

EXECUTIVE SUMMARY

WEB-BASED FIRE SYSTEM REPORTING PROGRAM

This voluntary program using an automated web-based interface with Fires2000 will extend the inspection cycle for qualified completely sprinklered buildings from 2 years to 4 years. There could be as many as 7,148 businesses affected by the program. It is more likely that around 5075 (71%) businesses in 462 buildings will participate due to the \$200 to \$250 costs of annual fire system inspections. Four years after the program inception it is estimated that the pool of CFIP inspections will be reduced by 522 per year reducing the existing pool from 8090 annual inspections to 7568 . The FMO will similarly reduce annual inspections from 11424 to 10250 (a 960 annual reduction after the 4th year). If current staffing is retained, the frequency shift will allow the FMO to dedicate 0.5 to 1 FTE Inspector to perform audits of system inspections and still have capacity to complete more than 480 lower priority inspections.

No additional ongoing costs are anticipated other than occasional Fires2000 programming by FIRE/BTS staff. All communication is intended to be by email keeping administrative costs low.

Benefits of the program are:

- Add equivalent capacity of 1 - 2 FTE Inspectors.
- Reduces the annual pool of CFIP by approximately 522 freeing companies for other activities if approved.
- Adds no ongoing costs.
- Focuses Inspection resources on less protected properties.
- Provides for up to 1 FTE Inspector to audit and monitor fire system inspection services provided by others.
- Is cost neutral or cost saving for a building (cost shifting from business to owner may occur).
- Highly automated adding few additional steps for Prevention business practices.
- First effort in web based business model for the Prevention Division.

Meetings with Inspection Contractors and Building Owners will be held if this program is approved.

Web based Fire System Reporting

UPDATE REPORT and DECISION PACKAGE April 1, 2010

PROGRAM DESCRIPTION:

Provide building owners the incentive of extended fire inspection cycle in buildings with complete fire sprinkler systems when annual NFPA 25 inspection and tests are performed on their fire protection systems.

PROGRAM NEED:

Fire Code requires an annual fire sprinkler test. The majority of businesses only perform tests when ordered to do so by the Fire Marshal.

At current staffing levels PF&R is unable to meet inspection goal of every business every other year. By moving 5,075 business inspections (35 million sq ft) from an inspection cycle of 2 years to 4 years PF&R can improve the inspection frequency of the remaining businesses.

PF&R relies on Inspectors to update the inspection system when an inspection report has been completed. Our records show inconsistent performance on our part.

FUNDAMENTALS:

The initial phase will include only automatic fire sprinkler systems but additional phases for fire alarm and fixed systems are anticipated if this concept proves successful.

This is intended to be a voluntary program on the part of Building Owners and participating Contractors.

To the extent possible all reporting, inspection database updating and notices will be automated.

See Attachment A for program details

FINANCIALS:

This program will generate at least 50% more revenue for each nonsprinklered business that is inspected that replaces the sprinklered inspection. It is assumed that instead of inspecting businesses in buildings that register for this program Inspectors will be inspecting the same number of businesses in non-sprinklered buildings⁽¹⁾. The average size of a business (PFI) in a sprinklered building is 2500 sq. ft. The following is a fee comparison for non-residential inspections:

AREA (SQ FT)	FEE-SPRINKLER	FEE-NON-SPRINKLER
2500	\$45	\$70
10,000	\$93	\$145

BTS has stated there will not be any ongoing costs to support the application. Any web changes will be billed at the hourly rate. BTS/PF&R staff will make changes to F2K as needed.

IMPACT ON INSPECTIONS:

There are approximately 38,600 inspections in the 2 year cycle. The FMO is responsible for about 22,400 and the remaining 16,200 are in the CFIP program. There are 7,148 inspections in completely sprinklered buildings that would be eligible for this program. Due to business choices it is estimated that about 5075 will take advantage of the extended inspection frequency and be part of this program. For planning purposes it is assumed the pool will ultimately consist of 1786 former CFIP inspections and 3288 FMO inspections. To avoid large peaks in “due” inspections every 4 years the program will limit the number of properties it will allow to register in each of the 1st 4 years. For planning purposes this limit is estimated at 446 CFIP inspections and 822 FMO inspections. This means up to 446 CFIP and 822 FMO inspections will be removed from “due” inspections each of the first 4 years. A leveling of inspections will occur in year 5 of the program. The following table summarizes the impact on inspections.

SUMMARY OF INSPECTIONS

	Total Inspections	Annual Due Pre-Program	Est. # Inspections In Program	Annual Due 4 yr after Program start (# in 4 yr cycle)
CFIP	16,180	8,090	1,786	6,750(446)
FMO	22,424	11,424	3,288	8,958(822)
TOTAL	38,604	19,514	5,933	9,633(1468)

Additional capacity of 411 inspections can be performed by the FMO in years 1-2 and 822 in subsequent years. This is approximately the workload of 2 FTE Inspectors. If one of these Inspectors performed inspections and the other audited the program this would reduce the current backlog by about 446 per year or 892 per 2 year cycle. The current backlog is 396 High and 6553 Medium and Low priority with 709 of these being over 4 years old. This program would allow the 4 year backlog to be eliminated in a 2 year cycle with steady progress of bring all inspections current (projection would be 14 years).

Supporting Data

Based on 2009 productivity records FMO Inspectors completed 8133 Reg and SO inspections. The average annual workload would be approximately 580 inspections, assuming the Division had 14 FTE Inspectors. The top 11 producers (2 of which were OT Inspectors only) have an average of 476 inspections and a median value of 467. Based on an average 475 inspections per Inspector the long term shift of 960 inspectors has the equivalent productivity of adding 2 FTE inspectors. A good alternative would be to use 1 FTE to audit the program and use the 2nd FTE for productivity. See Attachment B and C.

There are 648 buildings with complete fire sprinkler systems. These buildings contain businesses with the following inspection responsibilities:

Summary of Buildings w/ Complete Sprinkler Coverage

	# Businesses	Area (sq.ft.)	Fee
CFIP	2517	5,900,000	\$142,000
FMO	4,631	45,800,000	\$430,000

The industry cost for inspection and tests for small systems is from \$200 to \$250 per building for a single riser wet system. There would be no financial incentive for a building owner to participate in this program unless their biannual fire inspection fee was in excess of \$400. The following provides some idea of the number of buildings that fit that profile and therefore are deemed likely to participate in the program.

Buildings with Financial Incentive

AREA GROUP	# "AS" BLDGS	# BLDGS >\$400 FEE
<=10,000	39	9
10,001-52,000	358	212
52,001-104,000 ⁽¹⁾	125	125
>104,000 ⁽¹⁾	196	196
Total Bldgs	648	542 (83%)

(1) system inspection fees will be higher for multiple systems, multiple stories, and/or special system type. It is assumed but not verified that there will be economic incentive for these larger systems.

To balance future inspection cycles the program should only allow 1/8th the anticipated pool into the program in any given year. Assuming 83% of CFIP inspections would be done on a 4 year rotation, the following impact would occur:

Remove from CFIP: $(83\% * 2517) / 8 = 261$ inspectable occupancies/yr until stable.

Annual CFIP Impact (Reduce available)

Program YR	# Inspections
1-4	784
5+	522

Shift FMO from AS to NS: $(83\% * 4,631) / 8 = 480$

480 Insp shift to NS for Years 1-2, 960 for subsequent years.

NOTE: SUBSEQUENT REVIEW HAS DETERMINED THAT 71% OF BUILDINGS ARE MORE LIKELY TO PARTICIPATE IN PROGRAM VERSUS THE 83% THIS ANALYSIS IS BASED ON. THE PROGRAM IS STILL VIABLE WITH THIS REVISION.

ATTACHMENT A

Program Details

Eligibility

- Buildings with complete sprinkler coverage, except CORE to remain on 2 year cycle.
 - Exception: CORE's in buildings participating in the Facility Program are also eligible for 4 year cycle.
- Owner provides annual NFPA 25 Inspection of system from a certified individual using PF&R web-based reporting system and complete report forms. Completed forms to be retained at protected site.
- Systems maintained in compliance with NFPA 25. (all required maintenance and corrections completed).
- Water flow, supervisory and trouble signals monitored by an approved central station, remote station or proprietary supervising station. Fire Alarm Inspection and Test completed per PF&R criteria.

Operations

- Techs manage system. (Set up building and contractors, review status reports and report problems to Sr. Inspector or Auditing Inspector)
- .5-1.0 FTE Inspector assigned to audit the contractor's inspection procedures. This will be a good transition position into Plans.
- System Inspectors enter web reporting form when complete.
- Deficiency notice in F2K automatically generated when corrections needed. Inspector reviews and approves prior to printing and mailing.
- Failure to make corrections eliminates them from the program.
- Future expansion to Fixed Systems and Alarms is expected.