









ISO Public Protection Classification (PPC) February 23, 2019

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The American Fire Problem

- One of the largest single causes of insured property loss in the United States
- Insured losses of more than \$125 billion in the last decade
- 20,000 people injured in fires each year
- 3,000 Americans die each year in building fires
- More than 100 firefighters killed each year

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ISO Public Protection Classification

- ISO's PPC program is designed to measure the effectiveness of public fire protection for structures in 47,000 fire districts across the country
- PPC considers the overall fire suppression service capability relative to the risk in the graded area
- Better fire protection – as measured by the PPC – generally leads to a better loss experience for insured structural damage

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PPC Value for Communities

- Provides a direct and visible incentive for communities to improve the quality of their fire protection
- Promotes business / industry expansion
- Many local officials consider PPC to assist with protection decisions
 - Budgeting purposes
 - Justification for changes and improvements
 - Free advice regarding improvements to their PPC
- Better PPC can result in insurance savings

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PPC Value for Insurers

- Proven statistical correlation between improved PPC and lower property losses
- Help with underwriting and pricing policies
- Identifies different rating factors
 - Properties without a public water supply
 - Automatic aid
 - Nearest recognized responding fire station


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Fire Suppression Rating Schedule (FSRS)


- An Insurance Rating Tool, not just a fire department evaluation
- The FSRS is a first alarm schedule
- 105.5+ points possible
- Acknowledged and accepted measurement of a community's fire suppression capabilities
- References proven national standards



American Water Works Association
The Authoritative Resource on Safe Water





National Fire Protection Association
The authority on fire, electrical, and building safety



APCO International
Leaders in Public Safety Communications™

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FSRS Classes 1 to 10

| | | |
|-----------------------|---------|----|
| 90.00 to 100 + Points | = Class | 1 |
| 80.00 to 89.99 Points | = Class | 2 |
| 70.00 to 79.99 Points | = Class | 3 |
| 60.00 to 69.99 Points | = Class | 4 |
| 50.00 to 59.99 Points | = Class | 5 |
| 40.00 to 49.99 Points | = Class | 6 |
| 30.00 to 39.99 Points | = Class | 7 |
| 20.00 to 29.99 Points | = Class | 8 |
| 10.00 to 19.99 Points | = Class | 9 |
| 00.00 to 9.99 Points | = Class | 10 |

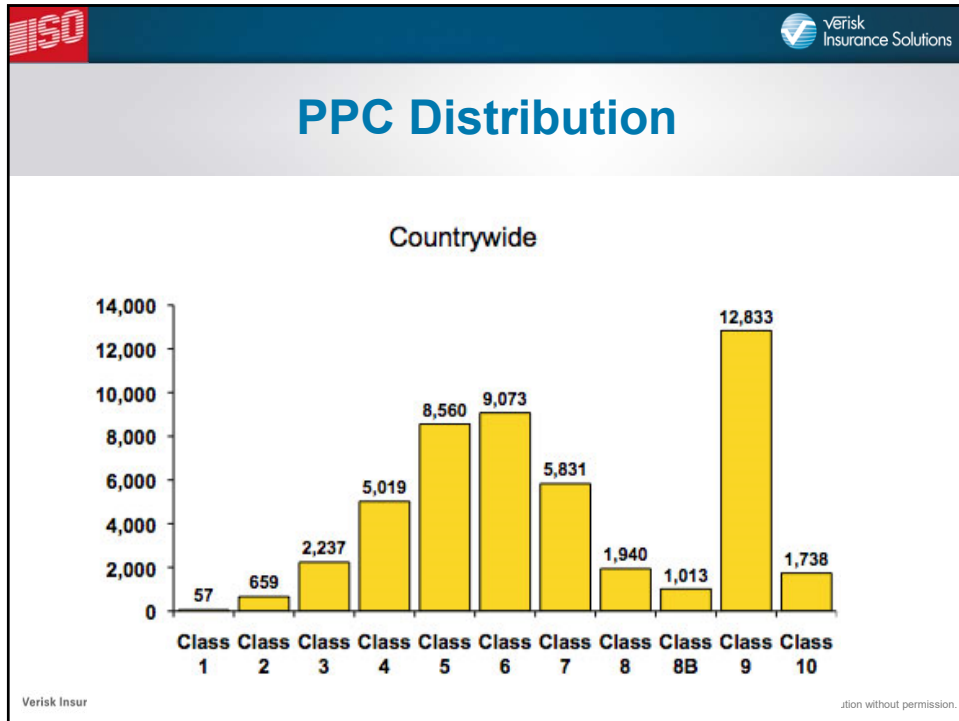
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FSRS Minimum Requirements

- Organization: Must be organized under all applicable state and local laws. Must have bylaws & boundary
- Membership: at least 4 responders
- Training: 12 hours per member per year
- Alarm notification: no delay (60 seconds max)
- Apparatus: NFPA 1901
- Housing: apparatus protected from the weather and station heated where needed
- Station without an engine is an unrecognized station

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Needed Fire Flow

ISO Needed Fire Flow

The estimated rate of flow in gpm that is considered necessary to fight a major fire in a nonsprinklered building under most conditions for a certain duration

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Determining Needed Fire Flow for Commercial Properties

- Effective area
- Construction Factor
- Occupancy Factor
- Exposure Factor
- $NFF = (C) (O) (1+(X+P))$
- Needed Fire Flow Reports
- Sprinklered - $NFF = 0$ gpm
- 5th Highest NFF = Basic Fire Flow (BFF)





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ISO Public Protection Classification (PPC) Emergency Communications

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Emergency Communications

Credit for Emergency Communications - 10 points


- Credit for Emergency Reporting - 3 points
- Credit for Telecommunicators - 4 points
- Credit for Dispatch Circuits - 3 points

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Emergency Communications



National Fire Protection Association
The authority on fire, electrical, and building safety

National Fire Protection Association
- NFPA Standard 1221



APCO International
Leaders in Public Safety Communications™

Association of Public Communications Officials
International
- APCO 33

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Emergency Communications

Emergency Reporting System

- No 9-1-1 or Basic 9-1-1
- Enhanced 9-1-1
- ANI - Automatic Number Identification
- ALI - Automatic Location Identification



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Emergency Communications

Additional points for Enhanced 9-1-1 include

- **Wireless Phase 1**
 - The PSAP is Phase 1 wireless-capable for at least one wireless service provider (WSP) in the jurisdiction or has made a valid formal request for Phase 1 wireless service with the WSPs doing business in its jurisdiction
- **Wireless Phase 2**
 - The PSAP is Phase 2 wireless-capable for at least one WSP in the jurisdiction or has made a valid formal request for Phase 2 wireless service with the WSPs doing business in its jurisdiction

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Emergency Communications

Additional points for Enhanced 9-1-1 include

Voice over Internet Protocol (VoIP)

- **Static**
 - The PSAP is capable of receiving and processing static VoIP calls with associated call back number and caller location information
- **Nomadic**
 - The PSAP is capable of receiving and processing VoIP calls utilizing dynamic ALI updates (callback number and caller location information)

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Emergency Communications

Additional points for Enhanced 9-1-1 include

Computer Aided Dispatch (CAD)

- Basic CAD
The PSAP provides its telecommunicators with software to assist in initiating calls for service, dispatching, and maintaining the status of responding resources in the field
- CAD with MIS
The PSAP has the ability to automatically accept, display and plot caller location data on an electronic map display (GIS) and access historical incident information
- CAD with Interoperability
The PSAP can transmit call information directly to responders, alternate PSAPs, and others. PSAP has the ability to provide data and interoperate electronically with other agencies and communications centers
- CAD with MIS and Interoperability

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Emergency Communications



Additional points for Enhanced 9-1-1 include

GIS/AVL

- GIS - Geographic Information System
- AVL - Automatic Vehicle Location
 - The PSAP uses a fully integrated CAD/GIS management system with automatic vehicle location (AVL) integrated with the CAD system providing dispatch assignments.



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Emergency Communications

Primary (call receiving) and Secondary (call processing) PSAP

- If calls are received at one dispatch center (primary PSAP) and detailed information is relayed to a secondary PSAP for dispatch, they should be transferred within 30 seconds.
- Delays in processing may cause:
 - Critical details may be lost or misunderstood
 - Potential time delay

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Telecommunicators

Handling of fire calls should be in accordance with the general criteria of NFPA 1221, *Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems*.



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Call Detail Recording

“A system that provides a record of each call, including automatic number identification (ANI), trunk number, and answering attendant number; and the time of seizure, answer, and disconnect / transfer.”

*NFPA 1221
2013 Edition*

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Telecommunicators

Telecommunicator performance based on: NFPA 1221

- Call receipt
 - Answer 95% of alarms within 15 seconds and 99% of alarms within 40 seconds
- Call processing
 - Complete 80% of emergency dispatching within 60 seconds and 95% within 106 seconds
- Call transfer
 - Transfer 95% of all alarms from a PSAP within 30 seconds, if applicable

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Telecommunicators

Emergency Dispatch Protocols for Fire Service (EDP):

- Telecommunicators have EDP containing questions and a decision-support process to facilitate correct call categorization and prioritization
- Telecommunicators use those protocols to provide pre-arrival instructions to emergency responders and callers

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Telecommunicators

Initial Training, Certification, Con-Ed, Quality Assurance

- Telecommunicators meet the qualification requirements referenced in NFPA 1061, *Standard for Professional Qualifications for Public Safety Telecommunicator*, and/or the
- Association of Public-Safety Communications Officials - International (APCO) *Project 33*.
- Telecommunicators are certified in the knowledge, skills, and abilities corresponding to their job functions

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Telecommunicators

Initial Training, Certification, NFPA 1061
Continuing-Education, Quality Assurance

- Telecommunicators participate in continuing education and/or in-service training
- Quality-assurance programs as appropriate for their positions

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Dispatch Circuits



Review of the dispatch circuit

- Type of dispatch circuit(s) provided
- Monitoring for integrity
- Emergency power supply



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Needed Dispatch Circuits

- Less than 730 alarms* per year:
 - 1 dispatch circuit is needed
- 730 or more alarms* per year:
 - 2 dispatch circuits are needed
- * Includes alarms transmitted to the graded area only


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Monitoring for Integrity



“Automatic monitoring of circuits and other system components for the existence of defects or faults that interfere with receiving or transmitting an alarm”



*NFPA 1221
2013 Edition*

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Monitoring for Integrity

What is it?

- Knowing when everything is working
- And when it's not
- And what to do when it isn't.....
- Two categories to monitor
 - The radio system equipment
 - The external environment

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Emergency Power Supplies



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Emergency Power Supplies

Typical Emergency Power Supply Arrangements:

- Batteries and manually started generator
- Automatically started generator with or without UPS
- Manually started generator
- Batteries only (Minimum 4 hours -If adequate for 24 hours, increased credit applies)
- Batteries qualify as emergency power for carried pagers



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Emergency Power Supplies

Required Testing of Emergency Power

- Load testing needed for full credit
- Weekly testing for full credit (minimum is quarterly for partial credit)
- Minimum duration of 1 hour for full credit (prorated credit if duration is less)
- Records of testing needed for verification (reduced credit if records not complete)



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ISO Public Protection Classification (PPC) **Fire Department**


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Fire Department



Credit for Fire Department - 50 points

- Fire engines – 6 points
- Reserve engines – 0.5 points
- Pump capacity – 3 points
- Ladder service – 4 points
- Reserve ladder service – 0.5 points
- Deployment Analysis– 10 points
- Company personnel – 15 points
- Training – 9 points
- Operational Considerations - 2 points



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Primary / Automatic Aid / Mutual Aid

- Primary Department
 - Responsible for fire protection
- Automatic Aid Department
 - Responds on 1st alarm with the Primary Department
 - May be creditable
- Mutual Aid Department
 - Does not respond on 1st alarm
 - Usually not creditable in the grading

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Automatic Aid

- All reported first alarm structure fires
- 24-7-365
- Max credit = 100% / Min credit = 40%
- Credit based on radio communications
 - Monitoring for integrity
 - Emergency power
 - Recording
 - Common frequencies
 - CAD


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Automatic Aid

- Common SOP's
- Credit also based on frequency of inter-department training
- 5 road mile limit
- Engines / ladder service / personnel



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Engine Companies

- Engine Companies
 - Maximum credit 6 points
 - Minimum pump capacity: At least 1 engine with a 750 gpm pump
- Number determined by:
 - Basic fire flow
 - Fire protection areas
 - Method of operation

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Number of Needed Engines

| Basic Fire Flow | Needed Engines |
|-----------------|----------------|
| 500 – 1000 gpm | 1 |
| 1250 – 2500 gpm | 2 |
| 3000 – 3500 gpm | 3 |

Additional engines may be needed by locations and/or method of operation


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Engine Company Equipment

Equipment on Existing Engine Companies

- 1,000 feet of supply hose - 2 ½ inch or greater
- 200 feet of attack hose - 2 or 2 ½ inch
- Equipment based on NFPA 1901
- Every engine needs a heavy stream device



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| Engine Company Equipment | | | |
|---|-----------------------|-----------------------|--------------|
| Equipment and Hose | Needed | Points Credit/Unit | Total Points |
| Booster tank | 300 gal. or larger | 1/10 gal. | 30 |
| Hose: | | | |
| 15' soft-suction or 20' hard-suction hose | 1 | 12 | 12 |
| 1½", 1¼", or 2" hose carried | 400' | 3/50 | 24 |
| Master stream appliance (1,000 gpm) | 1 | 100 | 100 |
| Nozzles: | | | |
| 2½" playpipe with shutoff and 1", 1½", and 1¼" tips | 1 | 20 | 20 |
| 2½" combination spray with shutoff | 1 | 30 | 30 |
| 1½" or 1¼" combination spray with shutoff | 2 | 10 | 20 |
| SCBA (30-minute minimum) | 4 | 24 | 96 |
| Extra cylinders (carried) | 4 | 6 | 24 |
| Salvage covers (minimum size of 12' x 14') | 2 | 2 | 4 |
| Electric handlights | 2 | 2 | 4 |
| Hose clamp | 1 | 4 | 4 |
| Hydrant hose gate (2½") | 1 | 4 | 4 |
| Gated wye (2½" x 1½" x 1¼") | 1 | 4 | 4 |
| Radio: | | | |
| Mounted | 1 | 32 | 32 |
| Portable | 1 | 16 | 16 |
| Ladders: | | | |
| 12' to 16' roof | 1 | 10 | 10 |
| 24' extension or larger | 1 | 16 | 16 |
| Annual tests: | | | |
| Pumper (see Table 512B) | 1 | 100 | 100 |
| Hose (see Table 512C) | 1 | 50 | 50 |
| Total | | | 600 |



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| Reserve Engine(s) | |
|---|--|
| Reserve Pumps | |
| <ul style="list-style-type: none"> Maximum credit 0.5 points 1 reserve pumper needed for each 8 needed engine companies or fraction thereof No reserve / no credit | |

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Pump Capacity

Pump Capacity


- Maximum credit 3.0 points
- Should equal or exceed Basic Fire Flow (BFF)
 - BFF = 5th highest Needed Fire Flow
- Pump capacity limited to
 - 75% if partial test records
 - 50% if no test records
- “Other” pumps not credited limited to 50%

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Pump and Hose Testing

- Pump testing credit based on average of the past 3 test intervals
- Hose testing credit based on average of the past 3 test intervals
- Based on manufacture’s recommendations
- 75% credit for partial records
- No records, no credit



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Ladder / Service Companies

- Service company equipment
- Ladder company equipment
- Testing




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What Is a Service Company?

- A Service Company is needed if a ladder company is not needed
- Carries equipment for forcible entry, salvage, ventilation, overhaul, lighting
- Ladder requirement
 - 1- 24' extension ladder and
 - 1- 16' straight ladder with hooks
 - 1- 10' attic ladder
 - 1- 14' combination ladder or longer
- Aerial and elevated stream devices needed




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| Service Company Equipment | | | |
|---|--------|-----------------------|--------------|
| Equipment | Needed | Points Credit/Unit | Total Points |
| SCBA (30-minute minimum) | 4 | 24 | 96 |
| Extra cylinders (carried) | 4 | 6 | 24 |
| Salvage covers (minimum size of 12' x 14') | 6 | 2 | 12 |
| Electric generator (3,000 watt) | 1 | 25 | 25 |
| Portable floodlight (500 watt) | 3 | 4 | 12 |
| Smoke ejector (5,000 cfm) | 1 | 20 | 20 |
| Portable thermal cutting unit | 1 | 20 | 20 |
| Saw – power (chain or heavy-duty rotary type) | 1 | 20 | 20 |
| Electric handlights | 4 | 2 | 8 |
| Pike pole (plaster hook): | | | |
| 3' or 4' | 2 | 2 | 4 |
| 6' or longer | 4 | 2 | 8 |
| Radio: | | | |
| Mounted | 1 | 32 | 32 |
| Portable | 1 | 16 | 16 |
| Ladder: | | | |
| 24' extension or longer | 1 | 25 | 25 |
| 16' roof or longer | 1 | 25 | 25 |
| 10' attic or longer | 1 | 4 | 4 |
| 14' combination or longer | 1 | 5 | 5 |
| Total | | | 356 |

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| When Do I Need a Ladder Truck? | |
|---|--|
| <ul style="list-style-type: none"> • 5 buildings 3 or more stories (2 ½ stories homes do not count) • 5 buildings with NFF over 3,500 gpm • 5 buildings single story - 32' tall <p>OR</p> <ul style="list-style-type: none"> • Combination of 5 of the above • A service truck is needed if a ladder truck is not needed | |
|  | |

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Ladder Company Equipment

| Equipment | Needed | Points Credit/Unit | Total Points |
|--|--------|-----------------------|--------------|
| Ladder: | | | |
| 16' or longer roof | 1 | 25 | 25 |
| 35' or longer extension | 1 | 25 | 25 |
| Elevated stream device* | 1 | 100 | 100 |
| Large spray nozzle (1,000 gpm) | 1 | 16 | 16 |
| Aerial ladder/elevating platform* | 1 | 200 | 200 |
| Annual tests (aerial/platform, see Table 542C) | 1 | 50 | 50 |
| Total | | | 416 |




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Testing of Aerial Devices

- Aerial testing credit based on average of the past 3 test intervals
- Nondestructive Test (NDT) required every 5 years. If no NDT within the past 5 years, no credit for aerial/platform device or elevated stream.



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Deployment Analysis

Deployment Analysis

- Previously Distribution of Companies
- Maximum credit 10.0 points
- Optional Deployment Analysis per NFPA 1710 (Standards of Coverage)
- Road mile analysis (1½ mile and 2½ mile) used when the standards of cover is not available

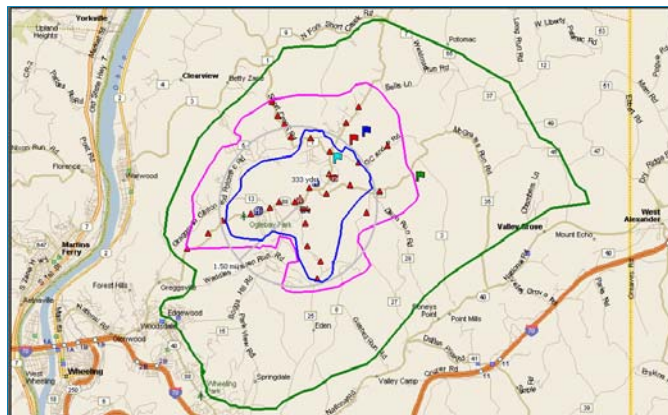


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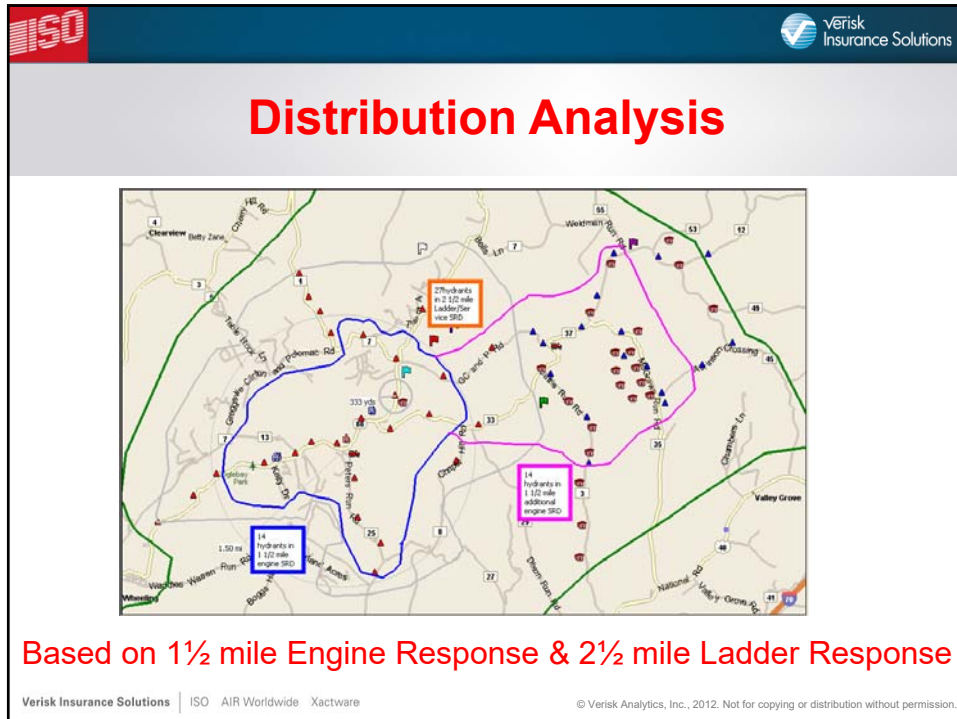
Distribution Analysis



Based on 1½ mile Engine Response & 2½ mile Ladder Response

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NFPA 1710

- Optional Deployment Analysis per NFPA 1710 (Standards of Coverage)
- This type of evaluation analyzes computer-aided dispatch (CAD) history.
- 1st due engine arrives within 240 seconds + 80 seconds of turnout = 320 seconds (5.33 min)
- Complement of apparatus arrives within 480 seconds + 80 seconds turnout = 560 seconds (9.33 min)


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Company Personnel

Existing Company Personnel

- On-Duty / PSO / On-Call
- Credit for Automatic Aid Personnel
 - With or without a needed company
 - Maximum AA factor of 1.0
- Firefighters must have protective clothing ensemble available




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Training

- Facilities and Use
- Company Training
- Officer Training
- Driver/Operator Training
- New Driver/Operator Training
- Hazardous Materials Training
- Recruit Training
- Pre-fire Planning Inspections




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Training

Training Facilities and Use must be at a training facility

- Live fire training structure including smoke room
- Drill tower at least 3 stories in height
- Training area at least 2.0 acres in size
- Full credit given for 18 hours per member per year
- Reference NFPA 1402




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Training

Company Training Program includes use of local buildings, streets and open areas

- Full credit given for 16 hours per member per month
- Reference NFPA 1001



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Training

Officer Training Program

- Officer certification
- Continuing education
- Reference NFPA 1021 and NFPA 1561

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Training

New Driver / Operator Training Program

- 60 hours
- Reference NFPA 1002 and NFPA 1451



Existing Driver / Operator Training Program

- 12 hours annually



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Training


Hazardous Materials Training Program

- 6 hours annually
- Reference NFPA 472





Recruit Training

- 240 hours in the first 12 months
- Reference NFPA 1001
- Structural fire training



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Training

Building Familiarization for Pre-Incident Planning

- Annual inspections / tours
- Used in training program
- Reference NFPA 1620

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Operational Considerations

Evaluates FD Standard Operation Procedures and Incident Management Systems

- Involving structure fires
- NFPA 1500 - FD Occupational Safety and Health Program
- NFPA 1201 - Providing Emergency Services to the Public
- NIMS - National Incident Management System
- NFPA 1561 - Emergency Services Incident Management System

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Operational Considerations

Standard Operating Procedures (SOP)

- Evaluates established SOP's for FD emergency operations
- Apparatus response / operation / inspection / maintenance
- Safety at incidents
- Training
- Company operations

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Operational Considerations

Incident management system

- Use an established Incident Management System
- NIMS
- NFPA 1561

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ISO Public Protection Classification (PPC) Water Supply

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Water Supply - 40 points

- Adequacy of water supply – 30 points
- Hydrant, size, type & installation – 3 points
- Inspection and fire flow testing of hydrants – 7 points



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Water information Needed for ISO

- All pump, plant and storage capacities
- Maximum daily consumption figures for each service level
- Hydrant breakdown by types and sizes
- Hydrant inspection records
- Flow test program records
- Scaled map showing streets & hydrants (GIS)

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Maximum Daily Consumption (MDC)

Rate in gpm of use on the day of the highest consumption in the last three years

- May be estimated at 150% of ADC
- Unusual events are not used for MDC - main breaks, fires, filling tanks, etc.
- Subtracted from the available supply
- Needed for each service level




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Storage

- Storage Tanks, Clearwells, Reservoirs
 - Type (Elevated, Ground, etc)
 - Size (MG)
 - Daily Minimum Capacity
 - Connection Size



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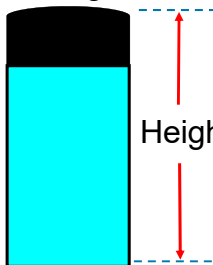
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Minimum Capacity of Tank

Tank capacity = 150,000 gallons
 Normal minimum capacity = 80 feet
 $80/100 \times 150,000 = \underline{120,000 \text{ gallons credited}}$



Normal low water level = 80 ft. →



150,000 gallons


Height = 100 ft

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Pumps

- Pumps
 - Actual GPM vs Rated GPM
 - Moving water from where to where?




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Adequacy of Water Supply

- The ability of the water distribution system to deliver the Needed Fire Flow at selected test locations
 - Minimum acceptable flow – 250 gpm for 2 hours + consumption
 - Minimum storage – 30,000 gallons + consumption





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Needed Fire Flow & Duration

| Needed Fire Flow in GPM | Duration in hours |
|----------------------------|----------------------|
| Dwelling < 4,800 sq ft | 1 |
| Dwelling ≥ 4,800 sq ft | 2 |
| 2,500 gpm or less | 2 |
| 3,000 To 3,500 gpm | 3 |
| 4,000 + gpm | 4 |

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Adequacy of Supply System

- Water System Limitations
 - What GPM can the system provide for a specific duration
- Hydrant Flow
 - Actual hydrant flow @ 20 PSI residual
- Hydrant Distribution
 - Distance from the building
 - Type of hydrant

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Emergency Supplies



Credit for water from another system:

- Supplies credited if available on automatic demand
- If not automatic, credit depends upon time needed to open
- Must have documented permission




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Hydrants - Size, Type & Installation

- Full hydrant credit
 - 6" branch
 - 5" or larger barrel
 - Pumper outlet
- Others
 - < 6" branch / <5" barrel
 - No pumper outlet
 - Flush type
 - Cistern or suction point




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Hydrants - Inspection & Flow Test Program

- Hydrant Inspection
 - Annual inspection program
 - In accordance with AWWA Manual 17
 - Flushing program
 - Pressure testing
- Inspection program for cisterns and suction points




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Hydrants - Inspection & Flow Test Program

- Fire-Flow Testing
 - All parts of the water system need to be flow tested
 - Maximum credit if tested every 5 years,
 - 10 years or more - no credit
- Hydrant marking system
 - NFPA 291 or AWWA Manual M17
- Records
 - Partial - 75% credit
 - None - 0% credit





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Hydrants - Inspection & Flow Test Program

- Computerized Hydraulic Model
 - Properly installed
 - Calibrated annually
 - Produces static pressure and flow predictions at 20 psi residual
 - Model verified by actual flow tests
 - AWWA Manual M32


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Distribution of Hydrants

Factors considered:

- All hydrants within 1000' will be credited at 1,500 GPM - depending on type and size of outlet(s)
- Proximity to property
- Size and type of outlets





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Hydrant Distribution - Outlets


| Outlets | Maximum Credit |
|---|----------------|
| At least one pumper outlet | 1,500 gpm |
| Two or more hose outlets, no pumper outlet | 750 gpm |
| One hose outlet only | 500 gpm |

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Alternative Water Supply

- Fire Department supplied water
 - Tanker / tender shuttle
 - Large diameter hose relay
- Certified water supply points
 - Suction Points
 - Dry Hydrants
 - Combination



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Alternative Water Supply

Tanker Shuttle




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Alternative Water Supply

Dry Hydrant



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Divergence

- Divergence is the difference between the Fire and water, so one does not carry the other in the end.
- How to figure the Divergence
- $0.5 (\text{water} - (0.8 \times \text{Fire})) =$
- Example
- $0.5 (40 - 0.8 \times 41.87) = -3.25$
- $0.5 (40 - 33.496) = -3.25$

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ISO Public Protection Classification (PPC) Community Risk Reduction

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Community Risk Reduction

- Adoption and enforcement of fire prevention codes
- Public fire safety education
- Fire investigation programs






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Community Risk Reduction - 5.5 points

- Fire prevention Code Adoption and Enforcement - 2.2 points
- Public Fire Safety Education - 2.2 points
- Fire Investigation - 1.1 points




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Community Risk Reduction

Fire Prevention Code Adoption and Enforcement

- Code adoption
- Code regulations
- Staffing
- Training / certification
- Frequency
- Continuing education
- Plan review
- Quality-Assurance
- Pre-fire planning




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Community Risk Reduction



Public Fire Safety Education

- Educator qualifications / training
- Continuing education
- Fire safety programs
- Juvenile fire setter intervention programs
- Program for occupancies having large loss potential



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Community Risk Reduction

Fire Investigation

- Fire investigation organization
- Fire investigation staffing
- Fire investigator certification
- Fire investigator continuing education
- Use of the National Fire Incident Reporting System

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Insurance Solutions



CMC Rule Changes
Split Class 9, 8B, & 10 Water

July 1 2014



The quest continues...

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New Split Class 9, 8B & 10 Water










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Split Class 9 and 8B

- Actuarially those risks in communities
 - over 1000' from creditable water and
 - within 5 road miles of the responding fire station but
 - covered by a protected class 1 – 8 fire department
 - Have lesser fire severity then those covered strictly by a Class 9 or Class 8B fire department



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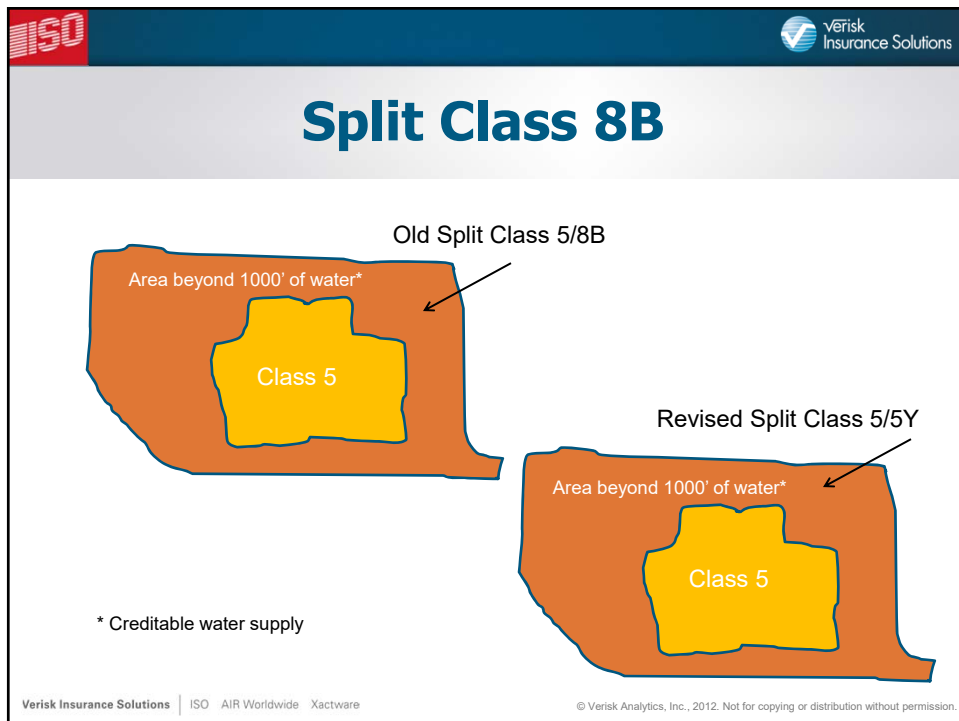
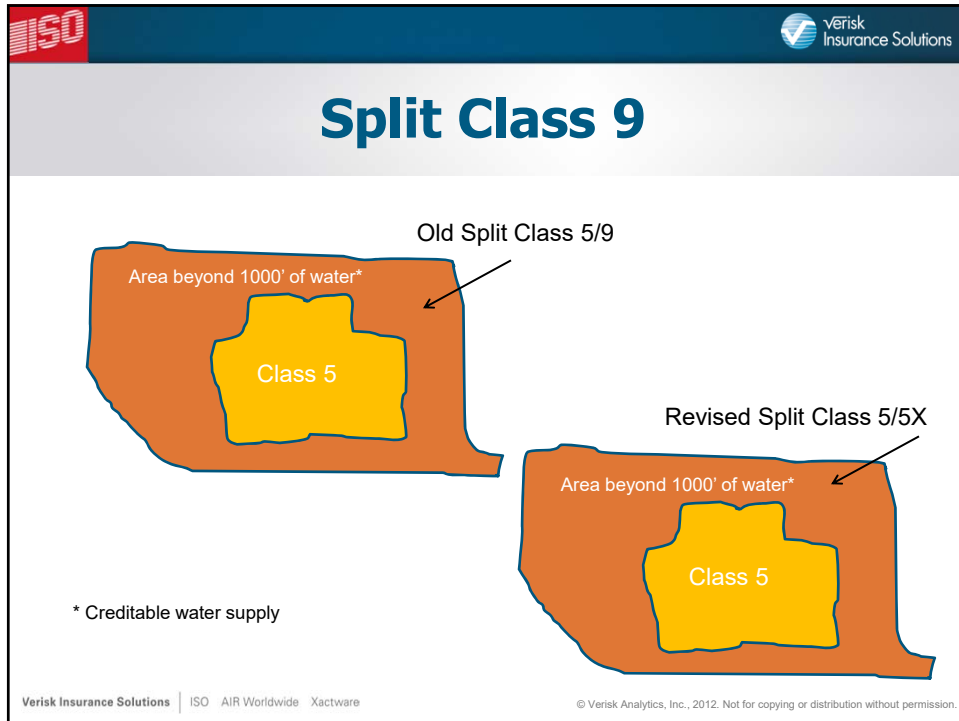





Split Class 9 and 8B

| Prior Classification | New Classification |
|----------------------|--------------------|
| 1/9 | 1/1X |
| 2/9 | 2/2X |
| 3/9 | 3/3X |
| 4/9 | 4/4X |
| 5/9 | 5/5X |
| 6/9 | 6/6X |
| 7/9 | 7/7X |
| 8/9 | 8/8X |
| 9 | 9 |

| Prior Classification | New Classification |
|----------------------|--------------------|
| 1/8B | 1/1Y |
| 2/8B | 2/2Y |
| 3/8B | 3/3Y |
| 4/8B | 4/4Y |
| 5/8B | 5/5Y |
| 6/8B | 6/6Y |
| 7/8B | 7/7Y |
| 8/8B | 8/8Y |
| 8B | 8B |


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10 Water (10W)

- Actuarially those risks in communities
 - between 5 and 7 road miles of the responding fire station
 - and are within 1000' from creditable water
 - Have lesser fire severity than those risks over 7 miles even if they have water





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10 Water (10W)


- Properties between 5 and 7 road miles from the responding fire station
- within 1000' of a creditable water supply.
- Will receive a 10 Water or 10W class
 - This includes communities using hauled water or meeting class 8B criteria.

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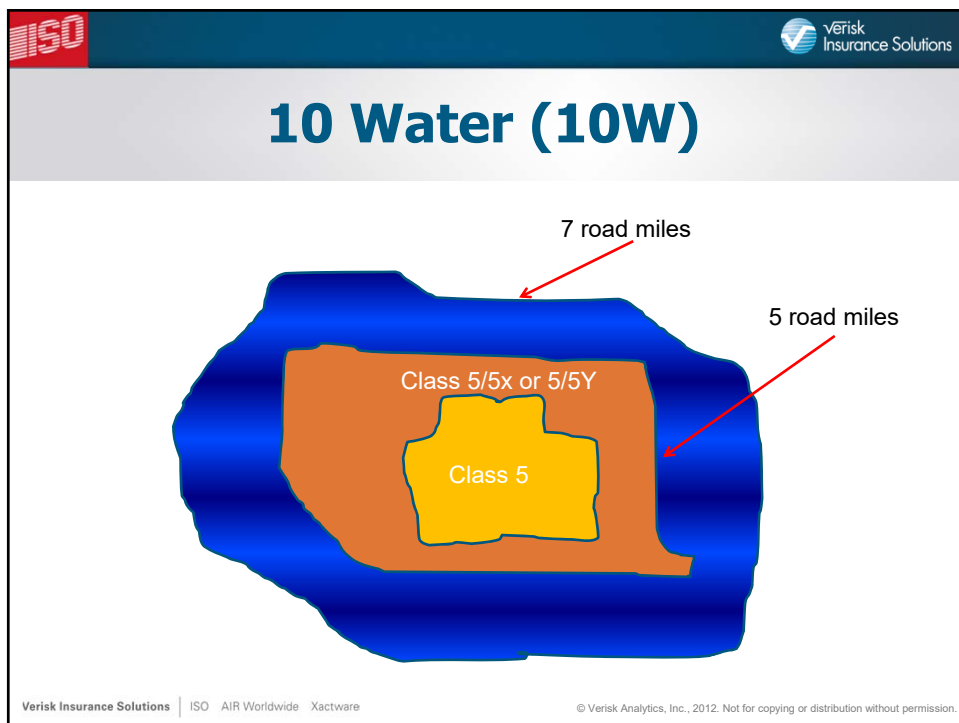
10 Water (10W)



- Based on that criteria ISO will be providing new relativities showing a 5% reduction for those properties that the following criteria
 - Are within 5 – 7 road miles from the responding fire station
 - Within 1000' of a creditable water supply



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ISO Public Protection Classification

Thank you for your attention.
Questions?



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Texas Addendum

- Compressed Air Foam System (CAFS)
- 1 additional point
- SCFM Compressor Minimum 125
- Class a Foam Pump Minimum 2.5 GPM
- Foam Tank Minimum 20 Gallons
- At Least One CAFS Engine must respond on ALL Structure Fires

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Texas Addendum

- Certification & Firemen's Training School
- 3.26 Additional Points in training, not to exceed 9 points total
- Certified Volunteers SFFMA or TCFP
- Attend the Texas A&M Firemen's Training School
 - Spring or Summer 1 week Class at College Station

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