National Emergency Training Center
16825 S. Seton Avenue
Emmitsburg, MD 21727-8998

FEMA

R0200

Dear National Fire Academy Student:

By now you should have received an email notification from the National Emergency Training Center (NETC) Admissions Office. This notification indicates your acceptance into the U.S. Fire Administration (USFA), National Fire Academy (NFA) "Leadership Strategies for Community Risk Reduction" (LSCRR) course.

Congratulations on being selected into the USFA's/NFA's LSCRR course. This course is designed to enhance knowledge and skills necessary to lead and manage fire prevention, community risk-reduction initiatives, illness prevention and health promotion at the local level. This course will give students tools and techniques to raise the level of importance for prevention within their organization. The course will demonstrate how fire prevention and other risk-reduction initiatives can benefit them directly and individually in providing a safer work environment. Students will be guided through a process that shows how to strategically build support internally and externally for community risk reduction, the steps and activities necessary to sustain programs, and how these come together to create effective risk-reduction programs. The ultimate goal of the course is to develop fire and EMS leaders and managers who are committed, in word and deed, to comprehensive multi-hazard community risk reduction.

There is a graded pre-course assignment attached, which is a prerequisite for attending this course. You are to bring the completed assignment with you to class.

This class is a six day class which starts on Sunday at 8 a.m. Subsequent classes will meet daily from 8 a.m. to 5 p.m., with evening classes possible.

The course materials for this course are now available in a Bring Your Own Device (BYOD) format which will function on any electronic device. If you own an electronic device (laptop computer, tablet, etc.) and are familiar with its document reader functions, we are asking you to download the Student Manual (SM) **before you travel to Emmitsburg** and bring the preloaded device with you. Please see the page following this letter for complete instructions on successfully downloading your course materials. Please note: If you plan to bring/use an iPad, you may experience issues saving/storing/printing course assignments since there is no USB/thumb drive capacity for these devices.

The NFA classroom environment is computer based. Increased numbers of students and instructors are bringing laptop computers or other electronic devices to campus; you are responsible for the security and maintenance of your equipment. The NFA cannot provide computer software, hardware (which includes disks, printers, scanners, monitors, etc.), or technical support for your device. For your convenience, we do provide surge protector power strips at each classroom table.

Should you need to access the Student Computer Lab, it is located in Building D and is available for all students to use. The lab is open daily with a technician available Monday through Thursday from 1700 to 2100 (5 p.m. to 9 p.m.) and on Saturdays from 0800 to 1200 (8 a.m. to noon). The lab uses Windows 7 and Office 2013 as the software standard.

If you need additional information related to your course's content or requirements, please contact Mr. Michael Weller, Fire Prevention Management Curriculum Training Specialist, at (301) 447-1476, or by email at michael.weller@fema.dhs.gov.Good luck, and I hope to see you on campus.

Sincerely,

Eriks J. Gabliks, Superintendent
National Fire Academy
U.S. Fire Administration

Enclosures

National Fire Academy Bring Your Own Device (BYOD)
Course Materials/Download Instructions

The **first step** is to download ADOBE Reader to your device. This will enable you to read and manipulate the course materials. ADOBE Reader can be used to comment and highlight text in Portable Document Format (PDF) documents. It is an excellent tool for note-taking purposes.

For Laptops and Computers

ADOBE Reader can be downloaded from www.adobe.com/downloads/. It is a free download. Please note that depending on your settings, you may have to temporarily disable your antivirus software.

For Tablets and Other Similar Hand-Held Devices

ADOBE Reader can be downloaded onto devices such as iPads, android tablets, and other hand-held devices. ADOBE Reader for these types of devices can be found in the device's Application Store using the search function and typing in "ADOBE Reader." Follow the instructions given. **It is a free application.** Note: In order to have the editing capabilities/toolbar, the document needs to be "opened with ADOBE Reader." There should be a function on your device to do this.

After you have successfully downloaded the ADOBE Reader, please use the following Web link to download your R0200, "Leadership Strategies for Community Risk Reduction" (LSCRR) Student Manual (SM). (You may copy/paste this link into your Web browser.)

https://nfa.usfa.fema.gov/ax/sm/sm_r0200.pdf

Note: Please make sure you download the ADOBE Reader first. To open the SM, you will need to open the ADOBE Reader and then open the SM through the ADOBE Reader in order for the note-taking tools to work properly.

If you need assistance, please contact nfaonlinetier2@fema.dhs.gov.

April 2018

R0200

“Leadership Strategies for Community Risk Reduction”

Pre-Course Assignment Workbook

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Introduction to "Leadership Strategies for Community Risk Reduction"

Welcome to "Leadership Strategies for Community Risk Reduction" (LSCRR). LSCRR is a six-day adapted version of "Executive Analysis of Community Risk Reduction" (EACRR), the second year Executive Fire Officer Program (EFOP). This course was created in response to requests from non-Executive Fire Officers (EFOs) who are responsible for developing, leading and evaluating risk-reduction initiatives in their communities, specifically at the company level. Students examine their communities' leading risks and identify determinants that may challenge mitigation. LSCRR culminates with students designing a plan to overcome potential obstacles and facilitate a successful risk-reduction outcome.

Since successful community risk reduction requires use of combined preventive interventions, the target audience for LSCRR is broad. Chief officers, Company Officers (COs), public educators, inspectors, plan reviewers, fire marshals, and investigators are ideal candidates.

The goal of LSCRR is to develop leaders in comprehensive multihazard community risk reduction. As an LSCRR class member, you will apply a strategic process to address risk challenges present in your home community. While a primary focus should be placed on your **local** fire problem, it is prudent to consider two overall categories of challenges:

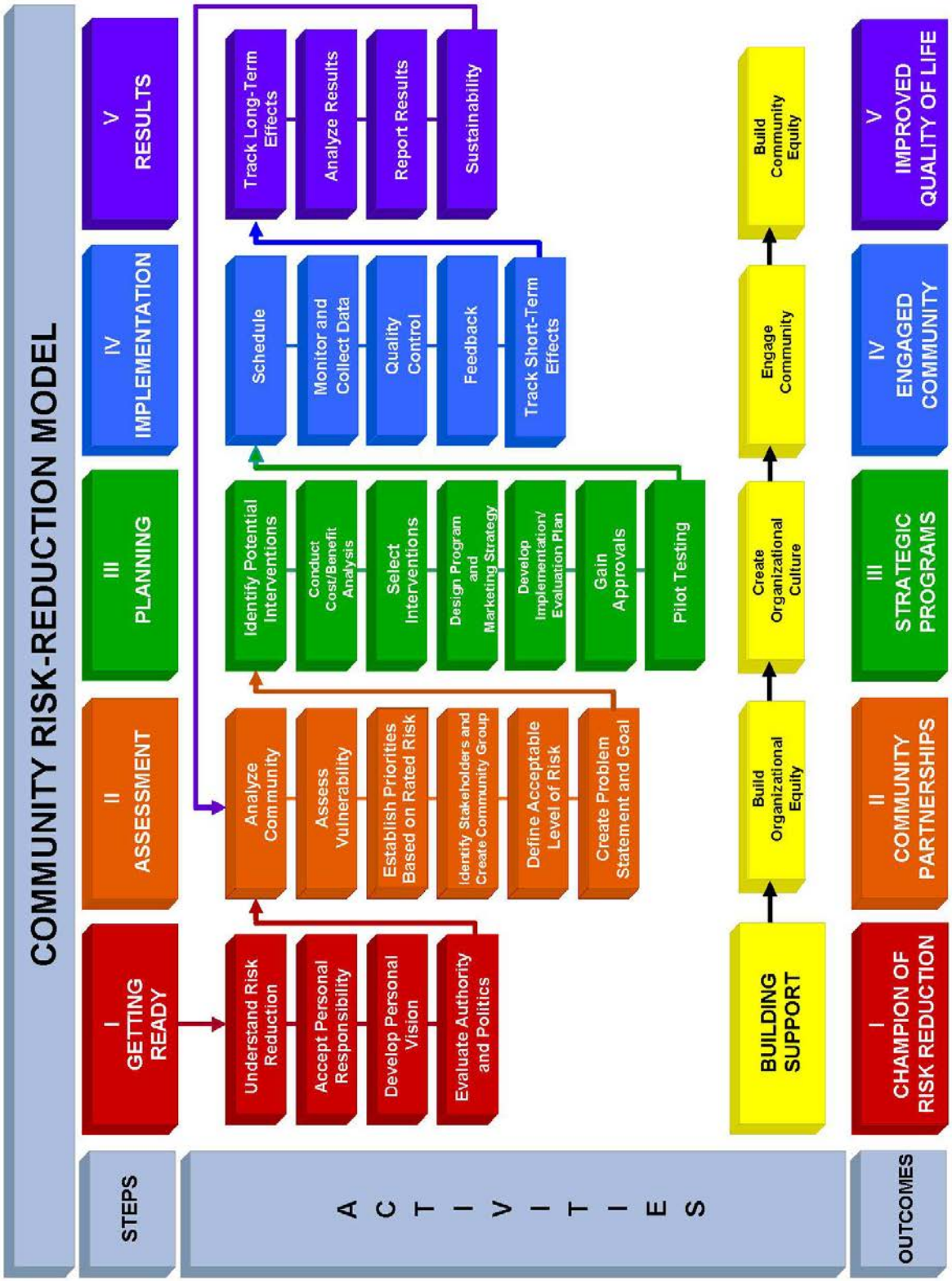
1. Man-made and naturally occurring risks that affect your community on a regular basis. Examples include fires, preventable injuries, and frequently occurring forms of severe weather.

2. Man-made or naturally occurring risks that may only happen once every five, 10 or even 20 years **but** have the **potential** for a devastating outcome. To qualify for this category, the risk should have affected your community in the past or be a major emerging issue. Examples include major hazardous materials release, domestic terrorism, hurricane, earthquake, etc.

The process of addressing your local risk(s) begins with pre-course research, continues through guided practice while at the National Fire Academy (NFA), and culminates in actions implemented upon returning home. The ultimate goal is for you to implement a plan to reduce preventable occurrences and/or mitigate loss from risks that cannot be stopped.

To be effective at leading a risk-reduction process, you must understand both your community **and** organization. LSCRR will help you develop that understanding and create a strategy of how to effectively reduce risk in your home community. LSCRR goes beyond simply teaching skills. The course provides insight into the steps necessary to carry out a successful community risk-reduction process. Further, it is designed to impart a set of specific key concepts and attitudes that are needed to lead the community risk-reduction process.

Examine and become familiar with the nationally recognized Community Risk-Reduction Model (located on the next page). The model outlines the process needed to build a successful community risk-reduction strategy. The LSCRR course promotes use of this model. The model will be used throughout the entire course.


COMMUNITY RISK-REDUCTION MODEL
STEPS
I GETTING READY
II ASSESSMENT
III PLANNING
IV IMPLEMENTATION
V RESULTS
Understand Risk Reduction
Accept Personal Responsibility
Develop Personal Vision
Evaluate Authority and Politics
Analyze Community
Assess Vulnerability
Establish Priorities Based on Rated Risk
Identify Stakeholders and Create Community Group
Define Acceptable Level of Risk
Create Problem Statement and Goal
Identify Potential Interventions
Conduct Cost/Benefit Analysis
Select Interventions
Design Program and Marketing Strategy
Develop Implementation/ Evaluation Plan
Gain Approvals
Pilot Testing
Schedule
Monitor and Collect Data
Quality Control
Feedback
Track Short-Term Effects
Track Long-Term Effects
Analyze Results
Report Results
Sustainability
A C T I V I T I E S
BUILDING SUPPORT
Build Organizational Equity
Create Organizational Culture
Engage Community
Build Community Equity
OUTCOMES
I CHAMPION OF RISK REDUCTION
II COMMUNITY PARTNERSHIPS
III STRATEGIC PROGRAMS
IV ENGAGED COMMUNITY
V IMPROVED QUALITY OF LIFE

KEY CONCEPTS FOR RISK-REDUCTION LEADERS

- Risk is influenced by social and economic issues. If community risk reduction is to be effective at improving community vitality, the community risk-reduction process must address socioeconomic issues.

- Risky behaviors result in consequences (e.g., residential fires, car crashes involving drunk drivers, etc.). These consequences are the events to which fire departments and Emergency Medical Services (EMS) agencies respond on a daily basis. Therefore, the purpose of community risk reduction is to prevent or minimize these events.

- Any effective community risk-reduction strategy integrates emergency response; code enforcement; legislative processes to adopt codes, standards, and prevention-related ordinances; plans review and design; fire and life safety education; public information and relations; risk-reduction-related economic incentives; and other mitigation activities.

- Prevention and response functions within an organization must be integrated into one team. In many organizational cultures, the prevention function is viewed as separate and distinct from the response mission. In fact, **both response and prevention have the same goal: prevent or reduce harm to the public from fire, preventable injuries, etc.** Same mission. Same team. Same organization. Same community. The synergy that results from integrating operations and prevention makes both functions considerably more effective.

- Risk is a community problem. The process of community risk reduction also must involve the community: its leaders, its groups, its neighborhoods, etc. Any community risk-reduction process that fails to engage the community and its citizens is doomed to fail.

- There may be some communities where an emergency organization is unable to gain community endorsement for a risk-reduction process. However, **every** organization can apply the process to create a culture that embodies the philosophy of community risk reduction. Then the organization is prepared when an opportunity for community change occurs.

- Community vitality is the product of numerous factors, including the absence of fires, absence of injuries, physical health, economic health, etc. A community risk-reduction process must apply risk management to all those areas that affect community vitality. This includes fires, injuries, terrorism, natural hazards, social crises, and environmental hazards.

PRE-COURSE ASSIGNMENT

Introduction

While LSCRR is not an EFOP course, its content remains at a high level — and for good reason. Through pre-course readings, you will discern that one of the reasons why the United States fire problem is far worse than in many developed countries is because a great number of our communities fail to dedicate adequate resources and strategically address their local issues effectively.

LSCRR will empower you with the knowledge and skills to make effective modifications to your community's risk-reduction strategies. This process will require a significant commitment on your part. It begins with the pre-course assignment.

Completion of this graded pre-course assignment is mandatory for acceptance into LSCRR. Information from the assignment will be used to process in-class activities and ultimately develop a draft plan for a risk-reduction initiative that can be used in your home community. The term "home community" refers to your fire department and the community it protects.

Some of the material you will explore dates back several years, or even decades in the case of the original "America Burning." The pre-course assignment for LSCRR is comprehensive because reducing and mitigating community risk is our industry's **ultimate** responsibility. Accomplishing the task successfully demands a strong foundation of knowledge. This knowledge base will be developed through completion of the pre-course assignment and LSCRR experience.

You will be collecting and analyzing a considerable amount of **local** data as part of the pre-course assignment. It is permissible (and encouraged) to have colleagues or staff assist you with data collection and interpretation. Please check with colleagues who have recently, within the last year, attended an NFA risk-reduction course. They may be able to help you with data collection. Save the data you collect on your community since you may be able to use it as a baseline, should you attend future risk-reduction courses.

You should budget approximately one month of intermittent development time for completing the pre-course assignment. There are six parts to the assignment. Directions are provided that identify the depth of effort you are expected to put into each part. Each of the assignment's sections includes an estimate of the minimum amount of time you should budget to complete the directives. The actions you need to take are in highlighted blocks and noted as action items. Before you begin, here is a general **overview** of what you will be doing:

- Part 1 involves perusing the seminal document in fire prevention entitled "America Burning." After looking over the highlights of the report, you will develop speaking points so you can discuss your views on how well America has reached the goals set by this landmark document. You will also explore what is being offered by one of today's "go to" resources for community risk reduction: Vision 20/20.

- Part 2 entails identifying the knowledge, attitudes and values your department has towards community risk reduction. You are asked to identify risk-reduction programs offered by your department. This section also seeks to identify how well your department and community supports risk reduction.

- Part 3 involves developing a demographic overview of your service area.

- Part 4 requires exploration of the man-made and naturally-occurring risks that are impacting your service area. This section is the most labor-intensive of the overall assignment. It also includes several action items.

- Part 5 will entail exploration of a web-based tool that uses Geographic Information System (GIS) data to compare the occurrence of structure fires to neighborhood economic characteristics. It also requires you to describe a high-risk location within your service area.

- Part 6 asks you to sign up for Fire is Everyone's Fight™.

The pre-course assignment is a graded assignment worth 100 points. Here is how you will be evaluated:

Assessment Area	Assessment Criteria	Points Awarded
Part 1 — Peruse the "America Burning" report. Respond to the two questions listed in action item one.	Bulleted responses to both questions are provided.	_____/20
Part 2 — Identify the knowledge, attitudes and values your department has towards community risk reduction. Identify risk-reduction programs offered by your department. Explain how well your department and community supports risk reduction.	Bulleted responses are provided for all directives listed in this section.	_____/20
Part 3 — Define your community/service area and its associated demographics.	Bulleted responses pertinent to demographics are provided for all directives listed in this section.	_____/20

Assessment Area	Assessment Criteria	Points Awarded
Part 4 — Analyze problem-related data.	After analyzing response data, a profile of at least three types of risk issues is created. Where a student is unable to gather the requested data for analysis, an explanation is provided in writing as to why the data could not be obtained.	_____/20
Part 5 — Explore high-risk sections of the service area.	Problem and people-related data is explored. A potential high-risk area is identified and explained.	_____/20

The written components of your assignment should be word processed, saved and brought with you to the NFA on your laptop computer (or other portable device). You should also store your work on a thumb drive that is no larger than 8 gigabytes (GB), and bring it with you to the NFA.

So we can grade your work, please print a hard copy of the written components of the assignment. You will submit it to the instructors on the first day of class. The assignment should be placed in a binder or notebook and divided into sections. **Note:** You do not have to print massive spreadsheets of response data. Simply bring those files with you in electronic format, as you will be using them in class.

We realize that some of the information asked for may be challenging to obtain. Please do your best to obtain the data, as it will build the foundation for a risk assessment of your community and service area. The instructors want to see that you put forth a good faith effort in obtaining the information to the best of your ability.

PART 1: EXAMINATION OF AMERICA'S CONTINUING FIRE PROBLEM

Estimated time to budget for completion of this section: two hours.

Information from this section will be used in Units 1 and 2.

Reading Assignment — "America Burning"

The U.S. is the most prosperous developed country in the world. Yet, current fire experience data identify our national fire problem as one of the worst among developed countries.

One factor contributing to our stagnant fire loss rates is the fire service's failure to address risk reduction in a strategic manner. While many departments have excellent public education programs, a more strategic approach that includes combined prevention interventions is needed.

To understand progress made and challenges yet to be conquered, please access the original "America Burning" report at https://www.usfa.fema.gov/downloads/pdf/publications/fa-264.pdf. Although the document is lengthy, please look over its content. Be sure to read the "What this Report is About" section in the introductory area, Page X.

Action Item 1: "America Burning"

As you look over the "America Burning" report, please reflect on the following questions, and create a few bullet-point responses so you are prepared discuss them in class. These notes should be submitted as part of the pre-course assignment.

Writing Assignment:

1. How well have we met the recommendations made as part of the "America Burning" report?

2. Has America as a country (and we as an industry) grown to accept that close to 3,000 people and over 100 firefighters will die in fire-related incidents each year?

Website Review Assignment — Vision 20/20

Throughout history, many national plans for fire protection have had a great deal in common. President Truman's 1947 "Report on Fire Prevention," the landmark report "America Burning" (first completed in 1973), and subsequent national reports from Wingspread, Solutions 2000 and others, focused on a common theme of increasing efforts in fire prevention as a key component to solving the fire problem in the U.S.

It is unfortunate, but today, still, fire safety efforts continue to be underfunded and understaffed in almost all fire departments. The result is a continuing fire problem, loss of life and property damage that may not occur under a different approach of "prevention first."

With funding from the U.S. Department of Homeland Security Assistance to Fire Fighters Fire Prevention and Safety Grant program, the Institution of Fire Engineers U.S. Branch established a steering committee comprised of noted fire service and related agency leaders to guide a national strategic planning process for fire loss prevention. The overall goal is to create a national plan that will coordinate activities and fire prevention efforts. The project is known as Vision 20/20: National Strategies for Fire Loss Prevention.

Vision 20/20 involves a large number of participants representing all areas of fire prevention, as well as other advocates and stakeholders. The project is committed to action; it focuses on several strategies that stakeholders are asked to support.

Thanks to strong support, the Vision 20/20 project continues to thrive. In addition to fostering strategic approaches to prevention, national conferences featuring best practices in fire risk reduction have been held. Additionally, the project is constantly creating free resources to support prevention strategies at the local level.

Action Item 2: Vision 20/20

Please visit http://strategicfire.org/ and peruse the contents of the site. More on Vision 20/20 will be featured as part of the LSCRR course when you are at the NFA. **Note:** There is no writing assignment here. Go to the website, and explore what is being offered to our industry.

PART 2: YOUR DEPARTMENT AND RISK REDUCTION

Estimated time to budget for completion of this section: four hours.

Information from this section will be used in Units 1, 4 and 5.

The ability to lead a strategic risk-reduction process is a skill that must be possessed by champions of risk reduction. LSCRR will help you build that skill set.

A successful risk-reduction process begins with a leader's vision. It advances through local data analysis and risk-reduction planning. It culminates in sustainable actions that are evaluated for success and modified according to need. Many of America's safest communities owe credit to graduates of the NFA who have helped design and implement a comprehensive risk-reduction strategy that focuses on local needs.

Action Item 3: Your Department and Risk Reduction

To build background information for several LSCRR activities, please respond to the following directives. These notes should be submitted as part of the pre-course assignment.

Writing Assignments:

1. Risk-reduction strategies are created most effectively when the entire organization understands the level of natural and man-made risk that faces the community. Line staff, midlevel management, executive officers, and administrative and political decision makers need a fact-based rationale of **why** they should provide tangible support to reducing risk. In your opinion, how knowledgeable is your internal constituency about current and potential risk issues in the local community? **Please create speaking points so you are prepared to discuss each of the following groups during an NFA activity.**

    a. Line staff (rank and file members).
    b. Midlevel management (station-level and battalion officers).
    c. Executive officers (assistant and deputy chiefs).
    d. Chief of department.
    e. Administrative leadership (city administrator).
    f. Political leadership (council, commission, board of aldermen).

2. Attitudes and values drive behaviors. In your opinion, what are the attitudes and values of your internal constituency about supporting risk reduction? **Please create speaking points so you are prepared to discuss each of the following groups during an NFA activity.**

   a. Line staff (rank and file members).
   b. Midlevel management (station-level and battalion officers).
   c. Executive officers (assistant and deputy chiefs).
   d. Chief of department.
   e. Administrative leadership (city administrator).
   f. Political leadership (council, commission, board of aldermen).

3. How well has your organization supported the institute of risk reduction as a core value? **Please help justify your answer by including the following information:**

   a. Does your organization's mission statement include prevention as a core objective? Please note the mission statement.

   b. What level of resources (attention, time, people, and money) does your organization invest into risk reduction?

      - What percentage of the department’s budget is spent on risk-reduction programs?

      - Who is responsible for managing the community risk-reduction efforts?

      - If you lost prevention-related positions over the past decade, how has it impacted your organization, and what is your organization doing about it?

   c. How well does your organization support the mission of your city or community?

4. Champions of risk reduction need baseline knowledge of risk-reduction initiatives currently in place within their home community. **Please come to the NFA prepared to discuss the school- and community-based risk-reduction programs that your organization is currently involved with. Create a list of the programs.**

   You should be prepared to explain how the efforts are evaluated and what the evaluation has shown. This includes that ability to discuss (in measurable terms) the outreach, impact, and outcome that have been created by your organization's school- and community-based programs.

Note: Outreach measures the number of people being served by your initiatives. Impact indicates the changes in knowledge, behaviors, and living environments that your initiatives have helped to facilitate. Outcome measures how your work has affected the occurrence of preventable risk in the community.

During class, you will offer your opinion of (and justify) how strategic your overall community risk-reduction effort is. You will then develop a personal vision for what your organization should or could be doing as part of an overall community risk-reduction strategy.

5. What are the current risk reduction priorities of your department?

6. How do local decision-makers view your department?

7. What does the community at large think of your department?

8. How does your department engage decision-makers and the public so your department receives an adequate level of support?

9. What public and private partnerships does your organization have that are helping to support risk-reduction efforts?

PART 3: BUILDING A DEMOGRAPHIC PROFILE OF YOUR COMMUNITY

Estimated time to budget for completion of this section: two hours.

Information from this section will be used in Units 1, 2 and 3.

Background Information

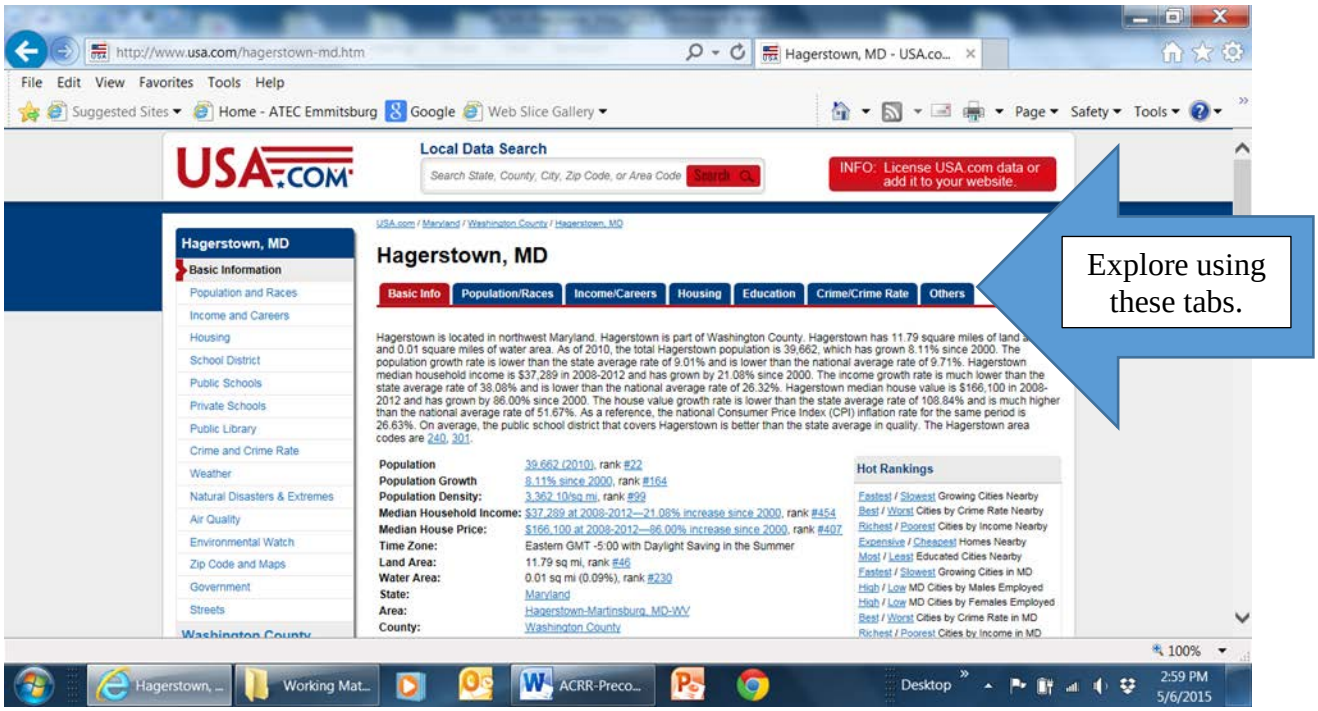
A logical first step in the risk-reduction assessment process is the ability to succinctly explain the demographics of your community as a whole. Think of this as being able to explain to a stranger, within two minutes, what your community looks like. **This assignment is not a major writing activity. Simply create notes, so you can articulate the demographic characteristics of your community as a whole. Note:** The term "community" applies to the total area that your department protects, **not** where you personally reside. You should be able to accomplish this task whether you are representing a city, county, township fire-protection district, or exploring the demographics of a firehouse (or battalion) service area.

A good web-based tool to help you build a brief but informative demographic profile can be found at http://www.usa.com/. This site provides up-to-date demographic information from the U.S. Census Bureau. Data for the Decennial Census is collected by the Census Bureau every 10 years. Data from the Decennial Census is used to determine congressional districts and the number of people who live in a community.

First, let's look at an example of how to get demographical information for a city or community as a whole.

You simply go to the website, search for your city, and click on the basic information tab. Next, explore what is available under the other categories, such as population/races, income/careers, etc. An example screenshot featuring Hagerstown, Maryland, is displayed on the next page.

Note: When initiating the search, please use your city or county's name followed by the abbreviation for your state (MD, PA, etc.).



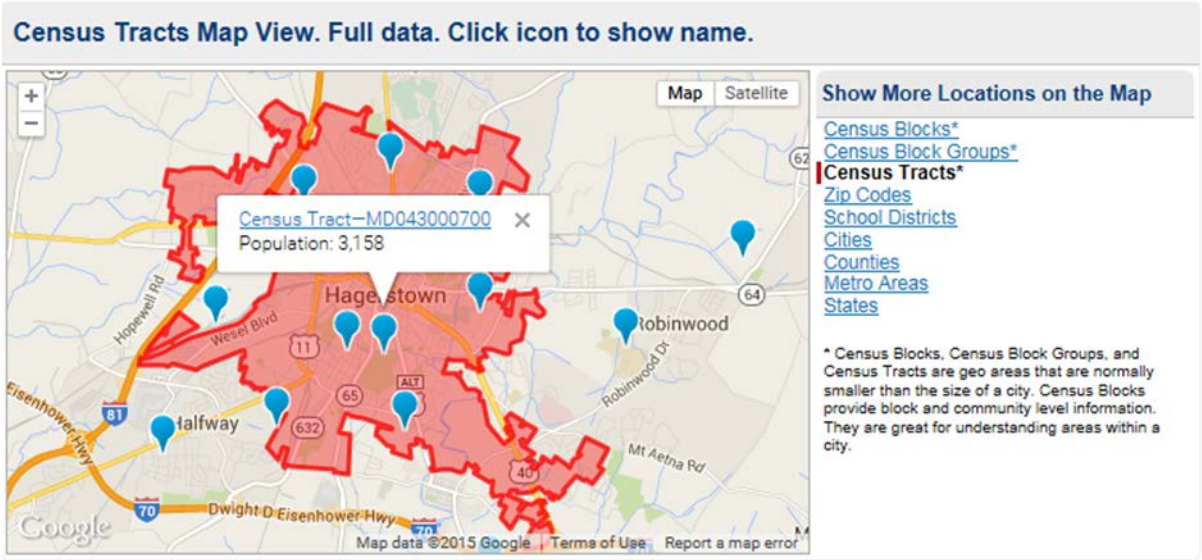
Stop and explore your city or community demographics as a whole to gain practice using the tool.

Let's continue with the next step. A second type of census, the American Community Survey (ACS), is an ongoing task of the Census Bureau. The ACS is mailed to over 3 million U.S. residents annually. The Census Bureau's goal is to survey each U.S. resident every seven years to create demographic profiles of local communities. ACS data is important to risk-reduction specialists because it provides information about where and how people live.

Data from the ACS allows us to explore demographic data both communitywide and by census tracts. Census tracts are defined geographical areas within a city, town, county or village.

Census tracts generally have a population size between 1,200 and 8,000 people, with an optimal size of 4,000 people. Each tract carries a numerical identification. The number of census tracts that are in your community is based upon its size and population. The size of the tract is related to the number of people living there. You may be from a geographical area that has anywhere from a few (rural area) to hundreds of census tracts (urban city).

To drill down on smaller parts of specific geographical area, census tracts can be divided further into census block groups and then into individual blocks. A census block group is a geographical unit that's between the size of a census tract and a census block. A block group is the smallest geographical unit for which the bureau publishes sample data (i.e., data which is only collected from a fraction of all households). Typically, block groups have a population of 600 to 3,000 people. A census block is the smallest geographic unit used by the bureau for tabulation of 100-percent data (data collected from all houses, rather than a sample of houses). In an urban city, census blocks are often as small as one or two city blocks. Let's look at an example:



Recall the first screen shot example from Hagerstown, Maryland. What you see above is a screen shot displaying the bottom of the basic information page. We have clicked on the census tract field shown on the right side of the screen. The example is displaying the number of census tracts in Hagerstown. The red shaded area represents the corporate boundary of the city. Each blue balloon represents a census tract.

The only way to become proficient at using this tool is to practice with it. While it may appear a little intimidating as you begin practicing, this tool is very user friendly. You should take some time to explore your city or community in a magnified scale.

Begin by searching for your city. Remember to use the state abbreviation, such as “MD” or “PA.” A map will be displayed showing the outline of your city. Go to the right side of the screen, locate the cities tab, and click on it. On the map, there should be a blue balloon identifying your city and the incorporated towns around it. There will also be a red dash beside the city category on the right side of the screen.

Next, locate the census tract feature, and click on it. You should see a display similar to what is displayed on the Hagerstown screen shot above. **Note:** If you are searching an urban city, do not panic when you see a huge amount of blue balloons. Hagerstown has a population of 39,000. The larger the city, the more census tracts there are. Simply drill down on the area you wish to explore by clicking on it or using the +/- zoom feature.

Find the census tract or tracts that represent the area you wish to explore. Click on the blue balloon for the census tract, and then click on the underlined link. You will notice the census tract area is highlighted, and there is an option to click on the purple balloons for census block groups. **Don’t click on the block groups yet.** Stop and explore the demographics of the census tract first. Clicking on the map will give you a larger view of the area, including street names.

Next, click on one of the purple block group balloons. The area will enlarge on the screen and then give you balloons for block groups. Use the same process as listed above to explore the block group you want to look at. **Caution: Don't click on the green balloons yet, as they will take you to individual blocks.**

Once you have explored the block group, click on one of the green balloons, and start exploring at the individual block level.

Note to our friends representing a Fire Protection District: In addition to census tracts, you may wish to explore data by zip code because of the size and geographical layout of your district.

Action Item 4: Demographic Profile of Community

This is not a major writing activity. Simply create notes so you can articulate the demographic characteristics of your city/community **and** your particular service area. Include these notes as part of your pre-course assignment so the instructors can review them.

Note: If you are currently serving in a position that provides communitywide services, respond to the directives from a global perspective. If you are serving at the firehouse or battalion level, please respond from a service area perspective.

Writing Assignment: Please build and be prepared to present a brief profile that includes the following:

1. Total geographical and population size of your city, community or district.
2. The geographical and population size of your specific service area, if smaller than citywide.
3. Presence and distribution of races, cultures, age groups, etc. present in your service area.
4. Economic drivers that support the community's tax base, such as key businesses, industries, sports complexes, etc. located in your service area.
5. Social issues that challenge your service area, such as poverty, educational levels, crime/violence, gangs, substance abuse, etc.
6. The presence and distribution of high-risk populations in your service area, such as young children under age five, older adults age 65+, people with disabilities, people impacted by poverty, and those who speak no or limited English.
7. Other high-risk conditions, such as aging buildings, high-density housing, absentee landlords, building construction types, and key target hazards.
8. Any other demographic that is unique to your service area.

PART 4: BUILDING A RISK PROFILE OF YOUR COMMUNITY

Estimated time to budget for completion of this section: at least eight hours.

Information from this section will be used in Units 1, 2 and 3.

Building a community risk profile is another initial step in risk-reduction planning. Unfortunately, it is a step often overlooked or mishandled. While the risk-reduction leader is not expected to be a social scientist or front-line practitioner, he or she needs an understanding of how to build a profile of his or her community's risks. This knowledge is essential to directing a comprehensive risk-reduction process.

Risk issues are generally explored in two categories:

1. Man-made incidents, such as fires, preventable injuries and intentional acts of violence.

2. Naturally occurring events, such as violent weather and its associated impacts.

Since you are attending an NFA course, obviously the academy wants you to have background information about the fire problems impacting your community. In addition, if your community provides EMS, you should also come with data so your fire problems can be compared with medical responses. The same holds true if your community is in an area that is impacted by severe weather, and there is a history of major or frequent events.

Building an accurate and objective risk profile of a community takes time and effort. Accurate means that you need good data; objective means you need enough of it. Before you begin searching for data, a logical first step is to find out if your department has ever completed a communitywide risk assessment.

Check with your organization's senior leadership, and find out if your department has ever conducted a community risk assessment. If yes, you should find out what specific risk issues were identified and what your department is doing to address them. (That was asked of you during Part 2 of this assignment.)

Unfortunately, many fire departments have limited or no experience with community risk assessment. Whether your department has or has not done a risk assessment, the following section is critical since you will be prioritizing a risk, population(s) and service area to address as part of the LSCRR course.

Part of the NFA learning experience is for you to discover the abilities, strengths and weaknesses of your data collection systems. Without good data, it can be very hard to objectively drill down to the nitty-gritty and prioritize risks that deserve attention. This is particularly true when an incident type is slowly rising over time.

Please do your best on this next action item since you may find that obtaining what is being asked of you may turn into a challenging process. You'll need to come to the NFA with an objective profile of **at least three and no more than five risk issues** that **could be considered** a potential priority to address. You will make a decision during class on what risk to focus on for your final course project.

To determine the risk issues that are worthy of priority consideration, you should explore the following:

- How often the incidents occur.
- Are the numbers of incidents rising, falling or remaining steady?
- Where the incidents are happening, and who they are impacting.
- The cost of the incidents — in terms of loss of life, injuries and property damage.
- The overall impact on the quality of life of people and vitality of the community.
- The cost to your department for providing service caused by the incidents.

You are encouraged to explore risks that you (in your present position, such as a CO, senior officer, public educator, inspector, investigator, etc.) have responsibility for doing something about by getting involved at some level.

Gathering a broad spectrum of evidence on the risks you explore will make it easier to select a specific risk to focus on during the LSCRR course. **Note:** You do not have to, and should not, build this profile alone. Seek help from others within your department who have the data. Also, to help you create this profile, talk with those who respond to and/or investigate incidents.

National Fire Incident Reporting System Data Assignment

Find out who is in charge of collecting and reporting your department's National Fire Incident Reporting System (NFIRS) data to your state coordinator. Meet with this person, and ask him or her to build you an NFIRS incident response profile that identifies the following:

- The types and frequency of incidents your department responds to. Have your NFIRS officer run a series of Tally by Incident Type reports. If you are from a large department that responds to lots of incidents, run this report for **each** of five years so you can identify if the various types of incidents you respond to are rising, falling or remaining steady. If you are from a smaller department, you should explore up to 10 years of data. In either case, you need several years of data so a baseline is created. A copy of what this report should look like is attached as an appendix to this assignment.

Next, because NFIRS data only reflects the incidents handled by your department as a whole, it is important to seek information from your department's Records Management System (RMS), so you can drill down to what's happening in the station response areas. Most departments use a third party's RMS software like Firehouse, FIRE RMS, or others.

Records Management System Data Assignment

Ask your data collection supervisor to provide data from your department's RMS (if you have one), and perform the following actions:

- Examine the types and frequency of incidents your department (as a whole) responds to. As with the NFIRS data, collect one-year summaries for a five- to 10-year period, so you have a dataset to work with.

- Compare this set of data with NFIRS data to explore if any gaps or discrepancies in reporting are identified. If you discover any issues, be prepared to discuss your challenges when you come to the NFA.

- Next, use your RMS data, and attempt to get specific on the types and causes of residential structure fires that your department (as a whole) responds to. Try to build a profile that will show the number of incidents, injuries, deaths and property loss per type of structure fire, such as cooking, heating, smoking, arson, etc.

- If your department provides EMS, please generate a dataset that will allow you to explore the types and frequency of EMS calls your department (as a whole) responds to. As with fire data, try to get specific, so you can track motor vehicle collisions, falls, cardiac-related incidents, overdose, poisoning, etc. Local hospital and state health department data can help build a profile of preventable injury events, such as falls, motor vehicle collisions, poisonings, assaults, etc.

  Caution: Try to avoid putting your data into huge categories like building fires, preventable injuries, weather-related, etc. **Attempt** to get specific, and identify the types of fire incidents: unattended cooking fires, portable heater fires, smoking-related, youth firesetting, arson, etc. Do the same for injuries: ground level falls, car crashes, pedestrians struck, overdose, poisoning, etc.

  This is where you may encounter frustration and discover weaknesses in how your department is reporting/tracking incidents. Consider this question for discussion at the NFA: How can you drill down and identify incidents, such as cooking, heating and smoking-related fires, if these causes are only tracked as building or structure fires? The same holds true for EMS incidents.

  Don't give up here; simply do your best with what you have to work with. What the NFA expects is that you come to class being able to show, in good faith, that you have worked to identify/justify several risk issues that deserve your attention.

  Note: If you are unable to gather the requested data for analysis, you must provide an explanation in writing as to why the data could not be obtained.

Naturally Occurring Incidents

While the majority of man-made risks are preventable, naturally occurring events are not. Examples include severe weather, earthquakes, extreme cold/heat and drought. Although a community may not be able to prevent such events, loss can be greatly mitigated through a combination of preplanning, resource allocation, and citizen preparedness.

While not preventable, most naturally occurring risks are predictable. Coastlines are more vulnerable to hurricanes. The South and Midwest regularly experience tornadoes. More snow falls in the Northern portion of the country than in the Southern. Lightning-initiated wildland fires often occur in forests. Flash flooding can happen anywhere.

If naturally occurring risk issues are prevalent in your community, please create a profile of what happens, when, how frequently, where, who is impacted, and the overall costs associated with the risk(s) identified.

A good source for information on naturally occurring risks is the University of Colorado — Natural Hazards Center.

Look under the **Resources** tab to locate **Selected Web Resources** where you will be able to link to data on all-hazard issues.

Check it out. ⇩

https://hazards.colorado.edu/

Action Item 5: Risk Profile of Community

Writing Assignments:

1. Check with your organization's senior leadership, and find out if your department has ever conducted a community risk assessment. If yes, note what specific risk issues were identified, and what your department is doing to address them.

2. Create an objective profile of **at least three and no more than five risk issues** that **could be considered** as a potential priority to address. Create bullet point statements under each risk that provides justification of why you believe the type of incident should be considered. If you can, try to build a profile of where incidents occur most frequently in the community, and who they impact.

   Remember, for this action item, you are encouraged to explore risks that you (in your present position such as a senior or company officer, public educator, inspector, investigator, etc.) have responsibility for doing something about by getting involved at some level. You will make a decision during class on what risk to focus on for your final course project.

   In addition to exploring your data, talk to your fellow officers, firefighters and EMS providers. Ask those who serve with you their opinions of what constitutes the most pressing risk issue facing your department and the service area you cover.

   Note: You do not need to print out hard copies of data spreadsheets. Do, however, save your data on the computer (or other electronic device) that you will be bringing to the NFA. You will likely use this data during class, and instructors may wish to examine it.

PART 5: DRILLING DOWN TO THE SERVICE AREA/NEIGHBORHOOD LEVEL

Estimated time to budget for completion of this section: two hours.

Information from this section will be used in Units 1, 2 and 3.

You were asked to complete Part 4 because you must have a handle on what's happening communitywide before you drill down to the specific service area(s)/neighborhood level. Comparing problem- and people-related data, both manually and with the help of technology, can help identify potential high-risk neighborhoods in your service area.

Did you know that the vast majority of American Red Cross (ARC) disaster services are to residential structure fires? The ARC has a campaign to reduce the occurrence of home fires and their associated impacts.

The ARC offers a risk mapping tool that combines use of GIS technology, NFIRS and census bureau data. Any community can now build a profile of local residential fire occurrences and compare the location of incidents with citizen income levels to look for pockets of high-risk neighborhoods. Experimenting with this tool to explore what's happening in your community is highly recommended. Here's how to proceed:

1. Go to https://www.homefirepreparedness.org/cms/node/104. Click on the blue banners to see the resources available from the ARC.

   Note: You may not be able to open all the links but this will give you an overview of the data available from the ARC.

2. When you open the resource banner, click on "Home Fire Risk Mapping."

3. At the top of the map you will see a box to search your home community.

4. Place the name of your home community in the search box.

5. There is a zoom button on the bottom right that allows you to look at a broad areas of your community to determine the fire risk.

6. Explore "View Map." There is a scroll down button on the left side that allows you to get additional information about your region and to do comparisons.

Note: While you are on the site, please check out what the ARC is doing in the area of residential fire safety.

Action Item 6: High-Risk Area/Environment

The final step in this pre-course assignment is to select a location that you believe is a high-risk environment in your service area.

This could be a specific response area or neighborhood(s) that creates a high service demand for your station. If it is, identify the contributing factors, such as areas of poverty, an aging community infrastructure, an aging population, fires, EMS calls, crime, unemployment, older buildings, housing density, population transience, percentage of homeowners versus renters, cultures, language barriers, etc., that combine to make this a high impact area.

Equally important, are there specific buildings or facilities that create a high service demand for your station? Don't forget to consider those non-emergency incidents that tax your time and effort. If so, explain the factors that are contributing to the situation.

Use the demographic data you gathered in Part 3, the RMS response data you gathered in Part 4, the on-line data tools, and discussion with your departmental staff as you process this section.

Writing Assignment: Please identify a high-risk/frequency area in your community or service district, and justify your consideration with several bullet point responses.

PART 6: FIRE IS EVERYONE'S FIGHT

Sign up for Fire is Everyone's Fight. This national effort is led by the U.S. Fire Administration (USFA) to lower the number of home fires and home fire injuries in America. Along with USFA and partner organizations across the country, the fire community is speaking out with a unified message of fire prevention and safety to the public. The goal is to change how people think about fire and fire prevention, using social marketing strategies to address the broadest audience.

Action Item 7: Sign Up

Go to https://www.usfa.fema.gov/prevention/outreach/fief/. Scroll down a couple lines, and click on Fire is Everyone's Fight. Continue scrolling down the page until you see the box on the right to register as a partner to use the Fire is Everyone's Fight logo on materials you create. The Fire is Everyone's Fight logo is trademarked, so we require that you complete a simple registration form to use it. Once you register, you'll have access to various versions of the logo optimized for website, print and online materials.

You are encouraged to download the Fire is Everyone's Fight Guide at: https://www.usfa.fema.gov/downloads/fief/fief_outreach_guide.pdf. This will help you develop creative ways to engage your community.

Congratulations! You have completed the pre-course assignment for the LSCRR course. You, your department and the community you service will benefit from this effort.

Remember, a grade will be given for the amount of effort you put forth in this assignment. If you have any problems or questions please contact:

Michael Weller, Training Specialist/Course Manager
Email: michael.weller@fema.dhs.gov
Phone: 301-447-1476

Name: Marta Wolfe
Department: Hamilton Fire Department (HFD)
Position: Lieutenant

"Leadership Strategies for Community Risk Reduction"
Graded Pre-Course Assignment Example

Action Item 1: Response to Questions on "America Burning"

1. How well have we met the recommendations made as part of the "America Burning" report?

   - I believe as a nation we have made moderate to good progress regarding the recommendations.
   - Fire deaths and injuries dropped dramatically with the introduction and advancement of smoke alarm technology.
   - While we are making progress in the area of residential sprinklers, we still have a lot of work to do in the political arena to get this equipment in all new residential occupancies.
   - Advances in firefighter training, equipment and standard operating guidelines (SOGs) have made the job safer.
   - We still have a way to go with regard to getting all fire chiefs, officers and firefighters to fully embrace risk reduction as a core value equal in importance to emergency response.

2. Has America as a country, and we as an industry, grown to accept that close to 3,000 people and over 100 firefighters will die in fire-related incidents each year?

   - I believe the average citizen is oblivious to America's fire problem.
   - People only think about the fire department when they need us.
   - The average person has no idea how many citizens and firefighters are hurt or killed by fire each year. I don't think they have an opinion of what is acceptable.
   - I think we as an industry truly embrace firefighter safety and survival. I am not sure I would say we "accept" the number of citizen or firefighter deaths.

Action Item 2: Exploration of Vision 20/20

I located the website and spent about an hour looking over the content. I learned there is a lot of very current information about risk reduction on the site and many free resources that my department can take advantage of. I have bookmarked the site for future use.

Action Item 3: Hamilton Fire Department and Risk Reduction

1. How knowledgeable is the internal constituency about current and potential risk issues in the local community?

   a. Line staff (rank and file members):

      HFD has a community risk-reduction unit. The unit leader and his staff do a good job of keeping the rank and file personnel up to date on risk issues and what the department is doing about them. I think if you asked most station personnel what our leading risk issues are and their role in helping to address them, they would provide a pretty good response.

   b. Midlevel management (station-level and battalion officers):

      I am currently a shift lieutenant assigned to the busiest engine company in our city. We, as well at the battalion chiefs, are regularly briefed on what is happening with community risk reduction, our roles and what is expected of those under our command.

   c. Executive officers (assistant and deputy chiefs): Same response as above.

   d. Chief of department:

      Our fire chief is a graduate of the NFA's EFOP. She is a major advocate for community risk reduction. She understands the importance and value of community risk reduction. Thus, she has a very close working relationship with the community risk-reduction unit. She really "gets it."

   e. Administrative leadership (city administrator) and political leadership (council, commission, board of aldermen):

      I had to call the chief about this one because I do not have a lot of contact with these people at my current level. The chief said she does her very best to keep her supervisors (and the political leadership) informed about local/emerging risk issues and what the HFD is doing about them. She says that, while the city administrator understands the importance and value of community risk reduction, it is an on-going challenge to keep the political leaders interested in risk reduction … That is, until something happens, and they have to answer questions from the public.

2. What are the attitudes and values of the internal constituency about supporting risk reduction?

   a. Line staff (rank and file members):

      Most have a positive attitude about community risk reduction and (in their own way) value doing it. Many see it as a way to improve public relations with the community. Just about everyone believes that it enhances firefighter safety and survival. There are some dissenters. Two, in particular, work in my station, but thankfully are not on my shift. Of course these two complain about having to do anything other than going on emergency calls.

   b. Midlevel management (station-level and battalion officers):

      We have three shifts. Two of the battalion officers absolutely embrace community risk reduction as a core value and responsibility of the HFD. The other battalion chief is within two years of retirement and prefers just to be left alone. He does what is asked of him, but if given the option, I think he would just as well not be involved with community risk reduction.

      Overall I think the station officers are pretty supportive of community risk reduction. None of them like surprises (like being sent to a community program with no notice). Our community risk-reduction unit does a good job of keeping everything organized and communicated outward.

   c. Executive officers (assistant and deputy chiefs):

      HFD has an assistant chief that oversees operations/training. He is very response oriented and prefers our training and activity levels to be directed to that topic. Since the fire chief is so proactive toward community risk reduction, I think she makes sure the HFD stays on track with risk reduction.

   d. Chief of department:

      I think I covered this well in my earlier response. Community risk reduction is one of her highest priorities.

   e. Administrative leadership (city administrator):

      The chief says the city administrator usually backs her on anything related to community risk reduction, so long as the request is backed up with a clear data-driven rationale.

f. Political leadership (council, commission, board of aldermen):

The chief says that at times it is a challenge to get the current political body to support anything new that is proposed. She said that she does understand their opinions since our current tax base is pretty flat. She indicated that two of the five council members sometimes look at community risk reduction as “fluff.” She says reminding them of the importance and value of community risk reduction is an on-going task.

3. How well has the organization supported the institute of risk reduction as a core value?

a. Does the organization's mission statement include prevention as a core objective? Yes.

The mission of the Hamilton Fire Department is to protect and enhance the quality of life for those who live, work, visit and invest in our community. We will accomplish the mission with proactive community risk-reduction strategies and quality emergency response.

b. What level of resources (attention, time, people, and money) does the organization invest into risk reduction?

- What percentage of the department’s budget is spent on risk-reduction programs?

The current annual HFD budget is about seven million dollars. Of that, $450,000.00 is dedicated to community risk reduction.

The Hamilton Fire Department has a community risk-reduction unit. It includes four personnel who are cross-trained as fire scene investigators, inspectors and community risk reduction specialists.

$400,000.00 is dedicated to salary and benefits for the four community risk-reduction unit staff and $50,000.00 for program support. The community risk-reduction unit routinely attains an average $50,000.00 each year from grants. I guess this is pretty good for a relatively small department.

- Who is responsible for managing the community risk-reduction efforts?

One of the community risk-reduction staff members has extensive training/experience in leading strategic community risk reduction. He is the team leader of the unit.

- If you lost prevention-related positions over the past decade, how has it impacted your organization, and what is your organization doing about it?

  HFD is currently operating with three of the four dedicated community risk-reduction positions. A staff member retired last year, and the position is currently frozen due to citywide budget constraints. The chief wants the position restored, but we also have two vacant firefighter positions that are creating a lot of overtime issues.

c. How well does the organization support the mission of the City of Hamilton?

In my opinion, the HFD fully supports the mission of the City of Hamilton. We provide proactive community risk reduction and aggressive emergency response.

4. Examples of the school and community-based risk-reduction programs offered by the HFD:

Here is a brief overview of what I believe to be the top three HFD community risk-reduction programs:

Children, ages 4 to 6: Start Safe

Start Safe is a preschool fire safety program that provides resources for preschool teachers and administrators to work hand-in-hand with the HFD. Working together, using developmentally-appropriate teaching tools from the Start Safe program, teachers and HFD station-based firefighters deliver life-saving lessons to the children who attend the nine preschool centers in Hamilton. Perhaps even more importantly, the Start Safe program helps us reach parents and caregivers with key safety messages and help them take action to reduce the risk of fires and burns at home. We educate approximately 400 preschoolers each year with this program. Firefighters like this program because the teachers do the lion's share of teaching, and they visit the centers as a follow-up to the lessons.

Children, ages 5 to 7: School-Based Fire Safety Education

The HFD has presented annual fire safety education programs at all city schools (Pre-K to third grade) since 1980. Seven essential lessons on fire safety are presented by classroom teachers to all kindergarten through second-grade students during the month of October. Firefighters then visit all classrooms to reinforce lessons that have been taught by teachers. Extension activities are sent home with students to involve families in the learning process. We visit all six Hamilton elementary schools annually, and educate approximately 1,800 students. Post-testing evaluation by teachers consistently indicates that knowledge gains are achieved by the students who receive the lessons. Return of homework assignments show that nearly 50 percent of parents make some sort of life safety enhancement as a direct result of our efforts.

Community Canvassing and Free Smoke Alarm Program

The HFD takes a very aggressive and strategic approach to residential fire safety. We proactively visit homes and apartments in our service area during the time period of April through October (roughly during daylight saving time). Our mission is to speak face to face with citizens, educate them about our priority risk issues, evaluate smoke alarms, and install them when needed. Since 1983, Hamilton firefighters have installed close to 27,000 free smoke alarms in more than 12,000 homes.

Firefighters annually visit approximately 4,000 Hamilton homes to inspect alarms. Half of the city's center-core and two census tracts are visited on a rotating basis. This strategy allows firefighters to visit all Hamilton homes at least once every five years. A core impact objective of the program is to get working smoke alarm protection that is less than 10 years old on each living level of homes.

It should be noted that firefighters canvass half of the city's downtown core/periphery **each year**. The purpose of this strategy is to assure the city's highest risk households (as identified through fire experience and census data) receive a personal visit by firefighters at least once every other year. This area is targeted because 90 percent of Hamilton's structure fires occur in rental units.

The greater downtown and immediate surrounding area include the highest number of rental properties inhabited by financially challenged residents. Assuming that lower-income households are at an increased risk for a fire, the fire department has made a concerted effort to reach out specifically to this vulnerable population.

While going door-to-door is not the most popular task on our firefighter's list of duties, the majority of our station staff support the strategy because it works. We physically get into places where we should be, impart knowledge and check/install smoke alarms. Our firefighters also get to observe first-hand the layout of buildings and construction features which enhances fire suppression abilities and firefighter safety.

5. Current risk-reduction priorities of the HFD:

I spoke at length with the community risk-reduction captain about the risk-reduction priorities of the department. He indicated that our on-going priority is two-fold: 1.) Deliver the best pre-school and primary-level education programs as possible. 2.) Continue our long-standing effort of strategically getting into the homes of Hamilton residents to discuss risk issues/solutions face to face, and ensure working smoke alarm presence.

6. How local decision-makers view the department:

Again, I had to speak with the chief on this one. She feels the decision-makers absolutely are in support of the HFD. She feels that overall the decision-makers understand what we are doing and why. She did express frustration that, in her opinion, the fire department sometimes comes up short at budget time when asking for program advancements.

However, she challenged me as an "up and coming" advancing officer to "walk a mile in the decision-makers shoes" as they are responsible for ensuring all city services are delivered in an uninterrupted manner. She left me with this to think about: "When people flush, they expect what's in there to go away." It took me awhile to figure that one out. The chief is right.

7. What the community at large thinks of the department?

   I believe the community loves the HFD, what we stand for, and the services we deliver. The chief says we are always one of the top-rated departments when the city performs citizen surveys.

8. How the HFD engages decision-makers and the public so we receive an adequate level of support:

   - Our community risk-reduction team leader is the Public Information Officer (PIO) for the department. He and the chief have an excellent working relationship with the media. The HFD is consistently in the news. We have an excellent website that is updated regularly. We are on Facebook and Twitter as well.

   - When someone is promoted, they are required to spend a day with the media to better understand how to interact with them. Our chief is very big on that.

   - The department offers a program called Fire Ops 101. Our labor organization spearheads this in collaboration with the chief. The program allows senior city staff, decision-makers, neighborhood groups and the public to learn first-hand what we do. Class members spend a weekend with us. Friday evening is an education/social event where attendees get to know one another, learn about the department, and find out what they will do on Saturday and Sunday. Saturday and Sunday the class engages in hands-on activities related to firefighting and EMS. We do this a couple times a year. Everyone (including the firefighters) really enjoys this. It certainly helped us get an additional five firefighters six years ago.

9. Public and private partnerships that help support risk-reduction efforts:

   - For close to 20 years, the HFD has been a key partner with the two Lowe's Home Improvement centers located in Hamilton. They have the Lowe's Heroes program that allows them to partner with us to perform annual community safety services.

   - The Home Depot makes an annual donation of smoke alarms to the HFD for use in low-income homes.

   - HFD recently partnered with the local chapter of the ARC to enhance our community canvassing effort. I understand the ARC is making a concerted effort nationwide to help fire departments with home-safety visits. Our firefighters really appreciate when the community risk-reduction unit introduces more help to do the home visitations.

- The U.S. Department of Housing and Urban Development (HUD) has provided funding for smoke alarms over a 30-year period.

- We work closely with our two Walmart stores on a variety of issues. A big one is that they supply us with gift cards so we can help families with emergent needs after an incident has taken place. Each battalion chief and community risk-reduction member has a card.

- The HFD has received several Assistance to Firefighters grants over the past decade to support community risk-reduction programs.

Action Item 4: Demographics of Hamilton and Station 4 Service Area

The City of Hamilton

Hamilton is located in Woodward County in the heart of the beautiful Leighland Valley. It encompasses a 12 square-mile area and is home to approximately 41,000 citizens. The population of Woodward County is currently 145,000.

As Woodward County's largest city, Hamilton has a center core where small specialty shops and restaurants offer a range of entertainment opportunities. The downtown includes a university center, a stunning theater for the performing arts, and one of the most beautiful natural parks in America.

Many restored Victorian-style homes dot the immediate periphery of downtown. The area adjoining downtown to the east and south includes multiple well-established neighborhoods sporting their own unique cultural flair. Several neighborhood markets serve as gathering points for residents. The outside circumference of Hamilton includes areas of residential, commercial and retail development.

As of 2010 to 2014, the total Hamilton population has grown 9.83 percent since 2000. The population growth rate is lower than the state average rate of 11.16 percent and is lower than the national average rate of 11.61 percent. Hamilton's median household income was $38,080 in 2010 to 2014 and has grown by 23.65 percent since 2000. The income growth rate is much lower than the state average rate of 40.25 percent and is lower than the national average rate of 27.36 percent. Hamilton's median house value was $151,000 in 2010 to 2014 and has grown by 69.09 percent since 2000. The house value growth rate is lower than the state average rate of 96.92 percent and is higher than the national average rate of 46.91 percent.

Station 4 Response Area

I am currently assigned as an engine company lieutenant at Station 4. Our firehouse is located just west of the immediate downtown periphery of Hamilton. The station houses an engine, tiller-ladder and medic unit. The fire units are staffed by an operator, lieutenant (or senior firefighter) and a line firefighter. The EMS unit is staffed by an emergency medical technician (EMT) and a paramedic. Our engine makes approximately five fire runs a day, and the truck averages two calls. The medic unit is busy and sees about 10 calls per shift.

Station 4's response district is the smallest in geographical size but serves one of the oldest and most densely populated areas. Housing stock is comprised mostly of old wood-frame homes that have been converted into duplexes and apartments. 84 percent of homes are inhabited by renters.

Census bureau data/maps show that the Station 4 area covers roughly two of the 14 census tracts in Hamilton. There are approximately 2,800 residential "units" in the response district. A "unit" counts as a residence. Hence, a ten-unit apartment counts as ten homes. A little over 8,000 people reside in Station 4's response area.

While the majority of Hamilton is inhabited by Caucasians, Station 4 serves the most diverse population. 59 percent of residents are Caucasian, 26 percent are African American, 9 percent are Hispanic and the remainder are defined as "other." Census data indicates the number of Hispanic residents to be rising. Discussion with firefighters supports this finding as well. Several dialects of Spanish are spoken in our district. There are no Hispanics on the fire department.

Census data indicates the number of older adults (age 65+) to be increasing in Station 4's service area. Again, response data and discussion with firefighters support this trend. While there are no notable economic drivers that support the community's tax base, such as key businesses, industries, sports complexes, etc., located in Station 4's service area, there are a very high number of rental occupancies. Of course, the owners of these occupancies pay taxes on their investments.

In addition, there are two elementary schools and a Head Start center in Station 4's area, along with several childcare facilities. There are two public housing complexes, and each has a community center. There is a chain grocery store, several neighborhood convenience stores, two fast-food restaurants and multiple pizza establishments. There are several liquor stores, and the convenience stores are permitted to sell wine and beer.

There are a number of social issues that challenge the quality of life in Station 4's area. Poverty is disproportionately higher in our response area as compared to other districts in the city. There are two public housing complexes and a high number of Section 8 homes. The unemployment is high, and many residents do not work. Very few residents in the service area have greater than a high school education. While organized gangs are relatively non-existent, delinquent adolescents are an issue. The area is also plagued by a significant substance abuse problem, most specifically alcohol and heroin. This in turn has created domestic violence issues, assaults and petty-level crime.

There are several high-risk populations/demographics in the Station 4 service area:

1. Nearly 90 percent of the households are low to moderate income.

2. Many households are led by a single mother with several young children under age five. Supervision of small children is often an issue in these homes.

3. People who display an overall "lack of personal responsibility" are frequent users of Station 4's emergency services. Our personnel get very frustrated when they visit a home where a free smoke alarm had been installed by the fire department only to have it removed by an occupant. These properties often have other issues as well, such as occupants who are substance abusers.

4. The working poor are a concern to our staff. In some homes, the adults work so many hours that they are not at home often. This, in turn, creates issues with unsupervised children and teens. It also leaves little time for adults to receive or focus on safety information.

5. The number of older adults who are attempting to age in-place within their home but lack an organized support system is a rapidly growing high-risk population. Physical disability challenges many of these residents. Hoarding is an issue in some homes. In general, the older adult population in Station 4's area is staunchly independent and wary of accepting assistance from anyone.

6. Last decade's recession brought with it an unexpected challenge to Hamilton — an increasing number of non-English speaking citizens. Desperate to find work in the fruit orchards within Woodward County, many Hispanic families moved to the lower-rent housing which is located in Station 4's area. The Hispanic population is comprised of large families with many households being multi-generational. Hording is an issue as the population seldom discards possessions. This group also requires multiple sleeping areas. Language barriers are an issue for city staff (including the FD) who attempt to serve this population. Those who live here are working hard but struggling to make ends meet. In general, this population keeps to themselves and does not trust public officials. While Station 4 does not make many fire runs to Hispanics households, we struggle to communicate with residents who summon EMS care.

The construction and density of the housing stock is a huge concern to Station 4's personnel. Other than the public housing complexes, most of the residential housing stock is old wood-frame buildings that were built prior to 1940. Many are Victorian-style homes that were formally grand single-family homes when the railroad supported the bulk of commerce in Hamilton from the 1920s to the 1960s. When the railroad industry faltered, homes were sold to investors who transformed them into multi-occupancy rental properties. There are multiple blocks of these balloon-frame buildings standing just a few feet apart in our service area. Many are inhabited by various high-risk populations. Absentee landlords, many of whom neglect their obligations as property owners, are a major problem in this area. Property owners have vehemently resisted efforts on behalf of the City of Hamilton to address the sub-standard housing issues.

Action Item 5: Risk Profile of Service Area

Risk Assessment

The HFD conducted their first community-wide risk assessment over 20 years ago. Fire department personnel were not surprised to learn that risks, such as unattended cooking fires in rental properties, electrical issues in old buildings, vehicle crashes, and pedestrians struck, occurred very frequently.

The community risk-reduction unit developed programs to address the issues listed above. While the unit led the overall community risk-reduction process, the actual program delivery has always been a co-responsibility of the line firefighting staff, including officers.

Over time, most of the community risk-reduction programs have proved to be effective. The leader of the community risk-reduction unit advised that cooking fires have been reduced by nearly 20 percent over a long-term period. While vehicle collisions are still a significant issue, the occurrence of vehicle versus pedestrian incidents has been reduced steadily through the years. He attributes the success due to a task force that has been addressing the issue over the long-term. Electrical issues in the old buildings are still a problem. We see that at the station response level as well.

NFIRS Data Review

The HFD NFIRS coordinator is the community risk-reduction team leader. He was able to run me ten years of Tally by Incident Sheet reports so I could look at the overall run experience of our department as a whole. I have the tally sheets on my computer and a thumb drive for review.

We looked at the data together, and he pointed out what a mess our data reporting system was in when he became the community risk-reduction team leader 20 years ago. He further explained how the senior leadership and station officers worked together to create a “cheat sheet” (per se) so those entering reports into the NFIRS would do so in a more objective manner. Seeing the data in “big picture format” made me understand even better why our department has such a strict reporting protocol.

The community risk-reduction team leader next pointed out some run trends that are concerning him and other senior officers:

1. The HFD as a whole is seeing a steady increase in smoke alarm malfunction calls. He believes it is due to aging electrical units that are simply outdated and need to be upgraded.

2. The department is seeing a slow but steady rise in the number of electrical fires in older commercial structures and aging apartment buildings. This is an expensive issue.

3. The number of EMS calls in general is increasing. He believes a lot of that has to do with the number of established residents who are either aging in-place in their home or moving to nursing care facilities in our city.

NFIRS Data Review

The community risk-reduction team leader provided me with ten years of RMS data for our department (both fire and EMS). We reviewed the data together and compared it with NFIRS data. Overall, the RMS data seemed to match up with that from NFIRS. We both agreed that the HFD still reports too many "other" entries to NFIRS. He said the reason our RMS data would likely be more accurate is because it will not let an entry of "other" be made without an exception being noted. I have this RMS data on my computer and thumb drive and will be prepared to display it while at the NFA.

Four Specific Incidents to Consider at the NFA

The following represents four types of incidents (specific to their occurrence in Station 4's response area) that I feel are worthy of consideration to address as a project when I attend the NFA:

1. Heroin Overdose (OD) — This is the most rapidly rising type of EMS call that our medic unit handles. Further inquiry revealed that nearly 15 percent of the heroin OD calls we answer end up being fatalities. Most of the incidents involve people between the ages of 19 and 40. There seems to be an equal number of male to female patients. The location of incidents is spread pretty evenly throughout our response area. I spoke with a close friend who is part of the police department's narcotic unit, and she indicted the heroin problem is "way out of control."

2. Falls Among Older Adults — This type incident has been steadily rising for the past several years. The typical incident involves an aging person who lives alone in their home. He or she (usually female) slips, trips or experiences a balance or dizziness issue causing them to fall. Sometimes the person simply cannot get up and calls for help. More times than not, the patient experiences a significant injury. Sometimes the patient lays injured for hours or days before they are discovered. Many of these patients are not able to return home. These incidents occur throughout our response area. Our firehouse staff is very passionate about this issue. Everyone wants to help our aging population because everyone has parents or grandparents.

3. Youth Firesetting and Adolescent Fire/Explosive Device Use — This type incident is rising (albeit slowly).

   First, we experience our share of unsupervised young children playing with lighters in their homes. This type incident is typically brought to our station's attention when a parent brings their child to the station seeking help with an on-going situation. Thankfully we do not respond to many fires caused by this type of behavior. These type incidents occur throughout our response area.

   Second, we are responding to injuries involving adolescents who are experimenting with fire and explosive devices (including bottle bombs). These are injuries caused by adolescents who have obtained information about fire and explosives on the internet and are experimenting with various products. The experimentation gets out of control, and an injury occurs. Fortunately no serious fires, major traumatic injuries or deaths have happened — yet. These type incidents occur throughout our response area.

4. Significant Residential Structure Fires — This type incident is tricky to explain, yet expensive and potentially deadly. Station 4 is experiencing a steady increase of working residential structure fires. The fires are occurring in rental properties (not public housing) across our response area. While we cannot pin down one, or even three, specific fire causes, the root behaviors surrounding the fire incidents involve some type of irresponsible action, such as unattended cooking, portable heater use near a bed, unsupervised children, unsafe smoking practices, overloaded extension cord, etc. This type of incident/scenario (albeit generic) is one that frustrates, and frankly scares, our firefighters, as they are the ones who have to risk their lives to extinguish fires in these occupied homes. The location of incidents is spread area-wide with the exception of our public-housing complexes. The population most impacted seems to be low-income large families who reside in rental occupancies that are in some state of disrepair.

Note: I have not assigned a priority to any specific type of incident. I will do so as part of the NFA experience.

Action Item 6: High-Risk Environment

Without question, I had to further explore the locations of the multiple working structure fires that I outlined in the last section (number 4). The Red Cross Mapping Tool helped me further define a specific "neighborhood" where a higher frequency of the working fires is occurring. That area is Franklintown.

Franklintown is roughly an eight-block area located just two blocks north of our station. I used the USA.com website and explored the demographical data at the census block group and individual census block level. It showed me that we are looking at only about 250 homes but a population of about 1,500 people.

People in this neighborhood are challenged by low education levels, very low income and a high rate of unemployment. This neighborhood is right in the middle of the multiple block area where the wood-frame homes stand very close to one another. Buildings are in poor condition. Residents and landlords do little or nothing to make them better.

I next looked at our RMS response data for this particular neighborhood. To no surprise, we run more fire and EMS calls to this neighborhood than others. My colleagues echoed this opinion, and so did the police officers who frequent our station. The police also said that population transience is extremely high in Franklintown with families moving in and out regularly for a multitude of reasons.

If pressed to proclaim a leading type of fire cause in this area, it would have to be unattended cooking. We run a lot of fires that cause significant damage after people put oil in a pan late at night to fry food, turn the stove on high, and then leave the kitchen for whatever reason. With regard to EMS incidents, it would have to be drugs, alcohol and domestic violence.

Franklintown does not have a neighborhood association. The primary gathering points for people during warm weather months are in front of homes and in back yards.