R200

Dear National Fire Academy Student:

Congratulations on being selected into the U.S. Fire Administration/National Fire Academy's *Leadership Strategies for Community Risk Reduction* (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 multihazard community risk reduction.

Attached is the precourse assignment which is a prerequisite for attending this course. A checklist found in the precourse material is to be completed and submitted one-week prior to your class start date. Information on where to send the precourse material is located in the package.

It is important to note that this is a 6-day course and the first day of class begins on Sunday at 8:00 a.m. Classes meet daily from 8:00 a.m. to approximately 5:00 p.m. with graduation scheduled on Friday at 4:00 p.m. You will be provided lodging for Friday night.

Should you need additional information related to course content or requirements, please feel free to contact Mary Marchone, Fire Prevention Management Training Specialist at (301) 447-1476 or email at Mary.Marchone@fema.dhs.gov

Sincerely,

Dr. Denis Onieal, Superintendent National Fire Academy

U.S. Fire Administration

August 2012

LEADERSHIP STRATEGIES FOR COMMUNITY RISK REDUCTION

PRECOURSE ASSIGNMENT

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INTRODUCTION TO THE LSCRR COURSE

Welcome to Leadership Strategies for Community Risk Reduction (LSCRR). LSCRR is a 6-day adapted version of Executive Analysis of Community Risk Reduction (EACRR), the second year Executive Fire Officer Program (EFOP) class.

This course was created in response to requests from non-EFO students who are responsible for developing, leading, and evaluating risk-reduction initiatives in their community. The course promotes a scientific and analytical approach to addressing community risk. Students examine their community's leading risks and identify determinants that may challenge mitigation. LSCRR culminates with students designing a plan to overcome potential obstacles.

Since successful community risk reduction requires use of combined preventive interventions, the target audience for LSCRR is broad. Fire and Emergency Medical Services (EMS) officers, public educators, inspectors, plan reviewers, fire marshals, and investigators are ideal candidates. LSCRR can serve as a capstone course to the National Fire Academy (NFA) fire prevention, public education, arson, and EMS curriculums.

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:

- Human-created and naturally occurring risks that impact your community on a regular basis. Examples include fires, preventable injuries, and frequently occurring forms of severe weather.
- Human-created or naturally occurring risks that may only happen once every five, 10, or even 20 years but have the potential of devastating outcome. To qualify for this category, the risk should have already impacted 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 precourse research, continues through guided practice while at the 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.

In addition to empowering you with a proven risk mitigation process to follow, this course supports the goals of the U.S. Fire Administration (USFA). The first goal is to reduce risk at the local level through prevention and mitigation. The second goal is to improve local planning and preparedness.

You may wonder "why is community risk reduction so important?" There are several components to the answer. Let's begin by looking briefly at the current fire problem in this country.

Each year in the United States approximately over 3,000 people are killed by fire and as many as 22,000 people are injured from fire. For the young, old, disabled, impoverished and challenged populations, fire remains one of the leading causes of death. While these statistics are better than those of 20 years ago, they are **still among the highest among developed nations**.

With advances in fire suppression equipment, wider adoption of fire codes, and more and more public education programs, the loss from fire **should** be steadily declining. Yet, that reduction is not happening. Why? There are probably numerous reasons, but the most obvious is that the fire service has more work to do in the area of prevention.

Prevention has been recognized for many decades as a key to reducing the effect of fires. The 1947 President's Conference on Fire Prevention cited prevention as a viable and important strategy for reducing the impact of fire. Again, in 1966, fire service leaders recognized prevention as an important strategy for the fire service during the first Wingspread Conference. That belief in prevention has been reaffirmed at three subsequent Wingspread Conferences.

Perhaps the strongest endorsement of prevention programs came in the benchmark report "America Burning," published in 1973. The report stressed two important facts. First, there is not enough focus on prevention by the fire service. Second, prevention has the potential to make a tremendous impact on the fire problem when implemented **in partnership** with suppression.

Prevention initiatives cannot take the form of a "canned" program, meant to be everything to everybody. Rather, each community must develop a specific plan to address the unique fire problems of that community through a combination of combined preventive interventions. This is what community risk reduction is all about--a community assessing its unique fire risks and hazards, and then developing and implementing specific intervention strategies to address those risks and hazards.

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.

Keys to Success

There are several keys to the success of any community risk-reduction process.

There is strong leadership in the fire department for the community risk-reduction process. Leadership begins at the top with the fire chief. It also involves all the department's EFOs and community risk-reduction (CRR) team leaders. If the organization's leadership is not solidly behind community risk reduction and does not provide active leadership during the process, the rest of the department will not have a passion for risk reduction.

The community must be engaged in the process. In reality, any community risk-reduction process must belong to the community. The fire department is a partner with the community. **Ultimately the community's organizations, leaders, and elected officials will determine the acceptable level of risk**. The leaders of the process must reach out to the community and get decisionmakers and target organizations involved in the planning, goal setting, marketing, etc.

The community risk-reduction plan must be tailored to local problems and local resources. This requires a comprehensive assessment of local risks and identifying interventions that will work with the local population groups.

The road to institutionalizing risk reduction should be a planned journey that involves collaboration between individuals, organizations, and the community. Research builds the foundation to get started on the right track.

LSCRR PRECOURSE ASSIGNMENT

Introduction

LSCRR will empower you with the knowledge and skills to be a champion for your community's CRR strategies. This process will require a significant commitment on your part. It begins with the precourse assignment.

Completion of the precourse 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. Home community is defined as the area for which you have responsibility.

The precourse assignment for LSCRR is important 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 precourse assignment and LSCRR experience.

The precourse assignment involves some reading and collecting and analyzing a considerable amount of **local** data. It is permissible (and encouraged) to have colleagues or staff assist you with data collection and interpretation. Use of **current** data is expected.

You should budget approximately 2 weeks of intermittent development time for completing the precourse assignment. Each of the assignment's sections includes an estimate of the minimum amount of time you should budget to complete the directives. Each section also includes a brief rationale of why you are being asked to complete the work and how it will apply to the LSCRR course.

A checklist for the assignment is included for your benefit and to serve as record of completion. **Only send the completed checklist** to the NFA's Training Specialist of Fire Prevention Management. It is due no later than 1 week in advance of attendance to NFA.

Name:	
Date of Class:	
Email:	

Please note date completed	Precourse Assignment Checklist
	Part 1: Building a Demographic Profile of Your Community
	Practice using American Fact Finder and Population Finder.
	Create a demographic, social, economic, and housing profile of your community.
	Profile how your community has developed and changed over the past 20 years.
	Predict what your community may look like 10 years from now.
	Part 2: Building a Risk Profile of Your Community
	Identify and profile the five leading causes of fire in your home community.
	Identify and profile the other human-created risks that currently or have potential to threaten your community.
	Create a population profile of high-risk groups in your home community.
	Identify how fire and preventable injury are affecting each high-risk group at the local level.
	Part 3: Identifying Root Factors of Risk and Populations at Greatest Risk
	Read this section.
	Send Precourse Assignment Checklist to: Mary Marchone, Training Specialist Email: Mary.marchone@fema.dhs.gov Fax: 301-447-1372; Phone: 301-447-1476

PART 1: BUILDING A DEMOGRAPHIC PROFILE OF YOUR COMMUNITY

Estimated time to budget for completion of this section: 5 hours

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

Introduction

The National Fire Academy is an institution of higher education dedicated to serving the emergency services. Many NFA courses require completing a pre-course assignment. The purpose of this requirement is so you come to the academy with baseline information that can be utilized to enhance your learning experience and create an action plan to apply in your home community.

A core component of most precourse assignments includes a community risk assessment of the service area you are responsible for. This assessment entails locating, collecting, and evaluating both people and problem-related data.

This tutorial provides an introduction of how to gather both. Let's start with peoplerelated data.

People-related Data

People-related data can create a demographic profile of your community. In addition to showing where people live, it can identify how they live. A good profile will explain the social, cultural, and economic composition of the area you protect.

One of the most reliable sources of demographic information is the U.S. Census Bureau. Data for the Decennial Census is collected by the Bureau every ten years. Data from the Decennial Census is utilized to determine congressional districts. The Decennial Census seeks to determine the *number of people* who live in a community.

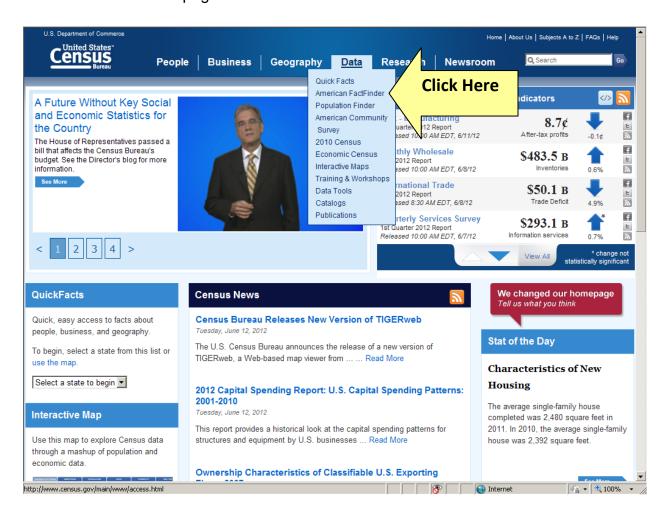
A second type of census, the American Community Survey (ACS), is as an on-going task of the Bureau. The American Community Survey is mailed to over three million U.S. residents annually. The Bureau's goal is to survey each U.S. resident every seven years to create demographic profiles of local communities. ACS data is important to risk reduction specialists because it provides information about *where* <u>and</u> how people live.

Data from the American Community Survey is available to the public through the American FactFinder database. FactFinder is an important tool for risk reduction practitioners because it allows us to explore demographic data both community-wide and by census tracts. Census tracts are defined geographical areas within a city, town, county, or village. Each tract carries a numerical identification.

Census bureau data is collected and analyzed by trained professionals. It is made available for public use though the Bureau's website. Part One of this tutorial will show you how to use the Bureau's site.

Use American FactFinder

 To get started, go to the Bureau's website located at <u>www.census.gov</u>. Once you are there, you should see a screen that looks like the one displayed in the screen shot shown below. Go to the Data section on the top of the Census Bureau's home page. Click on the *AmericanFact Finder* link.

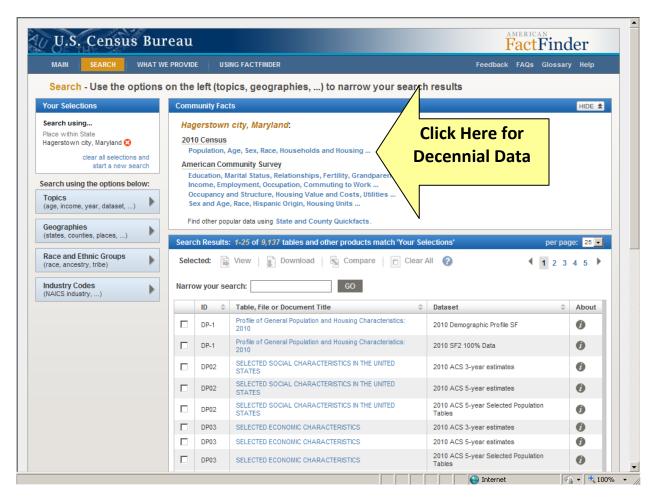


2. Upon arriving at the FactFinder site, you should see the screen displayed below. Enter the name of your community (city *or* county – plus the state); then hit Go.

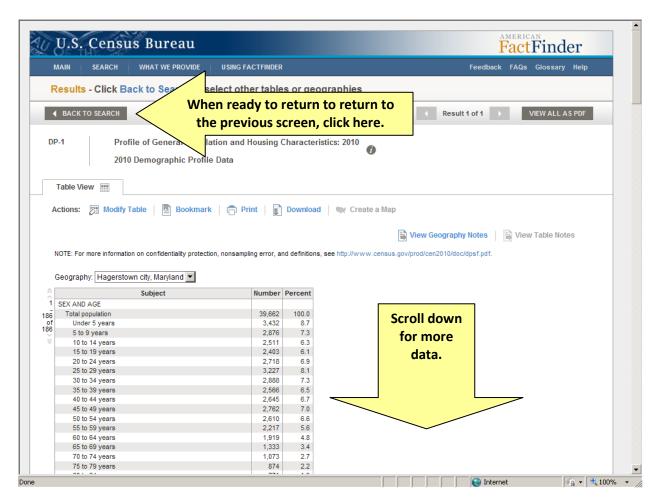


3. For the sake of this tutorial, we entered Hagerstown, Maryland as the example community. The following series of screen shots will walk you through the various types of demographical data that is available about a community at-large.

We will begin by examining data from the Decennial Census and then ascend to data from the American Community Survey.

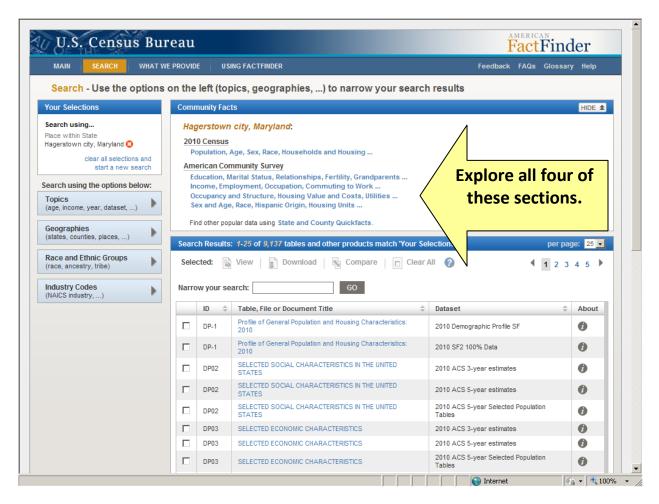


4. The screen shot displayed below represents only a small portion of what is available pertinent to the 2010 Decennial Census. Be sure to scroll down and see all of the data available on both people and housing characteristics.



Upon completing the exploration of general census data, go to the top of the screen and click on the Back to Search function.

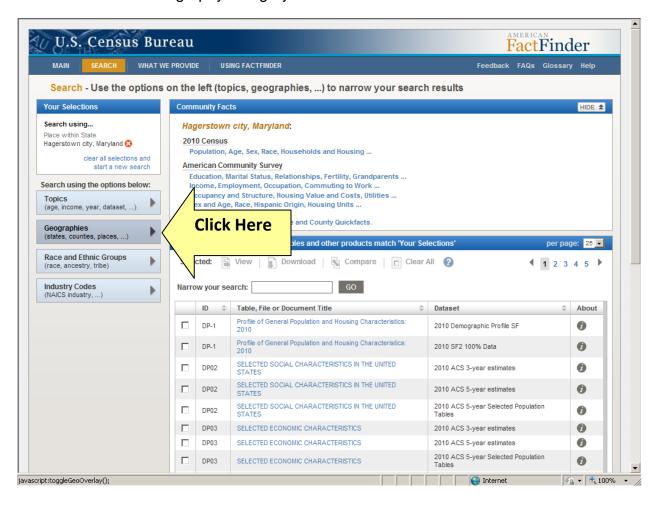
 Next, click on each of the four sections that display data from the American Community Survey. The Census Bureau strives to update this data on an ongoing basis. Each section will help you build an overall profile of your community at-large.



Note – a smart strategy is to print a hard copy of each section so you can examine and compare all of the data.

6. Now that you have developed a demographic profile of your community at-large, the next step is to learn how to find data on specific geographical areas known as census tracts. Let's go back to the example on Hagerstown, Maryland.

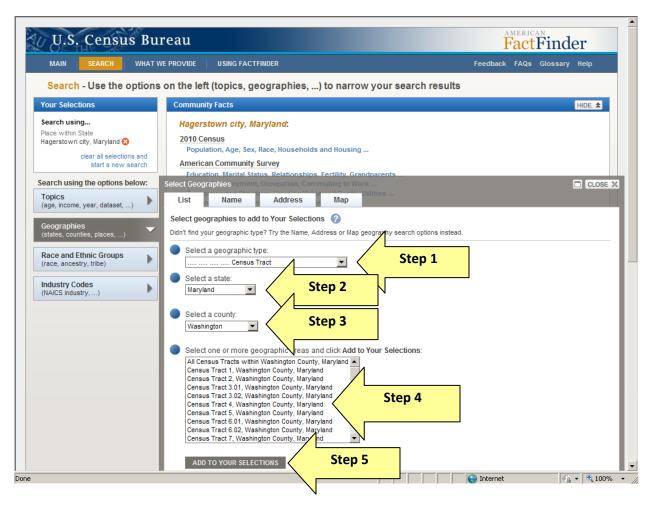
Locate the Geography category located on the left side of the screen and click it.



- 7. When the screen that is displayed below appears, perform a three-step process:
 - Step 1 Locate the geographic type, click on it, and select Census Tract.
 - Step 2 Select your state.
 - Step 3 Select your county.
 - Step 4 Select the census tract you wish to explore.
 - Step 5 Click on Add to Your Selections

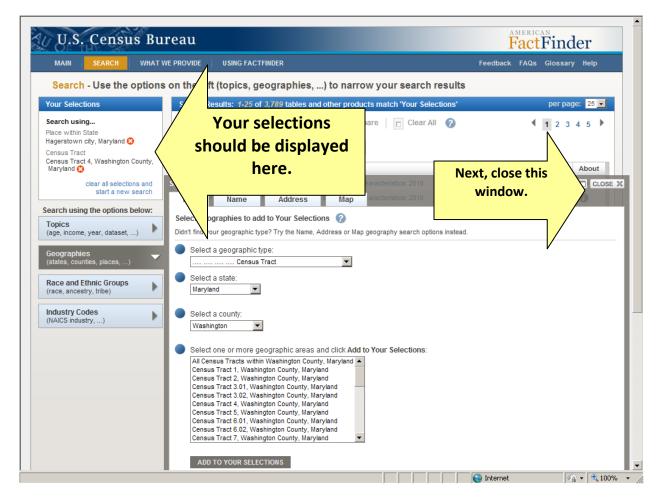
The field with census tracts for your county will become populated. You now have the option to explore your community by census tract. For this example, we will examine Census Tract 4 in Washington County, Maryland.

Note – you will need to know which census tract corresponds to the area of your community that you wish to explore. All census tracts in your entire county will be available for exploration.



8. If you have done the process correctly, you will see your city and census tract displayed in the Your Selections section.

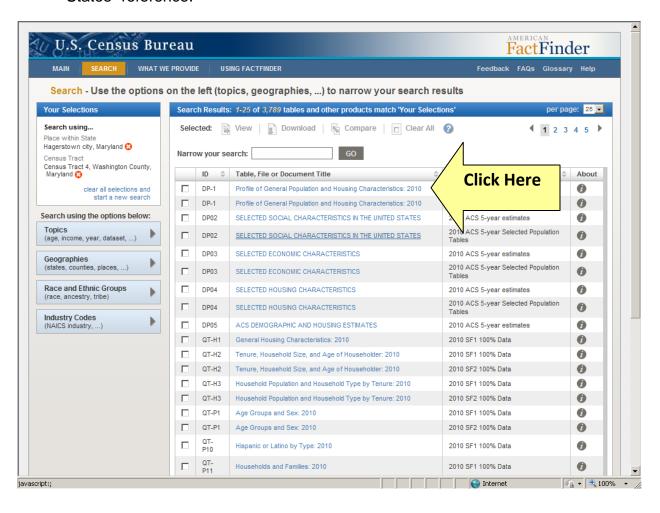
Next, close the overlay screen that offers census tract options.



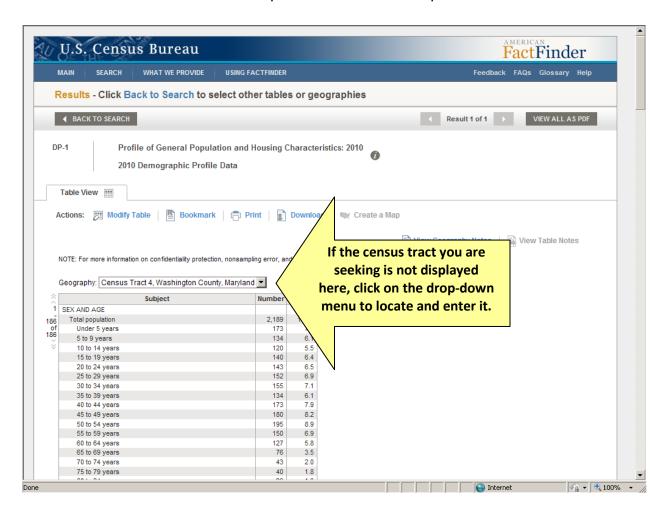
9. You should now see a screen that displays the data specific to the census tract you selected. In our case, it is for Census Tract 4 in Hagerstown, Maryland.

Each specific category of data can now be explored by census tract. For this example, we will select the Profile of General Population and Housing Characteristics 2010.

Note – the selections that reference "United States" allow you to compare the census data with national statistics. <u>Your</u> *local* data will not have a "United States" reference.



10. You now have data for the specific census tract requested.

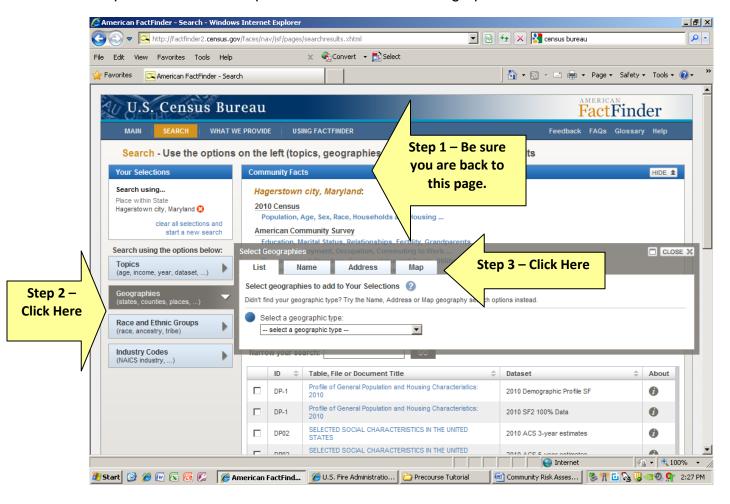


Note – if the census tract is not displayed in the Geography window, simply click on the drop-down menu to locate and enter it.

Special Section - Building a Map of Census Tracts

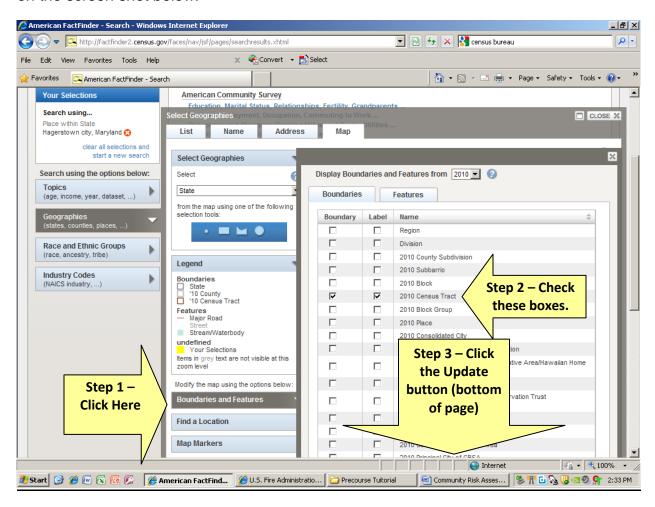
If you don't know the numerical designations of the census tracts in your community, you can build a map to identify them. Here's how:

- Step 1 Return to the Community Facts screen for your community.
- Step 2 Click on the Geographies feature.
- Step 3 Locate the Map feature on the Select Geographies menu and click on it.



You should now have the screen displayed below.

- Step 1 Locate the Boundaries and Features category and click on it.
- Step 2 Once the Boundaries and Features are displayed, click on both boxes for census tracts.
- Step 3 Click the Update button at the bottom of the screen. Note this is not visible on the screen shot below.



American FactFinder - Search - Windows Internet Explorer _ B × 🔻 🗟 😽 🗶 🛂 census bureau ← http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtm 0 -🗶 🍕 Convert 🔻 🚮 Select File Edit View Favorites Tools Help 🍃 Favorites 📉 🖂 American FactFinder - Search 🚹 🕶 🔝 🕝 🖶 🕶 Page 🕶 Safety 🕶 Tools 🕶 🕡 🖜 U.S. Census Bureau **Fact**Finder WHAT WE PROVIDE USING FACTFINDER Feedback FAQs Glossary Help CLOSE X Address 0 ▼ State 112.02 Legend Boundaries '10 County
'10 Census Tract Features Major Road Stream/Waterbody 10.02 undefined Items in grey text are not visible at this zoom level 109 Modify the man using the options below **Boundaries and Features** 2 Start 3 6 6 6 7 Start 3 6 6 7 Start 3 6 7 Start 5 6 7 Start 6 7 Start 7 Star Community Risk Asses... S M I S W I S S C S S PM

Your map with census tracts should appear. You may also print this map.

Summary of People-related Data

While the process of gathering data from the U.S. Census Bureau may appear intimidating at first, it is a task easily mastered with experience. Each time you work with the Bureau's database, the process will get easier.

The census bureau data analysis tools are very powerful instruments that can provide you with a wealth of information about the demographics of your local community. As more resources become available, the bureau plans to incorporate enhanced capabilities that will allow communities to integrate Geographic Information System (GIS) tracking/mapping with local demographics.

Problem-related Data

Data on fire experience in the U.S. is available through the United States Fire Administration (USFA). USFA began the National Fire Incident Reporting System (NFIRS) in 1975. Under NFIRS, local fire departments forward fire incident data to a state coordinator. The coordinator collates statewide fire incident data and reports information to the USFA.

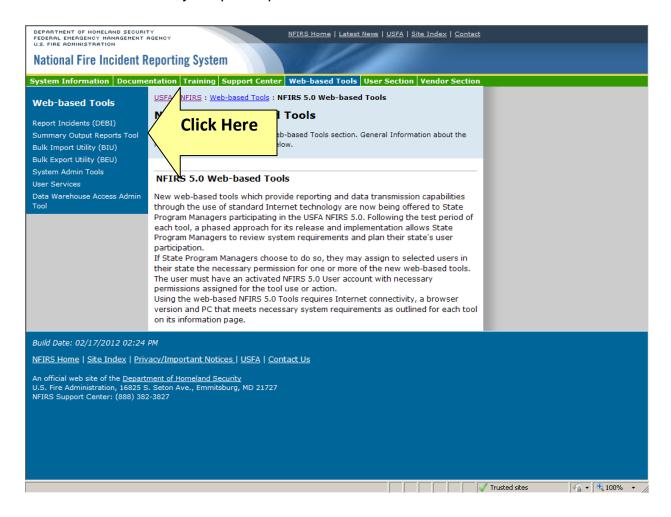
The following is an overview of how to obtain and review NFIRS data for your local community.

- 1. Obtain an NFIRS Account.
 - a. Request an NFIRS account from the person in your department responsible for NFIRS reporting. Your state NFIRS program manager or your local NFIRS person with an account with system administration permission assigns accounts. The NFIRS Support Center at the United States Fire Administration can provide you with the contact information of your state NFIRS program manager. Call (888) 382-3827 from 8:30 a.m. ET to 4:30 p.m. ET or email FEMA-NFIRSHelp@fema.dhs.gov.
 - b. Your NFIRS account needs only the following four permissions: Startup, Report Submit, Report Fetch, and Report Generate.

- 2. Log in the NFIRS Summary Output Reports Tool (a.k.a. SORT).
 - a. Go to the following website: www.nfirs.fema.gov.
 - b. Select Web-based Tools from the menu bar.



3. Select Summary Output Reports Tool from the Web-based Tools menu.



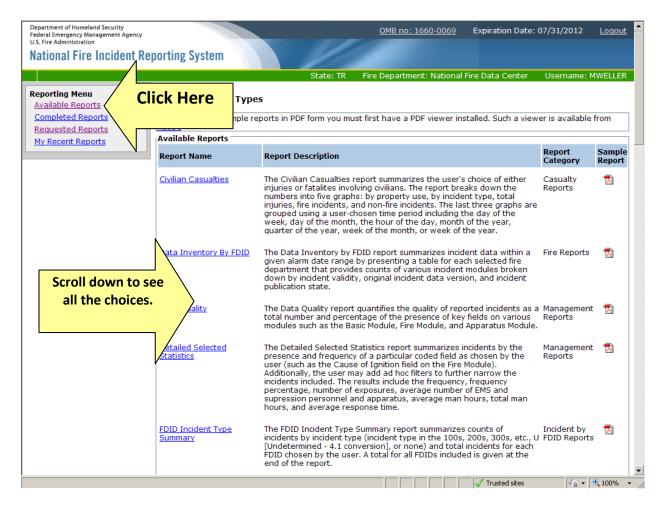
4. Log in using your NFIRS account (i.e., state abbreviation, user name, and password).





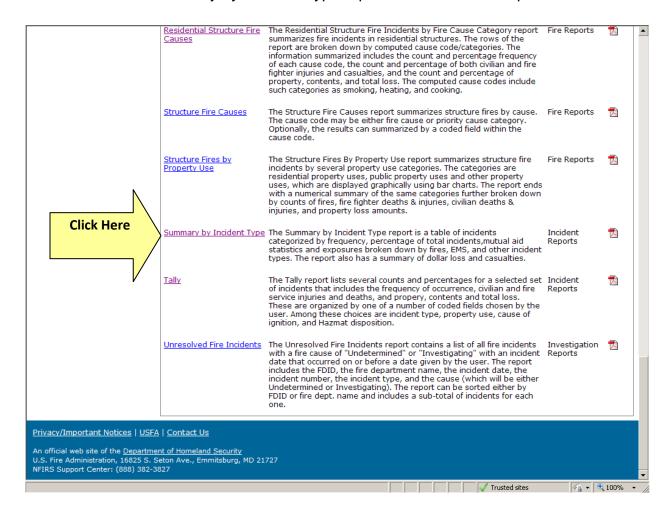
5. Click OK from the USFA Banner Page to go to the next page.

6. You should see the screen that is displayed below. Click on the Available Reports option in the Reporting Menu section. Note the report types that are available for you to develop. Scroll down the list so you see all the choices.

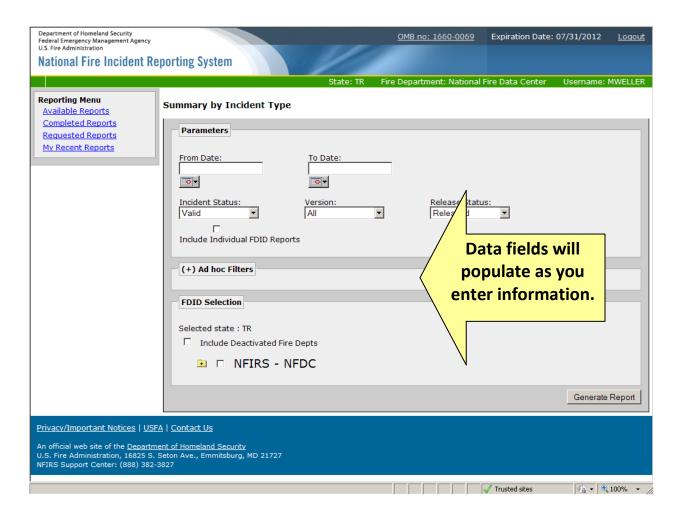


Note – for the sake of this tutorial, we will be focusing on how to create and print the following reports: Summary by Incident Types, Tally, and Residential Structure Fire Causes.

7. Select the Summary by Incident Type report from Available Reports.



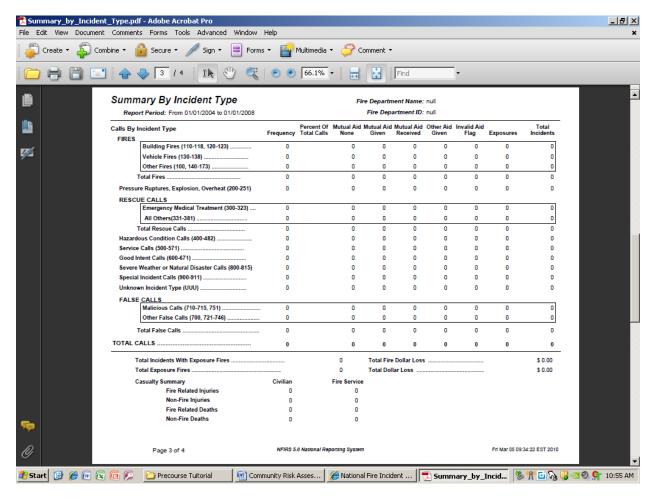
8. You should see the screen displayed below. Follow the directions listed at the bottom of this screen shot.



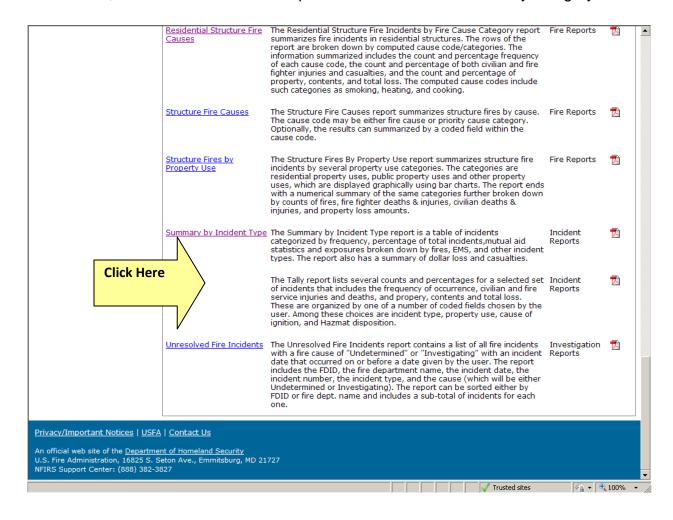
- A. Enter the following parameters:
 - From Date (format mm/dd/yyyy)
 - 2. To Date (format mm/dd/yyyy)
 - 3. Incident Status = All
 - 4. Incident Version = All
 - 5. Release Status = All
 - 6. Include Individual FDID Reports = blank
- B. Select the fire department to include in the report.

- 1. In the FDID Selection section, drill down to the fire department.
- 2. Check the box next to the fire department.
- C. Generate the report.
 - 1. Move down to the button named Generate Report.
 - 2. Select Generate Report.
- D. Print the report.
 - 1. Select My Recent Reports from the Reporting Menu.
 - 2. View the status of the report.
 - a. Submitted the report is waiting to be processed.
 - b. In Process the report is being created.
 - c. Completed the report is created.
 - 3. If the status of the report is completed, select the PDF version of the report from the Report Format section.
 - 4. Open the report.
 - 5. View and print the report.
 - 6. Close the report after it prints.

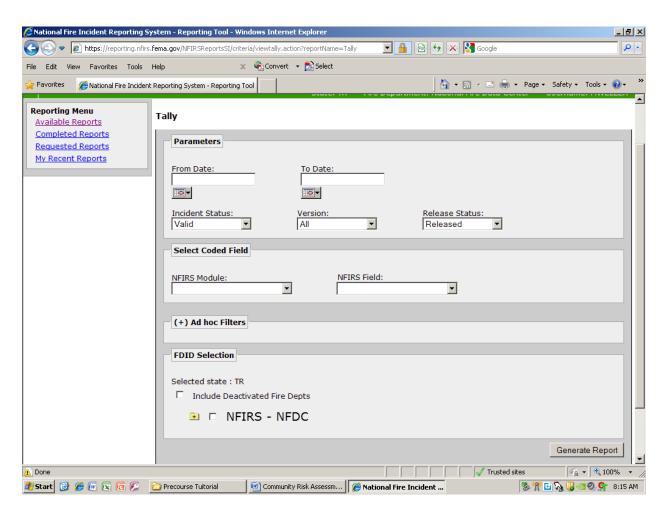
Note – the report you ultimately generate will look similar to the one displayed below. The report should be populated with data pertinent to your department.



9. Next, return to the Available Reports screen and select the Tally category.



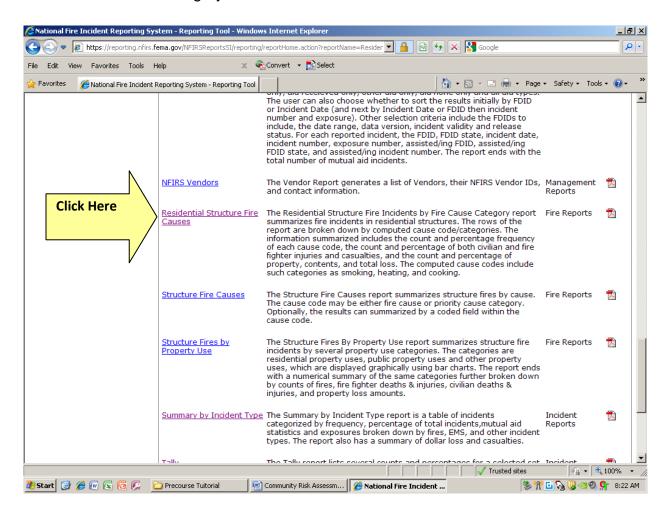
10. You should see the screen that is displayed below. Follow the directions listed at the bottom of this screen shot.



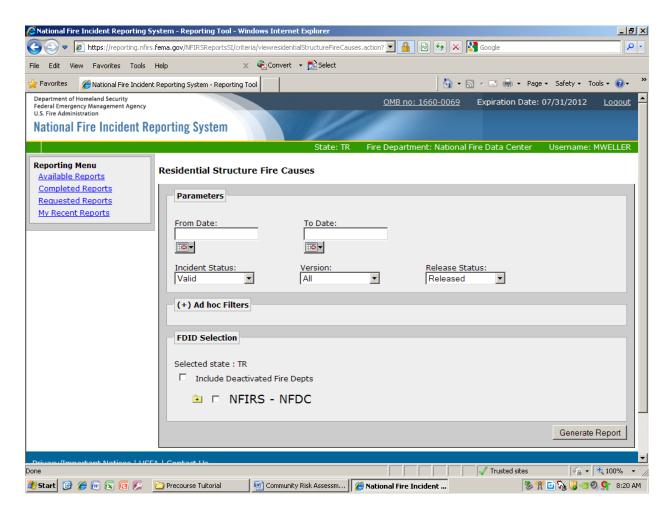
- A. Select the Tally report from Available Reports.
- B. Enter the following parameters:
 - 1. From Date (format mm/dd/yyyy)
 - 2. To Date (format mm/dd/yyyy)
 - 3. Incident Status = All
 - 4. Incident Version = All
 - 5. Release Status = All
- C. Select the data field to display on the report.
 - 1. NFIRS Module = (e.g., Basic Module)

- 2. NFIRS Field = (e.g., Incident Type)
- D. Select the fire department to include in the report.
 - 1. In the FDID Selection section, drill down to the fire department.
 - 2. Check the box next to the fire department.
- E. Generate the report.
 - 1. Move down to the button named Generate Report.
 - 2. Select Generate Report.
- F. Print the report.
 - 1. Select My Recent Reports from the Reporting Menu.
 - 2. View the status of the report.
 - a. Submitted the report is waiting to be processed.
 - b. In Process the report is being created.
 - c. Completed the report is created.
 - 3. If the status of the report is completed, select the PDF version of the report from the Report Format section.
 - 4. Open the report.
 - View and print the report.
 - 6. Close the report after it prints.

11. Next, return to the Available Reports screen and select the Residential Structural Fire Causes category.



12. You should see the screen that is displayed below. Follow the directions listed at the bottom of this screen shot.



- A. Select the Residential Structure Fire Causes report from Available Reports.
- B. Enter the following parameters:
 - 1. From Date (format mm/dd/yyyy)
 - 2. To Date (format mm/dd/yyyy)
 - 3. Incident Status = All
 - 4. Incident Version = All
 - 5. Release Status = All
 - 6. Include Individual FDID Reports = blank

- C. Select the fire department to include in the report.
 - 1. In the FDID Selection section, drill down to the fire department.
 - 2. Check the box next to the fire department.
- D. Generate the report.
 - 1. Move down to the button named Generate Report.
 - 2. Select Generate Report.
- E. Print the report.
 - 1. Select My Recent Reports from the Reporting Menu.
 - 2. View the status of the report.
 - a. Submitted the report is waiting to be processed.
 - b. In Process the report is being created.
 - c. Completed the report is created.
 - 3. If the status of the report is completed, select the PDF version of the report from the Report Format section.
 - 4. Open the report.
 - 5. View and print the report.
 - 6. Close the report after it prints.

Summary of NFIRS Tutorial

Because fire departments and states take part in NFIRS voluntarily, NFIRS conclusions may not completely reflect the entire nation's fire experience.

Also, remember that when utilizing any type of data collection software, it is critical that everyone responsible for incident reporting does his or her job in an objective manner. Simply stated, this means that your department must set a protocol for how incidents are classified.

Here is an example: Consider the typical unattended cooking fire that occurs when a person forgets about a pan of oil being heated on a stovetop. Unless your department has agreed on how your staff will classify the incident, you may end up reporting one of several selections. Over a period of time, this subjectivity in reporting can lead to the creation of an unreliable set of data about unattended cooking fires whereby you cannot discern how many incidents of people walking away from a stove you actually respond to.

If you submit data to NFIRS, it is a very wise strategy to explore the NFIRS webpage thoroughly. There are many sections that include helpful suggestions on how to classify and report incident data.

Assignment for Part 1

- 1. Use FactFinder to build a **current** demographical profile of your home community. Develop a profile of the people who live in your community (age, gender, race, ethnicity, incomes, poverty, etc.). Perform the same actions for housing (type of homes, age, owner versus renter, etc.). A profile of employment should also be explored. **A worksheet (with prompting questions) is provided to assist you.**
 - a. The demographic information will be used throughout the LSCRR course.
 - b. You **must** have this information available throughout the LSCRR course in order to process the in-class activities **and** the culminating project for the course. Saving the information on a memory device or printing hard copies is highly recommended. All *FactFinder* categories can be downloaded or printed. You may also wish to save the Census Bureau site as a favorite on your PC.
- Once information has been gathered, consider how your home community has developed over time (past 20 years). Also consider how it may change as time progresses. As part of this assignment, use bullet points to identify how your community has changed over the past 20 years and what its profile may look like 10 years from now.
 - a. One last **huge** point to consider: The U.S. Census is collected and processed every 10 years. Community demographics can change dramatically during that timeframe. Executive officers must remain knowledgeable of their home community's changing demographics.
 - b. It is wise to have a discussion with your local planning or community development professionals. If you have such a discussion, please include your findings as part of the narrative for this section.
 - c. Being able to **explain and use** the demographic, social, and cultural development of your community is essential to the effectiveness and credibility of your prevention programs.

DEMOGRAPHIC WORKSHEET

Use *FactFinder* to build a demographic, social, economic, and housing profile of your community. **Bulleted summary statements are acceptable.**

Category	Description		Questions to answeryour community
Demographical (people-related information):	Population size, distribution, age, ethnicity, and cultures.	•	What is the total population of your community?
		•	Population of each census tract?
		•	Which census tracts have greatest concentration of the following high-risk populations:
			- Children under 5 years? - Older adults?
			People challenged by poverty?People with disabilities?
			- People who speak little or no English?
Social characteristics:	Education levels and family profiles.	•	What are the demographics of education levels throughout your community?
		•	What census tracts include the greatest populations of the following:
			- Single-parent homes?
			- Two-parent homes?
			People living alone?Older adults living alone?
Economic	Employment profile	_	Media the ampleument profile of
characteristics:	Employment profile and rates, income levels.	•	What is the employment profile of your constituency?
			- Types of jobs?
			Work in community or commute?Major local employers?
			- Unemployment rate?
			- Income level ranges?

DEMOGRAPHIC WORKSHEET

Category	Description	Your Community
Housing profile:	Age of homes and occupants, types of residential occupancies, home ownership versus rental properties, transience among residents.	 What is the overall housing profile of your community? Average age of homes? New (or recent) construction? Homes with automatic detection and suppression equipment? Types of residential construction? Types of residential properties? (single family, duplex, multiunit) Renter versus owner occupied? Transience? (How often do people relocate to another residence?) Noteplease consider all census tracts. However, you only have to develop a general overview of your community's housing profile.
Growth trends:	Use Population Finder to project growth trends for your community. This option is located above the Fact Sheet selection option.	Use bullet points to profile how your community has changed over the past 20 years and what its profile may look like 10 years from now.

PART 2: BUILDING A RISK PROFILE OF YOUR COMMUNITY

Estimated time for completion of this section: 10 hours (contingent upon the organization's data collection system and the student's ability to extrapolate objective information)

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

Background Information

Every 79 seconds, fire occurs in someone's home. Residential fire affects over 400,000 families each year.

Residential fire deaths dropped to approximately 2,600 in 2002. This was the lowest death rate since the National Fire Protection Association (NFPA) began its current level of fire documentation in 1977. A similar reduction trend occurred in the early 1990s. Then, a three-year spike in the mid-1990s followed. Similar trends have occurred since then.

Seventy-nine percent of fire deaths occur in residential occupancies. Three quarters of all fire-related citizen injuries occur in residential fires.

Over 90 percent of America's homes have at least one smoke alarm. Up to 30 percent of these alarms don't work. **One third of all fires and 60 percent of fire fatalities occur in** *these* **homes.** That's high-risk!

The U.S. Fire Administration (USFA) and NFPA identify the national leading causes of fire to occur most frequently in the following order:

- 1. Unattended cooking--also leading cause of fire-related injury.
- 2. Arson--also second leading cause of fire death. Juvenile firesetting and fireplay are included in this area.
- 3. Heating appliances.
- 4. Electricity.
- 5. Smoking--remains leading cause of fire death.

One of the USFA goals is to reduce risk at the local level through prevention and mitigation. Unfortunately, many emergency service organizations plan risk-reduction strategies solely on *national* statistics. While national statistics play an important role in

identifying common risk issues, close examination of the local community and its needs is essential to effective risk reduction.

The National Fire Incident Reporting System (NFIRS) represents an option for use in obtaining the requested information. However, you must ensure that **accurate and objective** information has been obtained by your organization.

The USFA logically places emphasis on reducing America's fire problem. In addition to reducing the occurrence of fire, today's risk-reduction leaders must examine community risk from a broad perspective.

USFA calls for development of comprehensive multihazard risk-reduction plans within 2,500 American communities. These initiatives are to be led by or include the local fire service. In response to this challenge, CRR leaders should create an all-hazard profile that includes an overview of human-created and natural risks that currently or could threaten their community.

For this reason, the assignment for Part 2 is divided into three sections.

Section 1 requires you to objectively profile the leading fire problems currently affecting your community. While you should consider frequency of occurrence as a baseline for selection, other factors must be examined as well. These factors are listed on the worksheet. Try to get specific. If residential fires are your problem, can you identify what is the leading cause of these fires? Is it unattended cooking, candles, or electrical?

Section 2 directs you to identify preventable injuries and other human-created incidents that frequently impact your constituency. Consider frequency of occurrence and the other factors listed as you make selections.

Section 3 asks you to reflect on the **naturally-occurring** risks that have a history of or *significant* potential to impact your community. More information is provided prior to the worksheet.

Note--Information from all three sections must be compiled and interpreted prior to attending LSCRR. You will not be able to process an effective risk analysis of your community without it.

Assignment for Part 2

Section 1--Your Local Fire Problem

1. Using **local** data, list your fire experience using the following attributes:

- frequency of occurrence (listed by percent contrasted with total number of fires);
- morbidity and mortality (number of civilians injured or killed annually by this type fire);
- rate of rise for occurrences (is occurrence of fire rising, steady, or declining?);
- geographic distribution of occurrences (examine by census tract);
- financial impact to fire hosts, the community, and your organization; and
- population(s) most experiencing the specific type of fire.

A master worksheet is provided for your benefit. Please produce a copy for each of the five causes of fire you select. It is suggested that frequency of occurrence be used to initially select your leading types of fire to profile.

FIRE RISK WORKSHEET

Section 2--Other Human-Created Risks

1. In addition to fire, other human-created risks currently impacting your community. Likely among them are motor vehicle collisions, pedestrian incidents, falls to older adults, and other **preventable** occurrences.

These occurrences may happen so frequently that a community doesn't pay attention to their magnitude. Even worse, constituents (and even our industry) may grow complacent toward solving complex, yet frequently occurring, preventable risks.

This section begins by requiring you to examine America's preventable injury problem. It culminates as you profile preventable occurrences other than fire that currently (or have great potential to) affect your home community.

- Access the Centers for Disease Control and Prevention (CDC) Web site at www.cdc.gov Examine the section on injury, violence, and safety. The CDC collects and provides national data on age-specific leading causes of morbidity and mortality. Data queries can be refined per State through the National Center for Injury Prevention and Control (NCIPC).
- 3. The Web address specific to injury query is www.cdc.gov/ncipc/ncipchm.htm
 This site emphasizes the daily toll and cost of injury in the United States. This site is linked to Web-based Injury Statistics Query and Reporting Systems (WISQARS) which includes
 - a. Injury mapping--maps for county, State, region, and entire U.S. mortality rates.
 - b. Cause of death and injury charts.
- 4. Using a reliable source of local data, profile the causes of preventable injury and death that impact **your** community most frequently. If your organization is responsible for EMS, the source may be your own response data. If not, consider your local EMS authority, hospital(s), or health department.

If you cannot locate data specific to your community from a local source, consider using data published by your State.

You should profile five causes of preventable injury or death using the following attributes:

a. Frequency of occurrence (by percent contrasted with total number of injuries/deaths).

- b. Morbidity and mortality (number of civilians injured or killed annually by this type incident).
- c. Rate of rise for occurrences (are number of incidents rising, steady, or declining?).
- d. Geographic distribution of occurrences (examine by census tract).
- e. Financial impact to the victim, community, and your organization.
- f. Population(s) most experiencing the specific type of incident.

A master worksheet is provided for your benefit. Please produce a copy for each of the five causes of preventable injury you select. It is suggested that frequency of occurrence be used to initially select your leading occurrences to profile.

Note: Arson, hazardous materials release, and domestic terror are also examples of human-created (preventable) risks. Should you select one of these categories, be prepared to compare and contrast it with the impact created by other more frequently occurring incidents.

PREVENTABLE INJURY/DEATH WORKSHEET

Incident Type:	
Frequency (%)	
Morbidity/ Mortality	
Rate of Rise	
Geographic Distribution	
Cost (in \$)	
Population(s) most affected by this risk	

Section 3--Naturally-Occurring Risks

- 1. While the majority of human-created 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.
- 2. While not preventable, most naturally-occurring risks are predictable. Coastlines are more vulnerable to hurricanes. The south and mid-west regularly experience tornados. More snow falls in the northern portion of the country than in the south. Lightning-initiated wildfires occur in forests.
- 3. In addition to reducing fires and preventable injury, LSCRR advocates study of naturally-occurring risks that currently (or have a potential to) threaten the community you protect. Consideration should be based upon potential loss of life, personal property, and overall vitality of the community.
- 4. Please select three naturally-occurring risks that currently (or will likely) impact your community. These should be significant events that don't occur often, but when they do, there is great potential for high-impact.
- 5. Follow the worksheet's instructions to profile the risk. Next, offer an objective opinion as to your community's preparedness to mitigate the effects of a significant occurrence.

You should profile each risk using the following attributes:

- a. Prior frequency of occurrence. (How often has it impacted your community?)
- b. Past history of loss (number of civilian casualties, property damage, community vitality).
- c. Areas of community most affected (some neighborhoods more vulnerable?).
- d. Projected frequency of event. (When might it happen again?)
- e. Potential future losses (life, property, community vitality).
- f. Current preparedness/areas of concern. (Is your organization and community prepared to effectively mitigate effects of the next event?)

NATURALLY-OCCURRING RISK WORKSHEET

Incident Type:			
Prior Frequency of Event			
Past History of Loss (Life, Property, and Community Vitality)			
Areas of Community Most Affected			
Projected Frequency of Event			
Potential Future Losses (Life, Property, and Community Vitality)			
Current Preparedness/ Areas of Concern			

PART 3: IDENTIFYING ROOT FACTORS OF RISK AND POPULATIONS AT GREATEST RISK

Estimated time to budget for completion of this section: 1 hour

Note--this section requires reading only. Please reflect on the data you obtained in Part 1 of the precourse assignment on community demographics.

Background Information

The roots of America's fire problem are similar to those of the majority of other life safety risks in our country. Contributing elements that often lie at the core of risk include social, cultural, economic, and environmental factors.

CRR leaders must master how to identify, understand, and address how these factors are impacting fire risk at the **local** level. Of interest--many social, cultural, and economic risk elements often remain consistent regardless of community size. Differences most frequently occur in environmental factors.

Social Factors

Social problems such as a lack of quality housing, affordable health care, inadequate or unavailable childcare, lack of education and job opportunities, etc., are all social factors that contribute to risk.

Government systems, or lack of systems and services, can greatly impact social factors. Peers, family members, societal trends, and commercial marketing efforts can also generate social influences.

Cultural Influences

Cultural influences are the values, beliefs, behaviors, etc., of a specific group. Cultural beliefs are learned over time and through experiences. These beliefs can greatly influence a person or group's behavior.

Social and cultural influences are so interconnected that they often appear one and the same. Don't get hung up trying to overanalyze the differences. The point to consider is that both social and cultural factors/influences can have huge impact on risk in America, both positively and negatively.

Economic Factors

Income levels often impact the risk of fire or preventable injury among populations. Families with low income may not be able to afford fire protection systems, quality housing, regular daycare, etc.

National statistics clearly indicate the risk of fire and preventable injury is higher among economically-challenged populations. Economic factors include family, societal, and workplace influences that affect personal finances.

A strong local economy and workforce can influence the level of potential community risk in a positive manner. A broad-based spectrum of employment that offers an adequate number of jobs can lead to stable employment rates and a healthy diverse community.

In contrast, a community that offers limited employment options, with the majority being lower paying manufacturing positions, may see higher numbers of people challenged by preventable risk.

Environmental Elements

The environment in which populations live and work can affect risk. Lack of fire protection systems, cluttered living conditions, fire load, poorly maintained housing, and substandard construction are examples of such factors.

Environmental factors are often compounded by a lack of building and fire codes, or the lack of retroactive application of those codes. The lack of fire protection systems in aging multifamily housing is a common environmental factor that contributes to America's fire death rate plateau.

Contrasting Urban, Suburban, and Rural Fire Risk

Fire risk affects all communities regardless of size. Risk reducers should be able to identify risks and associated factors specific to their community regardless of size.

Historically, emergency providers believed the demographics of urban, suburban, and rural communities were vastly different. As technology continues to impact our society, many of the old stereotypes about the starkly different characteristics of urban, suburban, and rural communities will gradually disappear. A common fact will remain: the lifestyles of families are influenced by social, cultural, economic, and environmental factors.

It is important to have an understanding of these elements and how they contribute to fire and other preventable risks. It is also important to examine populations that are more vulnerable to risk.

Identifying Risk Factors In Specific Populations

Community risk is best addressed based on the objective study of data. Many national organizations (i.e., the USFA, the Federal Emergency Management Agency (FEMA), NFA, and the NFPA) have conducted extensive research and identified four respective populations known to be at higher risk from fire:

- 1. Young children (age 5 and under).
- 2. Older adults (age 65 and older).
- 3. People with disabilities.
- 4. People living in poverty.

Of interest, these populations consistently represent the groups that are most at risk from a plethora of other preventable occurrences.

Several factors can place people at greater risk for fire and preventable injury:

- age and gender;
- cognitive ability and intellectual level;
- physical, mental, and emotional condition;
- socioeconomic status: and
- community demographics and personal living conditions.

An important point to consider during the entire LSCRR course is when the risk factors that contribute to fire or preventable injury occur in combination, a person's vulnerability to risk may increase dramatically. For example, a visual-, hearing-, and mobility-impaired older adult living below the poverty level may be at much higher risk from fire than an older adult with only one of these challenges.

In 1999, leaders convened to discuss fire risk among the populations confirmed to be the most vulnerable. A report entitled "Solutions 2000" was generated as a result.

High-risk populations are at greater risk from the effects of most hazards, both natural and human-created.

- children (age five and under);
- impoverished households;
- older adults (age 65 and over);

- people affected by disabilities; and
- populations who speak little or no English.

The Solutions 2000 series focused on fire risk. However, a person's age, intellect, social class, physical ability, and living environment can impact their vulnerability to virtually **any** type natural or human-created risk.

In addition to the Census Bureau, there are many other community resources that may be useful when researching high-risk populations. Other sources for obtaining information on **local** community demographics include

Children age 5 and under: Office of Community Development, Board of

Education/School Districts, Head Start

Programs, Child Care Associations

Adults over age 65: Office of Community Development,

Commission on Aging, Older Adult Advocacy

Agencies

People with disabilities: Office of Community Development, People with

Disabilities Advocacy Agencies

People living in poverty: Office of Community Development, Office of

Housing and Urban Development, Social Service Agencies, Community Action Councils, Advocacy Agencies for Low Income Families

English as a second Office of Community Development, Board of

language and diverse Education/School Districts, Head Start

cultures: Programs, Child Care Associations, Social

Services and Community Action Council