

City of Bloomington, Indiana

Fire Department
Organizational Assessment

Final Report

August 2020



A PART OF



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A PART OF
 RAFTELIS

August 14, 2020

Honorable Mayor John Hamilton
City of Bloomington
401 N. Morton Street
Bloomington, IN 47404

Dear Mayor Hamilton:

We are pleased to provide this assessment and review of the City's Fire Department.

Effective public safety operations are a crucial component of local government services. This report utilizes data and feedback provided by Department staff to assess the structure, staffing levels, operations, and culture of the City's fire service. Specific recommendations designed to support ongoing practices as well as enhance staff collaboration and effectiveness are also included in this report. If implemented, these recommendations will enable the Department to more effectively and strategically prioritize service delivery and support efficient emergency response.

This report also addresses a key opportunity to improve cohesiveness among the City's public safety departments by developing emergency management capacity. This approach will lay an effective groundwork for future collaboration and enhanced public safety service throughout the community.

Thank you for the opportunity to continue to work with the City of Bloomington.

Sincerely,

Michelle Ferguson
Senior Manager - Organizational Assessment

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Executive Summary

Over the last four years, the Bloomington Fire Department has made several important and necessary operational changes and enhancements, including investments in new apparatus and equipment, adjusting its rank structure, and implementing new training software. As the organization adjusts to these enhancements, the Department has discussed pursuing additional changes such as addressing facility space needs, pursuing accreditation, and updating policies and procedures. While each of these changes is intended to improve operations and services, they represent significant departures from the Department's historical practices and have challenged the organization's culture.

It is essential for all organizations to embrace and adapt to change. Effective change management is particularly important for public safety organizations, such as fire departments, where lives are frequently on the line. However, an organization's ability to enhance operations, practices, and procedures often requires a high degree of participation and buy-in from its staff. The primary challenge facing the Bloomington Fire Department is a cultural disconnect between the Department's leadership and staff, which is rooted in the rapid and ongoing pace of change.

This report includes several recommendations designed to help the Department's staff regroup, reorient, and recommit to specific strategic goals and initiatives before continuing to adjust other operations. The Department should develop a more collaborative cultural approach using strategic planning and enhanced communications practices to increase understanding and educate staff about the Department's future plans. If implemented, these recommendations will support staff engagement and cultivate a shared vision of the Department and its operations that spans the entire organization.

Once this shared vision is established, the Department should move to implement other necessary structural and operational changes in a deliberate and strategic manner. Enhancing senior staff capacity, expanding data-tracking practices, and continuing capital investments will support the Department's efforts to provide responsive services in future years. Similarly, enhancing fire prevention activities will reduce false alarms and ensure units are free to respond to actual emergencies. Improving the Department's training practices will help staff provide more consistent service, increase communication, and expand safety awareness.

While most of the recommendations in this report concern fire operations, enhancing emergency management collaboration among the Fire and Police Departments is needed. Developing a City-wide emergency management function and coordination plan will require the Fire and Police Departments to train and rehearse for critical incidents, such as natural disasters. It will also create an opportunity for introspection to more fully understand how the public safety response to recent crises, such as the COVID-19 pandemic, might inform a thoroughly integrated and collaborative emergency management structure in future years.

The following table lists recommendations included in this report.

Table 1: List of Report Recommendations

Number	Recommendation
Management Culture and Practices	
1	Develop a Department-wide strategic plan.
2	Consider accreditation as appropriate resources become available.
3	Develop an internal communications strategy among the Chief, command staff, and shift personnel.
4	Continue and expand data tracking practices to support strategic initiatives.
5	Enhance, centralize, and regularly update existing rules, regulations, standing orders, and Standard Operating Guidelines (SOGs).
Structure and Staffing	
6	Create a Deputy Fire Chief of Administration position and retitle the current Deputy Chief position as Deputy Fire Chief of Operations.
7	Fill the existing shift vacancies.
8	Create a recruitment and retention plan.
9	Retitle the Fire Prevention Officer as a Community Engagement Officer reporting to the Deputy Chief.
10	Create a part-time Administrative Assistant position.
Facilities and Fleet	
11	Conduct a station location assessment and prioritize station replacement as part of the City's capital improvement plan.
12	Develop a clear communications practice regarding the status of vehicle and apparatus repairs.
13	Develop a capital asset reserve policy.
Fire Prevention and Inspections	
14	Create a false alarm/unwanted alarm reduction program.
15	Clarify service level standards for fire inspections.
16	Enhance the pre-plan development program.
Training and Safety	
17	Develop an annual training plan for all Department staff.
18	Continue leveraging the Department's Safety Committee.
Emergency Management	
19	Create an Office of Emergency Management to enhance collaboration.

Background and Methodology

In January 2020, the City of Bloomington engaged The Novak Consulting Group, a part of Raftelis, to conduct an operational assessment of the City's Fire Department. The purpose of this assessment was to evaluate the Department's staffing, structure, and operations, and to identify opportunities to enhance efficiency and effectiveness.

The Novak Consulting Group conducted interviews related to this engagement in February 2020, including individual interviews and focus groups with Fire Department staff. Focus groups and interviews included Command Staff, Captains, Chauffeurs, and Firefighters from each shift, as well as Inspection Officers, Shift Training Officers, representatives from the Union Board, and Battalion Chiefs. In total, this engagement resulted in interactions with approximately 80 Department staff.

In addition to interviewing staff, The Novak Consulting Group toured each of the Department's five fire stations, requested and reviewed call data and performance indicators provided by the Department, and analyzed the Department's practices and operations. The information gathered during this process, along with relevant best practices provided by the National Fire Protection Association (NFPA), International Association of Fire Chiefs (IAFC), and International Association of Fire Fighters (IAFF), was used to inform and develop recommendations in this report.

About the Bloomington Fire Department

The Bloomington Fire Department exists "to provide excellent public safety to everyone who lives in, works in, or visits the City through superb fire prevention, public education, and emergency management/mitigation completed by credentialed and trusted officials who receive first-rate training and high quality equipment."¹ The Department provides emergency response services for a variety of calls, including fires and hazardous conditions, false alarms, and emergency medical services (EMS). Notably, the Indiana University Health system functions as the primary EMS responder in Monroe County and provides both Advanced Life Support (ALS) and Basic Life Support (BLS) capabilities to residents experiencing an emergency. The Bloomington Fire Department functions as a secondary EMS provider and supports BLS capabilities using Firefighters who are certified Emergency Medical Technicians (EMTs).

The Department is overseen by the Board of Public Safety, a five-member body appointed by the Mayor that supervises the Police and Fire Departments.² The Board meets monthly to review the general performance, business, purchases, and personnel matters pertaining to the Police and Fire Departments and to approve payroll and claims for both departments.

The Department currently utilizes three shifts to provide general operational and emergency response support, as well as several additional positions to support training, prevention, logistics, and inspections activities. The following figure illustrates the Department's current organizational structure.

¹ City of Bloomington. FY2020 Budget Proposal. Page 104.

² Bloomington City Code. Chapter 2.17: Board of Public Safety.

https://library.municode.com/in/bloomington/codes/code_of_ordinances?nodet=TIT2ADPE_CH2.17BOPUSA

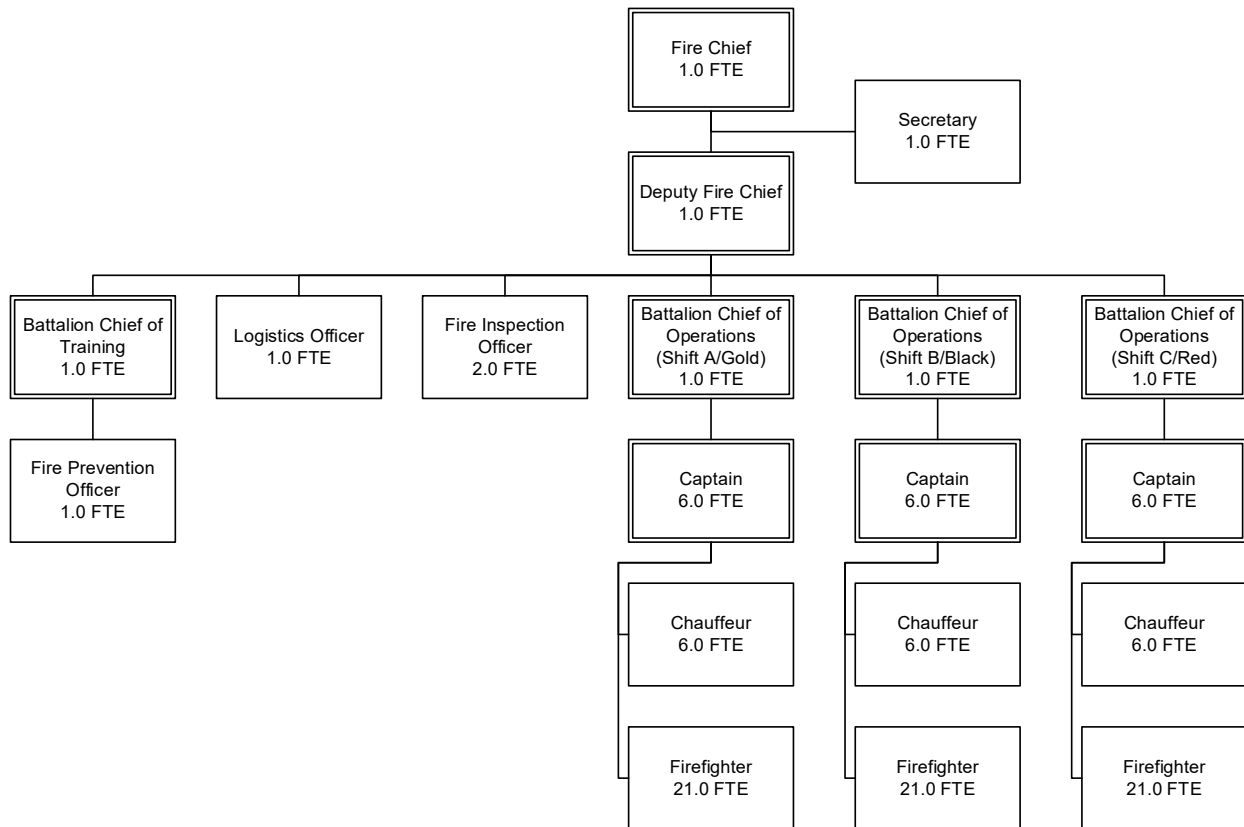


Figure 1: Current Bloomington Fire Department Organizational Chart, FY2020

The Department is led by the Fire Chief, who is appointed by and receives general administrative direction from the Mayor. The Fire Chief is responsible for strategically managing the Department and its operations, developing and administering policies and standard operating procedures (SOGs), coordinating activities with outside agencies, managing the Department's budget, and personally directing fire response at major alarms and events.

The Fire Chief is supported by a Secretary who primarily performs payroll, purchasing, and recordkeeping functions. The Secretary also provides customer service for members of the public who visit Fire Station 1 (the Department's headquarters). The Secretary is the only administrative support position assigned to the Department.

The Deputy Fire Chief assists with developing the Department's strategic goals and is responsible for supervising day-to-day operations and functions, including training, logistics, fire prevention and inspections, and emergency response. The Deputy Chief also assists with monitoring and tracking the Department's workload and performance measures, generating regular reports, recruiting employees and approving personnel changes, responding to resident inquiries, and supporting the Public Safety and Labor Relations Committees. The Deputy Chief directly supervises seven positions, including the Battalion Chief of Training, the Logistics Officer, two Fire Inspections Officers, and three Battalion Chiefs of Operations.

The Battalion Chiefs of Operations supervise shift staff responsible for providing emergency service response. These positions coordinate operations and activities at each of the City's five fire stations, direct

work plans and training efforts for shift personnel, supervise the testing of Department equipment, manage personnel and administrative records, and assist with the development of Department-wide policies and procedures. Battalion Chiefs also respond to significant calls for service and are expected to take command of fire scenes as necessary to ensure effective oversight.

Each Battalion Chief of Operations supervises a shift consisting of six Captains, six Chauffeurs, and 21 Firefighters. Captains are responsible for supervising activities and staff at their assigned stations, including maintenance, training, and emergency response. Chauffeurs serve as primary drivers. Firefighters respond to emergencies; maintain the cleanliness and basic maintenance of stations, apparatus, and equipment; and engage in regular training to maintain essential skills. All battalion staff (including Battalion Chiefs of Operations) currently work 24 hours on-duty followed by 48 hours off-duty, or 2,920 hours per year.

The Battalion Chief of Training coordinates the Department's training offerings and ensures that staff complete the required minimum training each year. This position also manages the Department's training software program, TargetSolutions® by Vector Solutions, and approves staff requests for specialized training. Another major responsibility of the Battalion Chief of Training involves managing and coordinating the Department's Fire Academy, which is typically offered annually.

The Fire Prevention Officer performs community outreach and education activities, conducts fire investigations, and manages the Department's social media accounts. Many of the community engagement activities performed by the Prevention Officer involve fire safety instruction at area schools, including fire drills and evacuations. The Prevention Officer also actively participates in the Department's recruitment process and trains new recruits on fire prevention concepts.

The Logistics Officer procures and maintains the Department's turnout gear and personal protective equipment (PPE), and is responsible for collecting and cleaning gear involved in fire incidents. This position also maintains inventories of Department supplies and manages inventory records. Finally, the Logistics Officer serves as a liaison between the Department and the City's fleet maintenance staff regarding vehicle and apparatus repairs and will coordinate outsourcing apparatus repair using third-party contractors where necessary.

The Fire Inspection Officers are responsible for fire prevention activities, including reviewing new construction plans and permits for compliance with applicable fire codes, performing proactive fire inspections at commercial properties in the City, and investigating fire incidents. These staff also provide fire prevention consultations with residents and business owners regarding the interpretation of the City's fire codes.

Core Services Matrix

The following table illustrates the core functions and services provided by the Fire Department and its staff. This list reflects key activities that account for significant staff time; it is not an all-inclusive list.

Table 2: Fire Department Core Services

Fire Department Function/Division	Program Area	Activities
Administration	Budget	<ul style="list-style-type: none"> • Prepare Department operating and capital budget annually • Track spending and run reports as needed
	Payroll	<ul style="list-style-type: none"> • Record shift attendance and leave usage daily • Prepare timesheets biweekly for review • Submit timesheets to City Payroll Office biweekly
	Personnel	<ul style="list-style-type: none"> • Submit personnel change forms to Human Resources as needed
	Purchasing	<ul style="list-style-type: none"> • Review and approve invoices submitted by Station Captains • Train staff regarding requisition process • Review and reconcile Department credit card as needed
	Academy and Recruitment	<ul style="list-style-type: none"> • Maintain eligibility list for Firefighters
Training	Academy and Recruitment	<ul style="list-style-type: none"> • Coordinate annual recruitment academy
	TargetSolutions	<ul style="list-style-type: none"> • Manage deployment of TargetSolutions software • Develop and deploy training modules
	Training and Professional Development	<ul style="list-style-type: none"> • Coordinate third-party training providers as needed • Track training hours and credentialing requirements to ensure staff meet minimum standards • Engage Shift Training Officers to coordinate training opportunities as needed
Prevention	Community Education	<ul style="list-style-type: none"> • Conduct monthly fire education events at community meeting locations including but not limited to schools and senior centers
	Social Media	<ul style="list-style-type: none"> • Manage Facebook and Twitter accounts daily
Logistics	Equipment Maintenance	<ul style="list-style-type: none"> • Collect, clean, and return gear exposed to fire scenes and contaminants • Inspect turnout gear and equipment for defects • Test equipment for safety and functionality
	Fleet Maintenance	<ul style="list-style-type: none"> • Coordinate vehicle and apparatus maintenance with City fleet and third-party contractors
	Inventory	<ul style="list-style-type: none"> • Maintain an inventory of gear, equipment, replacement components, and supplies
	Procurement	<ul style="list-style-type: none"> • Procure turnout gear, PPE, replacement parts, and other physical assets as needed • Procure medical supplies as needed
Inspections	Development Review	<ul style="list-style-type: none"> • Review all new construction permits and plans for compliance with fire codes as needed
	Fire Inspections	<ul style="list-style-type: none"> • Inspect all commercial properties for compliance with fire codes

Fire Department Function/Division	Program Area	Activities
Operations / Emergency Response	Emergency Response	<ul style="list-style-type: none"> Respond to fire scenes and emergency calls for service
	Maintenance	<ul style="list-style-type: none"> Maintain stations and station grounds Clean and perform light maintenance on vehicles and apparatus
	Training	<ul style="list-style-type: none"> Achieve minimum training expectations annually

Staffing

Based on position control information provided by the City Controller’s Office, authorized staffing in the Fire Department has been consistent over the past five fiscal years, as illustrated in the following table.

Table 3: Authorized Staffing Level by Position, FY2016 to FY2020

Fire Department Position	FY2016	FY2017	FY2018	FY2019	FY2020	Percentage Change FY2016 to FY2020
Battalion Chief	4	4	4	4	4	0%
Captain	18	18	18	18	18	0%
Chauffeur	0	0	25	23	22	Not Applicable
Chief	1	1	1	1	1	0%
Deputy Chief	2	1	1	1	1	-50%
Fire Inspection Officer	1	1	2	2	2	100%
Fire Prevention Officer	1	1	1	1	1	0%
Firefighter 1st Class	57	57	57	58	59	4%
Logistics/Training Officer	0	0	0	1	1	Not Applicable
Secretary	1	1	1	1	1	0%
Sergeant	25	25	0	0	0	-100%
Total	110	109	110	110	110	0%

Overall, staffing in FY2020 is the same as FY2016; however, staffing levels for some positions have shifted during this period. Beginning in FY2018, the rank of Sergeant was replaced by the rank of Chauffeur, and the number of Fire Inspection Officer positions increased by one. In FY2019, a Logistics/Training Officer position was created, and the number of Firefighter positions increased by one in both FY2019 and FY2020.

Budget

The following table compares actual expenses in FY2016-FY2019 to budgeted expenses for FY2020.

Table 4: Expenses by Fund and Category, FY2016 to FY2020

Category	FY2016 Actual	FY2017 Actual	FY2018 Actual	FY2019 Actual	FY2020 Budget	Percentage Change FY2016 to FY2020
General Fund						
Personnel Services	\$9,489,641	\$9,405,721	\$9,610,870	\$9,846,630	\$10,028,668	6%
Supplies	\$214,642	\$146,195	\$337,937	\$308,927	\$227,329	6%
Other Services and Charges	\$338,902	\$275,108	\$550,612	\$727,166	\$884,195	161%
General Fund Subtotal	\$10,043,185	\$9,827,024	\$10,499,419	\$10,882,723	\$11,140,192	11%
Public Safety Local Income Tax (LIT)						
Supplies	\$0	\$115,665	\$0	\$0	\$0	Not Applicable
Other Services and Charges	\$0	\$188,326	\$0	\$0	\$0	Not Applicable
Capital Outlays	\$0	\$956,359	\$807,330	\$1,730,003	\$2,113,720	Not Applicable
Public Safety LIT Subtotal	\$0	\$1,260,350	\$807,330	\$1,730,003	\$2,113,720	Not Applicable
Fire Pension						
Personnel Services	\$3,752	\$3,726	\$3,726	\$4,039	\$4,058	8%
Supplies	\$97	\$120	\$123	\$0	\$350	261%
Other Services and Charges	\$1,870,327	\$1,834,561	\$1,751,591	\$1,752,084	\$2,146,329	15%
Fire Pension Subtotal	\$1,874,176	\$1,838,407	\$1,755,440	\$1,756,123	\$2,150,737	15%
Grand Total	\$11,917,361	\$12,925,781	\$13,062,189	\$14,368,849	\$15,404,649	29%

Across all funds, FY2020 Budgeted expenses are approximately 29% higher than FY2016 actual expenses. The bulk of this increase is attributable to Capital Outlay expenses as a result of the Public Safety Local Income Tax (LIT), which has enabled the Department to replace aging vehicles and apparatus with modern equipment. Operating expenses in the General Fund have increased approximately 11%, driven primarily by increased spending for Other Services and Charges, such as contract repair for older fleet vehicles, increasing medical supply and utility-related expenses, and higher technology costs. Finally, services and charges related to Fire Pension have increased approximately 15% over the same timeframe.

Analysis and Recommendations

The Bloomington Fire Department has experienced significant cultural and operational changes over the last several years, including revisions to the command and rank structure, adjustments to personal protective equipment and turnout gear, and the implementation of new training software. These adjustments represent necessary and important adaptations designed to strengthen the Department's readiness and effectiveness. However, the pace and scope of these changes represent a significant departure from the past practice and experience of many Department staff. This has resulted in a cultural environment where staff feel disconnected from the change-making process and the rationale for future change.

In most organizations that experience cultural change, it is not unusual for staff to feel disconnected from the process, uncertain about the future, and frustrated with various aspects of change implementation. Many of the staff interviewed by The Novak Consulting Group for this assessment expressed similar sentiments and perceptions. The recommendations in this report are intended to enhance the Department's management culture and communications practices to build upon the positive changes that have already occurred, strengthen connections between staff and senior Department leadership, and enable the Department to continue improving service to the community. These recommendations also address enhancement to the Department's command structure and staffing levels, continued investments in facilities and fleet vehicles, and improved fire prevention, training, and safety practices.

Implementing the recommendations in this report will result in the following organizational structure. New and reclassified positions are highlighted in green.

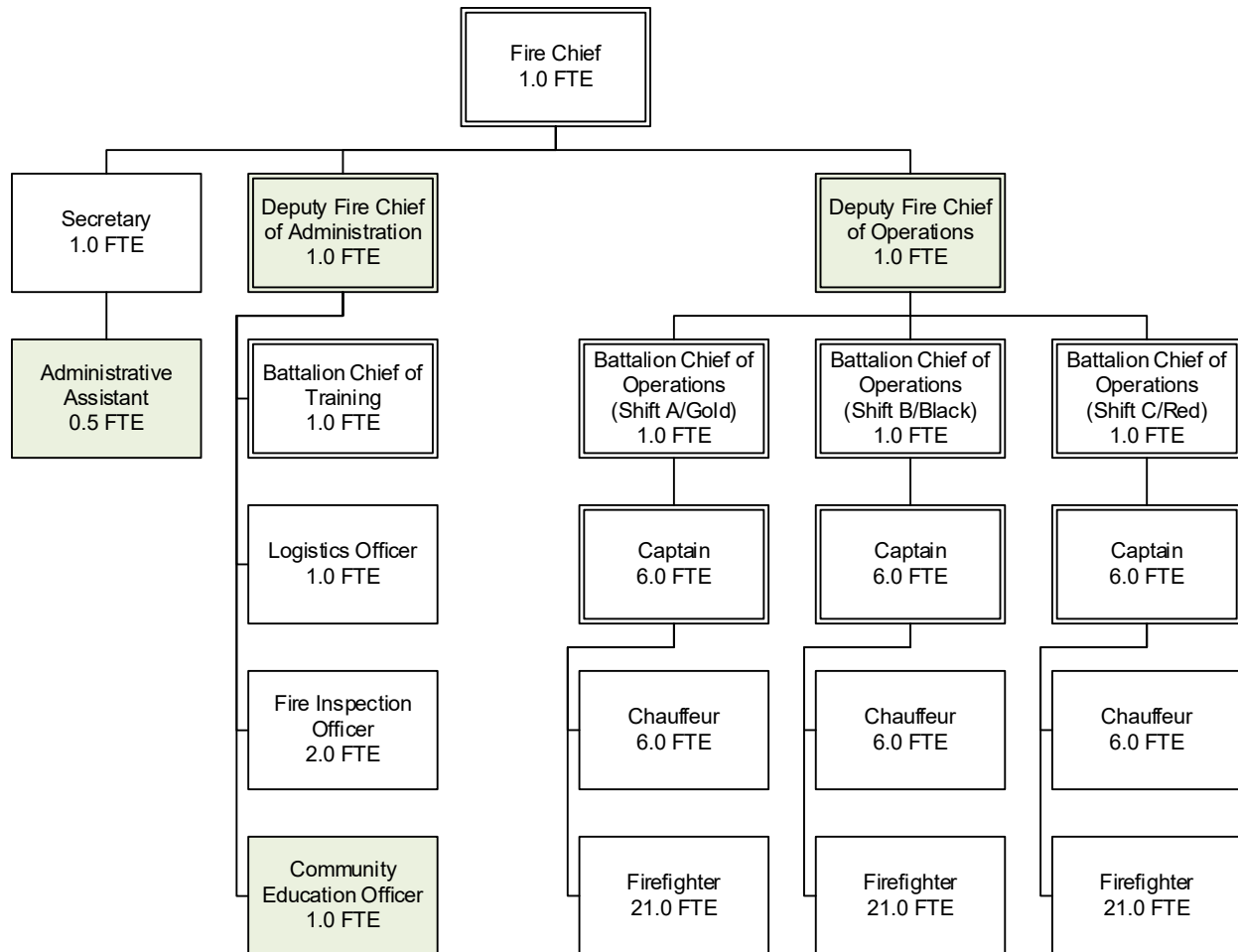


Figure 2: Proposed Bloomington Fire Department Organizational Chart

Management Culture and Practices

Recommendation 1: Develop a Department-wide strategic plan.

As a best practice, fire departments across the country commonly develop strategic plans as recommended by the IAFC and Center for Public Safety Excellence (CPSE). Strategic planning answers three essential questions about an organization:

- **Where are we?** What do we know to be true?
- **Where do we want to go?** What do we hope will be true in the future?
- **How do we get there?** What must go well in order to make it so?

The importance of developing a strategic plan, particularly in a public safety context, is twofold. First, strategic plans provide public safety agencies with a shared understanding of their role in the community and the values they will live out. This is accomplished through the development of vision, mission, and values statements, which describe how the organization will provide service. Cultivating this shared understanding is critical in a public safety context, where responses are often made during emergency situations involving significant and life-altering events. Defining how the Department sees itself as a service provider helps ensure staff provide consistent, quality services even in stressful situations.

Second, effective strategic plans guide organizational development using specific goals and initiatives, which enable staff to prioritize work in a way that advances the strategic plan. By developing clear goals and initiatives and regularly updating them, organizations can align cultural and operational changes with the overall strategy and more clearly communicate the rationale for future improvements.

The Bloomington Fire Department has already begun the process of developing a strategic plan. In 2017, the Fire Chief convened a meeting of Chief Officers and Captains to develop vision, mission, and core values statements for the Department. During the meeting, participants submitted ideas and thoughts regarding their vision for the Department and their perceptions about the Department's mission and core values. These ideas were pooled and discussed by all participants to identify commonalities, which in turn were developed into the following formal statements.³

Vision: The City of Bloomington Fire Department pledges to meet all national standards in a sustainable manner in order to be a leader in Monroe County and exceed our Citizens' expectations.

Mission: The City of Bloomington Fire Department is committed to providing honorable, professional, and safe responses to all emergency and non-emergency calls of the community that we serve. We are dedicated to minimizing the loss of life and property through the advancement of public safety with excellent fire prevention, risk reduction education, investigation, code enforcement, fire suppression, emergency medical service, and rescue.

The Department's **values** include the following:

- **Respect** – Treating others like you want to be treated regardless of their similarities or differences
- **Integrity** – Acting, speaking, and thinking with Honor and Ethics even when no one is watching
- **Service** – Placing the needs of others ahead of your own and treating everyone like they are important
- **Excellence** – Completing all duties to the best of your ability while constantly improving the City, Department, Shift, Crew, and yourself.

The vision, mission, and values statements described above are commendable and reflect an effort to create agreement among supervisory and command staff about the Department's role and values. However, these statements have not yet been revised since they were created several years ago. In the meantime, the Department has continued to adapt to operational changes, such as the use of new apparatus and equipment, as well as environmental changes, including response to the COVID-19 pandemic.

Additionally, the current strategic planning elements do not include clearly defined goals and initiatives. Goals, initiatives, and assignments are currently developed at monthly labor/management meetings that involve the Chief, Deputy Chief, Battalion Chiefs, and labor representatives. These meetings provide good opportunities for staff discussion and feedback, but relying solely on monthly meetings to chart the course of the Department may favor reactive management decisions. In an organization such as the Bloomington Fire Department, where significant cultural and operational changes have occurred and future changes are warranted, it is essential to prioritize new goals, initiatives, and projects in a way that advances the strategic plan.

³ City of Bloomington Fire Department. 2018 Rules and Regulations. Page 2.

Finally, while the current strategic planning elements reflect the vision of the Department's senior officers and supervisors, this vision was developed without significant community involvement or input from line staff or others in the City organization outside of the Fire Department. This results in a strategic planning framework that is informed only by a specific group of Department personnel. During interviews, staff described uncertainty about the Department's role in the City and the surrounding community, its long-term goals, and how assignments advance the Department. Some staff believe that the Department is a place where change occurs for the sake of change, while others believe changes are enacted for superficial reasons. In effect, there is a disconnect between how various staff in the Department perceive change management practices and how changes inform a more comprehensive, strategic outlook on the Department.

Notably, the Department currently utilizes a number of staff committees designed to facilitate input from line staff and drive proactive change:

- An Administrative Review Committee designed to develop standard operating guidelines, review rules and regulations, and recommend policy changes.
- A Professional Standards Committee tasked with developing a 10-year progression plan, recommending changes to position requirements, and formalizing guidance for promotions.
- A Safety and Health Committee to review accident reports, complete Occupational Safety and Health Administration (OSHA) and NFPA safety inspections, and recommend safety enhancements.
- A Personal Protective Equipment (PPE) Committee responsible for specifying minimum requirements for PPE gear used by operations staff.
- An Apparatus Committee responsible for specifying minimum requirements and equipment packages for fire apparatus.
- A Self-Contained Breathing Apparatus (SCBA) Committee responsible for specifying minimum requirements associated with SCBA equipment.
- A Hiring Committee tasked with developing interview questions, conducting panel interviews, and recommending improvements to the recruitment process. This committee has seven members.
- A Grant Committee that evaluates grant opportunities and completes grant-related work.
- A Historical Committee responsible for documenting and preserving items of historical significance and for recording video interviews of recruits and retirees.

These committees vary in size from two to 12 members and include staff representation from throughout the Department. The development and use of these committees represents a significant investment in attempting to solicit input and feedback from Department staff regarding operations and practices. It is important to continue leveraging these committees to focus on tactical concerns and to identify opportunity areas for improvement.

However, there is a need to engage all Department staff and the Bloomington community in a more inclusive, collaborative strategic planning process that builds upon the foundational and tactical efforts the Department has implemented to-date. The strategic planning process should utilize a methodology that solicits broad feedback from both community members and internal stakeholders. Soliciting input from these groups helps to ensure that the Department's strategic plan accurately addresses community needs and expectations while accounting for staff experiences. It also allows the Department to evaluate how community expectations compare to current outcomes and to chart a strategic course that focuses on effective service delivery. A variety of tools can be used to gather this feedback, including online surveys and in-person workshops and focus groups.

In addition to soliciting stakeholder input, the Department should establish a Strategic Planning Committee designed to shepherd the process, consider stakeholder feedback, and update the strategic plan. The committee should consist of representatives from throughout the Department who hold a variety of positions, including formal leadership positions, informal leadership positions, and line staff. The committee should also include representatives from other City departments who frequently interact with the Fire Department, such as the Mayor's Office and Human Resources. Utilizing a committee allows representatives of the Department at all levels and other stakeholders to participate in the process and actively develop the strategic plan.

Once the Department has evaluated its current circumstances and stakeholder expectations, it should reexamine its existing mission, vision, and values statements in light of this feedback. The Strategic Planning Committee should determine whether the existing statements adequately reflect stakeholder input and appropriately characterize the Department. Where appropriate, the Committee should update these elements and include revised versions in the strategic plan.

Most importantly, the Strategic Planning Committee should develop clear goals that define how the Department will fulfill its mission and realize its vision. For each goal, the Department should also identify specific initiatives and action items that will bring it closer to achieving its vision. These goals and initiatives will create a framework for all future change management in the organization. Once developed, the Department will be able to more effectively prioritize new initiatives and assignments based on how well they advance its strategic goals.

Strategic planning is a common practice among fire departments nationwide. The City of Carmel, Indiana's Fire Department updates its strategic plan every four years and utilizes many of the elements described above, including internal and external stakeholders, mission and values statements, and detailed goals and objectives.⁴ The City of Evanston, Illinois, issues a strategic plan every five years with similar elements.⁵

Engaging in a strategic planning process will require considerable planning and effort to secure participation from a variety of stakeholders. It is appropriate for the Department to utilize a third party to facilitate the strategic planning process to help reduce the workload associated with coordinating the planning effort, engaging stakeholders, and facilitating discussions. Third-party providers can also help communicate the value of strategic planning to staff and ensure that feedback from all sources is incorporated into the final strategic plan.

Investing time and energy into a strategic planning process will create several immediate and long-term benefits for the Department. First, the strategic planning process represents an opportunity to reevaluate the Department's present circumstances following a period of significant change. Taking time to gather input and identify an effective way forward will help reassure staff that previous and future changes all point to a common strategic vision, and increase the likelihood that staff will "buy in" to the strategic planning process. Additionally, developing a strategic plan will provide the Department with a common foundation upon which service expectations, performance, and operational practices are based. Using the strategic planning process, supervisory and line staff can collaboratively discuss the Department's role

⁴ City of Carmel, Indiana Fire Department. 2018-2022 Strategic Plan.
<http://www.carmel.in.gov/home/showdocument?id=10539>

⁵ City of Evanston, Illinois Fire Department. 2015-2020 Strategic Plan.
<https://www.cityofevanston.org/Home/ShowDocument?id=26597>

and goals, align these with community expectations, and create an organizational culture that is committed to achieving the Department's strategic priorities.

Recommendation 2: Consider accreditation as appropriate resources become available.

The Department is interested in pursuing accreditation to continue developing, documenting, and enhancing its operational capabilities and has registered with the CPSE as an agency interested in the accreditation process.⁶ Achieving accreditation is a worthwhile goal, and the Department has discussed using the accreditation process to achieve other important goals, such as drafting a formal strategic plan, creating a community risk assessment and defining standards of cover, and documenting compliance with other industry standards. However, the current focus on accreditation creates two challenges.

First, while embracing accreditation is an appropriate means to seek excellence, it is a significant undertaking that requires dedicated staff time and resources to develop, implement, and document compliance. The Department currently lacks dedicated staff capacity to attend to these functions, and there are additional staffing needs, as discussed in Recommendations 6, 7, and 10. Until the impact of the recommended changes in this report is known, it is inappropriate to add resources dedicated to the accreditation process.

Second, pursuing accreditation represents a new initiative that will likely prompt additional tasks, projects, and changes that must be carried out by the Department's staff. Without a formal strategic plan in place to prioritize and contextualize the accreditation process, staff may perceive accreditation as an additional ad-hoc assignment rather than part of a larger, comprehensive strategic goal. It is important to emphasize that while fire departments must develop strategic plans to become accredited, accreditation in and of itself is not a strategic plan. As described in Recommendation 1, recent cultural and operational changes have created a disconnect between line staff and command staff regarding change management practices and how changes inform broader strategic objectives.

In the current cultural environment, the Department's greatest priority should be to develop consensus and buy-in among staff, identify long-term goals and initiatives, and connect day-to-day assignments to the Department's vision, mission, values, and goals. This requires developing a strategic plan before pursuing new initiatives, such as accreditation, and utilizing the strategic plan to build more effective working relationships among staff. Adopting this approach will help reassure staff that additional initiatives (including accreditation) will be prioritized as part of the strategic planning process and supports the notion that broad community and staff input will be used to develop the Department's goals and initiatives. It also gives the Department more time to determine the level of staff support needed to successfully navigate the accreditation process once the time comes to pursue accreditation in earnest.

Recommendation 3: Develop an internal communications strategy among the Chief, command staff, and shift personnel.

Effective communication is essential to the success of any organization, and fire departments are no exception. While all organizations need to be intentional and consistent with communication, it is a particular challenge in the fire service due to multiple shift and station configurations. Over the last several years, the Bloomington Fire Department has employed a variety of methods designed to support and facilitate effective communication among staff outside the fireground, including face-to-face visits between the Chief and staff at fire stations, email communications, and written materials, such as

⁶ Center for Public Safety Excellence. Registered Agencies. <https://cpse.org/accreditation/registered-agencies/>

standard operating guidelines and standing orders. These approaches are currently used on an ad-hoc basis as circumstances and needs warrant.

During interviews, staff indicated that most day-to-day communication follows the chain of command. The Chief and Deputy Chief pass instructions and communications to Battalion Chiefs, who are in turn expected to relay this information to shift staff under their command. The Department also utilizes a monthly labor/management team meeting that includes the Chief, Deputy Chief, Battalion Chiefs, and representatives from the Bloomington Metropolitan Professional Firefighters Union, Local 586. According to staff, these meetings are recorded and are available for interested personnel to access.

While the Department has employed a variety of communications tools and approaches in recent years, there is a need to more clearly define when and how command staff will communicate with line staff. Additionally, it is important to ensure that communication is as consistent as possible when it does occur. These issues are best addressed by developing a formal communications strategy among the Chief, command staff, and shift personnel. The goal of an effective communications strategy is to clarify where, when, and how information will be passed among staff to maximize awareness and consistency.

To increase awareness, the Department should continue to deliver messages using a wide variety of approaches. This will require distributing communications simultaneously using several platforms, such as emails, newsletters, bulletin boards, and written memoranda. To maintain consistency, the Department should rely on written messages and distribute them simultaneously to the intended audience using the approaches described above.

The communications strategy should also consider how the urgency and sensitivity of information should impact how it is communicated. For example, the Department could utilize bulletin boards and a brief printed or emailed newsletter to convey less urgent information to staff, such as general reminders to complete paperwork or advertising elective training opportunities. More urgent or sensitive notifications could be posted to bulletin boards and formalized in a written memorandum that requires staff to sign off acknowledging they have read the materials.

It is also appropriate for the Department to more clearly define when face-to-face meetings are expected to occur at all levels of the organization. This is particularly important for building rapport and communicating sensitive or significant information. For example, the Department does not currently perform regular company meetings involving all staff on a given shift. Requiring regular company meetings increases Firefighters' ability to build relationships off the fireground and provides Battalion Chiefs with an opportunity to discuss issues with all shift personnel and "spot check" their understanding of communications. Similarly, in previous years, the Chief periodically visited stations and station Captains to build rapport and answer staff questions. While the Chief has resumed this practice in recent months, it is important to define the goal and frequency of these meetings as part of the overall communications strategy.

Finally, the communications strategy should describe the role each member of the Department plays in maintaining effective communications. It should identify when and how the Chief and command staff will relay information, as well as when and how line staff should acknowledge the communication. The strategy should also clearly articulate acceptable methods for line staff to provide feedback to senior staff, including tools such as anonymous comment boxes, regular employee surveys, participation in employee committees (like the Safety Committee discussed in Recommendation 18), regular one-on-one interviews with supervisors, and "open-door" policies with senior command staff.

Establishing a clear communications strategy is particularly important as the Department refines its strategic planning process and seeks to implement the strategic plan in future years. Because all staff have a role in achieving the Department's strategic goals, it is essential that all staff share the same communication expectations and practices.

Recommendation 4: Continue and expand data tracking practices to support strategic initiatives.

Successfully managing a strategic plan and evaluating operations requires diligent and accurate data collection practices. The Department currently collects a broad array of workload and performance indicators using FIREHOUSE Software® by ESO, a records management system designed to support fire department operations. FIREHOUSE records information about runs and calls, including the date, type, turnout and travel times, units dispatched, and district, which the Department uses to evaluate call patterns and response times. Staff also track public education, fire prevention, and inspections activities in FIREHOUSE. In early 2020, the Department began implementing TargetSolutions training software to administer computer-based training sessions and lesson plans. TargetSolutions also maintains records regarding training hours for each Department employee.

Maintaining these records is essential to evaluating the effectiveness of the Department's service delivery, and it is important for the Department to continue utilizing these software systems to track and record workload and performance data. However, implementing two adjustments to the Department's data collection practices will further enhance the usefulness of data collected and shed additional light on key aspects of the Department's workload.

First, while the Department tracks several workload indicators, it is also helpful to track the amount of staff time required to perform specific tasks. This already occurs for emergency calls, as FIREHOUSE tracks timestamps and time elapsed from dispatch to arrival on-scene. However, staff time spent performing other tasks, such as development review, inspections, pre-plan generation, and community engagement, is not currently tracked. Gathering labor hour data for these activities provides insights into how many staff may be required to perform the activity if the volume of the workload changes. This is particularly helpful for activities where staff time requirements may vary significantly based on the scope of a project, such as in development review. Knowing the amount of labor time required to perform specific tasks will also help the Department design and develop strategic initiatives that can be accomplished using existing staff.

Second, the Department currently tracks overtime usage, and the amount of overtime used and paid in recent years has increased, as discussed in Recommendation 7. However, the reason for granting overtime is not tracked on a case-by-case basis, and it is difficult to determine which factors contribute to overtime in a meaningful way. Tracking the reasons for overtime will support the Department's efforts to evaluate staffing and operational trends, achieve strategic goals, and make adjustments that effectively reduce overtime costs.

Finally, as the Department formalizes strategic initiatives, it is important to identify how progress and success will be measured for each initiative. Wherever possible, the Department should continue to leverage existing data collection practices; however, if additional data is necessary, the Department should identify specific criteria for success and track relevant indicators. Staff should also be provided with appropriate training to ensure data is gathered and analyzed as accurately as possible. During interviews, staff reported little formal training regarding the FIREHOUSE and TargetSolutions systems. To ensure accurate information is captured and to enhance the Department's performance reporting, it is essential to ensure that senior staff responsible for accessing these systems know how to collect and retrieve data.

The Battalion Chief of Training should identify and include relevant software training opportunities in the Department's annual training plan, as discussed in Recommendation 17, to better support the Department's data collection efforts.

Recommendation 5: Enhance, centralize, and regularly update existing rules, regulations, standing orders, and Standard Operating Guidelines (SOGs).

The Department maintains a Rules and Regulations manual, which was last updated in May 2018, along with a series of SOGs that were last revised in March 2019. In addition to these materials, the Department maintains a series of standing orders issued in 2017 regarding operations and equipment. These materials provide an overview of many responsibilities, expectations, and procedures regarding the Department's command structure and administrative duties.

However, the Department currently lacks comprehensive SOGs regarding operations on and off the fireground. During interviews, staff reported that training and operational practices can vary significantly among station captains and shifts. This leads to operational challenges when staff who backfill on a different shift or at a different station begin performing tasks differently than the crew normally assigned to that station. One approach to improve operational consistency involves developing a formal training program, as discussed later in this report. A second approach involves creating operational SOGs that describe how staff should perform tasks to promote consistency across all stations and shifts. These operational SOGs can also serve as a useful reference and training tool for staff.

In addition to developing operational SOGs, the Department should consolidate rules, regulations, standing orders, and SOG materials into a master resource manual. Currently, all of these materials are available in different digital and printed formats: the Rules and Regulations book is available as a single electronic PDF file, whereas standing orders and SOGs are available as discrete Microsoft Word™ documents that are compiled after printing. Collecting these materials in a single reference work will help to ensure that all staff have access to the same resource and that individual documents are not overlooked.

The Department should be commended for developing and maintaining the administrative documents discussed in this section over the last several years. Once the master resource manual is created, it will be important for the Department to continue its practice of regularly reviewing and updating this information. Fire departments commonly review these materials every two to five years, depending on their length, complexity, and available staff capacity. To ensure rules, regulations, standing orders, and SOGs remain relevant, the Department should establish a staff committee composed of representatives throughout the Department to review and update the master manual every three to five years.

Structure and Staffing

Recommendation 6: Create a Deputy Fire Chief of Administration position and retitle the current Deputy Chief position as Deputy Fire Chief of Operations.

Before FY2017, the Department utilized two Deputy Chiefs: a Deputy Chief of Administration and a Deputy Chief of Operations. In FY2017, the Department was restructured to eliminate one of the authorized Deputy Chief positions, and both administrative and operations staff were reassigned to the remaining Deputy Chief. The primary advantage of this structure is that it avoids overstaffing management positions and establishes a single chain of command through the Deputy Chief to the Chief. However, several challenges have emerged that justify reexamining the Department's senior management structure.

First, the Deputy Chief's current span of control is seven positions, including four Battalion Chiefs, the Logistics Officer, and two Fire Inspection Officers. While seven direct reports are generally manageable in other municipal functions, in the specific context of fire service, this arrangement presents unique challenges. The three Battalion Chiefs of Operations work 24 hours on/48 hours off alongside their shifts, while the remaining four Administrative staff supervised by the Deputy Chief work regular 40-hour weeks. Because the schedules worked by staff are so different, fostering effective communication requires a sustained effort to ensure Operations staff (Battalion Chiefs, Captains, Chauffeurs, and Firefighters) are continuously informed as they rotate on- and off-duty. In contrast, because the Deputy Chief sees the Administration staff each day as part of a regular 40-hour schedule, it is possible to communicate with and manage these staff more readily than the Operations staff.

Second, the current arrangement effectively places the Deputy Chief in charge of the Department's day-to-day operations. This provides the Chief with the capacity to strategically manage, evaluate, and organize the Department and also streamlines senior-level reporting relationships. However, it creates significant administrative workload for the Deputy Chief, who must supervise all core functions, including training and certifications, fire prevention and community education, fire inspections, logistics and procurement, and the day-to-day operational considerations of each shift and its Firefighters and calls for service. The breadth and depth of this workload require the Deputy Chief to attend to a wide variety of organizational concerns and prevents focused oversight of critical functions.

Finally, the current structure potentially creates challenges regarding succession planning and preserving the Department's institutional knowledge. Currently, the only senior management positions with broad responsibility for the Department are the Chief and Deputy Chief. This places the Department at greater risk of losing critical management expertise should either or both of these positions become vacant.

To address these challenges, the Department should create an additional Deputy Chief position and reinstitute the command structure utilized before FY2017. Specifically, the Chief should supervise two Deputy Chief positions: a Deputy Chief of Administration (DCA) and a Deputy Chief of Operations (DCO). Both Deputy Chiefs should share responsibility for Department-wide initiatives, such as the development of strategic goals, budget preparation, and backfilling for the Chief in the event of leave or absence. Other day-to-day supervisory duties of each Chief should be adjusted to provide greater management oversight and leadership capacity as described below.

The DCA should be responsible for supervising most non-shift personnel, including the Battalion Chief of Training, the Logistics Officer, the Fire Inspections Officers, and the Fire Prevention Officer. To provide enhanced leadership and accountability for the organization, the DCA should play a central role in developing appropriate policies and goals for administrative tasks and ensuring that work is carried out as efficiently and effectively as possible. For example, the DCA should engage with staff to proactively manage the Department's training calendar, identify key buildings that should be visited for pre-plan development, and prioritize fire compliance inspections for structures within the City. The goal of this oversight is not to micromanage employees or their work but rather to create sufficient leadership capacity to help the Department set and meet appropriate service targets.

Similarly, the DCO should be responsible for coordinating the Department's field staff, including Battalion Chiefs of Operations and shift Captains, Chauffeurs, and Firefighters. The DCO should proactively meet and communicate with shift staff to keep them apprised of important news and operational developments; ensure that staff have access to functional vehicles, apparatus, and equipment; and help coordinate operations that cross departmental and organizational boundaries.

The estimated cost of creating an additional Deputy Chief position is approximately \$94,869 in the first year, including a maximum salary of \$76,799, based on the City’s latest salary ordinance, plus employer taxes, Public Employee Retirement Fund (PERF) contributions, and \$14,000 for health insurance and other benefits. While creating this position will require some investment, it will provide the Department with greater leadership capacity, enable more thorough oversight of day-to-day operations across Department functions, and create institutional resiliency in the event senior leadership positions turn over.

Recommendation 7: Fill the existing shift vacancies.

According to the Department’s SOGs, minimum staffing for each shift consists of 27 personnel.⁷ If the number of available staff on the shift falls below this level, Battalion Chiefs will utilize a call list to assign unscheduled duty time to ensure minimum staffing is met. To determine whether the Department’s current authorized staffing levels are sufficient to achieve its minimum staffing target, it is necessary to perform a staffing factor analysis.

Shift Firefighters are currently scheduled 24 hours on-duty, followed by 48 hours off-duty. This is equivalent to approximately 2,920 scheduled hours per year per Firefighter. However, because staff take leave throughout the year, the average amount of leave usage must also be calculated to determine the number of hours staff actually serve on-duty, on average. According to data provided by the City, over the last three years, Firefighters have used an average of 318 hours per year on leave (including sick, vacation, bereavement, and other leave).

In addition to this leave, the collective bargaining agreement provides members with eight Kelly days per year. A Kelly day is a “work reduction day” provided to bring the hours worked by an employee below the threshold at which overtime is required per the Fair Labor Standards Act (FLSA). Eight Kelly days are equivalent to 192 additional leave hours. Adding these hours to 318 annual leave hours results in an average of 510 hours of unavailable time per year per Firefighter.

This means that although shift staff are scheduled for 2,920 hours per year, they are actually available to work 2,410 hours on average. Dividing the annual hours to be covered (2,920) by the number of available hours per Firefighter (2,410) yields a staffing factor of 1.21. In other words, for every Firefighter position included in the minimum staffing target, 1.21 personnel must be hired to ensure coverage after leave is taken into account. The following table illustrates this staffing factor calculation.

Table 5: Staffing Factor Calculation

Staffing Factor Calculation	Annual Hours
Annual Scheduled Hours	2,920
Less Average Leave	(318)
Less Kelly Days	(192)
Annual Available Hours	2,410
Staffing Factor	1.21

The next step is to apply this staffing factor calculation to the Department’s minimum staffing standard. Multiplying 27 personnel per shift by 1.21 results in 33 total personnel required per shift after accounting for leave usage. The Department’s authorized staffing is currently 34 personnel per shift, including one

⁷ Bloomington Fire Department. Standard Operating Guideline 107.01 - Staffing Policy. March 4, 2019.

Battalion Chief, six Captains, six Chauffeurs, and 21 Firefighters. According to this analysis, the Department's current authorized staffing is appropriate.

However, existing vacancies prevent the Department from fielding enough staff to ensure minimum coverage. According to data provided by the City, the Department carries seven vacant positions involving shift staff, as illustrated in the table below.

Table 6: Vacancies by Position, 2017-2019

Position	2017	2018	2019	2020
Sergeant/Chauffeur	1	1	0	1
Firefighter 1st Class	5	9	4	6
Logistics/Training Officer	0	0	1	0
Total	6	10	5	7

According to the Department, much of the current vacancy rate is attributable to the onboarding time required to train and orient new Firefighters, rather than an overall lack of available recruits. However, because training new personnel takes significant time, the Department's ability to achieve minimum staffing is reduced even if it can hire new staff quickly. This contributes to increased reliance on current staff to ensure minimum shift coverage, which in turn results in more overtime usage. The following figure illustrates overtime usage and costs over the last three years among the Department's shift staff.

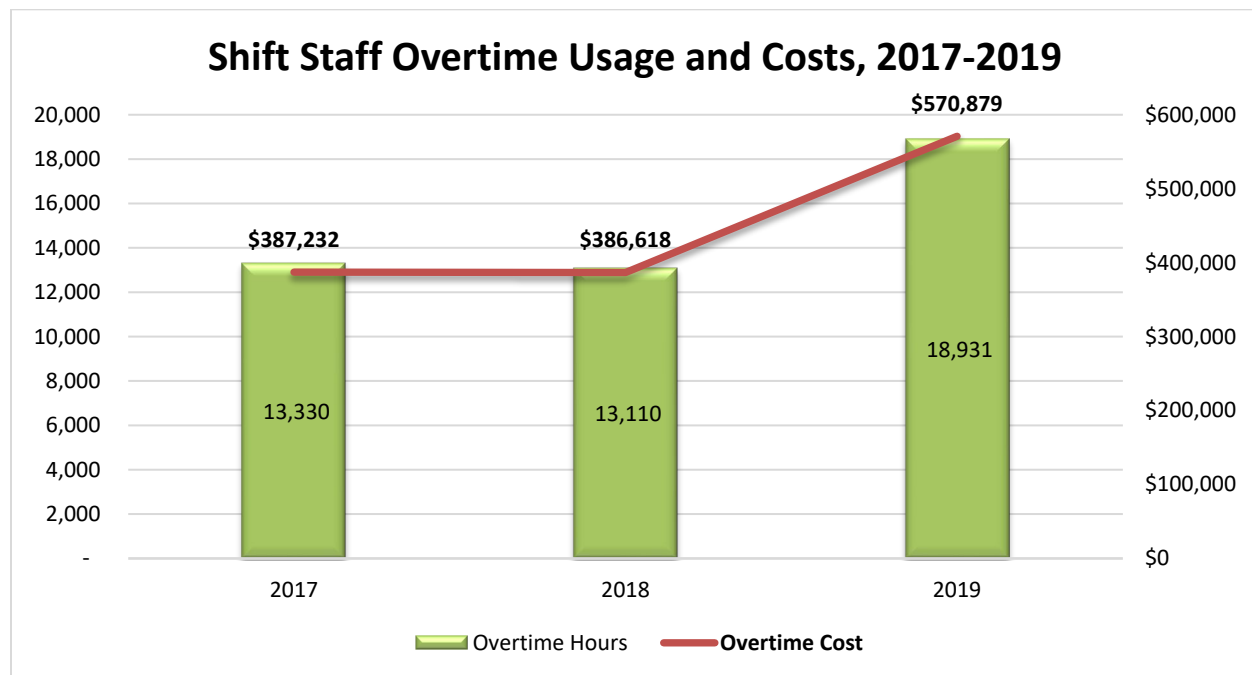


Figure 3: Shift Staff Overtime Usage and Costs, 2017-2019

It is important to emphasize that the vacancy information provided in the table above represents a snapshot in time. In contrast, total overtime hours and costs reflect an entire year's worth of data. Both vacancies and overtime are trending upward, and the Department relies on overtime to achieve minimum staffing due to vacancies. However, the extent to which increased overtime in 2019 is attributable to

vacancies is unclear. The Department does not track detailed reasons for overtime usage; capturing this information will provide more detailed insights into overtime trends, as discussed in Recommendation 4.

An analysis of staff tenure also indicates that elevated vacancy rates and overtime usage are likely to persist in future years. According to the Indiana Public Retirement System (INPRS) 1977 Police Officers' and Firefighters' Retirement Fund Handbook, Firefighters are eligible to retire after 20 years of service if they are at least age 50 and have ended their employment.⁸ While age data for the Department's employees was not readily available, nearly 30% of the Department's shift staff currently exceed or are approaching 20 years of service, as illustrated in the following table.

Table 7: Retirement Eligibility by Shift Position, 2020

Position	2020 Authorized Staffing	Personnel with 20+ Years of Service	Percentage Likely Retirement Eligible
Captain	18	11	61%
Chauffeur	22	8	36%
Firefighter 1st Class	59	10	17%
Total	99	29	29%

Given the future impact of likely retirements on the Department's staffing levels and the ripple effects this will create regarding increased vacancies and reliance on overtime, it is essential for the Department to fill existing vacancies as rapidly as possible. The actual work of firefighting and emergency response cannot occur unless personnel are hired by the Department and are fully trained. The Department should continue to hold academies at least annually, and the Department should begin developing a recruitment and retention plan to attract Firefighters to the City, as discussed in the following recommendation.

Recommendation 8: Create a recruitment and retention plan.

One of the most important tools the Department can leverage to fill existing vacancies and build a workforce that reflects the community it serves involves creating a recruitment and retention plan. At a minimum, the recruitment and retention plan should identify strategies for developing insights into why staff leave the Department, as well as strategies to encourage a diverse group of qualified applicants to view the Department as a good place to build a career. This effort should be led by the Deputy Chief of Administration with input from the Fire Chief, Battalion Chief of Training, and Community Engagement Officer.

To build an effective recruitment and retention plan, the Department must more fully understand factors that create vacancies, as discussed in Recommendation 7. An effective way of accomplishing this is to initiate exit interviews with staff upon departure. These interviews should be conducted by staff who are seen as neutral observers and whom the employee trusts, such as a senior officer outside the employee's usual chain of command or a staff member from the Human Resources Department. It is appropriate to utilize a pool of interviewers who are well-regarded in the Department to conduct the interviews on an as-needed basis, rather than assigning all interviews to just one staff member. Feedback from the exit interview process should be analyzed to determine the principal factors contributing to turnover and separations. The risk management plan should identify specific strategies to address and mitigate the principal causes of separation discussed during exit interviews.

⁸ Indiana Public Retirement System (INPRS). 1977 Police Officers' and Firefighters' Retirement Fund Handbook. Page 19. <http://online.flipbuilder.com/kaxi/zqxw/mobile/index.html#p=19>

Next, the risk management plan should describe how the Department's recruitment and hiring process can best support finding and selecting diverse and talented Firefighters to serve in the organization. During this assessment, The Novak Consulting Group reviewed the Department's hiring list memorandum, interview questions, and candidate preference questionnaire. Although these materials are appropriate, the Department may consider changing some questions and preference criteria to avoid inadvertently excluding underrepresented groups.

For example, Indiana Code Title 36, Article 8, Chapter 4, Section 10 specifies required and optional preferential considerations for fire and police employment. Mandatory preference must be given for honorably-discharged veterans and applicants whose mother or father were Firefighters or Police who died in the line of duty. Preference may also be given to Police Officers and Firefighters who have been laid off from their previous employer.⁹ While these preferences have been designed to avoid overruling other qualified and diverse candidates, the Department may consider reducing or eliminating optional preferences for applicants with public safety experience. Utilizing only the mandatory preference criteria defined in state law will help maximize the Department's ability to recruit a diverse workforce. The Department should also ensure that its diversity recruitment efforts align with broader City-wide recruitment strategies to the greatest extent possible.

Finally, the risk management plan should include a detailed marketing and outreach component. The Deputy Chief of Administration should coordinate closely with the Community Engagement Officer to develop near-, medium-, and long-term strategies for cultivating interest in fire service and the Bloomington Fire Department specifically. These strategies could include but are not limited to social media outreach, emphasizing the benefits of a fire career at public events and school visits, and attendance at job fairs and other recruitment events. Identifying these opportunities and committing to an outreach strategy will help the Department grow a pipeline of applicants who meet its standards and enjoy serving in the organization.

Recommendation 9: Retitle the Fire Prevention Officer as a Community Engagement Officer reporting to the Deputy Chief.

The Fire Prevention Officer currently reports to the Battalion Chief of Training and provides community engagement and outreach services. One of the Officer's goals is to conduct a fire education exercise at a preschool, elementary school, high school, or senior center within the City once each month. In addition to regular interaction with schools, the Fire Prevention Officer attends community meetings and events, offers specialized public education classes in CPR and general first aid, assists with the Citizen Fire Academy, conducts station tours, and manages the Department's social media accounts.

Creating a Deputy Chief of Administration, as described in Recommendation 6, will provide additional management capacity to more fully develop the Department's approach to community engagement, fire prevention, and internal training. Specifically, there is an opportunity to reassign the supervision of the Fire Prevention Officer from the Battalion Chief of Training to the Deputy Chief of Administration and to retitle the Fire Prevention Officer as a Community Engagement Officer.

This restructuring is warranted for two reasons. First, the functions and duties currently assigned to the Fire Prevention Officer are closely aligned with community outreach and education. While these efforts constitute "training" in a broad sense, they are externally-focused community engagement efforts, which

⁹ Indiana Code. Title 36, Article 8, Chapter 4, Section 10. Public safety officers; preference for employment.
https://www.lawserver.com/law/state/indiana/in-code/indiana_code_36-8-4-10

differ from the internally-focused, professional development training currently coordinated by the Battalion Chief of Training.

Second, retitling the Fire Prevention Officer to Community Engagement Officer more accurately reflects the duties assigned to this position and creates a clear point of contact for the Department's community outreach efforts. Because the Deputy Chief of Administration will supervise and manage the Department's community outreach activities, it is important for the Community Engagement Officer to report directly to the Deputy Chief.

Recommendation 10: Create a part-time Administrative Assistant position.

The Department's administrative staffing currently consists of a single full-time Secretary position that is responsible for general customer service support and clerical tasks, including correspondence preparation and filing. In addition to these tasks, the Secretary plays a critical role in higher-level administrative functions for the Department, such as payroll and procurement.

To record payroll, the Secretary tracks attendance and leave usage among the Department's staff and creates timesheets for each shift on a biweekly basis. This requires the Secretary to review the Department's shift schedule, track shift trades among staff, and reconcile actual time worked with time entered on timesheets. Once completed, the Secretary forwards timesheets to Battalion Chiefs of Operations and the Fire Chief for review and approval and then submits approved timesheets to the City payroll office. This process is performed on a biweekly basis, along with the City's pay cycle.

The procurement process also requires significant input from the Secretary. Currently, Station Captains are responsible for initiating procurements and work orders with vendors, obtaining appropriate receipts and documentation, and entering this information into the City's New World™ financial system. Once entered, the Secretary reviews the procurement and supporting documentation for accuracy and completeness and approves the materials in New World. The Secretary then enters procurement information into a separate Microsoft Excel™ database designed to track Fire expenses in real-time.

In addition to these processes, the Secretary assists the Battalion Chief of Training with tracking staff certifications and notifying staff when relevant licenses are expiring, runs fire prevention and other performance reports, processes personnel action forms, tracks sick leave usage among staff, maintains the Department's vehicle inventory, and scans documents for backup on a shared City network drive.

Under the current structure, there is no designated backup or support position to backfill the Secretary's duties. The Secretary will reportedly complete payroll even while on vacation, and there is no clear alternative staff person who can assume responsibility for this and other key tasks. This means the Department could lose important institutional knowledge about administrative functions if the Secretary separates from the organization or takes extended leave. To ensure the Department can continue to process administrative workload and build organizational resiliency, it is appropriate to create an additional part-time Administrative Assistant position to support the Secretary and the Department's administrative functions.

The Administrative Assistant should report to the Secretary and should be tasked with learning how to accomplish critical administrative processes, such as payroll and procurement. Additionally, the Administrative Assistant should support the Secretary's ongoing efforts to digitize documentation, track performance indicators, generate reports, and reconcile accounts regularly. By creating a new position to

help support these functions, the Department will help ensure administrative tasks are accomplished effectively even when staff take leave or separate from the organization.

Facilities and Fleet

Recommendation 11: Conduct a station location assessment and prioritize station replacement as part of the City's capital improvement plan.

In 2019, the Department engaged MartinRiley Architects + Engineers to conduct an assessment of the Department's five existing fire stations, including each station's functionality and current condition. During this study, MartinRiley examined the architectural and structural elements of each fire station in detail, along with station layouts and compliance with Americans with Disabilities Act (ADA) standards. According to MartinRiley, each of the Department's fire stations is deficient in square footage by 15%-25%, and three of the Department's stations are recommended for replacement (Stations 3, 4, and 5).¹⁰

The decision to revitalize and replace fire stations is a significant undertaking that should be pursued as part of the City's capital planning process. However, as part of the station replacement process, it is essential to consider not only the station's physical layout but also its location within the City. This is because station layout and location have a direct impact on the Department's service delivery, particularly concerning response times.

Station layout can affect how quickly Firefighters respond once a call is dispatched. The time from notification to departure, known as "turnout time," can be lengthened if the station's configuration prevents staff from accessing apparatus bays easily and quickly. The MartinRiley report notes that "[b]y locating the living, sleeping, and admin areas on the same side of the Apparatus Bay, stations can experience increased productivity and not struggle to know where personnel are in the facility."¹¹ However, most of the Department's current stations separate living quarters and bunk rooms across the apparatus bay.

Station location directly impacts the Department's ability to quickly arrive on-scene. The time from departure to arrival on-scene, known as "travel time," can be complicated by several factors, including traffic patterns and time of day, street width and construction, geographic constraints, such as rail lines and rivers, and distance. The MartinRiley study examined only the suitability of the Department's station structures; it did not include a corresponding analysis of station location and the impact of location on response times. It is important to note that fire station location studies involve highly specialized analysis that evaluates and predicts travel times based on traffic, geography, and other variables. These studies often utilize geographic information systems (GIS) to calculate average travel times to calls from current and potential fire station sites.

While conducting a fire station location study is not within the scope of this report, The Novak Consulting Group performed an analysis of turnout, travel, and overall response times based on call data provided by the Department. The Department's current goal is to arrive on-scene within four minutes of notification for 90% of emergency calls, and within eight minutes for 98% of emergency calls. Another common resource used to identify appropriate response time goals is the National Fire Protection Agency Standard 1710, which specifies performance objectives for career fire departments. According to NFPA 1710, turnout time standards are 60 seconds for EMS calls and 80 seconds for Fire calls. Travel time standards

¹⁰ MartinRiley. Bloomington Fire Department Building Assessments. August 1, 2019. Pages 7-9.

¹¹ Ibid. Page 6.

are 240 seconds (four minutes) for EMS and Fire calls.¹² In effect, NFPA 1710 establishes a minimum response time goal of five minutes for the initial responding engine company to 90% of dispatched incidents, compared to the Department’s goal of four minutes. NFPA also recommends additional response time goals for the full effective firefighting force.

According to call data provided by the Department for 2019, the average total response time for Fire-related calls is 4:28, and the Department responds to 90% of all Fire calls within seven to eight minutes. The following table illustrates the turnout, travel, and total response times for Fire-related calls in 2019, along with the cumulative percentage of calls in each timeframe. Cells highlighted in yellow represent the 90% fractile – the timeframe that accounts for at least 90% of calls.

Table 8: 90% Fractile Response Times for Fire Calls, 2019

Time Interval Minutes	Turnout		Travel		Total Response Time	
	Runs	Cumulative Percentage	Runs	Cumulative Percentage	Runs	Cumulative Percentage
< 1:00	25	10%	12	5%	1	0%
1:00 to 1:59	175	82%	47	24%	2	1%
2:00 to 2:59	36	96%	63	50%	23	11%
3:00 to 3:59	7	99%	52	71%	64	37%
4:00 to 4:59	2	100%	35	85%	58	60%
5:00 to 5:59	0	100%	21	94%	37	76%
6:00 to 6:59	0	100%	5	96%	31	88%
7:00 to 7:59	0	100%	5	98%	12	93%
8:00 to 8:59	0	100%	1	98%	10	97%
9:00 to 9:59	0	100%	2	99%	3	98%
10:00 to 10:59	0	100%	0	99%	1	99%
11:00 to 11:59	0	100%	0	99%	1	99%
12:00 to 12:59	0	100%	0	99%	0	99%
13:00 to 13:59	0	100%	1	100%	0	99%
14:00 to 14:59	0	100%	1	100%	0	99%
15:00 to 15:59	0	100%	0	100%	1	100%
Total	245	100%	245	100%	244	100%

Based on the analysis above, 90% of Fire calls have a turnout time of up to three minutes. Travel time for 90% of Fire calls takes up to six minutes, and total response time (turnout plus travel time) for 90% of calls takes up to eight minutes.

The 90% fractile response times for EMS calls are essentially the same, as illustrated in the following table.

¹² https://www.iaff.org/wp-content/uploads/Departments/Fire_EMS_Department/30541_Summary_Sheet_NFPA_1710_standard.pdf

Table 9: 90% Fractile Response Times for EMS Calls, 2019

Time Interval Minutes	Turnout		Travel		Total Response Time	
	Runs	Cumulative Percentage	Runs	Cumulative Percentage	Runs	Cumulative Percentage
< 1:00	255	13%	110	6%	17	1%
1:00 to 1:59	1,423	86%	403	26%	30	2%
2:00 to 2:59	245	98%	547	54%	215	13%
3:00 to 3:59	21	99%	387	74%	532	41%
4:00 to 4:59	7	100%	222	85%	471	65%
5:00 to 5:59	4	100%	129	92%	296	80%
6:00 to 6:59	1	100%	69	95%	159	88%
7:00 to 7:59	1	100%	46	98%	103	93%
8:00 to 8:59	2	100%	13	98%	65	96%
9:00 to 9:59	0	100%	6	99%	30	98%
10:00 to 10:59	0	100%	5	99%	13	99%
11:00 to 11:59	0	100%	2	99%	2	99%
12:00 to 12:59	0	100%	4	99%	3	99%
13:00 to 13:59	0	100%	3	99%	6	99%
14:00 to 14:59	0	100%	2	99%	1	99%
15:00 to 15:59	0	100%	2	99%	3	99%
16:00 to 16:59	0	100%	2	100%	2	99%
17:00 to 17:59	0	100%	1	100%	3	100%
Total	1,959	100%	1,953	100%	1,951	100%

Based on this fractile analysis, the Department's actual response times for first responding units are slightly longer than its internal goals as well as NFPA standards. The length of response times is impacted by several factors, including the layouts and physical constraints of existing stations and where they are located. While there may be opportunities to improve turnout time by reconfiguring stations, a major factor behind lengthy responses involves travel time from stations to incidents.

To reduce response times and address its facility needs, the Department should conduct a station location assessment and prioritize station replacement as part of its annual capital improvement plan. In 2017, the Department collaborated with Indiana University Bloomington to conduct a detailed station location assessment regarding Station 3. Because Stations 4 and 5 were also identified as candidates for replacement per the MartinRiley study, the Department should engage IU or another third-party consultant with specialized expertise in station location studies to develop a detailed plan for relocating existing stations and reducing response times.

Once the station location assessment is completed, the City should prioritize fire station replacements in its capital improvement plan based on space needs as well as potential response time improvements that may be realized through relocation. In addition to enhancing service delivery, investing in new stations ensures apparatus bays and living spaces can accommodate vehicles and crews effectively and creates additional opportunities to expand gear storage and equipment access for staff. These benefits will help the Department achieve additional efficiencies in future years. For example, by expanding the ability for

each station to store and clean contaminated turnout gear, the Logistics Officer's workload related to cleaning and transporting gear will be reduced.

Recommendation 12: Develop a clear communications practice regarding the status of vehicle and apparatus repairs.

At the beginning of each shift, Firefighters perform maintenance checks on vehicles and apparatus at their stations. Staff record the results of each inspection using an iPad application that generates a report for the Logistics Officer. If staff mark maintenance items as "critical," such as faulty brake lines or non-functional seatbelts, the Logistics Officer will validate the issue in consultation with the Battalion Chief on duty and the Deputy Chief. Once validated, the Logistics Officer will then coordinate repairs with the City's Public Works Department or a third-party contractor as appropriate.

During interviews, staff described two key challenges with this process. First, while the Department's vehicle inspection form describes differences between critical and non-critical repairs, staff reported that this guidance is applied inconsistently, and there is disagreement among Department personnel about what constitutes a "critical" maintenance item. Because the criticality of some repairs may be subjective and dependent upon external factors, such as prevailing weather conditions, it is important for the Department to offer guidance to drivers about when repair needs may render a vehicle unsafe to operate. The Department should leverage existing resources such as the Apparatus Committee, along with driver meetings, to clarify how the criticality of maintenance items should be determined and to evaluate whether the existing inspection form should be updated.

Second, while line staff have access to vehicle and apparatus inspection histories using the inspection application, there is currently no feedback loop to indicate when repairs are completed. The Department's inspection app is reportedly incapable of providing repair status updates, and staff have employed a variety of tools to enhance communication, including driver briefings during shift relief and maintaining independent logs about maintenance requests and service dates. Instead of these approaches, the Department should create a process for keeping shift staff informed about the status of requested vehicle repairs, including notification that critical repairs have been forwarded to Public Works or a third-party contractor, an estimated timeframe for repair, and the date the repair was completed.

This information should be maintained in vehicle logs available to drivers at each station. Utilizing maintenance logs to track the status of repairs will help to avoid duplicate reporting and provide current information on each vehicle's fitness for service.

Recommendation 13: Develop a capital asset reserve policy.

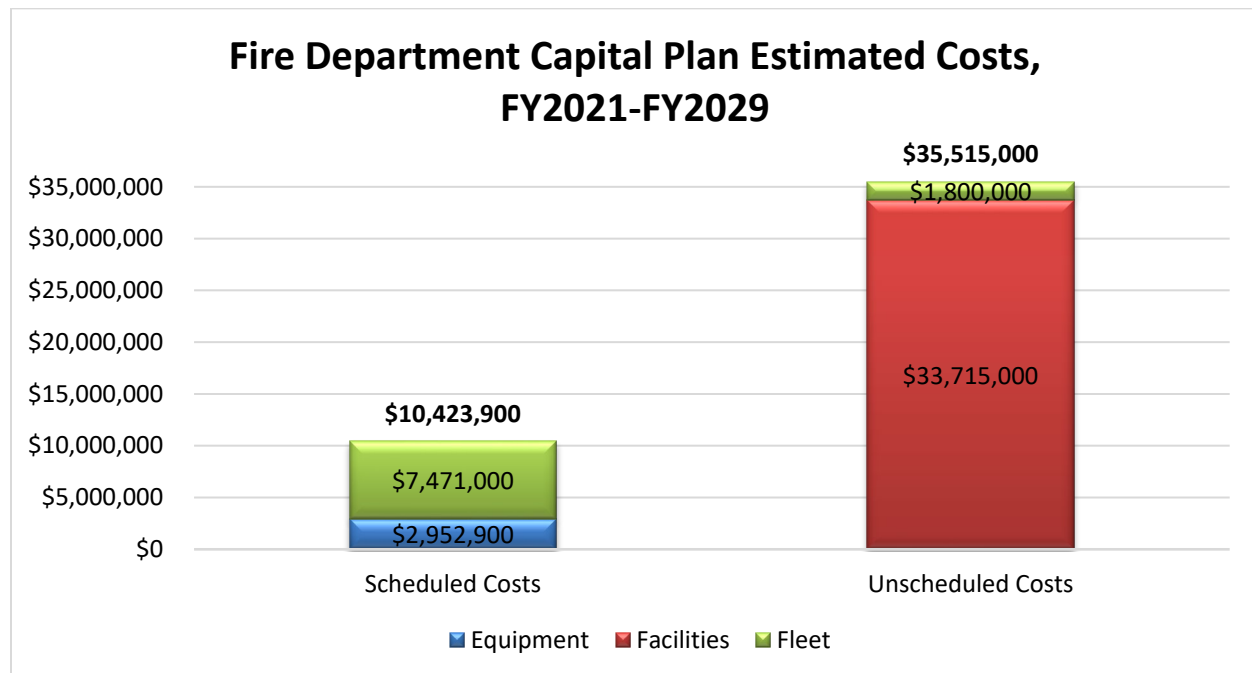
In 2016, a Public Safety Local Income Tax (PS-LIT) was levied to create dedicated revenue for public safety providers, including but not limited to the City/County Central Dispatch center as well as the City's Police and Fire Departments. The specific amount of revenue available to the City's Fire Department varies each year according to the local economy, applications for funding from authorized public safety providers, allocation decisions made by the PS-LIT Committee, and the needs of Central Dispatch and the City's Police Department.

Over the last several years, access to PS-LIT funds has enabled the Department to make significant investments in its fleet. The following table illustrates the number of vehicles and apparatus acquired and ordered by the Department from FY2017 through FY2020.

Table 10: Fleet Improvements, 2017-2020

Vehicle/Apparatus Type	FY2017	FY2018	FY2019	FY2020	Grand Total
Ladder Truck	0	0	1	1	2
Pickup Truck	0	2	2	0	4
Pumper	1	0	1	1	3
Sedan	0	0	0	1	1
SUV	3	0	0	1	4
Grand Total	4	2	4	4	14

In addition to these historical investments, the Department has developed a long-range capital plan, which includes \$10.4 million for scheduled capital expenses, such as regular vehicle replacement in specific years, as well as \$35.5 million for other identified needs, such as facility renovation and relocation. Approximately 72% of scheduled replacement pertains to fleet vehicles and apparatus, while 95% of unscheduled costs reflect facility needs. The following figure illustrates total estimated costs associated with the Department's current capital plan through FY2029 by asset type.

**Figure 4: Fire Department Capital Plan Estimated Costs, FY2021-FY2029**

Notably, the Department does not currently include annualized fleet replacement costs for existing vehicles and apparatus in its capital plan. Rather, the capital plan includes only the estimated costs for new fleet assets as they are eligible for replacement. Although the PS-LIT represents a relatively stable source of funding that has enabled the Department to purchase new fleet assets outright, it is prudent to also set aside some capital funds for future fleet replacements to protect against economic downturns or other potential revenue constraints. This is particularly important in the fire service, where expenses for new apparatus often exceed \$1 million.

To help provide consistent funding for fleet replacements in future years, the Department should engage Controller’s Office staff to develop a capital asset reserve policy. According to the Government Finance Officers Association (GFOA), this policy should define how capital reserve funds should be used and should describe an appropriate funding allocation, such as annually setting aside amounts based on depreciation or contributing a flat dollar amount.¹³ In the context of the Fire Department, the policy should also describe which assets fall under the scope of the policy. For example, the Department may choose to set aside replacement funding only for large apparatus, such as ladder trucks, while continuing to fund less expensive vehicles on a cash basis.

Proactively setting aside funding for replacement fleet assets, even when revenue streams are stable, will help ensure the Department can reliably meet its replacement goals and customer service expectations in the future. Although it will be difficult to set aside these funds given the extent of the Department’s capital needs, establishing this practice now will help ensure capital revenue is consistently available to address fleet replacement needs.

Fire Prevention and Inspections

Recommendation 14: Create a false alarm/unwanted alarm reduction program.

Overall service call volume increased by 12% from 2017 to 2019, driven primarily by increases in EMS and false alarm calls. The following table illustrates the number of distinct calls by type over the last three years.

Table 11: Distinct Calls by Type, 2017 to 2019

Call Type	2017	2018	2019	Total Change 2017 to 2019	Percentage Change 2017 to 2019
EMS	1,653	1,710	1,960	307	19%
False Alarm and False Call	1,040	1,148	1,163	123	12%
Good Intent Call	272	233	339	67	25%
Special Incident Type	4	12	10	6	150%
Overpressure/Explosion (No Fire)	12	15	12	0	0%
Uncategorized	12	3	12	0	0%
Severe Weather and Natural Disaster	3	3	1	-2	-67%
Service Call	116	110	109	-7	-6%
Hazardous Condition (No Fire)	225	176	216	-9	-4%
Fire	302	242	247	-55	-18%
Total	3,639	3,652	4,069	430	12%

According to this data, false alarm calls comprise a significant portion of the Department’s overall emergency response. On average, nearly 30% of the Department’s total call volume involves false alarm calls. Excluding EMS calls (which are a frequent service request for any fire department offering EMS services), false alarms represent 56% of the Department’s remaining call volume on average. Nearly 43% of these false alarm calls are attributable to IU properties, according to the Department’s data. This is significantly higher than the national average for false alarm calls; according to the latest available “Fire

¹³ Government Finance Officers Association (GFOA). Strategies for Establishing Capital Asset Renewal and Replacement Reserve Policies. <https://www.gfoa.org/strategies-establishing-capital-asset-renewal-and-replacement-reserve-policies>

Loss in the United States” publication by the NFPA, false alarm calls represent 8% of overall calls nationally and 12% of calls among communities between 50,000 and 99,999 residents.¹⁴

This level of false alarm activity creates several challenges for the Department. False alarms result in the deployment of expensive equipment and staff, tying up limited emergency response personnel when a genuine emergency could occur elsewhere. In addition, repeated false alarms undermine the confidence of occupants in the reliability of their alarm system and potentially reduce their response to the alarm.

To proactively address the prevalence of unwanted alarms in the community, the Department should create a comprehensive false alarm reduction program. This program should be modeled on NFPA best practices associated with reducing unwanted alarms. An NFPA report titled “Development of a Risk-Based Decision Support Tool to Assist Fire Departments in Managing Unwanted Alarms”¹⁵ describes several strategies for reducing false alarms and case studies of other communities. These strategies generally include penalties for repeated false alarms, changes to emergency response protocols for false alarms, and registration requirements to educate alarm users about preventing false alarms.

Chapter 14.40 of the Bloomington City Code addresses false alarms for public safety, including police and fire services. According to the code, a \$50 fine may be levied for the fourth false alarm in the same location in a calendar year, which increases to \$100 for the fifth violation and each additional violation in the same calendar year.¹⁶ Based on the Department’s call data, an average of 66 addresses generate four or more false fire alarms each year, as illustrated in the following figure.

¹⁴ NFPA. “FIRE LOSS IN THE UNITED STATES DURING 2018.” October 2019. Page 12. <https://www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/US-Fire-Problem/osFireLoss.pdf>

¹⁵ NFPA. “Development of a Risk-Based Decision Support Tool to Assist Fire Departments in Managing Unwanted Alarms.” <https://nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/Detection-and-signaling/RFUNwantedAlarmsLitReview.ashx>

¹⁶ City of Bloomington, Indiana. Municipal Code. Chapter 14. https://library.municode.com/in/bloomington/codes/code_of_ordinances?nodet=TIT14PESA_CH14.40FAEMAL_14.40.060V1

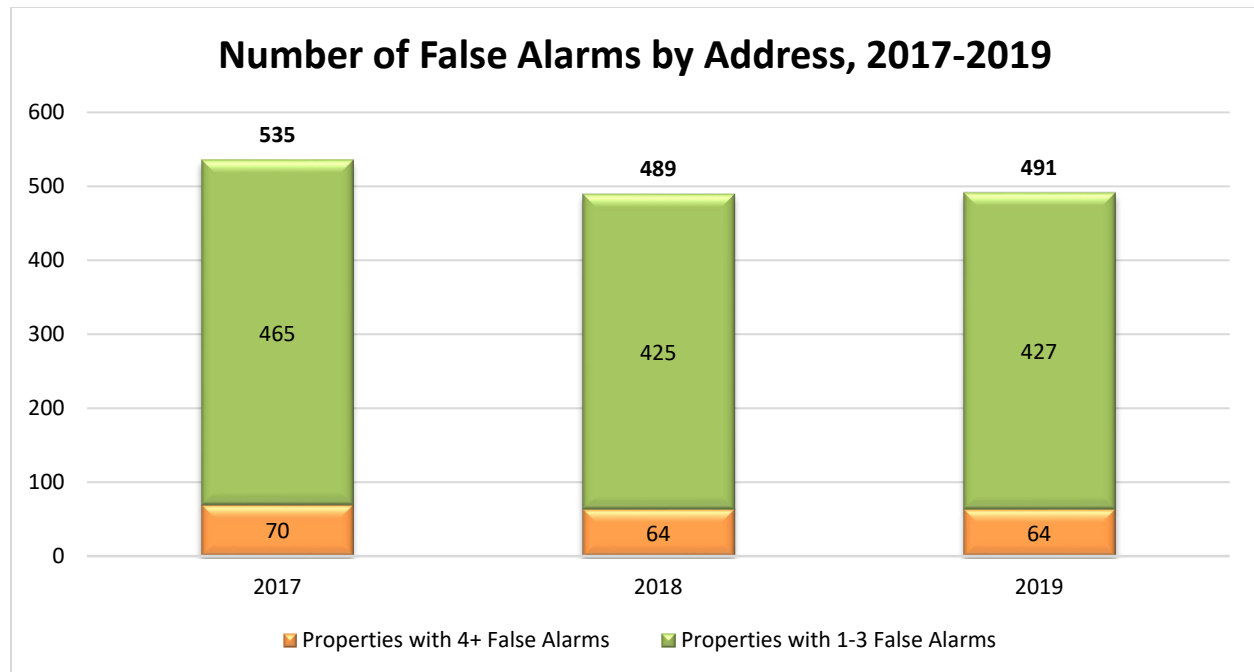


Figure 5: False Alarms by Address, 2017-2019

Of the addresses that generate frequent false alarm calls, approximately 13 have generated at least 10 calls on average over the last three years. As a practice, the Department does not enforce false alarm fees for repeat violators. It is important to begin enforcing false alarm fees, particularly for repeat violators, to increase awareness about the severity of false alarm calls and deter future occurrences. The primary goal of assessing false alarm fees is not necessarily punitive. Instead, the point is to encourage improved maintenance of alarm systems, reduce unnecessary response from Firefighters, and ensure that response capacity is available for true emergencies. A secondary goal of false alarm fee assessment is the recovery of costs associated with repeatedly deploying resources to the same site unnecessarily. While the Department is currently authorized to levy a fee of \$100 for the fifth infraction and each subsequent infraction, the sheer volume of false alarms at some addresses justifies a fee that more accurately reflects the Department’s costs to mobilize and deploy emergency response staff. Although establishing fees is ultimately a policy decision to be undertaken by the City’s governing body, the City should strongly consider assessing fully-burdened mobilization fees for addresses that generate significant false alarms.

A second common approach is to modify the Department’s response to commercial fire alarms when no additional information is provided that indicates an actual emergency is taking place. For example, the Department may send only one non-emergency response unit to investigate the alarm before calling for emergency crews. While this approach would increase response times in the event of an actual emergency, it will save time and mobilization costs each time an alarm turns out to be false or unwanted.

A third element the Department should incorporate into its false alarm prevention program includes an alarm system and installer registration ordinance. By requiring alarm users and installers to register installations with the City, the Department will obtain a more comprehensive understanding of where alarms are installed and engage alarm users to educate them about avoiding false alarms. The Department should stress that the impact of a false alarm is not just negative for the Fire Department but also for the occupant who suffers lost time and opportunity for revenue generation. Other Indiana communities with

prominent undergraduate institutions, such as the Cities of Terre Haute (Indiana State University)¹⁷ and Evansville (University of Southern Indiana),¹⁸ require alarm systems to be registered and permitted to prevent false alarm occurrences. Alarm permits are also utilized by other Indiana communities, such as the Cities of Fishers and Noblesville.^{19, 20}

Implementing these elements as part of a comprehensive false alarm program will enable the Department to more proactively address and prevent false alarm occurrences, saving time and expenses, and increasing availability for true emergencies.

Recommendation 15: Clarify service level standards for fire inspections.

Title 18 of the City Code concerns fire prevention, including the adoption of a fire code establishing construction standards for development projects and authorizing the Department to inspect “all structures and premises except the interiors of private single-family dwellings, and dwelling units in two-family and multifamily dwellings for the purpose of ascertaining and causing to be corrected any violation of the provisions or intent of this code affecting fire safety.”²¹

This code is currently administered by two Fire Inspection Officers who review development plans and permits, inspect properties and structures, and engage in consultations with businesses and residents. The following figure illustrates the number activities performed by Fire Inspection Officers from 2017 through 2019.

¹⁷ City of Terre Haute. Alarm Permit Application. <https://www.terrehaute.in.gov/departments/city-controller/permit-and-licensing-applications/Alarm%20Permit%20Application.pdf/view>

¹⁸ City of Evansville. Alarm Permits. <http://www.evansvillepolice.com/permits/alarm-permits>

¹⁹ City of Fishers. Alarm Systems. <https://www.fishers.in.us/478/Alarm-Systems>

²⁰ City of Noblesville. Alarm Ordinance and Application. <https://www.cityofnoblesville.org/topic/subtopic.php?topicid=225&structureid=14>

²¹ City of Bloomington Municipal Code. Section 18.04.060. https://library.municode.com/in/bloomington/codes/code_of_ordinances?nodeld=TIT18FIPR_CH18.04ADEN_18.04.060IN.

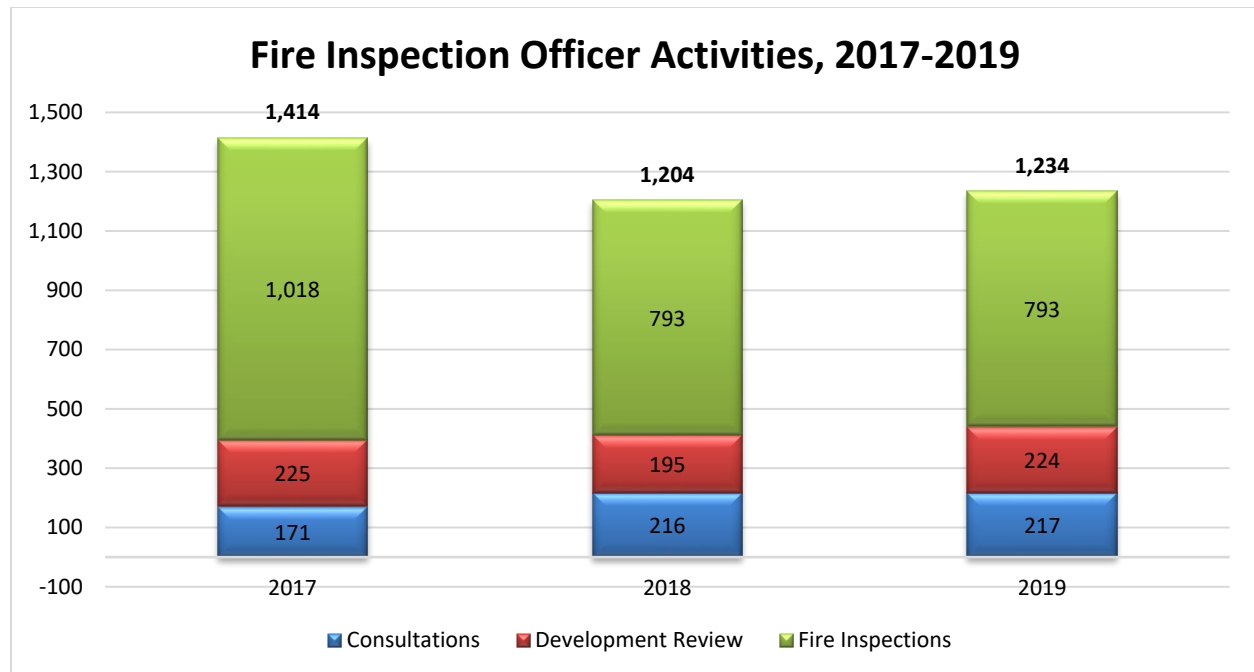


Figure 6: Fire Inspection Officer Activities, 2017-2019

Although Fire Inspectors perform approximately 868 fire inspections each year on average, it is not clear how these inspections meet the requirements of the current code. For example, although the code requires inspections of “all premises” except residential units, the number of structures requiring inspection is not known to the Department. The code also does not provide guidance regarding how frequently inspections should occur or the timeframe over which “all premises” should be inspected and reinspected. To resolve these issues, the Department should develop clear service level standards for fire inspections, which will inform future staffing and operations.

The first step toward clarifying service level standards involves understanding the baseline number of structures to be inspected in the City. This is difficult because the Department’s FIREHOUSE system does not include a comprehensive registry of existing structures. FIREHOUSE currently contains a list of 3,490 commercial and industrial facilities in the City, but the Department believes this number is likely outdated and inaccurate.

To obtain a better understanding of how many structures are eligible for inspection, the Department should develop a list of known addresses in the City along with the parcel number and zoning classification of each address. This information will allow the Department to isolate non-residential addresses. Next, the Department should review the list of non-residential addresses to determine whether the address pertains to a structure or a vacant property. Vacant properties should be removed from the list. The resulting list should include addresses that pertain only to non-residential structures; this list represents the baseline number of structures that should be subject to fire inspections per the City Code. It will be important to regularly update this list to reflect new developments, changes to existing structures, and zoning updates.

It is likely that the Department will need to engage specialized help to develop this list, including the City’s GIS staff and Housing and Neighborhood Development (HAND) Department. It is important to note that

this process may or may not result in data that can be imported into FIREHOUSE for easy reference, and the Department may also need to engage its vendor to evaluate options for incorporating this information.

Once the baseline number of inspections to be performed is known, the Department should establish clear service level goals regarding the number of inspections to be performed each year and how it will prioritize inspections. An effective approach used by the cities of Tempe, Arizona,²² and St. Paul, Minnesota,²³ involves classifying occupancies based on the risk of fire, using criteria such as occupant loads, square footage, the presence of hazardous processes/materials, and the nature of activities performed onsite. Occupancies classified as high-risk are inspected more frequently than low-risk occupancies. More recent efforts by the cities of Atlanta and Vancouver have focused on the use of data beyond simple hazard classification and fire activity to identify those occupancies that are actually more susceptible to fire events and then focusing on those properties.^{24, 25} This approach should be replicated in Bloomington. The highest-risk properties should be inspected annually, while low-risk properties should be inspected at longer intervals, such as every three to five years. To develop risk profiles, the Department should capitalize on existing interactions, such as pre-plan development visits, to gather information about existing structures.

The goal of clarifying service level standards for fire inspections is twofold. First, it aligns the Department's prevention activities more fully with existing City Codes and explains how the Code will be implemented. Second, it informs how the Department should staff inspections activities. If possible, the Department should establish a service level standard that is achievable by existing Fire Inspection Officers. However, if the number of properties that require annual inspections is too significant for existing staff to undertake, the Department can then begin to explore the cost and operational impacts of other options, such as adding Inspectors, utilizing Shift Inspectors, and/or employing company inspections.

Recommendation 16: Enhance the pre-plan development program.

The Department currently conducts pre-fire planning (pre-plan) inspections of structures in the City. This program requires each engine/truck company to conduct 120 building pre-plans annually, generating an average of 1,526 pre-plans each year across all companies, as illustrated in the following figure.

²² City of Tempe, Arizona Fire Department. "Tempe Fire Medical Rescue Department Community Risk Assessment Guidelines." November 2016. <https://www.tempe.gov/home/showdocument?id=74085>

²³ National Fire Protection Association (NFPA) and Fire Protection Research Foundation (FPRF). "Measuring Code Compliance Effectiveness for Fire Related Portions of Codes." 2008.

²⁴ Firebird: Predicting Fire Risk and Prioritizing Fire Inspections in Atlanta. 2016. http://firebird.gatech.edu/KDD16_Firebird.pdf

²⁵ Fire Underwriters Survey (FUS) Building Fire Risk Prediction Validation Project. FUS/Opta Information Intelligence. December 12, 2018. https://fireunderwriters.ca/media/bb737a67-f53f-4625-9cf8-d91e32c9fb7f/gtJiSg/FUS/Resources/Articles/FUS_Building_Fire_Risk_Validation_Project.pdf

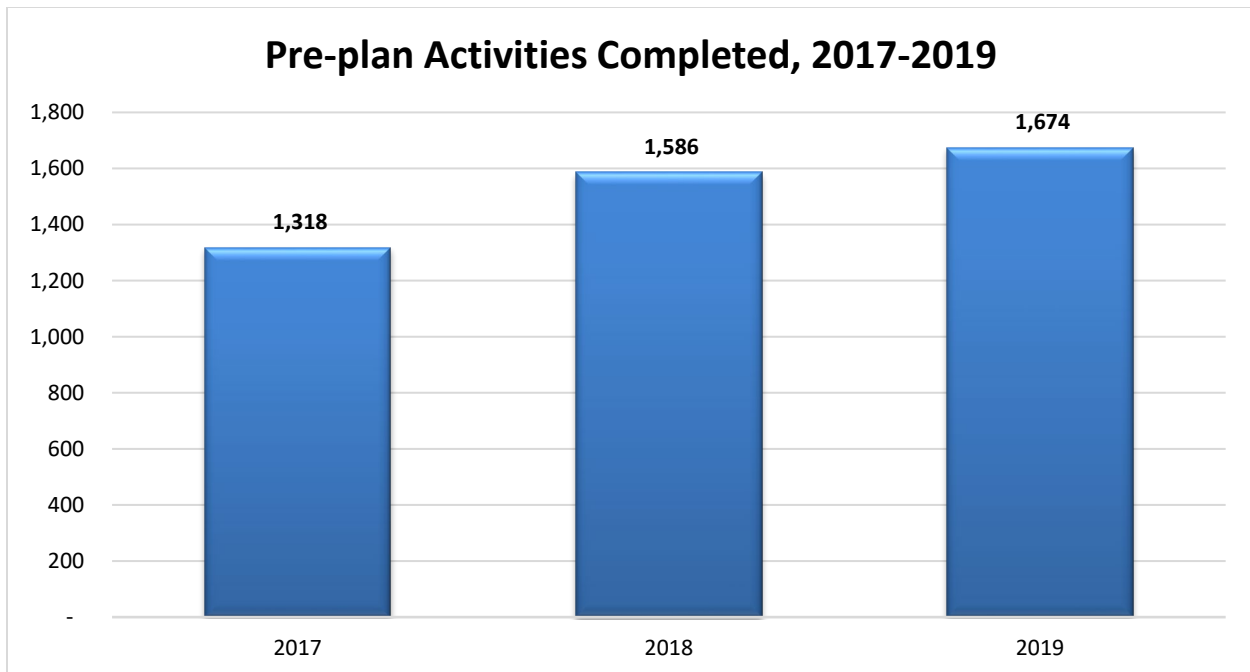


Figure 7: Pre-plan Activities Completed, 2017-2019

The primary purpose of a pre-plan inspection is to familiarize crews with building layouts and features in the event a structure fire occurs. During a pre-plan visit, company staff identify the most appropriate initial actions and procedures that should occur in the event of a structure fire and develop a written plan documenting this information. It is important to emphasize that pre-plan inspections are not enforcement operations and do not evaluate a structure's compliance with applicable fire codes. If company staff notice obvious infractions of the fire code while developing the pre-plan, they are expected to notify Fire Inspection Officers. Company staff do not take enforcement actions during or after the pre-plan visit.

The development of pre-plans is a commendable activity that creates opportunities for Firefighters to build rapport with the community and increases Firefighter safety. However, there are two challenges associated with the Department's current approach. First, company officers exercise significant discretion about which structures to evaluate for pre-planning purposes, and there is no systematic approach for determining which structures should be prioritized for pre-plan development. This creates a risk that the Department may inadvertently overlook structures that would put first responders at greater risk.

Second, it is unclear whether the pre-plans generated by company staff are accessible and usable to Firefighters when responding to an incident. During interviews, some staff reported that pre-plans are available in the field, while other staff reported that the plans were unavailable or that they did not know where to find them. At a minimum, pre-plans should be available to company officers arriving on-scene to facilitate coordinating fireground activities and emergency response.

To maximize the effectiveness of its pre-plan program, the Department should determine which structures pose the greatest risk to Firefighters and occupants and ensure plans are developed and regularly updated for those structures. First, the Department should review all structures for which pre-plans currently exist and determine the structure's risk level. Next, it should establish a protocol for regularly updating pre-plans based on risk; for example, pre-plans for high-risk structures should be

updated annually, while pre-plans for low-risk structures could be updated after several years. Finally, the Department should create a pre-plan development schedule that prioritizes high-risk structures and structures for which no pre-plan exists, followed by low-risk structures.

Additionally, it is important to ensure that first responders can reliably access pre-plan information in the field. Without this information, a primary benefit of pre-planning is lost, and the Department is at greater risk of encountering unknown circumstances in a structure fire. Ensuring that pre-plans are readily accessible and that staff understand how to use these documents will help preserve Firefighter safety and maximize the Department's response to structure fires.

Training and Safety

Recommendation 17: Develop an annual training plan for all Department staff.

The Department currently strives to achieve ISO standards for training activities and recently began implementing TargetSolutions software to better plan, develop, and track training opportunities for staff. At the time of this writing, training opportunities are grouped into 17 categories containing 326 individual training codes, as illustrated in the following table.

Table 12: High-Frequency False Alarm Addresses

Training Category	Number of Training Codes
Administrative	57
Audit & Review	1
Certification	30
College/Higher Ed Classes	4
Conference	10
Driver	20
EMS/Medical	80
Firefighter	40
Hazmat	11
Instructor Continuing Ed/Recertification	4
National Incident Management System	6
Officer	9
OSHA/Safety	10
Physical Fitness	11
Prevention	13
Rescue	10
Special	10
Total	326

On average, from 2017 through 2019, the Department has logged 49,091 hours of training per year among all staff. Its current internal target is 42,264 annual training hours per year, meaning the Department achieved 115% of its training goal on average during this period. Most training hours are allotted to physical fitness activities, followed by Firefighter, administrative, Driver, and EMS/medical training. Together, these training categories account for nearly 75% of all training time, as illustrated in the following figure.

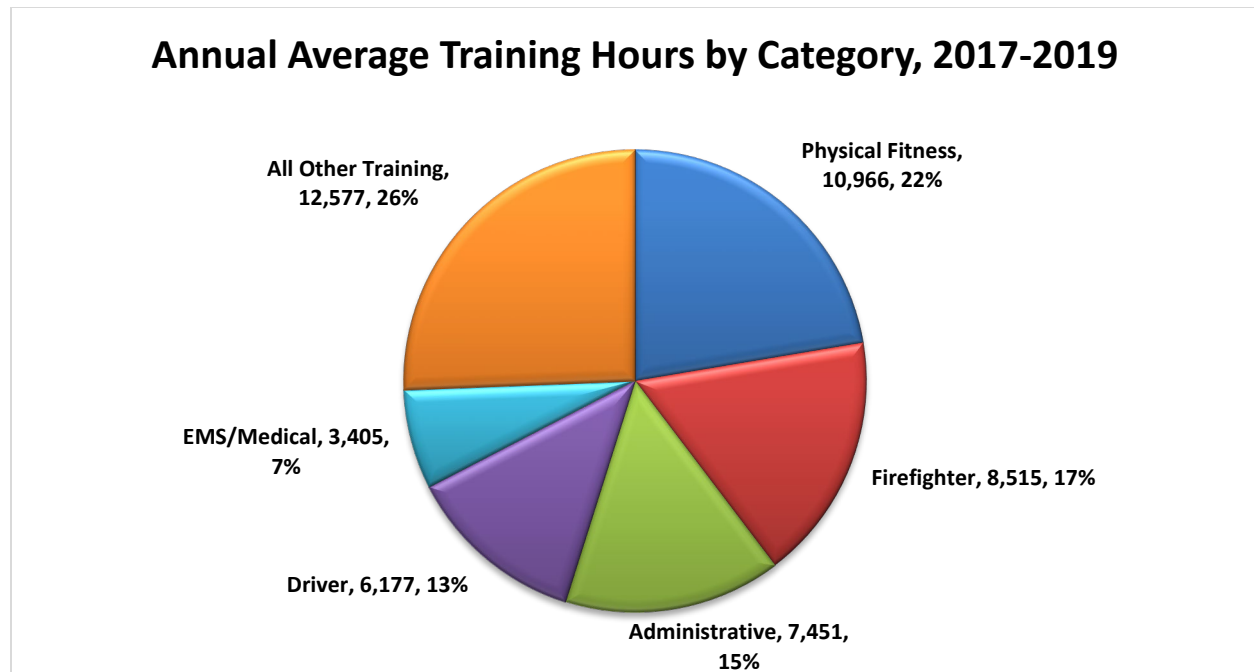


Figure 8: Annual Average Training Hours by Category, 2017-2019

Training is an integral aspect of effective firefighting operations, and the Department’s focus on training is commendable. However, while the time dedicated to training efforts currently exceeds internal goals, there are opportunities to further enhance and develop the Department’s training efforts.

Training functions are currently assigned to a variety of staff. The Battalion Chief of Training is primarily responsible for coordinating the Department’s hiring academy training, implementing the TargetSolutions training software, tracking training hours and certifications, and approving specialized training requests. However, decisions about day-to-day operations training and drills are largely left to the discretion of Battalion Chiefs of Operations and shift Training Officers, who are responsible for coordinating and delivering training to staff on their shifts. This approach creates a risk that staff on different shifts will be trained to perform tasks differently. During interviews, staff reported that varying training practices have created confusion and impacted activities on-scene when staff from one shift backfill for staff on a different shift.

To improve the consistency of training and ensure that all staff perform activities in a similar way, the Department should develop an annual training plan. As a best practice, the annual training plan should identify key training objectives that should be accomplished regularly, such as monthly or quarterly, while also ensuring that staff achieve minimum training and certification requirements. While many fire departments across the country utilize training plans, an example from the Bella Vista, Arkansas, Fire Department is instructive. This training plan identifies key training topic areas, the frequency each topic should be covered, and the number of hours staff are expected to spend training each topic area per year.²⁶ By organizing a training calendar in this manner, the Bella Vista Department can more effectively

²⁶ City of Bella Vista Fire Department. 2020 Annual Training Plan. <http://www.bvfdtraining.com/wp-content/uploads/2020/01/BVFD-2020-Training-Plan.pdf>

delegate training tasks to Captains and ensure that staff throughout the department focus on training tasks and skills development in a synchronized, consistent way.

The Bloomington Fire Department would benefit from a similar approach, and the Battalion Chief of Training should engage Battalion Chiefs of Operations and Shift Training Captains on each shift to determine training priorities each year. This feedback should be utilized to develop a Department-wide training plan that identifies goals for each training category and topic throughout the year. The training plan should also describe the role of the Department's Battalion Chiefs and Shift Training Captains in administering and supervising training efforts, as well as the appropriate use of TargetSolutions to communicate requirements and expectations and log training results.

Once the training plan is developed, it will be important for all of the Department's Battalion Chiefs and Shift Training Captains to ensure that staff follow the same training curriculum, particularly for company drills. Developing operational SOGs, as discussed elsewhere in this report, will provide a foundation for agreement upon standard practices and procedures that should be used to assist training efforts. Ensuring that all staff train the same way will enhance the Department's effectiveness, reduce opportunities for confusion, and improve Firefighter safety when responding to emergencies.

Recommendation 18: Continue leveraging the Department's Safety Committee.

The Department currently utilizes a Safety Committee composed of 12 staff from all levels of the Department and across all shifts. Much of this committee's work has included bringing the Department into greater compliance with OSHA regulations and addressing safety concerns that impact Department-wide operations. The Committee has also begun conducting safety audits in compliance with NFPA 1500: Standard on Fire Department Occupational Safety, Health, and Wellness. The use of safety committees such as this is commendable because fire service includes acute safety risks related to emergency response as well as potential chronic risks associated with exposure to toxic chemicals and conditions.

However, based on interviews with staff, awareness about the existence and role of the Safety Committee in day-to-day affairs is not universal. To address this, the Department should continue to leverage the Safety Committee and task the Committee with communicating to line staff regarding important safety-related matters and policy decisions. The Committee should continue to be composed of a wide variety of staff from across the Department at all levels, and it is appropriate to ensure that representation on the Committee is regularly rotated among existing personnel to invite new perspectives and increase general knowledge about the Committee's work.

Emergency Management

Recommendation 19: Create an Office of Emergency Management to enhance collaboration.

Emergency management is primarily a function of Monroe County and is coordinated by the Monroe County Emergency Management Advisory Council. The City currently appoints one representative to the Advisory Council, and the remaining eight representatives are appointed by Indiana University, Monroe County, other local municipalities, agencies, and businesses. While the Advisory Council appoints a County Emergency Management and Disaster Director, the City does not currently maintain its own Emergency Management function.

Emergency management and major incident response frequently involves multiple agencies and spans jurisdictional boundaries. Natural disasters, public health crises, and other emergency phenomena do not recognize borders and impact broad spectrums of communities where they occur. While it is entirely appropriate for the City to participate in the Monroe County Advisory Council and to employ a regional,

collaborative approach to emergency management, it is also appropriate to enhance emergency management capacity within the City organization proper.

As the home to IU and a seasonal population of diverse students from around the globe, the City must plan and prepare for unique challenges that differ from other agencies and communities in the surrounding county. However, the City does not currently maintain its own emergency management plan, and collaboration expectations between the City's Police and Fire Departments, such as joint training exercises and rehearsals, are unclear. It is both prudent and important for the City to develop additional emergency management capacity that clarifies its own internal response to emergency incidents and disasters, and that describes how public safety staff should collaborate with other critical staff, such as the Mayor's Office and the Department of Public Works, to navigate potential crises.

To create this capacity, the City should establish an Office of Emergency Management, which will serve as a liaison with the County Emergency Management Director, develop a City-level emergency management structure, create a City Emergency Management Plan, and foster more effective collaboration among departments. According to the Journal of Critical Incident Analysis, mature emergency collaboration programs include the following characteristics:²⁷

1. A basic understanding that the command and control structure will take over during emergencies, requiring all actors to play their "official response" role within that structure.
2. A general understanding of the roles various public and private actors play in emergency management, particularly regarding meeting shared technology, equipment, infrastructure, legal, and volunteer needs.
3. A fundamental understanding of the locality's socioeconomic conditions, such as language usage.
4. Building a plan that includes citizen and organization preparedness, first response considerations, and long-term response and recovery.
5. Rehearsal of possible disaster scenarios with a variety of emergency management actors.
6. Inclusion of multiple feedback opportunities to identify problems and generate solutions.
7. Development of a central information hub during the emergency.
8. Recognition that many variables are out of the control of emergency management leaders.

Developing this emergency management collaboration structure will enable the City to improve working relationships and functional ties between the Fire and Police Departments, which will create a foundation for additional collaboration in the future. Because this work is time-intensive and requires specialized knowledge and expertise, it is appropriate to establish the proposed Office of Emergency Management with minimal staff, e.g., with a Director and Assistant Director or support position, to begin the process and evaluate additional staffing needs in future years. As the process of developing this collaborative approach unfolds, it will be important for the City's Emergency Management Director to engage the Fire and Police Departments to learn more about emergency management practices actually utilized by the City, such as during the COVID-19 pandemic, to more fully inform future emergency planning efforts.

²⁷ Norris-Tirrell, Dorothy Ph.D. and Clay, Joy Ph.D. "Collaborative Planning as a Tool for Strengthening Local Emergency Management." Journal of Critical Incident Analysis. Spring 2014. Pages 39-40.
<http://jcia.aciaij.org/files/2014/06/Norris-Tirrell-3-Final.pdf>.

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Conclusion

The Bloomington Fire Department has experienced many organizational changes and is ideally positioned to adopt a more strategic operational approach. It is essential for the Department to enhance communications practices and cultivate staff buy-in to develop appropriate strategic goals and ensure effective progress toward these goals. Without taking sufficient time to engage staff and formulate a deliberate plan of action, the Department risks exacerbating existing cultural tensions between command staff and line staff.

Adopting a strategic plan that establishes a clear foundation for future change, using a process that successfully engages the community and staff throughout the Department, will support future implementation of the recommendations contained in this report. Each of the recommendations is intended and designed to enhance the Department's culture, practices, and operations. However, these recommendations must be carefully considered and implemented to maximize staff participation and support to create lasting improvements in the organization.