INTRODUCTION

For a community to have complete confidence in the public safety services being provided throughout its borders, an assessment of risk model must be honestly applied to the community. The application of a tested risk assessment model allows elected leaders the ability to make educated decisions on the level of service they desire.

Due to the limited amount of resources available to respond to the cadre of emergencies, communities must set response standards based on identified risk specific to their area. Fire chiefs who do not apply valid risk assessment models to their communities are failing to honestly inform their leadership of the needs they have. At best, they are basing everything from daily staffing to apparatus deployment on guess work or failed past practice.

The Commission on Fire Accreditation International (CFAI) defines the standards of response coverage for a fire department as being those "adopted written policies and procedures that determine the distribution, concentration, and reliability of fixed and mobile response forces for fire, emergency medical services, hazardous materials, and other forces of technical response" (CFAI 1999). There have been many attempts to create a standard for the response of firefighters and paramedics without gaining national or even international consensus. Several industry standards have been adopted in the last decade, mainly *National Fire Protection Association Standard 1710*, attempting to create a standard for staffing of fire and medical response apparatus in the community. While many communities have adopted in theory the staffing and response mandates of NFPA 1710, few actually have the ability to completely comply.

Prior to this study, the City of Sidney had not completed a thorough risk assessment of the community. In 1994, a fire station location analysis was performed to determine the best location to construct a replacement central fire station. Included in that report was a risk assessment and the development of fire demand zones. The fire demand zones were based on demographics and zoning districts along with a general review of fire risk based solely on occupancy. However, individual scoring of commercial and industrial facilities was not completed. Since that time, the risk assessment model has been developed by CFAI and has been accepted nationwide and is part of the self assessment component used by CFAI in the accreditation process throughout the country.

The current method of assessing individual risk in Sidney was adapted from a program found in use at the Jacksonville Naval Air Station Fire Department in Jacksonville, Florida and the Winter Park, Florida Fire Department. A modified version has also been used by Washington Township Fire Department in Dublin, Ohio. The community risk assessment (CRA) program allows fire personnel to perform specifically developed "windshield" surveys of each property in the community. Coupled with several assumptions and known facts related to a particular property, a valid risk assessment is developed. The CRA gives first responders the ability to regularly review each property in their respective demand zones and become familiar with the level of "risk" in this community; and it provides adequate information to develop the community's standard of response coverage (SORC).

Other tools of assessment are applied to the community including critical tasking of each tactical assignment and the application of pertinent geographical information system (GIS) data. All of the components, along with the formal adoption of Standard of Coverage, allows the agency to be on the cutting edge of the national fire service.

The process of performing continuing risk assessment of the community provides vital information for not only our first responders, but for management as well. Important decisions cannot be made without properly assessing risk. To that end, it is important that elected leaders have a complete

picture of fire department operations in their effort to provide a safe community to live, work, and play.

SECTION 1 – Community Baselines

The goal of the community risk assessment is to evaluate the whole community to allow the elected officials the ability to make a calculated decision on the level of service they want from their fire and EMS services. The first area examined in this assessment is the community itself. Section 1 will look at the history, demographics, geography, and government infrastructure in Sidney, Ohio and the impacts of these systems on emergency services. Also reviewed in this section are the mission and vision statements of the agency as they relate to the Standard of Coverage policy.

Section 1.1 – Community Overview

The City of Sidney, named after Sir Philip Sidney, a well-known poet and member of British Parliament, was originally a 70-acre parcel of land located along the west side of the Great Miami River. This land was donated by Charles Starrett to be used as the site of a new town which was to become the county seat of Shelby County. The area around Sidney was once the richly-forested hunting ground of the Shawnee and Miami Indian nations. This fertile area was developed as agricultural lands over time.

The construction of the Miami-Erie Canal between 1825 and 1837 connected Sidney in a north/south direction with the major trade centers in Ohio. In addition to opening the first significant "outside" trade for Sidney, the construction of the canal also attracted an influx of settlers to the area.

As the influence of the canal declined, another transportation element, railroads, began to develop in Sidney. East-west rail began to be laid in 1851, followed by north-south rail in 1856. Sidney is still served by these railroad lines today.

In the 1950's, another transportation element, the Interstate Highway, would play a significant role in the development of Sidney. Today, Interstate 75 connects Sidney with Canada to the north, and Florida to the south. Sidney has four interchanges with Interstate 75, providing quick and convenient access for both commercial and industrial users.

Today, Sidney is a progressive, growth-oriented community with a population of approximately 20,000. It is strategically located 40 miles north of Dayton, 85 miles west of Columbus, 100 miles south of Toledo, and 120 miles east of Indianapolis. Sidney offers an historic downtown featuring the famous Louis Sullivan designed People's Savings & Loan building, the Monumental Building (erected as a monument to those Shelby Countians who died in the Civil War), and the Shelby County Courthouse. The Courthouse, which occupies one city-block known as Court Square, was recently named as one of the "Great American Public Places".

Another unique characteristic of Sidney is its outstanding parks and recreation system. When the City's first comprehensive plan was being developed in the mid-1950s, the City decided that it would be an attractive feature to have a park or recreation area within a half-mile of every residence. This goal has resulted in a system of 14 neighborhood parks, a baseball complex, softball complex, soccer complex, municipal swimming pool, and the 180-acre Tawawa Park, a nature and picnic area.

Sidney offers a variety of employment opportunities, a variety of housing stock, and an unsurpassed level of quality of life amenities. Regardless of whether you are looking for a place to locate your business, to establish a home, or just to visit, Sidney, Ohio has what you're looking for!

Sidney’s Fire Department, informally organized as a fire brigade in 1857, has an exciting past full of tradition and hometown pride. Growing rapidly with a number of manufacturing firms starting, Sidney began to anticipate the prospect of major fires occurring in the town.

When an alarm of fire sounded, volunteers (known at the time as minutemen) formed a brigade and would run quickly to the scene, grabbing the nearest bucket. Once there, they located a water source and then formed two lines, one passing full buckets and the other returning the empties. This method of putting out fires continued until 1869 when City Council authorized the purchase of an Anderson Fire Engine that could be pulled by hand to the fire and water pumped into and out of the machine by handles on each side. The pumper was stored on the east side of Main near Court Street in downtown Sidney, although the exact location is unknown.

Sidney's approach to fire protection changed dramatically in 1872 when Council authorized the purchase of a hook and ladder wagon and buckets for $588. The wagon was pulled by hand and featured several ground ladders. In an era of black fire buckets, Sidney distinguished itself with red ones. Council also authorized a small hose house for $185, built on the southeast corner of Main and Court streets, later the site of the county jail. The next year, Council bought a hose reel for $411 and moved the hose house to the Courtsquare across the street. The Fire Department moved into the newly-dedicated Monumental Building in 1876.

In 1873, a brick waterworks building was erected on the east bank of the Great Miami River to hold the engines, water-wheels and other necessary equipment that was installed by the Holly Manufacturing Company of Lockport, New York. A contract was made with B.W. Maxwell to furnish the water that would flow through the mains (pipes) to serve the town. The water was obtained from the Mosquito Creek and stored in two reservoirs.

The first water pipes and hydrants were made of wood. To get water from a hydrant, a hole was chopped into the wood; water ran into a depression beside the hydrant, and buckets were used to scoop up the water. A wooden plug was forced into the hole to stop the flow of water. From this practice came the name, "fire plug."

A report in 1882 states that the waterworks mains led to almost all parts of town. The steam fire engine also had access to the water in the canal and river, while reservoirs could be reached at all points not accessible by the water-works.

With new equipment and hose house came the expansion of local "fire companies," common in larger eastern cities. By 1876, activities of these fire companies were frequently reported in the *Shelby County Democrat*: Tawawa Hose Company #1, Valley City Hose Company #2, Niagara Hose Company #3, and the Pioneer Hook and Ladder Company. After the Monumental Building was completed and outfitted for the fire department, a fire alarm system was developed. A succession of rapid taps of the fire bell atop the building signaled a fire. These taps would be followed by location taps: First Ward, one tap; Second Ward, two taps; and Third Ward, three taps, a system greatly expediting response.

Sidney voters approved a water system in 1872 complete with a waterworks, underground pipe, fire plugs, and reservoirs, a significant factor in improving fire protection. Sidney was one of the first small cities to have a city-wide waterworks. Use of underground cast iron pipe, instead of hollowed out wooden logs, considerably improved the reliability of the water system. More than 4 miles of main pipe in the ground, 42 fire plugs, and 147 hydrants for private use were in place by 1883. Arriving at the scene, hose companies hooked their hose to the fire plug or sometimes dropped their suction hoses into small, open reservoirs. Water pressure from the water main, usually quite strong, traveled through the hose to the nozzle to be directed on the fire. Firemen could also use the Anderson Fire Engine to pump water by hand from a reservoir.

Local fire companies were also social clubs, with prominent citizens as members. Monthly meetings were announced in the local newspapers and the election of officers was always well publicized. Fund-raisers were common. The Tawawa Hose Company sponsored a masquerade ball at "Singe" Hall on Easter Monday of 1877, with the local newspapers asking the public to "give them a goodly number…proceeds for benefit of the fire company and make our fire department more efficient." Sidney's firemen celebrated Independence Day, including a parade around the Courtsquare.

Sidney's Monumental Building was completed by 1876. The Tawawa Hose Company and the Pioneer Hook and Ladder Company moved in, while city offices were established on the second floor.

A wintertime fire in 1879 set the stage for a big change in the operation of Sidney's fire protection program. A midnight fire in the Yinger dwelling at the southwest corner of Main and Court Street sent the fire companies scrambling to the scene. "…hose reels soon arrived and in the intense cold, the firemen worked like beavers," the *Shelby County Democrat* reported. "…let us say it was demonstrated beyond a doubt that the services of a chief is wanted as every person at the fire was boss and for this reason, considerable damage…was through the lack of proper management."

City Council responded by establishing a Fire Department with an overseeing Chief Engineer. Each hose company could continue to choose their membership and elect officers, but they would be under the Chief Engineer's control during emergencies. Although his title was Chief Engineer, Michael Smith was really Sidney's first Fire Chief.

In 1869, Council authorized the purchase of an Anderson Fire Engine which was pumped using manpower to do the work, followed by the purchase of a hook and ladder wagon in 1872.

In 1883, Council purchased their first steam engine pump, an Ahrens-Fox Steamer for $4,000, later nicknamed "the Henry Young" in honor of the Chief Engineer who helped bring needed change in the department. By then, the department had an Engine Company, Hook & Ladder Company, and Hose Company, all pulled by horses.

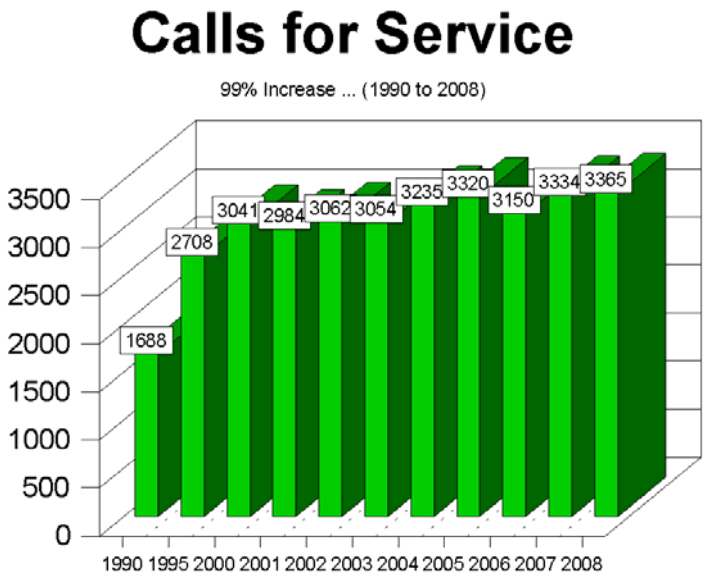
At the time the Steamer was bought, Sidney was recognized as having one of the best equipped fire departments in the nation for a community of its size. The steamer was a very dependable piece of equipment when called into use and worked major fires at the W.H.C. Goode home (Whitby Place) in 1899 (which was also heavily damaged in 1941); Sidney School Furniture Company, Wagner Manufacturing Company, and Thedieck's Department Store (two fires).

Today's department includes three engines, a ladder, heavy rescue unit, four ambulances, five command vehicles for the Chief, Deputy Chief, two Fire Prevention Lieutenants and the Training Officer, a four-wheel drive pickup housed at Station #1 to pull the Technical Rescue Trailer which holds the equipment for confined space, high angle, and trench rescue; a mobile Fire Safety Education Center, and a utility vehicle at Station #2.

On January 4, 1982, Fire Station #2 was placed in operation at 411 Vandemark Road. On October 27, 1996, the city dedicated its present central fire station at 222 West Poplar Street, once the site of Sidney Grain and Milling doing business as The Stone Bridge Warehouse. The new station cost $2,862,000 to build--including fixtures and furniture.

From the early days of four paid officers to a staff of 38 personnel plus a secretary, today's department has a daily minimum manning of eight crew members. Calls have escalated from 25 in 1897 to total of 3,365 in 2008.

The chart below graphically displays the significant increase in calls for service over the last 18 years.



Section 1.2 – Governance Model

The City of Sidney is governed by a Council/Manager form of government. The Sidney City Council is comprised of a seven-member body. All council members are elected to four-year staggered terms. There is one council member elected from each of the four wards and three council members are elected at-large. The following individuals represent the current elected officials of the City of Sidney:

Michael Barhorst ……	Mayor (At-large)
Terry Pellman …….	Vice-Mayor (At-large)
Frank Mariano ……	Council Member At-large
Mardie Milligan ……..	Council Member First Ward
Katie McMillan …….	Council Member Second Ward
Tom Miller …….	Council Member Third Ward
Steve Hamby ……..	Council Member Fourth Ward
Steven B. Stilwell ……..	City Manager
Jocele Fahnestock ……..	City Clerk

Incorporated 1853
11.7 square miles

The City Manager appoints agency heads and by Charter has the ultimate approval of all employees and acts as the Chief Executive Officer of the City. The Manager is responsible for carrying out Council policies through professionally trained and experienced staff.

The Fire Department, as well as the Police Department, is further governed by the City's Civil Service Commission, adopted by the City Charter in Section 6-4. The Civil Service Commission conducts examinations for entry-level firefighter and police officer positions as well as promotional testing within the public safety departments. The Civil Service Board includes three civilians appointed by City Council and a liaison from the Human Resources Department.

Section 1.3 – Current Level of Service
The agency is considered as a full-service emergency services provider. From the expected to the unexpected, Sidney Fire & Emergency Services provides the community an all hazards approach to customer service. Services are provided from two fixed locations (fire stations) which are strategically located in the community. The staffing pattern is a variable model using cross-staffed personnel and dual-staffed apparatus along with off-duty firefighter response and mutual aid. The department provides dual staffing for two engines, a rescue/engine, a ladder truck, and two EMS units. The specific incident determines the response. In addition, the department staffs a reserve engine and EMS unit and a back-up EMS unit with off-duty personnel.

The department provides technical rescue capabilities and the equipment for these types of incidents are typically transported by the technical rescue trailer. Technical rescue capabilities include trench rescue, rope rescue, confined space rescue, and fast water rescue. Hazardous materials response is provided as part of a joint Sidney-Shelby County Hazardous Materials Response Team.

In addition, Sidney Fire & Emergency Services is an active participant in the Shelby County Mutual Aid system for both fire and EMS and provides fire investigation services through a task force effort throughout the county.

The Sidney Department of Fire & Emergency Services is an advanced life support (ALS) emergency medical services transport provider. Initially, the department responded to resuscitator calls in the late 1950's, but in 1963 began response to medical emergencies in the community. In 1978, the department began providing ALS service, which is commonly referred to as paramedic level service. Currently, all career firefighters are certified at the EMT-B level and 24 members are certified as EMT-P and 2 personnel are currently enrolled in paramedic school. Three of the department's ambulances are equipped as advanced life support units and the fourth back-up unit is equipped as a basic life support unit. In addition, five pieces of apparatus carry semi-automatic defibrillators including Utility 1 and Utility 2, Medic 6 (back-up EMS unit), Rescue 9, and Engine 1 and Engine 4.

Current Apparatus & Equipment Deployment

STATION 1		**STATION 2**
Engine 1	Medic 12	Engine 4
Engine 3	Medic 6	Medic 10
Rescue 9	Medic 14	Utility 2
Ladder 5	Utility 1 / Rescue Trailer	

Section 1.4 – Mission and Vision Statement
The mission of the Sidney Department of Fire & Emergency Services is to serve and protect the community by minimizing loss of life and property through education and the utilization of a highly-trained work force.

The vision of the Sidney Department of Fire & Emergency Services is to be recognized as a leader in the fire service. We strive to be respected by the citizens for anticipating and responding to the changing needs of the community. The department will incorporate new technologies and techniques, focusing on training and education to provide the highest level of customer service and satisfaction in a professional and compassionate manner. (*adopted 2/6/2009*)

SECTION 2 – Risk Assessment
The only true way to adequately and properly provide services for the community is to assess the risk being protected. Unfortunately, many communities across the country never actually assess the risk

they are assigned to protect; they base their levels of protection on past-practice or common expectations. The community must assess the risk it protects to be able to educate and inform their elected officials and decision makers on what resources are needed to protect the community. This section will assess the immediate population served, the assessment tools used, impacts on deployment along with a comprehensive review of each demand zone (sector) for both fire and non-fire risk.

Section 2.1 – Population served

Sidney is located in west central Ohio along the I-75 corridor. Sidney has been known for decades as an industrial community as the daytime population increases from a normal 20,000 to approximately 30,000 during work hours. This section outlines key factors that are continuously considered during the development and maintenance of a community standard.

Population ……..… 20,211 (2000 US Census)

Demographics – The 2000 Census indicates that 92.6% of Sidney's population was white, 3.1% African-American, 1.9% Asian, and 1.2% Hispanic, and 1.2% from other races. The population distribution by sex is 51% female and 49% male.

Median household income …….. $38,663
Median family income ……..... $45,672
Median age …….. 34
% of high school graduates ……. 78%
% of college graduates …… 14%

Shelby County population …….. 47,910 (2000 US Census)
Total households …… 8,557

Public Safety Services
Fire Stations …… 2
Police Stations ……. 1

Educational Institutions
Elementary Schools ……. 5
Middle School…….. 1
High School ……. 1

Private Schools
Lehman Catholic High School
Holy Angels Elementary School
Sidney Christian Academy

Waterways
Total number of lakes/ponds …… 4
Great Miami River

Parks and Recreation
Parks and Recreation facilities …….. 23
Total Acreage: 702

Golf Courses
Moose Country Club

Public Utilities

Electric power ……	Dayton Power & Light Co.
Gas supplier ……..	Vectren
Water/sewer ……	City of Sidney
Stormwater management ……	City of Sidney
Solid waste/recycling …….	Waste Management
Telephone ……..	Embarq/Time Warner
Cable television/Internet ……	Time Warner

Major industry ……	machine tool/manufacturing
Largest employer ……	Emerson Climate Technologies

Retail shopping areas

Westown Plaza – Michigan Avenue/Vandemark Road
Vandemark Center – 505-569 Vandemark Road
Kroger Plaza – Michigan Avenue/Vandemark Road
Sidney Plaza – 1524-1760 Michigan Avenue
Sidney Foodtown Plaza – 1010 Wapakoneta Avenue

Major apartment complexes

Arrowhead apartments – 729-827 Arrowhead Drive
Amherst Country Villas – Amherst Drive
Autumn Park apartments – 363-387 West Russell Road
Canal Place apartments – 121 West Poplar Street
Cedarwood Commons – 220 Doorley Road
Carriage Hill – 2360 Wapakoneta Avenue
Countryside apartments – Countryside Drive
Deer Run apartments – 936 Buckeye Avenue
Mystic Apartments – 1491-1515 East Court Street
Northside Commons apartments – 308-328 West Russell Road
Northwood Dixie apartments – 140 Northwood Drive
Northwood Village apartments – 2315-2365 Collins Drive
Sycamore Creek – 712-760 Countryside Drive
Sidney Village apartments – 999 Buckeye Avenue
Spruce Street apartments – 1510 Spruce Avenue
Village West apartments – 500 North Vandemark Road

Assisted Living/Retirement Centers

Sidney Care Center – 510 Buckeye Avenue
The Pavilion – 705 Fulton Street
Jackson Towers – 333 East North Street
Dorothy Love Retirement Community (Clinton Township) – 3003 Cisco Road
Dorothy Love Apartments (Clinton Township) – 2500 N. Kuther Road
Fairhaven County Home – (Clinton Township) – 2901 Fair Road

Hospital

Wilson Memorial Hospital – 915 Michigan Avenue

Section 2.2 – Assessment Tool

For a community to appropriately provide for and understand the need for emergency services, a coordinated and comprehensive assessment must be maintained. If a community fails to assess the risk it faces, they will either fail to properly respond to the risk when needed, or will expend valuable resources in the wrong areas.

The Community Risk Assessment (CRA) tool implemented by the agency was a hybrid of the former risk hazard and evaluation system offered by the United State Fire Administration and refined by the Naval Air Station Fire Department in Jacksonville, Florida and Winter Park, Florida Fire Department. The agency was able to completely implement this tool and use it as intended to assess risk and deploy resources.

The CRA process was coordinated through the Fire Prevention Division and involved performing a coordinated survey of every commercial property in the city as well as selected residential properties. The master target hazard file was used to assign inspectors to survey and document the risk imposed by each property. Each property was assessed for the risk posed by the following items:

- Life hazard
- Community impact
- Hazard index
- Water supply
- Building usage
- Building construction
- Number of stories
- Square footage

Each of the areas described received a rating score from 1-3 with 1 equating to low risk or impact and 3 being high risk or high impact. The simplicity of this system allowed for an evaluation of over 620 properties. Each address was provided with a final CRA rating from 9 for the lowest risk to 24 for the highest. Upon completion of the field work, the data was processed into a spreadsheet which yielded a final score. The final data was then loaded into the GIS system which plotted each property by a CRA rating number.

The scores were reviewed and the following levels of identified risk were classified. Properties with the following CRA were classified with the associated risk level:

Risk	CRA Score
Maximum ……..	21-24
Significant …….	16-20
Moderate ……....	10-15
Low ……...	0-9

The CRA scores were assessed by demand zone (fire sector) to help identify locations of risk so that the ultimate location and placement of resources can be considered. In addition to the CRA, several other valuable important data were gathered as part of the overall risk assessment. These other assessments are directed at specific functions of the operation which impact both fire and non-fire risk. Each property assessed as part of the CRA program was identified and plotted in the GIS system. This allowed the visualization of where the “at risk” properties are within the city limits. An example of the maximum and significant risk property map has been included as Figure 1.

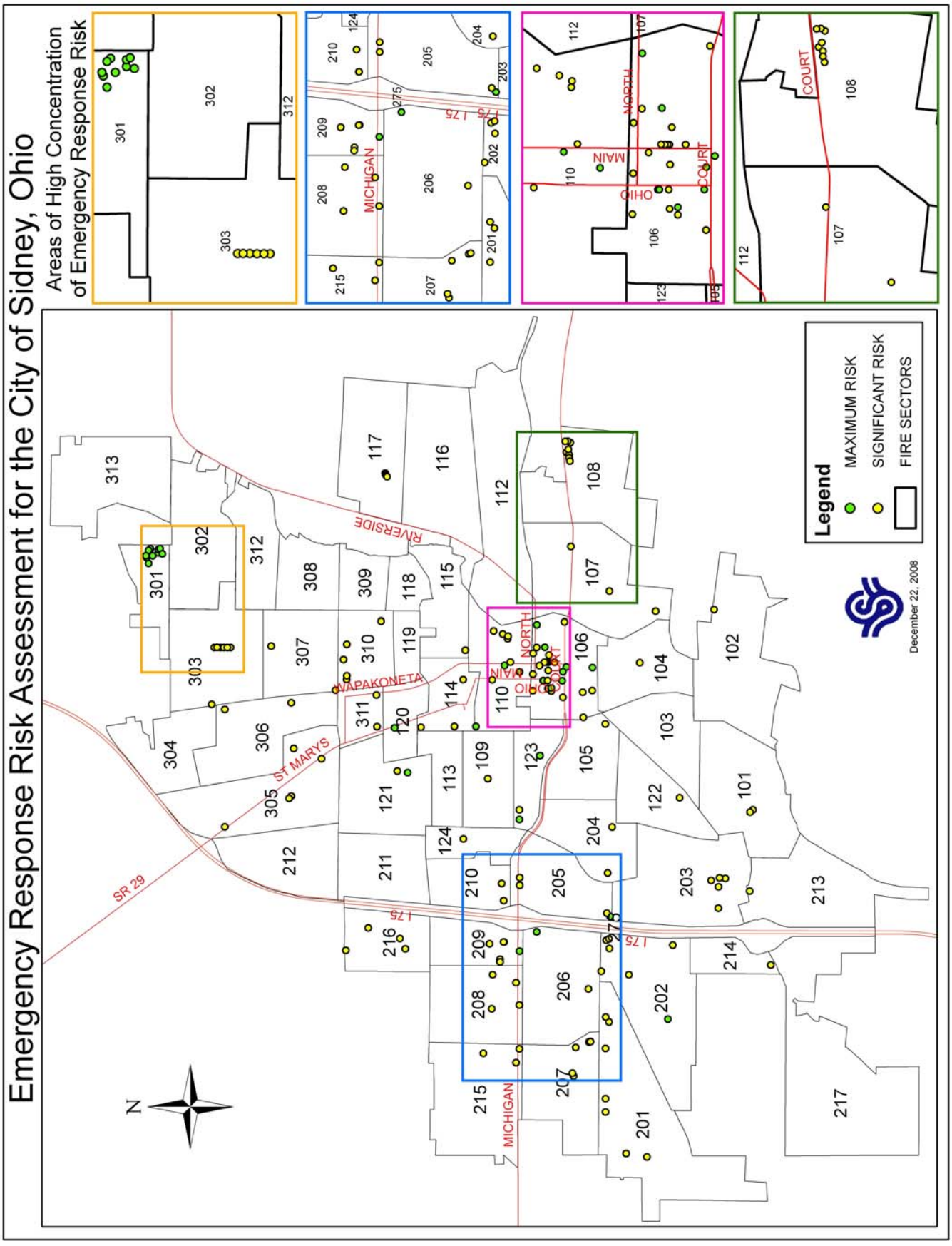

Emergency Response Risk Assessment for the City of Sidney, Ohio
Areas of High Concentration of Emergency Response Risk
Legend
MAXIMUM RISK
SIGNIFICANT RISK
FIRE SECTORS
December 22, 2008
N
SR 29
ST MARYS
MAPAKONETA
RIVERSIDE
MICHIGAN
OHIO
MAIN
NORTH
COURT
I 75

Figure 1

One critical resource that must be assessed as part of the community's ability to fight fire is its water supply. The City's water system is designed and constructed following modern engineering and American Water Works Association (AWWA) standards. The Insurance Services Office (ISO) evaluates the City's water supply system adequacy for fire suppression. Adequacy is considered the ability of a water system to supply needed fire flows (NFF) at identified locations throughout the city. In other words, available fire flow should equal or exceed NFF for an area of selected commercial, industrial, and residential risks.

A water supply evaluation considers three primary components of the water system: a) the supply works capacity, b) the water main capacity, and c) distribution of fire hydrants.

The city enjoys the benefits of an excellent water system. The city plans for and regularly pays to oversize distribution lines above that required by developers. This helps as future development occurs, the water main capacity is then capable of handling increased demand. The Utilities Director works closely with the Fire Department to ensure that deficiency areas are identified and corrected as Capital Improvement projects are planned.

As a built upon, urban/suburban community with an established water supply, available water to fight fire is not an issue. The issue for a community such as Sidney is what property/occupancy can burn therefore an assessment for the needed fire flow is applicable.

Section 2.3 - Non-fire risk assessment process

This section contains an analysis of the various non-fire related risk considered within the legal jurisdiction of the City of Sidney. As part of the analysis, historical and statistical data is used in order to determine trends based on type and location of the non-fire emergency. Additional perimeters utilized are natural barriers or locations for risk potential, mobility of risk, and socio-economic factors that might contribute to a non-fire risk within the city, economic impact factors if applicable, and a likelihood for a non-fire incident occurring.

While much analysis has been conducted based on the fire risk potential within the City of Sidney, the non-fire risk, although somewhat identified, has not been given due consideration. The purpose of this analysis is to better analyze those identified risk and relevance to emergency response and mitigation conducted by the Sidney Department of Fire & Emergency Services.

Non-fire risk exists in all jurisdictions. Standardizing those non-fire risks for all jurisdictions leads to a homogenized system that would potentially not be indicative of the two risks encountered. However, in the spirit of some standardization, the following non-fire risks should be identified and considered:

- Severe thunderstorm/windstorm
- Tornado
- Flood
- Winter storm
- Earthquake
- Chemical spill/industrial disaster
- Drought

Identification of a non-fire risk specific to the City of Sidney, while following a base template, must be more specific. The base template is generalized into the following service deliveries:

• Emergency medical services
• Hazardous materials
• Technical rescue

Identification of some standardized non-fire hazards led to an assessment of that risk factor as they pertain to the City of Sidney as well as the impact on emergency services. Assessment of each hazard as listed took into consideration the likelihood of the event, the impact on the city itself, and the impact on the agency.

Severe thunderstorm/windstorm Risk - Significant

The community is located in west central Ohio and prone to severe thunderstorms and, on occasion, straight-line windstorms. Climate conditions that create the severe thunderstorms exist mostly in the spring and summer months. However, there remains the potential for these types of storms year round. Severe thunderstorms consist of high winds, lightning, some localized flooding, and at times hail. Fallen trees and localized flooding impact mobility in and around the city and have an impact for emergency responses. Downed power lines create an interruption in power supply, activation of alarms, and an electrical hazard for responders.

The City of Sidney is vulnerable to the adverse affects severe thunderstorms and windstorms may produce. The agency has the ability to provide initial emergency response services needed to mitigate the various affects of storms and wind. Often times the initial influx of calls for service may prove overwhelming. Off-duty personnel may be recalled in order to increase the number of units available for response in order to maintain responder and citizen safety and utilization of resources in an effective manner.

Tornado Risk - Low

The potential for a tornado exists within the City of Sidney. As is the case with severe thunderstorms and windstorms, the climate conditions are such during the spring and summer months which could spawn such meteorological events. These events have historically been rare, but the city and surrounding area does have a record that the potential exists. With tornados comes the potential for major property damage and mass casualty. Economic impact would be great depending on the magnitude of the damage. The agency would handle this event as other mass casualty events with the use of multiple units and resources, outside resources, as well as an incident management system and utilization of the City's Emergency Operations Plan.

Flood Risk – Significant

The City of Sidney is home to the Great Miami River and several tributaries such as Tawawa Creek, Wells Creek, Plum Creek, Tilberry Run, and Mill branch. In addition, there are four ponds within the city as well as numerous detention basins. The potential for a flood hazard is significant due to low lying areas in the south end of the city near the Great Miami River as well as the potential for localized flooding along the tributaries, and flash flooding that can occur anywhere with heavy downpours. The city has a long-standing history of flooding problems dating back to the flood of 1913. The Ohio Department of Natural Resources has established a flood plain district which is administered through the Planning Department. The Great Miami River has a potential for flooding and the city has two low-head dams which create a significant hazard for rescue personnel should citizens become victims in these areas of the river at flood stage. Clearly, a fast water rescue incident can greatly impact the department. Rescue of victims from fast water rescue is very dangerous and the complexity of such an incident would depend on the location, damage caused, and potential for

life loss. The agency recognizes the potential for this type of scenario and is prepared from both an operational and equipment standpoint to respond to this type of emergency.

Earthquake Risk – Low

The potential for an earthquake to strike the city was made real after the Anna earthquake of 1937. It was discovered that a fault line runs through Shelby County between Sidney and Anna which gives the area the potential for an earthquake although the probability of an occurrence would be low. However, due to the proximity of the fault line, the danger factor would be ranked high as the damage from an earthquake would be very significant and could affect a large portion of the city. Again, the impact of such an incident would depend on the location, damage caused, and potential for life loss. The agency has limited capability to respond to an earthquake disaster because of the special equipment and training that is required to respond to building collapses. However, Ohio Region III Strike Team is available for response from the Dayton area. Ohio Task Force One, which is a federal resource and also headquartered in Dayton, is available to respond to these types of disasters with specially-trained personnel and equipment.

Winter Storm Risk – Moderate

By virtue of its location in the State of Ohio and the Midwest, the City of Sidney's vulnerability to winter storms with hazardous impact is moderate to high. Affects of a winter storm could include an ice storm which could create fallen trees and possible power interruption. In addition, snow and high winds could create blizzard conditions which can suspend all travel on roadways and impact the mobility of responders. The agency can handle this sort of hazard based on impact as they arise during the event.

Chemical Spill Risk – Significant

The City of Sidney has the potential for a chemical spill or industrial disaster from several methods. First, several state routes pass through the middle of the city and is bisected by Interstate 75, a major north/south route on the west side. In addition, CSX Railroad has heavily-traveled north/south and east/west lines through the city. The potential for a transportation accident in which a hazardous chemical is released is real and has occurred on several occasions during the past 15 years. Additionally, the city is home to several industrial facilities in which hazardous materials are used in the manufacturing process. This also creates a potential environment for hazardous materials release. Depending on location, type of material released, and the rate of release, large areas of the city may be impacted by this type of event. The agency, in cooperation with the local emergency planning committee, conducts an on-going hazardous materials risk assessment of facilities within the City. This agency operates jointly with Shelby County a hazardous materials response team to respond and mitigate releases should they occur.

Drought Risk – Moderate

Several areas of the United States have experienced dry periods and even droughts in recent years. Reservoirs have dried up, communities have initiated extensive water conservation programs, and water quality has been threatened. The city could be in a wide-spread area of drought and has experienced drought periods in 1988, 1991, 1997, 1999, 2002, and 2007. The city draws most of its raw water supply from Tawawa Creek and the Great Miami River. When the water levels recede and the city institutes drought contingency plans, water for fire suppression can be affected. The agency can deal with this situation by utilizing tanker shuttles with outside agencies.

Section 2.4 – Assessment of Risks by Demand Zone

The Sidney Department of Fire & Emergency Services provides fire suppression, fire prevention, fire investigation, public education, emergency medical services, technical rescue, and hazardous materials response to the properties and population of the City of Sidney. This document reviews,

identifies, and categorizes the hazards of the properties within the city as it relates to the emergency services provided by the fire department. When reviewing the hazards associated with each property, the following aspects of risk must be considered:

Probability
Probability defines the likelihood that a particular event will occur within a given period of time. An event that occurs daily would be considered high, where an event which occurs once a century is considered very unlikely. Probability then, is an estimate that an event will occur and a prediction that it will be very close by in time, or some time off in the future.

Consequence
Consequence has two components related to fire loss which are life safety and economic impact. Occupancies with a high degree of life safety risk may include retirement communities or nursing homes where the occupants cannot egress the facility in a timely manner. In the case of Sidney, economic impact of a fire in the downtown business district or an industrial park could be considered catastrophic to the community.

Occupancy Risk
Occupancy risk is defined as an assessment of the relative risk to life and property resulting from fire in a specific occupancy or a generic occupancy classification.

Demand Zones
Demand zones are defined as areas which are used to define or limit the management of a risk situation. A demand zone can be a single building or groups of buildings. It is usually defined in specific geographical boundaries. In the case for Sidney, we have utilized existing fire sector areas as demand zones. This area is also referred to as response management area for a particular response unit.

Community-generated Risk
Community-generated risk can be defined as the overall risk created by the defined service community. The service community is considered geographical in nature, but must also be thought of in terms of population. There exists a population of our service community, which is not residential in nature. The business community must be considered for reasons of prevention and educational outreach programs for their employees.

The process of systematic review for each commercial structure and generic-type structure, non-structure risk, and response zone was completed. The type of risks included life safety, fire, value to the community, hazard to the community, and include review of the structure, concentration of structure, occupancy, process, and population. These risks and hazards were analyzed using nationally-recognized standards from the National Fire Protection Association (NFPA) and the Insurance Services Office (ISO). The frequency and historic severity for each of the risks and hazards was also applied to identify a potential for the incident to occur. This historical response data was provided by the comprehensive data base maintained by the agency. The following section identifies each fire sector in the City of Sidney in six critical areas:

- Community profile
- Transportation issues
- Community risk assessment rating
- Incident history – 2005-2007
- Identified special risks
- Fire flow concerns

The emergency apparatus response assignment for the type of emergency response is consistent throughout the city limits. The agency does not differentiate, or consider such items as fire alarm systems or structures with fixed protection (sprinklers), in determining response assignments. The operations staff has established these assignments based on the ISO-required firefighting force and deployment models established through NFPA standards. This assignment data is entered into the CAD for dispatch recommendation purposes and is periodically updated as needed. The 9-1-1 Communications Technicians base EMS response criteria upon information gleaned through the requesting caller and EMS dispatch guidelines. The criteria are driven by the emergency medical dispatch protocols and the medical dispatching guidelines as outlined in the Powerphone Dispatcher's Medical Guide.

Response assignments:

- Structure fire: first alarm fire assignment is two engines, one ladder, one medic, one chief officer
- Auto accidents: one rescue, one medic
- Hazardous materials: two engines, one ladder, one medic, one chief officer
- River rescue: two medics, one rescue, boats
- Technical rescue: one rescue, one medic, technical rescue trailer
- Emergency medical BLS: one medic
- Emergency medical ALS: one medic
- Emergency medical ALS – priority one: one medic, one engine

These assignments may change with information based on the incident.

Reliability and other resources

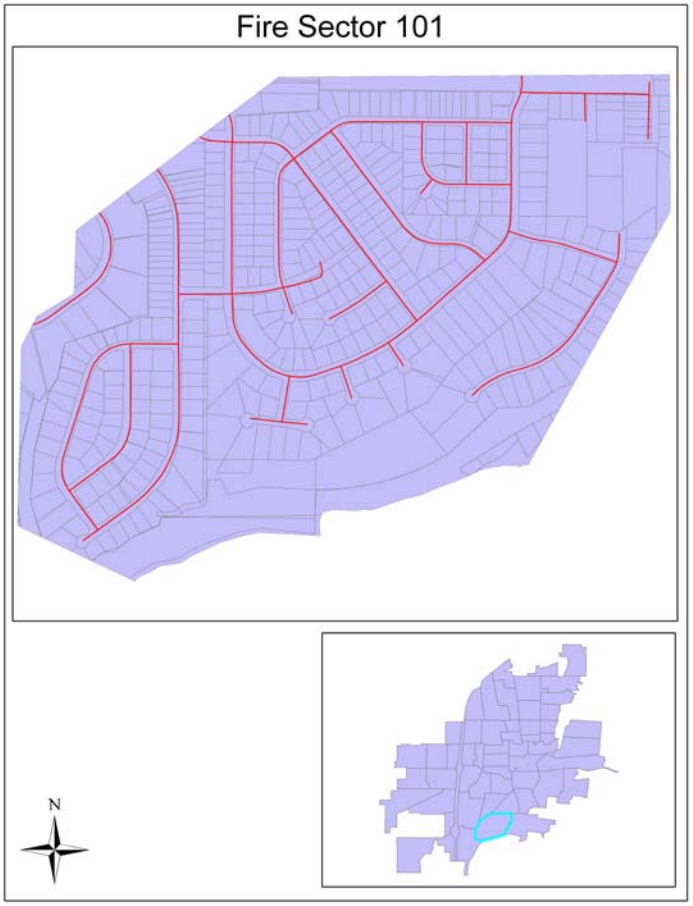
If emergency incidents that occur within the City of Sidney require additional resources, the standard procedure is to recall off-duty personnel. In some situations, it may only require the recall of two-three individuals or if the on-duty personnel are going to be committed for some time or are handling multiple calls, an additional shift may be recalled. On larger incidents, all off-duty personnel may be recalled.

If additional resources are needed within the city, the department utilizes a multiple alarm system which brings a pre-designated and pre-determined set of resources at the second, third, four, and fifth alarm levels. For example, a second alarm would bring three additional engines, one ladder, one heavy rescue, an air unit, and an EMS from outside departments.

The city participates in a county-wide, multi-agency automatic mutual agreement. On incidents that occur in the township areas in which the city provides primary response service, an automatic mutual-aid agreement has been established and additional resources from other volunteer departments in the area are dispatched upon the report of a working fire incident. This greatly reduces response time and brings the necessary resources to the scene of an emergency.

All departments in the county are trained and are familiar with the incident command system and utilize it on a daily basis. This allows emergency personnel from various jurisdictions to work cohesively in a coordinated and controlled manner. In addition, all fire and EMS units in the county were involved in a radio system upgrade in 2005. This has allowed all portable and mobile radios issued to police, fire, and EMS units in the city and county to contain identical 24 core frequencies. This permits interoperability regardless of discipline or jurisdiction. This greatly enhances the ability to communicate during emergency incidents and improves the level of safety for all personnel.

Sector Profile … 101 - Residential District - Imperial Woods & Westwood Estates



Community Profile

This area is primarily a residential district. In most cases, the water system is adequate to meet fire flows for the area described. It is bordered by CSX Railroad on the north, Fair Road on the northwest, and the Great Miami River on the south. It contains two well-known subdivisions: Imperial Woods and Westwood Estates. Also located within this area is the Shelby County Kidney Center and several apartment units located on Amherst Drive and Spruce Avenue. Residential units vary from smaller 1,000 square foot ranches to larger 2,500-3,000 square foot homes in the Westwood area. The typical residence in the area overall is approximately 2,000 square feet.

Transportation Issues

This area is comprised of mostly residential streets. The major roadways in this zone include Spruce Avenue, Colonial Drive, and Westwood Drive. With the exception of Spruce Avenue, two-way and four-way stop intersections exist throughout the district. No other significant traffic calming measures are utilized in this zone.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	15
Properties posing above average risk	2

Incident History – 2005-2007

There were no major incidents or large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	167
Fire responses	20
EMS	136
Other alarms	11
Dollar loss	$50

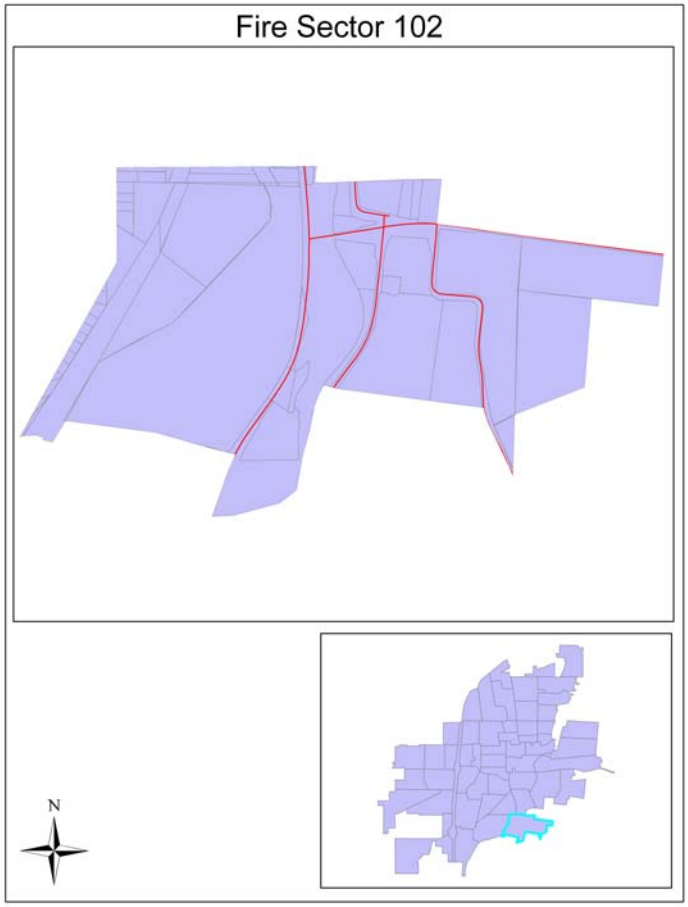
Identified Special Risks

The only significant-risk unprotected properties in this zone are the apartment buildings located on Spruce Avenue. Each apartment building contains 12 units and is designed with center core open stairwells. The buildings are equipped with internal fire detector and alarm systems. There are no churches, libraries, or buildings of historical value in this zone.

Fire Flow Concerns

In this zone, the largest structures are the apartment buildings on Spruce Avenue which are three-story and are 4,000 square feet per floor for a net square footage of 12,000. The required fire flow for 100% fire involvement is 4,000 gpm and the available water is rated at 3,500 gpm. The largest residential dwelling is approximately 3,000 square feet. Sufficient water supply is available to serve the residential areas.

Fire Sector Profile … 102 – Governmental Business - Green Area



Community Profile

This area is best described as an open area in nature along with several governmental facilities. In most cases, the water system is adequate to meet the fire flows for the area described. There are a handful of homes in the area along with Graceland Cemetery and the homes located at the rear of the Cemetery, which are accessible from Maple Leaf Court. The biggest concern for services in this area is the MRDD Pre-school located on Children's Home Road along with the City's Wastewater Treatment Plant and the Shelby County Jail.

Transportation Issues

This area is comprised of two main roadways including South Main Avenue (County Road 25A) and Gearhart Road. The CSX east-west rail line travels through this area, which includes the famous Big Four Bridge. There are no specific traffic calming measures utilized in this zone other than the usual two-way and four-way stop signs.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	9
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	59
Fire responses	5
EMS	50
Other alarms	4
Dollar loss	$0

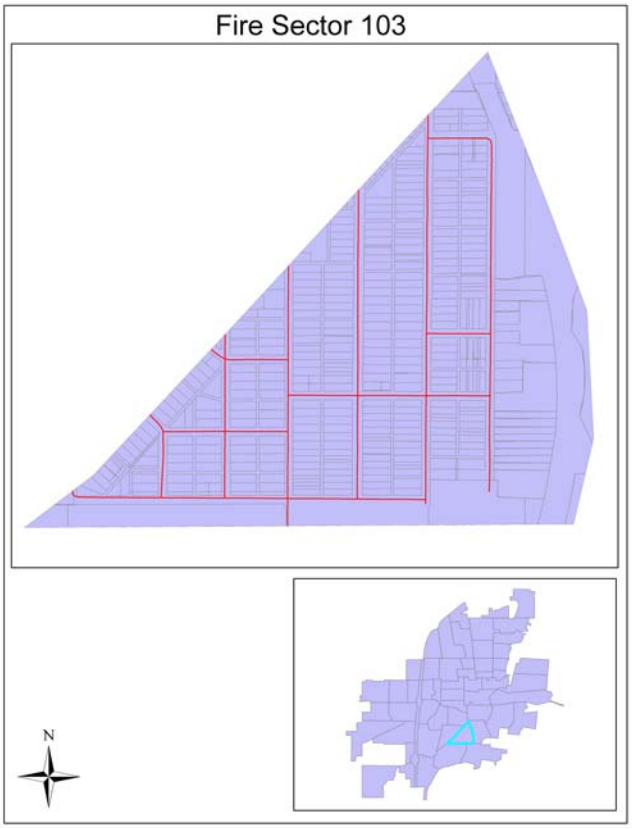
Identified Special Risks

The only properties in this zone which could pose a large loss of life are the Shelby County Jail and Wee School pre-school. As a correctional facility, jail security is of utmost concern along with maintaining a safe environment for the population. The jail has a complete fire suppression system along with an alarm system and around-the-clock Corrections Officer staffing. The facility has an evacuation plan that allows Correction Officers to move inmates from one portion of the jail facility to another and shelter-in-place or they can evacuate into the secure courtyard if necessary. The agency has done pre-planning and in past years conducted training to respond to emergencies at this facility. The Wee School is part of the MRDD campus, located at the site of the former Shelby County Childrens' Home. The Wee School has a population of 40 students. The building is protected by a fire suppression system and fire alarm system. The building is inspected on a regular basis and fire exit drills are conducted as required by law. In addition, there is a church located on Childrens' Home Road in this zone. The former Childrens' Home is considered to have historical value for the community. It currently is unoccupied.

Fire Flow Concerns

The Shelby County Jail is the largest facility in this zone at 68,231 square feet. The facility features non-combustible construction and is completely protected by a fire suppression and fire alarm systems. The Shelby County Engineer's Office and the Wee School Early Childhood Learning Center at the MRDD Center are also facilities with 30,000+ square feet. Both of those facilities are partially protected by fire suppression systems and feature fire alarm protection. Fire flow in the area is shown to be 1,000 gpm.

Fire Sector Profile … 103 – Residential District – Spruce Avenue / Foraker Avenue



Community Profile

This area is best described as residential in nature. The water system is generally adequate to meet the fire flows for the area. This area is bounded by Fair Road on the northwest and the CSX Railroad on the south and east. The former Railroad depot on Chestnut Street has historical significance for the community.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this zone include Spruce Avenue, Foraker Avenue, and Chestnut Avenue. While the streets are mostly residential in nature, no specific traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	1
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	104
Fire responses	12
EMS	71
Other alarms	21
Dollar loss	$29,800

Identified Special Risks

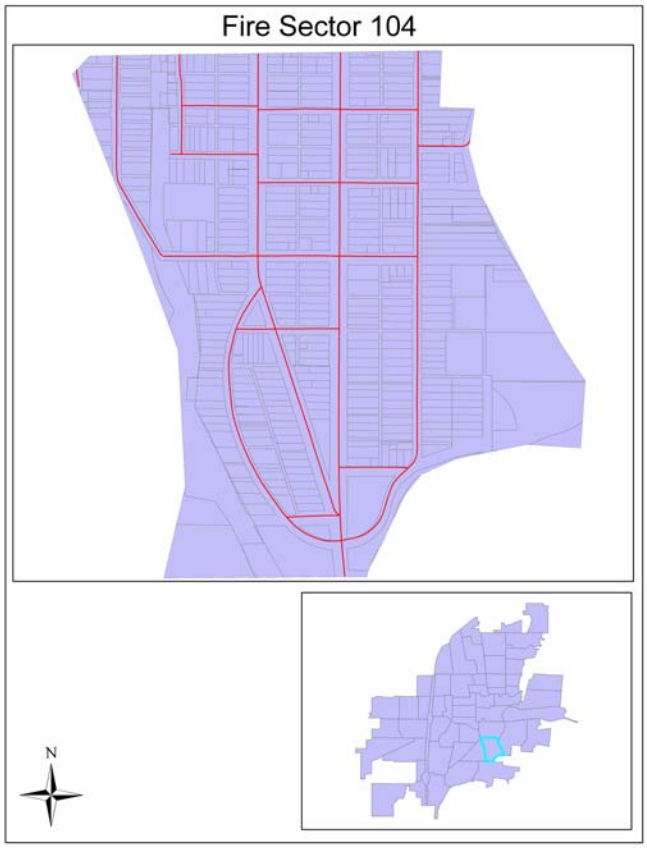
The former railroad depot for the CSX (formerly Penn Central) east-west line is located at the end of Chestnut Street at Lincoln Street. While the community risk assessment rating is an average risk, the building has historical significance.

Fire Flow Concerns

The fire flow report varies from less than 500 gpm to 1,000 gpm depending on the neighborhood and the size of distribution line. This area is residential in nature and consists of primarily single-family

dwellings with several two-family and three-family dwellings also in the district. The fire flow available is generally adequate for the associated risk.

Fire Sector Profile … 104 – Residential District - Southend



Community Profile

This area is best described as residential in nature. In most cases, the water system is adequate to meet fire flows for the area described. This area is known as the south end and contains many beautiful Victorian-style homes on Ohio and Main Avenues. Lowell Elementary School is located in this zone and several apartment buildings, a funeral home, along with two small churches.

Transportation Issues

This area is comprised of two main arteries including South Main Avenue and South Ohio Avenue along with South Miami Avenue. There are no specific traffic calming measures utilized in this zone other than the stop lights utilized at Ohio and Clay and Main and Clay and the usual stop signs.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	6
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	303
Fire responses	34
EMS	226
Other alarms	43
Dollar loss	$5,050

Identified Special Risks

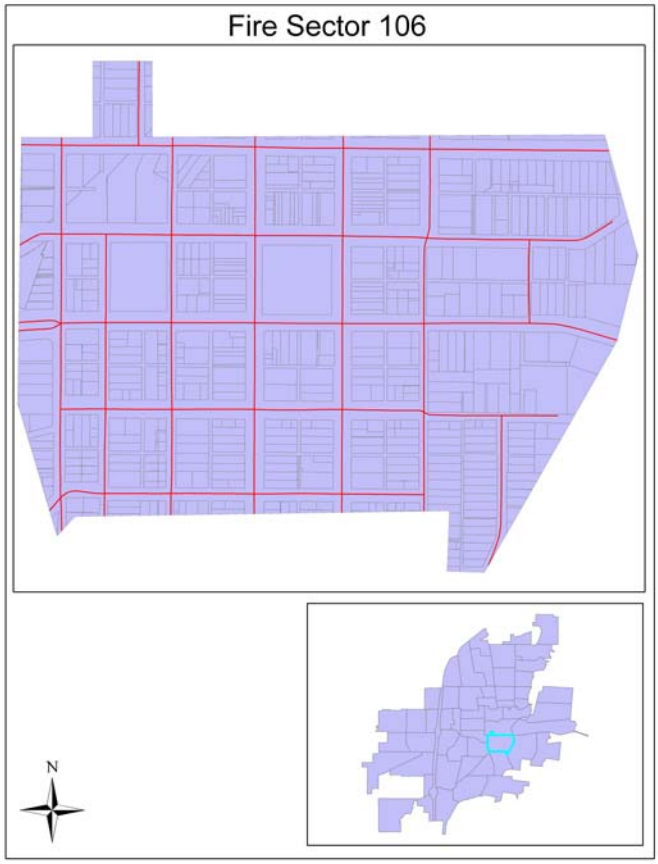
The only significant-risk unprotected property in this zone is the Lowell Elementary School. The school is comprised of a main building of approximately 11,000 square feet. There are many beautiful and well-kept homes in this area which reflects the quiet nature of the neighborhood. As was common in the era in which these homes were built, many of the residential dwelling units are situated in close proximity to adjacent structures, sometimes as close as four to five feet. This can create some problems for the agency should a fire gain significant headway before firefighting forces

arrive on the scene. While some of the residential units in this area have a rich history, none of the buildings in this zone have significant historical value.

Fire Flow Concerns

In this zone, the largest structure is 11,000 square feet. Required fire flow for 100% fire involvement is approximately 3,600 gpm and the two closest hydrants are rated at 800 and 1,200 gpm. With the exception of this structure, the fire flow is generally adequate for the residential dwelling units located in this area.

Fire Sector Profile … 106 – Downtown Business District



Community Profile

This area encompasses what is considered the city's downtown business district. It is generally considered a nine-block downtown area that is bordered by North Street on the north, the Great Miami River on the east, Water Street on the south, and Walnut Street on the west. Most of the city's main governmental functions take place within this area including City Hall, Police Department, and Fire Station #1. Also located within this zone are the Shelby County Courthouse and the Shelby County Annex, which contains most of the governmental functions for Shelby County. The north-south line of CSX Railroad lies adjacent to this district on the west. Numerous shopping and professional offices dot the area including those along Ohio Avenue and Main Avenue as well as those around the Courtsquare. The Sidney Senior Center and Central Elementary School all fall within this zone.

The city's downtown high-rise structures are located in this zone in several areas. Those include the Ohio Building, a five-story professional office building; the Shelby County Annex which is a four-story office building; Canal Place, a six-story apartment building; and Jackson Towers, a five-story apartment building located on East North Street. Numerous other three- and four-story buildings make up the downtown area. Several financial institutions call downtown Sidney home. US Bank, Chase Bank, Peoples Federal Savings & Loan, Mutual Federal Savings Bank, and Fifth Third Bank all have their local headquarters in the downtown area. Also located in this zone are numerous large churches. Holy Angels Catholic Church is located on South Main Avenue, St. John's Lutheran Church is located on Water Street, First United Methodist Church is located on East Poplar Street, and The First Presbyterian Church, First Baptist Church, and St. Mark's Episcopal Church are located on North Miami Avenue. This zone also contains the Amos Memorial Public Library which is the main library for Sidney and Shelby County. This zone contains numerous buildings that hold a significant historical value for Sidney and Shelby County. Peoples Federal Savings & Loan is an architectural gem of the famous Louis Sullivan and the Monumental Building, which houses Sidney Municipal Court and Veteran Services offices, is one of two left in Ohio that was built as a monument to those who died in the Civil War. Perhaps the best known building and the most significant from an historical nature is the Shelby County Courthouse, which was built in the 1880's. The downtown area around courthouse square has been enhanced by the completion of Streetscape in 2001.

The area is also dotted with multi- and single-family residences, some of which could be described as blighted. However, the North Street area has been identified as a possible cultural corridor as future plans include the construction of a new library facility and an addition to the Ross Historical Center. Numerous other residential dwellings or former residential dwellings that have been converted into professional offices contain beautiful architecture and interior wood finishes which add to the beauty and significance of the area.

Transportation Issues

This area is comprised of major roadways of the city and state highway routes that cross the area. State Route 47 and State Route 29 both traverse the downtown area. State Route 29 comes into the area from the north and turns east toward Pasco and State Route 47 comes in from the west into the downtown area and goes east out of the city along the Great Miami River. Ohio Avenue and Main Avenue, as well as Miami, Court, and Poplar Streets are major streets through the downtown area. Numerous stop lights and intersections exist along the major routes and are utilized as traffic calming measures in this zone.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	90
Properties posing above average risk	22

Incident History – 2005-2007

There were several incidents of large loss of dollars in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	1,095
Fire responses	103
EMS	911
Other alarms	81
Dollar loss	$171,945

Identified Special Risk

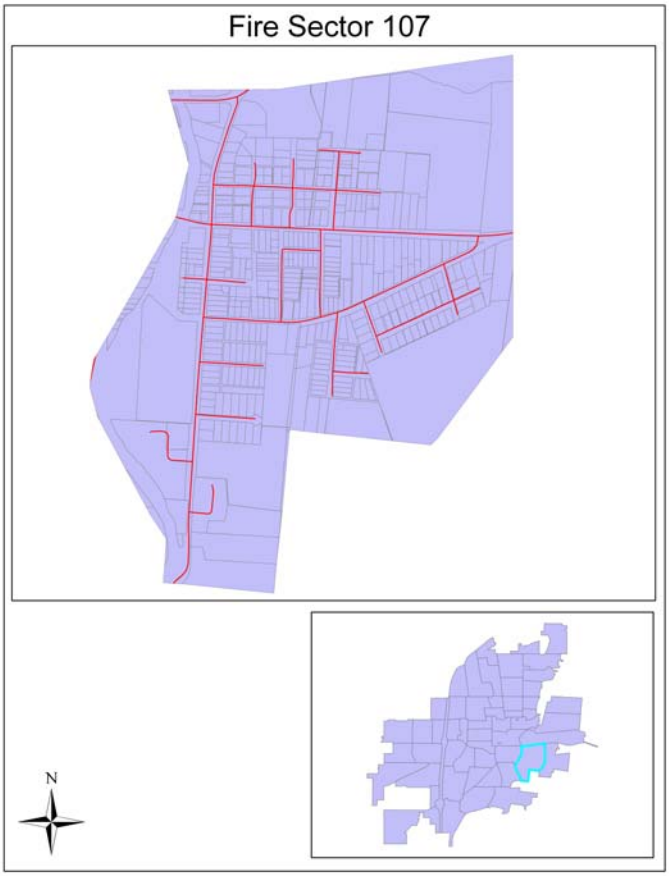
Numerous unprotected properties exist in this zone, which would pose a significant loss to the community as well as several areas in which the potential for loss of life exists. Several of these large buildings are adjacent to or nearby older residential sections that have the potential for rapid fire spread if an incident would occur during high wind conditions. Included in the moderate category is the U.S. Post Office which provides the only postal services for the entire community. Included in the significant risk category are Amos Memorial Library, Embarq, Senior Center, the former Erb Lumber property, and Peoples Federal Savings & Loan. Included in the significant risk/maximum risk category are the Ohio Building, the Monumental Building, Canal Place Apartments, Holy Angels Church, and the Shelby County Courthouse and Shelby County Annex. Also included is Central Elementary School and Jackson Towers. Of particular concern is the Ohio Building because it has no fire suppression system in place. A fire incident in this facility has the potential to engulf the entire building because of the age of the structure and its type four ordinary construction (construction classifications are used by the fire service to describe construction methods and materials). A fire in this type of facility greatly tasks existing resources and makes the chance of a significant fire loss very likely.

Fire Flow Concerns

With the exception of Jackson Towers and Courtview Center, most of the construction in the downtown area consists of type four ordinary construction. This entails a masonry or brick exterior with wood structural elements on the interior including floor joists and roof assemblies. During the

era in which most of the downtown was built, this type of construction was very common for larger buildings. Because of the age of most of these structures, numerous remodels and alterations have taken place over many decades. This provides an opportunity for an environment in which an incipient fire may go undetected for some time and has a chance to gain headway in concealed spaces and voids. Due to the size of the buildings and the potential for several layers of roof and/or several layers of ceiling to be present, the interior firefighting capability can be greatly compromised. Thus, the opportunity for a large scale fire exists in most of the downtown buildings and those that contain apartments on the second and third floors create a potentially grave situation that the emergency responders must face. All this combined with the buildings being constructed adjacent to one another causes this area of the community to carry a high level of risk from fire. Due to the 24-inch, 12-inch, and 10-inch mains in the downtown area, this zone contains some of the best water supply in the city. Hydrants on the Courtsquare are capable of providing 5,000 gpm and hydrants on Poplar Street near Fire Station #1 have approximately 5,000 gpm available. However, the Ohio Building located at 113 North Ohio Avenue has a footprint of 13,600 square feet. Taking that 13,600 times the five stories equates to 58,000 square feet of floor space. The required fire flow should this building be close to 100% involved in fire, is 22,000+ gallons per minute. Most of the buildings in the downtown area would require the use of multiple hydrants should a significant fire occur. With a few exceptions such as the Ohio Building and the Taylor Building, the agency believes that sufficient water supply is available in the downtown area for fire emergencies.

Fire Sector Profile … 107 – East Sidney area



Community Profile

This area is best described as residential in nature with some commercial structures and one health care facility. Many years ago, during Sidney's infancy, this area was known as East Sidney due to its location east of the Great Miami River. Most of the residential structures in this area will range from 900 to 1,500 square feet. The sector contains one health care facility (skilled nursing home) with 50 beds. In addition to the health care facility, the largest fire risk is the Copeland Corporation plant on Brooklyn Avenue. Both facilities are protected with fire suppression and early detection systems.

Transportation Issues

This area is comprised of mostly residential streets. The major roadways in this zone include Brooklyn Avenue and Court Street (State Route 29). A stop light signal is located at the intersection of Brooklyn Avenue and Court Streets and other two-way stop signs exist along most of the residential streets. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	6
Properties posing above average risk	2

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	423
Fire responses	28
EMS	367
Other alarms	28
Dollar loss	$56,050

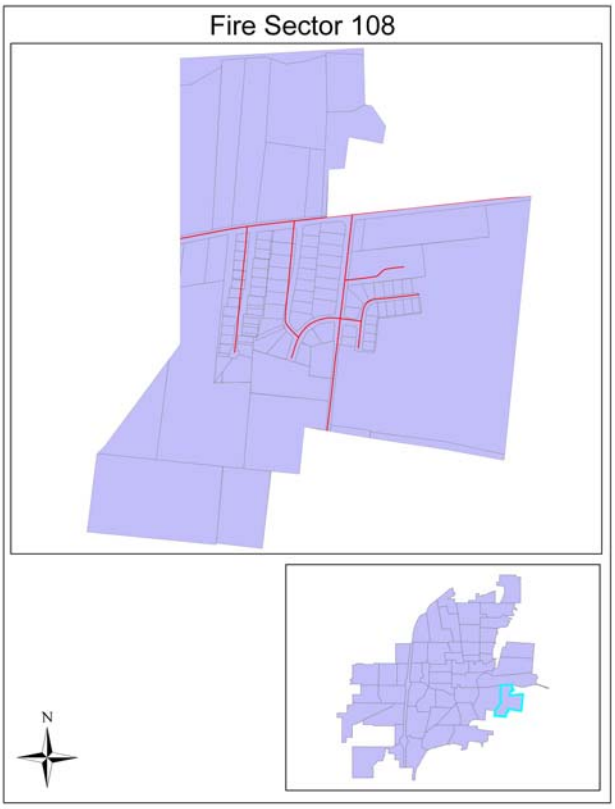
Identified Special Risks

There are two significant-risk properties in this sector, one which could pose a potential loss of life and the other a large loss of property. The Pavilion is a semi-skilled nursing facility located on Fulton Street that handles 50 residents on a daily basis. The facility is fairly large at 18,547 square feet, however it is protected with smoke and heat detectors along with an internal fire alarm system. The facility is also completely protected by a fire suppression system. Currently, preliminary plans have been developed to increase the size of the structure by 15,475 square feet. A manufacturing and research facility operated by Emerson Climate Technologies, formerly known as the Copeland Corporation, has a facility of 34,200 square feet that is protected with early-detection systems and fire suppression systems. Also located within this zone is the Agape Distribution Center, but it also is a protected facility.

Fire Flow Concerns

The largest residential dwelling is approximately 1,500 square feet. Required fire flow for 100% involvement is 500 gpm; available water is rated at 1,500-5,000 gpm. The largest commercial occupancy is 34,200 square feet and is protected by a fire suppression system. All other structures fall within acceptable fire flow limits as identified in the fire flow report.

Fire Sector Profile … 108 – Residential District – Cedarwood Commons/Mystic Apts/ University Heights



Community Profile

This area is best described as residential in nature. In most cases, the water system is adequate to meet the fire flows for the area described. Newer homes have been constructed on Dartmouth Street, Purdue Avenue, and University Drive. Many of the homes being built in this area will run between 2,000 and 2,600 square feet. Also located in this sector are two apartment complexes each containing multiple buildings that make up the complex. The Mystic apartment complex consists of ten buildings, each of which contains four-ten apartment units. The Cedarwood Commons area is a complex primarily housing the elderly and consists of eight buildings with eight units in each building. The City of Sidney Water Treatment Plant is located at 880 East Court Street.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this sector include Court Street (State Route 29) and Doorley Road. While the streets are mostly residential in nature plus the major thoroughfare, no specific traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	20
Properties posing above average risk	11

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	194
Fire responses	8
EMS	181
Other alarms	5
Dollar loss	$10,000

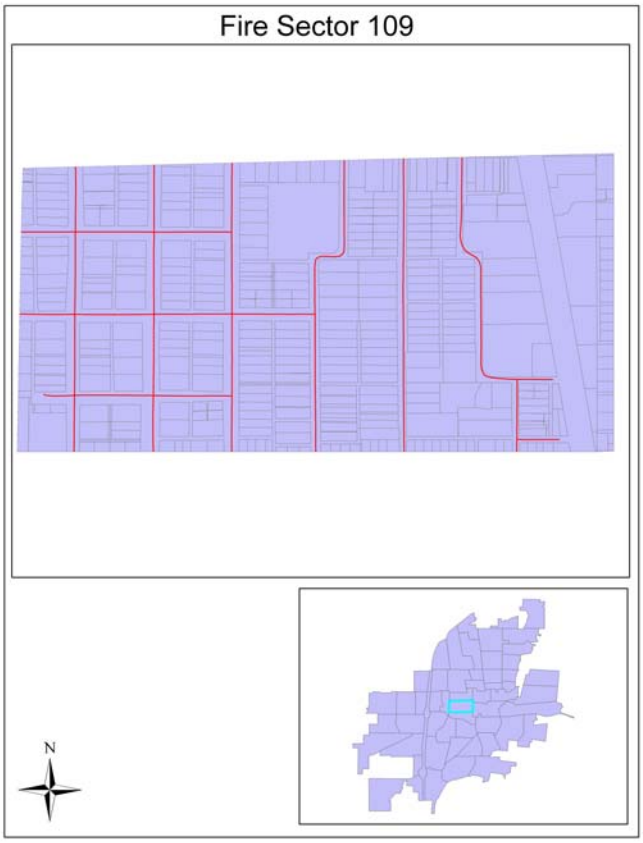
Identified Special Risks

There are two significant-risk unprotected properties in this sector which could pose a potential large loss of life and also impact the community. The City Water Treatment Plant is located at 880 East Court Street. The facility is operated 24/7 and while the structure is of non-combustible construction, chlorine is stored and used in large quantities. An accidental release of chlorine into the atmosphere could create a dangerous environment for the residential area surrounding the water plant depending on the amount and rate of release as well as weather conditions. The Mystic Apartment buildings are also a significant risk because of their multi-story wood-frame construction and limited accessibility to the buildings. There is also one new church located at 1322 East Court Street, however it does not pose a significant risk.

Fire Flow Concerns

The largest residential dwelling at 2,600 square feet requires 833 gpm for 100% involvement. Most of the water distribution system in this area will produce 1,000-2,000 gallons per minute and is sufficient for firefighting purposes. However, the largest commercial occupancy is the water plant at 110,000 square feet, which requires 36,000 gpm should this facility become 100% involved. Two hydrants in the vicinity of the water plant both produce 5,000 gpm which is excellent, but not sufficient to combat a fire of that magnitude. The greatest concern is the Mystic Apartment complex. Each of the buildings in the complex would require approximately 2,800 gpm application of water if the structure is 100% involved and fire hydrants in this area generally produce 1,200 gpm. This is due to the corporation limit bordering on the east side of the complex and deadend mains.

Fire Sector Profile … 109 – Residential District – Park Street/Wagner Avenue/ Sycamore Street



Community Profile

This area is best described as residential in nature. In addition, several light commercial occupancies are located within the area along with eight churches. The Metropolitan Housing Authority has five apartment units in a complex located on Park Street. The Sidney Care Center, a 51-bed semi-skilled nursing facility and Salvation Army are located on Buckeye Avenue. The Salvation Army is a mixed-use facility, containing a chapel, gymnasium, and classrooms. In most cases, the water system is adequate to meet the fire flows for the area described.

The north-south line of the CSX Railroad runs through the eastern portion of this sector and Humphrey Park is located at Buckeye Avenue and Park Street.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this sector include Park Street, Wagner Avenue, and Buckeye Avenue. Numerous two-way and four-way stop signs are located in the area. No other specific traffic calming measures are utilized in this sector. In 2007, the Park Street bridge that spans the CSX railroad had its safe load limit reduced by the City Engineer. As a result, the agency's engines and ladder may not cross the bridge. Because of this load reduction, alternate routes to Park Street are taken.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	13
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	380
Fire responses	35
EMS	300
Other alarms	27
Dollar loss	$55,000

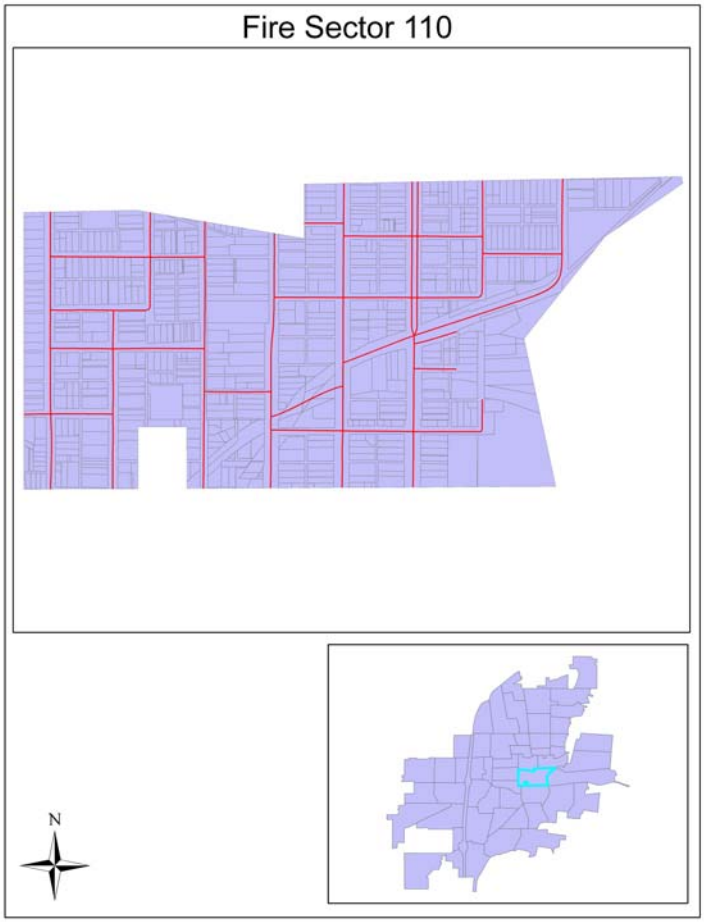
Identified Special Risks

There are no significant-risk unprotected properties in this zone which would pose a large loss of life. However, the Sidney Care Center located on Buckeye Avenue does pose the potential for a large loss of life. The Sidney Care Center is a 51-bed semi-skilled nursing facility and encompasses 15,477 square feet. The facility is protected with an early detection alarm system and fire suppression system. There are eight churches in this sector, however most are smaller in size with Cornerstone Assembly of God being the largest at 8,300 square feet. The Metropolitan Housing complex on Wagner Avenue contains five buildings, however due to their size, do not pose a significant threat.

Fire Flow Concerns

The largest residential dwelling is approximately 1,600 square feet. The required fire flow for 100% involvement is 500 gpm and available water is rated at approximately 2,000 gpm. The other small commercial occupancies in the area have sufficient water to serve the area. The largest commercial occupancy is the Salvation Army at 26,000 square feet. This facility would require 8,600 gpm application if 100% involved and the water available in the area is rated at 4,000 gpm. Multiple hydrants in the area would have to be utilized to obtain sufficient fire flow.

Fire Sector Profile … 110 – Light Commercial and Residential District – Ohio Avenue/ Oak Street/Walnut Street



Community Profile

This area is best described as light commercial with small retail and professional offices. This area contains small to large residential properties, many of which have historical significance. Also integrated into the area are two manufacturing facilities, two churches, and the City's two well-known castles. One of the castles, the Great Stone castle located on North Ohio Avenue, is currently occupied as a residence and a bed and breakfast and reception hall. Numerous wedding receptions and meetings are held in the facility on a regular basis. The largest structures in the area include Sidney Manufacturing at 80,000 square feet, Ring Can at 140,000 square feet, Ferguson Construction at 49,000 square feet, Clean All Services complex at 27,352 square feet, and Gates Brothers Glass at 22,500 square feet.

Transportation Issues

This area is comprised of two main thoroughfares, Ohio Avenue and Main Avenue, along with many residential streets. There are no traffic calming measures in existence along the major thoroughfares. Throughout the residential areas, numerous two-way and four-way stop signs exist, however no other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	30
Properties posing above average risk	8

Incident History – 2005-2007

There were no fire fatalities in this sector for the reporting period. However, there were 10 residential building fires with 7 of those resulting in significant damage. There were two other building fires, one in a restaurant, resulting in a loss of $200,000. The total number of fire and EMS calls are listed as follows:

Total alarms	574
Fire responses	80
EMS	438
Other alarms	56
Dollar loss	$550,600

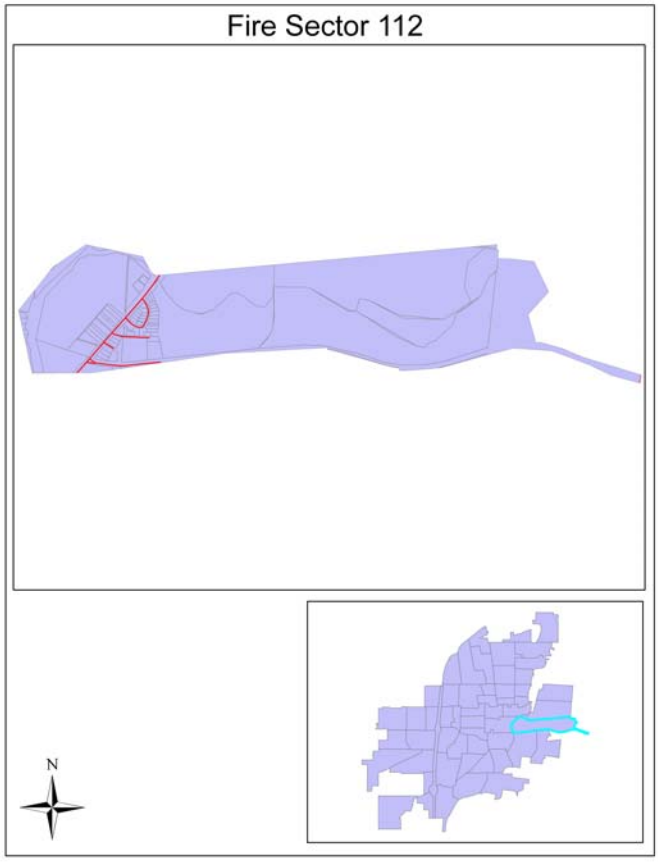
Identified Special Risks

Most of the larger properties in this sector are protected. None of the properties in the area should pose a large loss of life risk and the most significant risk unprotected properties in this zone are the Great Stone castle and St. Paul's United Church of Christ. In addition to the historical value of the Great Stone castle, several other residential properties exist in the area that do have some historical value. This sector is the area immediately north of the downtown where, in the late 1800s and early 1900s, many of Sidney's wealthier families built homes and resided. Many of the homes are large with Victorian-style architecture. As an example, the facility on North Ohio Avenue for New Choices, which is the social service providing protection and assistance for victims of domestic violence, is a former single-family residence that contains 5,348 square feet. Several homes of this type exist in this sector.

Fire Flow Concerns

Gates Brothers Glass is one of the largest unprotected structures at 22,500 square feet. The Great Stone castle has 13,292 square feet. If Gates Brothers facility were to be 100% involved in fire, a fire flow of 7,500 gpm would be needed. Hydrants in the area have 1,400 gpm available. The Great Stone castle would require 4,400 gpm flows; hydrants in the area have 1,570 gpm available. Hydrants from adjacent areas would have to be utilized to provide sufficient water for these facilities. Other hydrants in this sector have 2,500-5,000 gpm available. Fire flow available is dependent on the water main size in the area. Most of the other larger buildings in the area are protected with fire suppression systems and fire alarm/detection system.

Fire Sector Profile … 112 – Riverside Drive area near Sidney Municipal Pool



Community Profile

This area encompasses a primarily residential district near Tawawa Park, Sidney Municipal Pool, and Custenborder Park. The City's raw water pump station is located within this area and the pump station and Custenborder Park are adjacent to the Great Miami River. This area also provides the primary access to one of the city's low-head dams on the Great Miami River.

Transportation Issues

A major roadway in this sector is Riverside Drive (State Route 47). It also includes the entrance to the pool and Tawawa Park which is Tawawa Drive and a couple of small residential streets. Riverside Drive is a major thoroughfare and there are no significant traffic calming measures utilized in this zone other than the typical two-way stop intersections.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	2
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	64
Fire responses	5
EMS	53
Other alarms	6
Dollar loss	$0

Identified Special Risks

There are no significant-risk unprotected properties in this sector. The Sidney Municipal Pool does utilize chlorine in its operation, however the amount on hand is kept to a minimum and the facility infrastructure has been upgraded and well maintained. A significant non-fire risk exists in this sector due to the low-head dam located adjacent to the Stolle walk bridge. This dam helps provide water

supply for the city's main water/river intake. During flood stage, the low-head dam creates a fast water hydraulic which is extremely dangerous to anyone who may accidentally become trapped in the river. This creates a significant hazard for fire department personnel responding to anyone reported in the river, particularly when it is at flood stage. The agency has done training and pre-planning to respond to emergencies involving fast water rescue and the low-head dam. In addition, a boat ramp has been installed south of the Stolle walk bridge to further expedite the launching of rescue boats should the need arise.

The residential units in the area are small and average between 800 and 1,200 square feet of living space. There are no churches, libraries, or buildings of historical value in this sector.

Fire Flow Concerns

The typical residential property in this area is 800-1,200 square feet. The required flow for 100% involvement is 500 gpm. The largest commercial structure in the sector is the BK Rootbeer Stand with a requirement of 600-700 gpm for 100% involvement. Sufficient water supply is available to serve the residential and commercial areas.

Fire Sector Profile … 113 – Buckeye Avenue/Paul Street/Hayes Street

Community Profile

This area is best described as residential in nature. It contains mostly single-family and several multi-family residential neighborhoods.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this zone include Buckeye Avenue, Wagner Avenue, Hayes Street, and Paul Street.

Other than two-way stop signs, no traffic calming measures are utilized in this sector.

Community Risk Assessment rating

Since no commercial properties are located within this fire sector, no risk assessment on commercial structures was completed.

Incident History – 2005-2007

Two residential structure fires occurred during the reporting period, resulting in a total loss of $70,000. There were no fatalities during the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	86
Fire responses	11
EMS	71
Other alarms	4
Dollar loss	$70,000

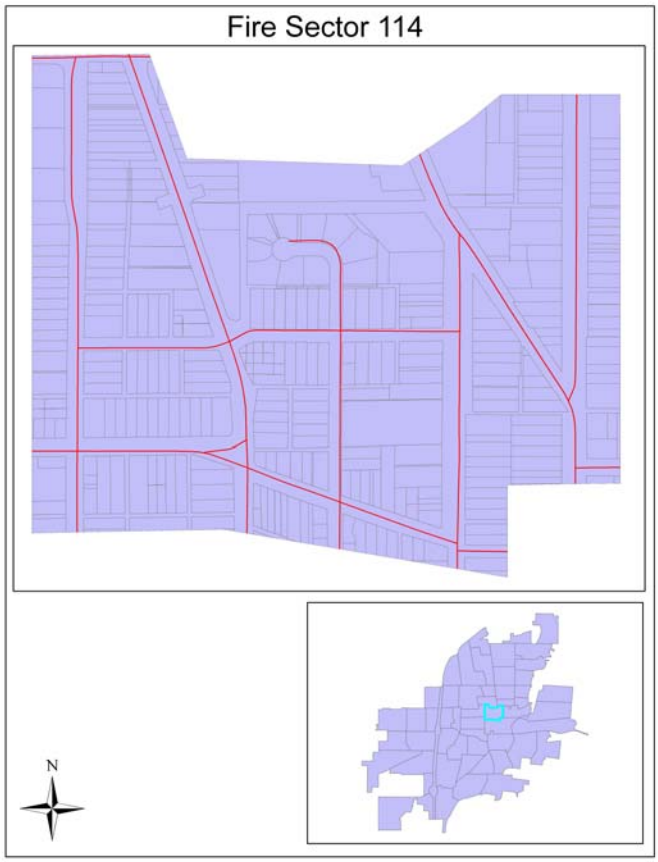
Identified Special Risks

There are no significant-risk unprotected properties in this sector which would pose a large loss of life and property other than the residential structures. Most of the residential units in this area range from 800-1,800 square feet of living space. There are no schools, churches, or libraries in this sector. The average residential structure in this area would rate a 12 on the community risk assessment scale.

Fire Flow Concerns

In this sector, the largest residential dwelling is approximately 1,800 square feet. Required fire flow for 100% fire involvement is 600 gpm; available water is rated at 2,000 gpm. All other structures fall within acceptable fire flow limits as identified in the fire flow report.

Fire Sector Profile … 114 – Oak Street/Park Street/St. Marys Avenue



Community Profile

This area is best described as small to moderate residential structures with some light commercial and two manufacturing facilities. The water system is adequate to meet the fire flows for the residential areas, however it is not adequate to meet the needs of a major fire in the Ross Aluminum Foundry facility. The Ross facility is a protected building, however its large size and quantity of hazardous materials present in the facility taxes the water system should an incident occur. A small strip mall is located on St. Marys Avenue and a small apartment complex is also located in that same vicinity. Lochard, Inc., a small sheet fabricating shop, is located on Wapakoneta Avenue.

Transportation Issues

This area is comprised of mostly residential streets. The major roadways in this area include St. Marys Avenue, Oak Avenue, Park Street, and Wapakoneta Avenue. Several two-way and four-way stop intersections exist within the sector. No other traffic calming measures are utilized in this zone.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	12
Properties posing above average risk	2

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	247
Fire responses	40
EMS	187
Other alarms	20
Dollar loss	$18,300

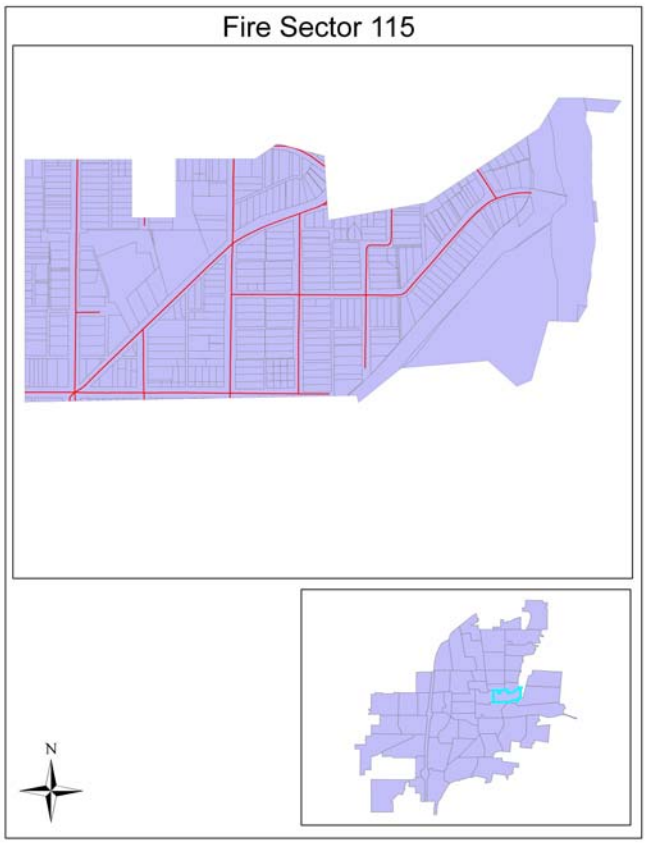
Identified Special Risks

The only significant-risk unprotected property in this sector which could pose a large property loss is Mechanical Galv-Plating. Directly south of Mechanical Galv-Plating is Ross Aluminum Foundries. The Ross facility is a large complex and is surrounded on the east by a residential neighborhood. Any emergency involving hazardous materials release or a significant fire that could overtax the suppression system would create a significant challenge for the agency to protect the adjacent residential neighborhood. There are no schools, churches or buildings of historical value in this sector. However, hazardous materials are used at both Mechanical Galv-Plating and the Ross Aluminum facility and vehicles delivering those hazardous materials travel through the sector.

Fire Flow Concerns

The residential dwellings range from 800 square feet to 1,500 square feet in the area. In addition, the apartment building complex on St. Marys Avenue contains approximately 5,490 square feet per unit. One hundred percent involvement would require 1,830 gpm. The fire flow reports indicates that approximately 4,000 gpm is available in the area. With the exception of Ross Aluminum Foundries, sufficient fire flow is available in this area.

Fire Sector Profile … 115 – Residential District – Port Jefferson Road/Broadway Avenue/Miami Avenue



Community Profile

This area is best described as residential in nature There are numerous two-family dwellings throughout the area, ranging in size from 1,200-1,800 square feet. There are some newer single-family homes located along Port Jefferson Road as large as 2,500 square feet. There is one small commercial structure and several apartment buildings in the area. The water system is generally adequate to meet the fire flows for the area. This area is bounded by Kossuth Street on the north, Miami Avenue on the west, Jefferson Street on the south, and the Great Miami River to the east.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this area include Miami Avenue, Broadway Avenue, Port Jefferson Road, and Jefferson Street. There is a traffic light at the intersection of Broadway and Port Jefferson Road and numerous two-way stop signs are utilized throughout the area including a five-way stop at Port Jefferson Road, Miami Avenue, and Jefferson Street.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	3
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	210
Fire responses	30
EMS	146
Other alarms	34
Dollar loss	$117,800

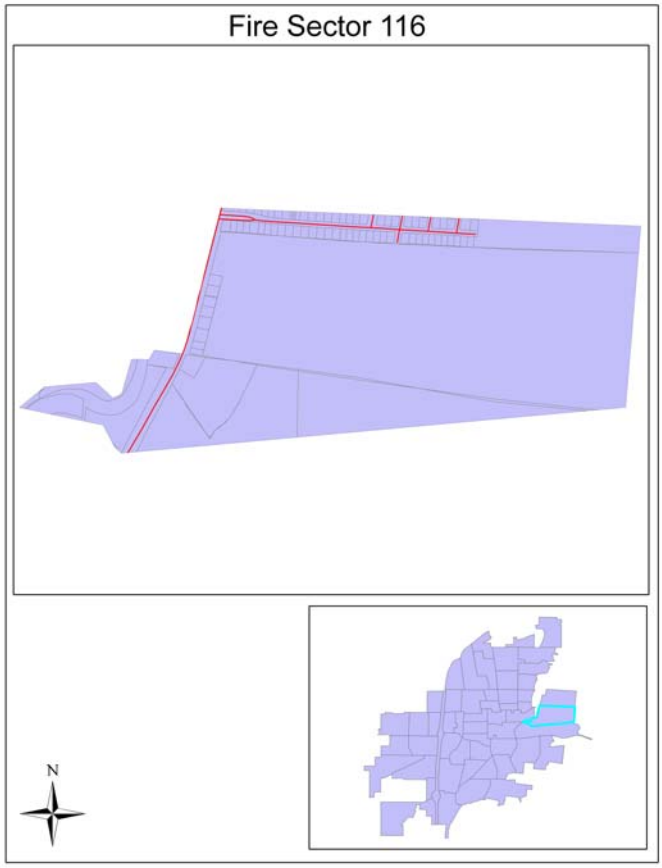
Identified Special Risks

The only significant-risk unprotected property in this sector which could pose a large property loss is the Bon Air apartment complex. This complex is located at 230 Jefferson Street and consists of two buildings with 12 units in each building. There are no schools, churches, libraries, or buildings of historical value in this sector.

Fire Flow Concerns

In this sector, the largest commercial structure is 9,483 square feet. Required fire flow is 3,100 gpm if the building is fully 100% involved. Available water in the area is rated at 1,000-3,000 gpm. The fire flow is generally adequate for the residential dwelling units located in this area.

Fire Sector Profile … 116 – Recreational area and residential district



Community Profile

This area is best described as an open area that contains some of the City's recreational facilities. There are a few single-family residences located along Riverside Drive. The water system is adequate to meet the fire flows for the area. This area is known as State Route 47 East and the Flanagan Sports Complex.

Transportation Issues

This area is comprised of a main thoroughfare, Riverside Drive (State Route 47). There are no specific traffic calming measures utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	1
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	20
Fire responses	2
EMS	14
Other alarms	2
Dollar loss	$0

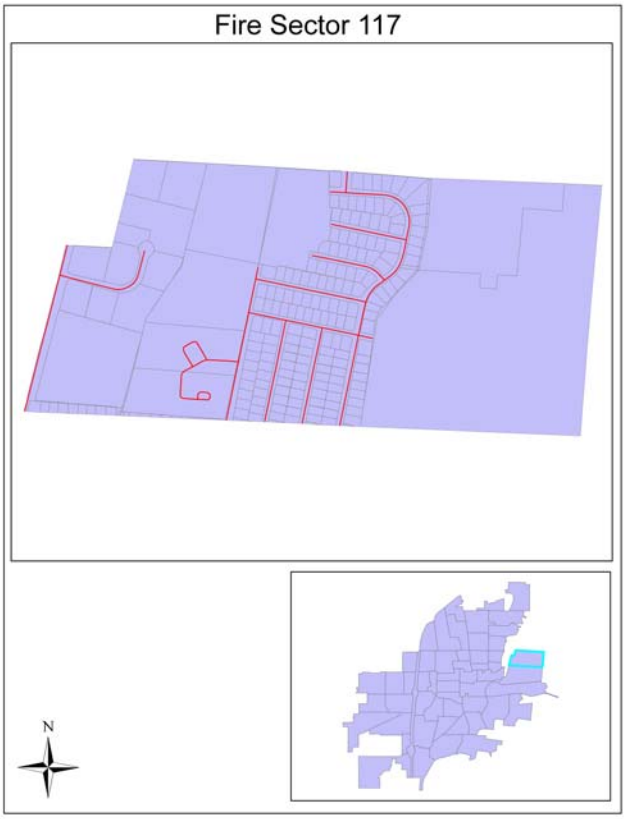
Identified Special Risks

There are no unprotected properties in this sector that carry an above-average risk. Riverside Drive is dotted with several older single-family dwellings, some of which are as large as 2,500 square feet. None of the buildings in this sector have an historical value.

Fire Flow Concerns

In this sector, the largest structure is approximately 2,500 square feet. Required fire flow for 100% involvement is approximately 833 gpm. Available water in the area is rated at 1,500-5,000 gpm. The fire flow is generally adequate for the residential dwellings located in this sector.

Fire Sector Profile … 117 – Residential District – Riverbend Boulevard



Community Profile

This area is best described as residential in nature with some commercial structures. Also located in this sector is a Metropolitan Housing Authority complex that contains five apartment buildings within the complex, each containing 6 apartment units. Most of the single-family residential structures in this area will range from 1,200-1,600 square feet. This area is bounded by Dingman-Slagle Road on the north, Riverbend Boulevard on south, and Riverside Drive to the west. Open farm agricultural abuts this area to the east.

Transportation Issues

This area is comprised of residential streets. The major roadways in this sector include Riverbend Boulevard, Constitution Avenue, and Hilltop Avenue.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	4
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars in this sector for the reporting period. In December of 2006, an elderly male died in a single-family residential fire on Hilltop Avenue. The total number of fire and EMS calls are listed as follows:

Total alarms	147
Fire responses	13
EMS	120
Other alarms	14
Dollar loss	$14,700

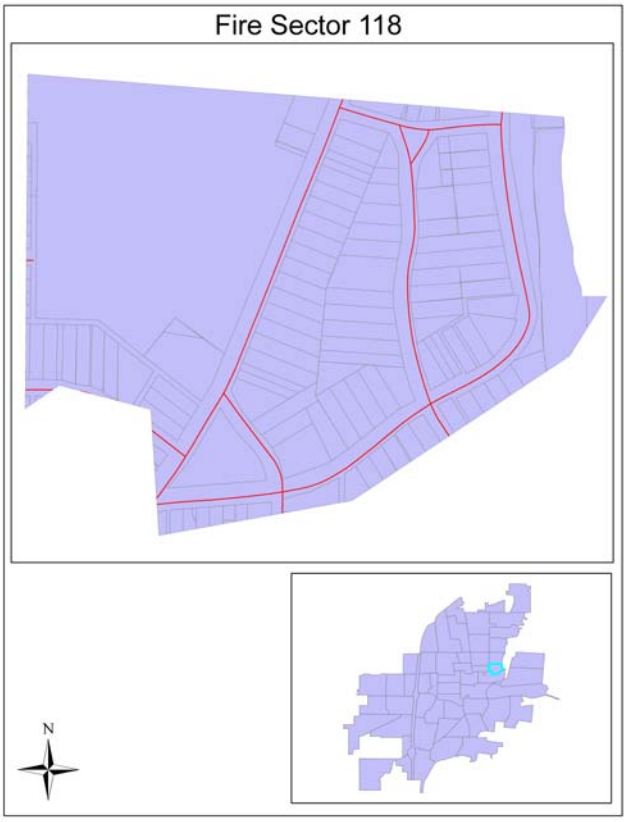
Identified Special Risks

The only significant-risk unprotected property in this sector which could pose a large property loss is the apartment complex on Hilltop Avenue. The complex consists of five two-story buildings that contain six apartment units each and each building has approximately 9,700 square feet. The configuration of the apartment buildings within the complex coupled with the limited access around the buildings further complicates fire suppression efforts at this location. The rest of the residential area consists of one-family and two-family homes and the majority are ranch-style homes. There are no buildings in this area that have significant historical value.

Fire Flow Concerns

In this sector, the largest structure is 9,700 square feet. Required fire flow is 3,200 gpm if the building is fully 100% involved. Available water in the area is rated at 2,500 gpm. With the exception of this property, the fire flow is generally adequate for the residential dwelling units located in this area.

Fire Sector Profile … 118 – Bon Air Drive – Overland Drive area



Community Profile

This area is best described as residential in nature with a large area of green space created by the Moose Lodge golf course. Most of the residential structures in this area will range from 1,200 to 3,000 square feet. In the 1960s and 1970s, Bon Air Drive and Overland Drive contained many upscale homes and has been considered for many years a very prestigious area. In most cases, the water is adequate to meet the fire flows for the areas described.

Transportation Issues

This area is comprised of mostly residential streets. The major roadways in this area include Bon Air Drive, Overland Drive, and Port Jefferson Road. Two-way stop signs exist along most of the residential streets. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	1
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	9
Fire responses	2
EMS	6
Other alarms	1
Dollar loss	$0

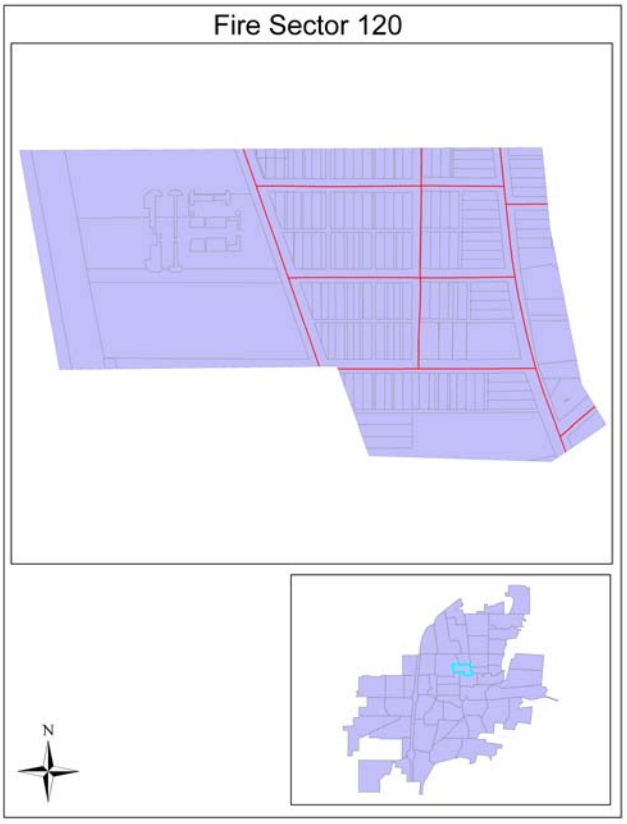
Identified Special Risks

There are no significant-risk unprotected properties in this sector which could pose a potential large loss of life or impact the community. The Sidney Moose Lodge is a public assembly facility that is protected with a suppression system. There are several large homes that are situated at the top of lots in which the topography has a significant grade. These would be a challenge should a fire occur in these structures, however because they are single family dwellings they do not pose a significant risk.

Fire Flow Concerns

The largest residential dwelling at 3,000 square feet requires 1,000 gpm for 100% involvement. Most of the water distribution system in this area will produce 1,000-1,500 gpm and is sufficient for firefighting purposes.

Fire Sector Profile … 119 – Residential District – Kossuth Street/Summit Street



Community Profile

This area is best described as residential in nature. The water system is adequate to meet the fire flows for the area described. Most of the homes built in this area run between 800 and 1,500 square feet. The Central Bible Study Ministries facility is located within this sector.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this area include Kossuth Street, Main Avenue, and Miami Avenue. Other than two-way stop signs, no other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	1
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	127
Fire responses	8
EMS	111
Other alarms	8
Dollar loss	$0

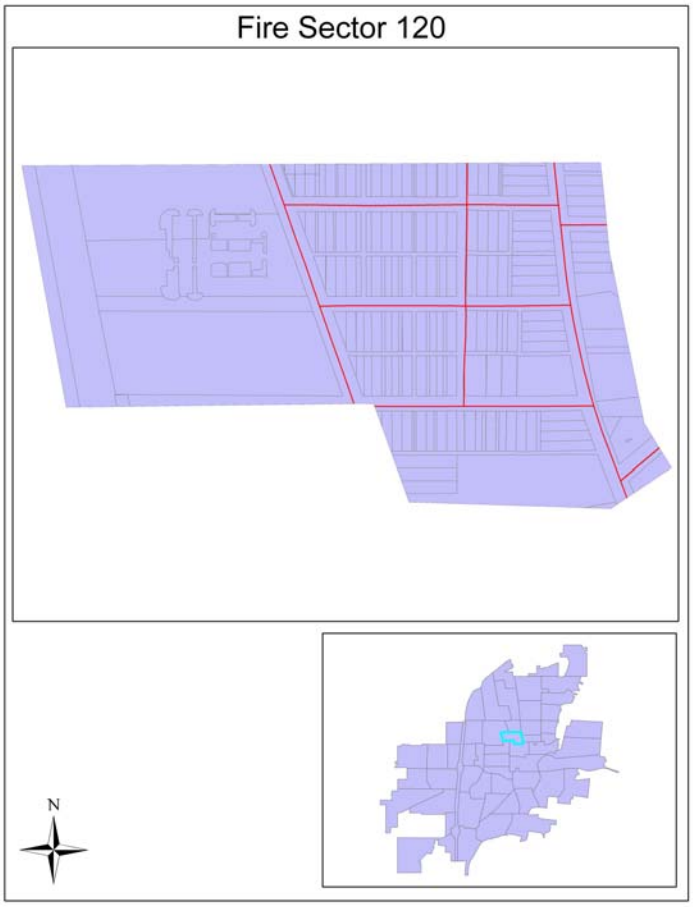
Identified Special Risks

There are no significant-risk unprotected properties in this sector which could pose a large loss of life or impact the community. There is one church located on Kossuth Street, however it does not pose a significant risk.

Fire Flow Concerns

The largest residential dwelling is approximately 1,500 square feet. The required fire flow for 100% involvement is 500 gpm. The other small commercial occupancy is the Central Bible Study Ministries at 4,500 square feet. This facility would require 1,500 gpm application if 100% involved and the water available in the area is rated at 2,200 gpm or greater depending on the specific hydrant location.

Fire Sector Profile … 120 – North Commercial District – Wapakoneta Avenue/Williams Street/St. Marys Avenue



Community Profile

This area is best described as light commercial and residential with numerous retail outlets along Wapakoneta Avenue. Additionally, district headquarters for the Ohio Department of Transportation is located on St. Marys Avenue and Northwood school is also located on St. Marys Avenue at Brookburn Street. This area also encompasses Harmon Field which is part of the City's park system. The north-south line of CSX Railroad traverses through this sector. Wapakoneta Avenue traverses this zone from north to south and carries a high volume of traffic. The shopping areas and retail outlets line the roadway throughout this sector. The small area of residential streets run directly between Wapakoneta Avenue and St. Marys Avenue. Homes in this neighborhood range from 1,000 square feet to approximately 2,000 square feet. Sidney Foodtown is located in this area and contains 16,845 square feet. Additionally, the AAA building contains 11,491 square feet and the World's Mission for Christ church is located on Doering Street.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this area include St. Marys Avenue, Wapakoneta Avenue, and Williams Street. Several traffic lights are located on Wapakoneta Avenue and numerous two-way stop signs are located in the residential areas. No other specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	12
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	70
Fire responses	12
EMS	52
Other alarms	6
Dollar loss	$0

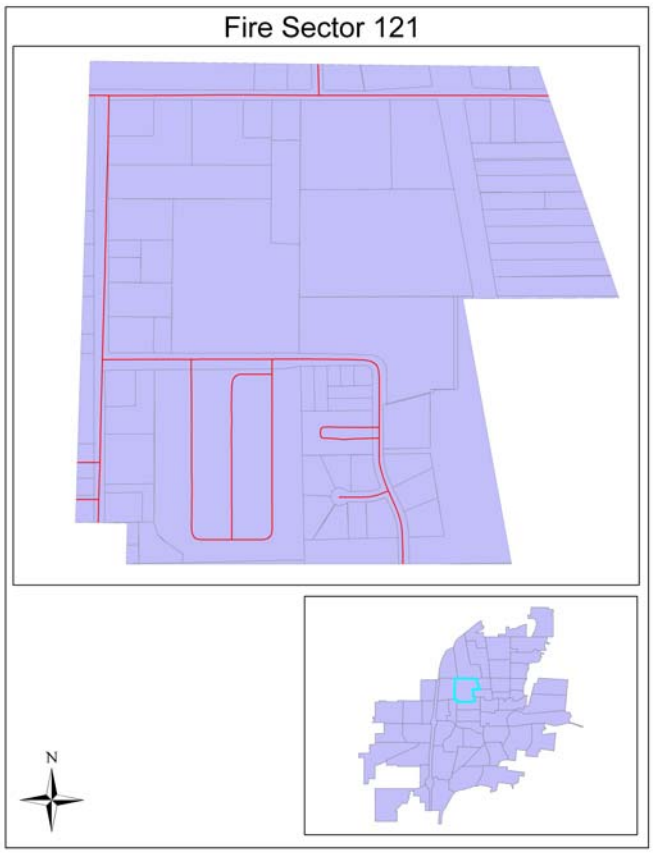
Identified Special Risks

One significant risk-unprotected property in this sector which could pose a high risk of loss of property is the district headquarters for the Ohio Department of Transportation. Sidney Foodtown, while not rising to the level of significant risk, would have an impact on the community should a significant fire event occur in this facility. The facility contains 16,825 square feet and as an unprotected structure would certainly provide a challenge for firefighting forces to control a fire in that building. A loss of this facility would have a negative impact on the community. There is a small church located on Doering Street, however it is less than 2,000 square feet. No libraries or other buildings of historical value are located in this sector.

Fire Flow Concerns

A calculation for needed fire flow was generated in the city's fire flow report. In this sector, the largest structure is the ODOT facility with 37,928 square feet. Required fire flow for 100% involvement is 12,640 gpm and available water is rated at 4,300 gpm. The Sidney Foodtown building would require approximately 5,600 gpm for 100% involvement. For these two structures, the fire flow is not sufficient. However, for all other structures located in this sector sufficient water supply is available. If a fire would occur in either one of these two facilities, water would have to be obtained from hydrants on a different grid system which would have to be pumped back to the scene utilizing a relay pumping technique. In the ODOT facility, weather conditions, and percentage of involvement would dictate whether a fire in that facility can be contained to a reasonable level.

Fire Sector Profile … 121 – Residential District – Countryside Street / Buckeye Avenue / Fourth Avenue



Community Profile

This area is best described as residential in nature with a mixture of light commercial. This area is bordered by Russell Road on the north, the CSX Railroad on the east, Fourth Avenue on the west, and Paul Avenue on the south. It contains several well-known apartment complexes: Buckeye Ridge apartments, Sycamore Creek apartments, Countryside Commons, and Sidney Village apartments. This area also contains Country Meadows which is a 87-unit mobile home park. Also located within this area are several public assembly facilities including the Disabled American Vets, Sidney American Legion, Knights of Columbus, and AMVETS. McLain's Garage, Embarq warehouse, Sidney Truck & Storage, and Slagle Mechanical are also located within this area. The City's northend 2 million gallon elevated water tower is located along Fourth Avenue. The single-family residential units in this area range from 800 square feet to approximately 1,500 square feet.

Transportation Issues

This area is comprised of several major thoroughfares including Russell Road and Fourth Avenue. Countryside Street and Buckeye Avenue are also well traveled and provide access to multiple apartment complexes. Numerous two-way stop signs exist throughout the sector. No other specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	16
Properties posing above average risk	3

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	256
Fire responses	25
EMS	218
Other alarms	13
Dollar loss	$50,200

Identified Special Risks

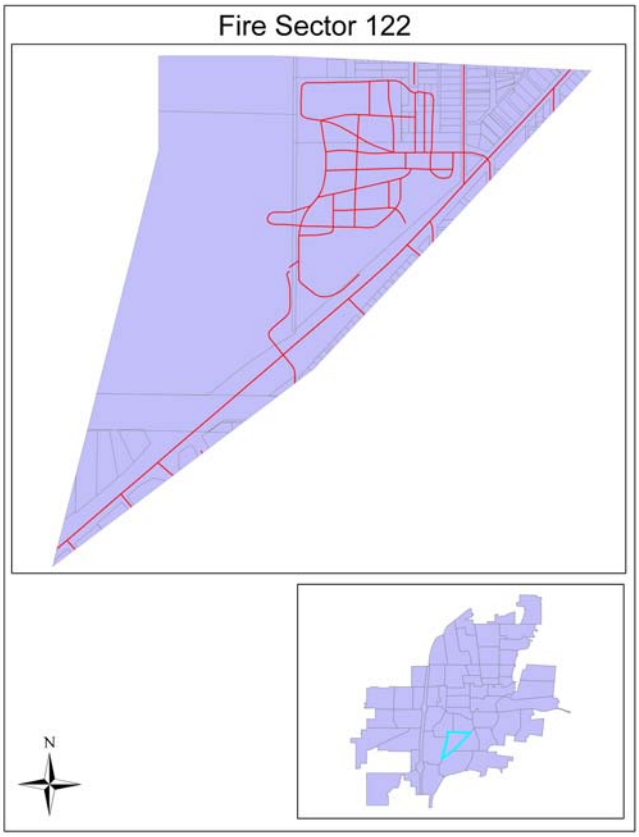
The significant-risk unprotected properties in this sector are the apartment buildings located on Buckeye Avenue and Countryside Street. Sycamore Creek apartments located at 712 Countryside Street consists of eight buildings. Each building is three stories and consists of 12,738 square feet with eight apartment units in each building. Each building has 25 or more occupants and the building construction has been identified as wood frame. The apartments on Buckeye Avenue formerly known as Deer Run and now known as Buckeye Ridge have three stories and contain 22,056 square feet. The buildings have limited accessibility and feature wood frame construction and open stairwells. The building has slightly less than 100 occupants and while it does have a smoke detector and fire alarm system, it does not have a suppression system. The Sidney Village apartments are a complex which consists of five buildings located at 999 Buckeye Avenue, each two-story in height and containing just under 10,000 square feet per building. This complex also features wood frame construction and open stairwell design. Each apartment exits directly to the outside and therefore no internal notification system exists other than individual smoke detectors in each apartment unit.

There are no churches, libraries, or buildings of historical value in this sector.

Fire Flow Concerns

In this area, the largest structure is the apartment building on Buckeye Avenue which is three-story and contain a total of 20,000 square feet. The required fire flow for 100% involvement is 6,666 gpm and available water is rated at approximately 2,500 gpm. The largest residential dwelling is approximately 1,500 square feet. Sufficient water supply is available to serve the residential areas. The Embarq warehouse is a building consisting of 16,400 square feet of space and Sidney Truck and Storage on Russell Road is just under 15,000 square feet. Both structures would require the use of multiple hydrants in the area to combat a fire which could gain significant headway.

Fire Sector Profile … 122 – Fairgrounds area – Fair Road



Community Profile

This area is best described as residential in nature with some small commercial structures and the Shelby County Fairgrounds. Most of the residential structures in this area range from 900 to 1,500 square feet. The sector also includes the Sidney Middle School, Farm Service Agency, the Shelby County Extension Service, and the Shelby County EMA/ Homeland Security facility. The EMA facility also has the Shelby County Fire Department and Shelby County Hazmat Team housed there.

Transportation Issues

The major roadway in this area is Fair Road. A stoplight signal is located at the intersection of Spruce Avenue and also at the entrance to the Sidney Middle School. Other two-way stop signs exist along most of the residential street intersections. No other specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	11
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	126
Fire responses	15
EMS	99
Other alarms	12
Dollar loss	$40,100

Identified Special Risks

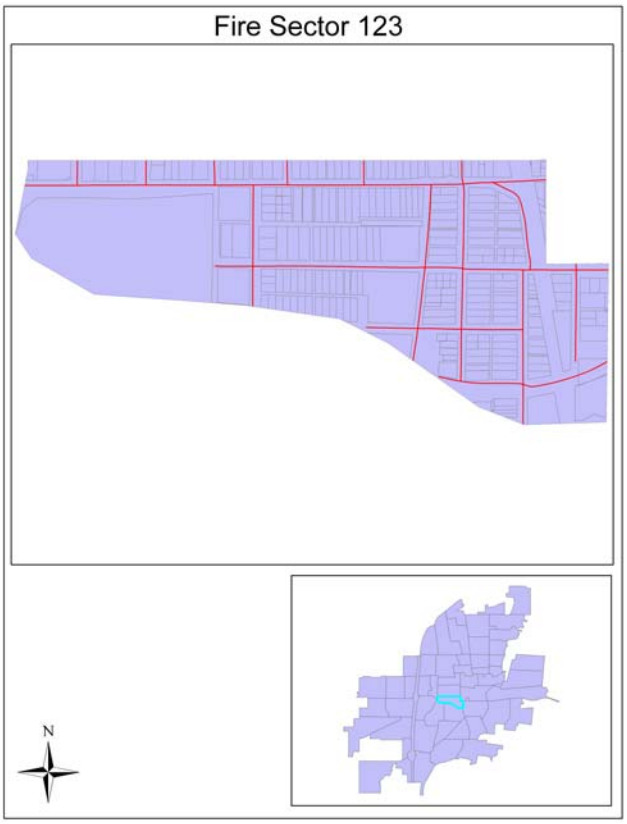
There is one significant-risk property in this sector, the Sidney Middle School. While this is a protected facility, the school has over 100 students on a daily basis and has the potential for large loss of life. It has over 170,000 square feet of space. This facility, as noted, is completely protected by a

fire suppression system and internal fire alarm system. It features non-combustible construction and is compartmentized with a series fire and smoke doors.

Fire Flow Concerns

Woody's Market, which is just under 5,000 square feet, and some of the buildings at the Shelby County Fairgrounds pose the largest concern regarding available water supply. Woody's Market, if 100% involved in fire, would require approximately 1,700 gpm. The hydrants in this vicinity are rated at 1,100 gpm. The largest residential dwelling is approximately 1,500 square feet. The required fire flow for 100% involvement is 500 gpm; available water is rated at 500-1000 gpm.

Fire Sector Profile … 123 – Residential



Community Profile

This area is best described as residential in nature with some commercial structures and the City's only hospital. In addition to the hospital, the largest fire risk is the Towne Center apartments. Both the hospital and the Towne Center apartments are protected with fire suppression and early detection systems.

Transportation Issues

This area is comprised of mostly residential streets. The major roadway in this sector is Michigan Avenue. Two-way stop signs exist along most of the residential streets. No other specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	11
Properties posing above average risk	3

Incident History – 2005-2007

There was no loss of life in this sector for the reporting period. Seven residential fires and two auto fires occurred in this sector during the reporting period. Four of the residential fires sustained losses of $40,000-$80,000 each. The total number of fire and EMS calls are listed as follows:

Total alarms	327
Fire responses	51
EMS	249
Other alarms	27
Dollar loss	$263,400

Identified Special Risks

There are two significant-risk properties in this sector, both of which pose a potential loss of life as well as large loss of property. Wilson Memorial Hospital is a full service 71-bed facility located at 915 Michigan Avenue. The facility is extremely large with 542,826 square feet. The facility is protected with smoke and heat detectors along with an internal alarm system. Eighty-seven percent (87%) of the facility is protected by a suppression system. In addition to the regular health care facility, the hospital operates a behavioral health unit on the second floor. Due to a normal fluctuation

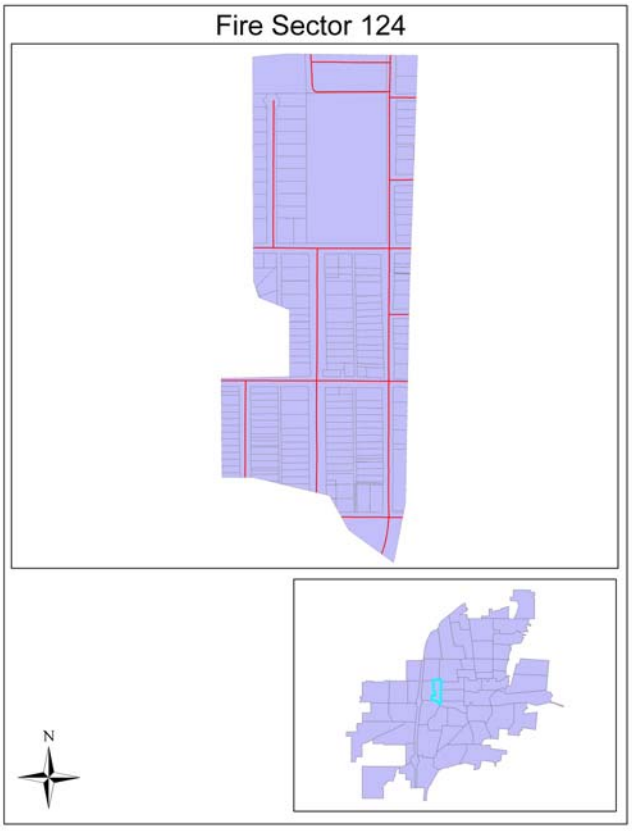
in daily census and with a large number of employees, the hospital has the potential for a large loss of life due to fire. A fire in a hospital facility has the potential for generating large amounts of smoke which can be extremely dangerous to a population that is not ambulatory and cannot evacuate on their own. Continuing in-service training by hospital staff along with detection and suppression systems, and non-combustible construction features should help limit any significant smoke and fire spread in the building. The agency recognizes the importance of the facility to the community and its high risk potential. The agency has conducted pre-planning on the facility as well as training on the deployment of hoselines to upper floors of the building and smoke removal methods.

Also located within this area are the Towne Center apartments. Towne Center apartments is a three-building apartment complex situated on the former site of the Stolle warehouse. This apartment complex has been a welcome addition to the neighborhood and replaces an aging manufacturing structure that was deteriorating and situated within a residential neighborhood. Each building has three stories and contains 12 units each. The apartment complex is protected with a fire alarm system and a fire suppression system. Access to the apartment building complex is limited and does pose some problems for firefighting crews. Two 10-unit apartment buildings are located along North Street and Highland Avenue in the same complex. The buildings are two-story and feature wood frame construction. The apartment units each have their own outside exit and do not have common hallways or stairways.

Fire Flow Concerns

The largest residential dwelling is approximately 1,500 square feet. Required fire flow for 100% involvement is 500 gpm. In some areas of this sector, water flow available are in excess of 1,000 gpm while some have less than 500 gpm. The two largest commercial occupancies are protected by fire suppression systems. In come instances, water may have to be obtained from hydrants on a different grid system and pumped to the fire scene utilizing a relay pumping technique. Water availability on Michigan Avenue in the area of the hospital is excellent; 5,000 gpm.

Fire Sector Profile … 124 – Residential District – Fourth Avenue / Park Street / Grove Street



Community Profile

This area is best described as residential in nature with some commercial structures. Most of the residential structures in this area range from 800 square feet to 1,800 square feet. The sector contains one elementary school as well as numerous retail outlets. A small church and a daycare are located on Wilson Avenue.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this area include Park Street and north-south thoroughfare in Fourth Avenue. A stoplight signal is located at Park and Fourth Avenues and Michigan Avenue and Fourth Avenue. Numerous other two-way stop signs exist along most of the residential streets. No other specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	9
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	125
Fire responses	11
EMS	99
Other alarms	15
Dollar loss	$3,000

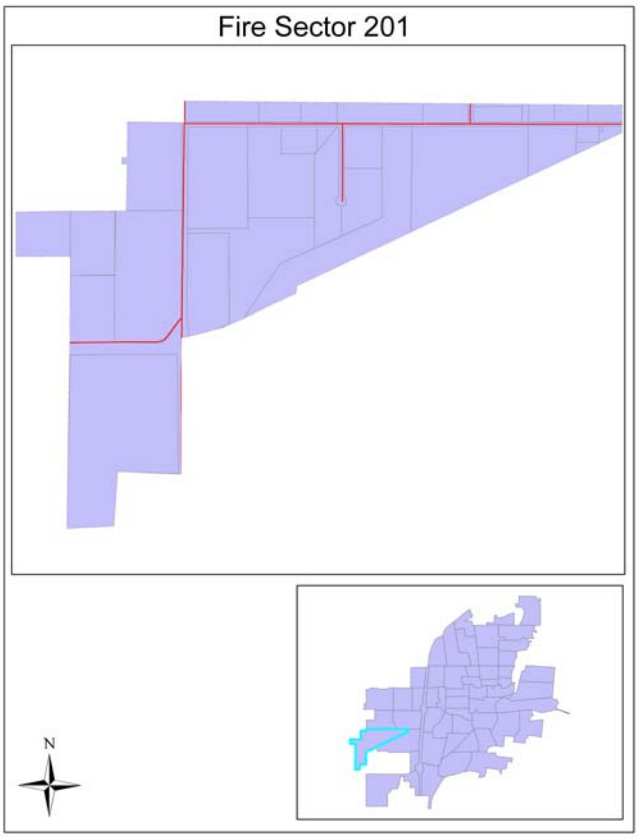
Identified Special Risks

The only significant-risk unprotected property in this sector is Longfellow Elementary School. The school is 33,878 square feet and has limited accessibility around the structure. The school has in excess of 100 students on a daily basis and does have an internal fire alarm notification system however does not have a fire suppression system.

Fire Flow Concerns

The largest residential dwelling is approximately 1,800 square feet. Required fire flow for 100% involvement is 600 gpm; available water is rated at 1,000 gpm or greater. The water tower on North Fourth Avenue contributes to the improved fire flows in this area. However, at 33,000+ square feet Longfellow Elementary School does not have an acceptable fire flow should the building become significantly involved in fire.

Fire Sector Profile … 201 – Industrial District – Campbell Road/Kuther Road



Community Profile

This area is primarily an industrial area which includes some warehousing and offices. In most cases the water system is adequate to meet the fire flows for the area described. It is bordered by Campbell Road on the north, Kuther Road on the west, and the railroad spur on the south and east. This area includes the NK Parts complex, Norcold Division of Thetford, numerous warehousing, and the DP&L substation and Sidney Service Center. Plygem (formerly known as Stolle Plant #3 and #9) occupies an extremely large facility on Campbell Road and Thermoseal is also located on Campbell Road.

Transportation Issues

This area contains two major roadways, Campbell Road and Kuther Road. Other than the two-way stop intersections, no specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	15
Properties posing above average risk	7

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	156
Fire responses	32
EMS	123
Other alarms	1
Dollar loss	$0

Identified Special Risks

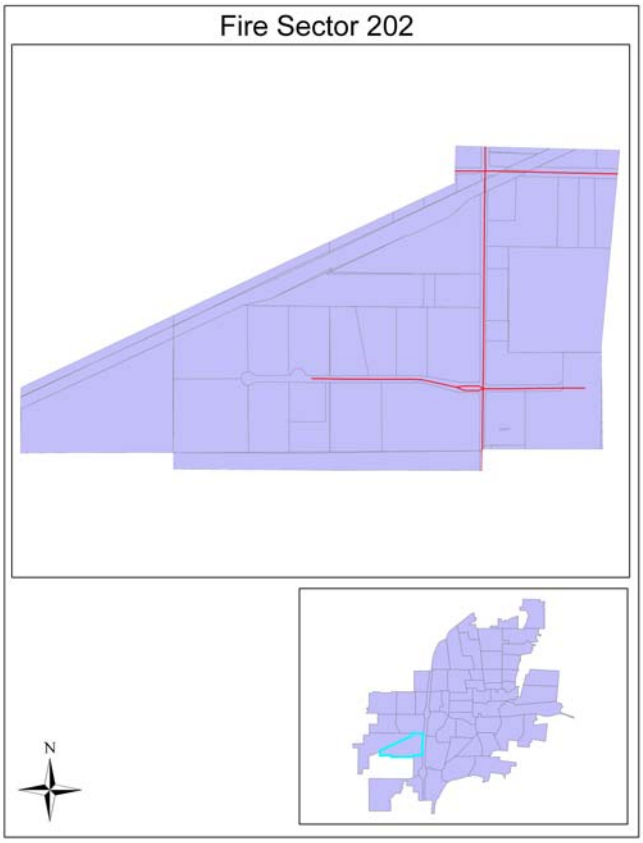
All of the properties identified as significant risk are protected properties. They all contain fire alarm detection systems, alarm notification and evacuation systems, and complete fire suppression systems. Even with the protection systems, several facilities present challenges should a fire incident occur. The Plygem complex has over 840,000 square feet under roof and the NK Parts complex has almost

250,000 square feet of space. The sheer size of these facilities requires extra resources to attack and contain a fire. Often times the appropriate size hoseline deployed in the proper location takes considerably more time than the routine residential fire; the fireloading in these facilities often requires higher gpm application than in many smaller structures. In addition, many of the facilities in this sector utilize various amounts and types of hazardous materials in their manufacturing processes. This can also magnify the seriousness of an emergency at these facilities. The Plygem facility as well as others in this area have OSHA-defined confined spaces on the premises. A confined space presents a special challenge for emergency responders in that specialized equipment and procedures must be utilized to effect a rescue because of the high level of danger and a requirement to follow prescribed OSHA regulations during the rescue operation. The agency has recognized this potential danger and equipped itself and has the necessary training to respond to a confined space rescue within its jurisdiction. There are no churches, libraries, or buildings of historical value in this area.

Fire Flow Concerns

In this area, the largest unprotected property is the DP&L Service Center with 25,000 square feet. One hundred percent involvement would require approximately 8,000 gpm of water. Fire hydrants in the area have 3,000-5,000 gpm available. This is largely due to the fact that Campbell Road is fed by a 20-inch line from the city's 1-million gallon water tower located nearby at the City Service Center and feeds into a 10-inch line westerly down Campbell Road. Water could be drawn from several hydrants in the area to supply sufficient water for this structure. All of the other significant risk structures in the area are protected by sprinkler systems and the Plygem plant has its own fire pump and auxiliary water supply to help protect the complex. The agency has pre-planned facilities throughout the city that present confined space challenges and have conducted confined space rescue drills at the Plygem facility.

Fire Sector Profile … 202 – Southwest Industrial Corridor – Vandemark Road / Industrial Drive



Community Profile

This area is a mixture of industrial facilities and commercial structures. It is bordered by CSX spur line on the north and west, CSX east-west rail line on the south, and Interstate 75 on the east. The Cargill, Inc. complex is located within this sector as well as Amos Press, I.A.C. (formerly known as Lear), and several trucking companies. The ADM grain facility as well as a fuel bulk plant are located within this sector.

Transportation Issues

This area is comprised of two major roadways, Vandemark Road and Campbell Road. Industrial Drive and Schlater Drive make up the remainder of the roadways within this sector. A traffic light is located at the intersection of Campbell Road and Vandemark Road and a railroad crossing with lights and gates are located at the CSX Railroad crossing on Vandemark Road, just south of Industrial Drive. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	24
Properties posing above average risk	6

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	129
Fire responses	70
EMS	52
Other alarms	7
Dollar loss	$52,000

Identified Special Risks

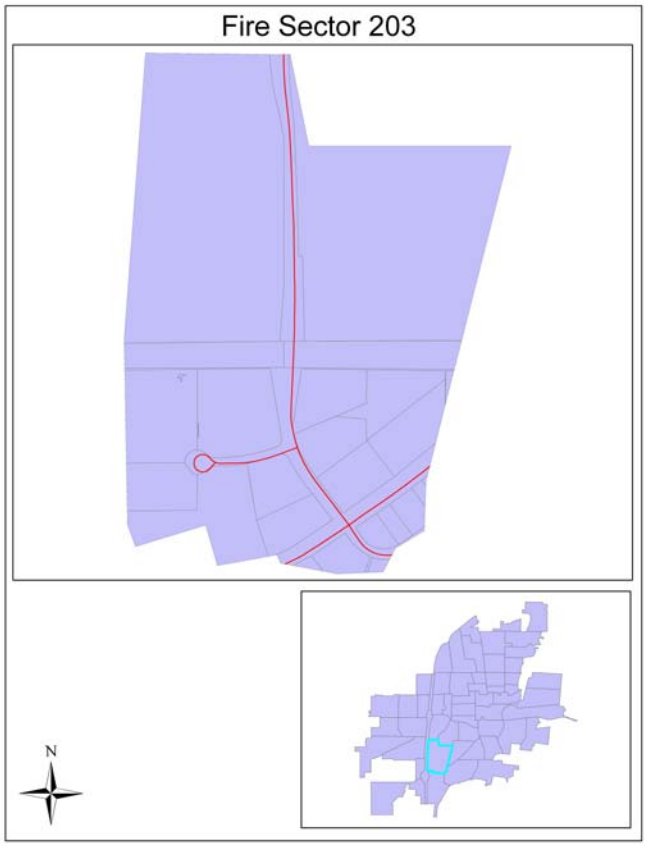
Several unprotected properties exist in this area which would pose a significant loss to the community should a fire occur in the structure. Sidney Tool & Die Building #1 and Everyday Manufacturing, both located on Campbell Road, are manufacturing facilities. Sidney Tool & Die Building #2, also located on Campbell Road is a protected property. The ADM grain facility is located on Vandemark Road and has a significant risk due to the square footage and the fact that it is a grain handling facility. This creates an environment in which the potential for a dust explosion constantly exists which can greatly endanger employees, customers, and first responders. Conway Trucking, SAIA Motorfreight, Bulk Transit, and AG Trucking all have facilities in this sector. At any time, these trucking companies could be carrying placarded or non-placarded quantities of hazardous materials which could create a potential problem should a release occur from a handling or transportation accident.

One of the highest risk facilities in the city is the Cargill, Inc. complex. Located at 2400 Industrial Drive, this complex contains 15 buildings along with several processing areas within the plant. Soybeans are delivered and then cracked open during a process utilizing hexane (a flammable gas) and the soymeal and raw soy crude oil are shipped to customers throughout the country. In addition, some of the oil is maintained on-site as Cargill utilizes its own refinery process to manufacture various grades of cooking oil. Utilized during the refinery process is hydrogen which is an extremely dangerous and highly flammable and explosive gas. This hydrogen is produced on-site and adds to the already dangerous environment where a dust explosion could occur. This coupled with numerous confined space spaces on-site is why Cargill is one of the high-risk facilities for the agency throughout the entire city.

Fire Flow Concerns

Some of the best water supplies in the city exist in this sector with many hydrants producing 2,500 gpm or greater. However, the fire flow needed in this area is also some of the greatest in the city. For example, the Sidney Tool & Die facility at 1950 Campbell Road is 48,000 square feet and would require 16,000 gpm if over 100% involved. This would require pulling water from several hydrants from a considerable distance to produce enough water to combat this fire. Cargill with its numerous buildings, has two fire pumps on site as well as its own water supply used to augment the city water system. The ADM facility on Vandemark Road would also require large quantities of water and is further hampered by limited accessibility.

Fire Sector Profile … 203 – Industrial area - Fourth Avenue / Progress Way



Community Profile

This area also encompasses an industrial area along with numerous commercial occupancies. It is bounded by Interstate 75 on the west, Campbell Road on the north, and Fair Road on the south. The CSX east-west main line traverses through the sector. Emerson Climate Technologies large facility is located on Campbell Road and Mama Rosa's manufacturing plant is located on Fair Road. Advanced Composites has two facilities located on Fourth Avenue and Playtex and Perfection Bakery are located on Progress Way. Numerous professional offices are located along Fairington Drive.

Transportation Issues

The major roadways in this area include Fourth Avenue and Fair Road. Fairington Drive and Progress Way also are located within the area. A stoplight signal is located at Campbell Road and Fourth Avenue, Fourth Avenue at the east entrance into Emerson Climate Technologies, and Fair Road and Fourth Avenue. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	21
Properties posing above average risk	7

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	104
Fire responses	24
EMS	78
Other alarms	2
Dollar loss	$0

Identified Special Risks

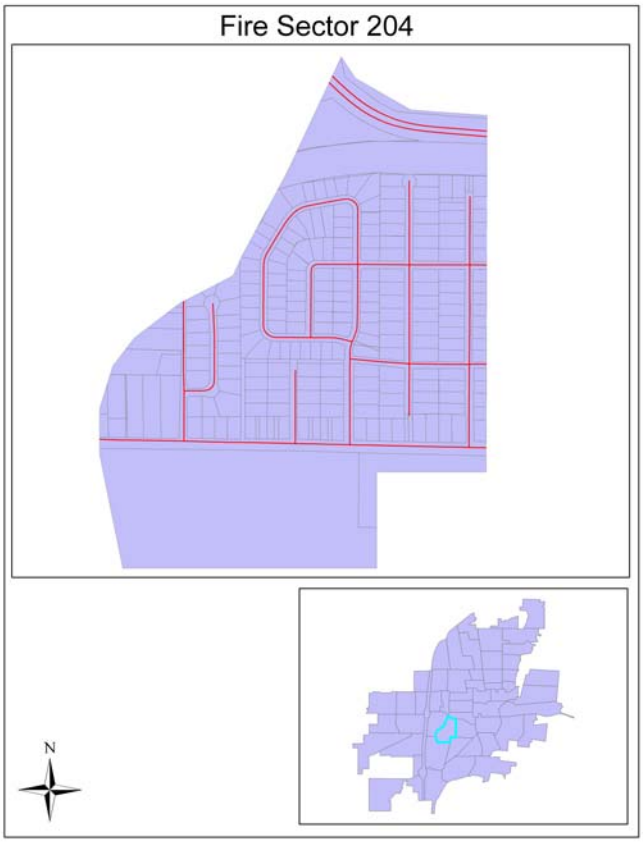
All of the properties in this sector that pose a significant risk are protected facilities including complete fire suppression systems and fire detection and fire alarm notification systems. However, several of the facilities still pose a considerable risk for the agency. Emerson Climate Technologies is an extremely large facility with over 854,000 square feet of space. Because of its size and construction features, it is at the highest end of the significant category with a rating of 20. The sheer size of the facility challenges the emergency responders to get to the location of the fire emergency and deploy a hose lines in an appropriate manner. In addition, some hazardous materials are used on the premises in the manufacturing process as well as temporary storage of inventory and parts. The Mama Rosa's facility located on Fair Road, while smaller in size than Emerson Climate Technologies, poses a myriad of challenges. Mama Rosa's utilizes large quantities of anhydrous ammonia in their manufacturing process of food products. Should a release of anhydrous occur, responders could be faced with a significant challenge for the facility and portions of the community depending on the amount of release and weather conditions. Anhydrous ammonia is an especially difficult chemical to deal with because of its chemical properties. Anhydrous is a corrosive and irritant that reacts with moisture on the human body. It is also an explosive hazard in a confined space.

Playtex operates two facilities, both located on Progress Way. The primary manufacturing facility poses challenges to first responders due to the nature of the baby wipe produced. The manufacturing process produces little pieces of fluff in the air which can accumulate and cause a flash fire should an ignition source come in contact with the accumulated product.

Fire Flow Concerns

In this area, the largest non-protected structure is Laser Fab Tech located on Fair Road. It contains 47,390 square feet and if 100% involved in fire would require a fire flow of 16,000 gpm. Most of the hydrants in the area will produce 1,500 gpm or greater, however a fire in this facility would require the agency to draw water from several hydrants in the area and even drawing from a different grid some distance away. The professional office properties along Fairington Drive can be served with the water supply that is available.

Fire Sector Profile … 204 – Sidney High School area



Community Profile

This area is best described as residential with some commercial facilities. The Sidney High School campus and Emerson Elementary are located in this sector along with the First Church of God. The water system is adequate to meet the fire flows for the residential areas, however it is not adequate to meet the needs of a major fire in the high school facility. This area contains primarily single family dwellings that range from 1,000 square feet to 2,000 square feet with several newer two-family dwellings which have recently been constructed in the Oak Leaf Court area.

Transportation Issues

This area is comprised of mostly residential streets. The major roadway in this area is Campbell Road. Several two-way and four-way stop intersections exist within the sector. Two traffic signals are also located at Campbell Road and Wagner Avenue and Campbell Road and Fourth Avenue. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	3
Properties posing above average risk	3

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	184
Fire responses	11
EMS	162
Other alarms	11
Dollar loss	$0

Identified Special Risks

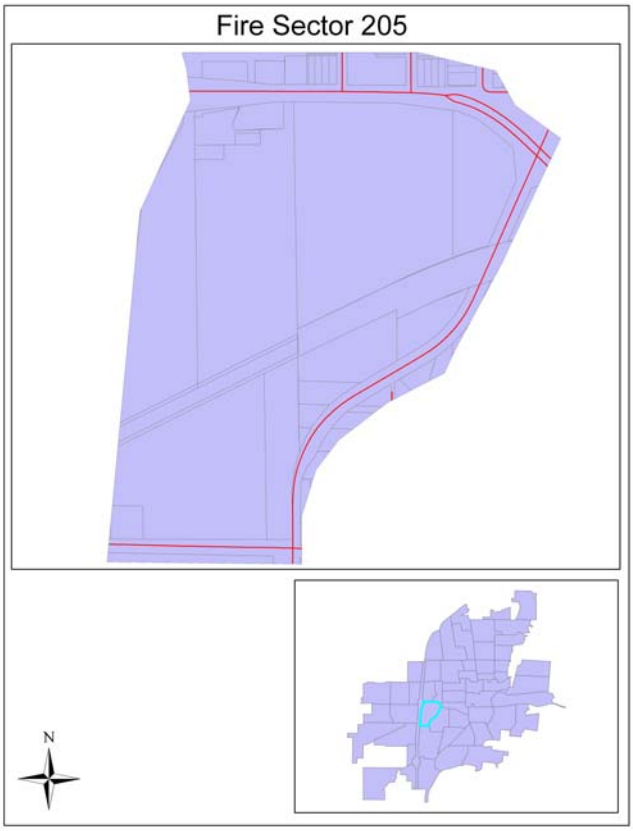
There are three significant risk unprotected properties in this sector which could pose a large property loss or in some cases, loss of life. The Sidney High School campus and Emerson Elementary school are both located on Campbell Road. Both facilities have in excess of 100 students on a daily basis and the elementary school contains 34,764 square feet and the high school contains 158,906 square feet. The high school campus recently went through some renovation and a new science lab was added. The science lab area includes a suppression system but only for that section of the building. While there are some hazardous chemicals on site that are used during lab work, the amount is not significant and should not pose a large-scale risk. Both the high school and elementary school have internal alarm systems. These are located directly west of Emerson Climate Technologies and other major industries in Section 203 that utilize hazardous chemicals and have the potential for an accidental release. Depending on the hazardous chemicals released and weather conditions, the population of both schools could be at risk and may have to be evacuated or sheltered-in-place should an incident occur. This same issue would hold true for the residential area as well.

The First Church of God is also located on Campbell Road. It is an unprotected building and contains 31,209 square feet. In the past, the high school has been utilized as an emergency evacuation shelter. The First Church of God has recently been established as the special needs emergency evacuation shelter for the community.

Fire Flow Concerns

The residential dwellings range from 1,000-2,000 square feet. One hundred percent involvement would require 660 gpm. The fire flow report indicates that most of the hydrants in the area flow between 1,800-5,000 gpm. However, it is clear that several hydrants would need to be utilized to obtain sufficient fire flow for the unprotected buildings in this sector should a significant fire occur.

Fire Sector Profile … 205 – Industrial and Commercial District



Community Profile

This area is best described as heavy industrial with several light commercial facilities and several strip shopping areas.

Transportation Issues

This area is served by Michigan Street (State Route 47) which is a major east-west thoroughfare. Sixth Avenue and Fifth Avenue also intersect with Michigan Street. There are several traffic signals located on Michigan Street, Fourth Avenue, and Campbell Road. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	14
Properties posing above average risk	5

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	48
Fire responses	6
EMS	41
Other alarms	1
Dollar loss	$0

Identified Special Risks

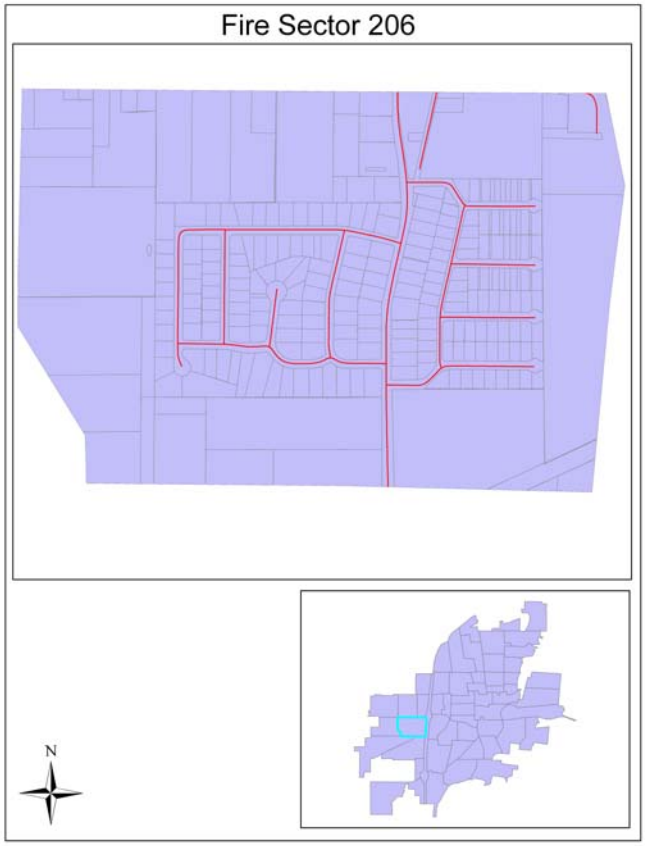
There are no significant risk unprotected properties in this sector. There are several facilities, while protected, could pose a large property loss or the potential for loss of life. The American Trim facility, formerly known as the Stolle Corporation Plant #2, is located on Michigan Street and contains just under 392,000 square feet. It is primarily a production facility with some short-term warehousing. American Trim utilizes hazardous materials in its manufacturing process and has hazardous chemicals onsite and routinely delivered. Reliable Castings is directly west of American Trim and has two facilities with approximately 67,000 square feet. This is primarily a foundry and also utilizes hazardous chemicals onsite. The Baumfolder Corporation on Campbell Road has a large

facility and The Pub is also located on Michigan Street. In addition to the hazardous chemicals stored onsite at the properties listed above, vehicles transporting hazardous materials routinely travel through the sector on State Route 47. The CSX spur line is also located in this sector.

Fire Flow Concerns

The fire flow report indicates that the water system can deliver 4,000+ gpm in many of the hydrants in the industrial section. Even with the significant flows available, several hydrants would have to be utilized to obtain sufficient water to fight fires in these facilities should a fire gain headway and overtake the suppression system. Sufficient water is available to fight fire in the strip malls that are located off of Michigan Street in the Sidney Plaza.

Fire Sector Profile … 206 – Shawnee Drive / Stewart Subdivision



Community Profile

This area is best described as residential in nature with some commercial structures and governmental facilities. The Stewart subdivision is made up of single-family ranch-style homes that range between 1,200 and 1,800 square feet. The Shawnee subdivision is made up of one-family and two-family dwellings and range between 1,600 and 2,200 square feet. The City of Sidney Service Center houses the public works, utilities, and parks and recreation vehicles. The Shelby Public Transit recently constructed a new facility. The city's 1,000,000-gallon water tower is located to the west of the Service Center and Fire Station #2 is located at 411 South Vandemark Road. This area is bounded by Interstate 75 on the east, Michigan Avenue on the north, Campbell Road on the south, and Stolle Avenue on the west.

Transportation Issues

This area is comprised of residential streets and Vandemark Road which is a major thoroughfare. The Stewart subdivision consists of Stewart Drive and four streets that all have cul-de-sacs. There are no major traffic calming measures used in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	7
Properties posing above average risk	2

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	135
Fire responses	14
EMS	97
Other alarms	24
Dollar loss	$4,050

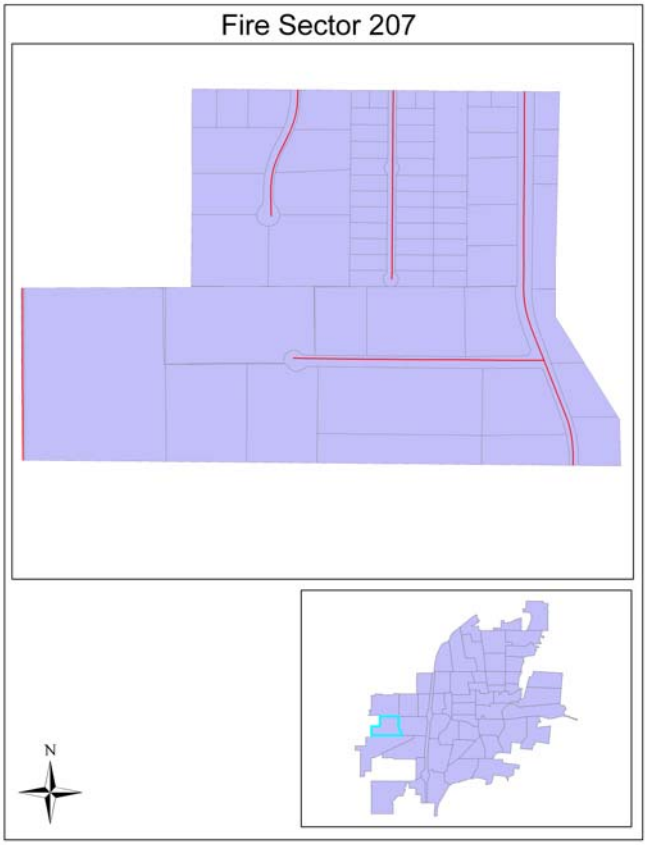
Identified Special Risks

The only significant risk unprotected properties in this sector which could pose a large property loss are the city Service Center and the Peerless Group. The Peerless Group is a manufacturer of commercial bakery equipment and contains 143,394 square feet. While it is a protected property, its size and accessibility make hose deployment challenging. The city Service Center is partially protected by a suppression system in the garage area. The Service Center contains 28,000 square feet of space. The rest of the residential area consists of one-family and two-family homes and the majority are ranch-style homes. The Pacific Pride fuel station features round-the-clock service, but it is protected by an automatic fire suppression system. There are no buildings in this area that have significant historical value.

Fire Flow Concerns

In this sector, the largest unprotected structure is 28,000 square feet. This would require a fire flow of just under 10,000 gpm if the building would become fully involved in fire. Available water in this area is rated at approximately 2,200-5,000 gpm. While sufficient for the smaller commercial properties and the residential structures, this would prove to be a challenge should the city Service Center become involved in fire. Overall, the fire flow is generally adequate for the buildings in this sector.

Fire Sector Profile … 207 – Meadow Lane Drive / South Stolle Avenue



Community Profile

This area is best described as primarily industrial with a mixture of commercial properties and a small residential subdivision. The residential subdivision is known as Meadow Lane Drive and was annexed to the city in 1989 as the city further developed industrially zoned land around it. Some of the commercial properties include PSG, Sidney Body Carstar, and Best One Tire. The remainder of the area includes several industrial facilities including Wells Hydro Aluminum, Bamal-Croynan, Protec Pak, and several large warehouses. The Wells Hydro and Bamal-Croynon facility each contain 715,000 square feet of space.

Transportation Issues

The major roadway in this area is South Stolle Avenue. Meadow Lane Drive serves the subdivision, however it is a dead-end street. Ross Street is located in the industrial sector and is also a dead-end. Two-way stop signs are located at Ross Street and Campbell Road along Stolle Avenue as well as Meadow Lane Drive and Lester Avenue. No specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	16
Properties posing above average risk	5

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	33
Fire responses	7
EMS	25
Other alarms	1
Dollar loss	$0

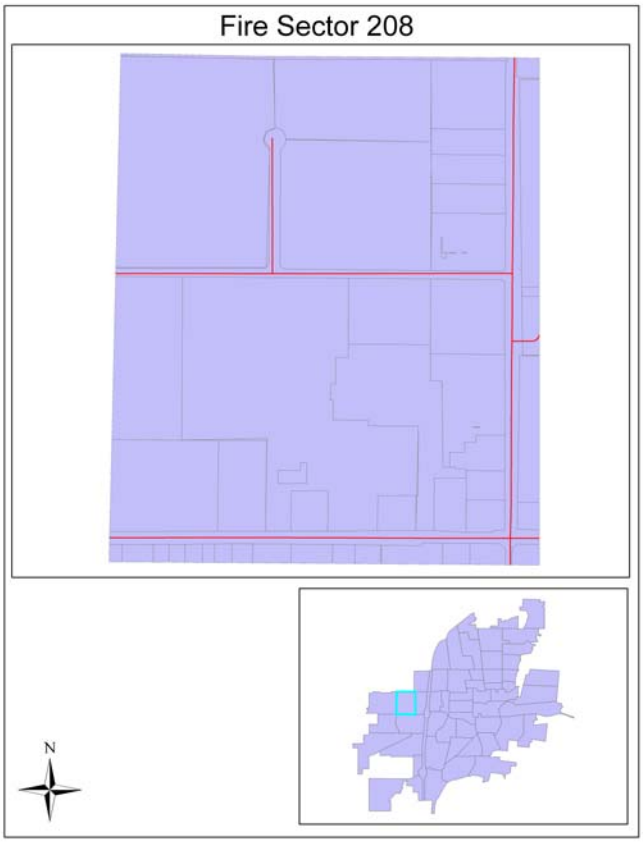
Identified Special Risks

All of the significant risk properties in this sector are protected. Protec Pak located on South Stolle Avenue is the highest risk facility in this sector due to the plastics used by the company and the packaging insulating material that is its final product. This is further compounded by the butane gas used in the manufacturing process. Other significant risk properties include the Emerson Climate Technology Warehouse and Copeland/Safeway Packaging facility on South Stolle Avenue, and Wells Hydro Aluminum and SMT Industries located on Ross Street.

Fire Flow Concerns

The largest unprotected facility in this sector is Sidney Classics located on Lester Avenue with 12,000 square feet. This would require 4,000 gpm if 100% involved. The hydrants in the area are capable of providing 2,500-5,000 gpm. Water would have to be obtained from hydrants located on other grids and relay-pumped to the scene to provide sufficient water. Several other facilities such as Sidney Body Carstar and Detailed Machining would also require a similar strategy for a significant fire. Meadow Lane Drive is a dead-end street that consists of single-family dwellings ranging in size from 1,200 to 2,200 square feet. Sufficient water is available in the area to battle fire in this area.

Fire Sector Profile … 208 – Michigan Avenue / Gleason Street



Community Profile

This area is best described as heavy commercial and industrial area. This is one of the commercial areas that is commonly referred to as the west end. This area contains the Westowne Plaza strip mall, Vandemark Center strip mall, Walmart Super Center, and numerous banks and restaurants. This area also includes doctors' offices, grocery store, two car dealerships, and several large warehouses.

Transportation Issues

Michigan Avenue and Vandemark Road are two major roadways in this sector. The intersection of Michigan Avenue (State Route 47) and Vandemark Road is the busiest intersection in the city with over 20,000 vehicles per day according to the city Engineering Department. Traffic signals are located at the intersection of Michigan and Vandemark and Vandemark and the entrance to the Westowne Plaza. Other than two-way stop signs, no other traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	32
Properties posing above average risk	5

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	258
Fire responses	39
EMS	204
Other alarms	15
Dollar loss	$500

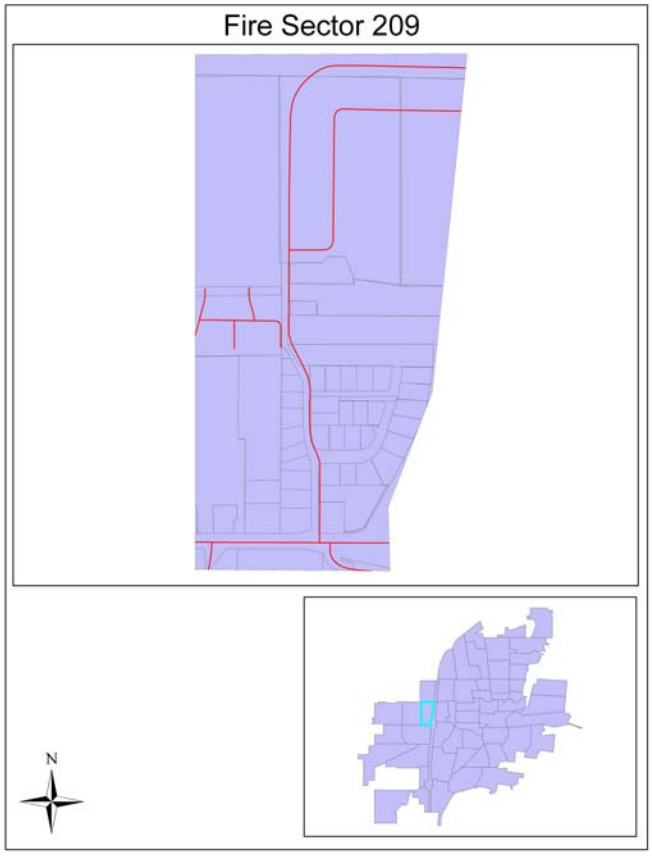
Identified Special Risks

All of the significant risk properties in this sector are protected with the exception of Buckeye Ford and Dan Hemm Chevrolet. This facility contains 15,440 square feet and would require fire flows in excess of 5,000 gpm should it become 100% involved. The hydrants in the area are capable of providing approximately 5,000 gpm thus requiring the agency to obtain water from hydrants in other grids to successfully suppress a fire in this building. Francis Furniture, although protected, contains 27,000 square feet and contains household furniture which is combustible and produces large quantities of smoke and heat. The Walmart Super Center is a huge facility with 227,000 square feet. While it is protected, hose deployment and searching the building for potential victims in smoke conditions is extremely difficult and dangerous due to the sheer size of the facility. The Sidney Warehousing facilities are also protected as are the two strip malls. The strip malls also present their own special challenge in determining which occupancy the emergency exists and gaining accessibility to that occupancy. In addition to these facilities being fully suppressed, they are also protected by smoke detector and fire alarm systems.

Fire Flow Concerns

The two largest unprotected facilities in this sector are Buckeye Ford at 15,440 square feet and Dan Hemm Chevrolet at 21,000 square feet. Both properties would require the use of multiple hydrants to obtain sufficient water supply to combat a fire in these structures. The hydrants in this area are generally rated at 2,000-5,000 gpm and above.

Fire Sector Profile … 209 – Michigan Avenue / Folkerth Avenue



Community Profile

This area is primarily a commercial area which includes a handful of single-family residences along Folkerth Avenue. Many of them have been converted to small offices. However, some of the dwellings are still maintained as residential properties. At the end of Folkerth Avenue is Lakeside Village (formerly Folkerth Trailer Park) which consists of 75 units. A small pond that was created during the construction of Interstate 75 is also located in this area. This sector contains several motels including the Quality Inn (formerly known as the Holiday Inn), Days Inn, Comfort Inn, Econo Lodge, and Travel Inn. The Sidney Kroger store and strip mall along Michigan Avenue is also located in this area.

Transportation Issues

Michigan Avenue (State Route 47) is a major roadway and also consists of Folkerth Avenue and Wayfarer Lane. A traffic signal is located at the intersection of Folkerth and Michigan Avenues. No other traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	21
Properties posing above average risk	7

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	251
Fire responses	25
EMS	213
Other alarms	13
Dollar loss	$20,500

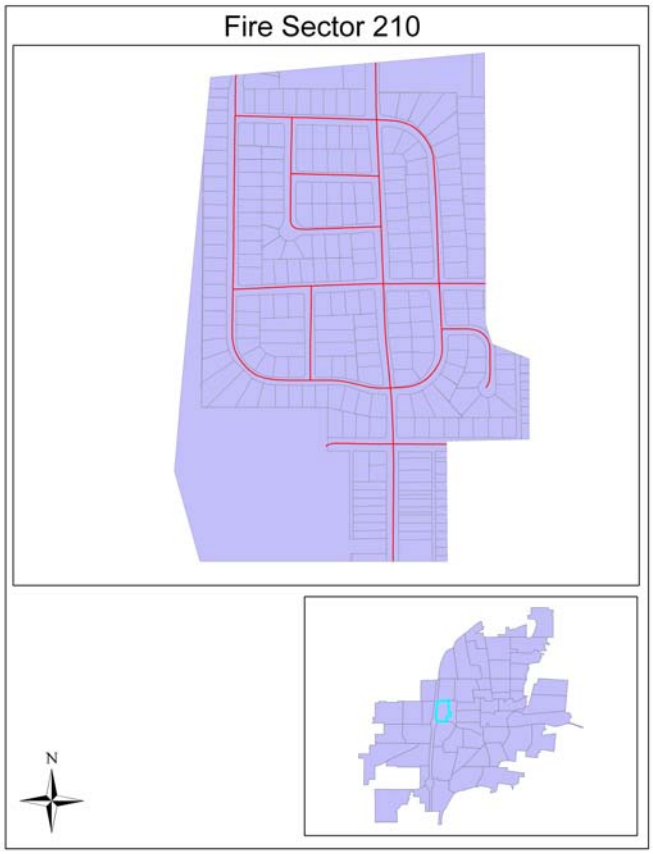
Identified Special Risks

This sector contains several properties that are identified as significant risks. The Quality Inn and Days Inn are in that category and are unprotected properties. The Econo Lodge and Travel Inn both rate a 20 which is at the highest level of the maximum risk category and are both unprotected. The Comfort Inn, located on Wayfarer Lane, is also rated a 20 but is partially protected by a suppression system. The original section was unprotected, however when additional rooms were added, that section of the building was required by the state to be protected with a suppression system. The Kroger complex and strip mall is also a significant risk property with over 132,000 square feet, however it is protected with a suppression system and fire and smoke detection system. The motels that have been identified are large facilities that would require significant amounts of water, but also have a transient population which has a potential for a large loss of life should the occupants be unable to escape a fire. All of the motels in question do have smoke and heat detectors and alarm notification systems. However, the nature of a transient occupant always carries a high risk of loss of life because of their unfamiliarity with the building. There are no churches, libraries, or buildings of historical value in this area.

Fire Flow Concerns

In this area, the largest unprotected property is the Heritage Inn with 80,000 square feet. Should this structure become completely involved in fire would require a fire flow in excess of 20,000 gpm. Obviously, the water system in this area is not designed to deliver that quantity The hydrants on Folkerth Avenue can deliver approximately 5,000 pgm. Some of the hydrants adjacent to the Quality Inn can deliver 1,200 gpm. Several hydrants would have to be utilized to obtain water and it would still not be sufficient to completely fight a fire in this structure. This same situation holds true for most of the motels in this sector. Previously, the fire flows available on Folkerth Avenue were poor for a commercial area. In 2001-02, a larger line was installed along Folkerth Avenue and was looped at the end of Folkerth Avenue through the farm field to Vandemark Road. This has greatly improved the fire flows in this area.

Fire Sector Profile … 210 – South section of Green Tree Hills



Community Profile

This area is primarily residential with some commercial structures. This area contains the Sidney Plaza which has three strip mall structures within its complex; Sidney Plaza east, Sidney Plaza west, and Sidney Plaza north. Sidney Plaza west is a large structure with 88,000 square feet. Most of the single-family residential structures in this area will range from 800 square feet to 1,800 square feet.

Transportation Issues

This area is comprised of residential streets. The major roadways in this sector include Park Avenue, Sixth Avenue, and Fair Oaks Drive.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	10
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	220
Fire responses	26
EMS	165
Other alarms	29
Dollar loss	$71,000

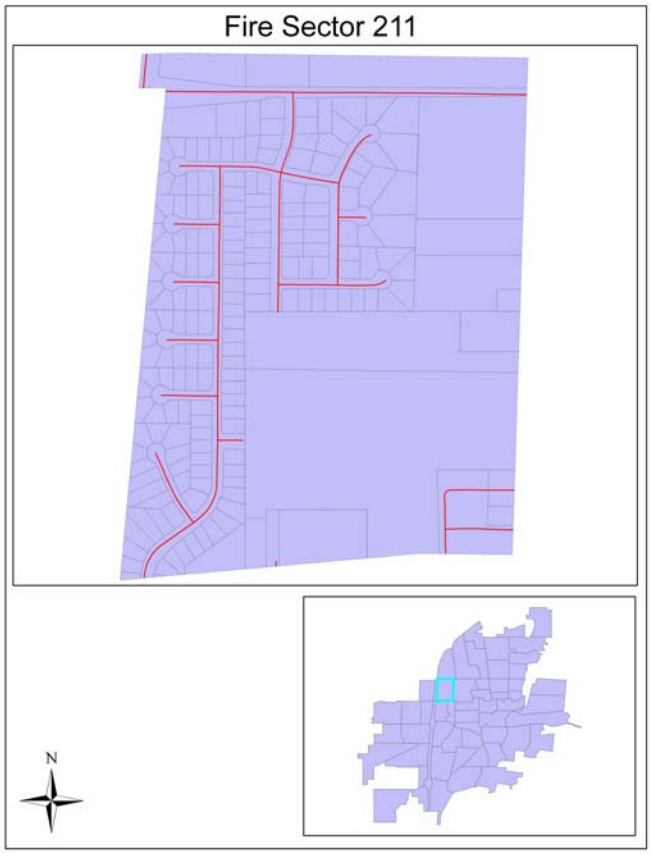
Identified Special Risks

Sidney Plaza west which contains several stores and a vacant storefront which formerly housed The Pharm is the only significant risk property identified in this sector. It is a protected property and contains 88,886 square feet. Sidney Plaza east and Sidney Plaza north are also protected properties. The rest of the residential area consists of one-family and a couple of two-family homes and the majority are ranch-style homes. There are no buildings in this area that have significant historical value.

Fire Flow Concerns

The largest unprotected property in this sector is the Subway restaurant located on Michigan Avenue containing 3,300 square feet. If this structure were 100% involved in fire, it would require a fire flow of 1,100 gpm. Sufficient water is available for fires in the area. The fire flow is generally adequate for residential dwelling units located in this area.

Fire Sector Profile … 211 – North section of Green Tree Hills



Community Profile

This area is best described as residential with two commercial structures. Most of the single-family residential structures in this area will range from 1,200 to 1,800 square feet. This area also contains some open green space area between Fourth Avenue and Fair Oaks Drive.

Transportation Issues

This area is comprised of mainly residential streets. The major roadway in this sector is Russell Road, which is a major east-west thoroughfare.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	2
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	81
Fire responses	15
EMS	54
Other alarms	12
Dollar loss	$227,500

Identified Special Risks

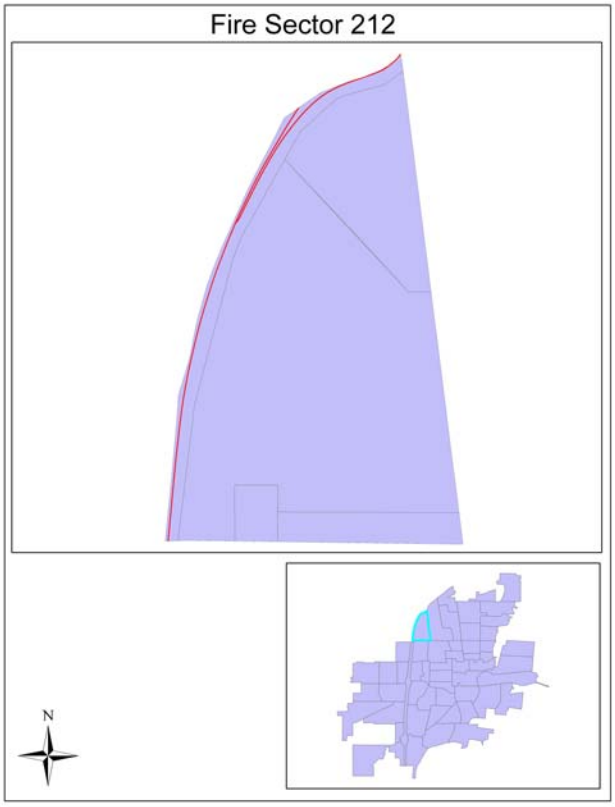
There are no significant risk properties in this sector which could pose a large property loss or loss of life. The largest structure in the sector is the Emmanuel Baptist Church located at the north end of Sixth Avenue with 6,600 square feet. The rest of the residential area consists of mostly one-family homes, with the majority of those being ranch-style homes. There are no buildings in this area that have significant historical value.

Fire Flow Concerns

In this sector, the largest structure is 6,600 square feet. The required fire flow is 2,200 gpm if the building is 100% involved in fire. Available water in the area is rated at 1,300 gpm and is located on

a dead end line. Water would have to be obtained from hydrants on another grid through relay pumping to fight a fire in this structure. Tri-County Community Veteranary Clinic is located on Russell Road and is 5,000 square feet. This structure would require approximately 1,600 gpm if it were to become 100% involved in fire. Available water in the area is in excess of 1,500 gpm. With the exception of the Baptist Church, the fire flows are generally adequate for the residential dwelling units located in this area.

Fire Sector Profile … 212– Open Area



Community Profile

This area is best described as an open area and is currently being utilized as agricultural ground. There are no structures in this area.

Transportation Issues

This area is accessed from either Russell Road or Interstate 75 on the west.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	0
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	3
Fire responses	0
EMS	1
Other alarms	2
Dollar loss	$0

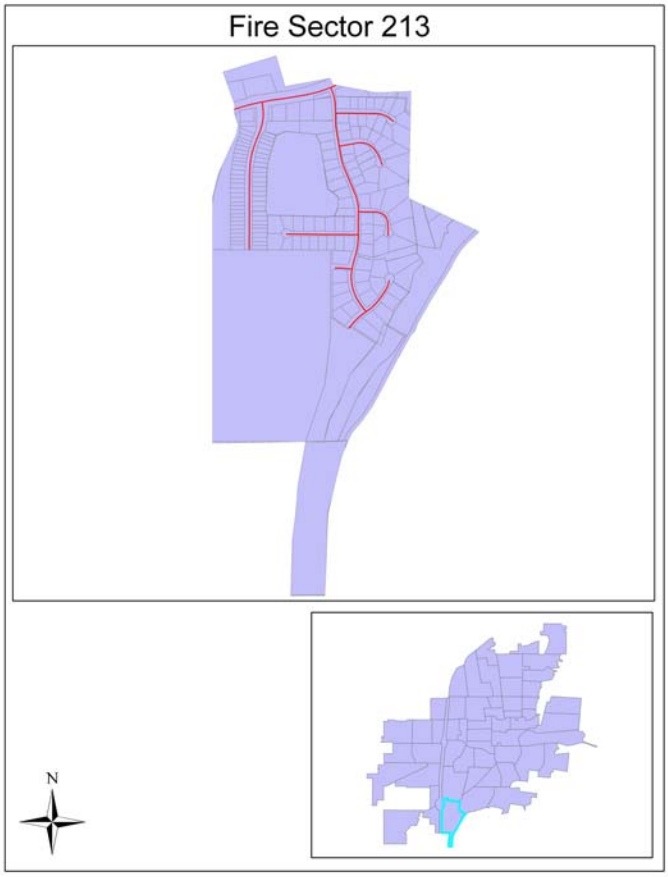
Identified Special Risks

There are no special risks identified in this area. The area is primarily agricultural ground and wooded area.

Fire Flow Concerns

While there are water mains located along Russell Road, there are no structures in this sector.

Fire Sector Profile … 213– Westlake Subdivision



Community Profile

Residential structures in this area would be considered upscale and consist of single-family dwellings and townhouses ranging from 1,800 to 6,000 square feet. In most areas, the water supply is adequate to meet the fire flow needs. Some residential dwellings are large area structures; however they are built upon conventional lots and do not pose any accessibility problems. The Westlake pond is centrally located in the subdivision.

Transportation Issues

Cumberland Drive is the only access to the subdivision on the west side of the lake and Westlake Drive is the only access on the east side of the lake. Cumberland and Westlake are not connected. Further development will hopefully provide a connector for ingress/egress.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	2
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	11
Fire responses	2
EMS	9
Other alarms	0
Dollar loss	$0

Identified Special Risks

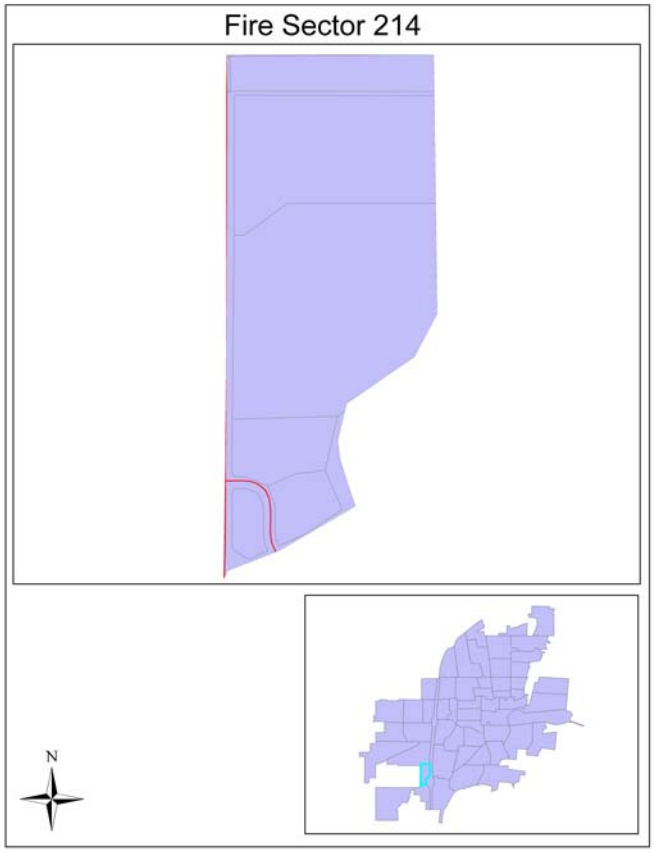
There are no significant unprotected properties in this sector which could pose a large property loss or large loss of life. Several of the single-family dwellings are located on large lots and contain larger homes that are typically 3,000 to 6,000 square feet in size. There are two commercial structures located along Fair Road; a Sunoco service station and an auto repair facility. Neither poses a

significant risk in the community risk assessment rating system. The Westlake pond is central to the Westlake subdivision. As with any body of water, the pond poses the potential for activity and the potential for drowning. There is an access easement for the property located in the residential area along Cumberland Avenue. The agency has trained and is capable of providing rescue on static bodies of water and also ice rescue.

Fire Flow Concerns

In this area, the largest structures are several single-family dwellings that approach 6,000 square feet of space. If one of these structures were to become 100% involved in fire, the needed fire flow would be approximately 2,000 gpm. Most of the fire hydrants in the area flow in excess of 1,500 gpm. This is a new subdivision and the water distribution mains have been sized according to city standards and are looped providing for a adequate water supply in the area.

Fire Sector Profile … 214 – Hampton Inn area



Community Profile

This area is best described as industrial with some commercial outlets along Fair Road. This sector contains Hexa Americas plant on Vandemark Road. Except for the commercial lots located along Fair Road and Hampton Court, the remainder of the open field area is zoned industrial. Due to its proximity to the Interstate and CSX east-west main line, it is felt this is prime industrial land. This area is bounded by Vandemark Road on the west, CSX Railroad on the north, Interstate 75 on the east and Fair Road on the south.

Transportation Issues

This area contains three roadways. Fair Road and Vandemark Road would both be considered major thoroughfares and Hampton Court is a small connector street located in the southwest portion of the sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	3
Properties posing above average risk	1

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	16
Fire responses	6
EMS	7
Other alarms	3
Dollar loss	$0

Identified Special Risks

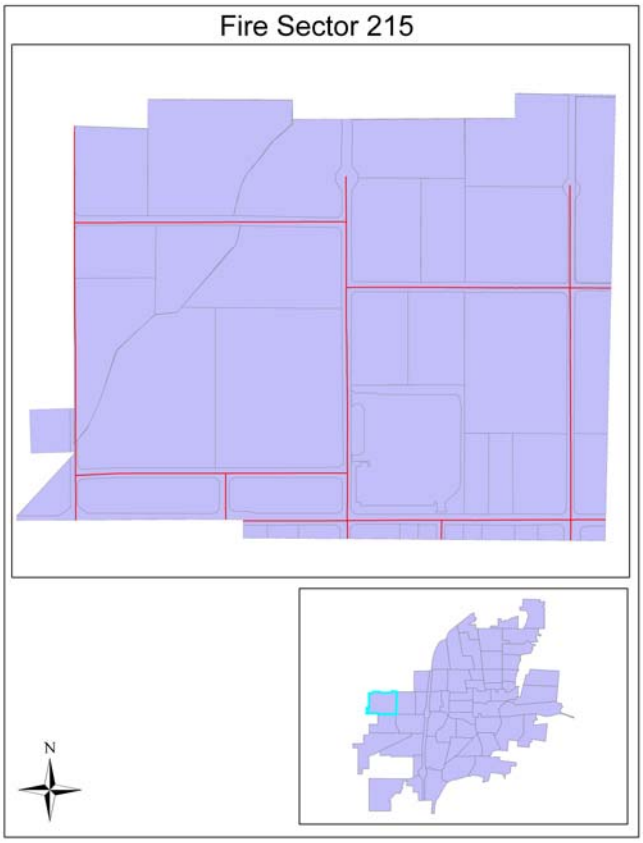
The only property that poses a significant risk in this area is the Hampton Inn. The Hampton Inn is protected by a fire suppression system and a smoke detector and fire alarm system. However, it is three stories in height and could have just under 100 occupants at any given time. Even with a suppression system, limiting smoke inhalation exposure and timely evacuation of the occupants is

critical to the safety of the occupants. The Hexa Americas manufacturing plant is located on South Vandemark Road. It is a significant-sized facility with 90,000 square feet. However, the facility is protected with a fire suppression system and early detection warning system and the building features non-combustible construction. There are no schools, churches, or buildings of historical value in this sector.

Fire Flow Concerns

The fire flow available in this area is generally considered very good. The water distribution mains are larger in size and are looped. Two of the larger properties in this area are protected by suppression systems. However, the Hampton Inn has just under 30,000 square feet and Hexa Americas has just over 90,000 square feet of space. Should a fire occur in these two facilities and the suppression system is inoperable or otherwise overtaken by a fire, the agency would struggle to provide sufficient water to fight a fire in the facility. Water would have to be obtained from fire hydrants located in adjacent areas and different grids through relay pumping to provide sufficient water for fires in these facilities. However, as long as the private fire protection systems in the facilities are in proper operating order, the agency has sufficient water to attack a fire in these facilities.

Fire Sector Profile … 215 – Commercial / Industrial District – State Route 47



Community Profile

This area is best described as a mixture of commercial and industrial properties. Two large big box stores are located in this area along State Route 47 west including Lowe's and Menards. Also located along State Route 47 are Goffena Furniture and Warehouse Carpets. Several manufacturing facilities and warehousing are located along North Stolle Avenue including Holloway Sporting Goods, Freshway Foods, and Hydro Aluminum. Several single-family residential units are also located along the south side of State Route 47.

Transportation Issues

The major roadway in this area is State Route 47 west (Michigan Street). Other streets located in the area include North Stolle Avenue, Gleason Street, Lester Avenue, and Howard Street. Traffic signals are located at State Route 47 and Stolle Avenue and State Route 47 and Kuther Road. Numerous two-way and four-way stop signs are also located within the sector. No other traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	10
Properties posing above average risk	4

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	115
Fire responses	18
EMS	92
Other alarms	5
Dollar loss	$2,500

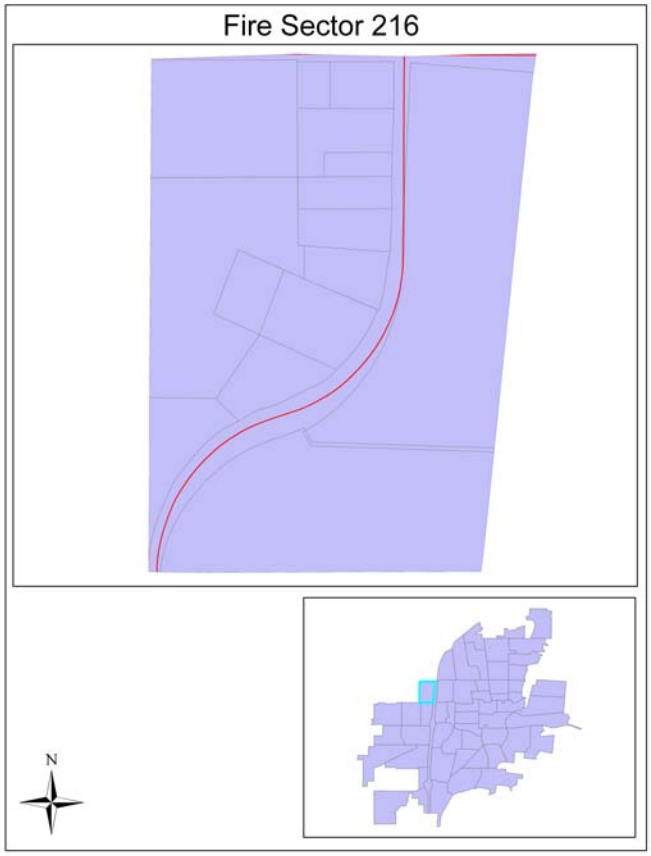
Identified Special Risks

All of the significant risk properties in this sector are protected by fire suppression systems. These facilities also feature smoke and heat detector early warning systems. Of concern to the agency is the potential for a large fire at Holloway Sporting Goods. The facility is in excess of 200,000 square feet and normally contains over 1 million garments wrapped in protective plastic. The fire loading of this inventory creates a tremendous risk if a fire were to occur. This type of product produces large quantities of heavy black smoke and high heat. The facility is safety conscious and does have the suppression system adapted to meet a modern textile-type facility. Nevertheless, a potential exists for the fire suppression system to be overtaken and or a large fire to gain significant headway should the suppression system be temporarily inoperable. The agency has pre-planned the facility and has procedures in place to deploy the largest handline available for fire crews to apply the maximum amount of water possible to quickly bring a growing fire under control. The Freshway Foods facility also causes the agency concern due to the large quantity of anhydrous ammonia used during the production process. The largest unprotected property in the sector is Warehouse Carpets located on Michigan Avenue with 11,000 square feet of space. However, the risk posed by the facility is considered moderate.

Fire Flow Concerns

The water flow available in this area is considered very good. The area is served by 16-inch, 12-inch, and 10-inch looped distribution mains. Most hydrants in the area can provide approximately 2,000 gpm. The largest unprotected facility in the sector is Warehouse Carpets which would require 3,600 gpm should the building become 100% involved in fire. Sufficient water is available to fight fire in the area. However, it should be noted that should any of the protected facilities have their suppression systems inoperable, water would have to be drawn from several hydrants in the area to provide a sufficient water supply.

Fire Sector Profile … 216 – North Vandemark Road area



Community Profile

This area is best described as a mixture of industrial facilities and commercial structures. The sector contains some large warehousing structures as well as a school. Numerous retail outlets are located along the west side of Vandemark Road near Russell Road.

Transportation Issues

This area contains two roadways: Russell Road and Vandemark Road. A three-way stop sign is located at the intersection of Russell and Vandemark Roads. No other specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	14
Properties posing above average risk	4

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	41
Fire responses	12
EMS	28
Other alarms	1
Dollar loss	$0

Identified Special Risks

All of the properties identified as significant risks are protected properties. They all contain fire alarm detection systems, alarm notification and evacuation systems, and complete fire suppression systems. Even with the suppression systems, several facilities present challenges should a fire incident occur. The BBI/Advanced Composites complex has over 335,000 square feet under roof and the two Sidney Warehousing facilities all located along Vandemark Road contain over 168,000 square feet each. The sheer size of these facilities requires extra resources to attack and contain a fire. Often times getting the appropriate size hoseline in the proper location takes considerably more time to deploy than the

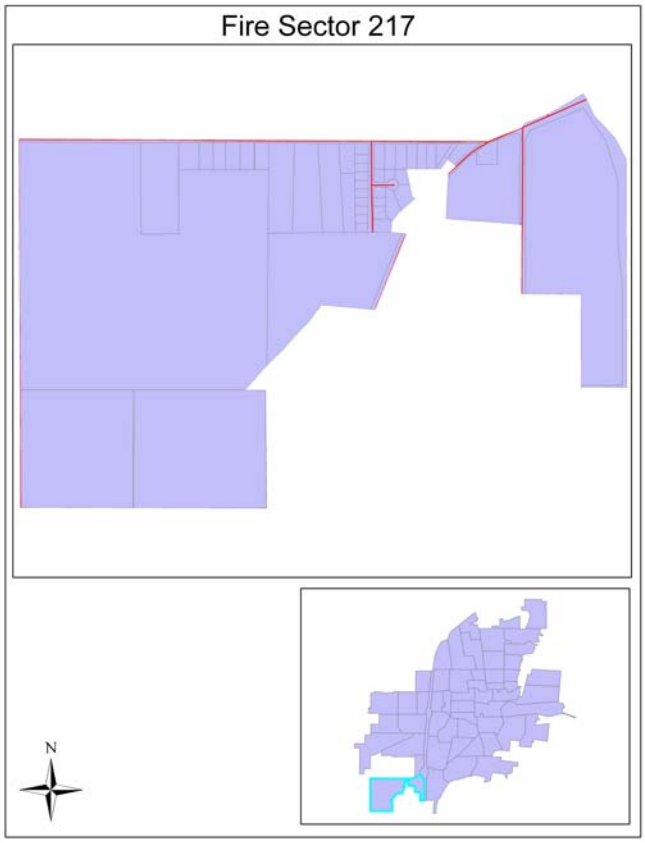
routine residential fire. In addition, the fireloading often requires higher gpm application than many smaller structures.

The Sidney Christian Academy located on West Russell Road poses a risk for a high loss of life. This facility contains almost 28,000 square feet of space and has over 100 occupants on a daily basis. The facility is protected with a fire suppression system and fire notification system. The facility conducts fire exit drills on a regular basis and the agency works with the staff to ensure as safe as an environment as possible. There are no churches, libraries, or buildings of historical value in this area.

Fire Flow Concerns

In this area, the largest unprotected property is the building that houses the Sidney Daily News and Sidney Windustrial with 22,000 square feet of space. If this property would become 100% involved in fire, it would require approximately 7,000 gpm of water. Fire hydrants in the area have approximately 5,000 gpm available. This is largely due to the looped distribution system and the close proximity of the Fourth Avenue Water Tower. Water could be drawn from several hydrants in the area to supply sufficient water for this structure. All of the other significant risk structures in the area are protected by suppression systems.

Fire Sector Profile … 217 – South Vandemark Road / Millcreek Road area



Community Profile

This area is a mixture of industrial zoned land along with some commercial structures and residential dwellings. This area contains farm land that is currently zoned industrial located between Fair Road and Interstate 75 south of Fair Road, and industrial zoned land south of Millcreek Road and east of Kuther Road. A large portion of this area was annexed into the city in 2006. Contained within this annexation was 263 acres which was known as the Cole annexation. The land is zoned industrial and has recently been identified as a job-ready site area on applications filed with the Ohio Department of Development by the City of Sidney. Also contained within the annexed area were single-family dwellings along the south side of Millcreek Road. Since that time, a small residential subdivision has started south of Millcreek Road.

Transportation Issues

This area consists of several major roadways: South Vandemark Road, Millcreek Road, Kuther Road, and Fair Road. Creekside Court and Cole Court are also located within the residential subdivision. There is a traffic signal located at Fair Road and Vandemark Road and two-way stop signs within the residential subdivision. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	3
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	31
Fire responses	5
EMS	20
Other alarms	6
Dollar loss	$1,000

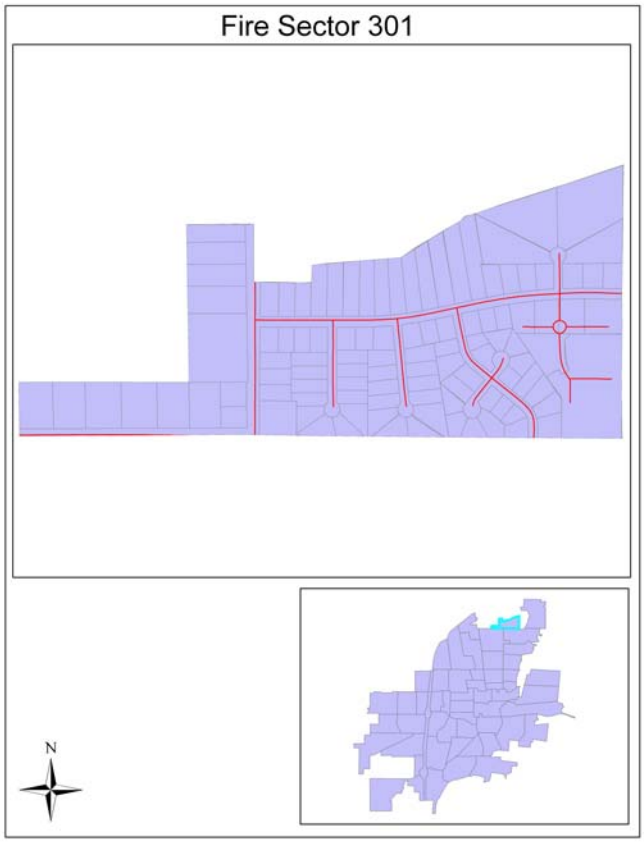
Identified Special Risks

There are no properties posing an above-average risk that have been identified in this area. The McKinney Lumber Company located on the south side of Millcreek Road contains 28,000 square feet and is utilized as a pallet manufacturing facility. There are no exposures in the area and does not pose a significant risk. The Faith Baptist Church, which is a small church with 3,800 square feet is also located along the south side of Millcreek Road. Due to its size, it does not pose a concern for the agency.

Fire Flow Concerns

The largest facility in this sector is the McKinney Lumber Company. If the facility would be 100% involved in fire, it would require 9,000+ gpm of water. While the fire hydrants in the area have 4,000+ gpm available, several hydrants would have to be utilized to obtain enough to combat this fire. Since the distribution line is on has a dead end in this area, it is suspect whether sufficient water would be available to successfully fight a fire in this facility. Sufficient water is available, however, for the single-family residences and church located on Millcreek Road.

Fire Sector Profile … 301 – Arrowhead Subdivision



Community Profile

This area is best described as heavy and moderate density residential with some light commercial facilities. The Arrowhead apartment complex consists of five buildings that are three stories each. Four of the buildings contain 12 apartments and one building contains 16 apartments. Also located in this sector are numerous duplexes. Choice One Engineering, Helman Body Shop, and professional offices are located along Broadway Avenue. The North Broadway Church of Christ is also located in this sector.

Transportation Issues

This area is comprised of mostly residential streets. The major roadway in this area is Broadway Avenue. A three-way stop sign is located at the intersection of Arrowhead Drive and Broadway Avenue. Numerous other two-way stop intersections exist within the sector. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	14
Properties posing above average risk	10

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	75
Fire responses	12
EMS	58
Other alarms	5
Dollar loss	$1,000

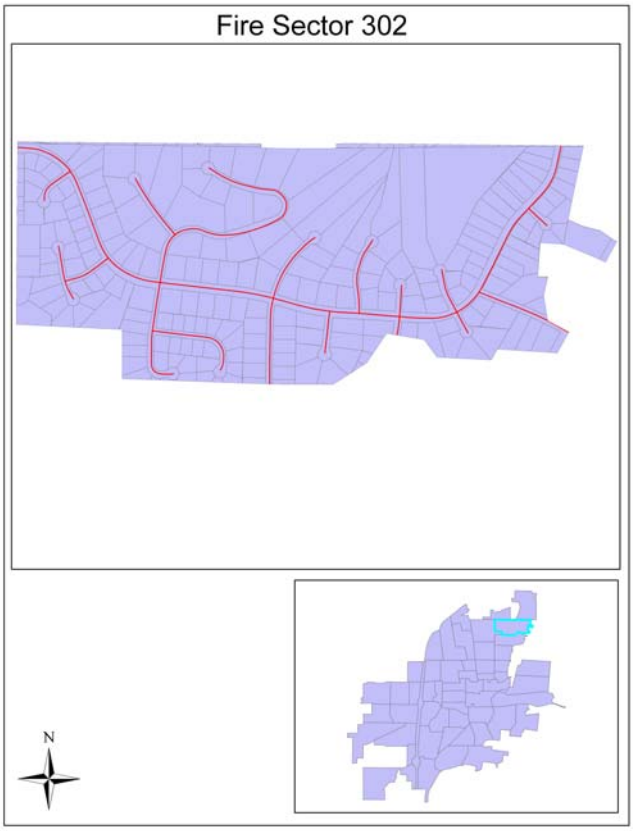
Identified Special Risks

The apartment complex located on Arrowhead Drive, known as the Arrowhead apartments, could pose a risk of large property loss and/or a large loss of life. These properties are unprotected and scored a maximum risk during the emergency response risk assessment. Each building is three stories and contains 15,000 square feet. It features a life hazard of over 25 occupants, accessibility for apparatus around the buildings is very limited, and the water supply is inadequate. The buildings are designed with open stairwells and features combustible construction. The North Broadway Church of Christ is located along Broadway Avenue and contains just under 5,000 square feet. There are no buildings of historical value in this sector.

Fire Flow Concerns

The single-family and two-family residential dwellings range from 1,200 to 2,600 square feet. In addition, the professional office on Broadway Avenue contains approximately 7,200 square feet. One hundred percent of fire involvement of this structure would require 2,400 gpm. The fire flow reports indicate that approximately 2,000 gpm is available in the area. The Arrowhead apartment complex discussed earlier contains 15,000 square feet in each building and would require a fire flow of 5,000 gpm if 100% involved. Due to the size of the distribution water lines in the area and the fact that Arrowhead Drive has a dead end main, the fire flows in this are range from 1,000-1,200 gpm. This would require the agency to obtain water through relays or tanker shuttles should a significant fire in the apartment complexes occur.

Fire Sector Profile … 302 – Plum Ridge subdivision



Community Profile

This area is best described as upscale residential. In some areas of the sector, the water system is adequate to meet the fire flows, however in other areas it does not provide sufficient gpm. This area contains a mixture of medium density and low density single-family dwellings. Several of the streets such as Timberlea Trail, Plumridge Trail, and Driftwood Trail contain large single-family lots in wooded areas and contain steep topography. These single-family dwellings are generally larger in size and are somewhat isolated.

Transportation Issues

This area is comprised of mostly residential streets. The major roadway in this area is Hoewisher Road which serves as a connector between Broadway Avenue and Sidney-Freyburg Road. There are several two-way stop intersections within the sector. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	0
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	34
Fire responses	9
EMS	18
Other alarms	7
Dollar loss	$1,250

Identified Special Risks

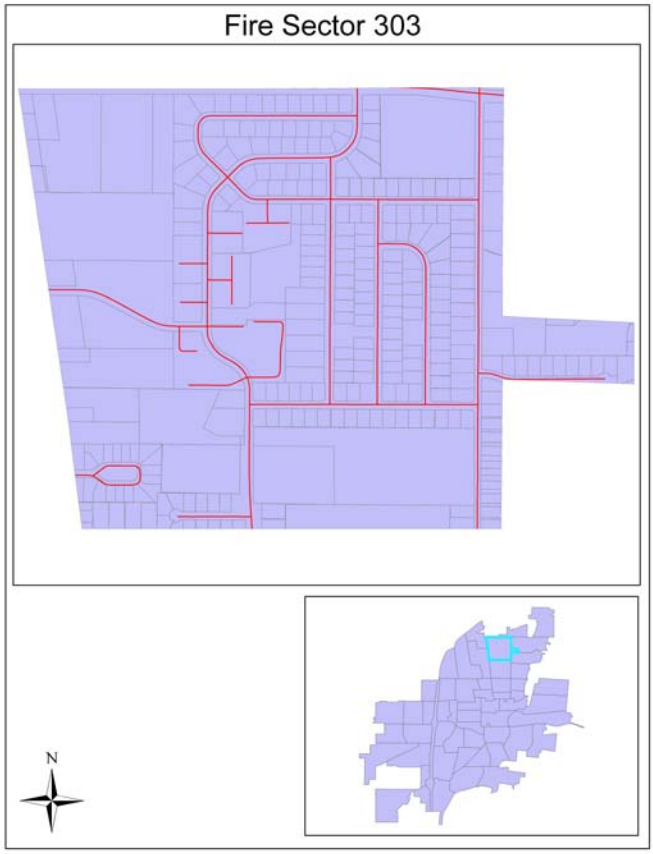
There are no significant risk unprotected properties in this sector which could pose a large property loss or large loss of life. Several of the single-family dwellings are located on large lots in wooded areas that have steep topography. These larger homes are typically 2,000 to 5,000 square feet in size

and pose a significant challenge for the agency. Not only do the size of the structures require a significant water flow, the topography and the distance off the roadway make hoseline deployment challenging and lengthy. The CRA rating on a larger home would be a 12. There are no schools, churches, or buildings of historical value in this sector.

Fire Flow Concerns

The residential dwellings in this sector range from 2,000 to 5,000 square feet in size. The fire flow report indicates that approximately 1,500-3,500 gpm is available in the area. For the structures located along Hoewisher Road, sufficient water supply is available. In most of the cul-de-sacs and off-streets, 1,500 gpm is available. A significant fire in one of these structures would require the agency to obtain water from multiple hydrants to provide sufficient fire flow.

Fire Sector Profile … 303 – Lunar Drive area



Community Profile

This area is best described as residential. The area consists of a mixture of one- and two-family dwellings along with several apartment buildings. The area is bounded by Hoewisher Road on the north, Wapakoneta Avenue on the west, Broadway Avenue on the east, and Parkwood Street on the south. The Northwood Village apartments, Northwood Trailer Park, and Northwood Dixie apartments are located in this area. The Trinity Church of the Brethren is also located on North Main Avenue. The water system is adequate to meet the fire flows for the residential area.

Transportation Issues

This area is comprised of residential streets. The major roadways in this area are Broadway Avenue and North Main Avenue. Several two-way and four-way stop intersections exist within the sector. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	8
Properties posing above average risk	7

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	156
Fire responses	10
EMS	135
Other alarms	11
Dollar loss	$0

Identified Special Risks

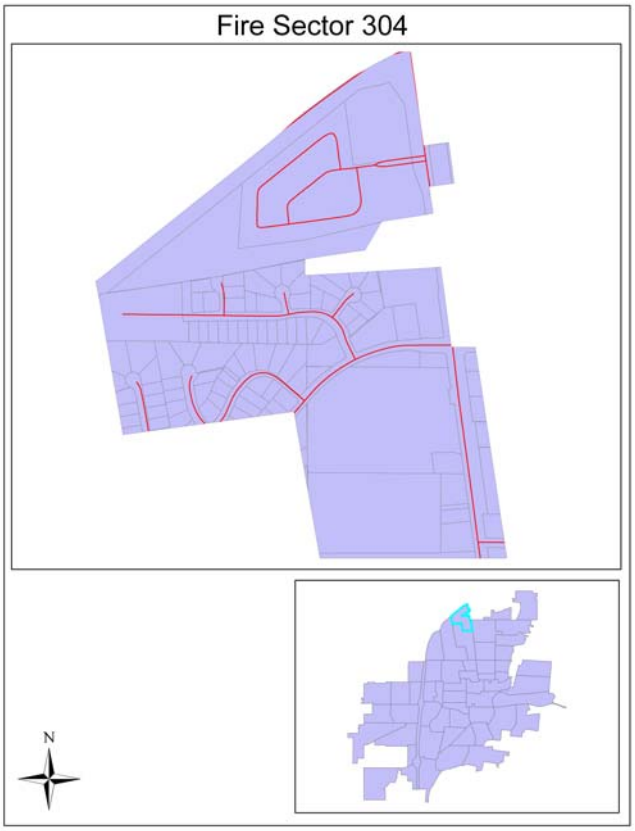
There are several significant risk unprotected properties in this sector which pose a risk of large loss of life or a large property loss. The apartment building known as Northwood Dixie apartments located at 140 Northwood Drive is a three-story building that contains just under 16,000 square feet.

The building contains 24 apartment units and features common open stairwells and combustible construction. The building does have an internal fire alarm system, however it is not protected by a suppression system. The Northwood Village apartments located on Collins Drive consists of six buildings, each containing 11,253 square feet. Each building is three stories and contains 12 units, and features a common open stairwell and combustible construction. The buildings are not protected by a suppression system but do feature smoke detectors in the common areas and in each residential unit. The Trinity Church of the Brethren is located on North Main Avenue and contains 7,720 square feet. The building has a large open area and carries some risk due to the limited accessibility around the building. It also houses the Sidney Cooperative Nursery which handles 15-18 students on a daily basis. There are no buildings of historical value in this sector.

Fire Flow Concerns

The residential dwellings in this sector range from 1,200 to 2,000 square feet. The apartment building on Northwood Drive contains approximately 16,000 square feet. One hundred percent involvement would require 5,000 gpm. The fire flow report indicates that the hydrants in the area can produce approximately 1,600-3,000 gpm. The agency would be required to obtain water from other hydrants located on adjacent grids to successfully fight a fire in this structure. The apartment buildings on Collins Drive contain approximately 11,000 square feet in each building. This would require a fire flow of 3,600 gpm if those buildings become 100% involved in fire. The hydrants on Collins Drive and Lunar Drive produce approximately 2,400 gpm. For fires in this structure, should it gain significant headway, the agency would have to obtain water from hydrants located in adjacent areas that are located on different grids. For the one- and two-family dwellings, the fire flows in the area are generally sufficient.

Fire Sector Profile … 304 – Residential District – Foxcross Drive / Addy Avenue



Community Profile

This area is best described as predominantly residential with some light commercial facilities. The area contains numerous single-family and two-family dwellings as well as a Marathon service station located at Hoewisher Road and Wapakoneta Avenue and the North Dixie Drive-thru and Sturm Construction located along Wapakoneta Avenue. Also located in this sector are the VFW and a currently vacant warehouse that formerly housed Freshway Foods located on Wapakoneta Avenue.

Transportation Issues

The major roadways in this area are Wapakoneata Avenue and West Hoewisher Road. Other residential streets include Foxcross Drive, Addy Avenue, and Alpine Court. A traffic signal is located at Hoewisher Road and Wapakoneta Avenue. Numerous other two-way stop intersections exist within the sector. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	3
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	147
Fire responses	14
EMS	128
Other alarms	5
Dollar loss	$0

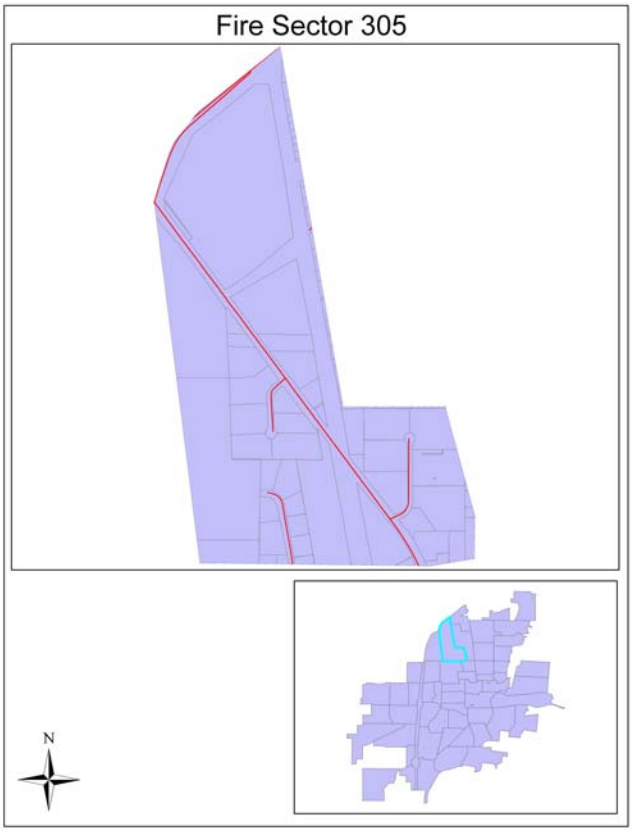
Identified Special Risks

There are no significant risk unprotected properties in this sector which could pose a risk of large property loss or large loss of life. The VFW Post 4239 located at 2841 Wapakoneta Avenue, while a private club, is considered in the building code classification as a public assembly. This facility is a total of 9,000 square feet and has a dance hall area located to the rear that is rented out for private receptions and banquets. Thus the potential for several hundred people to be in attendance at a single event occurs on a frequent basis. There are no schools, churches, or buildings of historical value in this sector.

Fire Flow Concerns

The residential dwellings in this sector range from 1,600 to 2,200 square feet. The fire flow report indicates that approximately 1,700-2,700 gpm is available in the area. Fire flows along Hoewisher Road and Wapakoneta Avenue are 3,800+ gpm. The VFW which is 9,000 square feet would require a fire flow of 3,000 gpm if the building were to be 100% involved in fire. Northbrook Trailer Park is located to the west of the VFW. Currently, the trailer park has no water supply for firefighting except one hydrant located at the entrance to the park on Wapakoneta Avenue. Fire flows for the mobile home park are inadequate and the size of the trailer park and length of the driveways would cause a lengthy hose lay into the trailer park from the location of the nearest hydrant. This would delay a sustainable water supply and has the potential for creating a situation in which a fire could spread from one trailer to adjacent trailers depending on the size of the fire and wind conditions. Sufficient water is available for residential fires in the remaining area of the sector.

Fire Sector Profile … 305 – St. Marys Avenue corridor - Lehman High School



Community Profile

This area is best described as a mixture of industrial and commercial properties. This area contains two plants of Formed Fibre Technologies along with Electro-Controls located on Ferguson Court. HB Manufacturing is located on St. Marys Avenue as is the Shelby County garage for ODOT. Lehman High School is located along St. Marys Avenue near I-75 and Dickman Supply, Area Energy & Electric, A&B Machine, and Shaffer Manufacturing are located along Commerce Drive. Commercial outlets and residential structures are located along St. Marys Avenue. The CSX Railroad north-south line also runs through this sector and is located at the rear of Lehman High School.

Transportation Issues

The major roadway in this area is St. Marys Avenue (State Route 29). Ferguson Court and Commerce Drive are two deadend streets off of St. Marys Avenue and Target Drive is a deadend street located off of Russell Road. There is a traffic signal located at Russell Road and St. Marys Avenue as well as a school zone in front of Lehman High School. Stop signs are located at the intersection of the deadend streets and St. Marys Avenue. No other traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	16
Properties posing above average risk	5

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	103
Fire responses	22
EMS	77
Other alarms	2
Dollar loss	$0

Identified Special Risks

There are five significant risk properties in this sector which could pose a large property loss or, in some cases, loss of life. The Lehman High School campus is located on St. Marys Avenue adjacent to Interstate 75 and CSX Railroad. Lehman has in excess of 100 students on a daily basis and contains 85,590 square feet. Several years ago, the Lehman facility was increased in size as a result of a major addition. This addition contains a fire suppression system along with fire and smoke barrier doors and an internal alarm system. The entire facility is protected with an internal early detection and notification system. The school features non-combustible construction and regularly conducts fire exit drills as required by Ohio law. While there are some hazardous chemicals on site that are used during lab work, the amount is not significant and should not pose a large-scale risk. Another potential risk for the school is the location and close proximity to Interstate 75 and the rail line. Should a transportation hazardous materials incident occur, the potential for an evacuation of the school or a shelter-in-place would have to be evaluated. Of course the type and quantity of the release, along with weather conditions, would impact that decision regarding the safety of the school population.

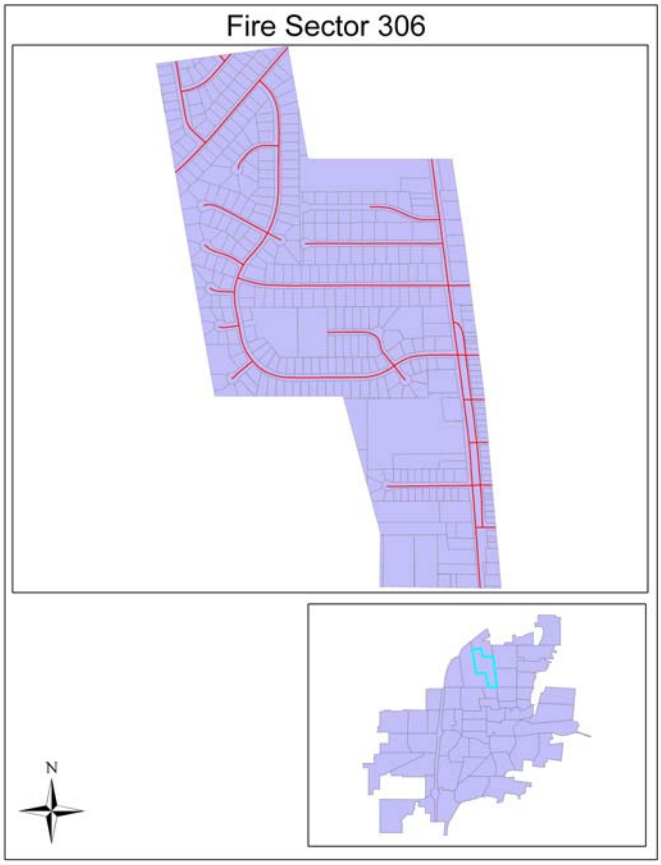
Shaffer Manufacturing, A&B Machine, Formed Fibre Technologies, and HB Products also are listed as significant risk properties. Formed Fibre Technologies contains two buildings in their complex and manufactures carpeting interior for the automotive industry. The combustibility of the product along with the high-rack storage causes the agency concern regarding flash fires. Flash fires create the potential for fire to gain significant headway and not be held in check by the suppression system. The agency continually works with the management of Formed Fibre to maintain a clean manufacturing environment as well as maintaining appropriate height storage and spacing of aisleways and work areas.

There are no churches or buildings of historical value in this sector.

Fire Flow Concerns

The largest unprotected property in this sector is Selmco Metal at 33,326 square feet. If this building were to be 100% involved in fire, it would require a fire flow of 11,000 gpm. This area is served by 16-inch and 12-inch looped distribution mains. The hydrants in the area would generally flow 3,000-5,000 gpm. However, a fire in this building would require that several hydrants be used to supply sufficient water to attack the fire. The same would hold true for several other facilities in the area including Becker Electric, Townsend Engineering, and Applied Industries Tech. Sufficient water is available to fight fires in the residential dwellings and smaller commercial outlets in this sector.

Fire Sector Profile … 306 – Residential & Commercial District – North Wapakoneta Avenue / Eagle Glen / Windsor Parke



Community Profile

This area is best described as a mixture of residential and commercial structures. Most of the residential structures in this area range from 1,200 to 2,400 square feet. North Wapakoneta Avenue contains numerous retail outlets and a larger church and two day cares are also located on Wapakoneta Avenue.

Transportation Issues

This area is comprised of several residential streets. The major roadways in this area include Wapakoneta Avenue, which is a major thoroughfare, and West Parkwood Street. A traffic signal is located at Parkwood and Wapakoneta Avenue and numerous other two-way stop signs exist along most of the residential streets. No other specific traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	19
Properties posing above average risk	2

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	149
Fire responses	22
EMS	115
Other alarms	12
Dollar loss	$75,000

Identified Special Risks

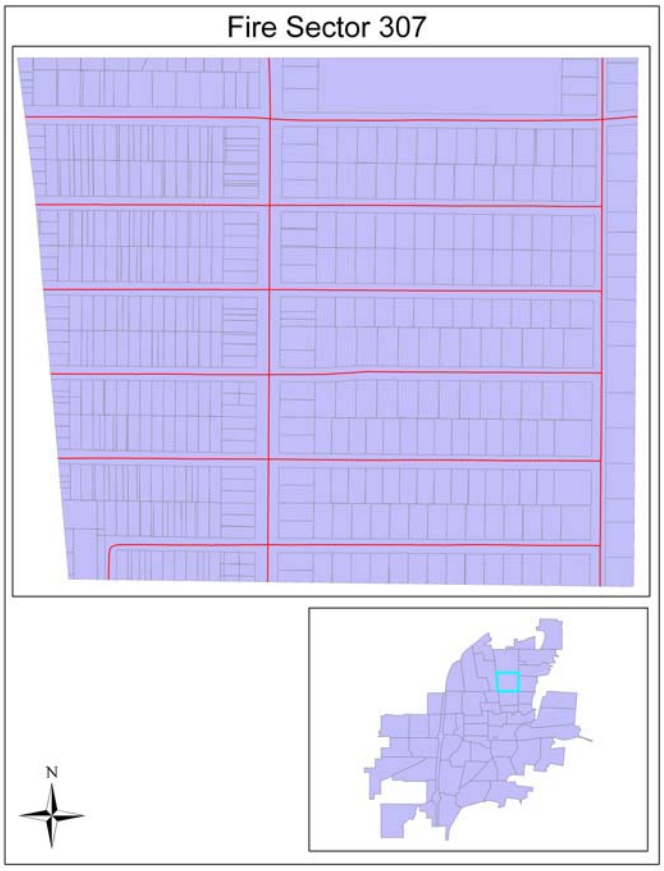
There are two significant risk unprotected properties in this sector. Carriage Hill condominiums is a three-story structure containing 29,154 square feet. It features open stairwells and wood frame construction. This L-shaped building is a mixture of apartments and condominiums with 84 units in the building. The building does contain a fire alarm system including smoke detectors in each unit.

An additional factor that affects the fire risk in this structure is the difficult accessibility to the rear side due to the configuration and size of the parking lot. The other significant risk property in this sector is the First Church of the Nazarene. This is a larger church containing just under 27,000 square feet of space. In addition to its open design, the First Church of the Nazarene also contains a well-attended pre-school that has approximately 80 population each work day. This building is also protected by a fire alarm and smoke detector system, however it does not feature a full fire suppression system. Northtowne Church of God is also located on Wapakoneta Avenue, but it is a smaller structure at 6,000 square feet and does not pose a significant risk. Tenderhearts Pre-school is also located on Wapakoneta Avenue and has an average daily population of 85. Tenderhearts along with Kiddieland Pre-school have the necessary state-minimum fire alarm systems and safety procedures in place. These facilities are inspected on a regular basis by the agency and pre-fire planning of these facilities has been completed. There is also a warehouse located on North Wapakoneta Avenue which contains just under 20,000 square feet. It is somewhat smaller in nature and currently is vacant. However, should a fire occur in this particular structure, limited accessibility will be a factor in fire suppression efforts.

Fire Flow Concerns

The largest unprotected structure in this sector is approximately 29,000 square feet. The required fire flow for 100% involvement in fire is 9,600 gpm. The fire hydrants in the area along Wapakoneta Avenue are capable of flowing over 3,800 gpm. Water would have to be obtained from several hydrants as well as water from adjacent grids and pumped back in relays to provide sufficient to combat a fire in the Carriage Hill building or the First Church of the Nazarene. The numerous commercial outlets along Wapakoneta Avenue can be adequately serviced with the water distribution system in the area. In the Windsor Parke and Eagle Glen subdivision, the largest structure is approximately 2,400 square feet. The fire flow required for structures of this size if 100% involved in fire would be approximately 800 gpm. However, the water distribution system in these areas is less than desired in some situations. Some hydrants in these areas flow between 500-1,000 gpm. While one hydrant would probably be sufficient for the average single-family dwelling fire, some structures may require multiple hydrants to be utilized in order to obtain sufficient water.

Fire Sector Profile … 307 – Residential District - Parkwood Street / Main Avenue / Broadway Avenue



Community Profile

This area is best described as residential in nature with some commercial structures. The residential structures in this area range from older homes of 800 square feet to more modern homes that contain up to 2,600 square feet. This sector contains the Kenwood apartments, Grace Baptist Church on Edgewood Street, and the YMCA facility located at 300 East Parkwood Street.

Transportation Issues

This area is comprised of two major roadways including Main Avenue and Broadway Avenue. Other roadways include Parkwood Street, Robinwood Street, Edgewood Street and others. A four-way stop sign is located at Parkwood Street and Main Avenue and Parkwood Street and Broadway Avenue. Numerous other two-way stop signs exist along most of the residential streets. No other specific traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	3
Properties posing above average risk	2

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	209
Fire responses	27
EMS	159
Other alarms	23
Dollar loss	$6,600

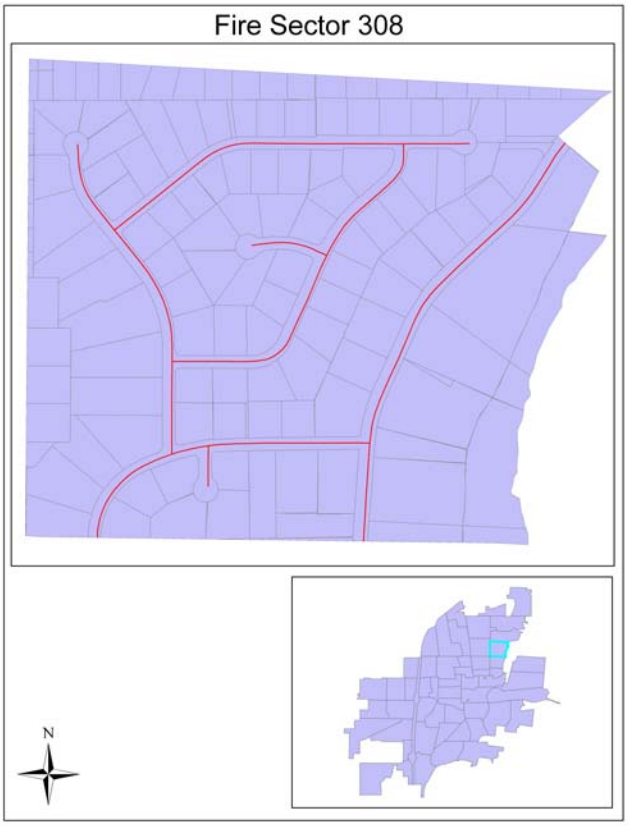
Identified Special Risks

There are two significant risk properties located in this sector. The Kenwood apartments are located at 1515 Kenwood Drive and contain approximately 6,700 square feet. The two apartment buildings are two stories in height and have a total of 6 units in each building. It features combustible construction and is an unprotected property. Each apartment unit has its own exit to the outside, therefore each unit has a smoke detector but there is no fire alarm system that protects the entire structure. It does not have a fire suppression system. The YMCA is an important component to the quality of life to the Sidney community. It is located at 300 East Parkwood Street and contains just under 60,000 square feet. The building is partially protected with a fire suppression system as a large daycare center is located in the basement of the facility. However, the first and second floor of the facility is not protected by the fire suppression system. The census of the building is usually over 100 occupants and is protected by a complete smoke detector and fire alarm notification system. The Grace Baptist Church is also located in this sector, however it is smaller in size at 6,600 square feet.

Fire Flow Concerns

The largest unprotected structure is the YMCA at 60,000 square feet. The required fire flow for 100% involvement in fire is 20,000 gpm.; available water is rated at approximately 3,200 gpm or greater. Even utilizing multiple hydrants in the area, sufficient water is not available to fight a fire in this facility should it gain significant headway. In the remainder of the sector, sufficient water is available to attack in the fire in the residential structures.

Fire Sector Profile … 308 – Residential District – Port Jefferson Road / Burkewood Drive / Westover Street



Community Profile

This area is best described as upscale residential. Most of the residential structures in this area are single-family and range from 2,000 to 4,000 square feet. This area is somewhat secluded in that it contains numerous cul-de-sacs and dead end streets that do not have through connectors. There are no schools or churches in this sector.

Transportation Issues

This area is comprised of a major roadway, Port Jefferson Road. This area is also comprised of several residential streets. A four-way stop sign is located at Port Jefferson Road and Russell Road. Numerous other two-way stop signs exist along most of the residential streets. No other specific traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	0
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	29
Fire responses	4
EMS	24
Other alarms	1
Dollar loss	$0

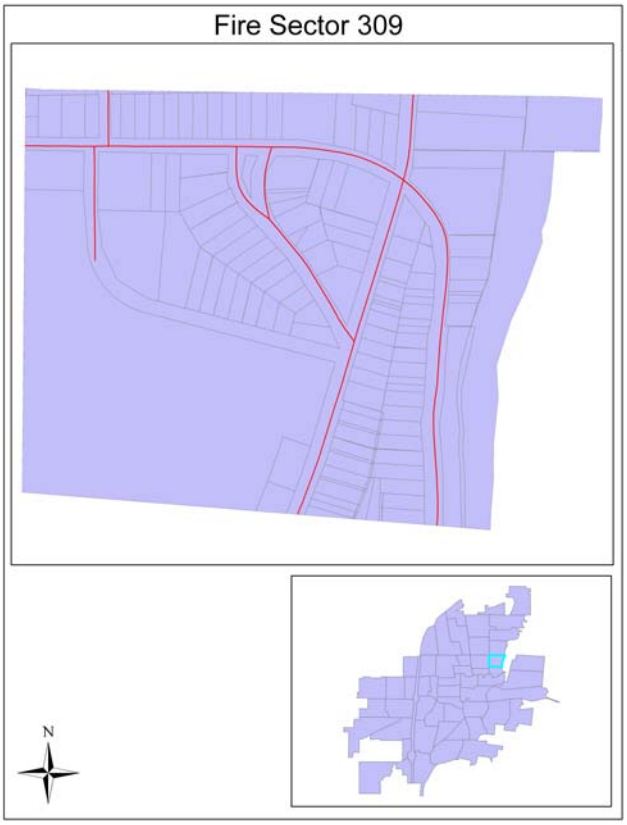
Identified Special Risks

There are no significant risk properties located in this sector. The typical residence found in this sector would score an average risk of 13 in the Community Risk Assessment rating. Some of the homes located along Port Jefferson Road are larger in size and have deeper setbacks than typically found in a residential district. However, no other specific risks were identified in this sector.

Fire Flow Concerns

The largest residential dwelling is approximately 4,000 square feet. The required fire flow for 100% fire involvement is approximately 1,300 gpm; available water in the area varies. The hydrant at Beck Drive and Cedar Court has 2,220 gpm available, while the hydrant at the dead end of Burkewood Drive has 940 gpm available. Due to the size of some of the residential structures, multiple hydrants in the area may have to be utilized to obtain sufficient water for fire attack. However, in general, sufficient water is available for firefighting in the area.

Fire Sector Profile … 309 – Residential District – Port Jefferson Road / Bon Air Drive / Russell Road



Community Profile

This area is best described as residential in nature. Most of the residential structures in this area are single-family and range from 1,600 to 3,000 square feet. This sector also contains large green space area as a majority of the Moose Lodge golf course is located within this sector. There are no schools or churches in this sector.

Transportation Issues

This area is comprised of several residential streets and major roadways. Russell Road and Port Jefferson Road are considered major roadways in the area. Bon Air Drive, Terrace Drive, Magnolia Drive, and Bon Air Circle are also located within the sector. A four-way stop sign is located at Port Jefferson Road, Russell Road, and Bon Air Drive. Several other two-way stop signs are also located within the sector. No other specific traffic calming measures are utilized in this sector.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	0
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	18
Fire responses	3
EMS	14
Other alarms	1
Dollar loss	$0

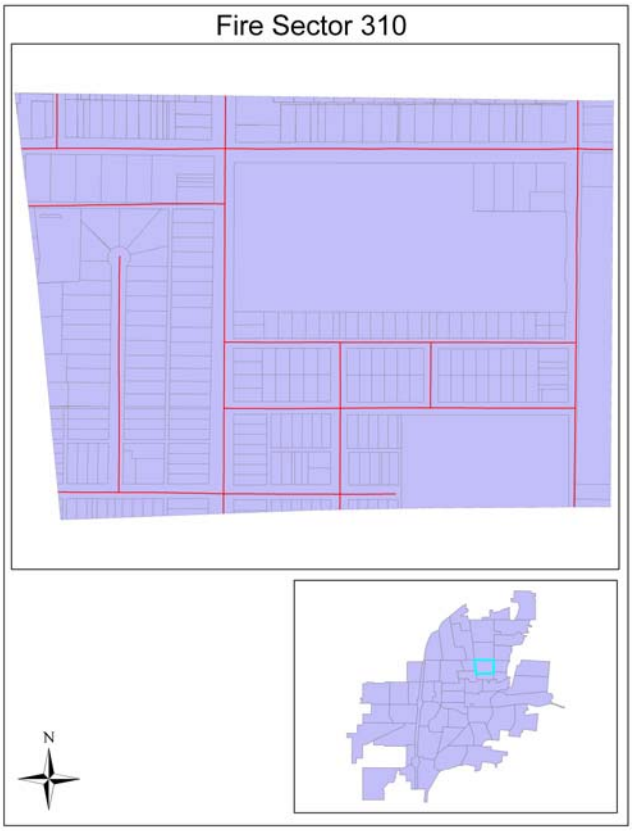
Identified Special Risks

There are no significant risk properties located in this sector. The typical residence found in this area would score an average risk of 14 in the Community Risk Assessment rating. Several of the homes are located along Magnolia Drive and Bon Air Circle which are large lots with limited accessibility. These homes may pose a more significant challenge than the average single-family dwelling, but they do not pose a significant risk. There are no schools, churches, or buildings of historical value located in this sector.

Fire Flow Concerns

The largest residential dwelling is approximately 3,000 square feet. The required fire flow for 100% fire involvement is approximately 1,000 gpm; available water is rated at 2,500 gpm or greater. Throughout the sector, sufficient water is available to attack a fire in a single-family dwelling.

Fire Sector Profile … 310 – Residential & Commercial District – Main Avenue / Russell Road / Broadway Avenue



Community Profile

This area is best described as predominantly residential with numerous commercial facilities located on Russell Road and Main Avenue. The LeRoi Manufacturing Company is also located on Russell Road at the intersection of Main Avenue. Numerous single-family and two-family dwellings are located within the sector. Whittier Elementary School is located on Belmont Street, Shelby County Headstart is located at the intersection of Russell Road and Main Avenue, and First Christian Church is located on East Russell Road.

Transportation Issues

The major roadways in this area are Broadway Avenue, Russell Road, and Main Avenue. Other residential streets include Front Street, Garfield Avenue, Belmont Street, and New Street. A traffic signal is located at the intersection of Russell Road and Main Avenue and a four-way stop sign is located at Russell Road and Broadway Avenue. Numerous other two-way stop intersections exist within the sector. No other specific traffic calming measures are utilized in this sector with the exception of the school zone located on Broadway Avenue adjacent to Whittier Elementary school.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	20
Properties posing above average risk	4

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	129
Fire responses	17
EMS	102
Other alarms	10
Dollar loss	$0

Identified Special Risks

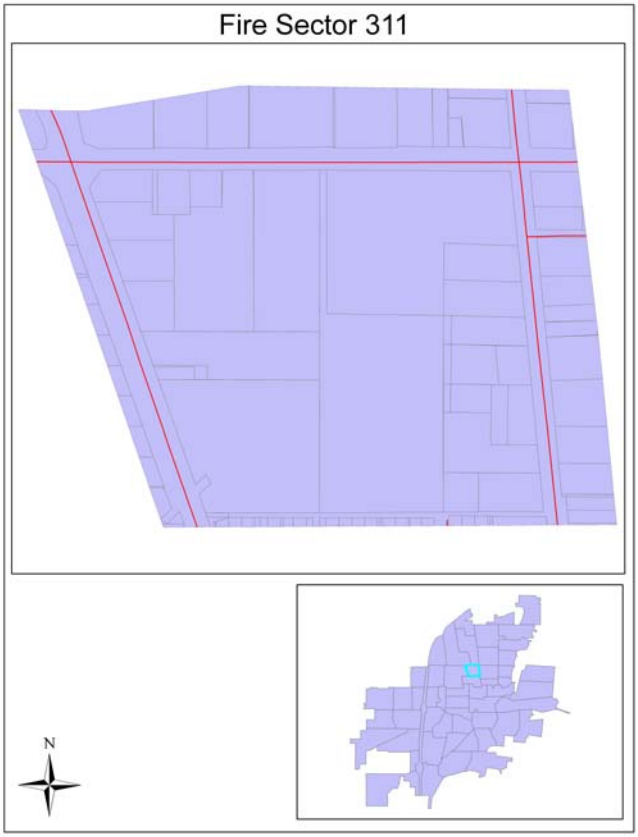
There are four significant risk unprotected properties in this sector which could pose a large property loss or, in some cases, loss of life. The Shelby County Headstart is located at 1500-1502 North Main Avenue. This facility has in excess of 100 students on a daily basis. The Shelby County Headstart and Mom's Bakery are located in the same building which contains approximately 12,771 square feet. Whittier Elementary school is located at 425 Belmont Street and also has in excess of 100 students on a daily basis and contains just under 24,000 square feet of space. Both schools have internal alarm systems, but do not have a fire suppression system. The agency regularly inspects the schools to ensure fire code compliance and that safety procedures and fire exit drills are practiced on a regular basis. Belmar Bowling Lanes and Sam's Skate Club also pose a significant fire risk and are located adjacent to one another on Russell Road. Neither structure is protected by a fire suppression system. Both facilities are somewhat seasonal, however during peak times can have several hundred occupants on the premises. Both facilities are high risk from a firefighting standpoint because of the bowstring truss roof assemblies utilized in both structures.

The former Dresser/Leroi manufacturing facility is located at the corner of Main Avenue and East Russell Road. This facility contains 221,740 square feet of space and contains several other buildings in the complex. The building is fully protected by a fire suppression system, however due to its size, initiation of firefighting operations could be delayed. Pinpointing the exact location of the fire and properly deploying the hoselines into a structure of this size would be challenges faced by the fire agency.

Fire Flow Concerns

The largest unprotected facility in this sector is Whittier Elementary school. At just under 24,000 square feet of space, this structure would require 8,000 gpm of water for firefighting operations should the building become 100% involved in fire. Hydrants in this sector generally have 2,000-5,000 gpm or greater available. Clearly, several hydrants would have to be utilized as well as hydrants on adjacent grids to obtain sufficient water to fight a fire in this size structure. Sam's Skate Club located on Russell Road at 13,500 square feet of space would require approximately 4,500 gpm of water should that structure become involved in fire. Some hydrants in the area have 5,000 gpm available, while others have less than 1,000 gpm available. Several hydrants in the area would have to be utilized to obtain sufficient water to fight a fire in this structure. In the residential area of the sector, sufficient water is available for firefighting in these smaller structures.

Fire Sector Profile … 311 – Commercial District – Northwood School / Parkwood Elementary School



Community Profile

This area is best described as predominantly commercial outlets with some single-family and multi-family dwellings. Numerous commercial outlets including service stations and banks are located along Wapakoneta Avenue and Russell Road. The Russell Road Christian Center is located on West Russell Road as are three retirement apartment complexes. The vacant Parkwood Elementary school is located on Russell Road and Northwood School is located on St. Marys Avenue. Several single-family and two-family dwellings are interspersed along Russell Road and St. Marys Avenue.

Transportation Issues

There are three roadways in this sector and all are considered major roadways. They include St. Marys Avenue (State Route 29) Russell Road, and Wapakoneta Avenue. Traffic signals are located at Russell Road and St. Marys Avenue, Russell Road and Wapakoneta Avenue, and Wapakoneta Avenue near Brookburn Street. No other traffic calming measures are utilized in this sector except for school zones.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	45
Properties posing above average risk	2

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	96
Fire responses	6
EMS	83
Other alarms	7
Dollar loss	$0

Identified Special Risks

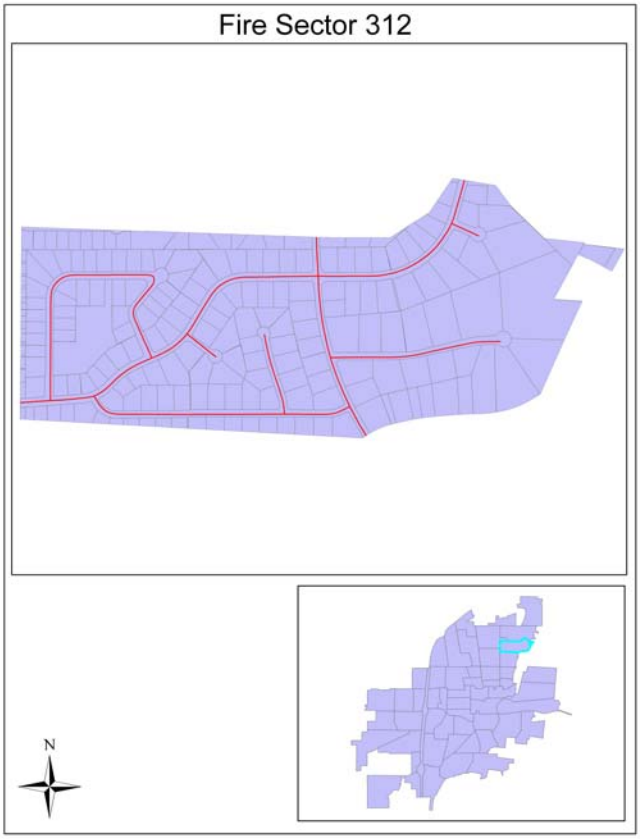
There are two significant risk unprotected properties in this sector which could pose a loss of life or large property loss. The Northwood School campus is located at St. Marys Avenue and Brookburn Street. The facility has in excess of 100 students on a daily basis and the school contains 77,491 square feet. The school does have an internal alarm system and the agency inspects the property and assures that fire exit drills are conducted on a regular basis. However, the facility is not protected by a fire suppression system.

Sidney Tire is located at 1231 Wapakoneta Avenue and the building has over 18,000 square feet of space. Due to the large inventory of both new and used automobile and truck tires, this property poses a significant risk for the agency should a fire escalate past the incipient stage. The agency is further hampered by limited accessibility to the rear of the building. Should the tire inventory become involved in a fire at this facility, an air pollution problem could develop which would require the evacuation of adjacent neighborhoods and necessitate involvement of the Ohio EPA. This sector is also home to numerous retail outlets located along Wapakoneta Avenue and Russell Road. Most of these buildings are smaller in size and do not rise to the significant risk category. The Russell Road Christian Center is located on West Russell Road and contains 12,487 square feet. Due to its building construction features, it has earned an average risk in the community risk assessment rating. There are no buildings in this area that have significant historical value.

Fire Flow Concerns

In this sector, the largest unprotected structure is 77,000 square feet, which is the Northwood School. This would require a fire flow of over 25,000 gpm if the building would become fully involved in fire. Available water in this area is rated at approximately 2,000-5,000 gpm. While sufficient for the smaller commercial properties and the residential structures, this would prove to be a challenge should this building become involved in fire. Even utilizing adjacent hydrants in the area and other hydrants from other grid systems, it is doubtful if sufficient water could be obtained for a fire of this size. The Sidney Tire store at 1231 Wapakoneta Avenue contains 18,310 square feet. If this building were to become 100% involved in fire, a fire flow of 6,000 gpm would be needed for normal fire loading. However, due to the increased BTU output of the rubber tire product, two to three times the required fire flow would be needed to attempt to successfully combat a fire at this facility. It is mostly likely that firefighting foam would also have to be employed to attack and suppress a fire of this magnitude. The fire flow available in the area is also insufficient for firefighting purposes at this facility. Sufficient water for the smaller commercial properties and residential structures in this area should be available with the existing distribution system.

Fire Sector Profile … 312 – Residential District – Parkwood Street / Wells Drive / Winfield Court



Community Profile

This area is best described as moderate density residential. Most of the residential structures in this area are single family with some two-family dwellings. The size of the structures range from 1,800 to 5,800 square feet. This area also contains a retention basin on Westminster Court.

Transportation Issues

This area is comprised of mainly residential streets. There is a four-way stop sign located at Wells Drive and Parkwood Street and a two-way stop sign at Port Jefferson Road and Wells Drive. Numerous other two-way stop signs are located in this sector. No other specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	0
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	24
Fire responses	6
EMS	13
Other alarms	5
Dollar loss	$0

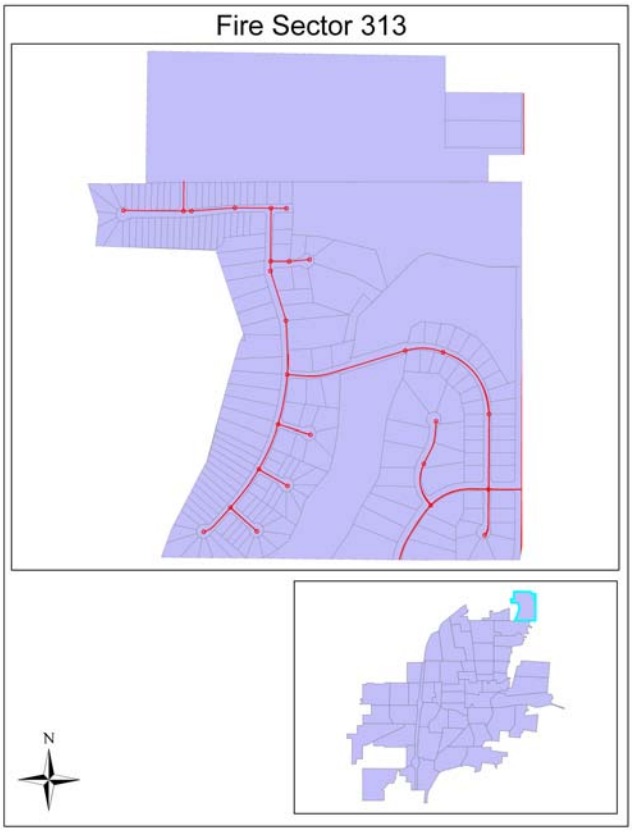
Identified Special Risks

There are no significant risk properties in this sector which could pose a large property loss or loss of life. There are no churches, schools, or buildings of historical value in this sector. The sector consists of predominately single-family dwellings and some two-family dwellings. The homes range from ranch-style homes to large estate-type homes on large lots.

Fire Flow Concerns

The largest homes in this area are approximately 5,800 square feet. This would require a fire flow of 1,900 gpm should the structure become 100% involved in fire. The fire flow report indicates that flows in excess of 1,500 gpm are available in the area. Sufficient fire flows are available throughout the area for firefighting purposes.

Fire Sector Profile … 313 – Residential District – Plum Ridge north



Community Profile

This area is best described as residential. Most of residential structures in this area consist of large single-family dwellings or townhouses ranging from 2,000 to 5,000 square feet. This area also contains some non-developed wooded areas that contain steep topography.

Transportation Issues

This area is comprised of mainly residential streets. Numerous two-way and three-way stop signs are located throughout the sector. No other specific traffic calming measures are utilized in this area.

Community Risk Assessment rating

A risk assessment was completed on the commercial properties within this sector as part of the Community Risk Assessment (CRA) program of the city.

Eight specific areas of risk were assessed to determine the demand placed on fire and emergency services to assist in the determination of a Standard of Coverage. This area of the community contained the following levels of demand:

Total properties assessed	0
Properties posing above average risk	0

Incident History – 2005-2007

There were no major incidents of large loss of dollars and/or life in this sector for the reporting period. The total number of fire and EMS calls are listed as follows:

Total alarms	2
Fire responses	1
EMS	1
Other alarms	0
Dollar loss	$0

Identified Special Risks

There are no significant risk unprotected properties in this sector which could pose a large property loss or large loss of life. Several of the single-family dwellings are located on large lots and have steep topography. Some of the larger homes are 3,000 to 5,000 square feet in size and pose a significant challenge for the agency. Not only do the size of the structures require significant water flow, the topography and distance off the roadway make hoseline deployment difficult and lengthy. There are no schools, churches, or buildings of historical value in this sector.

Fire Flow Concerns

The residential dwellings in this sector range from 2,000 to 5,000 square feet in size. The fire flow report indicates that approximately 1,400-3,400 gpm is available in the area, depending on the location and size of the water main. The hydrants along Hidden Ridge Drive have 2,000+ gpm available. Along Bridlewood Drive, 3,400 gpm is available and 1,400 gpm is available on Summerfield Trail. Sufficient water is available for firefighting in his area.

SECTION 3 – Standards, Goals, and Objectives

In order to perform a complete assessment of a community's ability to respond to specific emergencies, that community must establish standards for itself. These standards must be made based on an educated understanding of the risk faced both from the source and from the community.

If a community's emergency resources are to make a positive impact on the event, they must arrive in time and in sufficient numbers to affect change. Calls for assistance must be processed and dispatched quickly. In this section, an assessment of service delivery will help establish a total response time measurement for the service taking into consideration the factors involved in creating effective change in both structural fires and life-threatening emergency medical calls.

Section 3.1 – Total Response Time Measurement

The concept of a response time continuum (sometimes referred to as cascade of events) has evolved from the standards set by the National Fire Protection Association (NFPA) and the Commission on Fire Accreditation International (CFAI). While in previous analyses travel time was examined, a total response time continuum and its affect on the services the agency provides had not been evaluated or analyzed. As a part of this Standard of Cover document, the agency worked to determine acceptable levels of service based on the NFPA fire curve models, ALS/BLS criteria, and other related factors of response, including those established by CFAI.

The purpose of defining the factors that determine the standards of coverage allows the community to be informed about the decisions they make for the provisions of emergency services. As part of this process, the following information was examined:

Detection of an emergency

Detection is the time is takes to discover that an emergency exists. The detection of an emergency in the response time continuum is a portion in which the agency has very little or no control. Over the past decade, this area has been enhanced throughout the community by an increase in the use of cellular phones. Previously, detecting and reporting of an emergency may have been delayed because of a lack of communications options. The positive impact of personal phones/communications is as equally significant as the implementation of the enhanced 9-1-1 system in 1992. These issues have served to significantly decrease the time of emergency notification within the City of Sidney. To further explain, the detection of an emergency is further broken down into the following components:

> Event initiation point – the point at which factors occur that may ultimately result in an activation of the emergency response system. Precipitating factors can occur seconds, minutes, hours, or even days before a point of awareness is reached. An example is the patient who ignores chest discomfort for days until it reaches a critical point at which he/she makes the decision to seek assistance (point of awareness). It is rarely possible to quantify the point at which the event initiation occurs.
>
> Emergency event awareness – the point at which a human being or technologic "sentinel" (i.e., smoke detector, infrared heat detector, etc) becomes aware that conditions exist requiring activation of the emergency response system. This is considered the point of awareness.
>
> Alarm – the point at which awareness triggers an effort to notify the emergency response system. An example of this time point is the transmittal of a local or central alarm to a public safety answering point (PSAP). Again, it is difficult to determine the time interval during which this process occurs with any degree of reliability.

An interval exists between the awareness point and the alarm point. This interval can be significant as the alarm may be transmitted to a distant commercial alarm monitoring organization which then re-transmits the alarm to the local 9-1-1 dispatch center.

State notification – the point at which the public safety answering point receives an alarm. This transmittal may take the form of electronic or mechanical notification received and answered by the PSAP.

Call processing time

Call processing time is a component of the dispatch system. The City of Sidney dispatch center is operated by the Sidney Police Department under the direct supervision of the Chief of Police. The system utilizes a computer-aided dispatch system which serves police, fire, and EMS services. The computer-aided dispatch system most recently was upgraded in the summer of 2008 with a complete changeover to the Visionair system. During the 2003 ISO field evaluation, the City's dispatch system and procedures were evaluated against ISO standards and criteria. The City received 6.11 points credit of a 10 point maximum. This indicates that most areas of the communication system are operating within recommended standards and guidelines. However, deficiencies were noted regarding the number of operators (dispatchers) on duty based on the volume of activity handled by the communication center. An electronic monitoring device for alarm circuits is also needed in the center.

An immediate increase in dispatchers does not seem practical at this point in time. However, as an increase in police and fire activity occurs, the addition of a third dispatcher on a 24-hour or peak time basis should be carefully examined. In addition, the appropriate software should be acquired to provide the monitoring of alarm circuits as required by ISO.

What is an acceptable amount of time to process an emergency call? NFPA 1221, the standard on *Emergency Services Communications Systems*, establishes that benchmark as 60-90 seconds. Specifically, Chapter 7 of NFPA 1221 establishes that 95% of emergency call processing and dispatching shall be completed within 60 seconds and 99% of call processing and dispatching shall be completed within 90 seconds. However, two factors could lengthen the call processing time. The dispatch center operates with emergency medical protocol, which is an enhanced service for the community and allows dispatchers to provide specific emergency medical instructions to the caller. Frequently, dispatchers may assist callers with the initiation of emergency breathing and cardio-pulmonary resuscitation (CPR). The dispatch center is a dual-function facility in that it also handles call-taking and dispatching for the Sidney Police Department. At times, incidents will occur in which both law enforcement and fire resources are required at the incident. In some cases this can involve a safety factor due to the nature of the incident, such as a shooting, domestic violence, or other crimes involving violence. In these particular situations, additional time is necessary in order to make the scene safe for emergency responders. These two factors can affect call processing time.

Turnout time

Turnout time is the time it takes once notification to a station or unit is made, for the emergency response force to be on the road. Both fire stations in the City of Sidney have their living quarters and office directly adjacent to where the apparatus is housed. Station facilities are equipped with radio-toned-alert activation in addition to "rip and run" sheets directly from the CAD. This allows for an efficient and effective response of Sidney Fire and Emergency Services personnel to their assigned apparatus. Turnout time is measured from the time of first alerting of dispatch to the apparatus clearing the station. The benchmark for this measurement comes from NFPA Standard 1710, *Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*. Chapter 4 of NFPA 1710 establishes

the turnout time at one minute (60 seconds). This time interval can also be affected by several variables. Nighttime response when firefighters are asleep in the fire stations may require a slightly longer turnout time to alert, dress, and respond. Likewise, various assignments during the daytime may lengthen response times. A turnout time interval established at 60 seconds seems appropriate however, upon closer examination, 60 seconds is an extremely tight window. Unlike an urban area where a fire company is always together, suburban departments cross-staff several pieces of apparatus with limited number of personnel. The cross-staffing of several pieces of apparatus and equipment also results in an unusually large apparatus room which can also affect turnout time. For example, upon receipt of a fire alarm, personnel immediately travel to the "turnout area" of the apparatus floor. Once there, personnel don their personal protective equipment (PPE). After donning their PPE, fire personnel then pick up the rip-and-run sheet and briskly walk to their apparatus, get belted in, and then begin the response. Depending on their location in the station at the time of the alarm along with their activity, the 60-second benchmark is extremely difficult to achieve. Two and one-half minutes is a more likely target for turnout time in the modern organization.

Another major factor that will be examined elsewhere in this document is the delay created when firefighters are tied up on existing emergency incidents. When more emergency calls are received than the on-duty resources can handle, response to these calls may be delayed until units have cleared from the previous incident. This creates a "stacking" affect.

Travel time

Travel time is the time it takes for dispatched response units to arrive on scene at the emergency. The agency is located in fire stations and what was previously found to be strategic locations in the community. Travel time is generally considered to encase the distance and time traveled from the fire station housing the apparatus until it arrives on scene at the location of the emergency. However, several factors can also affect travel time. Winter weather conditions as well as localized flooding can affect travel time during certain times of the year. The previously mentioned problem of receiving multiple calls for services without having adequate resources to respond can create a stacking affect. A component to the stacking affect is that often times units may need to respond to adjoining districts in an effort to provide the quickest and most reliable response to the incident. For example, if the ambulance unit from Fire Station 2 is currently committed to an emergency call and a request for another ambulance or a fire unit occurs near Fire Station 2, then the available unit from Fire Station 1 would be the primary response unit. Clearly, this would lengthen the normal travel time of the response unit because of the unavailability of the first response units in that district.

Total Reflex Time

The agency has determined the Total Reflex Time to be that time which totally encompasses the response event, from the time the call for service is initially received through the time dispatched units arrive on location. The fire department receives response time data from the City of Sidney Communications Center CAD into the fire department database for the purpose of determining Total Reflex Time standard compliance.

> Setup Time – the point at which operations to mitigate the event begins. This sometimes varies greatly with arrival on scene. An example would be treating a patient on the third floor of an office building.
>
> Termination of incident – the point at which units have completed the assignment and are available to respond to another request for service.

Section 3.2 - The science of fire and the need for rapid response to affect positive change
Because there is such a wide variation in the fire dynamics of each particular fire, it is imperative to find a common reference point, something that is common to all fires regardless of the risk-level of the structure, the material or length of time the fire has burned. Such a reference point exists. Regardless of the speed of growth or length of burn time, all fires go through the same stages of growth. One stage in particular emerges as a very significant one because it marks a critical change in conditions. It is called flashover.

The flashover stage of a fire marks a major turning point in fire conditions that increases the challenge to a fire department's resources. How and why this is so is explained in the following descriptions of each stage of fire growth.

Smoldering stage
The smoldering stage is the first stage of any fire. When heat is applied to a combustible material, the heat *oxidizes* the material's surface into combustible gases. The oxidation process is exothermic, meaning that the oxidation process itself produces heat. The heat from the oxidation raises the temperature of other materials, which increases the rate of oxidation and begins a chemical chain reaction of heat-release and burning.

A fire progresses from the smoldering phase immediately or slowly, depending upon the fuel, nearby combustibles, and the surrounding air. For example, a wad of newspapers will smolder only a few seconds before progressing to the next stage, but a couch with a burning cigarette may continue smoldering for over an hour.

Incipient stage
When the temperature gets high enough, visible flames can be seen. This stage is called incipient or open burning. The visible burning at this stage is still limited to the immediate area of origin. The combustion process continues to release more heat which heats nearby objects to their ignition temperature and they begin burning.

Flashover stage
Not all of the combustible gases are consumed in the incipient stage. They rise and form a superheated gas layer on the ceiling. As the volume of this gas layer increases, it begins to bank down to the floor, heating all combustibles regardless of their proximity to the burning object.

In a typical structure fire, the gas layer at the ceiling can quickly reach 1500°F. As the gas layer moves down, it begins heating combustible objects in the room to their ignition temperature. The gas layer is mostly carbon monoxide, so the absence of oxygen prevents the heated objects from bursting into flame.

Oxygen gets introduced into the space in two ways. There is often enough available oxygen near floor level to start the open burning process when the gas layer reaches that level. Or, the high heat breaks a window and the incoming oxygen allows the burning to begin. It should be noted that the room becomes untenable long before flashover. Even though open flaming may not be present until everything reaches 500°F and oxygen is introduced, the room becomes untenable for human survival at 212°F.

When flashover occurs, everything in the room breaks into open flame at once. The instantaneous eruption into flame generates a tremendous amount of heat, smoke, and pressure with enough force to push beyond the room of origin through doors and windows. The combustion process then speeds up because it has an even greater amount of heat to move to unburned objects.

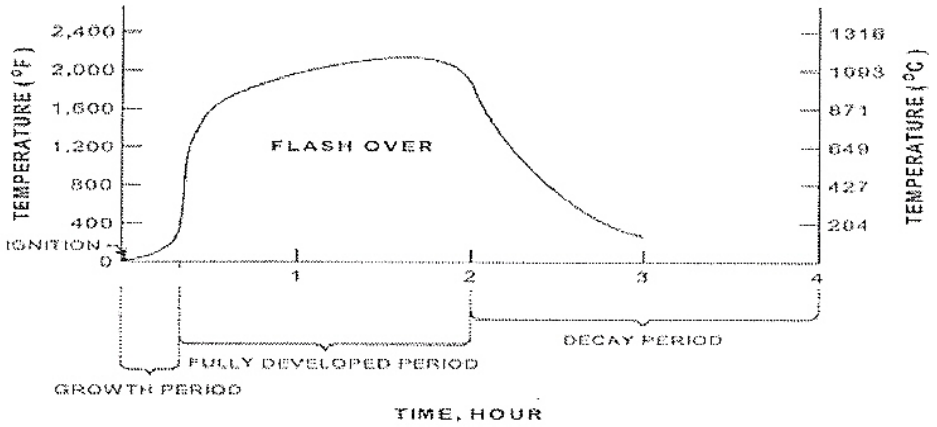
Flashover is a critical stage of fire growth for two reasons. First, no living thing in the room of origin will survive, so the chance of saving lives drops dramatically. Second, flashover creates a quantum jump in the rate of combustion and a significantly greater amount of water is needed to reduce the burning material below its ignition temperature. A fire that has reached flashover means that it is too late to save anyone in the room of origin, and a significant increase in staffing is required to handle the larger hose streams necessary to extinguish the fire. A post-flashover fire burns hotter and moves faster, compounding the search and rescue problems in the remainder of the structure at the same time that more firefighters are needed for fire attack.

PRE-FLASHOVER	POST-FLASHOVER
Fire limited to room or origin requires small attack lines	Fire spreads beyond room or origin
Search and rescue efforts easier	Requires more or larger attack lines
Requires few resources and can be handled by initial effective response force	Compounds search and rescue efforts
	Requires additional resources
	Additional companies are required

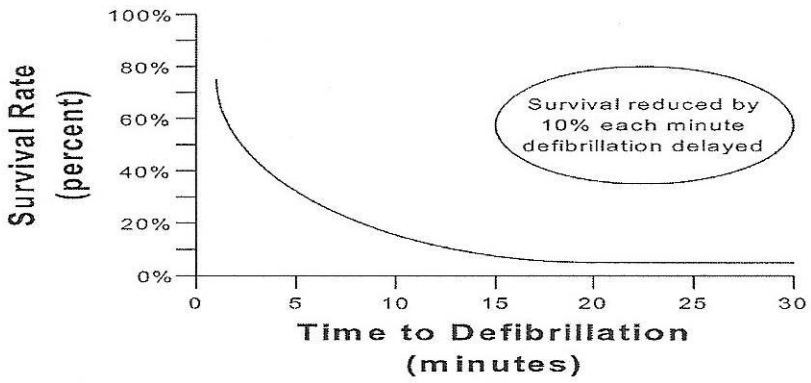
It has long been known that the real killer in structural fire is smoke, not the flame or heat. Smoke contains many toxic gases released as by-products of the combustion process. Carbon monoxide is one of these gases and the most prevalent. Test fires in residential structures have demonstrated the production of carbon monoxide in measurable amounts after three and one-half minutes from the ignition of the fire.

The primary objective of fire operations is to provide enough firefighters and equipment in a strategic location so that an effective response force can respond to and reach fire scenes to mitigate the problem before flashover occurs. The “time-temperature curve” standard is based on data from the NFPA and ISO which have established that a typical point source of ignition in a residential house will “flashover” at some time between five and 30 minutes after ignition, turning a typical “room and contents” fire into a structural fire of some magnitude.

Time-Temperature Curve



Section 3.3 – EMS Performance Goal
Time requirements for emergency medical service (EMS) calls are comparable to fire incidents. The purpose of a quick response, especially in the most critical situation (cardiac arrest), is that the brain, devoid of oxygen and circulation, begins to die within 4-6 minutes. Brain damage is normally irreversible after 10 minutes. Interventions include early cardiopulmonary resuscitation (CPR) and electrical defibrillation.



The agency provides CPR training to all City employees and other government agencies. The three front-line ALS units are equipped with Lifepak 10 heart monitor/defibrillators. The remaining fleet are equipped with automatic external defibrillators (AED).

CPR training is also offered in the community through the hospital and American Red Cross. AEDs have been installed at various public assembly locations in the community.

SECTION 4 – Critical Task Capabilities
In order to effect positive change, agency personnel must be properly assigned, resources must be properly placed and equipped, and each individual must be assigned a critical task to complete. Consequently, those individuals must arrive within a time frame which allows them a chance to use their skills to stop the loss or convert a potentially fatal medical condition.

Not only is it necessary to assess and establish the task assignments for fire and EMS responses for the agency, critical task assignments are also necessary for non-fire risk. This section will establish critical task assignments for fire, non-fire, and EMS responses and duties.

Section 4.1 – Technical Rescue / Critical Tasking
<u>Hazardous Materials Response</u>
All Sidney Fire & Emergency Services personnel are trained to the Hazmat Operations level. In addition, eleven Sidney firefighters are currently trained to the Hazmat Technician level, and several others are trained to the Hazmat Incident Commander level. In the event of a hazardous materials incident, the Sidney Fire & Emergency Services responds to assess and mitigate the incident as well as take whatever defensive actions may assist in resolving the incident. If mitigation of the incident requires Technician level capabilities, Sidney Fire & Emergency Services calls upon the Shelby County Hazardous Materials Response Team to respond. The Shelby County Hazardous Materials Response Team is a cooperative effort between the City and the County and is made up of Technician-trained fire personnel from the City and various County departments. All hazardous materials response vehicles and equipment are housed at the Shelby County EMA facility on Fair Road.

Technical Rescue

Sidney Fire & Emergency Services has trained all personnel in trench rescue operations, confined space operations, and fast water rescue and ice rescue operations. The department also provides a high-angle rope rescue capability which is a mixture of Awareness level training for all personnel with additional personnel who have volunteered to receive Operations level training. The City of Sidney has two rescue boats in their inventory capable of being deployed at two strategic locations along the Great Miami River. In addition, all of the specialty equipment necessary for the above-described technical rescue areas are stored and carried on the technical rescue trailer and the department's heavy rescue unit.

The specific critical task for each of these specialty areas is rather complex and dynamic depending on the situation confronting personnel. Each of the technical rescue areas has its own specific standard operating procedure, which is often very detailed to meet existing NFPA, OSHA, and NIOSH standards. All personnel receive regular training in the various technical rescue disciplines. The critical tasking identifies the minimum number of personnel to initiate rescue operations in the particular area.

Fast Water Rescue

The purpose is to ensure safe and efficient operations at incidents involving fast moving water, such as the Great Miami River. Of special concern are the city's two low head dams, which create dangerous currents, especially during flood stage.

Boat Operators shall have the responsibility of moving boats and other essential equipment to the water's edge.

Primary and secondary rescuer – the rescuer is the position designated to make actual rescue contact with the victim. The rescuer will be involved in rescue assessment and rescue decisions, but the duty of the rescuers is ultimately to get the victim to safety and medical treatment.

Shore-based rescuer – this position is located downstream from the actual rescue. With the use of throw bags, the shore-based rescuer is able to aid a victim or rescuer who is swept downstream.

Tasks	**Number of Personnel**
Boat Operators	2
Rescuers (primary and secondary)	2
Shore-based rescuers	2+
EMS	2
Incident Commander	1
TOTAL	9

Trench Rescue

The purpose is to ensure efficient and safe operations at incidents involving a trench or underground cave-in that entraps a victim.

Trench Group Leader – is responsible for sizing up the trench and determining whether the operation will be a rescue or recovery. The Trench Group leader directs and coordinates the activities taking place in the trench.

Prep Team – is responsible for gaining access to the trench by placing edge-bridging and ground pads as needed. The prep team ensures access to both sides of the trench and may need to physically remove dirt and other debris to accomplish these tasks.

Panel Team – is responsible for placing the panels in the trench and securing them.

Shore Team -- is responsible for placing and securing the horizontal shores that maintain the panels vertically and securely against the walls of the trench.

Primary & Secondary Rescuer – The primary rescuer shall attempt to make physical contact with the victim and conduct a primary exam. Secondary rescuer will assist primary and start digging procedures to extract the victim.

Safety – A Safety Officer shall be established at all trench incidents. Safety officer will monitor all activities at the trench and control access to the hazard zone.

Tasks	**Number of Personnel**
Trench leader	1
Prep team	2+
Panel team	2
Shore team	3
Rescuer	2
Safety	1
Incident Commander	1
TOTAL	12 (minimum 10)

Prep teams, when finished, will transition into other function areas.

Rope Rescue

The purpose is to provide safe and efficient operations at incidents which are high angle (elevated) or below grade that require the use of rope rescue systems, to reach or rescue victims.

The type of rescue determines the number of personnel required for this task. The two common types of rescue are litter evacuations and pick-off type rescue.

Litter Evacuations

Task	**Number of Personnel**
Rescue team leader	1
Litter attendant	1
Edgeman	2
Belayer	1
Main line attendant	1
Line handler	3
Incident Commander	1
TOTAL	10

Pick-off Type

Task	Number of Personnel
Rescue team leader	1
Primary rescuer	1
Belayer	1
Main line attendant	1
Line handlers	3
Incident Commander	1
TOTAL	8

Confined Space Rescue

The purpose is to provide safe and efficient operations at incidents in which a victim(s) are trapped within an area that qualifies as a confined space. A confined space may be found in agricultural, industrial, or other settings as defined by OSHA.

The size, location, and complexity of the confined space will dictate the size of the rescue group.

The minimum number of personnel necessary to begin a rescue operation is nine. Additional rescuers must be called as soon as a confined space rescue situation is confirmed.

Task	Number of Personnel
Rescue team leader	1
Safety officer	1
Entry attendant	1
Air sampling attendant	1
Entrants	2
Back-ups	2
Rig master	1
Line handlers	2
Reserve personnel	4
Incident Commander	1
TOTAL	16

Section 4.2 – Structural Firefighting Operations

The Sidney Fire & Emergency Services performs aggressive offensive interior fire attacks whenever possible. Through a structured risk management plan the department has established the following guidelines to provide direction to on-scene personnel in conducting a risk benefit analysis:

1. We may risk our lives a lot to protect savable lives.
2. We may risk our lives a little to protect savable property.
3. We will not risk our lives at all to save what is already lost.

Variable of fire growth dynamics and property and life risk combines to determine the fireground task that must be accomplished to mitigate loss. These tasks are inter-related, but can be separated into two basic types: fire flow and life safety. Fire flow tasks are those related to getting water on the fire. Life safety tasks are those related to finding trapped victims and safely removing them from the building.

Fire flow tasks can be accomplished with handheld hoses or master streams (i.e., nozzles usually attached to the engine or ladder). Master streams take relatively fewer firefighters to operate because they are most often fixed to the apparatus or an appliance anchored to the ground.

The decision to use handlines or master streams depends upon the stage of the fire and the threat to life safety. If the fire is in a pre-flashover stage, firefighters can make an offensive fire attack into the building by using handlines to attack the fire and shield trapped victims until they can be removed from the building. If the fire is in its post-flashover stage and has extended beyond the capacity or mobility of handheld hoses, or if structural damage is a threat to firefighters' safety, the structure is declared lost and master streams are deployed to extinguish a fire and to keep it from advancing to surrounding exposures. First arriving firefighters may use a transitional "defensive to offensive" strategy to limit or remove an immediate danger to life or health (IDLH) threat while awaiting the arrival of additional resources.

Life safety tasks are based upon the number of occupants, their location, their status (e.g. awake vs. sleeping), and their ability to take self-preserving action. For example, ambulatory adults need less assistance than non-ambulatory adults require. The elderly and small children always require more assistance.

The key to a fire department's success at a fire is adequate staffing and coordinated team work, regardless of whether the fireground task are all fire flow related or a combination of fire flow and life safety.

Before on-scene procedures can be established, the initial Incident Commander (IC) must select an appropriate initial strategy-offensive or defensive. An offensive strategy is an aggressive interior fire attack and is used whenever possible. The top priority is rescue of trapped victims. The agency's goals are to eliminate any/all fire-related deaths or injuries and contain fires to their room of origin. The first objective is to put a hoseline between the victims and the fire and to rescue those victims by removing them from proximity to the hazard. The second objective is to contain the fire to the room or origin.

A defensive strategy is one that does not allow interior fire attack except as needed to rescue trapped firefighters. When in the defensive mode, all victims are considered to have already expired because there are no tenable spaces. No attempts are made to retrieve bodies because fire and structural conditions do not warrant the risk to firefighters.

Structural Firefighter / Critical Tasking

Single-family dwelling fires are the most frequent type of fire incident facing fire departments. National data provided by the NFPA identifies these fires as the most common and the City of Sidney is no different. Forty-seven percent (47%) of the agency's fire responses over the past three years were to one- and two-family dwellings. These types of buildings are where the majority of fire fatalities occur. Seventy-eight percent (78%) of the 4,600 lives lost annually in fires occur in a residential setting which includes one- and two-family dwellings and apartment units. Since the single-family and two-family dwelling fire is the most prevalent, critical tasks are outlined for this type of response. These tasks must be conducted in a timely manner by firefighters in order to control the fire prior to flashover or to extinguish the fire in an effective manner. The fire department is responsible for assuring that responding companies are capable of performing all of the described tasks in a prompt and proficient manner.

Attack line: a minimum of two firefighters who advance a 1¾" hoseline that produces a fire stream of 200 gpm or a 2½" hoseline that produces a minimum of 250 gpm. Each engine carries a set of attack lines that are either pre-connected to the apparatus, folded on the hosebed, or in a special pack for carrying into high-rise buildings.

The selection of which attack line to use depends on the type of structure, the distance to the seat of the fire, and the size of the fire. The pre-connected lines are the fastest to use but are generally limited to fires within 200 feet of the engine. When attack lines are needed beyond this limit, the line must physically be extended to a longer length or the hosebed lines or high-rise lines are used. A 2½" attack line may be used when the fire is already beyond the flashover stage and threatens an unburned portion of a structure.

Search and Rescue: a minimum of two firefighters assigned to search for living victims and remove them from danger while the attack crew moves between the victims and the fire to stop the fire from advancing. A two-person crew is normally sufficient for most moderate risk structures, but more crews are required in multi-story buildings or structures with people who are not capable of self-preservation (i.e. nursing homes and hospitals).

Ventilation Crew: a minimum of two firefighters may be required to open a horizontal or vertical ventilation channel when the attack crew is ready to enter the building. Vertical ventilation or ventilation of a multi-story building can require more than two firefighters. Ventilation removes super-heated gases and obscuring smoke, preventing flashover and allowing attack crews to see and work closer to the seat of the fire. It also gives the fire an exit route so that the attack crew can “push” the fire out the opening they choose and keep it away from endangered people or unburned property.

Ventilation must be closely timed with the fire attack. If it is performed too soon, the fire will get additional oxygen and grow. If performed too late, the attack crew cannot push the fire in the direction they want. Instead, the gases and smoke will be forced back toward the firefighters and their entry point, which endangers them, any victims they are protecting, and unburned property.

Backup line: a minimum of two firefighters will advance an 1¾" or 2½" line that is taken in behind the attack crew to cover the attack crew in case the fire overwhelms them or a problem develops with the attack line.

Rapid Intervention Team: a minimum of two firefighters equipped with self-contained breathing apparatus (SCBA) and are available near the entry point to enter the structure, perform search and rescue, or backup a suppression crew if something goes wrong. The rapid intervention team is an outcome of the two-in and two-out rule. This particular requirement is an OSHA rule that requires two firefighters to be suited up and ready to rescue firefighters who are assigned to interior firefighting operations and are in an IDLH environment should one of those firefighters become disabled.

Exposure line: a minimum of 1¾" attack line may be taken above the fire in multi-story buildings to prevent fire extension, or used externally to protect nearby structures from igniting from the radiant heat. In situations where the heat release is great such as a flammable or combustible liquid, a 2½" line or deluge gun could be used. If 2½" lines are used, it doubles the staffing requirement.

Pump operator: one firefighter must be assigned to operate the fire apparatus under the correct pressure to the attack, backup, and exposure lines, monitor the pressure changes caused by changing flows on each line, and ensure that water hammer doesn't endanger any of the hoseline crews. This firefighter also completes the hose hook-ups to the correct discharges and completes the water supply hookup to the correct intake. The pump operator can sometimes make the hydrant hookup alone if the engine is near a hydrant, but the hydrant spacing for moderate risk fires normally precludes this.

Water supply: either the first-due or second-due engine must establish a reliable water supply by connecting a large 5" "supply line" to a fire hydrant. Once the connection is made the fire hydrant is then turned on allowing water to flow from the water distribution system into the intake side of the pump on the engine. Timing is a critical factor in establishing a continuous water supply for the fire. The agency's engines carry 750 gallons of water. This provides about three and one-half minutes of water for the attack crews if one 1¾" hose line is flowing.

Safety Officer: one firefighter or officer is assigned to continuously monitor the scene for situations that could injure or kill firefighters. The Safety Officer monitors and evaluates changing fire conditions. The structural integrity of the building, including roof, floor, and wall assemblies, are some of the areas evaluated. The Safety Officer works in concert with the Incident Commander to maintain a safety plan during the incident.

Incident Command: one officer is assigned to remain outside the structure to coordinate the attack, maintain a constant evaluation of the scene and make changes as necessary, arrange for more resources, and monitor conditions that might jeopardize crew safety.

Tasks	**Number of Personnel**
Attack hoseline	2
Backup hoseline	2
Search and rescue	2
Ventilation / utility control	2
RIT Team	2
Pump operator	1
Safety officer	1
Command	1
TOTAL	13

Section 4.3 – Emergency Medical Critical Tasking

Critical tasking analysis of EMS responses is dependent on the type of call encountered. The standard response for the majority of EMS calls is one medic unit. One medic unit describes an ambulance that is equipped to provide advanced life support services and staffed with three personnel with at least one of them being a paramedic. The tasking involved with emergency medical responses includes diagnosis and treatment of the patient, patient information collection, and patient transport to a medical facility.

The emergency medical calls that are classified as priority one receive an engine company response with at least two personnel in addition to the medic unit. The purpose of an additional company on a priority one call is to provide sufficient resources to effectively manage and treat the patient. The guidelines for a priority one are: the patient is not breathing, has no pulse, is unconscious or unstable, or is a victim of a shooting, stabbing, or falls over six feet in height.

The standard response for a motor vehicle accident with entrapment is a medic unit and Rescue 9, the department's heavy rescue-engine. The heavy rescue will be staffed with 2-3 personnel depending on resources available that day. Critical tasking for motor vehicle accidents are:

Task	# Personnel
Incident command/safety	1
Patient treatment	3
Extrication	2
Total	6

Clearly, an additional engine company could be utilized at these types of scenes depending on the severity of the crash and the types of hazards that may be present.

In the analysis of historical data, certain call types dealing with EMS response dominate the percentage scale in comparison to others. The data provided is based on the reporting system established by the State of Ohio Department of Emergency Medical Services; which said data is reported to the state quarterly. While categories and call types of EMS responses could be categorized ad infinitum, the basis of this assessment utilizes the state's structure to maintain uniformity. The data analyzed is based on data from calendar years 2005, 2006, and 2007. The two main categories are non-trauma medical (NTM) and trauma/injury (TI). The data from the last three reporting years indicate that non-trauma medical calls account for three-fourths of the EMS calls while one-fourth are trauma/injury-related responses. These figures have remained constant over the three-year reporting period.

Year	Non-Trauma	Trauma
2005	75%	25%
2006	77%	23%
2007	77%	23%

Utilizing this same data, the non-trauma and trauma/injury responses are broken down into subcategories as reported to the State of Ohio. The subcategories of the non-trauma medical include:

- General Illness
- Cardiac (all inclusive, i.e. chest pains, cardiac arrest and other cardiac)
- Diabetic emergency
- Poisoning / overdose
- Obstetrics (all inclusive)
- Respiratory distress
- Seizure
- Stroke / CVA

Of the listed NTM subcategories, data analysis shows that the highest percentage of calls fall into the general illness, respiratory distress, and cardiac categories. The chart below reflects these subcategories and their percentages of total EMS responses for calendar years 2005, 2006, and 2007:

	2005	2006	2007
General Illness	28%	28%	28%
Respiratory distress	11%	11%	11%
Cardiac	10%	10%	9%

The subcategories for the trauma/injury category are:

- Trauma – auto accident
- Trauma – not auto accident
- Trauma – pedestrian/auto

The chart below reflects two subcategories and their percentages of total EMS responses for the calendar years 2005, 2006, and 2007:

	2005	2006	2007
Trauma – not auto accident	17.1%	17.6%	17.8%
Trauma – auto accident	7%	6%	7%

The address data analyzed consisted of the specific addresses corresponding with EMS responses for calendar years 2005, 2006, and 2007. The following addresses had a recurring domination in the realm of EMS responses for the stated calendar years:

- 510 Buckeye Avenue
- 705 Fulton Street
- 121 West Poplar Street
- 333 East North Street

While the percentages of total EMS responses for each address is low in relation to other addresses, the data spikes on these particular locations. Property use of each location is indicative of the older population within the city. Each property listed is either a residential location for older citizens or an assisted living facility with nursing staff for our older citizens.

By virtue of this, it stands to reason that calls for EMS service in direct correlation to the NTM subcategories stated earlier would spike at these specific addresses. While the single data for each location never went higher than 2½% of total EMS responses, collectively, these locations in 2005, 2006, and 2007 accounted for 6.6%, 7%, and 5.6% respectively of the total EMS responses for the agency.

Even though this report has concentrated on demand for services within the city, it is worth noting the influence of the township areas serviced by the agency. Fairhaven County Home and Dorothy Love Retirement Community are both located in Clinton Township. The Dorothy Love complex includes the nursing facility, apartment building, and independent living areas. Both Fairhaven and Dorothy Love have high demand for EMS services.

In 2005, 2006, and 2007, the Clinton Township locations accounted for 10%, 11.6%, and 12.7% respectively of the total EMS responses for the agency. This type of demand is also an influencing factor on simultaneous multiple calls and call stacking.

Considering the high percentage of total emergency responses as EMS related, the consideration of the EMS risk potential within the city is significant. While locations and call types are varied, the EMS demand on the agency continues to be the highest demand.

Section 4.4 – Non-fire critical tasking
The critical tasking for non-fire risk is much like those related to fire risk. Because the same resources are used to respond to many of the non-fire risks, the response, apparatus, and personnel are the same. The EMS risk is certainly a perfect example of this response.

The agency also does an excellent job monitoring the other non-fire risks that occur throughout the community. For example, whenever a special event activity is planned in the community, planning is completed at the fire department administration level to determine if fire safety inspections are needed and also to determine if special hazards exist that would require fire or EMS personnel to be detailed to the activity. Staffing for any type of special event is based not only on the risk but on the amount of people expected to participate.

In addition, the agency has primary responsibility for emergency management operations for the entire city. This allows the agency to monitor and implement the concepts related to the City's emergency operations plan, NIMS, and the NRP.

SECTION 5 – Service Level Objectives
A community expects a certain level of service from their emergency service organization. A responsible agency will first examine the level of risk in the community; then they will determine what services can be provided in the areas of fire, EMS, and special non-fire risk responses. The Standard of Coverage policy is the final statement and the foundation of this service. A community accepts a Standard of Coverage and then works along with their professional staff to maintain that level of service.

The Standard of Coverage is based on several basic principles. Once the service commitment is determined by policy, the resources must be distributed in a way that maximizes the efficiency of each unit. The distribution of resources includes both equipment and personnel. In the fire service, distribution of resources has been very traditional. Fire response units are normally placed in fixed locations (fire stations). Once "fixed" locations are established, they are difficult to move or relocate when the community expands and develops. Thus, the fire service professionals must continuously monitor and focus on the efficient distribution of all its resources, both equipment and personnel.

Because most of the resources are delivered from fixed locations, the concentration of resources is equally important to maintaining a community standard of coverage. An agency must deploy resources in a manner which provides depth and redundancy normally referred to as concentration. This additional depth and concentration of resources allows a community to manage busy periods of service, areas of increased activity, and the ability to provide additional resources to maximum risk properties. This concentration of resources was first discussed and analyzed in the Fire Station Location Analysis conducted in 1994 (Crosley). During that analysis, it was revealed that the time for the second-due engine company to arrive on the scene of an emergency was critical in delivering sufficient resources to provide a sufficient firefighting force to deal with the emergency.

Section 5.1 – Distribution criteria
Distribution of response resources defines the specific geographical location for each resource. Resources change locations at any one point in time. These estimates are based on what is considered first due or closest resources under normal response situations.

Fire station location is driven by a number of factors; often times the least of which is delivery of quality service. Stations are often located where the City owns land and where they will provide the least disruption for residents. Fire Station #1 located at 222 West Poplar Street is the central fire station and also serves as the administrative headquarters for the department. While it was built on land owned by the City, it was sited as the best location in the Fire Station Location Analysis (Crosley 1994). Fire Station #2 is located at 411 South Vandemark Road and was built on land owned by the City and in conjunction with the City Service Center project in 1980-81. The station was sited without the benefit of a location analysis, but has proven to be a good location due to the industrial and commercial growth west of Interstate 75.

Over the past 15 years, the City has annexed significant areas of land to the southwest and to the north and northeast area. The land in the southwest area is zoned industrial and remains largely undeveloped. The land annexed to the north and northeast has been developed as a residential area and additional annexed land to the north is just beginning to be developed at the time of this analysis. As a result of this annexed area, the city boundaries have grown and the first due area for each of the existing fire stations has expanded. For Station #1, the annexed area has significantly increased the road miles and square miles area of its first due district.

STATION	AREA	ROAD MILES	CALLS FOR SERVICE	DWELLING UNITS
1	61%	74%	78%	76%
2	39%	26%	22%	24%

The above chart represents data that identifies the city's distribution of resources. Clearly, Fire Station #1 is responsible for almost twice the area and population of Fire Station #2.

Distribution strives for an equitable level of outcome—everyone in the community is within the same distance range from a fire station. However, many years ago in built-up urban areas, government leaders felt that distribution of resources should be based on risk. For example, an area of low risk could have fire company travel times far greater than those of a high-risk, high-consequence area. But in modern times, aggressive EMS response times based on successful intervention in cardiac cases drive distribution to be the same community wide; which negates distribution based on risk. In other words, the agency needs to cover all of the "dirt" with the same surface delivery goal. Figure 2 on the next page is a map that identifies the area of the city that currently can be reached in four, five, and six-minute travel times from each of the city's two fire stations.

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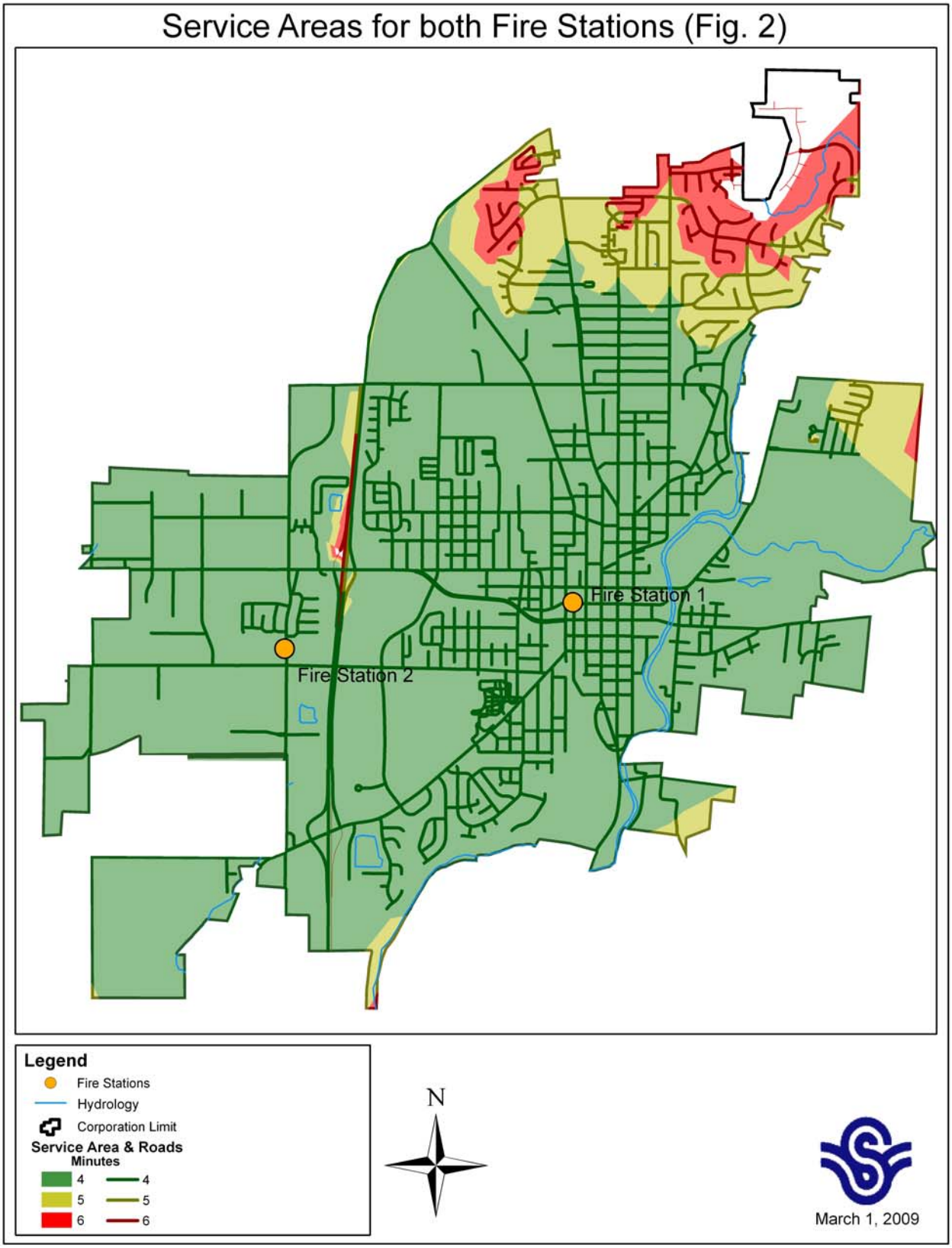
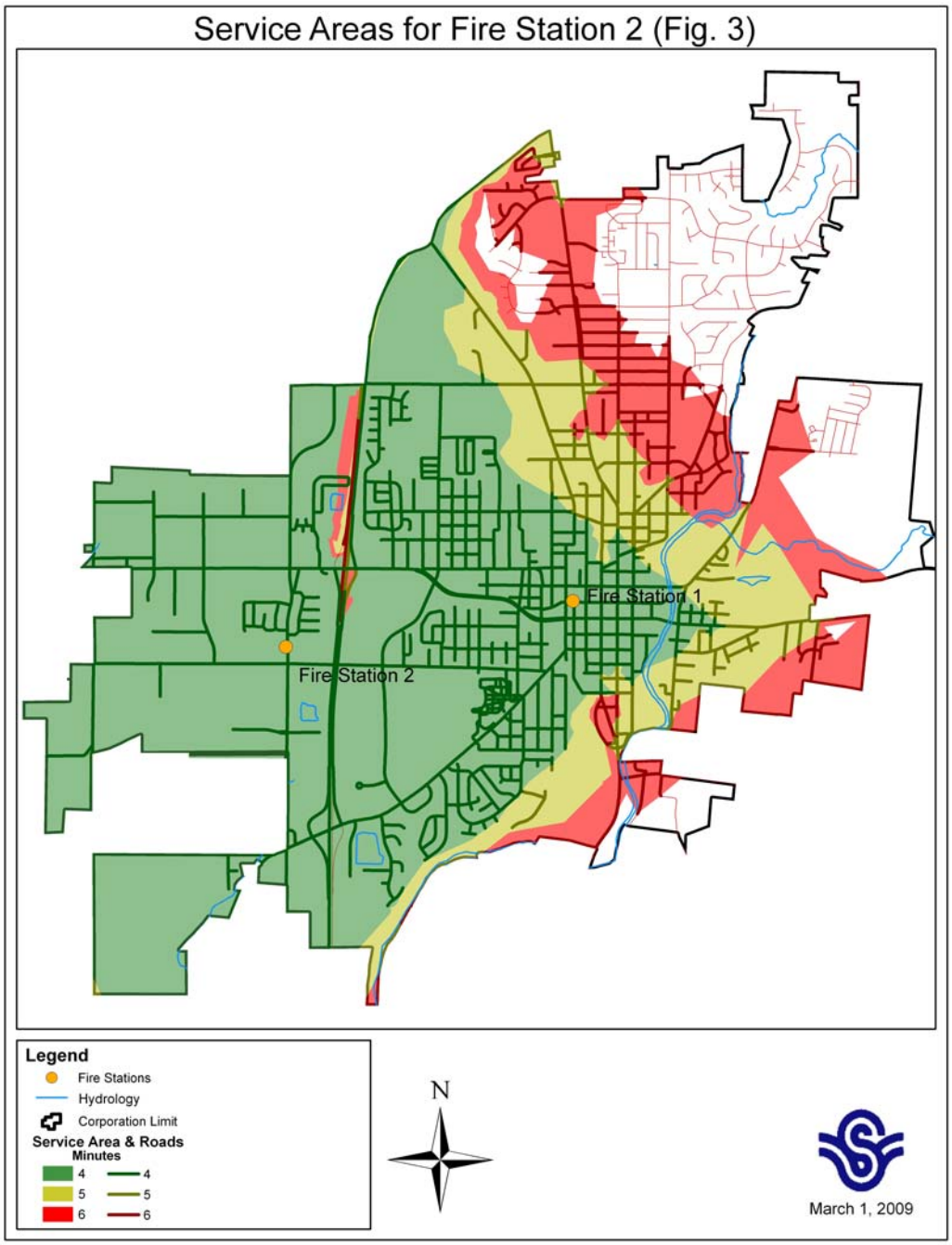


Section 5.2 – Concentration

Concentration is the spacing of multiple resources arranged close enough together so that an initial "effective response force" (ERF) can be assembled on scene within acceptable time frames. An initial ERF is that which will most likely stop the escalation of the emergency, be it fire or increased illness

or injury in the case of a medical emergency. The ERF is a result of the critical task analysis previously conducted for fire and non-fire emergencies. While distribution was about the first unit arrival, concentration is about having enough of the right equipment and staff arriving in a timeframe that allows them to be effective servicing the situation.

The easiest method by which to see how concentration is affected is to exam second-due company road miles. The largest concentration of risk is the downtown area in sector 110. Engine 1, located at Station #1, is first due. Engine 4, located at Station #2, is second due. Sector 110 is within a four-minute travel time of Station #2, making it possible to deliver an initial alarm assignment within four minutes. However, Sector 301 (Arrowhead Drive area) has a concentration of maximum risk properties. Station #1 is first due, but the second due engine from Station #2 is well beyond a six-minute travel time pushing almost eight minutes. This is graphically illustrated in figure 3.



Service concentrations often pull on distribution of resources making evaluating these impacts on service difficult. There is no one solution to this complex decision. If this report indicates the need for an additional station, is it sited to improve concentration deficiencies or distribution deficiencies? Is it geographically possible to site the station to resolve both issues?

Section 5.3 – Standards / Criteria

The delivery of fire protection services has long been considered a function of local government and while local elected officials wish to maintain that control, they also wish to know if there are national standards the agency are meeting. In this case, there are several standards or grading criteria by which to make that comparison. ISO conducts field evaluations in an effort to rate communities and their relative ability to provide fire protection. This evaluation is non-binding but does allow ISO to determine and publish the Public Fire Protection Classification. The classification is on a scale of 1 through 10, with 1 being the best and 10 indicating no recognized fire department. Sidney currently has a rating of 4. The lower the score the better the rating. This translates into lower insurance premiums for the business owner and homeowner and makes the community more attractive from an insurance risk prospective.

One of the criteria used by ISO is that an engine company should be within one and one-half miles of any built-upon area in the city. Although somewhat antiquated, this method of evaluation is still used today.

The most influential standard is NFPA 1710. NFPA 1710 is the standard for *Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*. The standard outlines requirements that address functions and objectives of fire department emergency service delivery, response capabilities, and resources. The NFPA standard is non-binding, but is recognized as an ideal by which all jurisdictions should strive to achieve.

Based on published criteria, the department should meet the following response time objectives. For 90% of all incidents, the first-due unit shall arrive within six minutes, thirty seconds total reflex time. This response objective includes ninety seconds for call processing, sixty seconds for turnout, and two hundred and forty seconds (4 minutes) for travel time. The CFAI takes the NFPA goal and further breaks down the response time goals by community type. Urban settings have the four minute travel time standard, suburban communities are set at five minute travel time, and the rural area benchmark is ten minutes. Sidney is considered a suburban community in the risk assessment process. The four-minute travel time is also the benchmark for EMS delivery as listed in NFPA 1710.

The agency utilized data generated during the reporting period for the purpose of examining actual response performance. The data set included 1,486 fire responses that were compared against the department’s performance goals related to travel and dispatch time. The study only included those calls where actual response times were recorded. The study was therefore limited to measurable data. EMS calls were excluded from the data set. EMS response does not require the donning of PPE by personnel prior to leaving the station. Medic units are smaller and easier to maneuver vehicles than fire apparatus. These factors lead to the reasonable conclusion that EMS response time data would generally be much faster than fire response. Therefore, the data set used would involve “the worst case scenario.”

The agency's performance against the response criteria is listed below:

Element	Target	Percentage
Call processing	1:30	63%
Turnout time	1:00	10%
Travel time (1st arriving unit)	5:00	78%

Breaking down the travel time by sectors, it is found that the agency's travel times are as follows:

Element	Sectors	Target	Percentage
Travel time	101-124	5:00	93%
Travel time	201-217	5:00	88%
Travel time	300-313	5:00	55%

The current performance level for travel time is five minutes. The current performance gap indicates that travel times to the north end of the city are not as fast as other areas of the city, and by a fairly large margin. There are several factors that can influence the performance gap. In the north end of the city there is a performance gap of 35%. There are several factors that can influence the performance gap. The lack of a north end fire station, apparatus deployment, training assignments, stacked calls, and human performance. The information contained in the sector analysis would indicate the travel distance in the 300-313 sectors to be a primary causative factor. This is further demonstrated analyzing the agency's performance against the proposed performance benchmark of 7-minute 30-second total reflex time in the chart below.

Total Reflex Time

Sectors	Target	Percentage
101-124	7:30	87%
201-217	7:30	80%
301-313	7:30	51%

The agency is close to meeting the performance goal in the 100 and 200 sectors of the city. However, in the 300 sectors, the results are far below the performance goal.

90th Percentile Performance

When the agency examines response for the reporting period within the 90th percentile, the following times were identified.

Element	Measure	Percentage
Call processing	2:18	90th
Turnout time	1:39	90th
Five-minute	5:30	90th

Section 5.4 – Standard of Cover Policy Statement

Based on the assessed risk, the City of Sidney is establishing a standard for the delivery of fire and EMS services. These services are based on many factors and have served to develop what is considered as an acceptable level of risk.

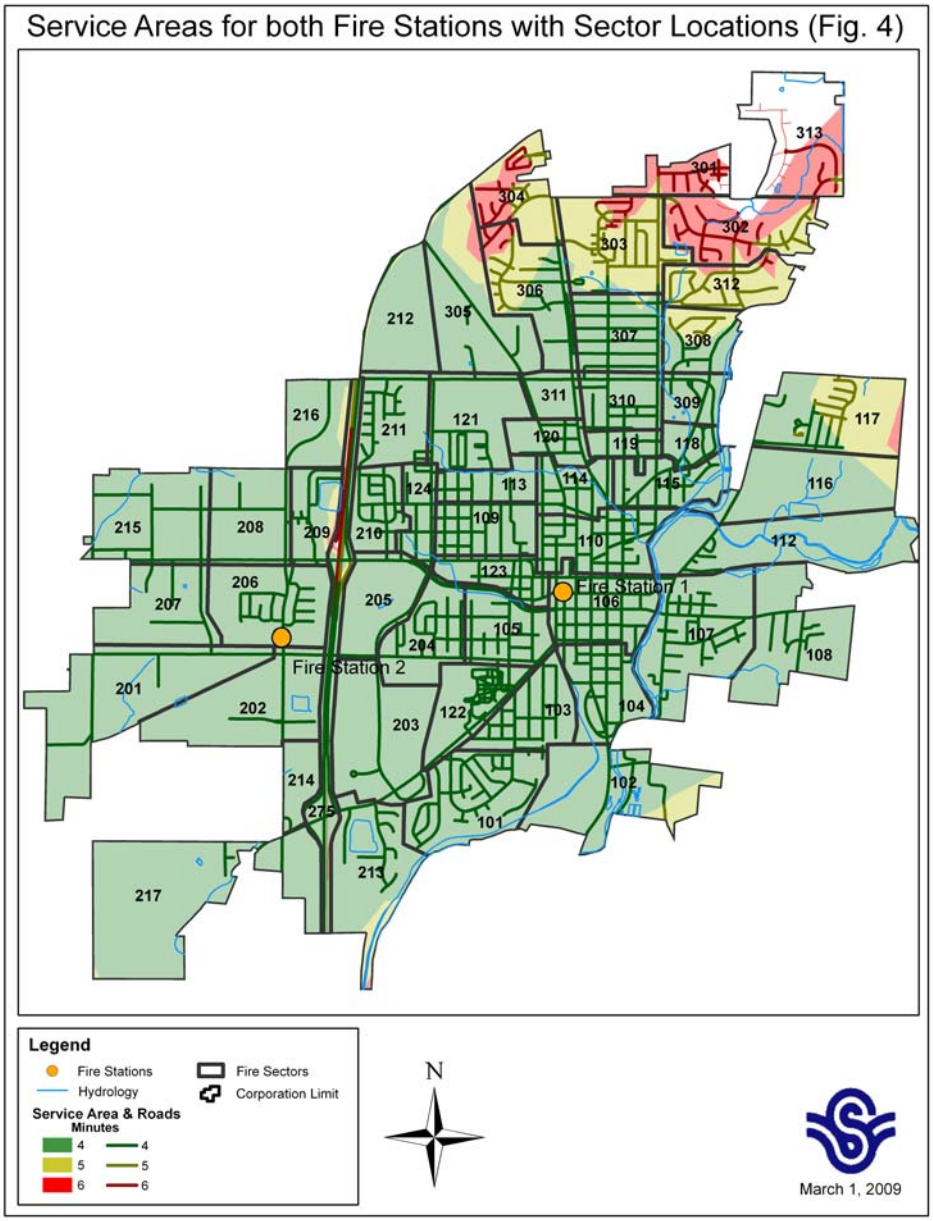
According to the International City and County Managers Association (ICMA), the City of Sidney's demographics deem that it falls within the description of a suburban community. This is also consistent with the United States Homeland Security, Federal Emergency Management Agency (FEMA) guidelines. Earlier in this review, a concept of total reflex time was introduced. Total reflex

time encompasses call processing, turnout time, and travel time. Thus, the intent is to develop a performance standard that is objective (measurable), goal-oriented, and strategic in nature.
As a result of this review of the agency's procedures, levels of risk, deployment criteria and critical tasking, the recommended community-based total reflex time standard policy for the Sidney Department of Fire & Emergency Services is:

For 90% of all incidents, the first due fire department unit will arrive within seven minutes, thirty seconds total reflex time.

For fire incidents, the remaining initial alarm assignment will arrive within ten minutes, thirty seconds, 90% of the time.

Section 5.5 - Influencing factors
When looking at demand zones 300 through 311, it can be seen that approximately 20% of the north end area is beyond five minutes travel from Fire Station #1. See figure 4. It is important to discuss, however, what other factors influence the response time issue.



With increasing frequency, the agency deals with multiple calls. A typical scenario is as follows: an EMS call is received requesting an ambulance at Walmart. The medic unit from Station #2 would respond. Shortly thereafter, a second call is received requesting an ambulance at NK Parts on South Kuther Road. The medic unit from Station #1 would then respond, even though the call is located in Station #2's district. The victim will have to wait on the medic from Station #1, which is a much longer travel time. Obviously, this will influence the first-due response time to that sector. It can also be more complex such as two EMS calls and two fires within a fifteen minute time-span or three EMS calls at the same time, leaving no units available to immediately respond to a fourth EMS call or a separate fire call. When any of these types of situations occur, it is referred to as "call stacking." With call stacking, the call waits until a unit can free themselves to respond, or off-duty fire personnel are recalled to handle the emergency, or in some cases, mutual aid is requested from an outside agency. Regardless of the solution, the emergency incident must wait until emergency units are available to respond lengthening normal response times. In 2006, there were 150 instances of simultaneous multiple calls and in 2007, 308 instances.

During the three-year reporting period, the agency experienced multiple instances of responding to fires short-handed. There were 31 incidents in which the second-due engine was unable to respond and 48 incidents in which the ladder was unable to respond. There are also many incidents in which the second-due engine and ladder company had a delayed response, but those numbers are not available in the data set.

Putting it all together

This report has provided valuable insight into the emergency response system for the community. Several maximum risk properties have been identified in the downtown area and in the west end along State Route 47. Areas in the far north end along Wapakoneta Avenue and Arrowhead Drive contain significant risk and maximum risk properties respectively.

Fire Station #1 and #2 are near the downtown and west end areas allowing for a timely response. However, resources from Fire Station #1 are not located close enough for a timely response to the north end areas mentioned especially considering the risk involved. From a distribution perspective, a station needs to be added to serve the north/northeast area of the city. This will reduce travel times to the area and improve the second-due response times for the area as well as the Riverbend area. The other advantage with adding another station is that it will improve reliability and will reduce (improve) response times because of availability. Adding another engine and medic company will improve response availability/times city-wide.

To illustrate, if a third station is added, a request for an ambulance in the area of Russell Road will get the medic unit from the north end station. If another call for an ambulance is received in the downtown area, then the medic unit from Station #1 would respond. Both responses will be efficient and within policy goals. If the third station is not added, then the Station #1 medic will be on Russell Road and the medic from Station #2 on Vandemark Road will need to respond to the downtown area. It is basically a systems approach; adding another station with sufficient resources will strengthen the system. It has also been demonstrated that the system can be strengthened by improving turnout time and call processing time.

With two current fire stations, much of the city is covered within four-minute travel time. Some of the areas north of Parkwood Street fall into the five-minute travel time. This would include parts of West Parkwood Street, East Parkwood Street-Wells Drive area, and North Main Avenue-Lunar Drive area. The area of West Hoewisher Road-Foxcross Drive and East Hoewisher Road fall into the six-minute travel area. The newer areas of Bridlewood Drive, Summerfield Trail, and Ridgeview Drive require travel times greater than six minutes. The only history to Sector 313, which is the Bridlewood

Drive area, has a 7-minute, 18-second travel time. Any further development to the north and recently annexed area will push the travel time to eight minutes and beyond.

One purpose of this report was to determine if the performance of the agency was consistent throughout the city. The performance was evaluated against standard criteria. In this case, the criteria is that which has been established by the Commission on Fire Accreditation International (CFAI). CFAI was an outgrowth of a joint project of the International Association of Fire Chiefs (IAFC) and the International City/County Managers Association (ICMA). The criteria utilized by CFAI is based on national standards such as NFPA, ISO, and AHA, along with nationally recognized best practices.

The risk assessment and data analysis has determined that there is a performance gap. The area located north of Russell Road falls outside the performance standard established by the agency, which indicates improvements are needed in the city's emergency services delivery. This gap has been determined to be primarily a distribution issue, indicating the need for a fire station in the north end of the city.

Adding another fire station will obviously require additional staffing. The additional on-duty staffing will help the agency meet the required number of personnel needed for a standard fire attack as outlined in the firefighting critical task analysis. This would also assist the agency in improving staffing levels needed to respond to significant and maximum risk properties. In the critical tasking identified for technical rescue, the additional resources will help meet those requirements or in some cases permit the initiation of rescue procedures while awaiting additional resources. This improvement will help the agency improve effectiveness and help make a safer environment both for the public and for the firefighters. In reviewing the high number of multiple incidents, this will also improve the ability to meet that demand and reduce the number of stacked calls currently being handled. This would result in more efficient and effective service to the public.

Section 5.6 - Fire Station Location Analysis

The project has provided data that indicates improvements are needed in the city's emergency services delivery system. An additional fire station in the north end area will eliminate the performance gap in the distribution of resources city wide. The next step is to analyze and select a location to maximize the resources for the agency. Determining the location to build a fire station involves several factors. Some of those factors include: travel times, roadway accessibility, first-due area impact, neighborhood type, and availability of land.

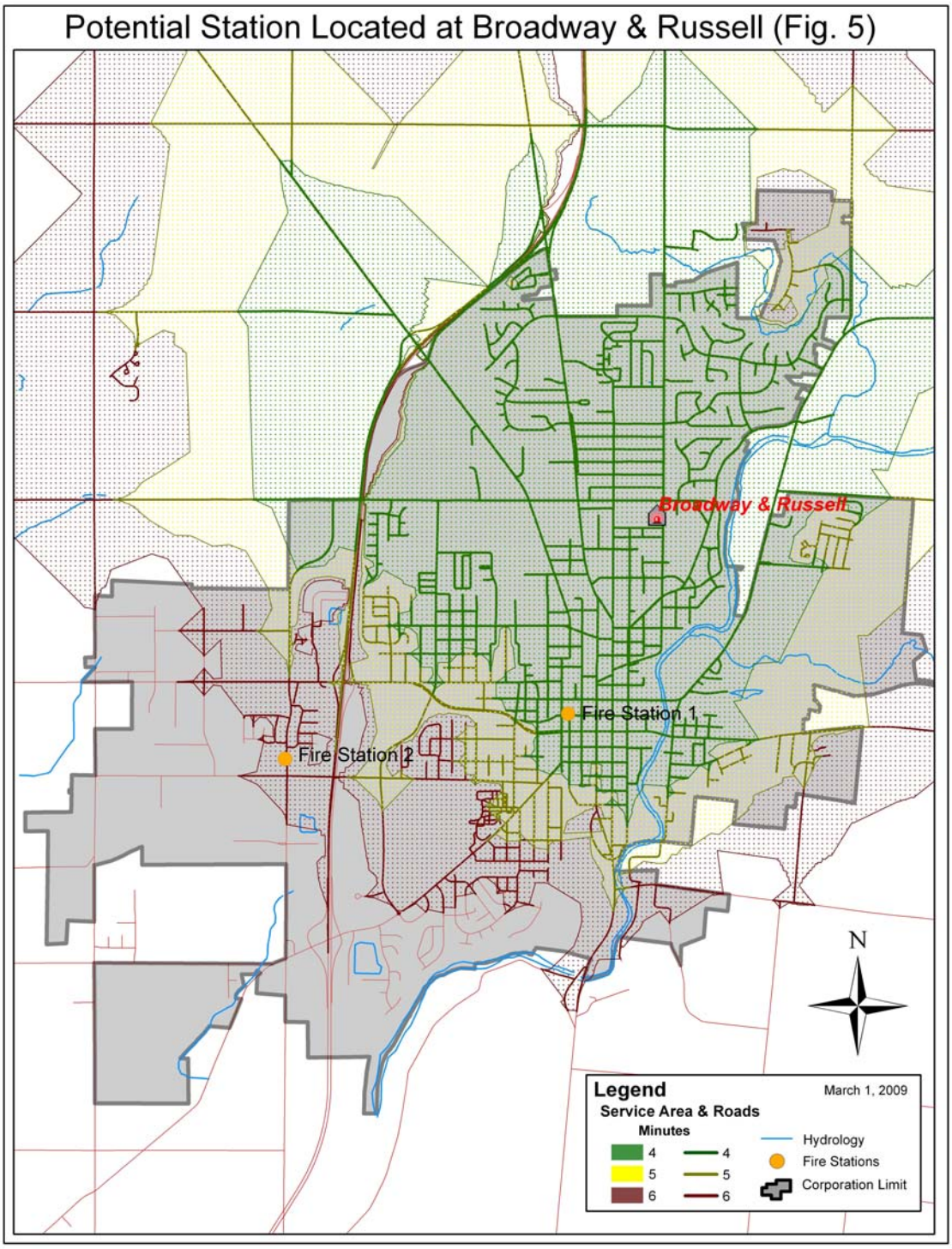
In 2006, the city began utilizing GIS technology. With this information and ArcGIS9 Fire Analysis Tool Software®, the agency was able to develop planning maps with a fire station placed in several different locations. The utilization of these planning maps was a crucial component in analyzing potential sites. The ArcGIS software produces easy-to-read maps which are included throughout this report. The following areas were examined as potential fire station locations:

- Broadway Avenue/Russell Road
- Broadway Avenue/Parkwood Street
- Broadway Avenue/Hoewisher Road
- Wapakoneta Avenue/Hoewisher Road
- East Parkwood Street/Hoewisher Road

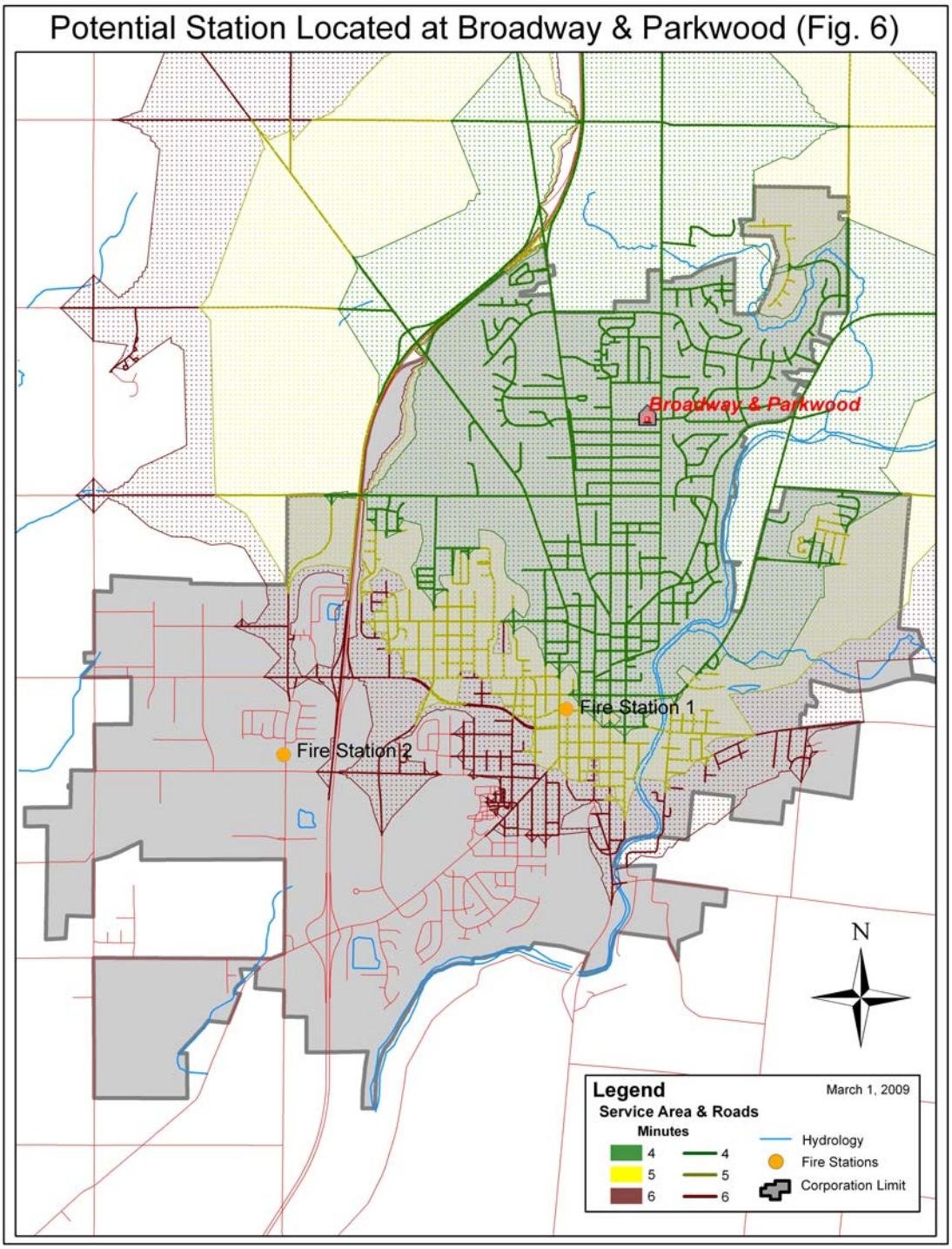
Note: Full-size maps of the following analysis are available in the appendices.

Analysis

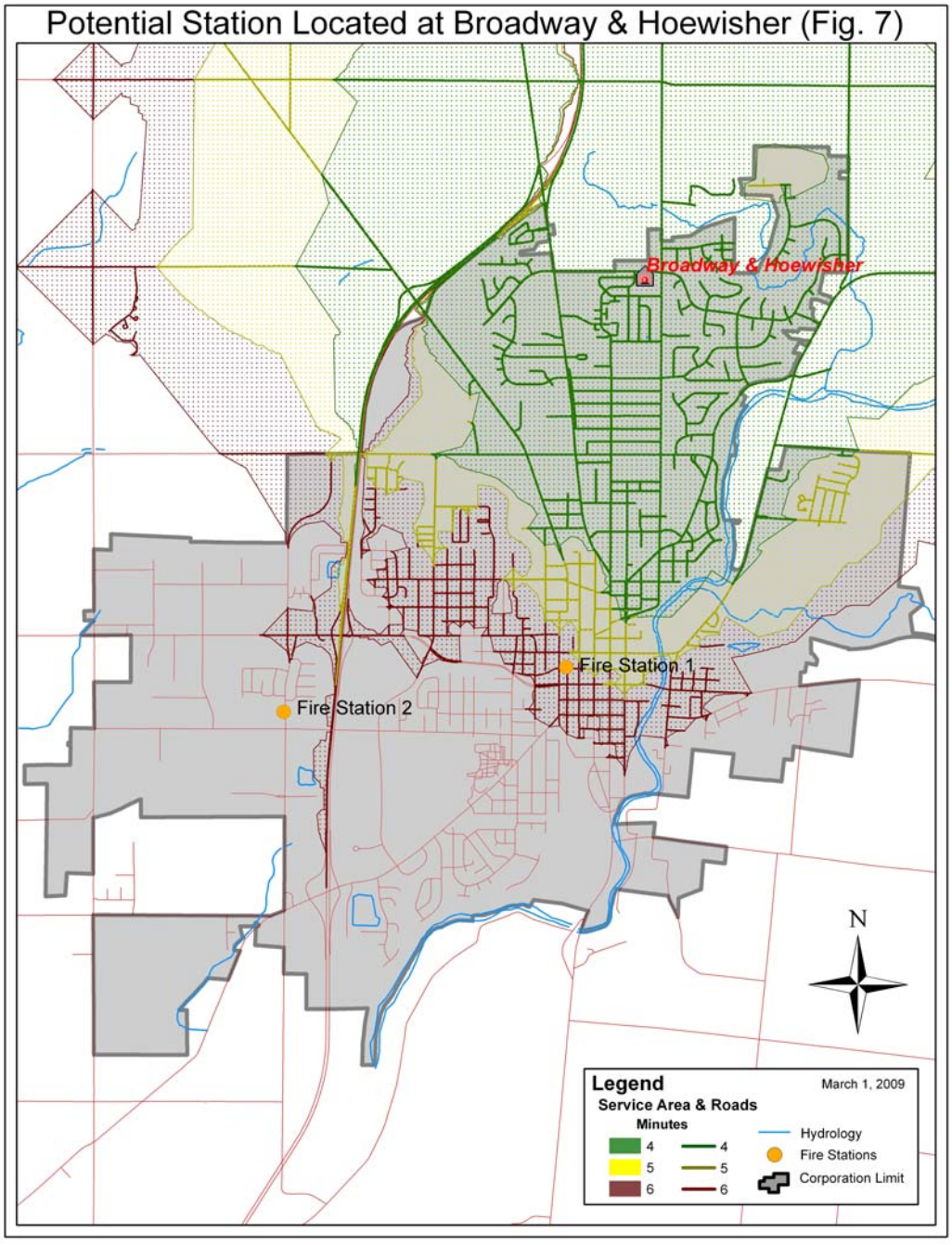
Broadway Avenue/Russell Road. This location significantly improves the ERF and concentration of resources. Four-minute travel times for the second/third-due company encompass all of the downtown area and much of Green Tree Hills. Almost all of the north end area improves to a four-minute or less travel time. This would indicate that Sectors 301, 302, 303, 304, 312, 313, parts of 306 and parts of 308 will realize significant improvement. However, some of the Bridlewood Drive and Ridgeview Drive area are still in the five-minute and six-minute first-due area. The site has good access to north-south areas (Broadway Avenue and Russell Road) and east-west areas (Russell Road). There are some lots in the area which may be available for purchase (see map in figure 5).



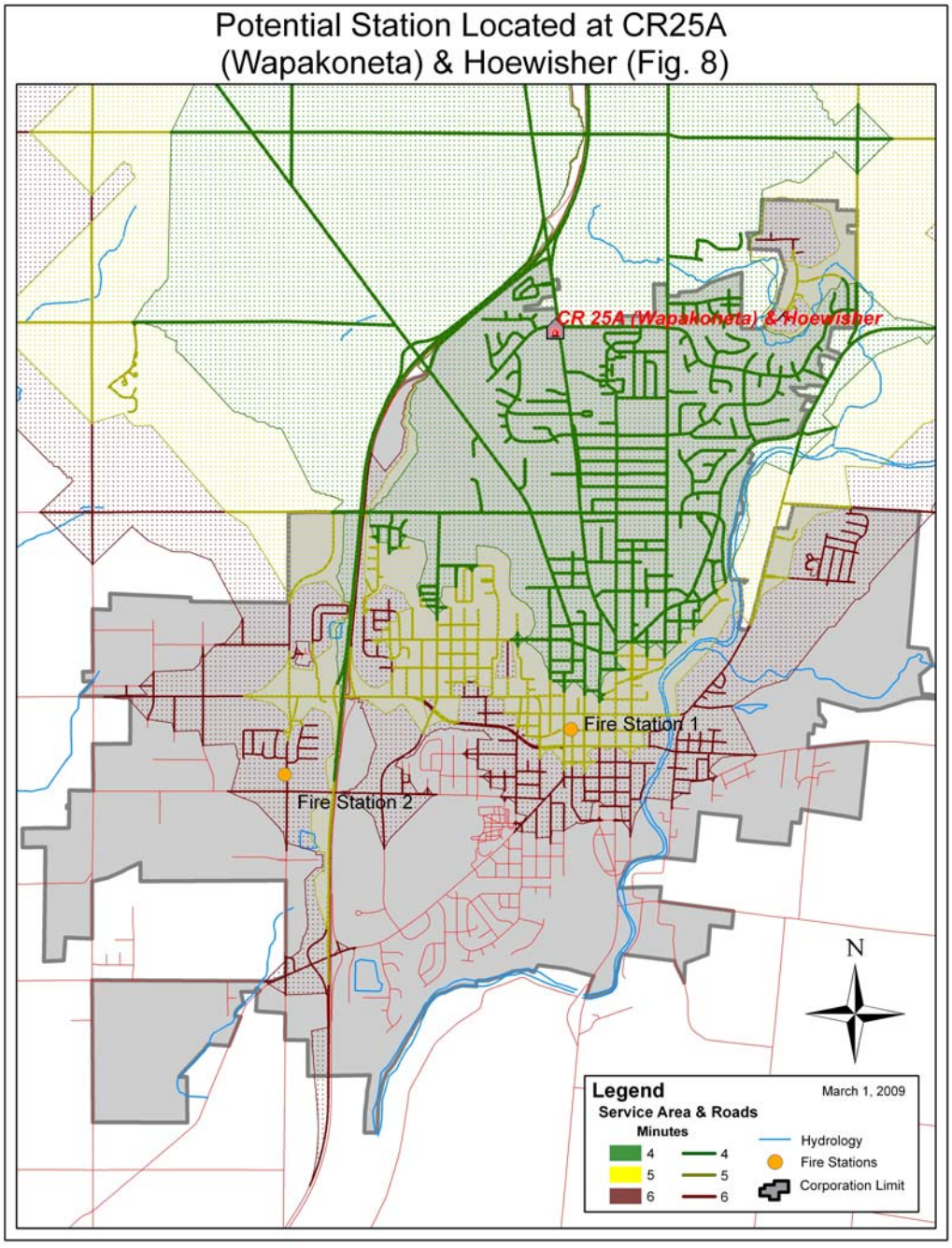
Broadway Avenue/Parkwood Street. This location provides a four-minute travel time to most of the north end area. It improves the Bridlewood Drive and Ridgeview Drive areas placing those areas within a five-minute travel time of the station. Conversely, while some of the downtown area would fall within the four-minute travel time for the second/third-due company, some of the downtown area and area immediately to the west of downtown would fall within the five-minute travel time area. This site has good access to the north-south areas via Broadway Avenue and Parkwood Street provides a viable east-west connection. There is some land available in the area. (see figure 6)



Broadway Avenue/Hoewisher Road. This location significantly improves the first-due response time for 95% of the north end area. Bridlewood Drive, Summerfield Trail, and Sidney-Freyburg Road would all fall within the four-minute travel time along with all of the Eagle Glen and Windsor Parke areas. Ridgeview Drive would fall just outside four minutes into the five-minute area and additional areas projected to be annexed in the future would fall into the five-minute travel time area. The second/third-due company response changes proportionately. The four-minute travel time area would extend to the Canal Street/Main Street area from this fire station location. Most of the downtown area would then fall into the five-minute travel time and the remainder of the area and west end would be in the six-minute travel time area. Good access is available to the north-south areas via Broadway Avenue and Hoewisher Road provides a solid east-west connector. There is land available in the area for a fire station facility. (see figure 7)



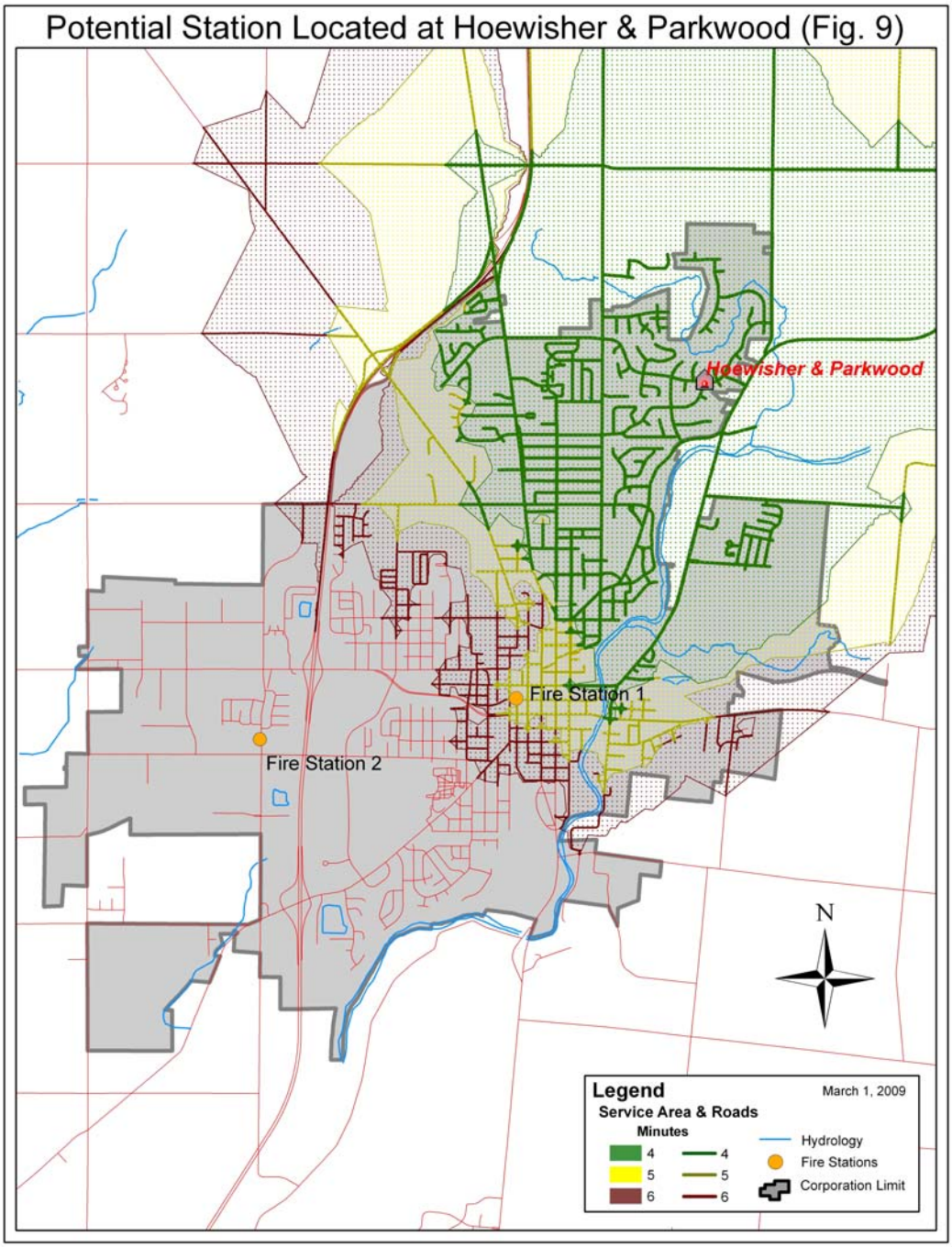
Wapakoneta Avenue/Hoewisher Road. This area provides the least improvement to the north end area as a whole. While the majority of the area would fall within a four-minute travel time, the Bridlewood Drive area would fall into the five-minute area and parts of Summerfield Trail and Ridgeview Drive and future street expansion would fall into the six-minute travel time area. All of the downtown area would into the five-minute travel time for the second/third-due company. (see figure 8)



This location provides good access to the north and south via Wapakoneta Avenue and to the east via Hoewisher Road. Until Hoewisher Road is connected to State Route 29 (St. Marys Avenue) and beyond, response to the west and southwest areas would be impaired from this location. There is land available in the area for a fire station facility.

East Parkwood Street/Hoewisher Road. This location drastically improves the travel times to the north end area (within four minutes) except some parts of Windsor Parke. The travel time to the Riverbend area is also improved to four minutes along with projected future annexed areas to the north. However, the downtown area falls within five- and six-minute travel times for the second/ third-due company. The hospital and all of the west end area fall beyond the six-minute travel time.

The accessibility is good to the east and west via Hoewisher Road and to access State Route 47. However, accessibility is poor for a quick north-south response. There are no lots available in the area for a fire station facility. (see figure 9)



The information contained in the location analysis is displayed graphically in figure 10.

	First-Due impact	Second-Due impact	Accessibility	Land	Total
Broadway/Hoewisher	4	3	3	3	13
Broadway/Parkwood	3	3	3	2	11
Hoewisher/Parkwood	3	2	1	1	7
Hoewisher/Wapak	1	3	1	2	7
Broadway/Russell	1	4	3	2	10

Figure 10

*1=poor 2=fair 3=good 4=excellent

As a result of the analysis, the two best locations at this time are the areas of Broadway Avenue/Hoewisher Road and Broadway Avenue/Parkwood Street. Obtaining lands at these exact locations may not be possible, therefore the goal is to identify areas and attempt to locate a facility as close to these areas as possible. Both locations are near residential neighborhoods. This will undoubtedly create angst from the citizens in the area. Locating a fire station is difficult at best in a residential area because the public will feel the emergency response activity will be intrusive and a distraction to their daily lives.

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