



# National Emergency Response Information System Overview

April 2025

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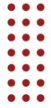
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# What is NERIS



**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.

# The Focus of NERIS:



## RISK

- Community Vulnerability
- Structures in First Due
- Code Adoption
- Evolving Weather Hazards



## DEPLOYMENT

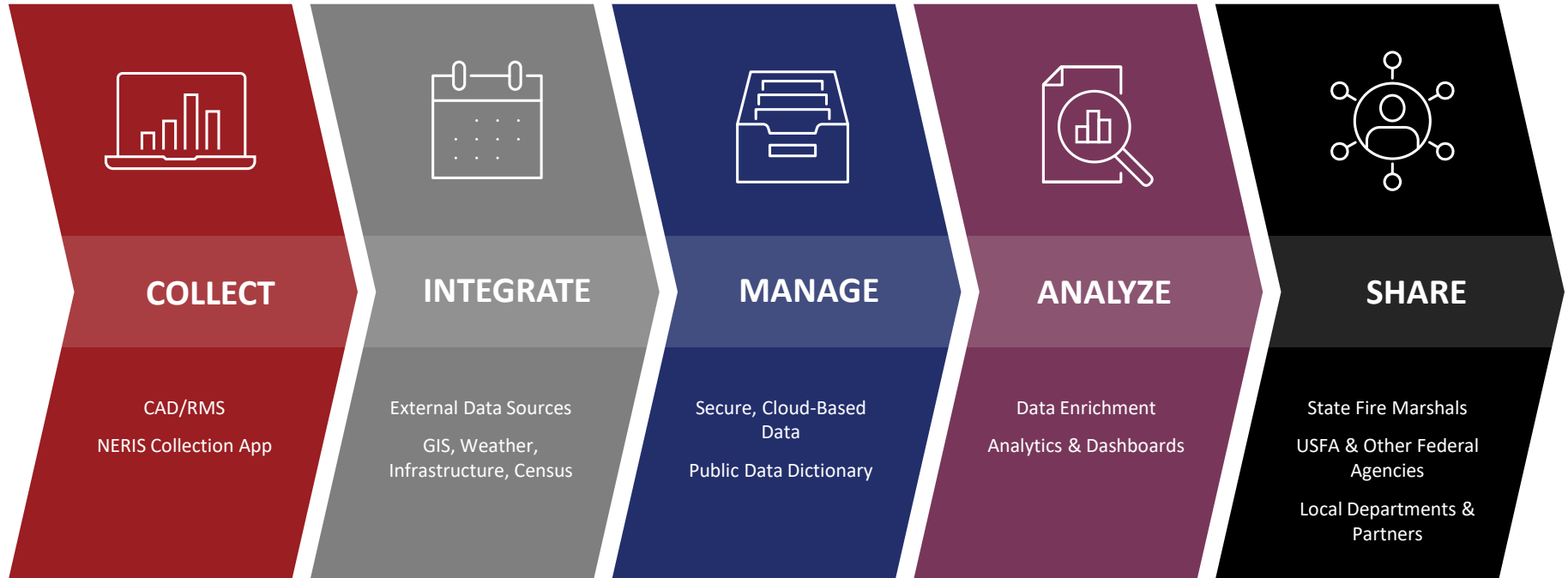
- Resource Allocation
- Monitor Staffing Levels
- Station & Unit Capacity
- Geographic Areas of Concern



## PERFORMANCE

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

# Fundamentally, NERIS



# NERIS Perception

What people have been able to see/touch/interact with has been limited as the system has been developed

## Data Schemas

The elements we collect. Designed to describe the work done by the fire service to help the people in the communities they protect.

## System Architecture

The foundation of the system – built on an elastic framework for reliability and scalability.



## Analytics

The value return on the data collected. Provides intelligence to help improve prevention efforts and emergency response

## API

The API is the data hub for the system allowing the movement of data both internally (within NERIS) and externally (to/from entities).

# Interconnected Intelligence

Powered by the National Emergency Response Information System (NERIS)



## EMPOWRING EFFECTIVE EMERGENCY RESPONSE

Intelligence



## NERIS DATA COLLECTION, INTEGRATION, MANAGEMENT AND ANALYSIS ENVIRONMENT

NERIS Data Framework  
& API Infrastructure



## DATA ECOSYSTEM

### Best Available External Data as APIs from:

- Local CAD
- Local RMS
- US Forest Service/NIFC
- Satellite Imagery
- National Weather Service
- Wildfire Detection Sensors
- Wearable Sensors
- Suppression Sensors



# Building **With** the Fire Service

**OCT-DEC 2023**

## **Data Framework & Architecture Development**

Local stakeholders representing a national perspective provided requirements in the development of the NERIS data framework, schemas, and the open solutions architecture. National engagement on the data framework resulted in 1,600 comments.

**MAR 2024**

## **Prototype Testing**

Six departments, representing a cross section of agency sizes and complexities, were charged with testing and evaluating the prototype NERIS.

**AUG 2024**

## **Beta Testing**

Building on feedback prototype testing, another 56 fire departments were onboarded into the beta NERIS platform and began identifying issues and opportunities for functional improvement.

**NOV 2024**

## **Version 1 Release**

Version 1 of NERIS is launched! A total of 173 fire departments were onboarded onto V1 NERIS and began using the system to report and share incident data.



# Key Features and Benefits of NERIS

# Data-informed leadership will become the gold standard for the fire service

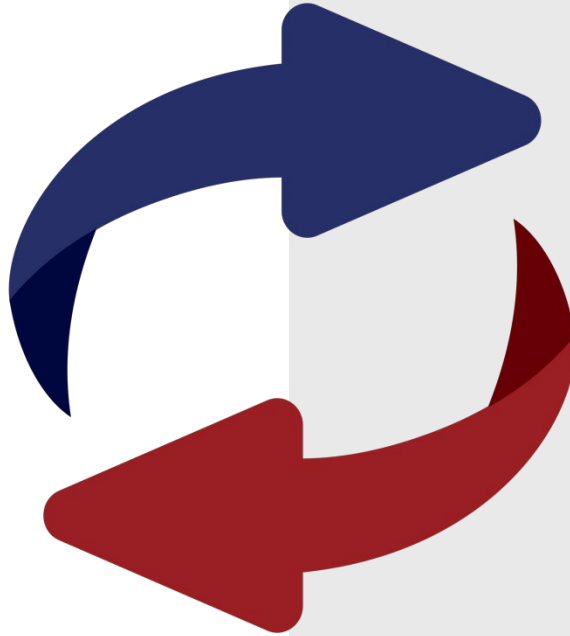
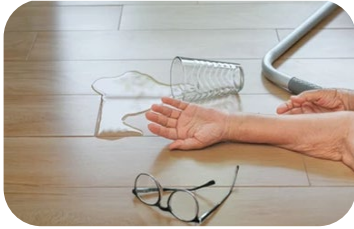
Data is a living resource that captures the full complexity of the incidents we respond to and the communities we serve.



Photo: SBCFD

Matching

# Risk & Resources



# NERIS Incident Data

- **Secure & Scalable Architecture:** Cloud-hosted open solution built for reliability, security, and easy expansion.
- **Standards-Based Data Sharing:** Public, interoperable API infrastructure ensures seamless data exchange.
- **GIS-Driven Precision:** Leveraging location services to provide accurate, actionable intelligence for responders.
- **Public NERIS Data Dictionary:** Transparent, standardized data definitions available to all stakeholders.
- **Enhanced Intelligence:** Integrates best available external data sources to boost situational awareness.
- **Operational Efficiency:** Reduces firefighter data entry burden by integrating:
  - Computer-Aided Dispatch (CAD)
  - Records Management Systems (RMS)



# NERIS Open Data

- **The foundation for national fire analytics** — powered by the first comprehensive, geospatially enabled list of U.S. fire departments
- Freely available public data as a service, hosted on the NERIS website
- Attribute levels mirror existing open NFIRS datasets
- Delivered in open formats like GeoJSON and Esri Feature Services
- Coming soon in 2025

## Open Data Product

## What's included?



Core Fire & EMS Department  
Data

- Fire department location
- Fire station locations linked to FDs
- Fire department service boundaries



NERIS Incident Data

- All-Hazards incident data shared to NERIS
- All modules from the NERIS data schemas
- No personally identified data or open text narrative fields included



# Data Integration

## Parcel Information

Critical property data—including land value, improved value, year built, square footage, and acreage—for every incident location, eliminating manual entry and enhancing situational awareness.

## Weather

Automated capture of weather conditions—temperature, humidity, wind, precipitation—at the time of each emergency call, streamlining data collection and freeing responders to focus on critical tasks.

## People, Places, and Infrastructure

Incorporate essential census-level data such as building types, ages, transportation infrastructure, and demographic details directly into incident records, enriching emergency response context.

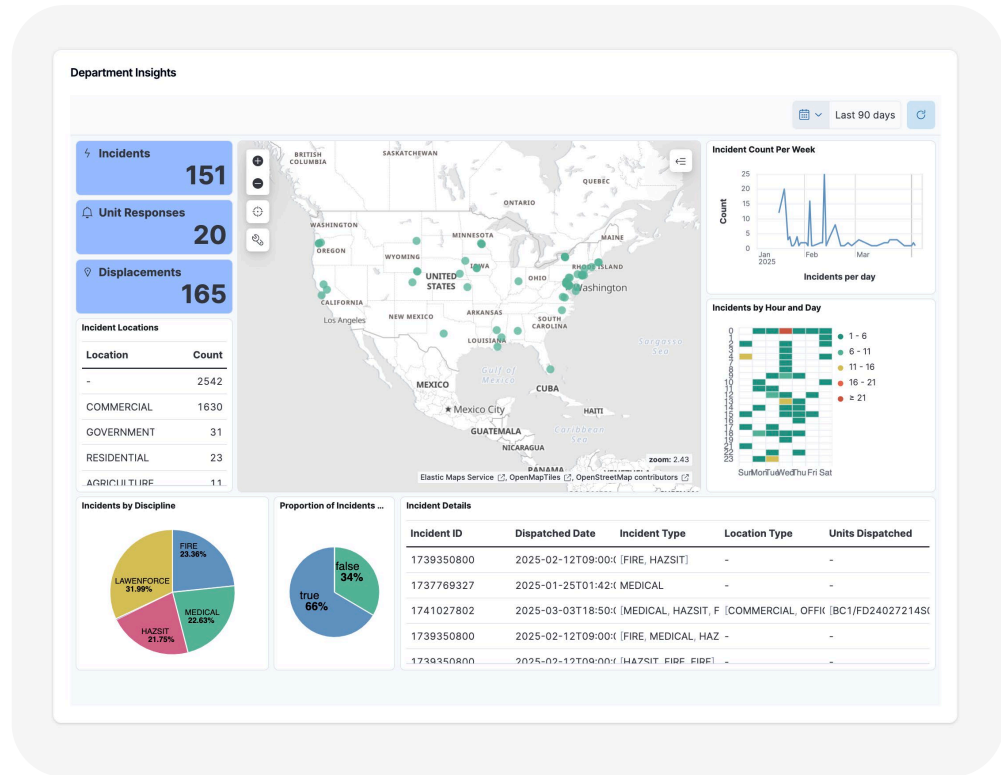
## Hazards and Current Conditions

Combine hazard exposure, current risk factors, and conditions to inform proactive emergency planning, targeted community risk reduction, and effective after-action analyses. Enhance efficiency by utilizing recent incident data and inter-agency resource information.



# NERIS Analytics: Immediate Insights

- Participating departments gain instant access to key analytics and metrics.
- NERIS enhances data by integrating essential data and information for better intelligence.
- The analytics menu for local fire & EMS departments will continue to expand and improve over time.

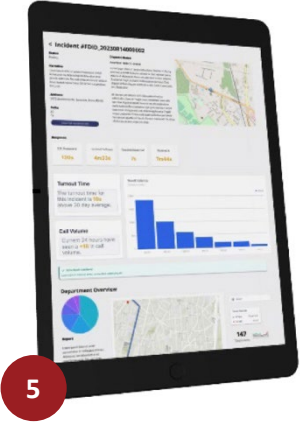
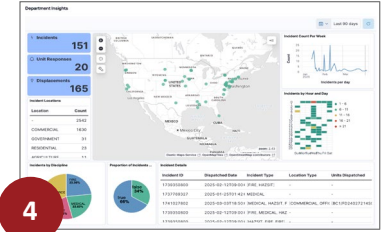
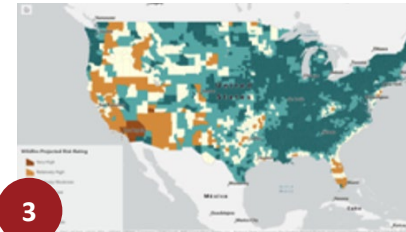
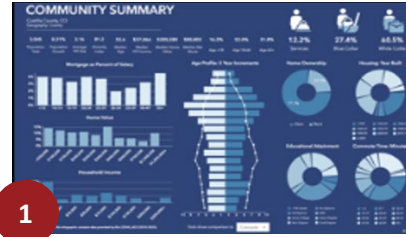




# Future Fire Department Fingerprint



1. Community Demographics
2. Early Detection Sensor Data
3. Current & Future Risk
4. NERIS Intelligence: Performance, Actions & Tactics, Community risk
5. NERIS Fire Department Profile



# 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.

**Civilian Casualties and Rescues**

Number of civilians rescued and/or injured (fatal or nonfatal) during the incident.

For Example: If 1 injured person self-evacuated and 1 non-injured person was rescued, enter 2. If 3 people were injured and subsequently rescued, enter 3.

1

**Civilian Casualties and Rescues (1)**

1

Describe whether the presence of an occupant in need of rescue was known.

Select one.

Known rescue need upon arrival

Describe whether the person was rescued, evacuated, or if there was no rescue.

Select one.

-Please select-

Rescued By Firefighter

Rescued By Firefighter RIT

Rescued By Non-firefighter

Evacuation Assisted By Firefighter

Describe the nature of the casualty.

Select one.

-Please select-

# 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.





# Onboarding for Local Fire Departments

# NERIS Onboarding

## Two Phase Process



# 1

### Creating Your Account

Fire departments can add/update attribute information after they activate their node in NERIS.



# 2

### Reporting

- A) If using the NERIS collection app - submit when ready.
- B) If using a third-party RMS – switch after your RMS is ready

# 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



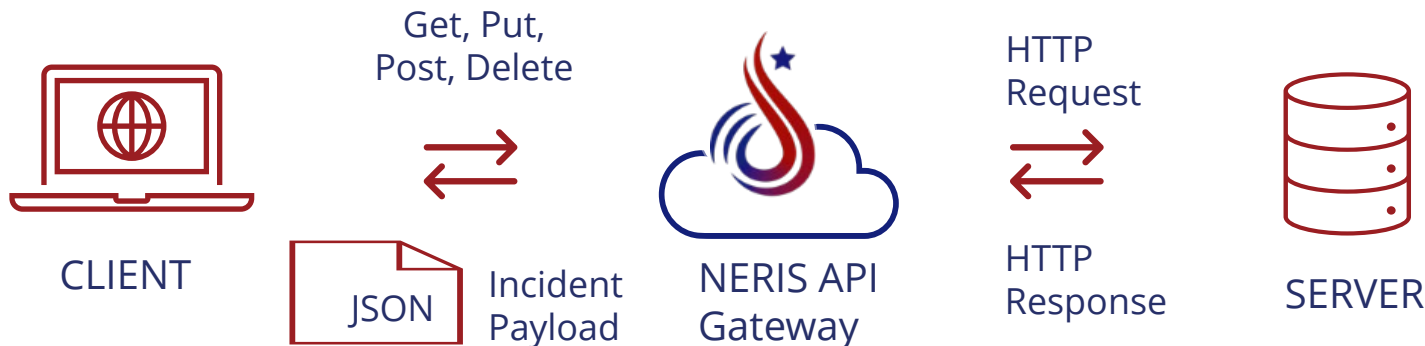
# NERIS API Integration



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.





# Onboarding Information

- Department demographics
- GIS boundaries of district and any other region sets
- Station names and addresses
- Unit and apparatus inventory
  - CAD designations, unit types, and unit level staffing
- Department services provided
  - Fire, EMS, investigative, CRR, etc.
- Department relationship information
  - Memberships and mutual/automatic/contract agreements



Photo: NYFD

# NERIS Ready: 2025



## Project Manager



- Establish a primary person of contact



## Department Details & GIS



- Obtain boundary and response area GIS layers
- Detailed information you'll need includes unit information, station addresses, minimum staffing and department attributes like ISO rating, accreditation status, etc.



## Training, Orientation, & Awareness



- Begin to push training materials about NERIS and the importance of data inputs to your members
- Share information about NERIS with neighboring agencies

2025

# Onboarding Schedule

## REGION | 2025 MONTH

2 May

4 June

6 July

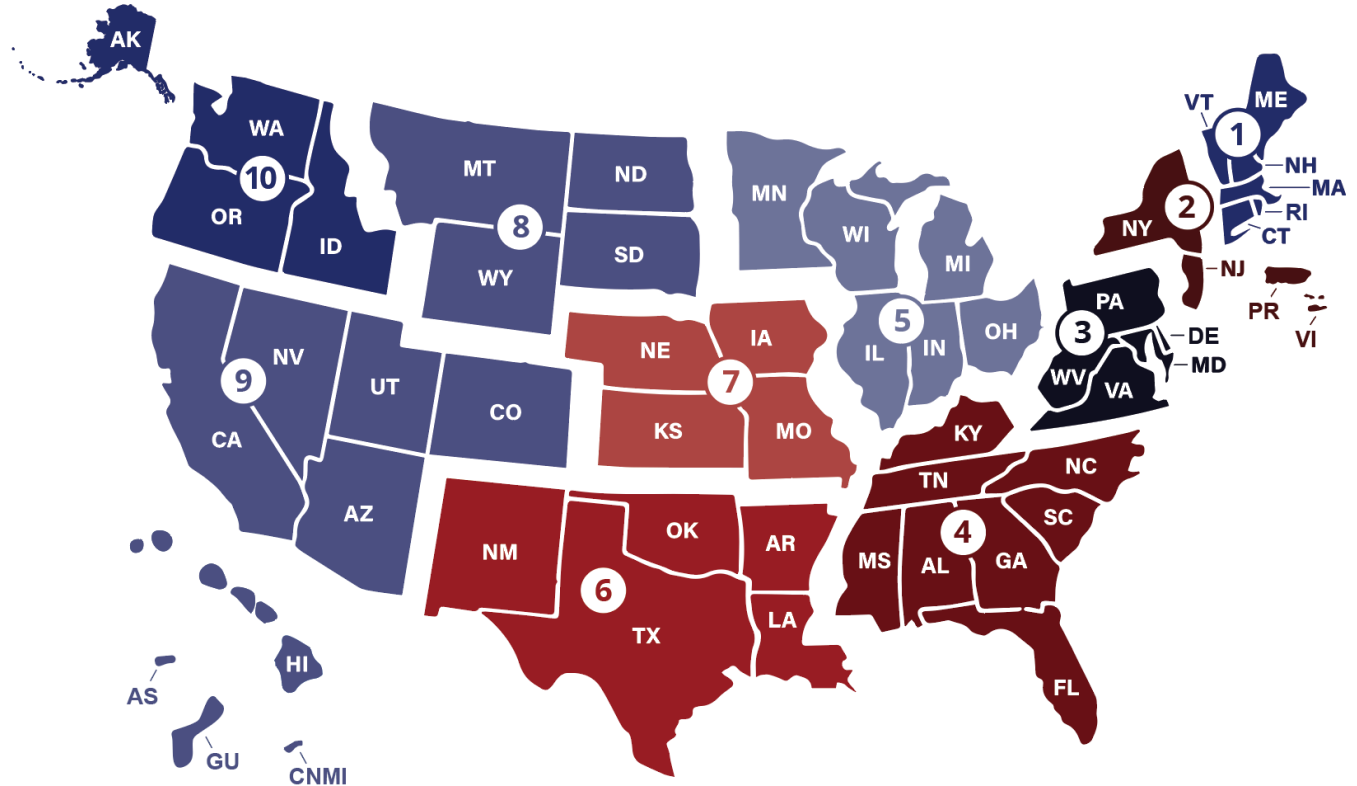
7 August

3 September

1 10 October

8 9 November

5 December





# NFIRS Sunset

# NFIRS Sunset 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.
  - Geospatial NFIRS PDR data also available for 2014-2023.
  - 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**
- **More Information:** <https://www.usfa.fema.gov/nfirs/about/sunset/index.html>

# NFIRS Sunset Essentials

2025



NFIRS




NERIS

## 2025 is a hybrid reporting year.

2025 incidents can be submitted to either NFIRS or NERIS.

- Once a fire department onboards onto NERIS **and** starts reporting incidents, they can stop reporting into NFIRS.



[Learn about onboarding onto NERIS](#) 

2026



NFIRS



NERIS

## 2026 incident reporting will only be in NERIS.

Starting Jan. 1, 2026, incident data submission will be exclusively in NERIS.

- No calendar year (CY) 2026 incidents will be submitted into NFIRS.

Jan. 31, 2026: end date for edits/modifications for CY25 incident records in NFIRS.

**NFIRS will be unavailable for all users starting in February 2026.**

# 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 Departments

## 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 to 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.

2025



NFIRS




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# Thank you.



**FAQS:** [HTTPS://WWW.USFA.FEMA.GOV/NFIRS/NERIS/ABOUT-NERIS](https://www.usfa.fema.gov/nfirs/neris/about-neris) |

**NFIRS Sunset:** <https://www.usfa.fema.gov/nfirs/about/sunset/index.html>



**WEBSITE:** [HTTPS://FSRI.ORG/PROGRAMS/NERIS](https://fsri.org/programs/neris) | **VIDEO Library:** <https://vimeo.com/nerisdata>



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