25 Incidents to be submitted into NFIRS
  - January 31, 2026 – End date for edits/modifications for CY25 incident records in NFIRS

- **CY2026 incident reporting.**
  - Starting January 1, 2026 incident data submission exclusively in NERIS
  - No CY2026 incidents will be submitted into NFIRS

*Dates and timeline are subject to change.

NFIRS Data Ownership

- Entities contributing data to NFIRS **retain ownership** of their data.
- **NFIRS is not authorized to serve as an entity's system of record** in fulfilling their local jurisdiction's records retention or storage solution.

"***The data collected and input into NFIRS by the local fire departments and states belongs the specific users***; FEMA/USFA does not have access to this information other than those staff who maintain the system. Therefore, historical data including PII are kept indefinitely for use in longitudinal analyses ***by those fire departments that own the data***."

Privacy Impact Assessment for the National Fire Incident Reporting System (NFIRS)

DHS/FEMA/PIA-044

Records Retention Guidance for Local Fire Department

Scenario A

Agency maintains their incident records via their **local Records Management System (RMS) or other storage as their system of record** and complies with their local records retention policy

GOOD – No further action needed

Scenario B

Agency enters incident reports **directly into NFIRS and does not have their own RMS** or other storage for the incident records serving as their system of record

ALERT – Agency needs to establish a system of record, retrieve, and store historical incident records in compliance with their local records retention policy.

Guidance for Scenario B:
Performing Historical NFIRS Records Retrieval

- Conduct a **NFIRS Bulk data export** for all years required to comply with your local records retention policy:
  - Maximum one-year increments
  - Maximum ~750,000 records
  - One export at a time

- Access the NFIRS Data Warehouse to complete records retrieval:
  - Excel Export
  - Max ~200,000 rows
  - Limited data fields
    - Basic Fire, Structure Fire, Wildland modules

- Be sure to complete retrieval of your Historical NFIRS records well in advance of the NFIRS sunset date.
  - Recommend completing all prior years needed before Nov. 2025, except for your 2025 records.

Call for Action: Records Retrieval

- Ensure fire departments understand their local records retention policies and confirm how they are implementing and complying with those policies for fire incident reports/records.
- Communicate with your local fire departments
  - Determine which agencies are “at risk” and may need to download their historical incident records
- Evaluate your state database to determine if there are any data gaps
- Establish a download schedule to meet your local or state records retention requirements and policy

Review

- Local fire departments retain the ownership and responsibility to maintain their incident records in accordance with their local, and/or state retention policies.
- If a state maintains a state-wide incident database, the state is responsible to maintain records in accordance with the state records retention schedule.
- As agencies migrate to NERIS, ensure timely closure of NFIRS data*
  - Jan 15, 2026 – End of new Incidents in NFIRS
  - Jan 31, 2026 – End of incident updates in NFIRS
  - February 2026 - NFIRS will sunset
    - User access to the NFIRS Enterprise Data Warehouse will also no longer be available.
- NFIRS Public Data Release (PDR) will remain and stay publicly available on OpenFEMA

*Dates and timeline are subject to change.

Questions & Answers

NERIS

NATIONAL EMERGENCY RESPONSE INFORMATION SYSTEM

More Information:

- **Website:** https://tinyurl.com/494xjnxe
- **Contact the team:** NERIS@ul.org