



# Comprehensive Study for the City of South Beloit Fire & Emergency Medical Services



August 4, 2025

Submitted By:



## Contents

Executive Summary .....	4
Introduction .....	5
Gratitude to the City of South Beloit .....	6
Study Methodology .....	6
Quantitative .....	6
Qualitative .....	6
GIS Analytics .....	7
Governance .....	7
City of South Beloit, Illinois .....	7
South Beloit Fire Department .....	8
City of Beloit, Wisconsin Fire Department .....	9
Town of Beloit Wisconsin Fire Department .....	9
Rockton Fire Protection District, Illinois .....	10
Harlem Roscoe Fire Protection District .....	10
Background Information .....	11
Types of Firefighters .....	11
Types of Emergency Medical Technicians .....	12
Shortage of Firefighters in our Nation .....	13
Firescope Mid-America Report .....	13
Contract for Staffing in the South Beloit Fire Station. ....	14
Findings .....	15
Fire Department Staffing Decline .....	15
IGA - Town of Beloit to staff the South Beloit Fire Station .....	16
Interviews with the Neighboring Fire Protection Districts in Illinois .....	19
Harlem Roscoe Fire Protection District .....	19
Rockton Fire Protection District .....	20
Analysis .....	21
Six Fire Station Response Model .....	22
Insurance Service Office .....	23
9-1-1 Calls and Dispatch Channel .....	27
Policies, Procedures and Mandatory Training .....	28



Future Considerations .....	28
Good, Better, Best Response Model .....	28
Six Fire Station Response Model .....	29
Insurance Service Office (ISO) Consideration .....	30
Policies and Procedures .....	31
Dispatch Considerations .....	32
Future Consideration for Staffing Partners .....	32
Appendix A – FireScope Mid-America .....	34
Appendix B– Resolution Number 6511 .....	59
.....	60
Appendix C – Insurance Service Office Report .....	70

#### List of Illustrations

Illustration 1: Map of Winnebago County Illinois .....	7
Illustration 2: South Beloit Fire Station (Source Facebook) .....	8
Illustration 3: Map of the City South Beloit (Source- FireCares) .....	8
Illustration 4: Map of the City of Beloit (Source FireCares).....	9
Illustration 5: Map of the Town of Beloit (Source FireCares).....	9
Illustration 6: Rockton Fire Station (Source Rockton FPD Website) .....	10
Illustration 7: Harlem Roscoe 3 Fire Stations (Source Harlem Roscoe FPD Website) .....	10
Illustration 8: Fire Stations surrounding South Beloit (Source ESRI ArcGIS) .....	22
Illustration 9: Chief Pease's Six Fire Station Response Model (Source ESRI ArcGIS).....	23
Illustration 10:Illustration Source-IAFF-NFPA 1710 Implémentation Guide (2002) .....	30

#### List of Charts

Chart 1: South Beloit Monthly Incidents (Town of Beloit Newsletter) .....	8
Chart 2: Listing of Countrywide and Illinois ISO classifications in 2023 .....	26

#### List of Tables

Table 1: ISO Points allowed for the City of South Beloit .....	26
--	----

## Executive Summary

The Illinois Fire Chiefs Association (IFCA) conducted a comprehensive study to evaluate the fire and emergency medical services (EMS) in South Beloit. This report reviews the Intergovernmental Agreement (IGA) between the City of South Beloit and the Town of Beloit, Wisconsin, and assesses alternative service providers and response models. The study employed both quantitative and qualitative methodologies, including statistical analysis, data validation, observations, and in-depth interviews with stakeholders.

Key findings highlight the challenges faced by the South Beloit Fire Department in recruiting and retaining personnel, consistent with national trends. Despite efforts to implement various solutions, interest in firefighting careers remained limited, resulting in unreliable staffing at the South Beloit fire station. The City of South Beloit sought assistance from nearby fire departments in both Illinois and Wisconsin, ultimately establishing an intergovernmental agreement with the Town of Beloit to provide staffing for the South Beloit fire station.

The report recommends several actions for the City of South Beloit:

1. **Utilize the current Intergovernmental Agreement:** Deploy an Advanced Life Support (ALS) Engine as the primary suppression vehicle when staffing levels allow, as it offers the most effective response to emergency incidents in the South Beloit community.
2. **Maintain comprehensive policies and procedures:** Ensure safety, legal compliance, training, and community trust, even when using contracted staff. Municipalities have the legal requirement to adhere to mandatory laws regardless of their staffing model (volunteer, Part or full time, and or contracted). The City of South Beloit should ensure the proper maintenance of its policies, procedures, and records. It is advisable to engage a qualified individual to oversee these responsibilities.
3. **Implement the six-fire station concept:** Consolidate with all Beloit agencies to implement Chief Pease's six fire station response model including all agencies operating on a single fire dispatch channel to enhance safety and operational efficiency. Consider moving 9-1-1 calls to the same Public Safety Answering Point (PSAP) center as the two other Beloit communities to improve dispatch (and response) times. In an emergency, every second can mean the difference between life and death.
4. **Maintain a favorable ISO rating:** Ensure sufficient apparatus and personnel responding to and operating at emergency incidents to avoid a poorer ISO rating.



The report provides detailed insights and recommendations to enhance the fire and emergency medical services in South Beloit, improving service delivery and community impact.

## Introduction

The safety and welfare of any community are fundamentally supported by access to dependable and effective emergencies, especially fire protection. The City of South Beloit, Illinois, has entered into an agreement for these services with the Town of Beloit, Wisconsin, and its Fire Department. Comprehensive details of this arrangement are outlined in Resolution #6511, which encompasses the Intergovernmental Agreement. The Illinois Fire Chiefs Association (IFCA) has been commissioned to review the service agreement (Resolution #6511) concerning firefighting and emergency medical services between the Town of Beloit, Wisconsin and the City of South Beloit, Illinois. The IFCA Consulting team recognizes that the evaluation of such agreements is critical to ensuring alignment among all parties, safeguarding their interests, and clarifying their respective rights and responsibilities—thereby fostering a more successful partnership.

During our engagement, the IFCA Consulting team conducted a comprehensive analysis of the intergovernmental agreement, with emphasis on the following key areas:

- Comprehension of Terms and Conditions: Contracts establish the obligations, rights, and expectations of all parties. A thorough review ensures mutual understanding of these responsibilities.
- Risk Identification: Certain contractual provisions may expose parties to specific risks. Detailed examination allows for the identification and negotiation of such clauses to mitigate potential exposure.
- Assurance of Compliance: Agreements often detail service standards and compliance requirements. Careful review ensures adherence, reducing the likelihood of future issues.
- Assessment of Service Scope: An in-depth review clarifies the extent of services provided, ensuring no ambiguity regarding inclusions or exclusions.
- Negotiation of Enhanced Terms: Unfavorable terms identified during the review process can be renegotiated, including aspects such as pricing, service levels, and cancellation policies.
- Dispute Prevention: Clearly defined expectations and procedures within a well-reviewed contract serve to minimize disruptions and facilitate the resolution of issues should they arise.
- Review of Renewal and Termination Provisions: Analysis of these clauses enables proper preparation for renewal processes and a clear understanding of termination protocols.



Alongside reviewing the Intergovernmental Agreement, the IFCA was tasked with evaluating alternative fire and EMS service providers and analyzing the feasibility and benefits of different options. The team also assessed local, private, and mutual aid partnerships with neighboring communities.

This report summarizes the main findings and recommendations, focusing on enhancing service delivery and community impact.

## Gratitude to the City of South Beloit

We sincerely thank the City of South Beloit for allowing the Illinois Fire Chiefs Association to conduct this study. We appreciate Ms. Sonya Hoppes, the South Beloit City Administrator, for her cooperation and guidance, as well as the area fire chiefs who shared their valuable expertise. Their partnership and commitment to community safety have been essential to this initiative.

## Study Methodology

The IFCA Consulting Team employed both quantitative and qualitative analysis in the assessment of the South Beloit Fire Department project. The team also used ESRI ArcGIS software for map creation.

### Quantitative

Quantitative research, which relies on statistical methods, begins with data collection based on the study's objectives. A large dataset is usually collected, checked, validated, and recorded before analysis. Data validation helps ensure an accurate representation of how services are provided.

The consulting team reviewed various reports, datasets, and correspondence. Some of the key materials reviewed included:

- Fire Department Study by FireScope Mid-America (2016)
- Fire Staff Consolidation Report 2023 (author unknown)
- Resolution 6511 – IGA Town of Beloit Fire Department
- Insurance Service Office – Public Protection Classification

### Qualitative

Qualitative methodology involves observation to collect non-numerical data, such as perspectives and key issues. Methods used included observations by the Consulting Team and in-depth interviews with both internal and external stakeholders of the Fire Department. Organizational culture, consisting of shared beliefs and behaviors, influences

how members operate within the department; this culture often develops over time and may not be explicitly defined.

Qualitative research enabled the Consulting Team to gather insights into opinions, attitudes, behaviors, beliefs, values, perceptions, and underlying assumptions within the Department's culture. For this study, input from former fire department members was not available. The Consulting Team interviewed or spoke with several internal and external stakeholders, including:

- Ms. Sonya Hoppes, City Administrator, City of South Beloit
- Mr. Kenneth Morse, Fire Chief (Retired), City of South Beloit
- Mr. Daniel Pease, Fire Chief, City of Beloit, Town of Beloit, and South Beloit Fire Departments
- Mr. Jason Griffin, Deputy Fire Chief, City of Beloit, and former Fire Chief of South Beloit Fire Department
- Mr. John Bergeron, Fire Chief, Harlem Roscoe Fire Protection District
- Mr. Kirk Wilson, Fire Chief, Rockton Fire Protection District

## GIS Analytics

A geographic information system (GIS) is a framework designed to capture, store, manipulate, analyze, manage, and present spatial or geographic information. GIS applications facilitate interactive queries, spatial analysis, map editing, and result presentation. This report used ESRI ArcGIS Software to generate some of the maps and visualizations.

## Governance

### City of South Beloit, Illinois

According to Wikipedia, South Beloit is a city located in Winnebago County, Illinois, in the United States. It serves as a suburban extension of Beloit, Wisconsin, and is situated along the Illinois–Wisconsin border within the Rockford metropolitan area. As of the 2020 census, the population was 7,989.

According to the City of South Beloit's official website, the community offers reasonable housing costs and a welcoming environment, making South Beloit an attractive location in which to live, work, learn, and play. The area features reputable schools, well-maintained parks, and convenient access, all of which contribute to its appeal for residents, businesses, and visitors alike. Both manufacturing and retail enterprises recognize the advantages of operating within the city. The City of



Illustration 1: Map of Winnebago County Illinois



South Beloit remains dedicated to delivering fiscally responsible, high-quality services with unwavering integrity and professionalism.

## South Beloit Fire Department

The South Beloit Fire Department was established decades ago. The City of South Beloit has a fire station located at 429 Gardner Street, South Beloit IL. 61080.



Illustration 2: South Beloit Fire Station (Source Facebook)

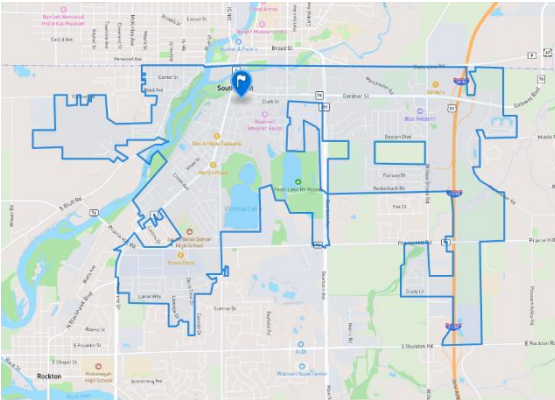


Illustration 3: Map of the City South Beloit (Source-FireCares)

The City of South Beloit is made up of approximately 6.13 square miles.

The Town of Beloit posted the following incident statistics for the South Beloit Fire Department

## South Beloit Stats

Incidents By Category	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Fire	Begin October 11th, 2024 ➔									2	1	3	6
Overpressure Rupture, Explosion, Overheat (No Fire)										0	0	0	0
Rescue & Emergency Medical Service Incident										39	68	54	161
Hazardous Condition (No Fire)										1	0	1	2
Service Call										7	13	7	27
Good Intent Call										4	3	3	10
False Alarm & False Call										2	1	5	8
Special Incident										0	1	0	1
Monthly Total:										55	87	73	215
As of Total:										55	142	215	

Mutual Aid Given/Received	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Automatic Aid Given	Begin October 11th, 2024 ➔									0	0	0	0
Automatic Aid Received										1			1
Mutual Aid Given										2			2

Chart 1: South Beloit Monthly Incidents (Town of Beloit Newsletter)

Prepared on: 7/1/2025												
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
1	1	1	2	2	2							9
1	0	0	0	0	0							1
63	65	62	49	62	67							368
1	0	2	2	0	2							7
11	4	5	8	5	7							40
2	3	5	5	4	1							20
9	3	10	5	5	4							36
1	0	1	0	1	0							3
89	76	86	71	79	83	0	0	0	0	0	0	484
89	165	251	322	401	484	484	484	484	484	484	484	

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
0	0	3	2	4	0							9
1	0	8	7	0	3							19
2	5	2	2	1	4							16



## City of Beloit, Wisconsin Fire Department

According to the City of Beloit website, the City of Beloit Fire Department is committed to safeguarding the residents of Beloit. Established in 1854, the department delivers emergency medical services, fire response, and specialized rescue operations to protect the community and mitigate the impact of disasters. The dedicated personnel of the department strive to provide high-quality service during critical times for residents and their families.

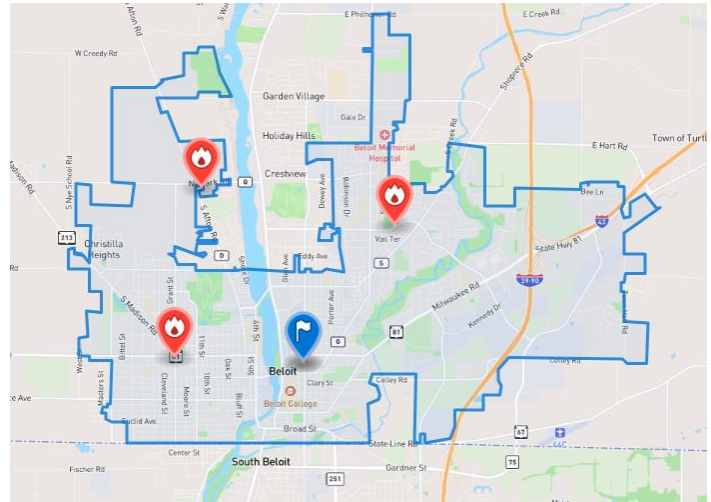


Illustration 4: Map of the City of Beloit (Source FireCares)

The Beloit Fire Department operates out of three (3) fire stations. The fire department serves a community of 36,966 residents in 17.47 square miles.

## Town of Beloit Wisconsin Fire Department

According to the Town of Beloit website, the mission of their fire department is to safeguard both residents and visitors by protecting life and property from the risks associated with fires, medical emergencies, environmental hazards, and other natural or man-made incidents. This objective is achieved through a comprehensive network encompassing fire prevention, fire suppression, emergency medical services, and specialized rescue operations. By emphasizing education, training, effective communication, and collaboration with regional partners, the department is dedicated to delivering high-quality services in an efficient, cost-effective, and professional manner.

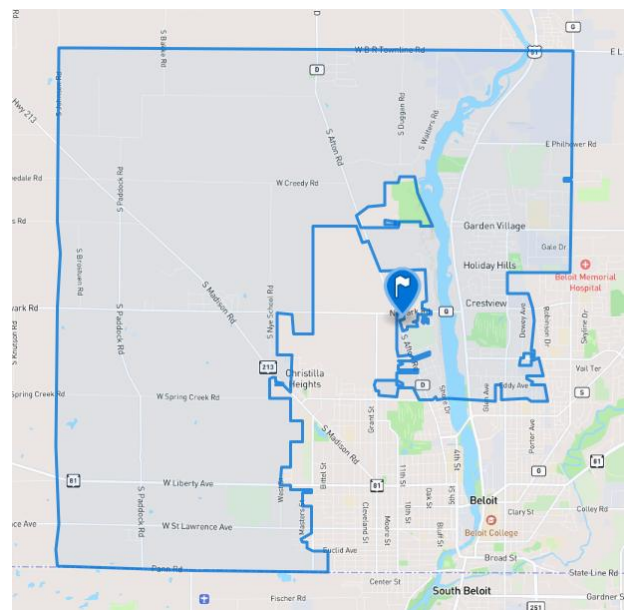
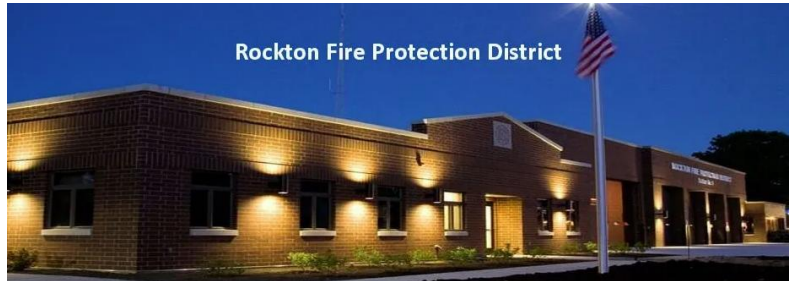


Illustration 5: Map of the Town of Beloit (Source FireCares)

The Town of Beloit Fire Department operates out of two (2) fire stations. The second fire station in the Town has just finished construction and is not in operation at the time of drafting this report. It is due to open when sufficient staffing is available. The fire department serves a community of 7,662 residents in 26.89 square miles.

## Rockton Fire Protection District, Illinois

According to the Rockton Fire Protection District website, the district is in northern Illinois along the Rock River. It operates one fire station serving a community that spans 54 square miles and has an estimated population of 23,000 residents.



*Illustration 6: Rockton Fire Station (Source Rockton FPD Website)*

## Harlem Roscoe Fire Protection District

According to the Harlem-Roscoe Fire Protection District website, the District serves an area of approximately 80 square miles, operating from three strategically located fire stations and providing services to nearly 35,000 residents. The organization functions as an all-hazards response fire department, offering hazardous materials response, technical rescue operations—including structural collapses, trench rescues, confined space rescues, and above- or below-grade rescues—water rescue services, and fire investigations. In addition to fire and rescue operations, the district also delivers Emergency Medical Services. Outlined below are the three (3) Harlem Roscoe Fire Protection District fire stations:

### Station #1



**Address:** 10544 Main St, Roscoe, IL 61073

### Station #2



**Address:** 825 Ralston Rd Machesney Park, Illinois

### Station #3



**Address:** 13974 Willowbrook Rd Roscoe, IL 61073

*Illustration 7: Harlem Roscoe 3 Fire Stations (Source Harlem Roscoe FPD Website)*

## Background Information

### Types of Firefighters

Firefighters play a crucial role in ensuring public safety by responding to emergencies, extinguishing fires, and providing rescue services. There are several types of firefighters, each with specific roles and responsibilities. Municipal or Fire Protection District firefighters are the most common type and are employed by local government agencies. They respond to a wide range of emergencies, including fires, medical emergencies, hazardous material incidents, and natural disasters. These firefighters are trained in various skills such as fire suppression, emergency medical services, and technical rescue operations.

Contracted firefighters are employed by private companies or organizations to provide fire protection services. These firefighters may work in industrial settings, such as oil refineries, chemical plants, or airports, where specialized knowledge and equipment are required to manage specific hazards. Contracted firefighters may also be hired by government agencies to supplement their firefighting forces. They undergo rigorous training to ensure they can effectively respond to a variety of emergency situations and collaborate with municipal firefighters to protect lives and property.

In addition to these primary types, there are also volunteer firefighters who serve their communities on a part-time basis. These individuals often have other full-time jobs but dedicate their time and skills to assist in emergency situations. Volunteer firefighters receive training like that of municipal firefighters and play a vital role in providing fire protection services, especially in rural or underserved areas. Together, these distinct types of firefighters form a comprehensive network of emergency responders dedicated to safeguarding the public.

The City of South Beloit established its fire department several decades ago, providing consistent service to the community. In recent years, however, the department has faced increasing challenges in recruiting local residents to serve as volunteer firefighters. To address this issue, the organization adopted a partially paid staffing model, utilizing both residents and external personnel to maintain fire station operations. Despite these measures, persistent staffing shortages have continued to impact reliability in response capabilities.

## Types of Emergency Medical Technicians

Emergency Medical Technicians (EMTs) are essential healthcare professionals who provide critical pre-hospital care in emergency situations. There are several levels of EMTs, each with varying degrees of training, skills, and responsibilities.

The first level is **EMT-Basic (EMT-B)**. These professionals are trained to provide basic life support (BLS) services, including CPR, oxygen administration, and the use of automated external defibrillators (AEDs). EMT-Bs can also manage trauma and medical emergencies by performing tasks such as controlling bleeding, splinting fractures, and assisting with childbirth. Their training typically involves around 120-150 hours of coursework and practical experience.

The next level is the **EMT-Intermediate (EMT-I)**, also known as Advanced EMT (AEMT) in some regions. EMT-IIs receive additional training beyond the basic level, allowing them to perform more advanced procedures. This includes intravenous (IV) therapy, advanced airway management, and the administration of certain medications. EMT-IIs are equipped to manage more complex medical and trauma situations, providing a higher level of care in the pre-hospital setting. Their training usually involves an additional 200-400 hours of coursework and clinical practice.

The highest level of EMT is Paramedic (**EMT-P**). Paramedics undergo extensive training, often completing 1,200 to 1,800 hours of education and clinical experience. They are skilled in Advanced Life Support (ALS) techniques, including endotracheal intubation, electrocardiogram (EKG) interpretation, and the administration of a wide range of medications. Paramedics can perform invasive procedures, such as chest decompressions and surgical airways, and are trained to make critical decisions in life-threatening situations. Their comprehensive training enables them to provide the highest level of pre-hospital care, often working alongside other healthcare professionals in emergency departments and critical care units.

Each level of EMT plays a vital role in the Emergency Medical Services (EMS) system, ensuring that patients receive timely and appropriate care during emergencies. The progression from EMT-Basic to Paramedic represents a continuum of increasing skills and responsibilities, with each level building upon the previous one to enhance the overall quality of pre-hospital care.



The City of South Beloit offers Emergency Medical Technicians at the Paramedic level. The South Beloit ambulance holds a license overseen by the Swedish Covenant Hospital System and the Illinois Department of Public Health. Before the staffing agreement with the Town of Beloit, the authorization to provide paramedic services in South Beloit was under review by the regulatory agencies due to insufficient ambulance staffing.

## Shortage of Firefighters in our Nation

The shortage of firefighters in the United States has emerged as a significant concern over the past decade, especially in states such as Illinois and Wisconsin. Multiple factors have contributed to this situation, including fiscal constraints, rising demand for emergency services, extensive training required for firefighting certification and licensure as an Emergency Medical Technician at either the basic or paramedic level, and the considerable physical and psychological demands of the profession. Many fire departments are facing challenges in recruiting and retaining qualified personnel, which further increases the burdens placed on current staff and exacerbates workforce shortages.

In Illinois, the problem is intensified by an aging workforce and insufficient funding for training and recruitment initiatives. Rural communities are particularly affected, as it is often difficult to attract new recruits to less populated areas. The COVID-19 pandemic had compounded these issues, triggering higher call volumes and aggravating staff shortages due to illness and burnout. Various measures aimed at addressing these difficulties include improving working conditions, enhancing recruitment efforts, and expanding mental health support for personnel. Nevertheless, ensuring sustained progress remains challenging for departments striving to protect public safety and meet community needs effectively.

As a result of these staffing shortages, numerous volunteer fire departments have begun employing paid personnel to respond to emergencies more efficiently. The need for career firefighters has increased, prompting local fire services to compete for qualified candidates. Additionally, private companies that previously supplied paramedics or firefighter-paramedics are encountering difficulties maintaining service contracts, as their compensation packages typically lag behind those offered by municipal employers.

## Firescope Mid-America Report

The City of South Beloit has faced challenges in maintaining adequate numbers of firefighting and medical personnel. In 2016, the City of South Beloit entered a contract with Firescope Mid-America to review fire department operations and recommend future options for South Beloit's fire and emergency services.



According to the report, at the time of the study, the South Beloit Fire Department employed four career staff: a Fire Chief, an Assistant Chief, a Captain, and a Lieutenant. The number of Paid on Premise (POP) and Paid on Call (POC) members was not specified, but Findings #15 states:

*“The Sbfd currently has a substantial roster of POP, POC and volunteer personnel. Recruiting has been successful, partly due to the department’s reputation and its training program. Management staff have noted concerns regarding future staffing. Most new personnel do not remain with the department for longer than five years, often leaving for employment opportunities elsewhere or due to the time commitment required for training.”*

Additionally, the report stated that the department had a Class 4 ISO Protection Classification and maintained a small dispatch center. The possibility of contracting dispatch services from either Rockford Memorial Hospital or Rockford Fire Department was discussed in the report as a recommendation.

The report also reviewed neighboring departments, including Harlem Roscoe and Rockton Fire Protection Districts, outlining their organizational structures and relationships with South Beloit’s Fire Department. It identified these districts as alternatives for providing contracted fire services to South Beloit. A complete copy of this report can be found in Appendix A of this report.

## Contract for Staffing in the South Beloit Fire Station.

Since the FireScope Report, the City of South Beloit continued to seek solutions to provide qualified staffing for their fire station. The lack of trained personnel available for emergency incidents led the City of South Beloit to explore contracting personnel services in their fire station. Below is a summary of their results:

City of Beloit – Declined the opportunity to work with the City of South Beloit fearing legal issues that might arise from being in two different states.

Harlem Roscoe Fire Protection District – Declined the opportunity to work with the City of South Beloit because they were in the progress of hiring fulltime personnel due to the shortage of available part time personnel themselves.

Rockton Fire Protection District - The Rockton Fire Protection District declined the opportunity to work with the City of South Beloit.

Declining Staffing Opportunities – The City of South Beloit contacted several private contracting companies (Lifeline, Metro, and PSI) seeking their interest in staffing the South





Beloit Fire Station. All the companies indicated that due to the shortage of available personnel, they could not offer a contract for services at that time.

Town of Beloit - Demonstrated a willingness to collaborate with the City of South Beloit. The two municipalities jointly established the terms outlined in Resolution Number 6511, which is a resolution by the City of South Beloit, Illinois, approving the Intergovernmental Agreement for Firefighting and Emergency Medical Services between the Town of Beloit, Wisconsin, and the City of South Beloit, Illinois.

## Findings

### Fire Department Staffing Decline

In the years following the Firescope report, the South Beloit Fire Department faced increasing challenges in recruiting and retaining personnel. Despite the city of South Beloit's efforts to implement various solutions, interest in firefighting careers remained limited, consistent with national trends. As a result, neighboring fire departments experienced a strain on their departments due to their commitment to provide automatic and mutual aid to South Beloit. The City of South Beloit continued to seek solutions addressing the challenge of maintaining appropriate staffing at their fire station. Insufficient EMS staffing levels created the possibility of their ambulance license being suspended by the local EMS system and the Illinois Department of Public Health, as the fire station was not consistently staffed with the required number of paramedics daily. As part of their efforts, the City of South Beloit sought assistance from nearby fire departments in both Illinois (as recommended in the Firescope Report), and Wisconsin.

Ultimately, only the Town of Beloit agreed to provide support. At that time, Chief Daniel Pease served as Fire Chief for both the City of Beloit and the Town of Beloit Fire Departments. While the City of Beloit expressed concerns about the legal implications of cross-state staffing agreements, the Town of Beloit proceeded to assist South Beloit. On May 6, 2024, an intergovernmental agreement was established between the Town of Beloit and the City of South Beloit to provide staffing for the South Beloit fire station. Details of this agreement are included in Appendix B of this report. Communications regarding the new agreement were highly transparent within both the South Beloit Fire Department and the wider community. The commencement date for contracted personnel from the Town of Beloit depended upon Chief Pease successfully recruiting additional staff. During the period in which Chief Pease was engaged in this hiring process, several South Beloit firefighters and paramedics resigned despite the City of South Beloit's enhanced efforts to retain them. At 7:00 AM on Friday, October 11, 2024, the Fire Chiefs from South Beloit and the Town of Beloit were on hand to oversee the change of the staffing of the fire station. The change of staffing model was very difficult but was necessary for the City of South Beloit to ensure the staffing of the fire station was consistent daily and complied with the license agreement with the Illinois Department of Public Health.

## IGA - Town of Beloit to staff the South Beloit Fire Station

The IFCA has been tasked with verifying that the agreement is properly executed, and all terms are met. The IFCA Consulting Team is unable to adequately review the legal language and terms of the Intergovernmental Agreement as we are not attorneys. The IFCA does recognize both governmental agencies had their respective attorneys review of the agreement prior to its adoption. This objective review highlights any issues requiring attention supporting transparency and accountability. The validation results will provide for future guidance and compliance. Below are the IFCA's audit findings for the IGA.

IGA Section- IFCA Question to Chief Pease Concerning the IGA Sections	Chief Pease Response
<a href="#">Section 1. Background</a>	
<p>E- What is the daily minimum staffing for Beloit's two fire stations? <u>What is the minimum staffing for the City of South Beloit's fire station daily?</u> Since the start of the agreement, <u>how many days have the staffing for the City of South Beloit at 3 personnel verses 2 personnel?</u> Did the City of South Beloit staffing ever go below 2 personnel for the day?</p>	<p>Chief Pease stated that three personnel are assigned to the South Beloit station 10-15% of the time. He also said only qualified personnel are permitted to work in certain roles, such as driver operator.</p> <p>Chief Pease reported that there are currently seven (7) personnel assigned daily and budgeted for fire stations in the Town of Beloit and the City of South Beloit. He also noted recent approval to increase staffing to ten (10) per shift, which will include coverage for the second fire station in the Town of Beloit.</p> <p>Chief Pease provided this written documentation: <i>Every day since we've taken over we've had at minimum 2 full-time paramedics. I'll break staffing down by month for you to include the number of times we've had 3 personnel staffed in South Beloit:</i></p> <p><i>October 11 (when we started in South Beloit) to October 31 – 6 times</i></p> <p><i>November - 10 Times</i></p> <p><i>December- 6 Times</i></p> <p><i>January- 12 Times</i></p> <p><i>February- 5 Times</i></p> <p><i>March- 3 Times</i></p> <p><i>April- 2 Times</i></p> <p><i>May- 9 Times</i></p> <p><i>June- 11 Times</i></p>

<a href="#">Section 2 Agreed upon Responsibilities under this Agreement.</a>	
<p>A (1) -Please provide a list of all Firefighter Paramedics who have worked in the South Beloit Fire station. Please ensure that all the personnel listed were licensed paramedics in good standings with the Beloit Hospital System at the time that they were assigned to work in the South Beloit fire station.</p>	<p>Chief Pease stated that 99% of Town of Beloit staff are dually certified as paramedics in South Beloit, fulfilling all continuing education at Beloit Hospital and Swedish Covenant.</p>
<p>A (2) -Please provide a copy of the response model for the Town of Beloit and the City of South Beloit. Please list any differences in the response model.</p>	<p>Chief Pease described a six-station response model, comprising three stations in the City of Beloit, two in the Town of Beloit, and one in South Beloit. He aims to staff an Advanced Life Support (ALS) Engine at the South Beloit station daily. The response model in the City of South Beloit and The Town of Beloit is a crossed staff model.</p>
<p>B -Has the City of South Beloit continued to provide fire inspection services and has the inspection results been turned over to Beloit for follow up inspections and compliance?</p>	<p>Chief Pease stated that the City of South Beloit employs a Fire Inspector. During our visit, the team saw the Fire Inspector depart for inspections.</p>
<p>C- Please confirm that dispatch services are still being processed through the Winnebago Sheriff's office and if there are any issues currently or predicted for the future.</p>	<p>Chief Pease stated that Winnebago County dispatches South Beloit FD, while Rock County handles dispatch for the City of Beloit and Town of Beloit. The City of Beloit's Battalion Chief monitors radio communications for South Beloit incidents.</p> <p>The City of South Beloit and Town of Beloit fire departments belong to MABAS Division 104; South Beloit is in Division 8.</p>
<p>D- Has the City of South Beloit allowed access to their fire station to The Town of Beloit via the key fob system? Are there any issues or maintenance required by the City of South Beloit?</p>	<p>Chief Pease stated that personnel have access to the fire station. The City of South Beloit is responsive to the maintenance needs of the station and apparatus.</p>
<p>E- Has the City maintained the fire station grounds including yard maintenance, trash, and snow removal?</p> <p>F- Has the annual ladder and pump testing completed? Has the City of South Beloit paid for these services? Are there any outstanding issues?</p>	<p>Chief Pease confirmed that the City of Beloit is maintaining both the fire station and the associated property.</p> <p>Chief Pease indicated that his personnel have scheduled the annual ladder and pump testing, and they have been scheduled for completion. These services are paid by the City of South Beloit.</p>

G. Is the Town of Beloit using the City of South Beloit inventory of turnout gear? Has the City of South Beloit replaced any gear? Is the City of South Beloit gear the same as the gear being used by Beloit?	Chief Pease plan is to use City of South Beloit turnout gear during recruit training and probation. Chief Pease indicated once a firefighter completes their probation period, they are issued new turnout gear specifically fit for them.
H- Has the hose been tested? Were there failures and have they been repaired or replaced?	Chief Pease confirmed that all hose will be tested and documented.
I - Has communications between the City of South Beloit and the Town of Beloit been acceptable. If there were problems, can you identify what it was?	Chief Pease stated he maintains open communication with the South Beloit City Administrator and that administrators from South Beloit, Town of Beloit, and City of Beloit meet regularly.
<a href="#">Section 3 City's Payments for Service</a>	
A (1&2) -has the City of South Beloit made the payments in accordance with the agreement on time?	Chief Pease stated that while it is not his responsibility, delayed payments would be reported to him.
A (3) – Has the City of South Beloit managed all the EMS Billing for the City of South Beloit EMS incidents? Has the Town of Beloit completed and provided all the NFIRS and all patient care reports to the City of South Beloit?	Chief Pease stated that South Beloit manages its EMS billing and is not aware of any issues with his staff submitting reports.
<a href="#">Section 4 Personnel and Equipment; Command Authority</a>	
A -Are there any employment issues that would be of concern to the City of South Beloit either now or in the near future? Have there been any issues regarding the inspection of equipment and apparatus? Are the inspections recorded for the City of South Beloit? Does the City of South Beloit respond to issues and repair them on a timely basis?	<p>Chief Pease stated that firefighter retention is the sole personnel issue, which is a nationwide concern. No Concerns with inspections and all inspections are logged.</p> <p>The City of South Beloit is responsive to issues and repairs</p>
B – Has communications between the Command staff and City representatives been effective?	Chief Pease reports that communication between his command staff and the City of South Beloit is great.

<a href="#">Section 5</a>	
A & B - Has communication between the City of South Beloit and the Town of Beloit's management staff occurred as specified in the agreement?	Chief Pease confirmed all communications required by the IGA are complete.
C- Are records pertaining to call volume, response times and fire incident reports shared with the City of South Beloit? Are there regularly scheduled meetings between the City of South Beloit and the Town of Beloit staff?	Chief Pease stated that a comprehensive record of monthly emergency response incidents is available on the Town of Beloit website in the fire department section. Detailed information regarding incidents specific to the South Beloit area is also provided. The Town of Beloit and the City of South Beloit administrators do talk about staffing challenges.
D – Is there a current list of fire hydrants out of service and is the City of South Beloit aware of them?	Chief Pease states that the City of South Beloit maintains records of out-of-service fire hydrants with its personnel. He noted that American Water manages the water system and updates the crews regularly.
<a href="#">Section 6 – Defense of Claims; Indemnification; Insurance</a>	
D – Have you received the certificate of insurance for the terms outlined in the agreement?	Chief Pease said he has not personally seen the certificate of insurance, but noted that if the Town administration lacked it, he would have been notified.

## Interviews with the Neighboring Fire Protection Districts in Illinois

### Harlem Roscoe Fire Protection District

The IFCA consulting team conducted a scheduled meeting with Fire Chief John Bergeron. During the meeting, Chief Bergeron offered insights into his department and its partnership with the South Beloit Fire Department. He explained that conversations regarding enhanced collaboration with South Beloit commenced over a year ago. However, he emphasized that he was unable to commit further at that time due to the department's transition to a paid staffing model and the accompanying operational challenges. The department currently has thirteen (13) staffed positions daily across their three fire stations.

Chief Bergeron outlined several points regarding previous interactions with the South Beloit Fire Department:

- He observed that the City of South Beloit dismissed the remaining fire department personnel before the current staffing agreement was implemented which put an unexpected burden on his departments having to respond to mutual aid calls for assistance to South Beloit.
- He reported that an ambulance is primarily stationed in South Beloit, but not a fire engine, and no officer is on duty. As a result, his department deploys a Battalion Chief with any response into South Beloit.
- Chief Bergeron has recently removed South Beloit from his MABAS Box Alarm Cards and does not utilize them for automatic aid due to what he described as limited response capability. Chief Bergeron noted that although his department does not use them in bound into Harlem Roscoe they still respond to South Beloit for emergency incidents.
- He stated that Harlem Roscoe responds to South Beloit approximately 90–100 times per year for various incidents.
- Chief Bergeron suggested that a staffed ALS Engine might better serve the City of South Beloit in the future instead of an ambulance. He indicated an openness to further discussions with the City of South Beloit on potential future collaboration, including possible changes to station staffing or annexation into the Harlem Roscoe Fire Protection District.

## Rockton Fire Protection District

The IFCA consulting team met with Fire Chief Kirk Wilson, who shared that his department, which includes forty (40) contract firefighter/paramedics from AMR and part-time staff members -does not face retention issues. After the South Beloit Fire Department terminated several members before the staffing contract began in the Town of Beloit, about ten members joined the Rockton FPD; only half remained today, though Chief Wilson did not specify reasons for their departure. Chief Wilson outlined several points regarding the South Beloit Fire Department:

- Chief Wilson would have liked better communications to prepare for the increased call volume when the City of South Beloit terminated their employees before the agreement with the Town of Beloit went into effect.
- Chief Wilson would like to see three (3) personnel staffed daily at the fire station as indicated in the Intergovernmental Agreement. Three (3) personnel would offer a greater response to the community.
- Chief Wilson has recently removed South Beloit from his MABAS Box Alarm Card and does not utilize them for automatic aid because of their limited response capability. Chief Wilson reported that his department still responds mutual aid to South Beloit for emergency incidents.





The IFCA considered the concerns raised by both Fire Chiefs regarding the termination of the remaining fire personnel prior to the Town of Beloit initiating operations at the South Beloit fire station. The IFCA Consulting team determined that, at that time, a significant amount of negative information was present, which may have misled the two neighboring Fire Chiefs. Contrary to these perceptions, the City of South Beloit introduced additional incentives including salary increases to encourage the remaining staff to continue their employment until the Town of Beloit was prepared to commence staffing the fire station.

The IFCA Consulting Team acknowledges the significance of fostering strong working relationships among neighboring Fire Chiefs. We recommend holding regular meetings to address shared interests and to identify collaborative opportunities that may enhance departmental effectiveness.

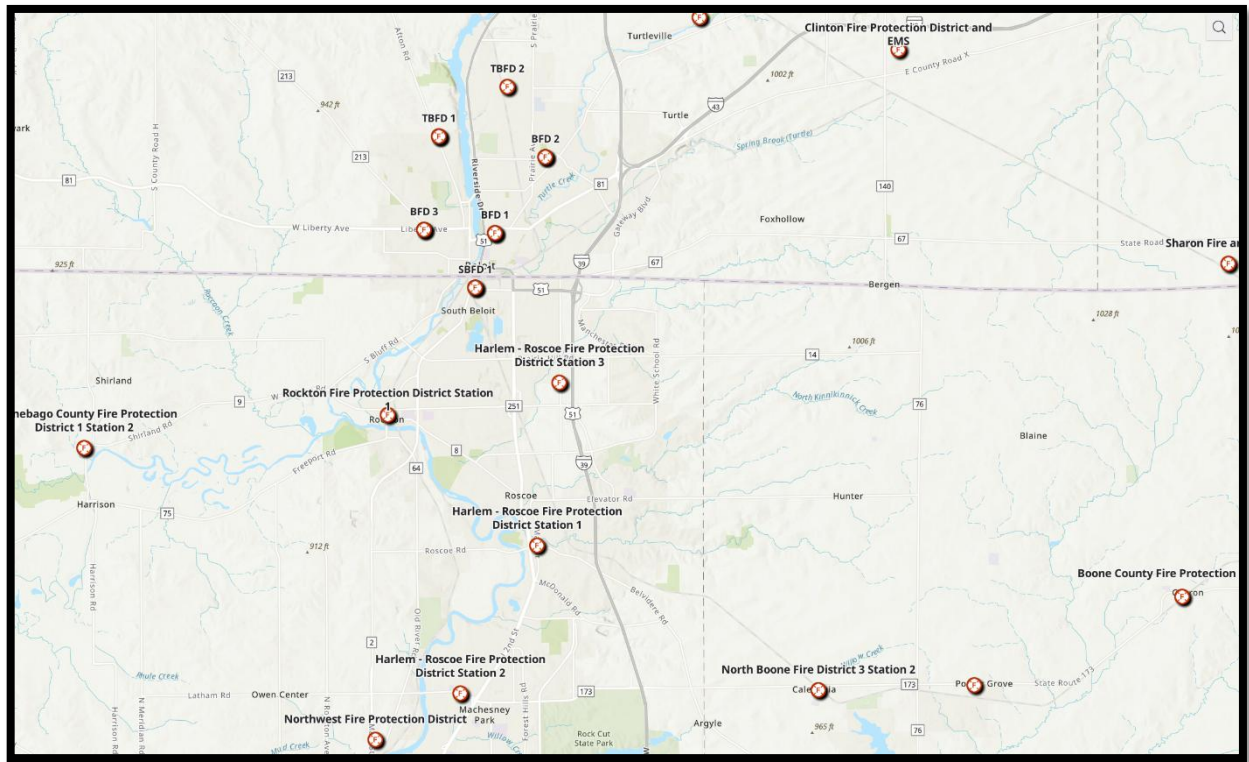
## Analysis

The South Beloit Fire Department, consistent with many fire services across the nation, encountered considerable difficulties in sustaining emergency response operations due to a shortage of qualified personnel. As a result, after extensive efforts to maintain in-house staffing, elected officials ultimately resolved to engage external staffing services to protect their community. During the period of diminishing availability of trained responders, the City of South Beloit sought input from various agencies to identify effective strategies, including holding discussions with neighboring fire departments to assess potential collaborative solutions.

South Beloit is located immediately South of the Wisconsin border in Illinois. The Rockton Fire Protection District (FPD) maintains one fire station to the South of South Beloit, while the Harlem Roscoe FPD operates three stations in the vicinity. In Illinois, a Fire Protection District serves as an independent taxing authority with a distinct tax rate. Areas, including individual parcels, subdivisions, or larger tracts, must be formally annexed into a district in order to be eligible for its services.

Additionally, the City of South Beloit has maintained communications with both the City of Beloit and Town of Beloit, Wisconsin. It is noteworthy that these two fire departments operate under the unified leadership of Fire Chief Daniel Pease, who is employed by the City of Beloit Fire Department and concurrently holds the position of Fire Chief for the Town of Beloit. Pursuant to a staffing agreement with the Town of Beloit, Chief Pease also serves as the designated Fire Chief for the City of South Beloit.

The map below indicates the location of fire stations in neighboring departments surrounding the South Beloit Fire Station.



*Illustration 8: Fire Stations surrounding South Beloit (Source ESRI ArcGIS)*

## Six Fire Station Response Model

During the Consulting Teams interview with Fire Chief Daniel Pease, he discussed a six (6) fire station response model that he is trying to implement. The response model will need additional staffing in the Town of Beloit's Fire Station #2 and the South Beloit Fire Station. Understanding the geographical proximity of neighboring fire departments to the South Beloit Fire Station provides relevant context. The following map shows the fire departments adjacent to the South Beloit Fire Station, as well as a detailed view of the six stations that are part of the proposed six fire station response model.

Chief Pease would like to implement a response model as though all six fire stations were from one department. All incidents receive a response based on the six-fire station concept, tailored to the specifics of each situation. In the Town of Beloit and the City of South Beloit, personnel may operate either an engine or an ambulance depending on the type of incident. This approach is implemented because current staffing levels do not allow for both vehicles to be staffed simultaneously at the fire station. He proposes the following staffing of apparatus in each of the fire stations:

City of Beloit Station #1  
staffing: (BFD 1)  
1-Battalion Chief  
1-Truck

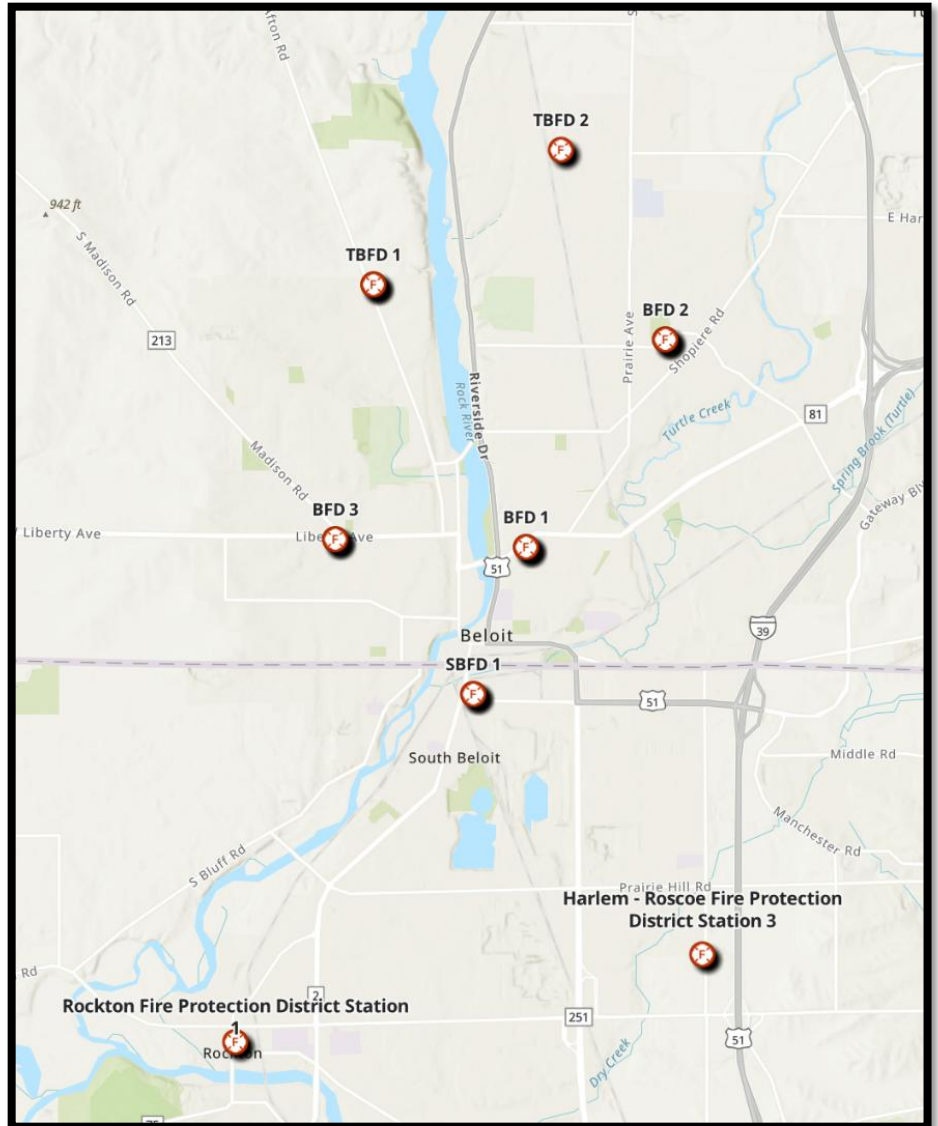
City of Beloit Station #2  
staffing: (BFD 2)  
1-Engine  
1-Ambulance

City of Beloit Station #3  
staffing: (BFD 3)  
1-Engine  
1-Ambulance

Town of Beloit Station #1  
staffing: (TBFD 1)  
1-Engine or Ambulance  
(Jump Company)

Town of Beloit Station #2  
staffing: (TBFD 2)  
1-Engine or Ambulance  
(Jump Company)

City of South Beloit  
Station #1: (SBFD 1)  
1-Engine or Ambulance  
(Jump Company)



*Illustration 9: Chief Pease's Six Fire Station Response Model (Source ESRI ArcGIS)*

## Insurance Service Office

Insurance Services Office, Inc. (ISO), a subsidiary of Verisk Analytics, is a leading provider of statistical, actuarial, underwriting, and claims information as well as analytics. ISO also offers compliance and fraud detection tools, policy language resources, detailed location information, and a variety of technical services. Its clientele includes insurers, reinsurers, agents, brokers, insurance regulators, risk managers, and other stakeholders in the property and casualty insurance sector.



Established in 1971 as an advisory and rating organization for the property/casualty insurance industry, ISO was created to supply statistical and actuarial expertise, develop insurance programs, and support insurance companies in fulfilling state regulatory requirements. In October 2009, ISO became a wholly owned subsidiary of Verisk Analytics.

The Insurance Services Office, Inc. (ISO) uses the Fire Suppression Rating Schedule (FSRS) to assess public fire suppression facilities and assign a Public Protection Classification (PPC) for insurance purposes. Many insurers use this rating to help determine fire insurance premiums, with better-rated communities enjoying lower premiums. However, rates can also depend on competition among insurance providers, which may reduce the impact of ISO ratings. To assign a PPC, ISO conducts field surveys evaluating four key aspects of a community's fire protection system using the FSRS.

### **Emergency Communications/Dispatch Systems (10 Points Available)**

The evaluation of emergency communications systems constitutes ten points of the overall classification. This assessment examines the community's infrastructure and capacity for receiving and dispatching alarms related to structure fires. Emergency Communications represent 10% of the total classification score. The section is allocated ten points, distributed as follows:

- Emergency Reporting – 3 points
- Telecommunicators – 4 points
- Dispatch Circuits – 3 points

### **Fire Department (50 Points Available)**

A comprehensive evaluation of the Fire Department constitutes fifty points of the overall classification. ISO places significant emphasis on a community's fire suppression capabilities, assessing the department's effectiveness based on its first-alarm response and initial attack efforts intended to minimize potential losses. The review encompasses key areas such as engine companies, ladder or service companies, deployment strategies, equipment inventory, pumping capacity, reserve apparatus, staffing levels, and training protocols. This section accounts for 50% of the total classification, with ISO's assessment focused specifically on the Fire Department's operational readiness and initial response actions. The fire department component is allocated a weight of fifty points, distributed as follows:

- Engine Companies 6 points
- Reserve Pumpers 0.5 points
- Pump Capacity 3 points
- Ladder/Service Companies 4 points
- Reserve Ladder/Service Trucks 0.5 points
- Deployment Analysis 10 points
- Company Personnel 15 points
- Training 9 points
- Operational considerations 2 points

### **Water supply (40 Points Available)**

A review of the water supply system comprises 40 points in the overall classification. ISO assesses the community's water supply system based on its capacity to support fire suppression needs. Evaluation includes hydrant size, type, installation, and the frequency and thoroughness of hydrant inspection and flow-testing programs. The water supply system contributes 40 points to the total score, allocated as follows:

- Credit for Supply System 30 points
- Hydrant Size, Type & Installation 3 points
- Inspection & Flow Testing of Hydrants 7 points

### **Community Risk Reduction (5.5 Extra Points)**

An evaluation of the community's risk reduction initiatives is conducted and documented in the Community Risk Reduction section, which may earn up to 5.5 additional points for a potential maximum score of 105.5. This assessment includes fire prevention code adoption and enforcement, public fire safety education, and fire investigation activities. Upon completion of the field survey, ISO reviews the collected data and determines the Public Protection Classification (PPC). The community is then notified via letter regarding its updated PPC rating. In addition, ISO supplies a hydrant-flow summary sheet and a Public Protection Classification Summary Report. This report details each sub-category, specifies the total points accrued by the community, outlines the criteria required to achieve full credit in each schedule section, and provides an account of the quantities assessed.

**Divergence** The effectiveness of a Fire Department is influenced by its water supply, and vice versa. If one is less adequate than the other, overall effectiveness is reduced. The FSRS score is adjusted by a divergence factor, which accounts for differences between the Fire Department's capabilities and the quality of the water supply. This factor mathematically decreases the score according to the relative difference between the two scores and is included in the final calculation.

**PPC Grade** The ISO-assigned PPC grade for a community is determined by the community's score on a 100-point scale. In 2023, at the time when the South Beloit report was issued, ISO classified 37,730 fire departments nationwide. The following charts present the distribution of these departments by classification both across the United States and within Illinois. Specifically, ISO assigned ratings to 1,734 fire departments in the State of Illinois in 2023.



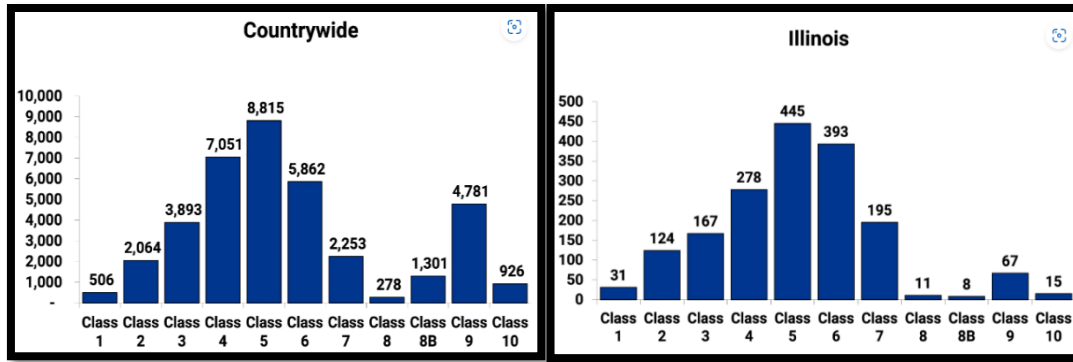


Chart 2: Listing of Countrywide and Illinois ISO classifications in 2023

The City of South Beloit holds a Class 4/4Y ISO classification. It is among the 278 Fire Departments in Illinois with this classification. The table below provides a detailed breakdown of the ISO score for the City of South Beloit:

ISO – FSRs ITEM	City of South Beloit (Class 4/4Y)	Credit Available
Credit for Emergency Reporting	3.00	3.00
Credit for Telecommunicators	2.99	4.00
Credit for Dispatch Circuits	1.65	3.00
<b>Credit for Receiving &amp; Handling Fire Alarms</b>	<b>7.64</b>	<b>10.00</b>
Credit for Engine Companies	5.78	6.00
Credit for Reserve Pumpers	0.00	0.50
Credit for Pumper Capacity	3.00	3.00
Credit for Ladder Service	1.60	4.00
Credit for Reserve Ladder & Service Trucks	0.00	0.50
Credit for Deployment Analysis	5.58	10.00
Credit for Company Personnel	4.26	15.00
Credit for Training	1.81	9.00
Credit for Operational Consideration	2.00	2.00
<b>Credit for Fire Department</b>	<b>24.03</b>	<b>50.00</b>
Credit for Supply System	26.14	30.00
Credit for Hydrants	3.00	3.00
Credit for Inspection & Flow Testing	4.00	7.00
<b>Credit for Water Supply</b>	<b>33.14</b>	<b>40.00</b>
<b>Divergence</b>	<b>-6.96</b>	<b>---</b>
<b>Community Risk Reduction</b>	<b>4.50</b>	<b>5.50</b>
<b>TOTAL CREDIT</b>	<b>62.35</b>	<b>105.50</b>

Table 1: ISO Points allowed for the City of South Beloit



The effectiveness of the ISO rating as an indicator of a community's fire protection capabilities remains subject to debate. The primary function of the ISO is to determine fire insurance classifications, which insurance companies may or may not use when calculating property insurance premiums for a given area. The ISO evaluates specific components of the fire protection program that it deems relevant for assigning insurance rates. Consequently, relying exclusively on a community's ISO rating provides only a limited insight into the overall performance or quality of its Fire Department. The complete ISO Report can be found in Appendix C of this report.

## 9-1-1 Calls and Dispatch Channel

Utilizing a 9-1-1 dispatch center that can coordinate with neighboring fire departments is crucial for several reasons. Firstly, it enhances the efficiency and effectiveness of emergency response. When a fire department can quickly communicate and collaborate with neighboring departments, it ensures that the closest and most appropriate resources are dispatched to an incident. This can significantly reduce response times, which is critical in emergency situations where every second counts. Faster response times can lead to quicker containment of fires, more effective rescue operations, and the saving of lives and property.

Secondly, a coordinated dispatch system promotes resource sharing and mutual aid among neighboring fire departments. In large-scale emergencies or situations where multiple incidents occur simultaneously, a single fire department's resources may be stretched thin. By having a dispatch center that can call upon neighboring departments, resources such as personnel, equipment, and specialized units can be pooled together to manage the situation more effectively. This collaborative approach ensures that no single department is overwhelmed and that the community receives the best possible emergency response.

Lastly, utilizing a 9-1-1 dispatch center that can dispatch incidents with other neighboring fire departments fosters a sense of community and cooperation. Fire departments working together can build stronger relationships, share best practices, and conduct joint training exercises. This not only improves the overall preparedness and capability of the departments involved but also enhances the trust and confidence of the community they serve. When residents know that their local fire department is part of a larger network of support, it can provide peace of mind and reassurance that they are well-protected in times of emergency.

At present, the City of South Beloit utilizes the Rockton line to access the County PSAP, illustrating effective intergovernmental collaboration. Nevertheless, as the City of South Beloit considers ongoing cooperation with the Town of Beloit and the City of Beloit to



implement the six-fire station response model, it is advisable to assess both the cost and effectiveness of transitioning their PSAP affiliation to align with that of the Town and City of Beloit.

## Policies, Procedures and Mandatory Training

Fire departments in Illinois should maintain a comprehensive set of policies and procedures to ensure the safety and efficiency of their operations. These guidelines provide a clear framework for firefighters to follow, which helps in maintaining consistency and standardization in their actions. This is particularly important in emergency situations where quick and decisive action is required. By having well-defined policies and procedures, fire departments can ensure that all members are aware of their roles and responsibilities, reducing the likelihood of errors and enhancing overall coordination during critical incidents.

Moreover, policies and procedures help fire departments comply with legal and regulatory requirements. They provide guidelines for handling various situations, from routine inspections to emergency responses, ensuring that the department operates within the bounds of the law. This not only protects the department from potential legal issues but also builds trust with the community it serves. Additionally, having clear policies and procedures in place aids in training new recruits and developing existing personnel, fostering a culture of continuous improvement and professional development within the department.

The City of South Beloit maintains policies and procedures for the fire department, which require regular updates. Fire department records also need to be consistently updated. The Intergovernmental Agreement with the Town of Beloit does not cover these responsibilities. The IFCA Consulting Team suggests that the City of South Beloit employs an individual with relevant experience to manage these tasks. This role could be fulfilled by a part-time staff member.

## Future Considerations

### Good, Better, Best Response Model

The level of fire and emergency medical services are contingent on several factors within a community. As we see throughout this report, the City of South Beloit had a declining pool of available personnel to do the job. Several factors could overcome this such as higher pay and benefits, better training, and increased call volume. The community's ability to fund/support emergency services could be categorized as a Good, Better, Best Response Model for a single fire station in a community.



“Good” Response Model- This approach involves two staff members available daily to operate an ambulance for emergency medical calls. While the ambulance crew can assist at fire incidents, they are not suitable as the primary fire response team. When the ambulance is in use, including hospital transport, the community lacks a staffed primary apparatus, leaving it vulnerable until assistance arrives from a neighboring area, which may cause delays.

“Better” Response Model – This approach assigns three personnel daily to staff an ALS fire engine, capable of responding to both fire and medical emergencies. Mutual aid ambulances from other communities would manage hospital transport on medical calls. EMS billing revenue would be minimal, as only the transport ambulance service may bill for transport.

“Best” Response Model - This approach involves assigning five personnel each day to staff, an ambulance with two personnel and an ALS (Advanced Life Support) fire engine with three personnel. This arrangement allows both the ambulance and engine to respond to calls as needed. A staffed ALS fire engine can accompany the ambulance for complex incidents requiring additional support. When the ambulance is used for patient transport, the ALS fire engine remains available for other emergencies. For incidents needing the fire engine, both the engine crew and ambulance personnel may respond together if necessary. The model follows Federal and State Occupational Safety and Health laws regarding "Two in Two out" procedures, provided all five personnel are present at the same time. The IFCA is currently working with Illinois OSHA and other fire service agencies in the state to educate and support fire departments to become OSHA compliant.

## Six Fire Station Response Model

The National Fire Protection Association (NFPA) 1710 standard outlines the minimum requirements for the organization and deployment of fire suppression operations, emergency medical operations, and special operations to the public by career fire departments. One of the key aspects of NFPA 1710 is the specification of the number of firefighters needed at a structure fire. This model also supports the initiative of Incident Command, another OSHA initiative.

According to NFPA 1710, a minimum of 15 firefighters should be dispatched to a structure fire in a typical single-family dwelling. This number includes the following roles:

- Four firefighters for the initial attack line.
- Two firefighters for the backup line.
- One firefighter for the incident commander.
- One firefighter for the safety officer.
- Two firefighters for search and rescue.
- Two firefighters for ventilation.
- Two firefighters for rapid intervention.
- One firefighter for the pump operator.

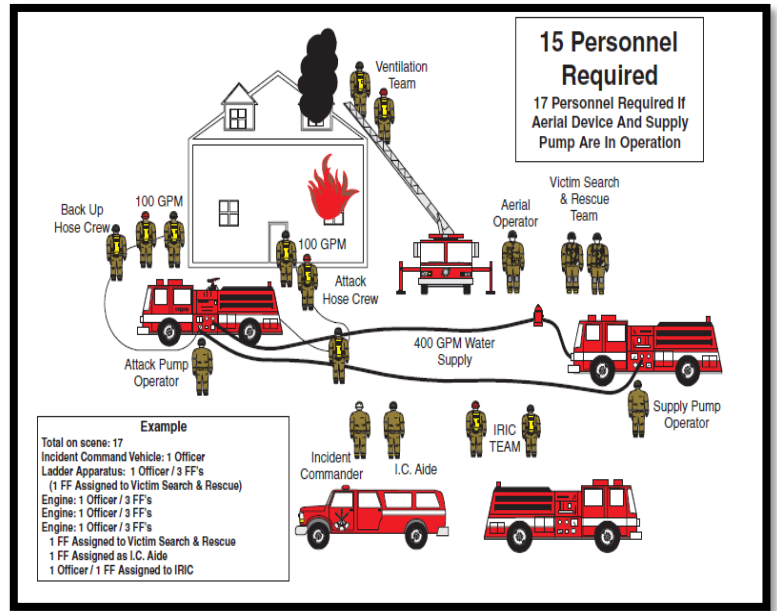


Illustration 10: Illustration Source-IAFF-NFPA 1710 Implementation Guide (2002)

This staffing level is designed to ensure that all critical tasks can be performed simultaneously and effectively, enhancing the safety and efficiency of fire suppression operations. The standard emphasizes the importance of having adequate personnel to perform these tasks, as it directly impacts the ability to control the fire, protect lives, and minimize property damage.

The six-station response model proposed by Chief Pease has the potential to meet all personnel requirements for structure fires as specified by NFPA 1710. While NFPA 1710 is not a mandatory standard, it is important to note that its recommendations are grounded in consideration of both firefighter safety and operational efficiency within fire suppression systems. The IFCA Consulting Team recommends the City of South Beloit to work with Chief Pease to implement this concept throughout the three Beloit communities. When staffing levels allow, the IFCA Consulting Team recommends deploying an ALS Engine as the primary suppression vehicle. The ALS Engine offers the most effective and practical response to most emergency incidents in the South Beloit community.

## Insurance Service Office (ISO) Consideration

The ISO rating, which measures the effectiveness and readiness of a fire department, can be significantly impacted by the lack of sufficient apparatus and personnel on a fire ground scene in South Beloit. When there are not enough firefighters or equipment available, the response time to emergencies can be delayed, and the ability to control and extinguish fires efficiently is compromised. This can lead to greater property damage, increased risk to lives, and a higher likelihood of fire spreading to adjacent areas. Additionally, the ISO rating considers the availability and reliability of firefighting resources, so any deficiencies in

these areas can result in a lower score. A lower ISO rating can have broader implications, such as higher insurance premiums for residents and businesses, and a diminished perception of the fire department's capability to protect the community. Therefore, ensuring that South Beloit has adequate apparatus and personnel is crucial for maintaining a favorable ISO rating and ensuring the safety and well-being of the community.

## Policies and Procedures

Fire departments in Illinois are legally required to maintain a comprehensive set of policies and procedures to ensure the safety and efficiency of their operations. These policies and procedures help in maintaining consistency and standardization in their actions, ensuring that all members are aware of their roles and responsibilities. Some of the agencies requiring written policies are Illinois Occupational Safety and Health (IL - OSHA), and the Illinois Department of Public Health (IDPH). Here are some required policies for Illinois fire departments:

1. **Fire Suppression and Emergency Response:** Policies outlining the procedures for responding to fire incidents, including the deployment of personnel and equipment, incident command structure, and safety protocols.
2. **Emergency Medical Services (EMS):** Guidelines for providing emergency medical care, including protocols for patient assessment, treatment, and transportation.
3. **Training and Certification:** Requirements for the training and certification of firefighters and EMS personnel, ensuring that all members are adequately trained and qualified to perform their duties.
4. **Safety and Health:** Policies to ensure the safety and health of firefighters, including guidelines for the use of personal protective equipment (PPE), health and wellness programs, and procedures for handling hazardous materials.
5. **Mutual Aid Agreements:** Procedures for coordinating with neighboring fire departments and other emergency services agencies, including mutual aid agreements and protocols for joint operations.
6. **Fire Prevention and Inspection:** Guidelines for conducting fire inspections, enforcing fire codes, and implementing fire prevention programs to reduce the risk of fire incidents in the community.
7. **Incident Reporting and Documentation:** Requirements for documenting and reporting fire incidents, EMS calls, and other emergency responses, including maintaining accurate records and submitting reports to relevant authorities.
8. **Public Education and Community Outreach:** Policies for conducting public education programs and community outreach initiatives to promote fire safety and emergency preparedness among residents.



The IFCA Consulting Team recommends that the City of South Beloit maintain policies and procedures for the fire department, the fire station, and the contracted personnel. These policies and procedures are crucial for ensuring the safety and efficiency of operations, providing a clear framework for firefighters to follow, and helping the department comply with legal and regulatory requirements. This approach not only protects the department from potential legal issues but also builds trust with the community it serves. Additionally, having clear policies and procedures in place aids in training new recruits and developing existing personnel, fostering a culture of continuous improvement and professional development within the department. Policies and procedures are required even when fire departments contract for personnel from another agency. Fire Departments found in noncompliance may be subject to severe fines and punishments including loss of licenses when applicable.

## Dispatch Considerations

The 9-1-1 call taking and dispatch process is critically important because it directly impacts the speed and efficiency of emergency response. According to the National Fire Protection Association (NFPA) 1221 standard, the goal is to answer 95% of 9-1-1 calls within 15 seconds and 99% of calls within 40 seconds. Once the call is answered, the dispatch process should be completed within 60 seconds for 90% of emergency incidents and within 90 seconds for 99% of incidents. These time standards are crucial because they ensure that emergency responders are alerted and dispatched as quickly as possible, minimizing delays in response times. Faster dispatch times can lead to quicker arrival of emergency services at the scene, which is essential for saving lives, reducing the severity of injuries, and minimizing property damage. In emergency situations, every second counts, and adhering to these NFPA standards helps ensure that communities receive timely and effective emergency assistance.

Currently, South Beloit Fire incidents are dispatched on a separate channel from those used by the City of Beloit and the Town of Beloit. The IFCA Consulting Team recommends if the six fire station concept is implemented successfully, it may involve consolidating all agencies onto a single fire dispatch channel. This strategy aims to enhance both safety and operational efficiency for all personnel involved. Additionally, the City of South Beloit should consider moving 9-1-1 calls to the same center as the two other Beloit communities to improve dispatch times.

## Future Consideration for Staffing Partners

The current Intergovernmental Agreement for staffing with the Town of Beloit is functioning effectively. This agreement has the potential to develop into a more comprehensive response framework should the six fire station response model be adopted, which would provide significant benefits to the City of South Beloit. The reliability of contracted staffing





at the fire station has improved since the implementation of the Intergovernmental Agreement. Given the ongoing national shortage of qualified firefighters and paramedics, the IFCA Consulting Team does not recommend reverting to staffing the fire station solely with City of South Beloit personnel.

If the City of South Beloit wishes to reconsider agencies that may provide contracted firefighters and paramedics in the future, it is recommended to contact the Fire Chief of Harlem Roscoe, who has expressed interest in exploring this possibility, as well as AMR, which currently supplies contracted personnel to the Rockton Fire Protection District. Additionally, the City of South Beloit should identify and reach out to other private companies available at that time.

## Appendix A – FireScope Mid-America



**A REVIEW OF FIRE DEPARTMENT OPERATIONS  
AND ALTERNATIVES FOR FUTURE FIRE AND  
EMERGENCY SERVICES IN THE CITY OF SOUTH  
BELOIT, ILLINOIS**

FIREScope MID-AMERICA  
FAIRFIELD BAY, ARKANSAS

© Copyright 2016, Firescope Mid-America. All rights for reproduction and distribution are granted to the City of South Beloit, Illinois

## TABLE OF CONTENTS

Executive Summary	Page 3
Introduction	Page 4
Study Methodology	Page 5
Findings	Page 5
Analysis	Page 12
Alternatives	Page 17
Recommendations	Page 22
Acknowledgements	Page 23
Appendix and End Notes	Page 23

## EXECUTIVE SUMMARY

The City of South Beloit engaged Firescope Mid-America to examine the services provided by its Fire Department in relationship to the cost effectiveness of those services and the ability of the City to maintain quality services in the future. Specifically, the objectives of the study are:

- To examine the level of services provided in relation to those required for the community
- To ascertain the cost effectiveness of the services currently provided
- To suggest alternatives to the provision of services while reducing the cost and/or escalation of costs for those services

The following alternatives are presented for consideration as the City Commission addresses the matter of fire and emergency services and the economic challenges ahead. More than one of the alternatives may be implemented.

- **Contract for Dispatching Functions:**

Enter into a service agreement with Rockford Memorial Hospital or the City of Rockford Fire Department to provide fire dispatching services for the City of South Beloit. Close out the SBFD dispatching center and hire a part-time clerical support person for the Fire Department.

- **Contract for fire services with Rockton Fire Protection District:**

Enter into an intergovernmental agreement with the Rockton Fire Protection District for the provision of Fire Services in the City of South Beloit. This would include designating the personnel and assets of the SBFD to be operated by the RFPD.

- **Contract for fire services with Harlem-Roscoe Fire Protection District:**

Enter into an intergovernmental agreement with the Harlem-Roscoe Fire Protection District for the provision of Fire Services in the City of South Beloit. This would include designating the personnel and assets of the SBFD to be operated by the HRFPD.

- **Contract for emergency medical service personnel to staff the primary ambulance at SBFD**

Enter into an agreement with a licensed paramedic service provider to staff the paramedic position on the primary SBFD ambulance in lieu of doing so with career staff from SBFD. Reduce the number of full time SBFD staff accordingly. This could be done for all full time coverage hours or a portion thereof.

The following alternatives were considered but not recommended for serious consideration:

FIREScope MID-AMERICA

*City of South Beloit Fire Services Study*

- Establishing a new fire protection district serving South Beloit or formally annexing into an existing fire protection district.
- Entering into an intergovernmental agreement for contract fire services from the City of Beloit, Wisconsin.
- Contracting with a private ambulance service to replace the ambulance service provided by the fire department.

**The following recommendations are made to address important issues that were identified during the site visit:**

- The working hours of the Fire Chief should be changed to require his presence during normal City business hours, Monday through Friday
- The Foreign Fire Insurance Tax Board should be elected and operated in accordance with applicable Illinois Statutes
- Before any further funds are devoted to the development of training facilities on the SBFD Headquarters property, the Commission should direct the SBFD staff to attempt to negotiate a workable agreement for the use and further development of the existing fire service training facility being operated by the Harlem-Roscoe Fire Protection District on Willowbrook Road.

## **INTRODUCTION**

The City of South Beloit engaged Firescope Mid-America to examine the services provided by its Fire Department in relationship to the cost effectiveness of those services and the ability of the City to maintain quality services in the future. The City faces a level or slowly increasing income stream while the costs of providing Fire Department services are rising faster than City revenues. Specifically, the objectives of the study are:

- To examine the level of services provided in relation to those required for the community
- To ascertain the cost effectiveness of the services currently provided
- To suggest alternatives to the provision of services while reducing the cost and/or escalation of costs for those services



## **STUDY METHODOLOGY**

Firescope Mid-America conducted a site visit in South Beloit to observe the facilities and equipment used by the South Beloit Fire Department and adjacent fire services. During the site visit, many local officials, fire service personnel, business leaders and citizens were interviewed to obtain information and impressions regarding the objectives of the study. Many notes were taken and information compared for its validity and applicability. In addition, Firescope Mid-America conducted a literature search that included reviewing applicable provisions of National Fire Protection Association Standards, Insurance Services Office Standards and Illinois Revised Statutes. Specific citations from these documents are noted in the appendix to this report.

All interviewees were advised that no statement would be attributed to any specific individual in this report. In addition, anyone could opt to be deleted from the list of those interviewed, an option that some of the individuals selected. Although some information was provided that dealt with specific internal issues or disagreements, the information was typically not relevant to the objectives to the study and is not directly addressed in this report.

The information gathered was developed into the findings of the study. The findings were sent to the City of South Beloit for fact checking. Analysis of all of the material was then accomplished by Firescope Mid-America toward developing the alternatives and recommendations set forth in this report.

## **FINDINGS**

1. The City of South Beloit has a population of approximately 7,719 and is located in far northern Illinois, directly adjacent to the Wisconsin state line. In fact the north city limits of South Beloit, is the south city limits of the City of Beloit, Wisconsin. The service area of the South Beloit Fire Department is roughly 6.5 square miles. Its demographics indicate that household income, family income and per capita income are all slightly below that of the adjacent Statistical Measurement Areas.<sup>1</sup>
2. South Beloit has some very stable industry, a successful industrial park and land available in several locations for industrial and commercial expansion. Of particular note is the land available near an interchange of Interstate Highway 90, just south of the Wisconsin state line. However, the number and breadth of retail establishments in the community continues to challenge the City's ability to generate sales tax. Some opportunities for greater retail growth have been explored in the past but have not been successful to date. In addition, property values and subsequently income from property taxes have decreased after the recession of 2008 and have been slow to recover. Fees for services provided by the City are consistent with those in surrounding communities. The economic condition of the State of Illinois continues to present challenges to drawing industry and business to the community.

*City of South Beloit Fire Services Study*

3. The operating expenses for the South Beloit Fire Department (SBFD) represent approximately 21% of the City's general fund operating costs. Property taxes supporting the fire services represent 11% of the City's portion of the total property tax rate. Approximately 32% of the property tax funds supporting the fire services are specifically dedicated to the pension fund<sup>2</sup>. Currently, about \$160,000 per year is realized in revenue from billing for ambulance services.
4. The City of South Beloit is led by a Commission form of Government. One of the Commissioners is assigned to oversee the public safety departments, including the Fire Department. In the most recent election all but one of the Commissioners was elected for the first time, as was the Mayor. As a municipal fire department, the SBFD is wholly governed by the City. Its financial, administrative and operational policies are subject to review and approval by the assigned Commissioner. The Fire Chief reports to the Commissioner as well. However, it is not expected that the Commissioner will be involved in the direct operation of the department and that has been and continues to be the case.
5. The Fire Department's operating expenses have been reasonably flat for several years as the City attempts to hold the line on financial status. However, the pension costs for the Firefighters' Pension Fund have continued to grow as the City's unfunded liability continues to be large. As of the December 31, 2014 financial report, the City is 50.34% funded in relation to the actuarial stated requirements of the fund. Presented as a function of the current pensionable payroll, this amounts to 490.67% of that payroll<sup>3</sup>. The City has been contributing an additional \$80,000 annually to the fund (in addition to the normal contributions driven by the annual payroll). However, the volatile market conditions and investment limitations imposed upon the fund by State law have caused the investment returns to be well below actuarial assumptions. The current (as of December 31, 2014) rate of City contribution to the fund as a percentage of pensionable salary is 32.95%<sup>3</sup>. This number will likely continue to grow given the investment returns and other actuarial assumptions.
6. The four full-time employees of the fire department are covered by a required Downstate Fire Pension Plan as governed by Illinois law. The plan also covers another employee who has retired on the basis of a non-duty related disability. Funding requirements for the Pension Plan are based upon the required actuarial study and the Illinois statutes that both require and restrict fund management. Not unlike many such plans in the State of Illinois, it is seriously underfunded in relation to the actuarial predictions. The Plan is governed by a Pension Board that consists of active members elected by their peers, one or two retired members, elected by retired members, if they are available, and two mayoral appointees, consistent with the State Statute. The Pension Board operates within a strict set of State mandated rules for investments, actuarial calculations and benefit payouts.

*City of South Beloit Fire Services Study*

7. The costs associated with funding the Fire Department pension fund will continue to grow as current covered personnel retire and those positions are filled by new, full-time personnel. A mitigating factor to rising costs is the fact that any new entrants to the system are covered under a diminished set of benefits mandated when the State of Illinois adopted a set of Tier 2 benefits for Downstate Fire Pension plans. The Tier 2 benefits are significantly less and thus require less funding to meet actuarial requirements going forward. The employee contributed share of Tier 2 benefits is slightly less as well.
8. The South Beloit Fire Department is a combination fire department operating with 4 career fire officers, career dispatchers, paid-on-premises (POP) personnel, paid-on-call (POC) personnel and some uncompensated volunteer personnel. The services provided include traditional fire services, paramedic emergency medical transport services, and some technical rescue services. The Department has a vigorous and well respected training program for its own personnel and other area firefighters in Illinois and Wisconsin. The Department is well respected in the community and is described by many as community oriented. They are dedicated to the Department's mission and to the community. The Fire Department personnel host an annual corn boil that was mentioned as a popular event by a number of interviewees. The department responds to approximately 900-1,000 calls per year with about 78% of those calls being emergency medical service related. The Insurance Services Office Public Protection Classification for the City of South Beloit is Class 4.
9. The four career fire officers consist of the Fire Chief, an Assistant Chief, a Captain and a Lieutenant. The Fire Chief advises that he works 14 hours on Mondays, 24 hours on Wednesday (into Thursday AM), and 10 hours on Fridays. When on duty, the Chief will respond to calls depending on other personnel in the Station, and often does so. When he is off duty, the Chief responds to significant or simultaneous calls in his City owned, assigned vehicle. The other three career officers each work a standard 24 hours on duty/48 hours off duty shift thus insuring that there is a career fire officer on duty at all times. In addition, each shift is staffed with 1 or 2 POP personnel who typically work either 12 or 24 hours. Some of the POP personnel work strictly in that role while others come from the ranks of the POC personnel who respond both on duty and off duty. Pay for the non-career personnel is \$9.50 per hour. Volunteer personnel who respond when called are not compensated. Career dispatchers also serve as POP personnel on some shifts when they are not on duty as dispatchers. The on-duty compliment always includes at least one person with Advanced Life Support (Paramedic) skills and licensure. None of the employees is represented by any organized labor union.
10. While POP personnel are paid below the rate of adjacent agencies, salaries for career personnel were recently adjusted to more closely reflect the market. In addition, career employees are provided with health insurance and other benefits that increase personnel costs. With only 4 full-time personnel, overtime payments to career employees are also significant.

*City of South Beloit Fire Services Study*

11. The SBFD operations are consistent with recognized good practice. For fires, all on duty personnel respond on the first engine while POC personnel responding from home/work staff the other equipment and bring it to the scene. Personnel are well trained and training documentation is consistent with good practice. On emergency medical calls, two of the on duty personnel respond in the first ambulance and the third on duty person responds in an SUV chase car. If the third person is needed, either as a paramedic for an Advance Life Support call or to help manage the patient, he/she will go with the ambulance to the hospital. If they are not needed, the third person returns to the station to staff other vehicles. Emergency Medical protocols dictate when there must be a paramedic in the ambulance with a patient. Some staff members have raised questions about the observance of those protocols. Any simultaneous ambulance call is either addressed with POC personnel or referred to a mutual aid agency for coverage.
12. The SBFD has automatic aid (all agencies dispatched at the time of the initial call) agreements with The City of Beloit, Wisconsin, and the Rockton Fire Protection District (RFPD). These agreements/operations cover a range of locations in each jurisdiction that make sense to provide closest fire company support. The activation of automatic aid is also driven by the type of incident. The SBFD has mutual aid (agency must be requested) with literally all fire departments in Winnebago County and, through the MABAS alliance, all other fire departments in Illinois. SBFD is also an active and respected participant in an alliance on both sides of the state line that addresses hazardous materials accidents and technical rescue situations. SBFD does not have an automatic aid agreement with the Harlem-Roscoe Fire Protection District which borders the City on the east and south.
13. The SBFD has very good equipment and maintains it well. They have redundancy in pumpers and ambulances. The ladder truck is in very good condition. They operate from a single fire station that was converted from a private use, remodeled and expanded for the fire department. It functions well and provides adequate working and training space in a pleasant environment. The building is well maintained and is a community asset. The station is well located to protect the northern and central parts of the City. Automatic aid from the RFPD aids in protecting the southwestern portions of the City.
14. The SBFD management and staff are experienced and credentialed. They have an organizational structure that utilizes a chain of command and assigns administrative responsibilities to all of the career and POC officers. Each of the three career officers serves as the shift commander on his shift. In their absence, another one of the career officers or a POC officer is assigned to that role. The Fire Chief has the overall responsibility for operations and does the scheduling. The Assistant Chief serves in the absence of the Chief and has the responsibility for personnel management. The Captain has responsibility for the training program for recruits and all personnel. The Lieutenant is responsible for dispatch and fire prevention functions. All have other assignments as well.

*City of South Beloit Fire Services Study*

15. The SBFD currently has a substantial roster of POP, POC and volunteer personnel. Recruiting has been successful due partially to the good reputation of the department and the reputation of the SBFD training program. The management staff does express concern about staffing in the future. Most young personnel joining the fire department do not stay more than 5 years. They either move away for employment or other reasons, or they are overwhelmed by the time commitment to function and stay current with fire service training. Also, management advises that the \$9.50 per hour pay for POC and POP personnel is an across the board rate that is below that of adjacent fire services.
16. The South Beloit Fire Department operates a small dispatch center that serves only the Fire Department. It is staffed at all times. Staffing includes two full-time dispatchers and some POP personnel that have been trained for the dispatch function. The two full-time dispatchers work 24 hour shifts with one working Monday and Wednesday and the other working Tuesday and Thursday. The remaining time is covered by the POP personnel. The SBFD dispatchers sleep and work in the communications room in the fire station. They have a rollaway bed on which they sleep at night. Most calls for SBFD fire services come through the Winnebago County 9-1-1 Center located in Rockford and operated by the Winnebago County Sheriff's Office. When a call is received for SBFD, the 9-1-1 operator takes the information and then forwards the call to the SBFD dispatcher's seven digit number. The Winnebago County operator does not typically stay on the line. The SBFD dispatcher takes the information from the caller, determines that the call is actually in the SBFD response area and then pages the Department personnel to respond. If the address for the call is determined not to be in the SBFD response area, the call is routed back to Winnebago County 9-1-1 for reassignment. The SBFD dispatchers do not have a computer aided dispatch system but do utilize web based maps. They have access to the SBFD radio channels and those of surrounding agencies. They also have the ability to activate the City's weather warning sirens. The direct costs of operating the SBFD dispatching function have risen slowly over the past few years and are currently approximately \$125,000 per year.
17. Some local businesses and institutions use the unlisted 7 digit number to contact the SBFD for emergencies rather than calling 9-1-1. This is approved by the Fire Chief and encouraged to speed up response.
18. The personnel assigned to dispatch also accomplish the clerical work for the SBFD. The two full-time dispatchers also work POP shifts on their days off from dispatch duties. They are also trained as fire inspectors and are doing some inspections in local businesses. The Fire Chief also has assigned hours as a dispatcher as a requirement under his job duties.

*City of South Beloit Fire Services Study*

19. The Harlem-Roscoe Fire Protection District (HRFPD) also maintains a dispatch function for its own operations and receives calls from the Winnebago County Communications Center. All of the staffing for the HRFPD is accomplished by POP personnel on a part-time basis. All other fire departments in Winnebago County are dispatched by a communications center in the Emergency Departments of two different hospitals or by the Emergency Communications Center operated by the City of Rockford Fire Department. The hospitals charge a nominal annual fee (currently about \$9,000 per year) to each fire department for their dispatching services. The City of Rockford Fire Department charges \$45.00 per call for their dispatching services.
20. The City of Rockford and Winnebago County Sheriff's Department operated a combined 9-1-1 Center until 2005 when the two entities opted to separate the operations. A new facility was constructed on the north side of Rockford and the Winnebago County Sheriff's Department began dispatching for their own operation and a number of the smaller community police departments in the county. Over the past decade, all police departments in the County, including the South Beloit Police Department moved to the service provided by the Sheriff's Department. Until that time, the South Beloit Police Department and Fire Department operated a center jointly, serving just the City of South Beloit.
21. Talks are nearing completion on the consolidation of the 9-1-1 centers operated by the County and the City of Rockford. The consolidated center will handle all 9-1-1 calls for the entire County and will dispatch all police agencies, including the Rockford Police Department. The center will also develop a policy and funding formula for fire departments that wish to be directly dispatched by the combined center. The details and timing of the consolidation are still in the formative stage and the agreement will need to be approved by the Winnebago County Board and the Rockford City Council. Along with the operational consolidation, the plan will be to replace the telephone and computer aided dispatch systems to meet modern standards. Both are a substantial expense.
22. The SBFD, as is the case with all fire departments in the State of Illinois, receives funds from a 2% tax on fire insurance premiums paid by City property owners to insurance companies that are not headquartered in the State of Illinois. The funds, known as the "2% funds" are paid directly to an elected board of active firefighters known as the Foreign Fire Insurance Tax Board. The rules for the board's composition, election and some operations are specified in Illinois law<sup>4</sup>. The purposes for which the funds may be used are broadly described by the statute as well<sup>4</sup>. Only the Board has the power to allocate and spend the money and the funds cannot be comingled with other tax funds. In South Beloit, the Board has been elected and is functioning. For the past several years, much of the money received has been used to develop a training facility behind the fire station. For several years the fund was not audited as required. However, it is now being included as a separate fund in the City's annual audit.



*City of South Beloit Fire Services Study*

23. The Harlem-Roscoe Fire Protection District abuts the City of South Beloit on the East and South. It is organized under Illinois Law as a Fire Protection District and is supported primarily by property taxes levied within its service boundaries. The HRFPD operates three fire stations, one of which is located on Willowbrook Road, directly adjacent to the South Beloit City limits. The area served consists of 84 square miles with approximately 35,000 residents. Calls for service average 2,100 per year with 78% of the calls being emergency medical related. All three stations are staffed by POP and POC personnel. The District has only two full-time personnel. HRFPD is not required to operate a Down State Pension program and has chosen not to do so. Its POP and POC personnel are paid on a scale from \$10 per hour to \$18 per hour based on service and training benchmarks. The District is well managed by a full-time fire chief and is financially very sound. Its equipment and facilities are excellent. The district also operates a state of the art fire training tower and live burn facility directly behind the fire station on Willowbrook Road. Currently, there is not any automatic aid agreement for services with the SBFD. The district provides a full range of fire and emergency medical services. The Insurance Services Office Public Protection Classification for the area served by HRFPD is Class 5. The District is governed by a 3 member board appointed by the County Board Chairman with the advice and consent of the County Board.
  
24. The Rockton Fire Protection District abuts the City of South Beloit on the South and West. It is also a recognized fire protection district supported primarily by property tax revenues from its constituent property owners. The service area encompasses approximately 54 square miles and has an estimated population of 21,000 residents. Calls for service average 1,200 per year with 75% of those calls being emergency medical service related. The RFPD operates from a single station in the Village of Rockton. There is currently a strong automatic aid relationship between the RFPD and SBFD. The RFPD staffs its station with POP and POC personnel as well as a part-time fire chief and part-time administrative staff. There are no full-time employees and no requirement for a pension plan. The RFPD also uses some contracted emergency medical service employees from a private provider to staff their ambulance service at some times. The district's equipment and facilities are in very good condition and their personnel are well trained. Pay for POP and POC personnel averages \$12.50 per hour with rates based upon skill levels and credentials. The RFPD is financially sound and well managed. The Insurance Services Office Public Protection Classification for areas served by the RFPD is Class 4. The District is governed by a 5 member board elected by the citizens of the district pursuant to 70 ILCS 705/4.03.
  
25. There is a disagreement between the administrations of SBFD and HRFPD regarding the provision of services on Interstate 90 in the area that lies between the Illinois/Wisconsin state line and the actual end of the Illinois Tollway jurisdiction. The HRFPD has a written agreement with the Illinois Tollway Authority to provide fire, rescue and emergency medical services on the Authority's northern most mileage in Winnebago County. While the Tollway Authority does not own the last few miles before the state line, the Tollway Authority does have a contract with the Illinois Department of Transportation for the operation and maintenance of Interstate 90 all of the way to the state line. The SBFD station is located 10,602 feet from the Gardner Road interchange

*City of South Beloit Fire Services Study*

access point to Interstate 90. HRFPD Station 3 is located 3,292 feet from the Rockton Road interchange access point and 11,394 feet from the Gardner Road interchange access point. At present, both agencies respond to the area.

26. The current SBFD Fire Chief indicated that he would be retiring in 2017 after a distinguished career involving many years of service to the City of South Beloit and active participation in the State-wide fire service organizations.

## ANALYSIS

The fiscal difficulties for the City of operating a fire department and maintaining the current service level are apparent in examining the facts. The unfunded liability in the Firefighters' Pension Fund along with the operating costs and other City priorities all require an increasing amount of recurring funds. With tax base growth as a very uncertain variable, it makes good sense to explore options that meet the service needs of the City, but do so with less funding pressure.

It is clear that the City Commission, the business community, and the citizens of South Beloit have certain expectations for fire and emergency services, not uncommon to those in most cities of similar size. That is, the community expects their fire department to respond quickly to calls for service and to be competent in addressing the reason for the call. There is also an understanding that the Fire Department is operated primarily with POC, POP and volunteer personnel in order that the services can be delivered within the economic capacity of a city the size of South Beloit. No person was encountered during the study that either thought or expected that the Fire Department would be staffed completely by full-time personnel.

As it exists, the Fire Department provides a very good level of service to the community. They respond quickly, personnel appear to be well trained and credentialed, and all reports are that they provide compassionate and quality efforts. The Department and its personnel are held in high regard by the community and the personnel have a devotion to the community. The staff of the Fire Department is proud of their service and has a level of camaraderie that is consistent with most quality fire departments. The mere presence of a consultant looking at alternatives to address the financial concerns of the City was concerning to many of the employees.

As mentioned earlier in this report, there was evidence in the form of anonymous and signed letters indicating some internal issues among the staff. While there may be validity to some or all of these concerns, this report will focus on the broader issues that face the community moving forward.

The Fire Department's staffing model is effective. It provides a career fire officer on duty at all times and supplements that officer with two POP personnel who are not full-time in that role. Additional staffing for incidents or simultaneous calls comes from the ranks of POC personnel who live in the community. There are other models that will work as well depending on the number of POC personnel in a system and their willingness to pull shifts at the station and respond from their homes. The system is based on the volunteer fire service that serves about

*City of South Beloit Fire Services Study*

75% of the fire departments in the nation. However, the system, nationwide, is experiencing difficulty. Several factors are involved in the shrinking number of volunteers (or POC personnel) including:

- Increasing training hours required to maintain credentials
- Less inclination among employers to release personnel for emergency calls
- Increasing numbers of single parent homes
- Societal mobility
- Less sense of neighborhood/community commitment

There are, however, ways to address the problems of recruitment and retention. Where there are active, well run fire departments that offer a sense of accomplishment and a valued set of benefits, volunteer and combination fire departments are thriving and will do so for many years.

Chief Morris is a dedicated and very well respected fire service leader. He has accomplished much for the Fire Department and the City. However, the hours that he maintains are not consistent with good management practices. It is important for the Department Head to be available during normal working hours and on call during off duty hours. Although some funds are saved by having the Chief work to cover some of the in station staffing, the lack of access to the Chief and oversight from the Chief ultimately add to “freelancing” and program failures.

Chief Morris indicated that he would be retiring in 2017 after a very distinguished career. Changes in top leadership are often good times to examine organizations and alternatives.

The issues associated with funding the current and unfunded liability of the pensions will remain with the City in nearly any scenario of cost cutting, contracting or consolidating. Replacing any of the full-time employees will continue to grow the obligation, albeit at a much slower rate because of the Tier 2 benefit changes. If any solution could be developed where the City no longer had full-time employees as its responsibility, the obligation would cease to grow and actuarial requirements would be defined only by those individuals who remained in the system as past employees and/or retirees.

The Fire Chief and many of the employees are very dedicated to and proud of the training sponsored by the Department. The results of a strong program have yielded a very well trained staff that is properly credentialed, beyond that of many fire departments. In the view of the Fire Chief and others at the Department, the element of the training program that is lacking is a skills development area with props for safe teaching and practicing of physical skills and tactical approaches. A large portion of the Foreign Fire Insurance Tax funds controlled by the firefighters has been and is planned to be used to develop a skills area behind the fire station. A plan is in place and some of the shipping container type vessels have been purchased and delivered. While the need to provide a skills area is important, there are existing facilities in Beloit and a new facility right on the South Beloit City limits on Willowbrook Road. The latter is operated by the Harlem-Roscoe Fire Protection District. When asked about the use of the HRFPD facility, the response was that it was difficult to schedule.

*City of South Beloit Fire Services Study*

The HRFPD training facility is modern and extensive. It was designed to provide a safe practice environment for all National Fire Protection Association Standard 1001 required skills for both Level 1 and 2<sup>1</sup>. Further, it has some training props for other specialty training. The HRFPD training facility is located behind that Department's Fire Station Number 3. Its location is of some concern in that it is located directly adjacent to a residential neighborhood where noise and smoke could become an issue with some residents. An effective use agreement for this facility would certainly make more sense than developing another facility in South Beloit. Achieving such an agreement may need to be done at the governance level.

Public safety dispatching in Winnebago County is currently undergoing some uncertainty and change. The newly elected Sheriff does not want his department engaged in the dispatch function for the entire county and thus has taken a path to reunify the dispatching functions of the City of Rockford and those of the remainder of the County. This is further driven by a new State of Illinois initiative to reduce the number of independent dispatching points. Unusual in the fire service is the use of hospital emergency departments as dispatching points. However, that is where the vast majority of Winnebago County fire departments are receiving their services at present. With the prospects of a single Public Safety Answering Point (PSAP) for Winnebago County, dispatching may have a clear direction in the future. However, there are many financial, service and political issues to be addressed and it is likely months if not years away from clarification.

The South Beloit Fire Department is one of only two fire service entities operating a single discipline, single jurisdiction dispatching center. The other is HRFPD. These centers offer some advantage in that there may be more awareness of a community than would be in place at a centralized center. There is also some advantage in that assigned personnel are able to accomplish a limited scope of other duties, primarily clerical in nature, during down time. However, the cost of operating a totally independent center for South Beloit Fire Department is well above that for organizations using a centralized system. The SBFD dispatchers do not have access to a computer aided dispatch system or to more regularly updated geo-based files. Other fire departments in the County report a good experience with the Rockford Memorial Hospital dispatching services.

Regardless of whether a fire department or a hospital is accomplishing fire department dispatching, there is an extra step introduced into the process of receiving and dispatching a call. When the 9-1-1 center receives the call, information is taken and the call is then forwarded to the appropriate fire and emergency medical dispatching center. In theory, this process is reasonably flawless. However, experience has shown that there is an increased opportunity for confusion and an inherent delay. Since the current 9-1-1 center in Winnebago County is not offering fire department dispatching, there would seem to be no way around the extra step. However, as the dispatching picture improves for the entire county, use of a consolidated dispatch center that not only receives the 9-1-1 calls but also dispatches them makes a great deal of sense. It is also a proven system throughout the nation. An important caveat to the success of a centralized system is that it must have an operational oversight entity that truly represents the entire user base.

*City of South Beloit Fire Services Study*

The SBFD staff indicated that there is a fire prevention program in place. There was some evidence of the public education side of such a program in visits to schools and community events. However, they admitted that the fire inspection program was just beginning to function. None of the businesses that were visited during the information gathering phase of this study could recall having a fire inspection in recent memory. The SBFD staff seemed to realize the importance of an inspection program and also saw it as a way to better utilize the down time of dispatchers. In fact, the dispatch staff not only seemed to be accomplishing the clerical aspects, but also was conducting the inspections as compensated POP or POC duties.

Eliminating the dispatch function operated by SBFD would offer substantial savings and may serve to streamline automatic aid paging. Long and short term solutions may be necessary given the status of fire and emergency medical service dispatching in the County.

Consolidation of services among the adjacent communities makes a great deal of sense. There are several forms of resource sharing. Mutual and Automatic aid represent the easiest situation and are in place to some degree for South Beloit. Functional consolidation retains the independent governance/management of each entity but essentially “melts” the response boundaries by providing the closest unit responses. Organizational consolidation merges to entities under a single managed operation providing services to a broad, defined area that is not necessarily coterminous with any one of the participant’s boundaries. The advantages of organizational consolidation can be achieved through an intergovernmental agreement for services or through actual annexation of one entity to another. In any case, levels of consolidation need to be win-win situations for all parties. This may range from strictly shared services to providing funding to one entity from another for imbalances in the system.<sup>6</sup>

The strong working relationship with the City of Beloit Fire Department is and should be valued. They provide considerable response assets and also appreciate the assistance that they receive from SBFD. The two communities share a substantial boundary. Regardless of any changes undertaken by the City of South Beloit, the automatic and mutual aid relationships with Beloit need to be considered and maintained.

The relationship between the Rockton Fire Protection District and SBFD is very good. There is a strong automatic and mutual aid system that benefits both entities and thus their citizens. The operations are similar in many respects as both are primarily staffed with POP and POC personnel. The RFPD does not have any full-time personnel and has, therefore, avoided many of the costs associated with pensions and other benefits. Consolidating these two entities, either functionally or organizationally could offer service and economic advantages. Their existing fire stations are strategically located 3.38 miles apart in a pattern that would offer good response times to the currently developed area of South Beloit. It would be important to create an automatic aid arrangement with the HRFPD to provide proper coverage in the southeast portion of the City.

The relationship between the Harlem-Roscoe Fire Protection District and SBFD is functioning, but somewhat strained. The issue of coverage on Interstate Highway 90 was cited as an issue, but seems to lack much substance in final analysis of why relations are not better. When asked, two different officials, who requested not to be identified, cited personalities as the root cause.

*City of South Beloit Fire Services Study*

The two fire departments do work together on mutual aid situations. However, the lack of automatic aid is no more glaring than in the fact that staff and personnel from HRFPD Station 3 are not dispatched on a first alarm basis to any incident in the South Beloit subdivision directly adjacent to their station. They would respond if they were physically aware of the situation, but that is the only situation for initial response.

Harlem-Roscoe Fire Protection District has very limited use of full-time personnel. In doing so, they operate in a system that uses POP and POC personnel to staff nearly every position. They have avoided the necessity for pension systems and mandated benefit programs for full-time personnel by remaining essentially a part-time employer. The HRFPD has a substantial funding base and has grown to meet the needs of its constituents over the years without unmanageable debt.

Consolidation with HRFPD could offer significant service enhancements. The stations are 3.73 miles apart and situated to offer good response services to some of the existing area of South Beloit and nearly all of the growth area of the City. The automatic aid arrangement with RFPD would be important to maintain good coverage in the southwest portion of the City.

Illinois law allows a good bit of flexibility in the use of intergovernmental agreements to accomplish municipal services and projects. There are a number of examples of agreements between municipalities and fire protection districts. There are also opportunities in the statutes that allow cities to either form coterminous boundary fire protection districts or to annex into existing fire protection districts. In the latter two cases, an election process is required. Intergovernmental agreements for services do not typically require an election as they are negotiated and executed by the elected/appointed officials of the parties.

Intergovernmental agreements have the flexibility to allow the parties to negotiate the level of diminished or continued governance for the fire services. While some cities have opted to retain a high level of control over consolidated fire services, others have opted out leaving the governance to the elected/appointed fire protection district board. Each situation tends to be a bit different based upon what each party can bring to the table. In the case of South Beloit, a quality fire department operation is in place including equipment, a station and trained personnel. Conversely, the City has a funding problem and no other entity will be interested in taking on a burden that cannot be addressed by the property tax base and any supplemental funding required making a joint effort a win-win situation.

Consolidations, and for that matter, any major changes in operations create concern on the part of and for the people in an organization. The possibility of jobs being lost or changed is great. There is a fear that the history and traditions of the organization can be lost along with the identity of an organization. These are matters that must be addressed as any change proceeds.

However, one of two overarching priorities for the community should be the provision of quality fire, emergency medical, and related services. Although the quality of these services can be expressed in metrics from national standards, to a great extent the public has three major elements within their expectations. These are:



*City of South Beloit Fire Services Study*

- The fire department will respond quickly. When someone dials 9-1-1, they are in need of help. Regardless of how a particular situation may compare with other situations, the calling party regards the matter as an emergency and they would like direct attention to the matter.
- The fire department will do good work. Citizens expect the fire department to be well trained in a broad scope of matters. Certainly proper and rapid medical intervention is the best example. But they might also need someone to shut off a broken faucet that is causing water damage in a home.
- The fire department will respond with compassionate and kind personnel. Citizens need kindness and caring in what can be some of the toughest times in their lives. The kindness demonstrated by the fire department responders at a given incident is often the most remembered part of the encounter with a person in need of fire department services.

Providing fire and emergency medical services is a dangerous activity. Service providers risk their physical and mental health as well as their lives. The other overarching priority in any change must be the safety of the service providers. Any alternative that diminishes the number of qualified personnel available to respond to incidents not only impacts effectiveness, but also the safety of providers. Personal protective equipment quality must also be maintained. Incident management is a key factor in responder safety as well and must be addressed. Nothing in the operations of any of the three fire departments discussed in this report would lead one to believe that responder safety would be diminished by working together in any cooperative or consolidated system.

## ALTERNATIVES FOR CONSIDERATION

The following alternatives are not presented in any order of importance. More than one of the alternatives may make sense as options for South Beloit to meet its service, responder safety, and financial objectives.

### Contract for Dispatching Functions:

Enter into a service agreement with Rockford Memorial Hospital or the City of Rockford Fire Department to provide fire dispatching services for the City of South Beloit. Close out the SBFD dispatching center and hire a part-time clerical support person for the Fire Department.

- **Advantages:**
  - Even considering that there would be an annual or per call fee for the service, a substantial savings could be achieved with the elimination of two full-time dispatcher positions and the POP salaries required to staff a 24/7/365 operation.
  - Radio, telephone and computer aided dispatching infrastructure is existing and in place.
  - The Rockton Fire Protection District already utilizes Rockford Memorial Hospital for dispatching services and thus auto aid dispatching would likely be a smoother operation.

*City of South Beloit Fire Services Study*

- A level of reliability would be achieved that is not present with a single on-duty dispatcher.
- Interdepartmental coordination is enhanced at major incidents when dispatching functions are centralized at a single agency.
- **Disadvantages:**
  - Two employees would lose their jobs and some POP personnel would have diminished income.
  - Some level of intimate knowledge of the community could be diminished as dispatchers would not be local residents or members of the SBFD.
- **Comments:** The current dispatchers are involved with the reorganized fire prevention program and do some of the clerical functions of that program while on duty as dispatchers. They do the actual inspections as POP personnel when they are not scheduled to work as dispatchers. As the dispatching issues are addressed and solutions finalized for Winnebago County, it is likely that the City will have some other options available. If this is the only action taken, the full-time firefighter pension obligations will continue as current employees retire and replacements are hired.

**Contract for fire services with Rockton Fire Protection District:**

Enter into an intergovernmental agreement with the Rockton Fire Protection District for the provision of Fire Services in the City of South Beloit. This would include designating the personnel and assets of the SBFD to be operated by the RFPD.

- **Advantages:**
  - Administrative costs would be reduced as many functions could be consolidated into the administrative operations at RFPD. One of the Fire Chief's positions could be eliminated.
  - Transition of service would be nearly seamless as the two organizations routinely work together already.
  - The combined forces of POC and POP personnel will assist both organizations in staffing.
  - Depending upon the staffing model adopted, full-time positions could be phased out and thus the requirement for new pensionable positions could be phased out.
  - Some redundant fire apparatus could be phased out reducing vehicle replacement costs.
  - The resulting entity would have a greater depth in providing services.
  - There would be a single set of operational procedures and guidelines.
  - The resulting entity would provide very good response coverage to the City as long as automatic aid agreements were developed/retained with HRFPD and the City of Beloit.
  - Revenue sources to pay for the fire services would remain under the control of the City government and would not be restricted to purely property taxes and fees.

*City of South Beloit Fire Services Study*

- **Disadvantages:**
  - Some full-time positions could be eliminated impacting current employees.
  - The City would no longer govern the operation of the Fire Department.
  - There could be a sense of loss in the community for not having its own fire department.
  - The City would retain pension fund obligations of the existing and retired employees in the South Beloit Firefighters' Pension System.
  - Some POC and/POP personnel may opt out of the system rather than face a change in leadership and operations.
- **Comments:** Consolidations require significant negotiation and willingness on the part of all parties to achieve a positive outcome. The Rockton Fire Protection District Board is not likely to agree to a consolidation that presents any unanticipated increase in costs to their tax payers at the time of the consolidation or in the future. The same should be the case for the City of South Beloit. As a part of assessing the costs, it is important to examine not only current financial positions, but also opportunities for future cost avoidance. Such items as the life cycle cost of equipment and buildings as well as community growth should be part of the mutual considerations. Any agreement must deal with the status of employees, the ownership of real and mobile property, and the basic service expectations of the entities. There are a number of example agreements among Illinois entities that can provide guidance in the negotiation and drafting process. While there is a temptation to enter into short term agreements to "test the waters", experience would point to longer term. Savings are often realized over time when the provisions of an agreement and the operations of a combined entity have an opportunity to smooth out. Many successful agreements are for periods of 10 years and have cancellation clauses that make it painful to do so for any single signatory. The RFPD Board is elected by the taxpayers within the official District boundaries. As a contracting partner, South Beloit constituents would not be able to vote on Board members since the City would not officially lie within the boundaries of the District.

**Contract for fire services with Harlem-Roscoe Fire Protection District:**

Enter into an intergovernmental agreement with the Harlem-Roscoe Fire Protection District for the provision of Fire Services in the City of South Beloit. This would include designating the personnel and assets of the SBFD to be operated by the HRFPD.

- **Advantages:**
  - Administrative costs would be reduced as many functions could be consolidated into the administrative operations at HRFPD. One of the Fire Chief's positions could be eliminated.
  - The combined forces of POC and POP personnel will assist both organizations in staffing.
  - Depending upon the staffing model adopted, full-time positions could be phased out and thus the requirement for new pensionable positions could be phased out.
  - Some redundant fire apparatus could be phased out reducing vehicle replacement costs.

*City of South Beloit Fire Services Study*

- The resulting entity would have a greater depth in providing services.
  - There would be a single set of operational procedures and guidelines.
  - The fire prevention and public safety education programs for the City would be strengthened.
  - Access to existing training facilities would be enhanced.
  - The resulting entity would provide very good response coverage to the City as long as automatic aid agreements were developed/retained with RFPD and the City of Beloit.
  - Revenue sources to pay for the fire services would remain under the control of the City government and would not be restricted to purely property taxes and fees.
- **Disadvantages:**
    - Some full-time positions could be eliminated impacting current employees.
    - The City would no longer govern the operation of the Fire Department.
    - There could be a sense of loss in the community for not having its own fire department.
    - The City would retain pension fund obligations of the existing and retired employees in the South Beloit Firefighters' Pension System.
    - Some POC and/POP personnel may opt out of the system rather than face a change in leadership and operations.
  - **Comments:** Consolidations require significant negotiation and willingness on the part of all parties to achieve a positive outcome. The Harlem-Roscoe Fire Protection District Board is not likely to agree to a consolidation that presents any unanticipated increase in costs to their tax payers at the time of the consolidation or in the future. The same should be the case for the City of South Beloit. As a part of assessing the costs, it is important to examine not only current financial positions, but also opportunities for future cost avoidance. Such items as the life cycle cost of equipment and buildings as well as community growth should be part of the mutual considerations. Any agreement must deal with the status of employees, the ownership of real and mobile property, and the basic service expectations of the entities. There are a number of example agreements among Illinois entities that can provide guidance in the negotiation and drafting process. While there is a temptation to enter into short term agreements to "test the waters", experience would point to longer term. Savings are often realized over time when the provisions of an agreement and the operations of a combined entity have an opportunity to smooth out. Many successful agreements are for periods of 10 years and have cancellation clauses that make it painful to do so for any single signatory. The HRFPD Board is appointed by the Winnebago County Board Chair with the advice and consent of the County Board. The constituent interests of the HRFPD Board members can be subject to the negotiation process, providing some direction to County officials in their appointing process.

*City of South Beloit Fire Services Study*

**Contract for emergency medical service personnel to staff the primary ambulance at SBFD**

Enter into an agreement with a licensed paramedic service provider to staff the paramedic position on the primary SBFD ambulance in lieu of doing so with career staff from SBFD. Reduce the number full time SBFD staff accordingly. This could be done for all full-time coverage hours or a portion thereof.

- **Advantages:**
  - One or more full-time salary and benefit packages could be eliminated as the time would be covered by a contract employee not receiving benefits (including pension) from the City.
  - Paramedic coverage would be maintained.
- **Disadvantages:**
  - One or more career personnel would not be available for calls that are not related to emergency medical matters.
  - The cost of the contract employee would need to be deducted from the potential savings.
  - Some full-time SBFD positions would be eliminated impacting existing personnel
  - In the absence of a career officer, shift supervision responsibilities would need to be delegated to POP personnel.
- **Comments:** The RFPD uses this process to avoid hiring full-time personnel to staff their ambulance. Since they are unable to find enough POP personnel with a paramedic credential to cover all times, they have contracted with a paramedic service provider to be assigned to their station and respond to calls during certain hours. Using the POP and contract paramedic, they have avoided the need to hire full-time paramedic staff. A contract for such services is with the paramedic's employer for a set amount. The employee is paid by the third party and benefit issues are matters between the paramedic service and their employee.

**ALTERNATIVES NOT RECOMMENDED**

- Although there are clearly provisions in Illinois law that allow a municipality to enter into a process to form a coterminous fire protection district or to physically annex into an existing fire protection district, these alternatives have not been recommended. First, they all require a rather substantial process of petitioning the courts and holding elections. Second, and more important, the establishment of a fire protection district (or annexing into an existing district) would place the entire funding burden for fire services in the City on property taxes and fees for service. There is a great deal more flexibility in both process and funding options through the use of negotiated intergovernmental agreements.

*City of South Beloit Fire Services Study*

- Entering into an intergovernmental agreement with the City of Beloit may be possible. While the two communities have a very good relationship for automatic and mutual aid, the City of Beloit is not physically located to provide any enhanced services to most of the City of South Beloit. In addition, there may be issues in negotiating an agreement with a municipality in another state. There could also be labor issues since the City of Beloit's fully career fire department is represented by organized labor and the City of South Beloit's personnel are not.
- Discontinuing the SBFD medical transport service would reduce the call burden substantially allowing a reduction in cost and possibly precluding the need for full-time personnel at SBFD. A private ambulance service might be found to place a unit in South Beloit and provide paramedic services. However, it is highly unlikely that they would be able to place more than a single unit in the community and even then it would likely be a shared resource with other communities. The revenue stream from paid ambulance services in South Beloit would not sustain the stationing of a for-profit provider ambulance dedicated solely to South Beloit. The quality of ambulance service in the community would almost certainly be diminished even if a provider could be found.

## **SPECIFIC RECOMMENDATIONS**

During the site visit, a few items were noted that merit some attention regardless of any of the alternatives considered by the Commission. These items are meant to address matters that should make the SBFD function well and fulfill the requirements of certain statutes and recognized good practice.

1. The working hours of the Fire Chief should be changed to require his presence during normal City business hours, Monday through Friday. It is important to have access to the Department Head daily and to provide the programmatic oversight that is achieved by having the Chief at work each business day.
2. The Foreign Fire Insurance Tax Board should be elected and operated in accordance with applicable Illinois Statutes. This includes the need for an annual professional audit. It appears that this recommendation is now being met, but it should continue to be part of the Board's responsibility to do so.
3. Before any further funds are devoted to the development of training facilities on the SBFD Headquarters property, the Commission should direct the SBFD staff to attempt to negotiate a workable agreement for the use and further development of the existing fire service training facility being operated by the Harlem-Roscoe Fire Protection District on Willowbrook Road. Commission assistance should be provided as needed.



## ACKNOWLEDGEMENTS

It is always a difficult time when communities are facing financial challenges and significant changes. This is the case in the wonderful community of South Beloit. It was noted that the City Commissioners are focused on the problem at hand, but are doing so with real concerns about the welfare of the community and its excellent fire department employees. It should be noted that the consultant received cooperation from everyone contacted during the site visit. Information sought was always provided and people were candid with their thoughts and opinions. The openness of the employees of the SBFD was very good and indicated that they understand the issues and the need to look at alternatives. Appreciation is also expressed to the management of the Rockton Fire Protection District, The Harlem-Roscoe Fire Protection District, The Winnebago County Sheriff's Office, The City of Rockford, Rockford Memorial Hospital and The City of Beloit, Wisconsin, for their effort to provide quality information and candid thoughts.

## APPENDIX AND END NOTES

The following is a partial list of persons interviewed during the site visit. A number of individuals asked not to be included in the list and some citizens contacted at random were not asked for their name.

Mayor Ted Rehl, City of South Beloit  
 Commissioner Tom Fitzgerald, City of South Beloit  
 Commissioner Jeff Redieske, City of South Beloit  
 Commissioner Lori Duffy, City of South Beloit  
 Commissioner Linda Chambers, City of South Beloit  
 City Clerk Tracy L. Patrick, City of South Beloit  
 Mr. Don Elliott, City of South Beloit  
 Chief E. Dean Steigemeier, City of South Beloit Police Department  
 Chief Donald Shoevlin, Harlem-Roscoe Fire Protection District  
 Chief Kirk Wilson, Rockton Fire Protection District  
 Chief Kenneth C. Morse, City of South Beloit Fire Department  
 Assistant Chief Michael Davenport, City of South Beloit Fire Department  
 Captain Gary Grown, City of South Beloit Fire Department  
 Lieutenant Andrew Kitson, City of South Beloit Fire Department  
 Dispatch Supervisor Rhonda Cleveland, City of South Beloit Fire Department  
 Dispatcher Shawna Henthorn, City of South Beloit Fire Department  
 Mr. Curt Lansbery, President and CEO, North American Tool Company  
 Ms. Leah M. Lorenze, Controller, Altra Electric Clutch Brake Group  
 Mr. Jeff Reininger, City of South Beloit Public Works  
 Lieutenant Steve DePauw, Winnebago County Sheriff's Department

*City of South Beloit Fire Services Study*

Others interviewed but not specifically named represented the following entities:

City of Rockford Fire Department

City of Beloit Fire Department

Rockford Memorial Hospital

Winnebago County Assessor's Office

Illinois Tollway Authority

City of South Beloit Fire Department line personnel

Citizens of South Beloit encountered in various businesses

**End Notes:**

1. United States Census Bureau, web site, [www.census.gov](http://www.census.gov), as of April 2, 2016
2. City of South Beloit, Illinois, Annual Financial Report for the Period Ended December 31, 2014, Sikich Certified Public Accountants, Rockford, Illinois, p. 82
3. Ibid, p. 65
4. 65 ILCS 5/11-10-2
5. Standard for Firefighter Professional Qualifications, National Fire Protection Association, Quincy, MA, 2012, Chapters 4 and 5.
6. Managing Fire Services, International City/County Management Association, Washington, DC, 2002, Chapter 16

## Appendix B– Resolution Number 6511

**RESOLUTION NUMBER: 6511**

**A RESOLUTION OF THE CITY OF SOUTH BELOIT, ILLINOIS APPROVING THE INTERGOVERNMENTAL AGREEMENT FOR FIREFIGHTING AND EMERGENCY MEDICAL SERVICES BETWEEN THE TOWN OF BELOIT, WISCONSIN AND THE CITY OF SOUTH BELOIT, ILLINOIS**

WHEREAS, the City of South Beloit, Illinois ("City") provides for Firefighting and Emergency Medical Services within the City; and

WHEREAS, the Town of Beloit, Wisconsin ("Beloit") has successfully provided assistance and services to the City in recent years, offering mutual aid for firefighting and emergency medical services and under informal agreements; and

WHEREAS, the City has determined a need for permanent assistance in providing firefighting and emergency medical services to its citizens; and

WHEREAS, the City is authorized to enter into intergovernmental agreements pursuant to Section 10, Article VII of the Illinois Constitution which states in relevant part, "[u]nits of local government... may contract or otherwise associate among themselves, with the State, with other states and their units of local government... to obtain and share services and to exercise, combine, or transfer any power or function, in any manner not prohibited by law or ordinance" and by the Illinois Intergovernmental Cooperation Act (5 ILCS 220/ et seq.); and

WHEREAS, the City wishes to formalize the terms and conditions whereby Beloit will operate the City's fire department and provide firefighting and emergency medical services; and

WHEREAS, the City desires to enter into the Intergovernmental Agreement For Firefighting and Emergency Medical Services between the Town of Beloit and the City of South Beloit as is attached hereto as Exhibit A ("Agreement") or one in substantially similar form; and

WHEREAS, the City Council has determined that it is in the best interests of the City and its citizens to approve said Agreement.

NOW THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of South Beloit, Illinois, and its citizens as follows:

1. The above recitals are incorporated herein and made a part hereof.
2. The City hereby accepts and approves the Agreement attached hereto as Exhibit A, or one in substantially similar form.
3. The Mayor, City Administrator, and the City Clerk are hereby authorized to execute and attest said Agreement and any other documents necessary to effectuate the same.

PASSED UPON MOTION BY Morse

SECONDED BY Adleman

BY ROLL CALL VOTE THIS 18<sup>th</sup> DAY OF March, 2024

AS FOLLOWS:

VOTING "AYE": Adleman, Morse, Prentice, Fitzgerald

VOTING "NAY": Hedrington

ABSENT, ABSTAIN, OTHER \_\_\_\_\_

APPROVED March 18, 2024

MAYOR

ATTEST:

CITY CLERK

**EXHIBIT A**

**INTERGOVERNMENTAL AGREEMENT FOR FIREFIGHTING AND EMERGENCY  
MEDICAL SERVICES BETWEEN THE TOWN OF BELOIT AND THE CITY OF  
SOUTH BELOIT**

July 1, 2024

**INTERGOVERNMENTAL AGREEMENT  
FOR FIREFIGHTING AND EMERGENCY MEDICAL SERVICES  
BETWEEN THE TOWN OF BELOIT  
AND THE CITY OF SOUTH BELOIT**

This Intergovernmental Agreement ("Agreement") is made as of May 10, 2024, between the TOWN OF BELOIT, Rock County, Wisconsin, a Wisconsin body corporate and politic under Wis. Stat. § 60.01, ("Beloit" or "Town") and the City of South Beloit, Winnebago County, Illinois, an Illinois body corporate and politic under Illinois Stat. § 65 ILCS 5/ ("City"), (collectively "Party" and/or "Parties").

**Section 1. Background**

A. On March 29, 1956 the Town of Beloit Board of Supervisors voted to form the fire department. Beloit has a fire department comprised of full-time and part-time personnel. Wisconsin State Statute Section 66.0301 Intergovernmental Cooperation provides for intergovernmental cooperation between units of local government, including the power to contract or otherwise associate among themselves to obtain or share services and to exercise, combine, or transfer any power or function in any manner not prohibited by law or by ordinance, and to use their credit, revenues, and other resources to pay costs related to intergovernmental activities. Wisconsin State Statute Section 66.0303 Municipal Interstate Cooperation provides that a municipality may contract with municipalities of another state for the receipt or furnishing of services including specifically for the "receipt, furnishing, or joint exercise of fire fighting or emergency medical services."

B. Pursuant to section 10, Article VII of the Illinois Constitution "[u]nits of local government... may contract or otherwise associate among themselves, with the State, with other states and their units of local government... to obtain and share services and to exercise, combine, or transfer any power or function, in any manner not prohibited by law or ordinance." The Illinois Intergovernmental Cooperation Act (5 ILCS 220/ et seq.) also encourages intergovernmental cooperation.

C. Beloit has successfully provided assistance and services to South Beloit over the years under various mutual aid, auto-aid and informal agreements.

D. Beloit and the City have thoroughly studied the firefighting and emergency medical services, fire safety inspection services and dispatch services, and the Parties believe that the delivery of these services to the City will increase efficiency, provide quicker response times, decrease redundancy, decrease costs; and thereby, enhance the delivery of public safety services in both Communities.

E. The structure and staffing of Beloit's Fire Department is currently sufficient to serve the Towns two fire stations with at least two employees each day. The Town will hire 9 full time personnel for the purpose of staffing the City's fire station. The Town will staff the City's Fire Department with up to three employees each day. The staffing of a South Beloit Engine or Quint shall be staffed at a minimum with 3 personnel. It is understood and agreed between the parties that when PTO, furlough days, or sick time require, the staffing model can vary based upon PTO, furlough days, and sick time usage. It is anticipated that the City's fire station will be staffed with 3 personnel, a majority of the time. However, at no time will staffing fall below two personnel minimally trained as firefighter/paramedics.



F. The Parties desire to enter into this Agreement to set forth their rights and responsibilities with respect to the delivery of fire and emergency medical services.

**Section 2. Agreed upon Responsibilities under this Agreement**

A. Emergency Services.

(1) Beloit's Fire Department ("Fire Department") will provide to the City full-time firefighting services; paramedic-level emergency medical services, ambulance transport services and related services customarily provided by the Fire Department (collectively "Emergency Services"). All personnel serving in South Beloit shall be licensed and qualified to participate in the Beloit Hospital System, as City of South Beloit Fire Department Medical Director, and provide such services as they are assigned. At all times, shall the City of South Beloit be staffed by Beloit with appropriately licensed personnel to maintain paramedic level service for the City. If, for any reason, staffing levels fall below that which is required under the terms of this Agreement to provide appropriate paramedic-level service, that shall be considered a default under the terms of this Agreement.

(2) The Fire Department will provide Emergency Services to the City in the same manner as Emergency Services are provided within Beloit, applying the same response model and other protocols equally to both Parties.

B. Inspection Services. The City shall continue to provide fire safety inspection services during the term of this Agreement. The City shall provide the results of such fire safety inspections to Beloit which may request follow-up inspections for compliance. The City shall be responsible for any enforcement proceedings required to correct violations discovered through fire safety inspections.

C. Dispatch Services. City will continue to provide 911 Dispatch through outside contracted services or through Winnebago County, Illinois Sheriff's Department 911 Telecommunication Center at a cost covered by the City.

D. Security of Fire Station. City shall maintain ownership of its Fire Station, however, City shall make arrangements to provide Beloit with the means to regulate access to the Fire Station by means of a dedicated key fob system to be under the control of Beloit.

E. Maintenance of Fire Station Grounds. City shall be responsible for maintenance of Fire Station grounds including yard maintenance, trash and snow removal.

F. Annual Testing. City shall pay for annual ladder and pump testing.

G. Turn Out Gear. City's inventory of turn out gear shall be distributed by Beloit. Beloit shall replace turn out gear required after the City inventory is used on a schedule in accordance with acceptable industry standards.

H. Fire Hose Inspection. Beloit will service check all fire hose in the possession of the City; the City shall pay for the replacement of all failed fire hose.

I. Documents to be Provided. City shall provide to Beloit the reports or documents set forth in Exhibit A attached to this Agreement.

**Section 3. City's Payments for Services****A. Emergency Services Costs.**

(1) The City shall pay Beloit quarterly installments to cover Beloit's costs to deliver the Services ("Quarterly Services Fee") payable on January 1, April 1, July 1 and October 1 annually. For the first year of services, from July 1, 2024 through December 31, 2024, the Annual Services Fee is \$489,720.00. For the second year of services, from January 1, 2025 through December 31, 2025, the Annual Services Fee shall be \$1,008,823.00. For the third year of services, from January 1, 2026 through December 31, 2026, the Annual Services Fee shall be \$1,039,088.00. For the fourth year of services, from January 1, 2027 through December 31, 2027, the Annual Services Fee shall be \$1,129,644.00. For the fifth year of services, from January 1, 2028 through December 31, 2028, the Annual Services Fee shall be \$1,234,615.00. For the sixth year of services, from January 1, 2029 through December 31, 2029, the Annual Services Fee shall be \$1,315,706.00.

(2) The City shall pay the Quarterly Services Fee on January 1, April 1, July 1, October 1 annually. The Parties' representatives may agree from time to time, in writing, on a different payment schedule.

(3) The City shall manage all aspects of billing and collection of ambulance services via its outside contracted service for billing. Beloit will prepare all required reports under the NFIRS National Fire Incident Reporting System and all necessary patient care reports required by the state of Illinois (IDHP), NEMSIS, or any other reports that required by the City of South Beloit.

**Section 4. Personnel and Equipment; Command Authority**

**A. Personnel and Equipment.** All personnel provided by Beloit under this Agreement shall at all times remain the employees of Beloit. Beloit is responsible for all employment matters related to the personnel, including but without limitation to, hiring, salaries, benefits, discipline and all other employee-related matters. The City shall be responsible for the cost of the care and maintenance of all City equipment, apparatus, and the City's fire station. Beloit shall be responsible for regular and on-going inspections of all department equipment and apparatus and shall timely report to the City any need for repair or replacement. With regard to the fire station building, Beloit shall report to the City Street Superintendent and/or City Administrator any issues observed by Beloit in need of repair. The City shall timely perform the repair, or make arrangements to do so, subject to approval by the City Council.

**B. Command Authority.** The Town of Beloit Fire Chief, or his or her designees, will be primarily responsible for all services provided to the City under this Agreement, including without limitation command authority and decision-making at fires and other emergency scenes and delivery of emergency medical services, Inspection Services, and Dispatch Services. The Town of Beloit Fire Chief will have discretion at all times whether, and when, to collaborate with, or transfer command authority to City representatives. Command staff will make itself available to the City 24/7/365. Non-emergent meetings shall be scheduled two weeks in advance.

**Section 5. Communications**

**A. Regular Communications.** The Parties shall communicate regularly regarding services provided under this Agreement. The primary channel of communication will be

between representatives designated by the City Administrator, or designee, and the Beloit Fire Chief.

**B. Emergency Communications.** In the event of an emergency, the Parties will communicate with each other through the City Administrator, the Beloit Town Administrator and the Beloit Fire Chief.

**C. Annual Meeting; Records.** Each month for the first six (6) months of this Agreement, and at least quarterly each year thereafter, representatives of both communities shall meet to discuss matters related to this Agreement. The purpose of the meetings are to ensure that the Parties have the opportunity to talk in person about the management, delivery, costs, and other matters related to the various services and generally about the relationship between the Parties. Beloit's Town Administrator and the City Administrator may choose not to hold some meetings if they determine there is no need to do so. Beloit agrees to keep records for the City in the same manner as records are kept for Beloit and to provide those records to the City upon request. The records may include, but are not limited to, call volumes, response times and fire incident reports.

**D. Hydrant and Contact Information.** Within one week after the Commencement Date, and every year thereafter, the City will give Beloit a list of out-of-service fire hydrants.

#### **Section 6. Defense of Claims; Indemnification; Insurance**

**A. Defense Against Claims.** Except as provided in Subsections B and C below, if a lawsuit or other claim is brought against one Party from a third-party relating to a matter arising from this Agreement, the Party against which the claim is brought shall notify the other Party and the Parties shall conduct a mutual defense against the claim and shall share costs and otherwise cooperate to defend against the claim.

**B. Indemnification by Beloit.** Beloit shall hold harmless and indemnify the City and its officials, officers and employees (collectively "Indemnitees") from all liability, personal injuries, property damage, claims, causes of action, damages, losses and other obligations related to a claim asserted by any third-party at any time against the City if the claim arises from the Town's performance of its obligations under this Agreement, except that this indemnity shall not apply to the negligence or willful or wanton misconduct of the City. This subsection shall not be intended, and may not be deemed or construed, as a waiver by Beloit of any immunity provided under law.

**C. Indemnification by the City.** The City shall hold harmless and indemnify Beloit and its officials, officers, and employees (collectively "Indemnitees") from all liability, personal injuries, property damage, claims, causes of action, damages, losses and other obligations related to a claim asserted by any third-party at any time against Beloit if the claim arises from an act or failure to act by the City, except that this indemnity shall not apply to the negligence or willful or wanton misconduct of Beloit. This subsection shall not be intended, and may not be deemed or construed, as a waiver by the City of any immunity provided under law.

**D. Insurance.** The City shall purchase and maintain during the term of this Agreement, and any extension thereto, public liability insurance with policy limits in the amount of \$1,000,000.00/\$3,000,000.00 covering any actions brought against the City or Beloit for any damages to persons or property asserted by a third party allegedly caused by actions of the City or an employee of Beloit working under the terms of this Agreement. The City shall name Beloit as an additional insured under this policy and shall provide a certificate of insurance to Beloit as evidence of insurance coverage described herein.



**Section 8. Term; Termination.**

A. Initial Term and Renewal Terms. The delivery of services under this Agreement shall commence on July 1, 2024 ("Commencement Date") and this Agreement shall expire on December 31, 2029 ("Initial Term").

B. Termination. Either Party may terminate this Agreement by twelve (12) months written notice to the other Party.

**Section 9. General Provisions**

A. Notice. All notices required or permitted to be given under this Agreement must be given by one of the following: personal delivery; deposit in the United States mail with first class postage thereon; or deposit with a nationally recognized overnight delivery service, addressed as outlined below. Mailed notice shall be deemed given and received within three (3) days after notice was mailed. Overnight courier delivery shall be deemed given and received twenty-four (24) hours after pick-up by courier. Notices and communications must be addressed as follows:

To Town of Beloit:

Town of Beloit  
2445 S. Afton Rd  
Beloit, WI 53511  
Attention: Town  
Administrator

To South Beloit:

South Beloit  
519 Blackhawk Blvd.  
Suite 2  
South Beloit, IL 61080  
Attention: City  
Administrator

B. Non-Waiver. Neither Party is under any obligation to exercise any of its rights under this Agreement. The failure of a Party to exercise a right shall not be deemed or construed to be a waiver of that right or of the right for the Party to exercise that right in the future.

C. Consents. Unless otherwise provided in this Agreement, whenever the consent or approval of a Party is necessary, that consent or approval must be in writing.

D. Entire Agreement. This Agreement is the entire agreement between the Parties. This Agreement supersedes all prior negotiations, understandings, and agreements between the Parties, whether written or oral, relating to the subject matters of this Agreement.

E. Interpretation. This Agreement must be construed as though the Parties participated equally in the drafting of this Agreement. Further, this Agreement shall be governed by the laws of the State of Wisconsin with venue for actions brought in a State Court being proper only in Rock County, Wisconsin, and if federal jurisdiction is properly invoked, with the Western District of Wisconsin.

F. Amendments. Any amendment or modification to this Agreement shall be effective only after it is in writing and executed by both Parties authorized representatives in accordance with applicable law.

G. Authority to Execute. Each Party represents that the persons executing this Agreement on its behalf have been properly authorized to do so by their respective Parties.

H. Severability. If any provision of this Agreement is determined by a court of competent jurisdiction to be invalid or unenforceable, the remaining provisions of the Agreement shall continue in full force and effect.

**IN WITNESS WHEREOF**, the Parties have executed this Agreement as of the day and year first above written.

**TOWN OF BELOIT**

By: \_\_\_\_\_

Diane M. Greenlee, Town Chairperson

**ATTEST:**

By: \_\_\_\_\_

Karry DeVault, Town Clerk

**CITY OF SOUTH BELOIT**

By: \_\_\_\_\_

Tom Fitzgerald, Mayor

**ATTEST:**

By: \_\_\_\_\_

Tracy Patrick, City Clerk

**Exhibit A**

**Reports and Documents to be Provided by City of South Beloit**

1. Serial numbers and locations of all mobile radios used by City's Fire Department
2. Itemized list of all equipment in the current City Fire Station
3. Most recent budget figures to maintain the City Fire Station and equipment
4. Itemized list of all City fire apparatus including major equipment
5. Current vehicle replacement schedule
6. Inventory of fire hose
7. Hydrant Location List

## Appendix C – Insurance Service Office Report

**Public Protection Classification  
(PPC®)  
Summary Report**

**South Beloit**

**ILLINOIS**

**Prepared by**

**Insurance Services Office, Inc.  
1000 Bishops Gate Blvd., Ste. 300  
P.O. Box 5404  
Mt. Laurel, New Jersey 08054-5404  
1-800-444-4554**



## Background Information

### Introduction

ISO collects and evaluates information from communities in the United States on their structure fire suppression capabilities. The data is analyzed using our Fire Suppression Rating Schedule (FSRS) and then a Public Protection Classification (PPC®) grade is assigned to the community. The surveys are conducted whenever it appears that there is a possibility of a PPC change. As such, the PPC program provides important, up-to-date information about fire protection services throughout the country.

The FSRS recognizes fire protection features only as they relate to suppression of first alarm structure fires. In many communities, fire suppression may be only a small part of the fire department's overall responsibility. ISO recognizes the dynamic and comprehensive duties of a community's fire service, and understands the complex decisions a community must make in planning and delivering emergency services. However, in developing a community's PPC grade, only features related to reducing property losses from structural fires are evaluated. Multiple alarms, simultaneous incidents and life safety are not considered in this evaluation. The PPC program evaluates the fire protection for small to average size buildings. Specific properties with a Needed Fire Flow in excess of 3,500 gpm are evaluated separately and assigned an individual PPC grade.

A community's investment in fire mitigation is a proven and reliable predictor of future fire losses. Statistical data on insurance losses bears out the relationship between excellent fire protection – as measured by the PPC program – and low fire losses. So, insurance companies use PPC information for marketing, underwriting, and to help establish fair premiums for homeowners and commercial fire insurance. In general, the price of fire insurance in a community with a good PPC grade is substantially lower than in a community with a poor PPC grade, assuming all other factors are equal.

ISO is an independent company that serves insurance companies, communities, fire departments, insurance regulators, and others by providing information about risk. ISO's expert staff collects information about municipal fire suppression efforts in communities throughout the United States. In each of those communities, ISO analyzes the relevant data and assigns a PPC grade – a number from 1 to 10. Class 1 represents an exemplary fire suppression program, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria.

ISO's PPC program evaluates communities according to a uniform set of criteria, incorporating nationally recognized standards developed by the National Fire Protection Association and the American Water Works Association. A community's PPC grade depends on:

- **Needed Fire Flows**, which are representative building locations used to determine the theoretical amount of water necessary for fire suppression purposes.
- **Emergency Communications**, including emergency reporting, telecommunicators, and dispatching systems.
- **Fire Department**, including equipment, staffing, training, geographic distribution of fire companies, operational considerations, and community risk reduction.
- **Water Supply**, including inspection and flow testing of hydrants, alternative water supply operations, and a careful evaluation of the amount of available water compared with the amount needed to suppress fires up to 3,500 gpm.

## Data Collection and Analysis

ISO has evaluated and classified over 39,000 fire protection areas across the United States using its FSRS. A combination of meetings between trained ISO field representatives and the dispatch center coordinator, community fire official, and water superintendent is used in conjunction with a comprehensive questionnaire to collect the data necessary to determine the PPC grade. In order for a community to obtain a grade better than a Class 9, three elements of fire suppression features are reviewed. These three elements are Emergency Communications, Fire Department, and Water Supply.

A review of the **Emergency Communications** accounts for 10% of the total classification. This section is weighted at **10 points**, as follows:

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

A review of the **Fire Department** accounts for 50% of the total classification. ISO focuses on a fire department's first alarm response and initial attack to minimize potential loss. The fire department section is weighted at **50 points**, as follows:

- Engine Companies 6 points
- Reserve Pumpers 0.5 points
- Pump Capacity 3 points
- Ladder/Service Companies 4 points
- Reserve Ladder/Service Trucks 0.5 points
- Deployment Analysis 10 points
- Company Personnel 15 points
- Training 9 points
- Operational considerations 2 points
- Community Risk Reduction 5.5 points (in addition to the 50 points above)

A review of the **Water Supply** system accounts for 40% of the total classification. ISO reviews the water supply a community uses to determine the adequacy for fire suppression purposes. The water supply system is weighted at **40 points**, as follows:

- Credit for Supply System 30 points
- Hydrant Size, Type & Installation 3 points
- Inspection & Flow Testing of Hydrants 7 points

There is one additional factor considered in calculating the final score – **Divergence**.

Even the best fire department will be less than fully effective if it has an inadequate water supply. Similarly, even a superior water supply will be less than fully effective if the fire department lacks the equipment or personnel to use the water. The FSRs score is subject to modification by a divergence factor, which recognizes disparity between the effectiveness of the fire department and the water supply.

The Divergence factor mathematically reduces the score based upon the relative difference between the fire department and water supply scores. The factor is introduced in the final equation.

### **PPC Grade**

The PPC grade assigned to the community will depend on the community's score on a 100-point scale:

PPC	Points
1	90.00 or more
2	80.00 to 89.99
3	70.00 to 79.99
4	60.00 to 69.99
5	50.00 to 59.99
6	40.00 to 49.99
7	30.00 to 39.99
8	20.00 to 29.99
9	10.00 to 19.99
10	0.00 to 9.99

The classification numbers are interpreted as follows:

- Class 1 through (and including) Class 8 represents a fire suppression system that includes an FSRs creditable dispatch center, fire department, and water supply.
- Class 8B is a special classification that recognizes a superior level of fire protection in otherwise Class 9 areas. It is designed to represent a fire protection delivery system that is superior except for a lack of a water supply system capable of the minimum FSRs fire flow criteria of 250 gpm for 2 hours.
- Class 9 is a fire suppression system that includes a creditable dispatch center, fire department but no FSRs creditable water supply.
- Class 10 does not meet minimum FSRs criteria for recognition, including areas that are beyond five road miles of a recognized fire station.

## New PPC program changes effective July 1, 2014

We have revised the PPC program to capture the effects of enhanced fire protection capabilities that reduce fire loss and fire severity in Split Class 9 and Split Class 8B areas (as outlined below). This new structure benefits the fire service, community, and property owner.

### New classifications

Through ongoing research and loss experience analysis, we identified additional differentiation in fire loss experience within our PPC program, which resulted in the revised classifications. We based the differing fire loss experience on the fire suppression capabilities of each community. The new PPC classes will improve the predictive value for insurers while benefiting both commercial and residential property owners. Here are the new classifications and what they mean.

### Split classifications

When we develop a split classification for a community — for example 5/9 — the first number is the class that applies to properties within 5 road miles of the responding fire station and 1,000 feet of a creditable water supply, such as a fire hydrant, suction point, or dry hydrant. The second number is the class that applies to properties within 5 road miles of a fire station but beyond 1,000 feet of a creditable water supply. We have revised the classification to reflect more precisely the risk of loss in a community, replacing Class 9 and 8B in the second part of a split classification with revised designations.

### What's changed with the new classifications?

We've published the new classifications as "X" and "Y" — formerly the "9" and "8B" portion of the split classification, respectively. For example:

- A community currently displayed as a split 6/9 classification will now be a split 6/6X classification; with the "6X" denoting what was formerly classified as "9".
- Similarly, a community currently graded as a split 6/8B classification will now be a split 6/6Y classification, the "6Y" denoting what was formerly classified as "8B".
- Communities graded with single "9" or "8B" classifications will remain intact.

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

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

**What's changed?**

As you can see, we're still maintaining split classes, but it's how we represent them to insurers that's changed. The new designations reflect a reduction in fire severity and loss and have the potential to reduce property insurance premiums.

**Benefits of the revised split class designations**

- To the fire service, the revised designations identify enhanced fire suppression capabilities used throughout the fire protection area
- To the community, the new classes reward a community's fire suppression efforts by showing a more reflective designation
- To the individual property owner, the revisions offer the potential for decreased property insurance premiums

**New water class**

Our data also shows that risks located more than 5 but less than 7 road miles from a responding fire station with a creditable water source within 1,000 feet had better loss experience than those farther than 5 road miles from a responding fire station with no creditable water source. We've introduced a new classification —10W— to recognize the reduced loss potential of such properties.

**What's changed with Class 10W?**

Class 10W is property-specific. Not all properties in the 5-to-7-mile area around the responding fire station will qualify. The difference between Class 10 and 10W is that the 10W-graded risk or property is within 1,000 feet of a creditable water supply. Creditable water supplies include fire protection systems using hauled water in any of the split classification areas.

**What's the benefit of Class 10W?**

10W gives credit to risks within 5 to 7 road miles of the responding fire station and within 1,000 feet of a creditable water supply. That's reflective of the potential for reduced property insurance premiums.

**What does the fire chief have to do?**

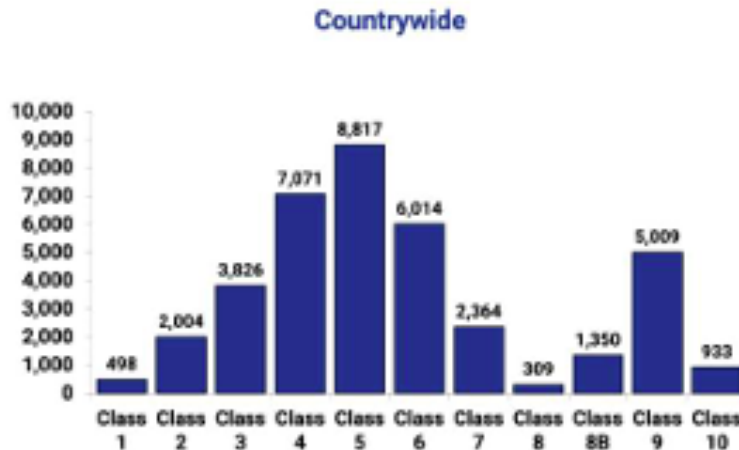
Fire chiefs don't have to do anything at all. The revised classifications went in place automatically effective July 1, 2014 (July 1, 2015 for Texas).

**What if I have additional questions?**

Feel free to contact ISO at 800.444.4554 or email us at [PPC-Cust-Serv@iso.com](mailto:PPC-Cust-Serv@iso.com).

### Distribution of PPC Grades

The 2023 published countrywide distribution of communities by the PPC grade is as follows:



### Assistance

The PPC program offers help to communities, fire departments, and other public officials as they plan for, budget, and justify improvements. ISO is also available to assist in the understanding of the details of this evaluation.

The PPC program representatives can be reached by telephone at (800) 444-4554. The technical specialists at this telephone number have access to the details of this evaluation and can effectively speak with you about your questions regarding the PPC program. What's more, we can be reached via the internet at [www.isomitigation.com/talk/](http://www.isomitigation.com/talk/).

We also have a website dedicated to our Community Hazard Mitigation Classification programs at [www.isomitigation.com](http://www.isomitigation.com). Here, fire chiefs, building code officials, community leaders and other interested citizens can access a wealth of data describing the criteria used in evaluating how cities and towns are protecting residents from fire and other natural hazards. This website will allow you to learn more about the PPC program. The website provides important background information, insights about the PPC grading processes and technical documents. ISO is also pleased to offer Fire Chiefs Online — a special, secured website with information and features that can help improve your PPC grade, including a list of the Needed Fire Flows for all the commercial occupancies ISO has on file for your community. Visitors to the site can download information, see statistical results and also contact ISO for assistance.

In addition, on-line access to the FSRs and its commentaries is available to registered customers for a fee. However, fire chiefs and community chief administrative officials are given access privileges to this information without charge.

To become a registered fire chief or community chief administrative official, register at [www.isomitigation.com](http://www.isomitigation.com).

### PPC Review

ISO concluded its review of the fire suppression features being provided for South Beloit. The resulting community classification is **Class 04/4X**.

If the classification is a single class, the classification applies to properties with a Needed Fire Flow of 3,500 gpm or less in the community. If the classification is a split class (e.g., 6/XX):

- The first class (e.g., "6" in a 6/XX) applies to properties within 5 road miles of a recognized fire station and within 1,000 feet of a fire hydrant or alternate water supply.
- The second class (XX or XY) applies to properties beyond 1,000 feet of a fire hydrant but within 5 road miles of a recognized fire station.
- Alternative Water Supply: The first class (e.g., "6" in a 6/10) applies to properties within 5 road miles of a recognized fire station with no hydrant distance requirement.
- Class 10 applies to properties over 5 road miles of a recognized fire station.
- Class 10W applies to properties within 5 to 7 road miles of a recognized fire station with a recognized water supply within 1,000 feet.
- Specific properties with a Needed Fire Flow in excess of 3,500 gpm are evaluated separately and assigned an individual classification.

FSRS Feature	Earned Credit	Credit Available
<b>Emergency Communications</b>		
414. Credit for Emergency Reporting	3.00	3
422. Credit for Telecommunicators	2.99	4
432. Credit for Dispatch Circuits	1.65	3
<b>440. Credit for Emergency Communications</b>	<b>7.64</b>	<b>10</b>
<b>Fire Department</b>		
513. Credit for Engine Companies	5.78	6
523. Credit for Reserve Pumps	0.00	0.50
532. Credit for Pump Capacity	3.00	3
549. Credit for Ladder Service	1.60	4
553. Credit for Reserve Ladder and Service Trucks	0.00	0.50
561. Credit for Deployment Analysis	5.58	10
571. Credit for Company Personnel	4.26	15
581. Credit for Training	1.81	9
730. Credit for Operational Considerations	2.00	2
<b>590. Credit for Fire Department</b>	<b>24.03</b>	<b>50</b>
<b>Water Supply</b>		
616. Credit for Supply System	26.14	30
621. Credit for Hydrants	3.00	3
631. Credit for Inspection and Flow Testing	4.00	7
<b>640. Credit for Water Supply</b>	<b>33.14</b>	<b>40</b>
<b>Divergence</b>	<b>-6.96</b>	<b>--</b>
<b>1050. Community Risk Reduction</b>	<b>4.50</b>	<b>5.50</b>
<b>Total Credit</b>	<b>62.35</b>	<b>105.50</b>



### **Emergency Communications**

Ten percent of a community's overall score is based on how well the communications center receives and dispatches fire alarms. Our field representative evaluated:

- Communications facilities provided for the general public to report structure fires
- Enhanced 9-1-1 Telephone Service including wireless
- Computer-aided dispatch (CAD) facilities
- Alarm receipt and processing at the communication center
- Training and certification of telecommunicators
- Facilities used to dispatch fire department companies to reported structure fires

	Earned Credit	Credit Available
414. Credit Emergency Reporting	3.00	3
422. Credit for Telecommunicators	2.99	4
432. Credit for Dispatch Circuits	1.65	3
<b>Item 440. Credit for Emergency Communications:</b>	<b>7.64</b>	<b>10</b>

#### **Item 414 - Credit for Emergency Reporting (3 points)**

The first item reviewed is Item 414 "Credit for Emergency Reporting (CER)". This item reviews the emergency communication center facilities provided for the public to report fires including 911 systems (Basic or Enhanced), Wireless Phase I and Phase II, Voice over Internet Protocol, Computer Aided Dispatch and Geographic Information Systems for automatic vehicle location. ISO uses National Fire Protection Association (NFPA) 1221, *Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems* as the reference for this section.



<b>Item 410. Emergency Reporting (CER)</b>	<b>Earned Credit</b>	<b>Credit Available</b>
<b>A/B. Basic 9-1-1, Enhanced 9-1-1 or No 9-1-1</b> For maximum credit, there should be an Enhanced 9-1-1 system, Basic 9-1-1 and No 9-1-1 will receive partial credit.	<b>20.00</b>	<b>20</b>
<b>1. E9-1-1 Wireless</b> Wireless Phase I using Static ALI (automatic location identification) Functionality (10 points); Wireless Phase II using Dynamic ALI Functionality (15 points); Both available will be 25 points	<b>25.00</b>	<b>25</b>
<b>2. E9-1-1 Voice over Internet Protocol (VoIP)</b> Static VoIP using Static ALI Functionality (10 points); Nomadic VoIP using Dynamic ALI Functionality (15 points); Both available will be 25 points	<b>25.00</b>	<b>25</b>
<b>3. Computer Aided Dispatch</b> Basic CAD (5 points); CAD with Management Information System (5 points); CAD with Interoperability (5 points)	<b>15.00</b>	<b>15</b>
<b>4. Geographic Information System (GIS/AVL)</b> <u>The PSAP uses</u> a fully integrated CAD/GIS management system with automatic vehicle location (AVL) integrated with a CAD system providing dispatch assignments.  The individual fire departments being dispatched <u>do not need</u> GIS/AVL capability to obtain this credit.	<b>15.00</b>	<b>15</b>
<b>Review of Emergency Reporting total:</b>	<b>100.00</b>	<b>100</b>

#### **Item 422- Credit for Telecommunicators (4 points)**

The second item reviewed is Item 422 "Credit for Telecommunicators (TC)". This item reviews the number of Telecommunicators on duty at the center to handle fire calls and other emergencies. All emergency calls including those calls that do not require fire department action are reviewed to determine the proper staffing to answer emergency calls and dispatch the appropriate emergency response. The 2013 Edition of NFPA 1221, *Standard for the Installation, Maintenance and Use of Emergency Services Communications Systems*, recommends that ninety-five percent of emergency calls shall be answered within 15 seconds and ninety-nine percent of emergency calls shall be answered within 40 seconds. In addition, NFPA recommends that eighty percent of emergency alarm processing shall be completed within 60 seconds and ninety-five percent of alarm processing shall be completed within 106 seconds of answering the call.

To receive full credit for operators on duty, ISO must review documentation to show that the communication center meets NFPA 1221 call answering and dispatch time performance measurement standards. This documentation may be in the form of performance statistics or other performance measurements compiled by the 9-1-1 software or other software programs that are currently in use such as Computer Aided Dispatch (CAD) or Management Information System (MIS).

<b>Item 420. Telecommunicators (CTC)</b>	<b>Earned Credit</b>	<b>Credit Available</b>
<b>A1. Alarm Receipt (AR)</b> Receipt of alarms shall meet the requirements in accordance with the criteria of NFPA 1221	<b>14.86</b>	<b>20</b>
<b>A2. Alarm Processing (AP)</b> Processing of alarms shall meet the requirements in accordance with the criteria of NFPA 1221	<b>0.00</b>	<b>20</b>
<b>B. Emergency Dispatch Protocols (EDP)</b> Telecommunicators have emergency dispatch protocols (EDP) containing questions and a decision-support process to facilitate correct call categorization and prioritization.	<b>20.00</b>	<b>20</b>
<b>C. Telecommunicator Training and Certification (TTC)</b> Telecommunicators meet the qualification requirements referenced in NFPA 1061, <i>Standard for Professional Qualifications for Public Safety Telecommunicator</i> , and/or the Association of Public-Safety Communications Officials - International (APCO) <i>Project 33</i> . Telecommunicators are certified in the knowledge, skills, and abilities corresponding to their job functions.	<b>20.00</b>	<b>20</b>
<b>D. Telecommunicator Continuing Education and Quality Assurance (TQA)</b> Telecommunicators participate in continuing education and/or in-service training and quality-assurance programs as appropriate for their positions	<b>20.00</b>	<b>20</b>
<b>Review of Telecommunicators total:</b>	<b>74.86</b>	<b>100</b>

**Item 432 - Credit for Dispatch Circuits (3 points)**

The third item reviewed is Item 432 "Credit for Dispatch Circuits (CDC)". This item reviews the dispatch circuit facilities used to transmit alarms to fire department members. A "Dispatch Circuit" is defined in NFPA 1221 as "A circuit over which an alarm is transmitted from the communications center to an emergency response facility (ERF) or emergency response units (ERUs) to notify ERUs to respond to an emergency". All fire departments (except single fire station departments with full-time firefighter personnel receiving alarms directly at the fire station) need adequate means of notifying all firefighter personnel of the location of reported structure fires. The dispatch circuit facilities should be in accordance with the general criteria of NFPA 1221. "Alarms" are defined in this Standard as "A signal or message from a person or device indicating the existence of an emergency or other situation that requires action by an emergency response agency".

There are two different levels of dispatch circuit facilities provided for in the Standard – a primary dispatch circuit and a secondary dispatch circuit. In jurisdictions that receive 730 alarms or more per year (average of two alarms per 24-hour period), two separate and dedicated dispatch circuits, a primary and a secondary, are needed. In jurisdictions receiving fewer than 730 alarms per year, a second dedicated dispatch circuit is not needed. Dispatch circuit facilities installed but not used or tested (in accordance with the NFPA Standard) receive no credit.

The score for Credit for Dispatch Circuits (CDC) is influenced by monitoring for integrity of the primary dispatch circuit. There are up to 0.90 points available for this Item. Monitoring for integrity involves installing automatic systems that will detect faults and failures and send visual and audible indications to appropriate communications center (or dispatch center) personnel. ISO uses NFPA 1221 to guide the evaluation of this item. ISO's evaluation also includes a review of the communication system's emergency power supplies.

**Item 432 "Credit for Dispatch Circuits (CDC)" = 1.65 points**

### **Fire Department**

Fifty percent of a community's overall score is based upon the fire department's structure fire suppression system. ISO's field representative evaluated:

- Engine and ladder/service vehicles including reserve apparatus
- Equipment carried
- Response to reported structure fires
- Deployment analysis of companies
- Available and/or responding firefighters
- Training

	Earned Credit	Credit Available
513. Credit for Engine Companies	5.78	6
523. Credit for Reserve Pumpers	0.00	0.5
532. Credit for Pumper Capacity	3.00	3
549. Credit for Ladder Service	1.60	4
553. Credit for Reserve Ladder and Service Trucks	0.00	0.5
561. Credit for Deployment Analysis	5.58	10
571. Credit for Company Personnel	4.26	15
581. Credit for Training	1.81	9
730. Credit for Operational Considerations	2.00	2
<b>Item 590. Credit for Fire Department:</b>	<b>24.03</b>	<b>50</b>

### **Basic Fire Flow**

The Basic Fire Flow for the community is determined by the review of the Needed Fire Flows for selected buildings in the community. The fifth largest Needed Fire Flow is determined to be the Basic Fire Flow. The Basic Fire Flow has been determined to be 3500 gpm.

#### Item 513 - Credit for Engine Companies (6 points)

The first item reviewed is Item 513 "Credit for Engine Companies (CEC)". This item reviews the number of engine companies, their pump capacity, hose testing, pump testing and the equipment carried on the in-service pumpers. To be recognized, pumper apparatus must meet the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus* which include a minimum 250 gpm pump, an emergency warning system, a 300 gallon water tank, and hose. At least 1 apparatus must have a permanently mounted pump rated at 750 gpm or more at 150 psi.

The review of the number of needed pumpers considers the response distance to built-upon areas; the Basic Fire Flow; and the method of operation. Multiple alarms, simultaneous incidents, and life safety are not considered.

The greatest value of A, B, or C below is needed in the fire district to suppress fires in structures with a Needed Fire Flow of 3,500 gpm or less: **3 engine companies**

- a) **1 engine companies** to provide fire suppression services to areas to meet NFPA 1710 criteria or within 1½ miles.
- b) **3 engine companies** to support a Basic Fire Flow of 3500 gpm.
- c) **3 engine companies** based upon the fire department's method of operation to provide a minimum two engine response to all first alarm structure fires.

The FSRs recognizes that there are **3 engine companies** in service.

The FSRs also reviews Automatic Aid. Automatic Aid is considered in the review as assistance dispatched automatically by contractual agreement between two communities or fire districts. That differs from mutual aid or assistance arranged case by case. ISO will recognize an Automatic Aid plan under the following conditions:

- It must be prearranged for first alarm response according to a definite plan. It is preferable to have a written agreement, but ISO may recognize demonstrated performance.
- The aid must be dispatched to all reported structure fires on the initial alarm.
- The aid must be provided 24 hours a day, 365 days a year.

FSRS Item 512.D "Automatic Aid Engine Companies" responding on first alarm and meeting the needs of the city for basic fire flow and/or distribution of companies are factored based upon the value of the Automatic Aid plan (up to 1.00 can be used as the factor). The Automatic Aid factor is determined by a review of the Automatic Aid provider's communication facilities, how they receive alarms from the graded area, inter-department training between fire departments, and the fire ground communications capability between departments.

For each engine company, the credited Pump Capacity (PC), the Hose Carried (HC), the Equipment Carried (EC) all contribute to the calculation for the percent of credit the FSRs provides to that engine company.

**Item 513 "Credit for Engine Companies (CEC)" = 5.78 points**

**Item 523 - Credit for Reserve Pumpers (0.50 points)**

The item is Item 523 "Credit for Reserve Pumpers (CRP)". This item reviews the number and adequacy of the pumpers and their equipment. The number of needed reserve pumpers is 1 for each 8 needed engine companies determined in Item 513, or any fraction thereof.

**Item 523 "Credit for Reserve Pumpers (CRP)" = 0.00 points**

**Item 532 – Credit for Pumper Capacity (3 points)**

The next item reviewed is Item 532 "Credit for Pumper Capacity (CPC)". The total pump capacity available should be sufficient for the Basic Fire Flow of 3500 gpm. The maximum needed pump capacity credited is the Basic Fire Flow of the community.

**Item 532 "Credit for Pumper Capacity (CPC)" = 3.00 points**

**Item 549 – Credit for Ladder Service (4 points)**

The next item reviewed is Item 549 "Credit for Ladder Service (CLS)". This item reviews the number of response areas within the city with 5 buildings that are 3 or more stories or 35 feet or more in height, or with 5 buildings that have a Needed Fire Flow greater than 3,500 gpm, or any combination of these criteria. The height of all buildings in the city, including those protected by automatic sprinklers, is considered when determining the number of needed ladder companies. Response areas not needing a ladder company should have a service company. Ladders, tools and equipment normally carried on ladder trucks are needed not only for ladder operations but also for forcible entry, ventilation, salvage, overhaul, lighting and utility control.

The number of ladder or service companies, the height of the aerial ladder, aerial ladder testing and the equipment carried on the in-service ladder trucks and service trucks is compared with the number of needed ladder trucks and service trucks and an FSRS equipment list. Ladder trucks must meet the general criteria of NFPA 1901, *Standard for Automotive Fire Apparatus* to be recognized.

The number of needed ladder-service trucks is dependant upon the number of buildings 3 stories or 35 feet or more in height, buildings with a Needed Fire Flow greater than 3,500 gpm, and the method of operation.

The FSRS recognizes that there are **0 ladder companies** in service. These companies are needed to provide fire suppression services to areas to meet NFPA 1710 criteria or within 2½ miles and the number of buildings with a Needed Fire Flow over 3,500 gpm or 3 stories or more in height, or the method of operation.

The FSRS recognizes that there are **1 service companies** in service.

**Item 549 "Credit for Ladder Service (CLS)" = 1.60 points**

**Item 553 – Credit for Reserve Ladder and Service Trucks (0.50 points)**

The next item reviewed is Item 553 "Credit for Reserve Ladder and Service Trucks (CRLS)". This item considers the adequacy of ladder and service apparatus when one (or more in larger communities) of these apparatus are out of service. The number of needed reserve ladder and service trucks is 1 for each 8 needed ladder and service companies that were determined to be needed in Item 540, or any fraction thereof.

**Item 553 "Credit for Reserve Ladder and Service Trucks (CRLS)" = 0.00 points**

**Item 561 – Deployment Analysis (10 points)**

Next, Item 561 "Deployment Analysis (DA)" is reviewed. This Item examines the number and adequacy of existing engine and ladder-service companies to cover built-upon areas of the city.

To determine the Credit for Distribution, first the Existing Engine Company (EC) points and the Existing Engine Companies (EE) determined in Item 513 are considered along with Ladder Company Equipment (LCE) points, Service Company Equipment (SCE) points, Engine-Ladder Company Equipment (ELCE) points, and Engine-Service Company Equipment (ESCE) points determined in Item 549.

Secondly, as an alternative to determining the number of needed engine and ladder/service companies through the road-mile analysis, a fire protection area may use the results of a systematic performance evaluation. This type of evaluation analyzes computer-aided dispatch (CAD) history to demonstrate that, with its current deployment of companies, the fire department meets the time constraints for initial arriving engine and initial full alarm assignment in accordance with the general criteria of in NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*.

A determination is made of the percentage of built upon area within 1½ miles of a first-due engine company and within 2½ miles of a first-due ladder-service company.

**Item 561 "Credit Deployment Analysis (DA)" = 5.58 points**

**Item 571 – Credit for Company Personnel (15 points)**

Item 571 "Credit for Company Personnel (CCP)" reviews the average number of existing firefighters and company officers available to respond to reported first alarm structure fires in the city.

The on-duty strength is determined by the yearly average of total firefighters and company officers on-duty considering vacations, sick leave, holidays, "Kelley" days and other absences. When a fire department operates under a minimum staffing policy, this may be used in lieu of determining the yearly average of on-duty company personnel.

Firefighters on apparatus not credited under Items 513 and 549 that regularly respond to reported first alarms to aid engine, ladder, and service companies are included in this item as increasing the total company strength.

Firefighters staffing ambulances or other units serving the general public are credited if they participate in fire-fighting operations, the number depending upon the extent to which they are available and are used for response to first alarms of fire.

On-Call members are credited on the basis of the average number staffing apparatus on first alarms. Off-shift career firefighters and company officers responding on first alarms are considered on the same basis as on-call personnel. For personnel not normally at the fire station, the number of responding firefighters and company officers is divided by 3 to reflect the time needed to assemble at the fire scene and the reduced ability to act as a team due to the various arrival times at the fire location when compared to the personnel on-duty at the fire station during the receipt of an alarm.

The number of Public Safety Officers who are positioned in emergency vehicles within the jurisdiction boundaries may be credited based on availability to respond to first alarm structure fires. In recognition of this increased response capability the number of responding Public Safety Officers is divided by 2.

The average number of firefighters and company officers responding with those companies credited as Automatic Aid under Items 513 and 549 are considered for either on-duty or on-call company personnel as is appropriate. The actual number is calculated as the average number of company personnel responding multiplied by the value of AA Plan determined in Item 512.D.

The maximum creditable response of on-duty and on-call firefighters is 12, including company officers, for each existing engine and ladder company and 6 for each existing service company.

Chief Officers are not creditable except when more than one chief officer responds to alarms; then extra chief officers may be credited as firefighters if they perform company duties.

The FSRS recognizes **5.65 on-duty personnel** and an average of **0.94 on-call personnel** responding on first alarm structure fires.

**Item 571 "Credit for Company Personnel (CCP)" = 4.26 points**



**Item 581 – Credit for Training (9 points)**

<b>Training</b>	<b>Earned Credit</b>	<b>Credit Available</b>
<b>A. Facilities, and Use</b> For maximum credit, each firefighter should receive 18 hours per year in structure fire related subjects as outlined in NFPA 1001.	0.00	35
<b>B. Company Training</b> For maximum credit, each firefighter should receive 16 hours per month in structure fire related subjects as outlined in NFPA 1001.	1.36	25
<b>C. Classes for Officers</b> For maximum credit, each officer should be certified in accordance with the general criteria of NFPA 1021. Additionally, each officer should receive 12 hours of continuing education on or off site.	8.50	12
<b>D. New Driver and Operator Training</b> For maximum credit, each new driver and operator should receive 60 hours of driver/operator training per year in accordance with NFPA 1002 and NFPA 1451.	5.00	5
<b>E. Existing Driver and Operator Training</b> For maximum credit, each existing driver and operator should receive 12 hours of driver/operator training per year in accordance with NFPA 1002 and NFPA 1451.	0.00	5
<b>F. Training on Hazardous Materials</b> For maximum credit, each firefighter should receive 6 hours of training for incidents involving hazardous materials in accordance with NFPA 472.	0.29	1
<b>G. Recruit Training</b> For maximum credit, each firefighter should receive 240 hours of structure fire related training in accordance with NFPA 1001 within the first year of employment or tenure.	5.00	5
<b>H. Pre-Fire Planning Inspections</b> For maximum credit, pre-fire planning inspections of each commercial, industrial, institutional, and other similar type building (all buildings except 1-4 family dwellings) should be made annually by company members. Records of inspections should include up-to date notes and sketches.	0.00	12

**Item 580 "Credit for Training (CT)" = 1.81 points**

**Item 730 – Operational Considerations (2 points)**

Item 730 "Credit for Operational Considerations (COC)" evaluates fire department standard operating procedures and incident management systems for emergency operations involving structure fires.

<b>Operational Considerations</b>	<b>Earned Credit</b>	<b>Credit Available</b>
<b>Standard Operating Procedures</b>  The department should have established SOPs for fire department general emergency operations	<b>50</b>	<b>50</b>
<b>Incident Management Systems</b>  The department should use an established incident management system (IMS)	<b>50</b>	<b>50</b>
<b>Operational Considerations total:</b>	<b>100</b>	<b>100</b>

Item 730 "Credit for Operational Considerations (COC)" = 2.00 points

**Water Supply**

Forty percent of a community's overall score is based on the adequacy of the water supply system. The ISO field representative evaluated:

- the capability of the water distribution system to meet the Needed Fire Flows at selected locations up to 3,500 gpm.
- size, type and installation of fire hydrants.
- inspection and flow testing of fire hydrants.

	<b>Earned Credit</b>	<b>Credit Available</b>
616. Credit for Supply System	<b>26.14</b>	<b>30</b>
621. Credit for Hydrants	<b>3.00</b>	<b>3</b>
631. Credit for Inspection and Flow Testing	<b>4.00</b>	<b>7</b>
<b>Item 640. Credit for Water Supply:</b>	<b>33.14</b>	<b>40</b>

**Item 616 – Credit for Supply System (30 points)**

The first item reviewed is Item 616 "Credit for Supply System (CSS)". This item reviews the rate of flow that can be credited at each of the Needed Fire Flow test locations considering the supply works capacity, the main capacity and the hydrant distribution. The lowest flow rate of these items is credited for each representative location. A water system capable of delivering 250 gpm or more for a period of two hours plus consumption at the maximum daily rate at the fire location is considered minimum in the ISO review.

Where there are 2 or more systems or services distributing water at the same location, credit is given on the basis of the joint protection provided by all systems and services available.

The supply works capacity is calculated for each representative Needed Fire Flow test location, considering a variety of water supply sources. These include public water supplies, emergency supplies (usually accessed from neighboring water systems), suction supplies (usually evidenced by dry hydrant installations near a river, lake or other body of water), and supplies developed by a fire department using large diameter hose or vehicles to shuttle water from a source of supply to a fire site. The result is expressed in gallons per minute (gpm).

The normal ability of the distribution system to deliver Needed Fire Flows at the selected building locations is reviewed. The results of a flow test at a representative test location will indicate the ability of the water mains (or fire department in the case of fire department supplies) to carry water to that location.

The hydrant distribution is reviewed within 1,000 feet of representative test locations measured as hose can be laid by apparatus.

For maximum credit, the Needed Fire Flows should be available at each location in the district. Needed Fire Flows of 2,500 gpm or less should be available for 2 hours; and Needed Fire Flows of 3,000 and 3,500 gpm should be obtainable for 3 hours.

**Item 616 "Credit for Supply System (CSS)" = 26.14 points**

**Item 621 – Credit for Hydrants (3 points)**

The second item reviewed is Item 621 "Credit for Hydrants (CH)". This item reviews the number of fire hydrants of each type compared with the total number of hydrants.

There are a total of 426 hydrants in the graded area.

620. Hydrants, - Size, Type and Installation	Number of Hydrants
A. With a 6 -inch or larger branch and a pumper outlet with or without 2½ -inch outlets	426
B. With a 6 -inch or larger branch and no pumper outlet but two or more 2½ -inch outlets, or with a small foot valve, or with a small barrel	0
C./D. With only a 2½ -inch outlet or with less than a 6 -inch branch	0
E./F. Flush Type, Cistern, or Suction Point	0

Item 621 "Credit for Hydrants (CH)" = 3.00 points

**Item 630 – Credit for Inspection and Flow Testing (7 points)**

The third item reviewed is Item 630 "Credit for Inspection and Flow Testing (CIT)". This item reviews the fire hydrant inspection frequency, and the completeness of the inspections. Inspection of hydrants should be in accordance with AWWA M-17, *Installation, Field Testing and Maintenance of Fire Hydrants*.

**Frequency of Inspection (FI):** Average interval between the 3 most recent inspections.

Frequency	Points
1 year	30
2 years	20
3 years	10
4 years	5
5 years or more	No Credit

**Note:** The points for inspection frequency are reduced by 10 points if the inspections are incomplete or do not include a flushing program. An additional reduction of 10 points are made if hydrants are not subjected to full system pressure during inspections. If the inspection of cisterns or suction points does not include actual drafting with a pumper, or back-flushing for dry hydrants, 20 points are deducted.

**Total points for Inspections = 4.00 points**

**Frequency of Fire Flow Testing (FF):** Average interval between the 3 most recent inspections.

<u>Frequency</u>	<u>Points</u>
5 years	40
6 years	30
7 years	20
8 years	10
9 years	5
10 years or more	No Credit

**Total points for Fire Flow Testing = 0.00 points**

**Item 631 "Credit for Inspection and Fire Flow Testing (CIT)" = 4.00 points**

**Divergence = -6.96**

The Divergence factor mathematically reduces the score based upon the relative difference between the fire department and water supply scores. The factor is introduced in the final equation.

### **Community Risk Reduction**

	<b>Earned Credit</b>	<b>Credit Available</b>
1025. Credit for Fire Prevention and Code Enforcement (CPCE)	<b>1.96</b>	2.2
1033. Credit for Public Fire Safety Education (CFSE)	<b>1.58</b>	2.2
1044. Credit for Fire Investigation Programs (CIP)	<b>0.96</b>	1.1
<b>Item 1050. Credit for Community Risk Reduction</b>	<b>4.50</b>	<b>5.50</b>

<b>Item 1025 – Credit for Fire Prevention Code Adoption and Enforcement (2.2 points)</b>	<b>Earned Credit</b>	<b>Credit Available</b>
<b>Fire Prevention Code Regulations (PCR)</b> Evaluation of fire prevention code regulations in effect.	8.60	10
<b>Fire Prevention Staffing (PS)</b> Evaluation of staffing for fire prevention activities.	8.00	8
<b>Fire Prevention Certification and Training (PCT)</b> Evaluation of the certification and training of fire prevention code enforcement personnel.	3.00	6
<b>Fire Prevention Programs (PCP)</b> Evaluation of fire prevention programs.	16.00	16
<b>Review of Fire Prevention Code and Enforcement (CPCE) subtotal:</b>	<b>35.60</b>	<b>40</b>

<b>Item 1033 – Credit for Public Fire Safety Education (2.2 points)</b>	<b>Earned Credit</b>	<b>Credit Available</b>
<b>Public Fire Safety Educators Qualifications and Training (FSQT)</b> Evaluation of public fire safety education personnel training and qualification as specified by the authority having jurisdiction.	5.00	10
<b>Public Fire Safety Education Programs (FSP)</b> Evaluation of programs for public fire safety education.	23.75	30
<b>Review of Public Safety Education Programs (CFSE) subtotal:</b>	<b>28.75</b>	<b>40</b>

<b>Item 1044 – Credit for Fire Investigation Programs (1.1 points)</b>	<b>Earned Credit</b>	<b>Credit Available</b>
<b>Fire Investigation Organization and Staffing (IOS)</b> Evaluation of organization and staffing for fire investigations.	8.00	8
<b>Fire Investigator Certification and Training (IQT)</b> Evaluation of fire investigator certification and training.	3.38	6
<b>Use of National Fire Incident Reporting System (IRS)</b> Evaluation of the use of the National Fire Incident Reporting System (NFIRS) for the 3 years before the evaluation.	6.00	6
<b>Review of Fire Investigation Programs (CIP) subtotal:</b>	<b>17.38</b>	<b>20</b>

**Summary of PPC Review**  
**for**  
**South Beloit**

FSRS Item	Earned Credit	Credit Available
<b>Emergency Communications</b>		
414. Credit for Emergency Reporting	3.00	3
422. Credit for Telecommunicators	2.99	4
432. Credit for Dispatch Circuits	1.65	3
<b>440. Credit for Emergency Communications</b>	<b>7.64</b>	<b>10</b>
<b>Fire Department</b>		
513. Credit for Engine Companies	5.78	6
523. Credit for Reserve Pumpers	0.00	0.5
532. Credit for Pumper Capacity	3.00	3
549. Credit for Ladder Service	1.60	4
553. Credit for Reserve Ladder and Service Trucks	0.00	0.5
561. Credit for Deployment Analysis	5.58	10
571. Credit for Company Personnel	4.26	15
581. Credit for Training	1.81	9
730. Credit for Operational Considerations	2.00	2
<b>590. Credit for Fire Department</b>	<b>24.03</b>	<b>50</b>
<b>Water Supply</b>		
616. Credit for Supply System	26.14	30
621. Credit for Hydrants	3.00	3
631. Credit for Inspection and Flow Testing	4.00	7
<b>640. Credit for Water Supply</b>	<b>33.14</b>	<b>40</b>
<b>Divergence</b>	<b>-6.96</b>	<b>—</b>
<b>1050. Community Risk Reduction</b>	<b>4.50</b>	<b>5.50</b>
<b>Total Credit</b>	<b>62.35</b>	<b>105.5</b>

**Final Community Classification = 04/4X**

© 2004 Blackwell Publishing Ltd, *Journal of Internal Medicine* 255: 111–118

### What's new in Business Knowledge?

**DATE** \_\_\_\_\_ **TIME** \_\_\_\_\_

[illegible]

**THE UNIVERSITY OF CHICAGO PRESS**

THE MOUNTAIN ROAD PROJECT IS THE FIRST OF THE LOSTTOWN PHASE THREE DEVELOPMENT

[illegible]





1000 Bishops Gate Blvd. Ste 300  
Mt. Laurel, NJ 08054-3404

11.800.444.4854 Opt.2  
11.800.777.3629

August 26, 2024

Mr. Tom Fitzgerald, Mayor  
South Beloit  
519 Blackhawk Blvd  
South Beloit, Illinois, 61080

RE: South Beloit, Winnebago County, Illinois  
Public Protection Classification: 04/4X  
Effective Date: December 01, 2024

Dear Mr. Tom Fitzgerald,

We wish to thank you and Mr. Jason Griffin for your cooperation during our recent Public Protection Classification (PPC) survey. ISO has completed its analysis of the structural fire suppression delivery system provided in your community. The resulting classification is indicated above.

If you would like to know more about your community's PPC classification, or if you would like to learn about the potential effect of proposed changes to your fire suppression delivery system, please call us at the phone number listed below.

ISO's Public Protection Classification Program (PPC) plays an important role in the underwriting process at insurance companies. In fact, most U.S. insurers – including the largest ones – use PPC information as part of their decision-making when deciding what business to write, coverage's to offer or prices to charge for personal or commercial property insurance.

Each insurance company independently determines the premiums it charges its policyholders. The way an insurer uses ISO's information on public fire protection may depend on several things – the company's fire-loss experience, ratemaking methodology, underwriting guidelines, and its marketing strategy.

Through ongoing research and loss experience analysis, we identified additional differentiation in fire loss experience within our PPC program, which resulted in the revised classifications. We based the differing fire loss experience on the fire suppression capabilities of each community. The new classifications will improve the predictive value for insurers while benefiting both commercial and residential property owners. We've published the new classifications as "X" and "Y" — formerly the "9" and "88" portion of the split classification, respectively. For example:

- A community currently graded as a split 6/9 classification will now be a split 6/6X classification; with the "6X" denoting what was formerly classified as "9."
- Similarly, a community currently graded as a split 6/88 classification will now be a split 6/6Y classification, the "6Y" denoting what was formerly classified as "88."

- + Communities graded with single "9" or "8B" classifications will remain intact.
- + Properties over 5 road miles from a recognized fire station would receive a class 10.

PPC is important to communities and fire departments as well. Communities whose PPC improves may get lower insurance prices. PPC also provides fire departments with a valuable benchmark, and is used by many departments as a valuable tool when planning, budgeting and justifying fire protection improvements.

ISO appreciates the high level of cooperation extended by local officials during the entire PPC survey process. The community protection baseline information gathered by ISO is an essential foundation upon which determination of the relative level of fire protection is made using the Fire Suppression Rating Schedule.

The classification is a direct result of the information gathered, and is dependent on the resource levels devoted to fire protection in existence at the time of survey. Material changes in those resources that occur after the survey is completed may affect the classification. Although ISO maintains a pro-active process to keep baseline information as current as possible, in the event of changes please call us at 1-800-444-4554, option 2 to expedite the update activity.

ISO is the leading supplier of data and analytics for the property/casualty insurance industry. Most insurers use PPC classifications for underwriting and calculating premiums for residential, commercial and industrial properties. The PPC program is not intended to analyze all aspects of a comprehensive structural fire suppression delivery system program. It is not for purposes of determining compliance with any state or local law, nor is it for making loss prevention or life safety recommendations.

If you have any questions about your classification, please let us know.

Sincerely,

*Alex Shubert*

Alex Shubert  
Manager -National Processing Center

cc: Mr. Todd Christmas, Water Superintendent, Illinois American South Beloit Zone  
Ms. Jennifer Fey, Director, Winnebago County 911 Center  
Mr. Jason Griffin, Chief, South Beloit Fire Department

End  
of  
Report