RConnecticut State Building and Fire Codes

Find the most current schedule at https://portal.ct.gov/DASCodeChange

Completed: 2020 Amendments Drafted and Code Change Proposals Received

6/30/19 Committees/Work Groups Review

8/31/19 Final Drafts Developed

10/31/19 Drafts Reviewed

11/13/19 Codes and Standards Drafts Approval

2/29/20 Public Comment Period

5/31/20 Legislative Review/Approval

10/1/20 Code Takes Effect



NFIRS: A Review of the Rules for the Basic Module

Fall 2019 Career Development Series

DJ Zordan, FM, OEDM Trainer,

DAS Office of Education and Data Management



Use of OEDM Training Materials

Use of Office of Education and Data Management (OEDM) training materials must be approved in writing by the State of Connecticut, Department of Administrative Services' Office of Communications. In approving of such use, the State of Connecticut assumes no liability associated with such use, including, but not limited to, the user's dissemination of any inaccurate information or interpretation in connection with its use of these training materials. Use of the training materials is at the sole risk of the user, and the State's approval of the use does not constitute an endorsement of the user or its intended use.

Scope

This seminar has been developed to provide the Connecticut Fire Service with training to complete required documentation with improved accuracy.

Objectives

Upon completion of this training session, students will be able to:

- Explain how the need to collect fire data led to the organization and development of NFIRS
- · Describe the benefits of using NFIRS
- Demonstrate how to complete the basic module correctly

Participants should return to their respective departments with the ability to identify areas within their organizations where NFIRS is being used incorrectly and implement corrective actions.

Introduction

- DJ Zordan
 - State of Connecticut DAS
 - > Office of Education and Data Management
 - **Cromwell Fire Department (2002 Present)**
 - United Technologies Hamilton Sundstrand (2005 2010)
 - ➤ Westfield Fire District Middletown, CT (2010 2016)
 - ➤ NFIRS State Program Manager October 2018

History

1972 - America Burning published

- > Published by Commission of Fire Prevention and Control
- First In-depth discussion of the nation's fire problem

≻ Recommendations

- Help place solutions to the fire problem on a firmer foundation of scientific data
- ➤ Establishment of a National Fire Data System
- ➤ 1976 six states piloted a program and it has evolved into what we today know as NFIRS

Incident Reporting

- Three basic purposes for incident reporting:
 - 1. Legal Record that a fire or other incident occurred
 - 2. Provides information to senior officials
 - 3. Ability to collect data that is useable at the State and National Level

Incident Reporting - Who uses the data















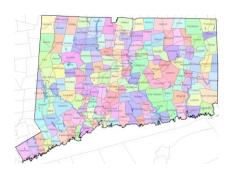




Incident Reporting - Who uses the data

❖ State Level:

- 1. State Budgets
- 2. Creation of Laws
 - Sprinkler Laws
 - Fireworks
 - Arson



Incident Reporting - Who uses the data

❖ Local Level:

- 1. Developing priorities and targeting resources
- 2. Design of fire prevention and educational programs



Incident Reporting

- Are local fire departments required to report incidents?
 - > YES!
 - 1. CT Statute 29-303

CT General Statutes 29-303

CT Statute 29-303

- Fire Chief or Fire Marshal, where a fire, explosion, or other fire emergency occurs shall furnish the SFM a report that shall include
 - 1. All facts relating to cause, origin, kind, estimated value and ownership of property damaged/destroyed
 - 2. The name of each firefighter who was present <u>and</u> exposed to heat, radiation or other known or suspected carcinogen as a result of such fire, explosion, or other fire emergency
 - 3. Such other information as called for by the State Fire Marshal on forms furnished by the SFM or in electronic format prescribed by the SFM

When To Report

Each time a fire service unit moves in response to an alarm, the Basic Module (NFIRS-1) must be completed.

Emergency calls

Report

- All fires
- · Vehicle accidents
- · EMS and rescue incidents
- · Hazardous materials incidents
- · Severe weather emergencies
- · Overpressure ruptures / Explosions
- · False alarms / False calls

Nonemergency calls

Report

- · Service calls
- · Good intent calls
- · Smoke detector installations
- · Community paramedicine

When To Report

While NFIRS does capture some non-emergency incidents, such as service calls, you should not use the NFIRS report to document scheduled events such as parades, code inspections, department training and standby at sporting events

Do not report

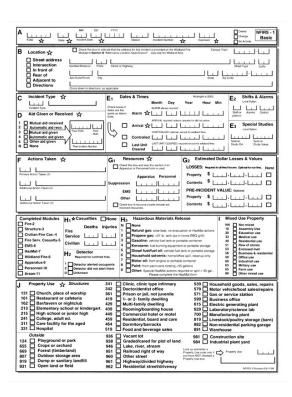
- · Parades
- · Training
- · Fire prevention events
- · Stand by at sporting events
- · Code inspections

NFIRS Modules

- ❖ NFIRS consists of 11 modules.
 - Basic Module (NFIRS-1): Captures general information on every incident (or emergency call) to which the department responds
 - · Information collected is common to all incidents
 - Entries in this module determine what other modules must be completed

NFIRS Modules

- The following modules are used in conjunction with the basic module and required based on the information entered into the basic module
 - Fire Module (NFIRS-2): used to describe each fire incident to which the department responds
 - Structure Fire Module (NFIRS-3): used to describe each structure fire to which the department responds
 - Civilian Fire Casualty Module (NFIRS-4): used to report injuries or deaths to civilians or other emergency personnel
 - Fire Service Casualty Module (NFIRS-5): Used to report injuries and deaths of firefighters



K1 Person/Entity Inv	Business Name (Faggistable) Area Code Phose Name of Programmer				
Then six the three day loade address lines. Number 1991	S. Disc. First Berne M. Leaf Barne Suffer Su				
State More people involved	ZP Code ? Check this box and attach Supplemental Forms (NFIRS-1S) as necessary.				
Local Option Check this box if some address as incident toolating (Boston B). Then skip the three darpholes address lines. Namble	Mrs. First Name MI Last Name Suffs				
State	Apticolements City Limit = Limit September City Sept				
Local Option					
	Fire Module Requirer? Check the box that applies and then complete the Fire Module Based on Incident Tryp, as a follow: Designing 111				
ITEMS WITH A \$\frac{1}{2}\$ MUST ALWAYS BE COMPLETED!					
M Authorization Check box if Officer in charge ID thore in charge. Member making rep	Signature Position or rank Assignment Month Day Year				

Basic Module: Section A

Section A: FDID, State, Incident Number, Incident Date, Exposure Number



- FDID: A unique five character number assigned by the State to identify a particular fire department
 - CT uses this number to designate departments by county
- **❖ State**: The state where the Fire Department is located

Basic Module: Section A - Exposure

Exposure is defined as a fire resulting from another fire outside that building, structure, or vehicle, or a fire that extends to an outside property from a building, structure, or vehicle.

✓ Rule: Buildings with internal fire separations

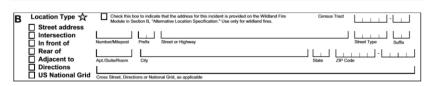






Basic Module: Section B

Section B: Location



This section provides fields to identify the specific location and vicinity (in front of, rear of, next to) information pertaining to an incident. "Location" is a required section, so as much information as possible should be entered.

Basic Module: Section B - Census Tract

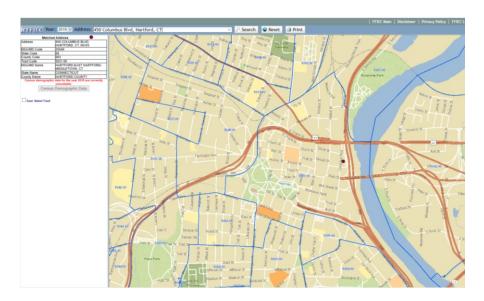
Section B: Location

В	Location Type ద	Check this box to indicate that the address for this incident is provided on the Wildland Fire Module in Section B, "Alternative Location Specification." Use only for wildland fires.	Census Tract
	☐ Street address ☐ Intersection ☐ In front of	Number/Milepost Prefix Street or Highway	Street Type Suffix
	☐ Rear of ☐ Adjacent to	L Apt/SuiteRoom City	State ZIP Code
	☐ Directions ☐ US National Grid	Cross Street, Directions or National Grid, as applicable	

This element provides a means to cross-reference geographic and population information that is available from the U.S. Census Bureau to incident data for comparative analysis.

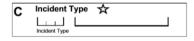
https://geomap.ffiec.gov/FFIECGeocMap/GeocodeMap1.aspx

Basic Module: Section B



Basic Module: Section C

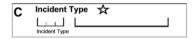
Section C: Incident Type



- Enter the type of incident (a three-digit code) to better identify the types of incidents to which fire departments respond.
 - ✓ Rule: The code should reflect the situation found at the scene, not what you were dispatched to

Basic Module: Section C

Section C: Incident Type



100 Series: Fires;

200 Series: Pressure Ruptures (no fire);

300 Series: Rescue and EMS;

400 Series: Hazardous Conditions (not a fire)

500 Series: Service Calls;

600 Series: Good Intent Calls;

700 Series: False Alarms and False Calls;

800 Series: Severe Weather and Natural Disasters

900 Series: Other Types of Incidents



Scenario: Incident Type - Reporting



111: Building Fire



Scenario: Incident Type - Reporting



113: Cooking fire involving the contents of a cooking vessel without fire extension beyond the vessel.





Scenario: Incident Type

- Ansonia Fire Department is dispatched to Route 8
 North for a vehicle leaking gasoline. Vehicle is in
 the breakdown lane on the right side.
- While units are responding, dispatch advises the responding companies that the vehicle has been struck and the assignment was being upgraded to a Motor Vehicle Accident.
- Upon arrival, this is what you have...



Scenario: Incident Type - Reporting



131: Passenger Vehicle Fire.

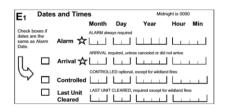




- 121: Fire in a mobile home used as a fixed residence.
- If the RV was in transit....use code 136.

Basic Module: Section E

Block E1: Dates and Times



- · Alarm: Actual Time the Fire Department was notified
- · Arrival: Actual time the first responding unit arrived
- Controlled: Actual time when fire is under control or the incident is stabilized and does not require additional resources
 - · Last Unit Cleared: Actual time the last unit cleared the incident scene

Basic Module: Section E - Last Unit Cleared



Last Unit Cleared Date and Time

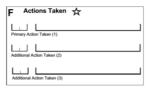
This is the actual month, day, year and time of day when the last unit cleared the incident scene.

These fields do not reflect an "in service" time, nor do they include the time spent transporting a patient to a hospital facility or transit back to the station.

If the Last Unit Cleared Date is the same as the Alarm Date, the report writer can check the box, "Date Same as Alarm."

Basic Module: Section F

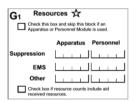
Section F: Actions Taken



- In this section you will enter a two-digit code to explain the most significant actions taken by the fire service personnel at the incident scene.
 - ✓ Rule #1: The Primary Action taken is the most significant action taken by the fire department (use the code with the lowest value).
 - ✓ Rule #2: When cancelled enroute, enter code 93; Incident Type must be 611

Basic Module: Section G1

Block G1: Resources



 The total complement of fire department personnel and apparatus (suppression, EMS, other) that responded to the incident. This includes all fire and EMS personnel assigned to the incident whether they arrived at the scene or were canceled before arrival

Basic Module: Section G2

Block G2: Estimated Dollar Losses and Values

G ₂ Estimated Dollar Losses and Values						
LOSSES:	Required for all fires if known. Optional for non-fires.	None				
Property	\$,,					
Contents	\$,,					
PRE-INCIDENT VALUE: Optional						
Property	\$,,					
Contents	\$,					

- Estimates of the total property and contents dollar loss and the pre-incident value of the property and contents.
 - An estimate of the property and contents dollar loss is required for all fires where the value is known.
- Losses: Rough estimation of the total loss to the structure and contents, in terms of the
 cost of replacement in like kind and quantity. This estimation of the fire loss includes
 contents damaged by fire, smoke, water, and overhaul. This does not include indirect loss,
 such as business interruption.
- · Pre-incident Value: Estimation of the replacement cost of the structure and contents

ICC - Building Valuation Data

Square Foot Construction Costs a, b, c

Group (2018 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage		238.50	232.82	223.18	209.86	203.80	216.12	191.69	184.50
A-1 Assembly, theaters, without stage		217.54	211.85	202.22	189.15	183.09	195.16	170.98	163.79
A-2 Assembly, nightclubs	191.96	186.56	182.12	174.70	164.94	160.39	168.64	149.29	144.33
A-2 Assembly, restaurants, bars, banquet halls	190.96	185.56	180.12	173.70	162.94	159.39	167.64	147.29	143.33
A-3 Assembly, churches	226.69	218.58	212.89	203.26	191.60	185.54	196.20	173.43	166.24
A-3 Assembly, general, community halls, libraries, museums	190.63	182.52	175.84	167.20	153.09	148.07	160.14	134.97	128.78
A-4 Assembly, arenas	224.65	216.54	209.85	201.22	187.15	182.09	194.16	168.98	162.79
B Business	197.81	190.62	184.70	175.70	160.65	154.63	168.95	141.15	134.99
E Educational	209.43	202.23	196.97	188.01	175.28	166.43	181.55	153.08	148.70
F-1 Factory and industrial, moderate hazard	117.60	112.19	105.97	101.84	91.54	87.26	97.61	75.29	70.95
F-2 Factory and industrial, low hazard	116.60	111.19	105.97	100.84	91.54	86.26	96.61	75.29	69.95
H-1 High Hazard, explosives	109.99	104.58	99.35	94.22	85.14	79.87	89.99	68.89	N.P.
H234 High Hazard	109.99	104.58	99.35	94.22	85.14	79.87	89.99	68.89	63.56
H-5 HPM	197.81	190.62	184.70	175.70	160.65	154.63	168.95	141.15	134.99
I-1 Institutional, supervised environment	197.83	191.05	185.12	177.91	163.28	158.81	178.06	146.98	142.33
I-2 Institutional, hospitals	330.92	323.73	317.81	308.81	292.72	N.P.	302.06	273.22	N.P.
I-2 Institutional, nursing homes	229.68	222.49	216.58	207.57	193.53	N.P.	200.83	174.02	N.P.
I-3 Institutional, restrained	224.86	217.67	211.75	202.75	188.96	181.94	196.00	169.45	161.29
I-4 Institutional, day care facilities	197.83	191.05	185.12	177.91	163.28	158.81	178.06	146.98	142.33
M Mercantile	142.95	137.54	132.11	125.68	115.38	111.83	119.62	99.73	95.77
R-1 Residential, hotels	199.70	192.92	186.99	179.78	164.90	160.43	179.93	148.60	143.96
R-2 Residential, multiple family	167.27	160.49	154.56	147.35	133.71	129.23	147.50	117.40	112.76
R-3 Residential, one- and two-family ^d	155.84	151.61	147.83	144.09	138.94	135.27	141.72	130.04	122.46
R-4 Residential, care/assisted living facilities	197.83	191.05	185.12	177.91	163.28	158.81	178.06	146.98	142.33
S-1 Storage, moderate hazard	108.99	103.58	97.35	93.22	83.14	78.87	88.99	66.89	62.56
S-2 Storage, low hazard	107.99	102.58	97.35	92.22	83.14	77.87	87.99	66.89	61.56
U Utility, miscellaneous	85.30	80.55	75.51	71.75	64.72	60.49	68.56	51.18	48.73

Basic Module: Section G2



Basic Module: Section G2



Basic Module: Section G2



Basic Module: Section G2

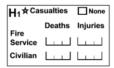


Basic Module: Section G2



Basic Module: Section H1

Block H1: Casualties



- A person injured or killed either as a result of the incident or during the mitigation of the incident.
- · An injury is physical damage to a person that requires either
 - 1. Treatment by a practitioner of medicine within 1 year of the incident, or
 - 2. At least 1 day of restricted activity immediately following the incident.
- Deaths also include people who die within 1 year because of injuries sustained from the incident.

Basic Module: Section H1 - The Rules

H₁★Cas	None		
F:	Deaths	Injuries	
Fire Service			
Civilian			

✓ Fire Service Rule #1:

 Include those people injured or killed while responding to or returning from the incident. If the injury or death occurred on fire department property after the apparatus was placed back in service, do not include it in this section.

√ Fire Service Rule #2:

 On-duty firefighter injuries or deaths that did not occur during an incident may be collected using the Fire Service Casualty Module. Remember when reporting a firefighter casualty of this type, the Basic Module must still be filled out, complete with an incident number. In this event, create an EMS incident with the appropriate response information.

Basic Module: Section H1 - The Rules

H₁★Cas	H₁★Casualties		
	Deaths	Injuries	
Fire Service			
Civilian			

Civilian Death:

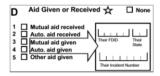
- Enter the number of civilians or non-fire department personnel who died in connection with this incident.
- Enter only fire-related deaths here.

Civilian Injury:

- Enter the number of civilians or non-fire department personnel who were injured (but did not die) in connection with this incident.
- Enter only fire-related injuries here.

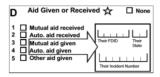
Basic Module: Section D

Section D: Aid Given or Received



Aid information can be used to study response levels necessary to control various fire and emergency situations. It can be used to determine the adequacy of resources at the local level and the need for adjusting cooperative agreements. The Aid Given or Received entry serves as data control to ensure that the same incident is not counted more than once while still giving credit for activity performed by outside departments.

Basic Module: Section D - The Rules



- Mutual Aid: Request for assistance for a specific incident
- Automatic Aid: Prearranged request for assistance
- Aid Received:
 - A fire department handles an incident within its jurisdiction with additional manpower or equipment from one or more outside fire departments.
- Automatic Given:
 - A fire department responds into another fire department's jurisdiction to provide assistance at an incident or to cover a vacated station.

Scenario: Mutual Aid 1

 Watertown Fire Department is dispatched to building fire at 123 Main Street. Working fire upon arrival and additional resources are needed onscene. Middlebury Fire Department is requested to respond with an Engine. Middlebury arrives on scene and performs all requested tasks. Middlebury Engine is released from the scene and returns to Middlebury.

Scenario Report: Mutual Aid 1

Watertown Fire Department

- Basic Module
 - Section D: Mutual Aid
 - Mutual Aid Received
 - Other required modules

Middlebury Fire Department

- Basic Module
 - Section D: Mutual Aid
 - Mutual Aid Given
 - FDID: 01240
 - WFD Incident Number

Scenario: Mutual Aid 2

- Watertown Fire Department is dispatched to a major motor vehicle accident. Upon arrival, the Incident Commander determines that the incident will be an extended operation and requests one Engine from the Middlebury Fire Department to cover the Watertown Station.
- Middlebury Fire Department dispatches one engine for the cover assignment. They standby for approximately 2 hours and are released.

Scenario Report: Mutual Aid 2

Watertown Fire Department

- Basic Module (322)
 - Section D: Mutual Aid
 - None
 - Other required modules

Middlebury Fire Department

- Basic Module (571)
 - Section D: Mutual Aid
 - · Mutual Aid Given
 - FDID: 01240
 - Incident #: Blank
 - MFD did not respond to an incident

Scenario: Mutual Aid 3

- Watertown Fire Department is dispatched to a major motor vehicle accident. Upon arrival, the Incident Commander determines that the incident will be an extended operation and requests one Engine from the Middlebury Fire Department to cover the Watertown Station.
- Middlebury Fire Department dispatches one engine for the cover assignment. While standing by, MFD responds to two calls for Watertown:
 - EMS call 15 Court Street
 - Fire Alarm Activation 23 College Street
- Following the last call on College Street, MFD is released from coverage by Watertown

Scenario Report: Mutual Aid 3

Watertown Fire Department

- Basic Module (322)
 - Section D: Mutual Aid
 - None
 - Other required modules
- Basic Report for 15 Court
- Basic Report for 25 College

Middlebury Fire Department

- Basic Module (571)
 - Section D: Mutual Aid
 - None
 - Remarks/Narrative
 - Note that while covering WFD, responded to two calls and list address and WFD Incident #





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