

# **City of West Allis Fire Department**



## **2014 Annual Report and Standard of Coverage 2010-2014**





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**STEVEN D. BANE**  
FIRE CHIEF



**CITY of WEST ALLIS**  
FIRE DEPARTMENT

Citizens of West Allis,  
Honorable Board of Police and Fire Commissioners,  
Honorable Mayor and Common Council,



Dear Friends,

Thank you for taking the time to review our 108<sup>th</sup> annual report. I hope the information in this report will demonstrate the effective use of tax dollars used to provide the citizens and visitors to West Allis an efficient and effective fire department.

2014 proved to be a year of transition for the West Allis Fire Department, starting with it being my first full year as Chief. Having served 11 years as the Assistant Chief in the Bureau of EMS, I was given the privilege and honor to be the 11<sup>th</sup> Chief to lead the department on December 1, 2013. I inherited an agency that was in the midst of an extraordinary turnover of personnel in key positions. During 2013 and 2014 the West Allis Fire Department experienced retirement or reappointment of all of its Assistant Chiefs, Deputy Chiefs and Battalion Chiefs along with eight of its nine Captains.

I would like to professionally and personally thank Interim Chief Gary Streicher for the great job he did leading the Department from March 1, 2013 – December 1, 2013. His commitment, dedication, and leadership made the transition as seamless as possible. His guidance, support, and friendship were instrumental in making 2014 a very successful and rewarding year for me and the West Allis Fire Department.

Following retirements of the Assistant Chief of Operations in December 2014 and the Assistant Chief of Fire Prevention and EMS in February 2015, we restructured the administrative command staff as outlined in our org. chart on page 14. The former Deputy Chief of Training and Safety was appointed as the Assistant Chief of Operations and the former Deputy Chief of Emergency Medical Services was promoted to the rank of Assistant Chief. The Bureau of Fire Prevention, which had briefly been housed under the Assistant Chief of EMS and Fire Prevention, returned to its former status as a stand-alone bureau and a Deputy Chief was appointed to command it. The vacant Deputy Chief of Training and Safety position was assumed on an interim basis by a Captain who was promoted officially to the rank of Deputy Chief in July of 2015.

Overall call volume for 2014 was virtually identical to the four previous years. Over the past five years the department responded to approximately 8,000 calls for service per year. In 2014 the department responded to 8,220 calls for service. Emergency medical responses continue to lead the calls for service at 85%. See page 77 of the Standards of Cover document to see the current and previous four years of responses by NFIRS category.

We accomplished much in 2014, which is highlighted in each Bureau's report later in this document. A few of the most significant accomplishment include:

- The signing and implementation of the Milwaukee County Shared Services Memorandum of Understanding that will greatly increase and improve the safety of those we serve and those who serve (our fire fighters). Through sharing resources across municipal borders, firefighting and EMS units can improve response times and better handle large events and peak periods of call volume.
- Implementation of a Mobile Integrated Healthcare (MIH) program designed to better and more appropriately serve those struggling in the current healthcare environment.
- Efforts began on the transition to ProPhoenix Records Management System (RMS) which will better integrate with our Computer Aided Dispatch system (CAD). It is also anticipated to be easier and more efficient for IT to manage and support this product due to the police department using the same vendor.

With oversight and direction from the Board of Police and Fire Commissioners, our department continues to work to improve the quality of life for residents and visitors of West Allis, while maintaining fiscal responsibility. Our efforts and close attention to detail have been rewarded through international recognition and by the City's confidence in allowing us to develop new programs. We'll continue to monitor and report our progress and to analyze the impacts of our programs, staffing changes and fiscal challenges to assure that our services meet the expectations of City policymakers, residents and visitors.

Again this year, many members of the West Allis Fire Department have contributed to our success and have adapted to our internal and external challenges. Heading into 2015, we'll continue to strive to provide the best services available for citizens of and visitors to our community.

Thank you for taking the time to review our 108<sup>th</sup> West Allis Fire Department Annual Report.

Sincerely,



Steven D. Bane  
Fire Chief



STEVEN D. BANE  
FIRE CHIEF



CITY of WEST ALLIS  
FIRE DEPARTMENT

## Office of the Fire Chief – 2014 Accomplishments

### ACCOMPLISHMENT #1:

#### Transition and Succession Planning

#### Description:

- Having been promoted to fire chief on December 1, 2013, 2014 was my first full year as chief.
- 2014's budgets, and therefore administrative staff positions, were in place when I came in to office.
  - 2014's budget called for the elimination of a battalion chief's position or higher.
- Several administrative chiefs positions were open or would become open in 12-15 months

#### Plan:

- A transition plan that included a temporary reorganization was developed. Our plan needed to be flexible and adaptable.
- Working with Audrey Key from HR we were made aware of a City Policy that allowed for "interim" assignments. This gave us the ability to have members function in administrative roles thereby giving them and us the opportunity to determine if it was a good fit for all involved. Previously we used "acting pay" to compensate members working at a higher rank. This did not allow for appropriate compensation in the assistant or deputy chief roles given the level of responsibility.
  - We were expecting the need to fill two battalion chief and three to four assistant/deputy chief positions.
- I truly felt the loss of a chief's position was not in the best interest of the City or the Fire Department and worked to gain support for all of the positions.
- We reviewed our staff and looked for members who had the needed skill sets and education so we could begin training them to fill key roles that were likely to open up due to retirements.

#### Results:

- Three captains were each given a four month opportunity to be interim battalion chief.
  - Due to an unexpected departure of a third battalion chief all three were promoted to battalion chief and were well prepared for the role.
- During the 2015 budgeting process we were able to maintain all chief positions
- Deputy Chief King was appointed Assistant Chief overseeing the Fire Prevention and EMS Bureaus.
  - Captain Zellmann was appointed Interim Deputy Chief of EMS.
  - Upon the retirement of AC King on February 28, 2015 Kurt Zellmann was appointed Assistant Chief of EMS.
- Deputy Chief Jay Scharfenberg was promoted to Deputy Chief of Training and Safety after "acting" in that role for a year.

- It was expected that AC Streicher would retire at the end of 2014. DC Scharfenberg was determined to be the logical successor and therefore the two prepared for the transition all year.
  - DC Scharfenberg was appointed to the AC of Operations role upon AC Streicher's retirement at the end of 2014
  - CT Joe Levenhagen was appointed Interim Deputy Chief of Training.
- Equipment Operator Mason Pooler was appointed to the Lieutenant of Fire Prevention and began to work closely with AC King to prepare him to replace AC King if he retired.
  - LT Pooler was appointed DC of Fire Prevention upon the retirement of AC King.
- The temporary re-organization and use of "Interim" assignments proved to be very beneficial for succession planning and assured we remained under budget for personnel costs.

**ACCOMPLISHMENT #2:**

Financial and Budgeting

**Description:**

- Provide high quality and dependable fire, EMS and other emergency services at or under budget
- Work within the Mayor's 2015 budget directive to assure the most cost effective and efficient emergency service is provided given current financial constraints.
- Work with City Administrator, Finance Director, and Common Council to assure targeted priorities are supported in the Mayor's Proposed Budget and subsequently approved by the Council

**Plan:**

- Flex our overall staffing level to allow for cost savings that can be redistributed to other areas of the budget.
  - Specifically, our capital account for large fire apparatus. Previous reductions in our capital account have created an aging fleet that needs to be upgraded
  - Other items of importance to fire fighter and community safety and health.
- Provide frequent feedback and be accessible to City Leaders.
- Invited elected and appointed leaders to do ride-alongs with our members to get an inside look so as to better understand the services and value we provide to the community.

**Results:**

- In 2014 fire department expenses came in at 92.69% of budget.
- Fire Department 2015 submitted budget was approved by the Mayor with only a very slight reduction in one line item.
  - Including the reinstatement of a chief's position.
- Fire Department 2015 budget was passed unanimously by the Common Council with no further reductions to the Mayor's recommendation.
- \$267,500 was allowed to be carried over to 2015 to firm up items as follows: \$120,000 to capital, \$16,500 for a power cot, \$5,000 to cover our portion of Assistance to Fire Fighter Grants that we wrote for, \$75,000 to begin saving for an Automated Station Notification System, \$45,000 to outfit line personnel with new station uniforms that will look more professional and reduce long term costs, and \$6,000 to purchase smoke and CO detectors that will be distributed throughout homes in the community that do not have working devices.

## Office of the Fire Chief – 2015 Goals

During my first year as Chief I have realized there are two key goals I would like to see developed and well on their way to implementation during my tenure. They are:

1. Mobile Integrated Healthcare
2. Reestablishment of the IAFF/IAFC Joint Labor Management Wellness-Fitness Initiative

### **GOAL #1:**

Continue to review, assess, and develop the benefits of a Mobile Integrated Healthcare Program.

#### **Description:**

- *The U.S. health care system is often described as one that fails to achieve optimal health outcomes while generating exorbitant costs for patients, payors and society.*
- *The Institute of Medicine (IOM) estimates that \$750 billion—30% of the U.S. annual health care budget—is wasted on unnecessary services, inefficient delivery, excessive administrative costs and prevention failures. Barriers to patient access, fragmentation of acute and chronic care, ineffective management of chronic illness, and complex, outdated reimbursement processes leave patients, clinicians and payors frustrated at historic levels.*
- *A special problem: 24/7 coordinated out-of-hospital care. The discontinuities of health service are notably evident in the care of patients at home; this is particularly true for the chronically ill, frail elderly and mobility impaired. Multiple single-purpose providers offer niche care and often only during restricted hours of operation, neither of which match the actual needs of this patient population.*
- *As a result, patients are routinely referred to hospital emergency departments (EDs) by their healthcare providers, outside of normal business hours, despite the common knowledge that the ED is an imprecise match to their needs. Further, care gaps such as a lack of post-acute transitional care make preventable re-admissions a virtual inevitability that is both expensive and disappointing to patients, caregivers and the health care system.*

*In attempts to correct some of these shortcomings, we propose here a novel delivery strategy for an inter-professional practice of medicine—Mobile Integrated Healthcare Practice (MIHP)—intended to serve a range of patients in the out-of-hospital setting by providing 24/7 needs-based at-home integrated acute care, chronic care and prevention services.*

#### **A Mobile Integrated Healthcare Practice will:**

- *Focus on patient-centered navigation and offer transparent population-specific care by integrating existing infrastructure and resources, bringing care to patients through technology, communications, and health information exchange*
- *Define its operations through population-based needs assessment and tools*
- *Leverage multiple strategic partnerships operating under physician medical oversight*
- *Improve access to care and health equity through 24-hour care availability*
- *Deliver evidence based practice using multidisciplinary and inter-professional teams in which providers utilize the full scope of their individual practices and support healthcare delivery innovation*

Excerpted from *Mobile Integrated Healthcare Practice: A Healthcare Delivery Strategy to Improve Access, Outcomes and Value*. <http://www.mobileintegratedhealthcare.com/what-is-mobile-integrated-healthcare>

**Plan:**

- Attended several local and national conferences and webinars, networked with other interested agencies, read numerous articles and researched on-line what MIH is and what it can do for a community.
- Appointed LT David Bandomir to be our MIH Coordinator and FF's Tim Kersten and Mallory Sura as assistants. LT Bandomir was assigned to 8-hour duty to work fulltime on the MIH program.
- WAFD members and City Leaders traveled to Fort Worth and Dallas TX to learn about their programs and ride-along with their crews to get an up close view of how they have been successful.
- Worked with other Milwaukee County Fire Departments to collaborate on the development of a county wide MIH program and training program.
- Ongoing meetings with Aurora West Allis Medical Center (AWAMC) to determine areas of cooperation
- Met with researchers from the Medical College of Wisconsin and developed a plan for a "Proof of Concept" trial for high-frequency users of our EMS system.
- Create and fill a MIH Lieutenant's position on all three shifts. These positions will require certification in MIH, Critical Care Paramedic (CCP), and Incident Safety Officer.
- Development of a model for MIH that is sustainable both financially and logistically.

**Results to date:**

- Completed 90-day proof of concept trial, targeting 29 patients who were the highest utilizers of our EMS services since 2013. Data and results of the trial are being compiled.
- LT Bandomir has been promoted to CT and will be transitioned out of his role as MIH coordinator. His replacement, LT Timothy Kersten, has been chosen and is being further integrated into the program. CT Bandomir will remain as the leader until such time as a smooth and seamless transition can be completed.
- Three WAFD members are enrolled in a MIH certification program at UWM.
- Discussions and development of a strategic partnership with AWAMC is showing great promise and interest by both agencies. Anticipated we will be nearing a negotiating stage soon for cost recovery.

**GOAL #2:**Reestablishment of the IAFF/IAFC Joint Labor Management Wellness-Fitness Initiative**Description:**

- In October of 2002 after the development of a MOU between the City of West Allis and West Allis Professional Fire Fighters Local 1004 and receiving an Assistance to Fire Fighters Grant (AFG) the IAFF/IAFC Joint Labor Management Wellness Fitness Initiative (WFI) began.
- After only a little over a year in existence Local 1004 exercised a clause in the MOU and withdrew from the program.
- Study after study shows the advantages of a properly designed wellness fitness program and how it benefits the individual and the cost of their healthcare.
- The largest hurdle to the program is likely to be funding for the medical evaluations. Ideas and strategies are being discussed and will need to be presented to the Common Council for approval.
  - *The International Association of Fire Fighters, in cooperation with the International Association of Fire Chiefs, has committed to an unprecedented endeavor. We have gathered together some of North America's finest fire departments in an effort to build a stronger fire service by strengthening our foundation – the fire fighter.*

- *An overall wellness/fitness system must be developed to maintain fire fighters' physical and mental capabilities and should be the objective of every fire department in cooperation with its local IAFF affiliate. While such a program may be mandatory, agreement to initiate it must be mutual between the administration and its members represented by the local union. Any program of physical fitness must be positive and not punitive in design; require mandatory participation by all uniformed personnel in the department once implemented; allow for age, gender and position in the department; allow for on-duty-time participation utilizing facilities provided or arranged by the department; provide for rehabilitation and remedial support for those in need; contain training and education components, and be reasonable and equitable to all participants.*
- *The program must address the following key points:*
  - *Confidentiality of behavioral, medical and fitness evaluations;*
  - *To develop a physical fitness and wellness program that is educational and rehabilitative and is not punitive;*
  - *Require a commitment by labor and management to a positive individualized fitness/wellness program;*
  - *Develop a holistic wellness approach that includes:*
    - *fitness*
    - *medical*
    - *rehabilitation*
    - *behavioral health*
  - *Be long term, program could be made available to retirees.*

Excerpted from: <http://www.iaff.org/HS/Well/wellness.html>

**Plan:**

- Assigned Interim Deputy Chief Joe Levenhagen as our coordinator of the program.
- Held joint labor management meetings to discuss the basic concept of bringing the program back. West Allis Professional Firefighters Association IAFF Local 1004 appointed FF Dan Rohde as their representative to work with I/DC Levenhagen.
- Attended numerous meetings of the Metro Milwaukee Fire Departments Consortium of Sustainable Health Programs. Working to determine if we should sign the MOU that has been developed. Below is an excerpt from that document:

***Background***

*The Metro Milwaukee Fire Departments Consortium of Sustainable Health Program's (MMFD COSHP's) mission is to provide participating departments with a turnkey, operationally and economically efficient, center of firefighter health program development and maintenance resources. By collaboratively serving one another, each department will be synergistically empowered to "Guard the Health of their greatest asset, their members. Firefighter health services are the same across department lines. Investing finite resources to independently access similar services that can be shared among a partnering group is fiscally responsible. There is synergistic power in the collaboration of unique departmental resources.*

*As a group, we carry greater fiscal capital for vendors as well as various grant funding sources. Through collaboration, we carry a better opportunity to establish sustainable health programs, both operationally and fiscally; empowering us to provide the best firefighter centric health program for the members. As a byproduct we will reap fiscal and operational benefits that would have been difficult to attain independently.*

**Results to date:**

- Multiple joint labor management meetings and determined there is interest on both sides of the table. Will continue to meet and discuss a strategy for implementation.
- Consistently reminding the labor reps that a program such as this needs to be viewed as a benefit to the employee.
- Three members have been chosen to attend the Peer Fitness Training course that will be held this fall.
- The MMFD COSHP's is ready for us to join once an agreement is reached with Local 1004 and funding has been secured.

**GOAL #3:**Succession planning for the role of fire chief**Description:**

- When interviewed as a candidate for fire chief I was asked how long I would serve, I said it would be for three to five years.
- I indicated that I would first take a look at retiring at the three year mark. After that I planned for it to be a year to year decision. That being said, December 31, 2016 is the first date that I am considering for retirement.
- We have placed qualified and competent members in the key roles of Assistant and Deputy Chief to prepare and train them as my successor.
- Exposing the Assistant and Deputy Chiefs to all of my job functions and responsibilities is a priority of mine.
- Encourage the Assistant and Deputy Chiefs to continue their pursuit of formal education.

**Results to date:**

- Assistant and Deputy Chiefs are included and represent me at meetings and other job assignment so as to learn and get a feel for the role of fire chief.
- Assistant and Deputy Chiefs are consulted and included on most decisions for the organization.
- One member is completing his Master's Degree and will begin the National Fire Academy Executive Fire Officer Program in September of 2015.

# 2014 Staffing Changes

## Retirements

05/01/14	EO Mark Wendt (appointed 07/29/89)
08/26/14	BC Daniel Machowski (appointed 04/18/87)
11/22/14	LT Eric Toepfer (appointed 03/05/88)
12/31/14	AC Gary Streicher (appointed 03/19/83)

## Promotions

01/04/14	CT Daniel Levenhagen to Interim Battalion Chief
04/19/14	FF Kevin Brode to Lieutenant
05/03/14	FF Benjamin Koenig to Equipment Operator
05/03/14	CT David Jarosch to Interim Battalion Chief
09/06/14	CT Daniel Ledvorowski to Interim Battalion Chief
09/20/14	CT Daniel Levenhagen to Battalion Chief
09/20/14	FI Nicholas Palasz to Lieutenant
11/22/14	LT Joseph Levenhagen to Captain

## Reassignments

03/22/14	LT Duane Fisher to Fire Fighter
05/03/14	I/BC Daniel Levenhagen to Captain
09/06/14	I/BC David Jarosch to Captain
12/31/14	I/BC Daniel Ledvorowski to CT

## Appointments

04/24/14	PFF Kevin Acker
04/24/14	PFF William Emery
04/24/14	PFF Adam Livingston
04/24/14	PFF Christopher Williams



**BUREAU OF OPERATIONS**

**Jay D. Scharfenberg**  
Assistant Fire Chief

**CITY of WEST ALLIS**  
**FIRE DEPARTMENT**



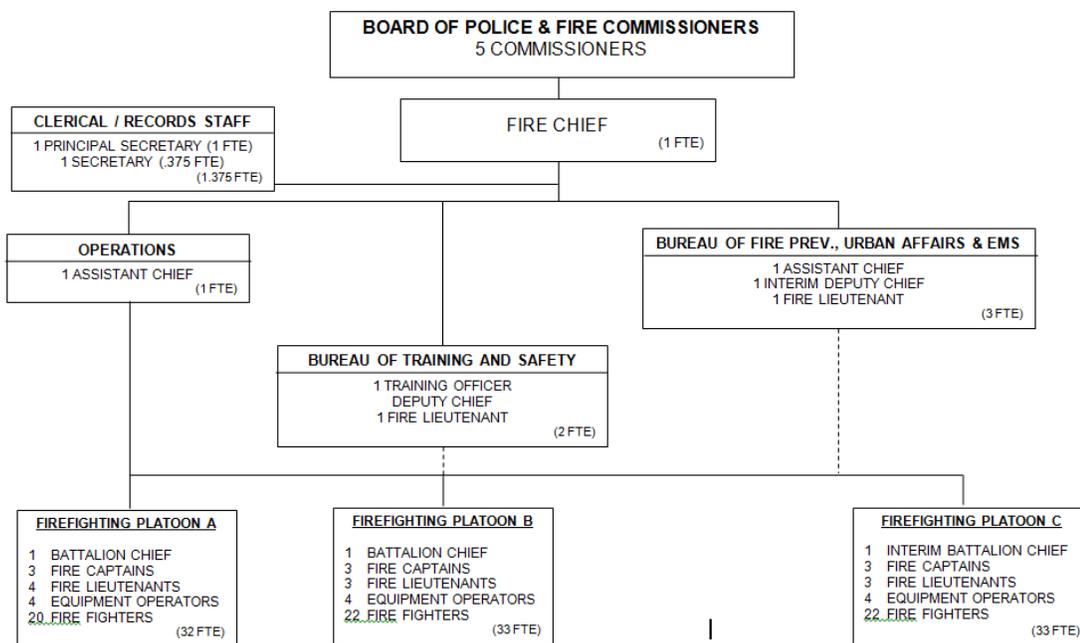
### **Bureau of Operations**

The West Allis Fire Department is a career agency that protects a population of approximately 61,000 residents in 11.4 square miles. The department has 105 sworn employees and 1.5 civilian employees operating out of three fire stations and a stand-alone administration building. On a daily basis, the West Allis Fire Department operates three engine companies (staffed with 4 personnel per company), one ladder truck company (staffed with 4 personnel), three paramedic EMS transport units (staffed with 2 personnel per unit), and a battalion chief. The department’s annual operating budget in 2014 is \$13,672,542 and the capital budget is \$256,575.

The Fire Chief is supported by two Assistant Chiefs and two Deputy Chiefs, all of whom work a 40-hour schedule with offices in the Fire Administration building. Assistant Chiefs oversee the Bureau of Emergency Medical Services and Fire Prevention and the Bureau of Fire Operations. Deputy Chiefs oversee the Bureau of Training and Safety and the Bureau of EMS Operations. Two lieutenants are assigned to a 40-hour schedule, one in the Bureau of Training and Safety and one in the Bureau of Emergency Medical Services and Fire Prevention.

A Battalion Chief commands each firefighting platoon. There are three Captains assigned to each shift, one at each fire station for a total of nine Captains. Lieutenants are assigned primarily to the truck company, but also to paramedic transport units as staffing permits. Equipment Operators are assigned to operate engine and truck apparatus at each station and the remaining line positions are filled by firefighters. There are 33 members assigned to each shift who work a rotating schedule of 24 hours on duty followed by 48 hours off.

**ORGANIZATIONAL CHART  
FIRE**



TOTAL POSITIONS: 107 (106 City FTE)

Overall call volume for 2014 was virtually identical to the four previous years. Over the past five years the department responded to approximately 8,000 calls for service per year. In 2014 the department responded to a total of 8,221 calls for service. A breakdown of these calls for service by type appears below:

- Fire: 136
- Rupture/Explosion: 0
- EMS: 7,021
- Hazardous Condition: 239
- Service Call: 154
- Good Intent: 176
- False Alarm: 491
- Severe Weather: 1
- Other: 3

Attached to this report is a copy of the West Allis Fire Department's Standards of Coverage (SOC) document which provides a detailed analysis of the Bureau of Operations' performance benchmarks, benchmark compliance and overall activity by planning zone over the five year period from 2010-2014. Please see the SOC document for additional details.

Sincerely,

Jay Scharfenberg  
Assistant Fire Chief – Bureau of Operations



BUREAU OF OPERATIONS

Jay D. Scharfenberg  
ASSISTANT CHIEF

CITY of WEST ALLIS  
FIRE DEPARTMENT

## 2014 Operations Bureau Accomplishments

### ACCOMPLISHMENT #1:

Succession planning for the retirement of Assistant Chief Gary Streicher.

#### Description:

- Assistant Chief Streicher decided in early 2014 that he would retire in December of that year.
- Having worked in his current position for 12 years, Chief Streicher had a significant amount of knowledge and experience to share with his successor.

#### What was involved in the process:

- Chief Streicher worked very closely with Jay Scharfenberg, then serving as the Deputy Chief of the Bureau of Training and Safety, to share knowledge and to develop a system of reference in preparation for retirement.

#### Why it was important:

- Having served for more than a decade as the West Allis Fire Department's primary human resources manager, firefighting equipment purchaser and liaison with external agencies, AC Streicher had developed a broad base of knowledge, a wealth of experience and a wide array of fire service, government agency and private sector contacts that the West Allis Fire Department could ill afford to lose. By passing knowledge to Deputy Chief Scharfenberg, arranging a system of digital file reference and introducing DC Scharfenberg to key external contacts, AC Streicher prepared his successor for transition and, by extension, prepared the Fire Department to successfully function in his absence.

### ACCOMPLISHMENT #2:

Development and Implementation of a Milwaukee County Shared Services Incident Management Plan.

#### Description:

- In order to share fire suppression and specialized resources across municipal borders in a safe manner it was first necessary to develop a standardized Incident Management Plan (IMP).
- Assistant Chief Streicher (Bureau of Operations) and Deputy Chief Scharfenberg (Bureau of Training and Safety) worked closely with colleagues from neighboring fire departments to prepare an IMP for adoption by the Milwaukee County Association of Fire Chiefs.

**What was involved in the process:**

- Assistant Chief Streicher worked with the Shared Services Committee to identify key operational concerns that related to the implementation of the Shared Services initiative.
- Deputy Chief Scharfenberg served as a member of the Shared Services Command and Operations sub-committee to author a comprehensive Incident Management Plan (IMP). This IMP, which complies with all applicable federal and state statutes as well as industry best practices, was presented to and adopted by the Milwaukee County Association of Fire Chiefs.

**Why it was important:**

- In order to share resources freely between municipalities it is necessary that a consistent command framework be in place to manage them and to ensure their safety. Common terminology and functional positions are identified in the IMP which allows for resources to fit seamlessly into an operational role regardless of jurisdictional identity.

**ACCOMPLISHMENT #3:**

Implementation of a Milwaukee County Shared Services Memorandum of Understanding.

**Description:**

- Prior to 2014 the Milwaukee County fire departments that shared a border with the City of Milwaukee had been developing plans to share fire suppression, EMS and special operations resources.
- In May of 2014 the Shared Services Memorandum of Understanding was signed by 10 municipalities which provided a legal basis for dispatching the closest, most appropriate resource to the scene of an emergency incident regardless of jurisdictional identity.

**What was involved in the process:**

- Formalizing the Shared Services initiative by means of a binding Memorandum of Understanding was the culmination of many hours of work by chief officers and fire chiefs from throughout Milwaukee County who were willing to put personal preferences aside so as to work in concert.

**Why it was important:**

- As municipal budgets have tightened and the demand for protective services have increased, it has become necessary to rely heavily on mutual and automatic aid agreements to ensure safe operation in times of high demand for service.

**ACCOMPLISHMENT #4:**

Center for Public Safety Excellence (CPSE) approval of the West Allis Fire Department's 2014 Annual Compliance Report (ACR).

**Description:**

- In order to maintain accredited status, CPSE requires submission of an ACR which is reviewed and approved or denied by the governing board.

**What was involved in the process:**

- Each year the West Allis Fire Department's Accreditation Manager must prepare and submit an ACR to verify compliance with core competencies and to describe progress that has been made to implement strategic recommendations that were identified in the most recent peer review site visit.
- The 2014 ACR was submitted on June 18, 2014 and subsequently approved by CPSE.

**Why it was important:**

- Submission of the ACR serves to verify that we are maintaining compliance with industry best practices and to document our progress in implementation of strategic recommendations.

**ACCOMPLISHMENT #5:**

Administration of a Captain's Promotional Process

**Description:**

- In order to prepare for the retirement of three Battalion Chiefs, two Assistant Chiefs and one Captain that would occur between January 2014 and May 2015 it was necessary to conduct a promotional process for the rank of Captain.

**What was involved in the process:**

- The Captain's promotional process consisted of a resume and qualification review, oral interview, incident command performance evaluation and personnel management exercise.
- Seven Fire Department Lieutenants participated in the promotional process and were ranked in order of performance on an eligibility list that will expire on November 20, 2016.

**Why it was important:**

- Captains serve as the direct link between management and field personnel and, as such, fill an incredibly valuable role. Additionally, Captains work as shift commanders in the absence of their Battalion Chief which requires that they be capable of performing effectively as incident commanders. This promotional process evaluated, not only the ability of candidates to serve as station commanders, but also to function effectively in the incident command role.

## 2015 Operations Bureau Goals

### **GOAL #1:**

Represent the West Allis Fire Department and the Milwaukee County Association of Fire Chiefs as a member of the Milwaukee County Radio System's Operational Committee

#### **Description:**

- Assistant Chief Scharfenberg was selected by the Milwaukee County Association of Fire Chiefs to serve on the Milwaukee County Public Safety Radio System's Operational Committee

#### **What is involved in the process:**

- The Operational Committee of the Milwaukee County Public Safety Radio System has been tasked with forecasting and resolving operational issues as well as identifying and documenting best practices for system implementation.
- The Operational Committee will develop and implement a process for training and migrating Milwaukee County public safety agencies from a legacy system to the new Milwaukee County Public Radio System in early 2016

#### **Why it is important:**

- Radios serve a vital role in protecting Fire Department members while enabling them to function effectively in an environment that is at times chaotic, isolated and/or hostile.
- As Milwaukee County's fire departments begin to work more cooperatively via the Shared Services initiative, the need for effective interagency communication has been magnified and must be carefully and diligently addressed by the Operational Committee.

### **GOAL #2:**

Administer a Lieutenant's Promotional Process

#### **Description:**

- In response to the retirement/reassignment of three Battalion Chiefs, two Assistant Chiefs, one Captain and two Lieutenants between January 2014 and May 2015 it will be necessary to conduct a promotional process for the rank of Lieutenant.

#### **What is involved in the process:**

- The Lieutenant's promotional process will consist of a resume and qualification review, written exam, fire officer performance assessment, EMS CQI performance assessment and oral interview.

#### **Why it is important:**

- Lieutenants serve a valuable and incredibly diverse role in both line and administrative positions. They must be capable of working as company officers on fire suppression and EMS transport units in the Bureau of Operations and may be assigned to an administrative role in any of the other three bureaus.
- Lieutenants must serve as station commanders and as initial incident commanders in the absence of their regularly assigned Captain.

**GOAL #3:**

Implement an improved system of mutual /automatic aid radio communications

**Description:**

- Due to heavy radio traffic on IFERN, use of this talkgroup for routine mutual/automatic aid between Milwaukee County fire departments will be discontinued
- When providing mutual/automatic aid prior to the MABAS Box Alarm level, each agency will communicate on the primary dispatch talkgroup of the “stricken community”. One exception to this rule will be the City of Milwaukee Fire Department, whose units will communicate on Firecom 1 due to the fact that MFD currently lacks access to the Milwaukee County Public Safety Radio System. This is expected to be resolved in 2016 as part of the transition to the new Milwaukee County Public Safety Radio System.

**What is involved in the process:**

- Portable radios must be programmed and placed into service that allow for easily switching from the West Allis Fire Department’s primary dispatch talkgroup to the dispatch talkgroup of neighboring municipalities.
- Personnel must be trained in the use of newly programmed radios and the amended communications plan. Additionally, members must be trained to access primary talkgroups of all Milwaukee County fire departments, regardless of proximity to West Allis or frequency of interagency assistance.

**Why it is important:**

- The IFERN radio channel is used on a routine basis for mutual aid in neighboring counties and experiences periods of heavy traffic that interfere with local communications. The new communications plan will allow for heavy traffic in Milwaukee County that will not be affected by similar traffic in neighboring counties. This is particularly important during severe weather events that produce high system utilization across a relatively large geographic area.
- Dispatch centers and emergency scene incident commanders have been forced to monitor at least three and sometimes four radio channels on a routine basis. By eliminating IFERN from the equation we will allow the dispatcher and/or incident commander to focus more attention on the emergency at hand.

**GOAL #4:**

Replace 1 ¾” hose lines and automatic nozzles with 2” hose lines and 1 ⅝” smooth bore nozzles

**Description:**

- Replacing 1 ¾” hose lines and automatic nozzles with 2” hose lines and 1 ⅝” smooth bore nozzles on the rear hose bed of all engine company apparatus will allow a single engine company to flow approximately 250 gallons per minute of water while retaining sufficient hose line mobility to conduct interior operations
- While not used on a routine basis, this new hose line configuration will be deployed for defensive and transitional fire attacks where large volumes of water are required.

**What is involved in the process:**

- Hose and nozzles will be purchased and engine company hosebeds will be reconfigured as necessary to accommodate this larger diameter line.
- Personnel were trained on the use of this hose line / nozzle combination in 2014. AC Scharfenberg will monitor use of this tool at emergency incidents to gauge its effectiveness as well as the need for refresher training.
- Equipment Operators and company officers will be trained that, since this hose line flows a large volume of water, a water supply must be secured prior to deploying it to the interior of a structure.

**Why it is important:**

- Modern fires are fueled by hydrocarbon based products which burn hotter and propagate faster than natural, legacy fuels. Larger volumes of water are required to safely extinguish deep seated fires than were required in decades past.
- West Allis Fire Department staffing levels have steadily decreased as the demand for service has conversely increased. As a result, we are not typically able to stretch and operate a second hoseline early in the firefighting operation as we were able to do decades ago. This new hose line / nozzle combination will allow the initial arriving engine company to flow a large volume of water without requiring immediate assistance.

**GOAL #5:**Consolidate hiring processes with North Shore and Wauwatosa Fire Departments**Description:**

- Rather than running an independent hiring process, the West Allis Fire Department will join forces with the North Shore and Wauwatosa Fire Departments to run a joint recruitment and hiring process. Doing so will allow for consolidation of effort while still allowing each agency to interview, screen and hire candidates as they see fit.

**What is involved in the process:**

- The City of Wauwatosa, North Shore Fire Department and City of West Allis Human Resources departments will work jointly to accept and screen applications for all three agencies. This will be accomplished via an internet based application form submittal process and the City of Wauwatosa will serve as a primary clearing house for application data.
- In 2014 the West Allis Fire Department incorporated Wisconsin Personnel Partners written exam into its hiring process. In 2015 this same testing process will be used to evaluate a pool of candidates that will be shared between the West Allis, North Shore and Wauwatosa Fire Departments.
- Representative chief officers from each agency will serve as a panel to conduct the initial round of pre-employment interviews. Following this round of interviews candidates will be screened and interviewed by individual agencies according to local pre-employment policies.

**Why it is important:**

- The West Allis, Wauwatosa and North Shore fire departments stipulate identical minimum qualifications, employ the same written examination process and conduct very similar initial candidate interviews. In so doing, each agency is duplicating effort and expending valuable resources. By consolidating processes we can achieve the same end result while minimizing

the impact on each agency.

**GOAL #6:**

Enhance dispatching capability to support shared services response

**Description:**

- Early analysis of Shared Services responses indicates that approximately 90 seconds is wasted while dispatchers communicate via radio to determine resource availability. In some cases this dispatch delay greatly exceeds the 90 second threshold. If all Milwaukee County fire department dispatch centers were able see resource status in real time we could drastically reduce call processing time.

**What is involved in the process:**

- We must identify and clearly define data that will be communicated between Milwaukee County dispatch centers so as to allow for sharing of resource status and availability in real time. Once these data packages have been identified we will implement technology, likely via regional contract with a third party vendor, to share resource data between dispatch centers in real time and via automated transfer process.

**Why it is important:**

- While the Shared Services initiative has allowed the closest appropriate resource to be dispatched to the scene of an emergency, its weak link exists in dispatching. Early analysis indicates that approximately 90 seconds is wasted while dispatchers communicate via radio to determine resource availability. In some cases this dispatch delay greatly exceeds the 90 second threshold. Routine sharing of resource status among Milwaukee county Fire departments will significantly impact overall call processing time and allow us to fully tap the potential of the Shared Services initiative.



**BUREAU OF EMERGENCY  
MEDICAL SERVICES**

**KURT ZELLMANN  
ASSISTANT CHIEF**

**DAVID BANDOMIR  
CAPTAIN**

**TIMOTHY KERSTEN  
LIEUTENANT**



## **Bureau of Emergency Medical Services**

The EMS Bureau's most notable accomplishment in 2014 was implementation of a Mobile Integrated Healthcare (MIH) Program. The need to manage increasing response volumes with existing staff has led to the development of this program. The proactive idea is to reduce repeat visits to hospitals by chronic patients. Treating these patients before they call 9-1-1 avoids an ambulance transport and costly care at the hospital.

### IHI Triple Aim

The tenets of the WAFD – MIH are reflected in the Institute for Healthcare Improvement's "Triple Aim":

- Improve the patient experience of care (including quality and satisfaction)
- Improve the health of the community
- Reduce the per capita cost of health care

### High-Frequency Patient Program

The purpose of this program is to address the needs of underserved citizens of West Allis who lack connection to primary healthcare or other care. These citizens often have a myriad of healthcare issues but do not have ready access to quality healthcare due to a lack of economic resources. These citizens also often have unmet social or mental health needs which exacerbate their medical issues. In the past, WAFD's sole response to these patients has been to respond to their 9-1-1 call, mitigate issues to the extent of our ability and transport the patient to the Emergency Department. The highest frequency patients make up at least 10% of the total WAFD call volume.

### 'Safe Landing' Program

Healthcare systems have been seeking mechanisms to prevent readmissions. The department's MIH Program offers a solution to medical providers who are seeking to decrease patient readmission rates. The Mobile Health Paramedic (MHP) will provide in-home follow-up appointments to patients identified by providers to be at risk for readmission. Specific services to be provided, and treatment guidelines to be followed, will be agreed upon by the Medical Director and the Primary Care Provider. Patients enrolled in the Safe Landing Program will receive patient advocacy, healthcare navigation, and educational services per MIH protocol within scope of practice.

### Role as Healthcare Navigators

The MHPs will serve as healthcare navigators to selected patients. In the healthcare navigator role, the MHP will perform a variety of patient centered assessments in order to determine the patient's medical, social, and mental healthcare needs. Once the assessment process is complete, an individualized care plan will be developed in conjunction with the medical provider. This care plan will outline future steps for the patient and will include referrals to agencies appropriate to the patients need. Additionally, the MIH coordinator will seek to ensure that the patient has appropriate medical oversight through a dedicated primary care physician or clinic. The MHP will also seek to educate the patient about their health issues, medication compliance, and other important life skills.

### Goals

Through the healthcare navigation process the following goals will be achieved:

- By navigating the patient to appropriate medical resources that are available, the patient's level of health will be improved.
- Through the integration of social service and mental health professionals into the patient's life, the factors that often exacerbate underlying health conditions will be mitigated resulting in an improved quality of life for the enrolled patients.
- Educating the patient about their medical conditions will allow the patient to understand their own body in a better manner and empower them to manage their own healthcare issues in a more independent manner.

### Strategic Plan

Our community's MIH Program has the potential to:

- Reduce health system expenditures
- Reduce the frequency of repetitive callers in the emergency response system
- Enhance public health and safety by meaningfully supporting the health and social welfare needs of the community
- Become self-sustaining

West Allis is part of a coalition of Milwaukee County Fire Departments that is embracing the changing nature of the fire service with similar community projects. In conjunction with the West Allis Health Department, a community needs assessment was performed to identify gaps in care. A comprehensive inventory that identified the availability and distribution of current capabilities and resources from a variety of partners and organizations throughout our community was also completed

The department is seeking to establish a sustainable model for improving the use of existing EMS providers within their current scope of practice in coordination with other health providers. Currently, our highest immediate priority is the design and development of the readmission prevention program with Aurora West Allis Medical Center. This will be the first EMS/hospital partnership in the state addressing readmissions from a patient-centered approach. By building in sustainability initially, we allow the MIH Program to grow in the future to address other gaps in care within our community.

Respectfully Submitted,

A handwritten signature in cursive script that reads "David Bandomir".

David Bandomir

Captain - Mobile Integrated Healthcare Coordinator



EMERGENCY MEDICAL SERVICES

KURT ZELLMANN  
ASSISTANT CHIEF

CITY of WEST ALLIS  
FIRE DEPARTMENT

## 2014 Emergency Medical Services Bureau Accomplishments

### ACCOMPLISHMENT #1:

Transition leadership of the Emergency Medical Services Bureau within WAFD

#### Description:

- Assistant Chief Steve Bane transitioned out of his previous role as EMS Bureau head and into the Fire Chief role.
- Locate and transition a replacement into the role with minimal disruption.

#### What is involved in the process:

- Locate a qualified individual willing to take on the role.
- Temporally realign Bureau to accommodate the transition.
- Insure that the Bureau remains functional during the transition.
- Train and operationalize the individual.

#### Why it is important:

- The EMS Bureau is the busiest division within the Fire Department making up over 85% of the fire departments 8221 call for service in 2014 and retuning just under 1.6 Million dollars back to the city.

#### How it was accomplished:

- WAFD Captain Kurt Zellmann was selected to lead the Bureau by Chief Bane and appointed as Interim Deputy Chief of EMS per PFC approval.
- Intensive training in Chief level responsibilities and daily mentoring.
- Acting Deputy Chief Kurt Zellmann transitioned to Assistant Chief of EMS.



## **ACCOMPLISHMENT #2:**

### Assist Operations Bureau with Procurement of Pre-Owned Fire Engine

#### **Description:**

- Due to unforeseen mechanical failure of a critical reserve Fire Engine a replacement unit needed to be secured quickly in an economical manner.

#### **What is involved in the process:**

- Work with city leaders and elected officials to determine a budget.
- Locate, inspect and test an acceptable pre-owned replacement rig.
- Negotiate and procure the rig from previous owners.

#### **Why is it important:**

- Fire department members rely on this equipment to get them quickly and reliably to emergency scenes to mitigate problems.
- The current Advanced Life Support Model requires that fire apparatus be deployed along with Ambulances to provide the proper level of manpower at an emergency scene.
- Out of date, unreliable and unsafe equipment impacts operational efficiencies and repair budgets due to its continual need for repair and difficult maintenance.

#### **How it was accomplished:**

- By illustrating the severe need for the replacement of obsolete and economically unviable equipment to city officials, a reasonable strategy for mitigating the unforeseen need was arrived at and approved.
- By working with the city fleet department, a number of outside vendors & dedicated WAFD members to rehabilitate and integrate the pre-owned rig into the WAFD fleet.



### **ACCOMPLISHMENT #3:**

#### Implementation of ProPhoenix WDA mobile data terminals in Fire & EMS units.

##### **Description:**

- Upgrade obsolete hardware and software within Fire and EMS units to facilitate true two way data exchange between units in the field and Dispatch and reduce the number of multi-system computer interfaces that slow and complicate data exchange.
- Significantly reduce non-essential two way radio traffic to ease dispatch load to improve EMD call processing times.

##### **What is involved in the process:**

- Interface with CAD software vendor, West Allis IT, PD and Dispatch to develop an implementation plan for the switch to new more robust software and hardware.
- Work with WA-IT to upgrade city servers and in rig hardware to operate a newer more capable version of the Computer Aided Dispatch software.
- Train Fire Department users in the operation of the new program and equipment.

##### **Why is it important:**

- The efficient movement of data to and from units in the field is a key capability required by modern fire departments.
- Making information from in house data libraries and real time dispatch updates accessible to operations level units increases both safety and efficiency.
- Real time data collection produces more accurate operational data and can be used downstream to both monitor and improve deployment decisions.

##### **How it was accomplished:**

- By physically upgrading computer hardware in the field units with economically obtainable modern hardware and migrating servers to the most modern version of CAD software available we have realized significantly greater capabilities in field units.
- Through hands on training of personnel we have accomplished the transition at the user level.



## **ACCOMPLISHMENT #4:**

### Secure Department of Transportation Grant Funding for All Terrain Ambulance.

#### **Description:**

- Provide final justification and rationale to the Wisconsin Department of Transportation to secure grant funding in the amount of \$45,000 towards the purchase of an off road capable mini-ambulance.
- Expand the operational capacities of WAFD for limited access locations and large venue and high population events.

#### **What is involved in the process:**

- Identify and delineate the need for additional WAFD resources to provide the DOT Zoo interchange project area with appropriate medical response capability.
- Negotiate grant acceptance terms between city and DOT
- Define operational parameters of the vehicle and end of contract provisions.

#### **Why is it important:**

- Acquisition and acceptance of the DOT grant funds provides WAFD with significantly improved operational capabilities in a multitude of circumstances.
- The grant funds will significantly reduce the replacement funding pressure on the current off road EMS unit which is near the end of its service life.
- The new mini-ambulance will significantly improve patient privacy and comfort when employed at venues such as State Fair Park or large crowd gatherings.

#### **How it was accomplished:**

- This acquisition was made possible through the work of not only the Bureau of EMS but previous administrators who began the needs conversation with DOT at the outset of the project.
- By informing the city leaders of the opportunity of the Grant offering and explaining the benefits of fund acceptance.
- The unit is fully specified and upon release of funding by DOT the order will be placed with the unit manufacturer.



**ACCOMPLISHMENT #5:**  
Implementation of No Lights & Sirens Emergency Response Mode

**Description:**

- To revise the WAFD EMS unit response model to include the capability to respond non lights and sirens to Emergency Medical Dispatch determined low acuity requests for service.

**What is involved in the process:**

- Research and rigorous data analysis to ensure that the planned reduction in response intensity was in fact a well-founded hypothesis.
- Education of WAFD members, WAPD Dispatch and engaged community partners regarding the reasoning and presumed benefits to all interested parties.
- Physical modifications to all current WAFD EMS units and fire apparatus to allow for optical preemption mode only responses.
- Re-evaluation of the initial hypothesis and provision of a feedback loop to review any possible field identified system failures along with a continued QA of an appropriate number of calls processed by WAPD dispatchers.

**Why is it important:**

- The safety of both WAFD responders and the public at large is the primary driver for the implementation of this plan.
- Allowing data analysis to drive decision making regarding the efficiency of response and the improvement of an operational model is an important step in harnessing the information collected by implantation of the EMD system.
- The system provides for triage of requests for service in a vetted manner and very accurately determines caller request acuity. By allowing the system to drive the response mode safety and greater operational efficiencies can and are being realized with no detriment to the requesting parties.

**How it was accomplished:**

- By careful planning, examination of systems currently operating in the same manner and the analysis of WAFD acquired data.
- The development of WAFD policies and procedures regarding the reduced response acuity.
- The careful and systematic review of preliminary data gathered during a trial period validated the results presented by other EMS systems operating in a similar manner.

Determinate Code	Verbalized As	Unit(s) Dispatched	MED Unit Mode	Engine Mode
Ω	Omega	Med Unit	Cold	N/A
A	Alpha	Med Unit	Cold	N/A
B	Bravo	Med Unit	Hot	N/A
C	Charlie	Med Unit and Engine	Hot	Cold
D	Delta	Med Unit and Engine	Hot	Hot
E	Echo	Med Unit and Engine	Hot	Hot

## 2015 Emergency Medical Services Bureau Goals

### **GOAL #1:**

Begin the implementation of ImageTrend Elite to comply with State and Federally mandated NEMSIS 3.0 EMS data reporting requirements.

#### **Description:**

- The federal government has initiated an upgrade and re-alignment of EMS data collected at the national level. The data set elements have been evolved to more closely match data collected at the hospital level.
- Current EMS data collection software used by the majority of EMS providers in not only Wisconsin but the country is not capable of gathering data according to the new requirements. As a result the core software required to collect this new data is being phased out and replaced with a new system.

#### **What is involved in the process:**

- A complete overhaul of the software used to collect EMS data in the field and phasing out of the current generation of software.
- The configuration and rebuilding of the new software package to meet the needs of not only WAFD but County, State and Federal guidelines mandated at the NEMSIS 3 level.
- A significant committee level time commitment will be required to determine the usage of and layout of new data elements collected.

#### **Why is it important:**

- The transition to NEMSIS is an unfunded State and Federal mandate that must be complied with in order to maintain operational privileges within the State and to receive both state and Federal aid and reimbursement dollars.
- The forced transition to a completely new software system that is mission critical to EMS provider presents daunting challenges at both the administrative and operational levels.
- Ultimately the NEMSIS Level 3 Data will help EMS providers gather better and more accurate data. The new software is projected to have exponentially better performance and is rich in enhanced user features and data collection control capabilities.



**GOAL #2:****Operationalizing Mobile Integrated Healthcare****Description:**

- To continue to develop and be a national leader in the provision of Mobile Integrated Healthcare Services to the citizens on West Allis and surrounding communities.

**What is involved in the process:**

- Sustained engagement of both local regional and national level system development pioneers while forging our own pathway to successful implementation.
- Evolving a staffing model to accommodate and best deploy individuals with the newly acquired Mobile Integrated Healthcare provider skill set.
- Seek and cultivate opportunities to generate both revenue and savings for all engaged parties.

**Why is it important:**

- The Pre-Hospital and post discharge care delivery models are rapidly evolving and at this juncture in time WAFD has self-cultivated a leadership role in the process. To best ensure that WAFD and community needs are met it is vitally important that WAFD remains a driving force in this evolution.
- All indications are that additional revenue opportunities may be available for this healthcare delivery system and it would be wise to try and foster the process to ensure the biggest return on the investment already made.



### GOAL #3:

#### Implementation of the ProQA Emergency Medical Dispatch Software

##### Description:

- To transition from WAPD dispatchers using a manual flip card system to code EMS calls for service to a fully CAD integrated and computer based EMD program.

##### What is involved in the process:

- Completion of a program interface that will allow the EMD coding software ProQA to seamlessly operate within the current ProPhoenix CAD Dispatching software.
- The two independent software vendors have never integrated into each other's products; as a result the implementation time table has been significantly extended.
- Exhaustive testing of the interface in a demo environment to ensure seamless integration of the two programs to insure no loss of fidelity between either product.
- Training of all WAPD dispatchers in the new ProQA software package and its operational impact on ProPhoenix CAD software.

##### Why is it important:

- Improved dispatch proficiency and accuracy.
- A predicted reduction in call processing time that will predictably reduce response times for WAFD units.
- The improved delivery of pre-arrival instructions by dispatchers when needed in critical situations. No longer will the dispatchers have to find the appropriate instructions within the card set and simultaneously navigate the decision trees to continue to deliver appropriate instructions based on caller responses.
- Reduced time consuming manual review of calls by administrative staff to ensure dispatcher compliance with the EMD system.



## GOAL #4:

### Improvement of EMS Data monitoring and dissemination

#### Description:

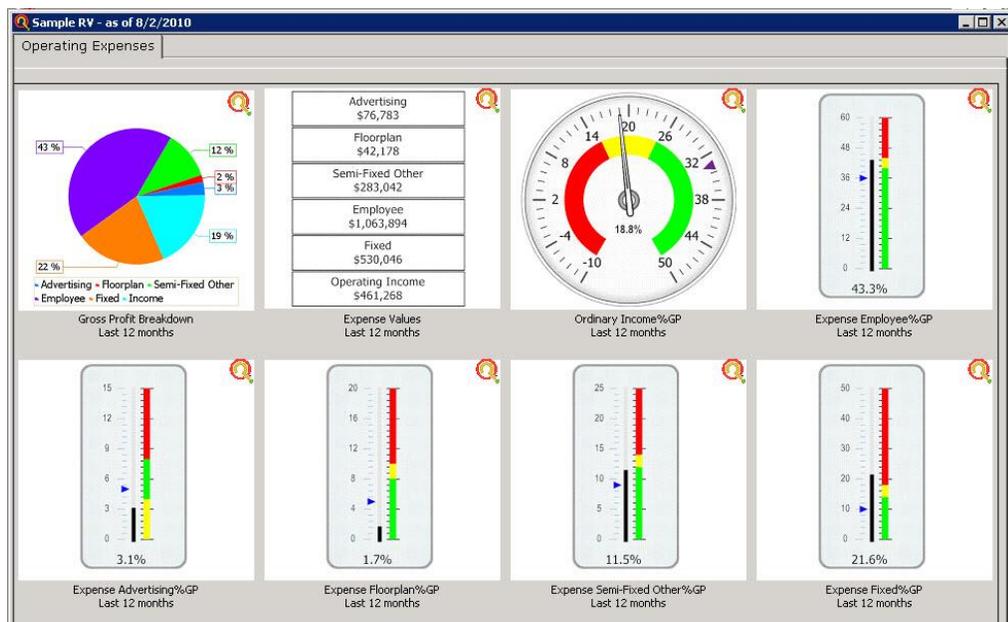
- To implement and operationalize semi-automated reporting tools to better analyze collected EMS data.
- To share this data with the EMS providers that are responsible for collecting it and with any other stakeholders *that may benefit*.

#### What is involved in the process:

- The configuration of multiple existing software tools and the development of import and export criteria into and out of the reporting and Q/A tools.
- Engaging parties that are willing to take on the task of continually herding the data to appropriate silos for ongoing analysis.

#### Why is it important:

- We have a very large pool of operational data and we continue to collect more each day. Careful examination of this data can show concerned parties at all levels information about our operational methods and clients that we may not be fully aware of.
- Data tells a story but only if you consistently pay attention to what it has to illustrate. If there are operational efficiencies to be had or deficiencies that we are not currently aware of many times simple data analysis will reveal trends or patterns that were not otherwise obvious or perceptible.
- Data can change preconceived notions about operational process and lead to innovation and improvement with minimal emotional pressure needed from the drivers of change and improvement.



## **GOAL #5:**

### Specify acquire and operationalize a new fire engine

#### **Description:**

- To complete the complex task of designing, purchasing and placing into service a new fire engine for WAFD station #2.

#### **What is involved in the process:**

- Purchasing a modern triple combination municipal pumping engine is a very complex, time consuming and important task.
- The first step is conducting a needs analysis regarding the particular municipality's current and future requirements.
- Ensuring that all the departments' current and future operational needs are met in the most economically efficient and feasible means possible and that the apparatus is built to all applicable safety and operational specifications.
- Procuring the apparatus by means that will insure a competitive price is paid for by the purchasing municipality while meeting all the specified requirements.
- Supervising the construction of the vehicle to ensure all agreed upon specifications are met prior to accepting the vehicle.
- Training all department equipment operators on the new engine and adjusting any operational polices that may be impacted by a new design or procedure.

#### **Why is it important:**

- The analysis must take many complex factors into account and look deep into the department's operational future. The exorbitant cost of fire apparatus and the nearly ridiculous expected service lives can severely compound the impact of a mistake made today. Any mistake in the specification can and will have a significant impact on the department's economic and operational future.
- Custom built fire apparatus is generally the single most complex and expensive piece of equipment purchased by a municipality and has the longest expected service life of any piece of mobile equipment.
- Custom fire apparatus depreciate very quickly and are very often regionally specific. In the event of a defect in the design or performance of an engine very little can be done to remedy this type of situation.
- The safety of the firefighters that ride on and operate the vehicle as well as the citizens of the community that the vehicle protects rely on near flawless performance of the vehicle for extended periods of time.
- Ultimately there are no second chances or "do overs" when purchasing a piece of fire apparatus. The onus is on the municipality to get the job done right the first and only time around.





BUREAU of TRAINING and SAFETY

JOE LEVENHAGEN  
DEPUTY CHIEF

CHRIS ZIOLECKI  
LIEUTENANT



CITY of WEST ALLIS  
FIRE DEPARTMENT

## 2014 ANNUAL REPORT BUREAU of SAFETY and TRAINING

The Bureau of Training and Safety is primarily responsible for ensuring that fire department members are prepared to effectively deliver essential services to the citizens of West Allis. In order to accomplish this mission, Bureau personnel work to keep fire department members abreast of current technology and information related to the science of fire suppression and EMS delivery, maintaining fundamental skills and developing new ones through consistent, realistic and practical training sessions. Additionally, the Bureau of Training and Safety manages the fire department recruitment process and training of new fire recruits, manages the Candidate Physical Ability Testing (CPAT) program, coordinates an internship program for technical school students, prepares and conducts promotional testing, develops and maintains department operating guidelines and training manual articles, organizes and manages health and wellness programs and manages the Survive Alive program.

There are several organizations and standards that influence the training that is delivered to fire department personnel. Among them are Wisconsin Department of Safety and Health Standards, National Fire Protection Association (NFPA) standards, Insurance Service Office (ISO) recommendations, Cities and Villages Mutual Insurance Company (CVMIC) recommendations, Commission Fire Accreditation International (CFAI) requirements, and contractual obligations for the training of personnel. In compliance with these standards, laws and recommendations, the Bureau of Training and Safety delivered the following training sessions in 2014:

### TRAINING PROGRAMS

**Fire Suppression:** Classes relating to fire suppression practices included annual SCBA donning, proficiency and confidence course drills. During the SCBA confidence course, firefighters encounter scenarios that re-enforce survival topics. WAFD companies trained on a variety of fire ground tactics along with joint training with surrounding communities. Using vacant structures and benign smoke conditions, practical exercises were also conducted on a variety of fire suppression skill sets including live fire evolutions in the WAFD training tower in 2014.

<b>Topic</b>	<b>Attendees</b>
SCBA Proficiency Drill	85
SCBA Confidence Course	89
Vertical Ventilation Drills	88
Positive Pressure Fire Attack	66
Water Supply Operations	43
Primary Search and Victim Rescue	64
Incident Review-Cornerstone	86

**Emergency Medical Services:** All fire department personnel are licensed as Emergency Medical Technicians (EMT's) and are thus required to complete EMT refresher training every two years. The Wisconsin Department of Health Services dictates general refresher format while the Bureau of Training and Safety develops class content and provides the instruction and competency testing. In addition to this refresher training, 2014 EMS classes included annual Infection Control training and a new program of quarterly EMS protocol review and knowledge assessment. EMT's along with paramedics were trained on current topics relevant to issues confronting crews in the field such as Ebola recognition and treatment procedures.

<b>Topic</b>	<b>Attendees</b>
EMT Refresher	70
Infection Control	88
See-Through CPR Orientation	83
Ebola Recognition/Treatment	87
Quarterly Protocol Review	92

**Special Operations:** Classes related to special operations included ice/water rescue, Sky Glider rescue, trench rescue, confined space rescue and hazardous materials mitigation.

<b>Topic</b>	<b>Attendees</b>
Sky Glider Rescue	54
Trench Rescue	87
Confined Space Rescue	86
Hazardous Materials Response	85
Ice/Water Rescue	82

**Human Resources:** Training related to human resource considerations primarily consisted of a department policy and operating guideline review program that is mandatory for all personnel. This program, which is ongoing throughout the year, assigns a specific department policy and operating guideline for review each week as in-station training. Officer Development sessions were conducted on a quarterly basis. In addition to these programs, ethnic/cultural diversity training was conducted in 2014.

<b>Topic</b>	<b>Attendees</b>
Department Policy Review	103
Operating Guideline Review	103
Officer Development meetings	26
Ethnic/Cultural Diversity Training	87

**Equipment Familiarization/Orientation:** A vital function of the Bureau of Training and Safety is to ensure that all personnel are kept abreast of current technology. As new tools are introduced or existing equipment is upgraded, Training Bureau personnel provide familiarization/orientation training so as to ensure that all personnel are proficient in the operation and maintenance of such equipment. In 2014, the West Allis Fire Department upgraded key pieces of equipment including Paratech Vehicle Stabilization Struts, Roof Operation Safety Platform, Various rope rescue equipment including new rescue ropes, carabineers. Training all personnel to be proficient in the operation of this new equipment required a significant investment of time and resources.

Topic	Attendees
Paratech Vehicle Stabilization Struts	89
Bullard Eclipse TIC Orientation	51
Roof Operation Safety Platform	88
Rope Rescue equipment	86

### **FIREFIGHTER RECRUITMENT**

The Bureau of Training and Safety oversees the recruitment process and hiring of new firefighters. Minimum application qualifications include a high school diploma or equivalent, Wisconsin State Firefighter Certification Level I, a current State of Wisconsin EMT license, and a valid driver's license. Preferred qualifications include an Associate of Applied Science Degree in Fire Science or closely related field from an accredited college or university, and/or a Bachelors' Degree from an accredited college or university, and/or a current Wisconsin EMT-Paramedic license.

In 2014, four candidates were hired in April, using the existing 2013 recruitment pool. A total of 180 applications were processed in 2013. The applicant pool included:

- 86 applicants with an AAS degree in Fire Science Technology
- 20 applicants with a BA or BS degree
- 67 applicants with a paramedic license
- 10 female applicants

### **CANDIDATE PHYSICAL ABILITY TESTING**

The Bureau of Training and Safety is responsible for administration of the Candidate Physical Ability Testing (CPAT) program. The program started in 2003, making 2014 its 12<sup>th</sup> year of operation. Bi-monthly tests were scheduled from March through October.

In 2014 we conducted testing on 49 days with a total of 355 candidates participating in the program. The results were as follows:

- Overall: 202 participated; 154 passed, 28 failed, 20 did not complete = 76.23% pass rate.
- Males: 188 participated; 151 passed, 18 failed, 19 did not complete = 80.31% pass rate.
- Females: 14 participated; 3 passed, 10 failed, 1 did not complete = 21.42% pass rate.

**CONCLUSION**

This is a summary of some of the significant activities of the Bureau of Training and Safety. As always, the Training Bureau wishes to thank all of the members of the West Allis Fire Department for their cooperation throughout the year, as well as the administrative staff and members of other city departments for their continuing support.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Joe Levenhagen", with a stylized flourish at the end.

Joe Levenhagen, Deputy Chief-Bureau of Training and Safety



**BUREAU of TRAINING  
and SAFETY**

**JOE LEVENHAGEN  
DEPUTY CHIEF**

**CHRIS ZIOLECKI  
LIEUTENANT**



**CITY of WEST ALLIS  
FIRE DEPARTMENT**

## **2014 Training and Safety Bureau Accomplishments**

### **ACCOMPLISHMENT #1:**

#### Active Shooter Rescue Task Force Implementation

The West Allis Fire Department recognizes active shooters as a reality in modern American life along with the need to integrate Fire/EMS and law enforcement resources to save savable lives. It is no longer advisable for Fire/EMS resources to simply “stage and wait” upon arrival at an active shooter event. It is the goal of the West Allis Fire and West Allis Police Departments to work cohesively by forming Rescue Task Force(s) (RTF) in an effort to provide victim contact within 10 minutes and victim transport within 60 minutes of first fire/EMS unit arrival. In order to accomplish this, West Allis PD members will provide the protection element and West Allis FD members will provide the rescue (EMS) element of the RTF, integrating both elements to form a single unit which can operate in the warm zone of a tactical environment. Starting on May 8, 2015 the implementation of the Rescue Task Force to active shooter incidents was implemented and all paramedic units and the Battalion Chief are supplied with Ballistic Protection Equipment (BPE) and Individual First Aid Kit (IFAK).

### **ACCOMPLISHMENT #2:**

#### Consolidate Recruit Training

Starting on May 18<sup>th</sup>, 2015 the West Allis Fire Department is consolidating the recruit training program with North Shore and Wauwatosa Fire Department. With the implementation of shared services, among neighboring communities, it is essential each fire department operate jointly and efficiently. The Joint Fire Training Academy (J.F.T.A) will begin the process of shared training in order to learn and understand how each department operates. Joint training allows for a broader base knowledge and will create seamless operations at both fire and EMS incidents in our communities.

## 2015 Training and Safety Bureau Goals

### **GOAL #1:**

#### Formalize Equipment Operator and Acting/EO Training Program

##### Objective:

- Create a formalized Equipment operator handbook
- Develop a standard testing procedure
- Annual recertification for A/EO's and EO's with incidents in the past year

Currently with the cooperation between the Bureau of Training and Safety and veteran equipment operators, a formal hand book with equipment operator responsibilities, is in development. This handbook will cover equipment operator's responsibilities in station, including routine maintenance of apparatus and equipment, as well as responsibilities on the road and at various emergency scenes.

Develop a standard testing procedure for certification of equipment operators and A/EO's. The purpose of this standard is to assure the safe and efficient response of personnel and apparatus to the scene of an emergency without unnecessary danger to public or private property, or injury or death to civilians or fire department personnel, as well as understanding equipment operator's responsibilities at emergency incidents.

### **GOAL #2:**

#### Provide Fire and Safety Public Education Programs

##### Objective:

- Provide the Survive Alive Fire Safety program to all public and private school students at least once over the course of completing grades one and four.
- Provide general fire safety education programs to public and private grade-schools students at least once every school year.
- Provide public fire safety programs for at least 5,000 people annually

The goal is to administer classes for all public and private school students in first and fourth grades. Provide fire prevention week hands-on educational programs for all public and private school students in first through six grades. With the cooperation between the Bureau of Training and Safety and the Bureau of Fire Prevention, provide public relations and education events. With current staffing and increased call volumes it is more and more challenging to continually provide these programs at present state.

**GOAL #3:****Provide Training and Revise Operating Guidelines to Reflect Modern Fire Science**

## Objective:

- Save lives
- Protect property
- Reduce harmful impacts to the environment
- Review one-half of all operational guidelines annually

It is the goal to revise operating guidelines and incorporate practices learned from current modern fire science research. Many of the strategies and tactics used in the past are obsolete. The fire service must change according to the research-based data to develop education and training to reflect best practices.

Research from Underwriters Laboratories (UL) and National Institute of Standards and Technology (NIST) has changed the way fire departments operate. Understanding fire flow paths, modern fuel loads (synthetic materials) and the effects fire has on modern construction material, are vital considerations required to operate safely and efficiently in modern fire service times.

**GOAL #4****Wellness Fitness-Initiative for all Fire Department Personnel**

## Objective:

- Implement Fire Service Joint Labor Management Wellness Fitness-Initiative
- Promote and maintain both mental and physical fitness
- Train and certify Peer Fitness Trainers through the IAFF/IAFC/ACE PFT Program
- Provide long term savings by reducing costs due to sick and injuries to personnel

Historically, fire departments spent their time and money maintaining apparatus and equipment while the fire service's greatest asset was mostly ignored. It is through personnel fire departments are able to serve the public, accomplish their missions and make a difference in the community. Implementing a Wellness Fitness-Initiative makes sense for all including fire service personnel, tax payers, and the community we serve.



BUREAU of TRAINING  
and SAFETY

JOE LEVENHAGEN  
DEPUTY CHIEF

CHRIS ZIOLECKI  
LIEUTENANT



CITY of WEST ALLIS  
FIRE DEPARTMENT

## Bureau of Training and Safety 2015 Goals and 2014 Accomplishments

The Bureau of Training and Safety is primarily responsible for ensuring that fire department members are prepared to effectively deliver essential services to the citizens of West Allis. In order to accomplish this mission, Bureau personnel work to keep fire department members abreast of current technology and information related to the science of fire suppression and EMS delivery, maintaining fundamental skills and developing new ones through consistent, realistic and practical training sessions. Additionally, the Bureau of Training and Safety manages the fire department recruitment process and training of new fire recruits, manages the Candidate Physical Ability Testing (CPAT) program, prepares and conducts promotional testing, develops and maintains department operating guidelines and training manual articles, organizes and manages health and wellness programs and manages the Survive Alive program.

### ACCOMPLISHMENT 1:

#### Purchasing and implementing Paratech Struts for Vehicle Stabilization

##### Description:

- Vehicle stabilization is the first step in extrication. Stabilizing struts sets the scene for successful extrications with a wide range of stabilization options.
- Paratech struts are used during car accidents in which vehicles may be over turned and are unstable during rescue incidents.
- Stabilizing struts will allow WAFD personnel the ability to extricate victims of vehicle accidents and prevent further injury to victims as well as fire department personnel.

**What is involved in the process:**

- Researching and purchasing the stabilizing struts.
- Understand objectives of vehicle stabilization and how to accomplish this using Paratech struts.
- Identify proper procedure for assembling Paratech Struts
- Identify capabilities/limitations of the Paratech struts.
- Develop a lesson plan and obtaining vehicles in order to utilize and familiarize fire department personnel with the new Paratech Stabilizing Struts.

**Why it is important:**

- Vehicle accidents can cause serious injuries to both the victims as well as the rescue personnel. The use of the Paratech stabilizing struts will help minimize any further injury to the victims and rescue personnel.

**ACCOMPLISHMENT 2:**

Implement “Transitional Attack” as a common WAFD Strategy

**Description:**

- It is the goal to revise operating guidelines and incorporate practices learned from current modern fire science research.
- Research from Underwriters Laboratories (UL) and National Institute of Standards and Technology (NIST) has changed the way fire departments operate.
- Understanding fire flow paths, modern fuel loads (synthetic materials) and the effects fire has on modern construction material, are vital considerations required to operate safely and efficiently in modern fire service times.
- Studies done by Underwriters Laboratories have proven the implementation of “Transitional Attack” strategy significantly improves conditions throughout the entire structure that is involved in a fire.

**What was involved in the process:**

- Personnel will understand modern fire science research conducted by Underwriters Laboratories (UL) and National Institute of Standards and Technology (NIST) on the topic of transitional attack.
- Personnel will learn tactics and strategies involved in transitional attack for structural firefighting according to WAFD operating guidelines.
- Personnel will learn evolutions to reinforce communications and fire stream deployment components of the transitional attack.

### **Why is it important**

- The fire service must change according to the research-based data to develop education and training to reflect best practices.
- Transitional attack strategies and tactics and its effects it will achieve during firefighting will significantly improve conditions throughout the structure allowing a greater chance for victim survival and the safety of crews entering a burning structure.

### **ACCOMPLISHMENT 3:**

#### 2014 Recruit Class

#### **Description:**

- The Bureau of Training and Safety oversees the recruitment process and hiring of new firefighters.
- In 2014, four candidates were hired in April, using the existing 2013 recruitment pool. A total of 180 applications were processed in 2013.

#### **What was involved in the process:**

- Recruits trained on a 40 hour shift for the first 6 weeks under the supervision of Deputy Chief Jay Scharfenberg and Lieutenant Dan Becker.
- Recruits were oriented to department policies, operating guidelines, rules and regulations and training manual documents.
- The four probationary firefighters were placed on 24 hour shifts and assigned to the Bureau of Operations as probationary firefighters. Bureau of Training conducted quarterly tests and monitored progress of each recruit throughout the probationary year. Daily reports submitted by the probationary firefighters and monthly evaluations by the captains assigned to each recruit were used to monitor progress of each recruit.

#### **Why is it important:**

- Vacancies need to be filled due to retirement or other reasons.
- Proper training of new recruits is vital to the safety of the recruit as well as each crew member. It must also be understood that completing the initial six-week training is the beginning of a firefighters training, not the end of it. PFF's have limited exposure to many department policies and need follow-up training on the policies and procedures they were exposed to during their initial training.

# 2015 Goals

## **GOAL # 1**

### Formalize Equipment Operator and Acting/EO Training Program objective:

- Create a formalized Equipment operator handbook
- Develop a standard testing procedure
- Annual recertification for A/EO's and EO's with incidents in the past year

Currently with the cooperation between the Bureau of Training and Safety and veteran equipment operators, a formal hand book with equipment operator responsibilities, is in development. This handbook will cover equipment operator's responsibilities in station, including routine maintenance of apparatus and equipment, as well as responsibilities on the road and at various emergency scenes.

Develop a standard testing procedure for certification of equipment operators and A/EO's. The purpose of this standard is to assure the safe and efficient response of personnel and apparatus to the scene of an emergency without unnecessary danger to public or private property, or injury or death to civilians or fire department personnel, as well as understanding equipment operator's responsibilities at emergency incidents.

## **GOAL #2**

### Provide Fire and Safety Public Education Programs objective:

- Provide the Survive Alive Fire Safety program to all public and private school students at least once over the course of completing grades one and four.
- Provide general fire safety education programs to public and private grade-schools students at least once every school year.
- Provide public fire safety programs for at least 5,000 people annually

The goal is to administer classes for all public and private school students in first and fourth grades. Provide fire prevention week hands-on educational programs for all public and private school students in first through six grades. With the cooperation between the Bureau of Training and Safety and the Bureau of Fire Prevention, provide public relations and education events. With current staffing and increased call volumes it is more and more challenging to continually provide these programs at present state.

### **GOAL # 3**

#### Provide Training and Revise Operating Guidelines to Reflect Modern Fire Science Objective:

The objective of the fire service has been the same for the past 250 years.

- Save lives
- Protect property
- Reduce harmful impacts to the environment
- Review one-half of all operational guidelines annually

It is the goal to revise operating guidelines and incorporate practices learned from current modern fire science research. Many of the strategies and tactics used in the past are obsolete. The fire service must change according to the research-based data to develop education and training to reflect best practices. Research from Underwriters Laboratories (UL) and National Institute of Standards and Technology (NIST) has changed the way fire departments operate. Understanding fire flow paths, modern fuel loads (synthetic materials) and the effects fire has on modern construction material, are vital considerations required to operate safely and efficiently in modern fire service times.

### **GOAL # 4**

#### Wellness Fitness-Initiative for all Fire Department Personnel Objective:

- Implement Fire Service Joint Labor Management Wellness Fitness-Initiative
- Promote and maintain both mental and physical fitness
- Train and certify Peer Fitness Trainers through the IAFF/IAFC/ACE PFT Program
- Provide long term savings by reducing costs due to sick and injuries to personnel

Historically, fire departments spent their time and money maintaining apparatus and equipment while the fire service's greatest asset was mostly ignored. It is through personnel, fire departments are able to serve the public, accomplish their missions and make a difference in the community. Implementing a Wellness Fitness-Initiative makes sense for all including fire service personnel, tax payers, and the community we serve.

Respectfully submitted,



Joe Levenhagen, Deputy Chief-Bureau of Training and Safety



**BUREAU of FIRE  
PREVENTION and URBAN  
AFFAIRS**

**MASON J. POOLER  
DEPUTY CHIEF**

**MARK DOMBROWSKI  
LIEUTENANT**



## **Bureau of Fire Prevention and Urban Affairs**

The Bureau of Fire Prevention and Urban Affairs is responsible for reduction of potential risk of injury, death and property loss within the City of West Allis and inside State Fair Park. Risk reduction is accomplished through various methods including: 1) pre-incident **inspections and code enforcement**, 2) building **plan review**, and 3) post-incident **fire investigation**.

### **Inspections & Code Enforcement**

This West Allis Fire Department's Fire Prevention Bureau inspects all commercial properties as well as residential properties containing three or more families. These inspections are to educate the owners and occupants about the fire and life safety codes that reduce the risk to the occupants and property through the practice of fire prevention.

In 2012, the bureau switched from a bi-annual inspection cycle to an annual cycle for most occupancies. While this cycle change reduced the number of inspections performed annually by 41%, it has allowed fire inspectors to spend 20% more time performing each inspection on average. This has led to an increase in the quality of each inspection performed and has contributed to a decrease in outstanding violations.

<b>Activity</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Regular Route Inspection	4,289	4,268	4,388	7,558	7,213
Occupancy Permit Inspections	205	201	204	170	204
State Fair Park Inspections	167	126	156	177	107
Special Inspections – Complaints/Referrals	198	202	242	183	103
License Inspections – Liquor/Other	200	227	243	238	253
Re-inspections	781	667	1,008	1,397	913
	<b>5,840</b>	<b>5,691</b>	<b>6,241</b>	<b>9,723</b>	<b>8,793</b>

Inspection Hours	2,083	2,071	2,092	2,968	2,819
Violations Issued	1,904	1,871	2,009	2,975	3,377
Outstanding Violations as of 12/31/2014	128	374	538	888	1,421

Implementation of an internal inspection audit cycle has increased the number of inspections completed on time as well as an increase in re-inspections of outstanding violations. This has led to greater code compliance and a large decrease in outstanding violations. While the fire department does have citation power, the bureau has maintained an effort to work with property and business owners to solve fire code concerns before the issues escalate to the level of citation. The department has not had to issue a citation in the past two years.

<b>Compliance Actions</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
Pre-Citation Letters Issued	19	12	33	27
Citations Issued	0	0	1	5

## **Plan Review**

Another area of fire prevention is the plan review and site inspection of buildings under construction and those undergoing remodeling. Inspectors review building plans to assure necessary safety features are present as well as compliance of state fire codes is observed. Inspectors also oversee the installation of fire protection systems and assure that these systems are properly maintained. This level of review assures code compliance that provides safety for the occupants and emergency response personnel. This also provides the basic information for the pre-plan process. Plan review is an integral risk reduction component.

### **Plan Reviews:**

<b>Activity</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>	<b>2010</b>
Planning Commission	39	51	59	45	83
New Construction	16	7	6	6	6
Renovation/Remodeling	108	143	116	113	137
Fire Alarm Systems	54	40	41	40	41
Fire Sprinkler Systems	58	49	64	54	64
Other Fire Suppression	10	16	10	17	29
Under/Above Ground Storage Tank Plans	3	0	1	2	2
Petition of Variance	1	0	3	0	2
	<b>277</b>	<b>306</b>	<b>300</b>	<b>277</b>	<b>364</b>

**Site Inspections:**

Activity	2014	2013	2012	2011	2010
Fire Alarm Systems	51	51	38	58	79
Fire Sprinkler Systems	53	39	40	38	99
Fire Main	1	0	0	2	5
Fire Pump Inspection	0	1	0	0	0
Hood & Duct Fire Suppression Systems	9	11	2	12	10
Tent Inspections	17	11	16	22	13
Tank Inspections	15	3	41	18	20
	<b>140</b>	<b>116</b>	<b>137</b>	<b>150</b>	<b>226</b>

Activity	2014	2013	2012	2011	2010
Plan Review Hours	328	305	306	312	373
Site Inspection Hours	159	118	159	198	237
Fire Prevention Permits Issued	155	133	140	133	142
Fire Prevention Permit Fees	\$ 17,498	\$ 9,880	\$ 13,010	\$ 12,115	\$ 11,185
Estimated New/Remodel Construction	\$ 53,056,163	\$ 25,037,655	\$ 16,275,062	\$ 21,269,145	\$13,662,757

**Fire Investigation**

Fire investigation entails searching for the origin and cause for the fire. Identifying how and why each fire occurs helps provide information that can be used to educate citizens and prevent future fires. The Fire Investigation Team consists of eight members that are trained specifically in fire investigation. Two of these members have completed the National Fire Academy's "Fire/Arson Origin & Cause" 80 hour class in Emmitsburg, Maryland. Entrance into the class is very selective and only investigators that have obtained a high level of previous education and experience are considered for the class. This certification allows members to investigate high dollar loss and possible arson fires. This team works closely with the West Allis Police Department Arson Investigators on suspicious and suspected arson fires.

Investigated by	2014	2013	2012	2011	2010
Company Officer/Incident Commander	72	120	132	91	35
FD Fire Investigator	32	30	19	10	22
PD Arson Investigator	11	7	3	2	2

**State Fair Park**

The Wisconsin State Fair Park hosts a variety of events throughout the year. There are 56 permanent buildings inside the park, all of which require annual fire inspections. Additionally, several large events are hosted throughout the year that sees an influx of temporary stands set up within the park. Such events include the annual Wisconsin State Fair, Harvest Fest, Greek Fest, Indy Fest, and the ARCA racing series. The annual Wisconsin State Fair involves an additional 186 temporary stands set up with in the fairgrounds, all requiring fire inspections. In addition to the high profile events listed above, the Wisconsin State Fair Park hosted 350 smaller events throughout the grounds in 2014. Approximately half of these small events also warrant a fire inspection. The sporadic use of

both the permanent buildings and temporary stands used within the Wisconsin State Fair Park lends them to a wide variety of fire code concerns and require extra attention during every event.

A handwritten signature in black ink, appearing to read "Ma Pooler". The letters are cursive and somewhat stylized.

Deputy Chief Mason Pooler



BUREAU OF FIRE  
PREVENTION  
MASON J. POOLER  
DEPUTY CHIEF  
MARK DOMBROWSKI  
LIEUTENANT



CITY of WEST ALLIS  
FIRE DEPARTMENT

## 2014 Fire Prevention Bureau Accomplishments

### ACCOMPLISHMENT #1:

Succession planning for the retirement of Assistant Chief Martin King.

#### Description:

- Assistant Chief King decided in the second half of 2014 that he would retire in February of 2015.
- Having worked in his current position for 15 years, he had a lot of knowledge and expertise that had to be passed on.

#### What is involved in the process:

- Working with the Lieutenant of the Fire Prevention Bureau and all six of the fire inspectors to disseminate as much knowledge as possible before retirement.

#### Why it is important:

- The citizens, contractors, and business owners need to experience business as usual after AC King's retirement. Maintaining the continuity of the Bureau is expected by all.

### ACCOMPLISHMENT #2:

Reduction of outstanding fire code violations.

#### Description:

- Historically, up to 15% of fire code violation remained uncorrected for over 90 days.
- After realizing how long many fire code violations were remaining uncorrected, steps were taken to follow through and take corrective action.

### **What is involved in the process:**

- Three reasons were found as to why violations were allowed to remain uncorrected for so long:
  - 1) Documentation errors
  - 2) Lack of follow up after inspections
  - 3) Failure of business/property owners to take corrective actions
- Documentation errors were identified and corrected. Increased emphasis on proper documentation was given to all fire inspectors.
- A lack of basic scheduling tools had contributed to lack of follow up. Each inspector was given basic training in the scheduling component of Microsoft Outlook. Inspectors now schedule follow up appointments on a calendar that is shared with Fire Administration.
- Business/property owners that failed to fix violations after 90 days now receive a pre-citation letter. These letters are very effective. No citations have been issued to date as the pre-citation letters are being taken seriously, resulting in the necessary corrections being taken.

### **Why it is important:**

- Keeping outstanding violations to a minimum is key to reducing the risk of fire in the community.

### **ACCOMPLISHMENT #3:**

#### Successful Fire Prevention Week presentation at local schools.

#### **Description:**

*Number of schools:* 22 (increased from 16 in 2013)

*Total students contacted:* 3,244 (increased from 3,171)

*Grades:* Targeted K4-3<sup>rd</sup>

*Changes from last 2013:* The school district began to offer 4K, which increased the number of classes we had to present to. Most 4K students were added to existing elementary schools; however, three stand-alone 4K buildings were also added. Additionally, two new private schools were added.

*Synopsis of Program:* Four stations:

- 1) Sound the Alarm: We show students the smoke alarm and explain that the alarm works by detecting smoke in your home. We hope to teach them that when there is smoke, there is probably a fire somewhere, and that smoke is bad for them. We explain that it is important to know the sound of the alarm and to practice fire drills at home like they do at school.
- 2) Crawl Low and Go: We explain to students that when they hear a smoke alarm sound, they need to get out of their house or apartment quickly. We explain that smoke is deadly and that if possible, they should choose an exit route that is free of smoke. If they must escape through smoke, however, they should crawl low on their hands and knees down where the air is cleaner and cooler.

- 3) Firefighters Wear Funny Stuff: A firefighter talks about the special clothes and equipment used for protection, pointing out each item as the other firefighter puts it on. We explain that firefighters can be hurt in the fire and need special equipment to fight fires, or rescue people from inside building homes and buildings and that there is no need to be fearful of firefighters.
- 4) Photo with Sparky the Fire Dog and Fire Truck: Self-explanatory.

Feedback from all teachers and principals was overwhelmingly positive. Twice we heard the comment, *“This was the best Fire Prevention Week presentation that we have ever had.”*

4k students and younger were given “Brecker Bunny” safety books. 5K and older students were given book marks with fire safety tips written on them. Most of the school staff commented on how they liked the give-a-ways.

Sparky, the Fire Dog, portrayed by our personnel in costume, made an appearance and posed for pictures with each class. The children seemed to love this and all of the school staff seemed to enjoy Sparky’s presence.

While at Irving School, members had the opportunity to educate a child with a severe hearing impairment. Upon returning home, the child expressed fear to his parents that he would not be able to hear a smoke alarm going off in the middle of the night. The mother, in turn, called the Fire Prevention Bureau seeking advice. Through grant money, the department has acquired specially designed smoke alarms that alarm at a lower and louder tone and vibrate the resident’s bed, designed for people with hearing impairments. Within 24 hours, a fire department engine was able to stop by and install the device in the child’s bedroom, free of charge to the family.

All officers that attended presentations were given feedback forms to fill out and return. All feedback forms were positive.

**What is involved in the process:**

- Scheduling visits with all area schools and fire department personnel.
- Developing a slightly new and different program from the year before.

**Why it is important:**

- Instilling fire safety messages in children at a young age is key to teaching children how to react if a fire occurs.

#### **ACCOMPLISHMENT #4:**

##### Revamping of the Survive Alive program.

###### **Description:**

- The Survive Alive program has been a successful endeavor since 1985.
- The facility was in need a remodel.

###### **What is involved in the process:**

- Firefighter Dan Hauenstein wrote for and was approved for a grant through FEMA to remodel and modernize the program.
- Firefighter Hauenstein spent hours (many on his own time,) painting, decorating, and remodeling the facility.
- An old, standard definition television and VHS player was replaced with a modern flat panel television and DVD player.
- Much of the program is now run by an electronic tablet computer.
- Feedback forms for teachers are now distributed electronically instead of by paper.
- The program content is now more modern and geared towards today's children, as opposed to the dated program that was in place.

###### **Why it is important:**

- Our Survive Alive House was the first in the state and has been a model for other such houses across Wisconsin.
- Over 30,000 children have been taught fire safety lessons in our Survive Alive House since its creation.
- In order to effectively teach students, the program needs to be current and relevant and the teaching environment needs to be modern and comfortable.

## **2015 Fire Prevention Bureau Goals**

#### **GOAL #1:**

Complete data conversion from Zoll RMS to Phoenix RMS and provide preplan information to crews in the field.

###### **Description:**

- As we transition to new record management software, past data such as inspection records and building preplan information must be formatted and imported from old vendor to new vendor.
- Currently this information is not available to crews in the field. Having access to this information will allow for safer and faster mitigation of emergency incidents.

**What is involved in the process:**

- Hundreds of man hours will go into pulling out data from our current record management systems in preparation for export into the Pro Phoenix record management system. Data will be “scrubbed,” eliminating bad data that has built up over years.

**Why it is important:**

- ProPhoenix software has already been adopted by the police department. Having both departments on the same system will allow easier and more accurate sharing of data and down the road will result in less work for IT as they only deal with one software system as opposed to two.
- More robust reporting capabilities.
- Ability for emergency crews to access critical data in the field. The current RMS system does not have the ability to be accessed out of the fire station.

**GOAL #2:**

Roll out Pro Phoenix mobile inspection app.

**Description:**

- The new Pro Phoenix software comes with various “apps” that will facilitate in day-to-day operations of the department, including fire inspections. We plan on rolling out the inspection module first as it ties in with many other aspects of the department.

**What is involved in the process:**

- Once the above Zoll RMS to ProPhoenix RMS is completed in Goal #1, we need to purchase tablets, configure the software, and train the fire inspectors to use the program.

**Why it is important:**

- Currently the fire inspectors rely on paper inspection forms. These use a tremendous amount of paper and also run a high risk of human error as paper can be lost and/or damaged. Also, data entry errors occur as inspectors transcribe field findings from hand-written paper notes into the computer back at the station.

**GOAL #3:**

Maintain less than 3% outstanding fire code violations over 90 days old.

**Description:**

- Code enforcement is one of the most important aspects of the Fire Prevention Bureau. While occasionally, code violations go uncorrected longer than desired; the bureau has set a goal to minimize violations that go uncorrected for over 90 days.

**What is involved in the process:**

- Maintaining accurate and organized records.
- Working with business owners, property managers and contractors to make sure expectations are clear and that the fire code is followed.

**Why it is important:**

- Keeping fire code violations to a minimum ensures that life and property are as safe as possible.
- Staying on top of violations keeps the city's liability to a minimum.

**GOAL #4:**

Work with Building Department to streamline permitting process.

**Description:**

- Currently the city Building Department and Fire Department have separate permitting processes. This is very confusing for property owners and contractors who are working in the city. They have to go to City Hall for some permits and the Fire Administrative Building for other permits. Many projects require permits from both departments, both with different fees.

**What is involved in the process:**

- The Building department is taking the lead on this project by using a software program called BP Logix, which allows citizens to create an account and pull certain permits on line.
- Once the Building Department gets the software up and running, the fire department hopes to "piggyback" onto the process, allowing people to pull all permits and pay all fees online.

**Why it is important:**

- People expect to be able to take care of all permits and fees in one, convenient location.
- The city wants to be viewed as "business friendly" and to make doing business here easy and convenient.

**GOAL #5:**

Encourage and track continuing education for fire inspectors.

**Description:**

- Historically, fire inspectors have had limited continuing educational opportunities.

**What is involved in the process:**

- Searching out and disseminating continuing education opportunities to fire inspectors and those who have shown an interest in the position.
- Utilizing personnel area of RMS to track continuing education hours more consistently than we have been.

**Why it is important:**

- Expectations of fire inspectors are changing.
- Building construction techniques are changing and fire inspectors need to be able to identify new hazards.
- Technology is playing an increasingly large role in fire detection systems.

**GOAL #6:**

Readdress the way the department staffs fire investigators.

**Description:**

- Historically, most fire inspectors were members of the 8 hour administrative staff that would either investigate on duty or get called in after hours. As most of the experienced investigators have retired, we have a new group of investigators, many of whom are 24 hour personnel.

**What is involved in the process:**

- Researching various staffing models for a position.
- Many smaller suburban departments have begun a program in which they share fire investigators. We have begun preliminary research into what would be required to participate in this program.

**Why it is important:**

- The department is required to investigate all fires for origin and cause.
- While we have several investigators, the labor-management agreement makes it difficult to require certain members to remain “on-call” after hours.
- Likewise, if we look at requiring a minimum amount of fire investigators per 24 hour shift, this would be subject to contract negotiation.
- Providing the initial fire investigation education is time consuming and costly. In order to remain a fire investigator, continuing education must be sought out. This also comes with a price tag that we struggle to budget for.

**GOAL #7:**

Encourage and track continuing education for fire investigators.

**Description:**

- Currently, most fire investigation education is tracked by individual fire investigators.

**What is involved in the process:**

- Seek out and disseminate fire investigation educational opportunities.
- Utilize the new RMS software to track continuing education electronically.

**Why it is important:**

- The department is required to investigate all fires for origin and cause.
- If subpoenaed for a fire investigation case, any involved fire investigators will have their educational background scrutinized.
- In order to do a thorough job and to limit liability, the department should maintain good fire investigation education records for all investigators.

**GOAL #8:**

Provide smoke detectors and carbon monoxide alarms to at risk portion of the community.

**Description:**

- The department currently distributes smoke detectors and carbon monoxide alarms to low income and elderly residents at their request, as budgetary constraints allow.
- We would like to be more aggressive with distributing the devices to residents as the need is identified.
- The department has \$6,000 set aside to purchase devices.

**What is involved in the process:**

- Creating a plan to identify residents in need of smoke detectors and carbon monoxide alarms.

**Why it is important:**

- Assuring that residents have functioning smoke detectors and carbon monoxide alarms will reduce the number of fire deaths and incidents of carbon monoxide poisoning in the city.
- Earlier notification of fires will get emergency apparatus on scene sooner, decreasing property loss due to fires.

WEST ALLIS FIRE DEPARTMENT

# STANDARDS OF COVERAGE

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MAY 8, 2015



7332 WEST NATIONAL AVE  
WEST ALLIS, WI 53214



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SECTION ONE:

# INTRODUCTION



WEST ALLIS FIRE DEPARTMENT  
STANDARDS OF COVERAGE

# INTRODUCTION

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## INTRODUCTION

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The Allis-Chalmers Corporation, from which West Allis gets its name, dominated the Milwaukee manufacturing scene for most of the 20th century with its bright orange tractors. At its height, Allis-Chalmers employed tens of thousands of workers to build farm tractors and turbines for the hydroelectric industry. As the economy changed to favor jobs in the service industry, however, many manufacturing jobs were moved overseas. In 1986, nearly a century after its establishment, Allis-Chalmers closed its doors. In its wake it left a vibrant community with a shared sense of purpose and pride.

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## CITY PROFILE

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The City of West Allis, incorporated in 1906, lies immediately west of the City of Milwaukee. With its 60,411 residents in 11.4 square miles, West Allis is the most populous suburb in Milwaukee County and the 10<sup>th</sup> largest city in Wisconsin.

West Allis' population is predominately white, with a growing Hispanic community. As of 2010, 86.4% of the population is made up of non-Hispanic whites, 10.7% are Hispanic, and 2.9% are either African-American or Asian, according to the US Census Bureau. Nearly half of the adults living in West Allis are married, and the median household income is \$43,652. The city's unemployment rate, at 6.4%, is higher than the national unemployment rate of 5.4% in 2013. According to current census data, 14.6% of the city's residents report income below the poverty level. Additional details include:

Median Age	38
Total Households	27,450
Number of Owner Occupied Units	15,073
Percentage of High School Graduates	89%
Percentage of College Graduates (Bachelor Degree)	22%

### Public Safety Services

Fire Stations	3
Police Stations	1.5

### Public Schools

Elementary Schools	9
Middle Schools	2
High Schools	2

**Private Schools**

- Lamb of God (k3-8)
- Grace Christian Academy (K3-12)
- Mary Queen of Saints (K3-8)

**Colleges**

- Milwaukee Area Technical College
- Sanford Brown College
- Marian University

**Nursing Homes**

- Ruth Hospice
- Mary Jude Nursing Home
- Village at Manor Park
- New Samaria
- Mitchell Manor
- Allis Care Center
- Heritage Square

**Hospitals**

The City of West Allis is fortunate to have a hospital, Aurora West Allis Medical Center, located centrally in the city. In addition, the City of West Allis is located within a four mile radius of three other hospitals which includes a Level I Trauma Center.

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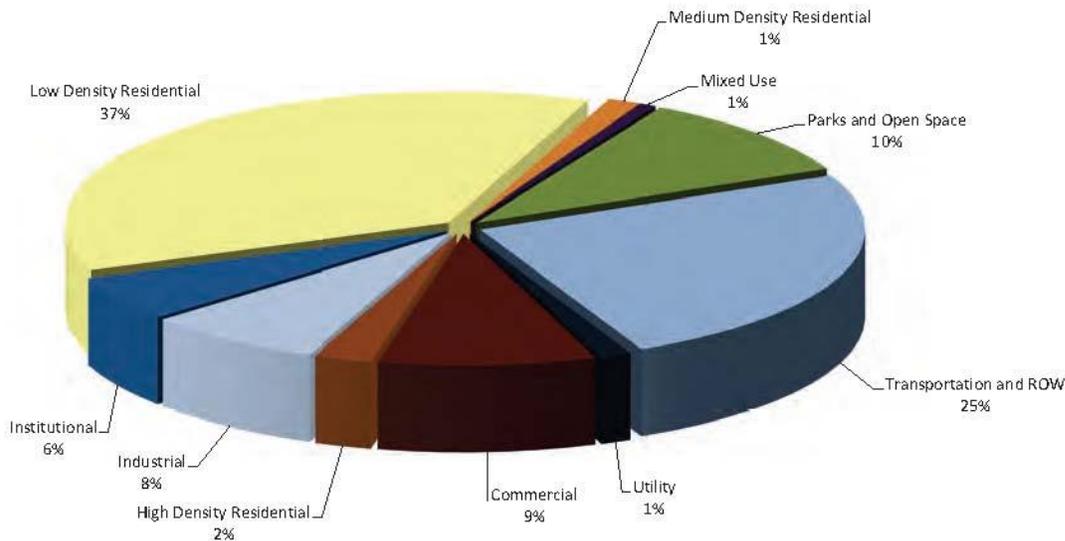
## CITY OF WEST ALLIS LAND USE

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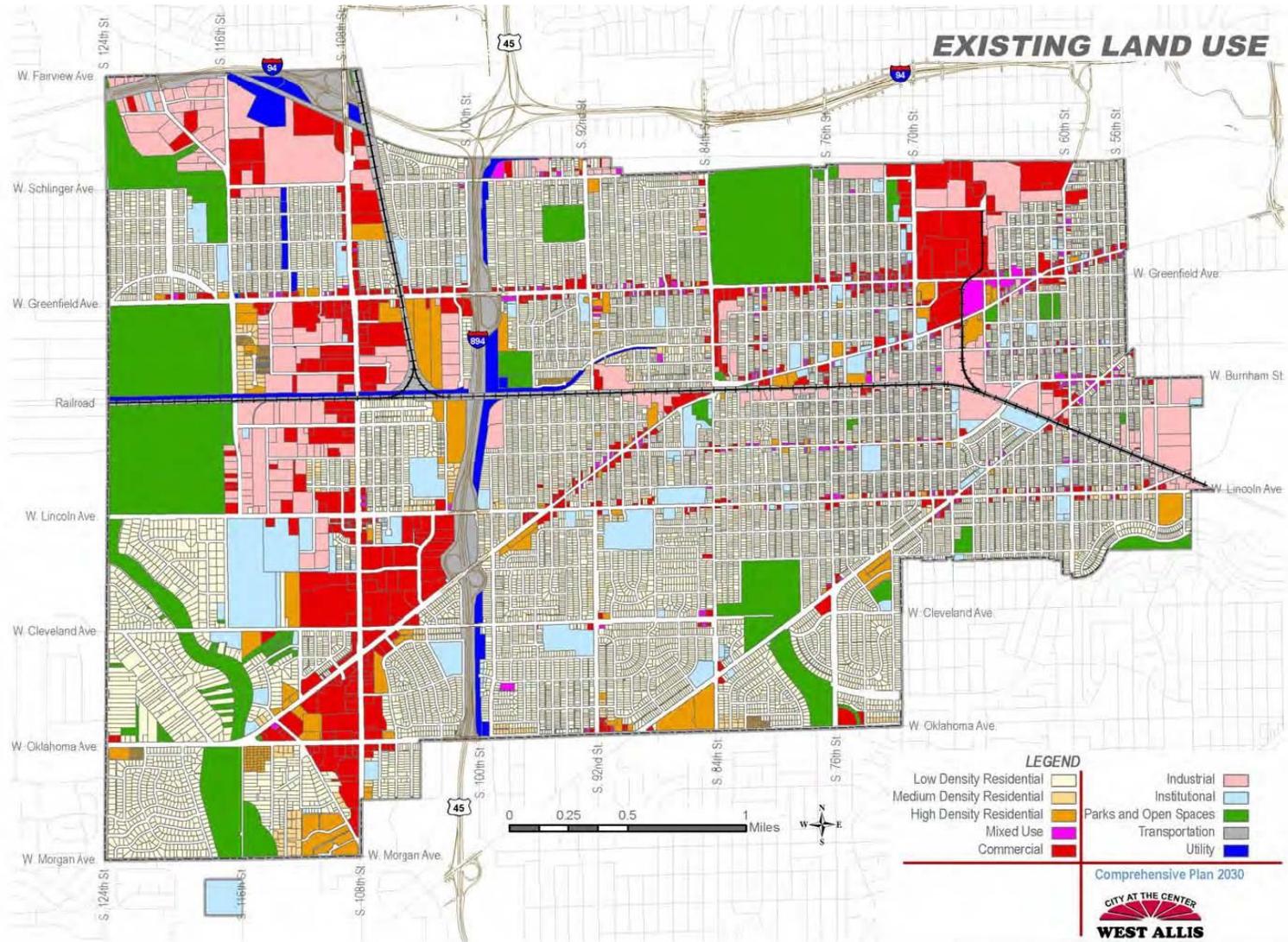
The City of West Allis is characterized by a high percentage of residential properties, which account for roughly 40% of the city's land. Residential properties are categorized as high, medium, or low density. High-density use indicates 15-20 dwelling units per acre. Medium-density use indicates 10-14 dwelling units per acre, while low-density use indicates nine dwelling units per acre. Commercial and industrial properties occupy 15% of the city's land, typically in the vicinity of major transportation corridors.

Parks and open space account for ten percent of the city's land. Some of the larger parks in the area include Honey Creek Park, Greenfield Park, and McCarty Park. The city's most significant natural resources include the Root River, Hale Creek, and Honey Creek areas. These resources encompass 800 acres of land.

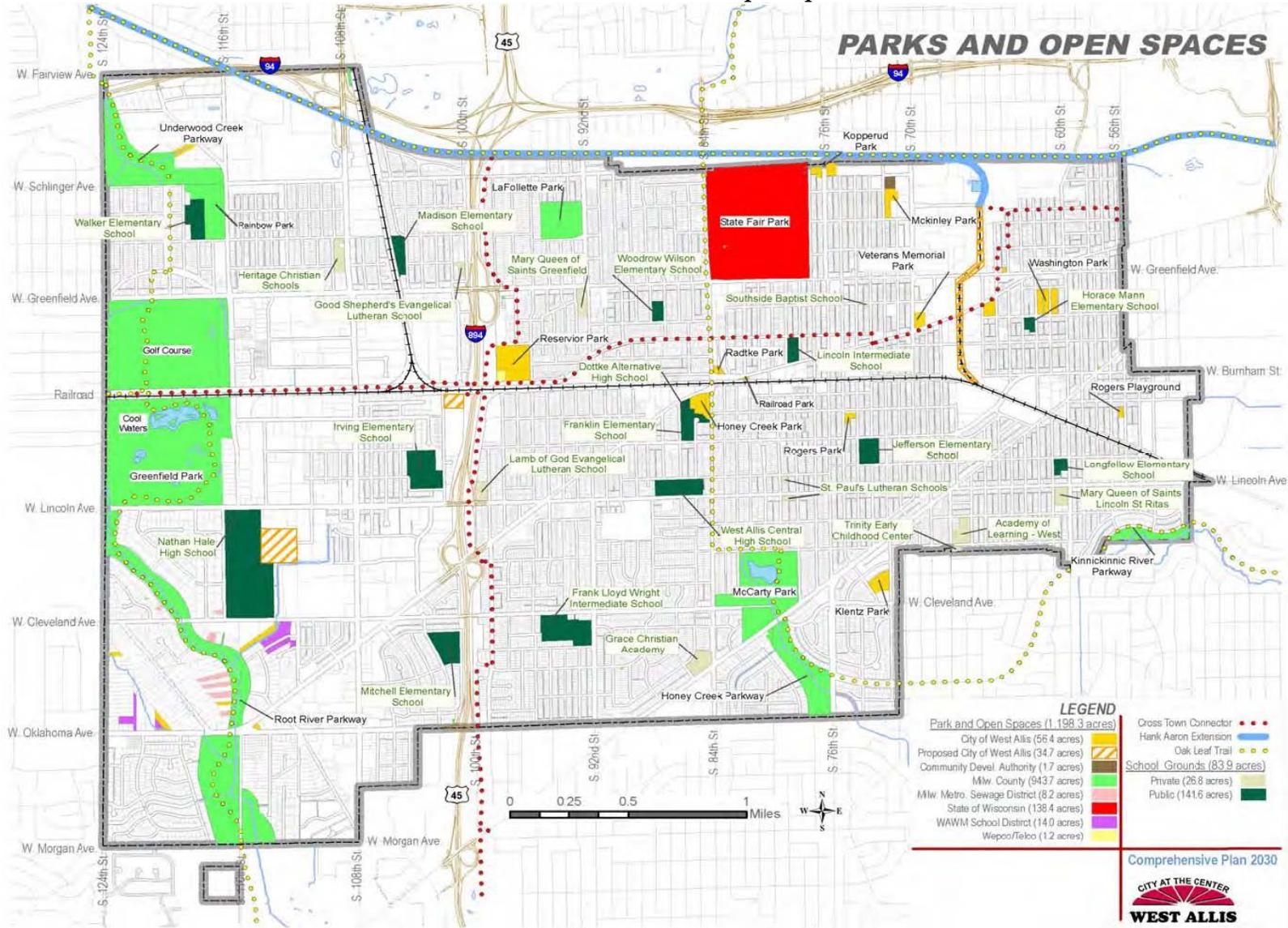
### 2014 Land Use Pie Graph



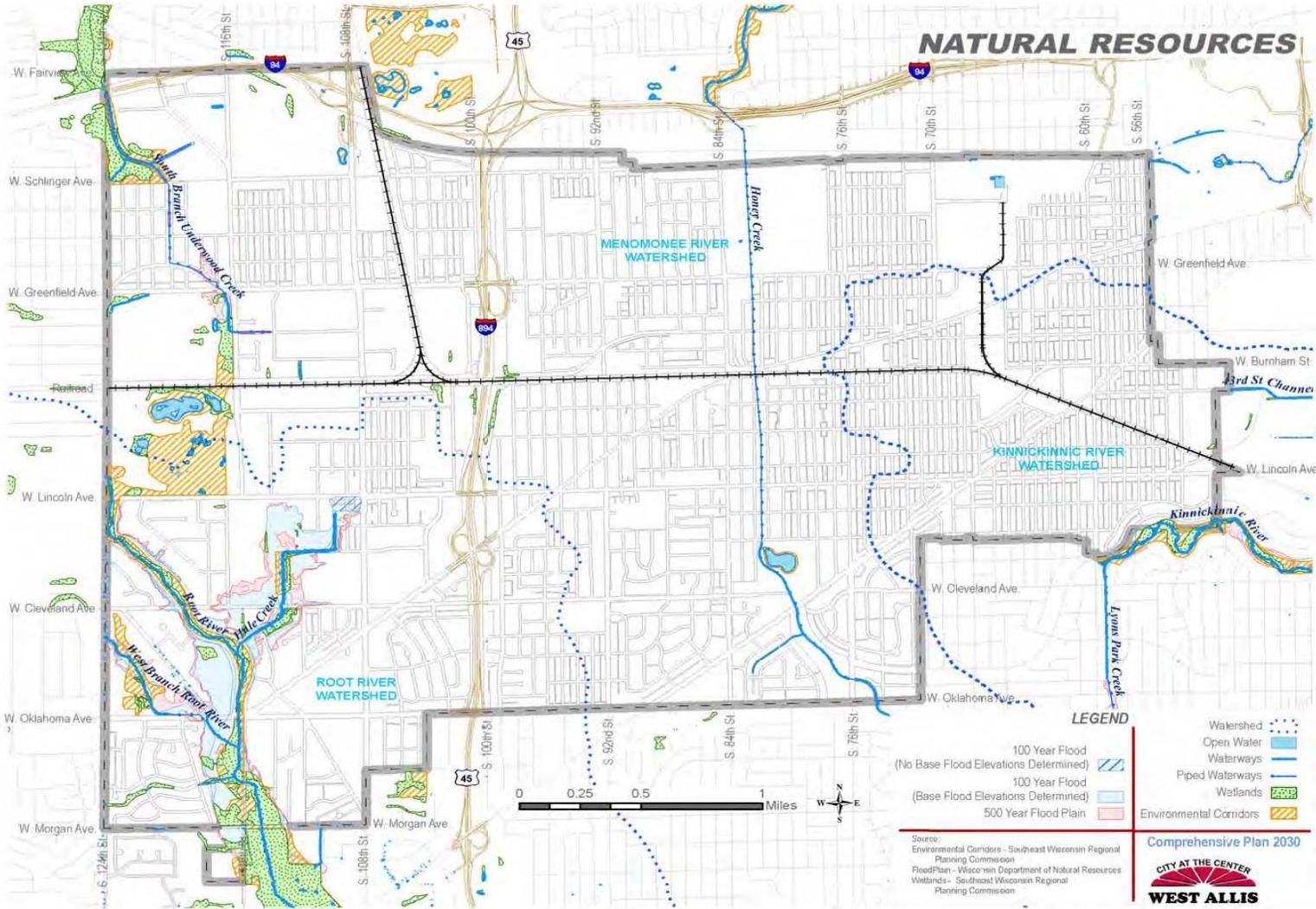
# 2014 Land Use



# Parks and Open Space 2014



# 2014 Natural Resources



**HISTORY OF THE WEST ALLIS FIRE DEPARTMENT**

The West Allis Fire Department was established in 1906 as a small but dedicated band of volunteers who responded to fires on horseback. In February, 1922, the volunteers disbanded and a small group of “paid on call” firefighters were called upon to protect the city. Three years later, the fire fighters were placed on the city government payroll as a full time fire department operating out of a single fire station.

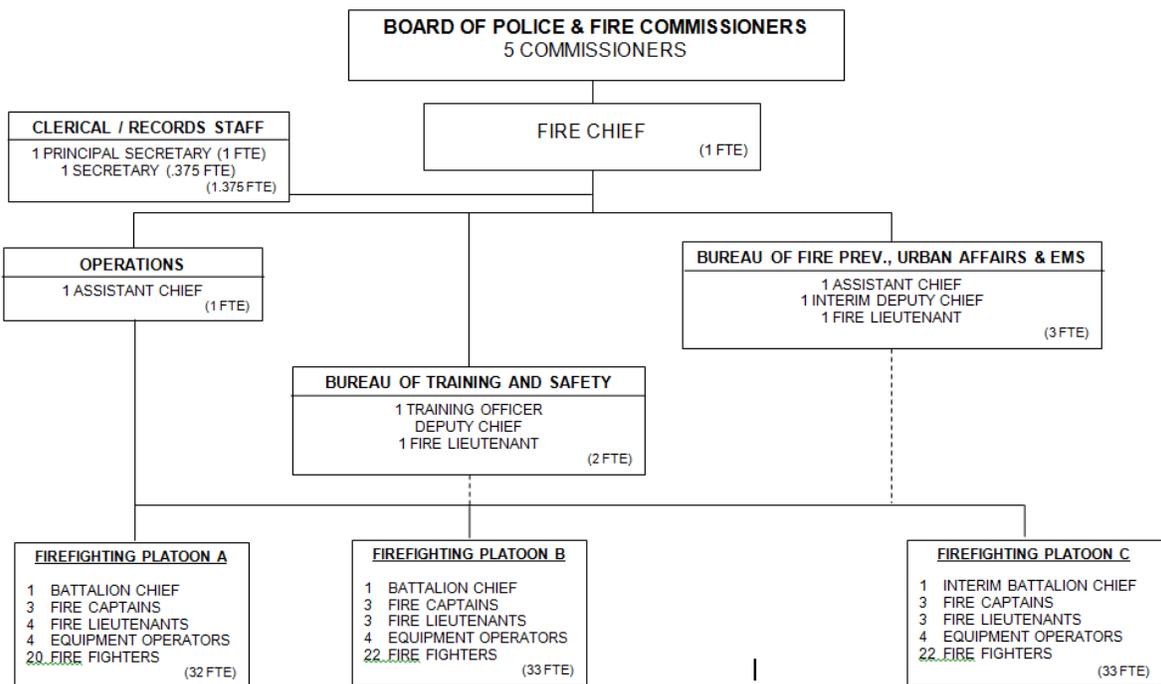
**GOVERNANCE IN THE CITY OF WEST ALLIS**

The City of West Allis maintains a Mayor and Common Council form of government. The fire department is directly governed by a Board of Police and Fire Commissioners. Police and Fire Commissioners are appointed by the Mayor and approved by the Common Council. The City of West Allis Fire Department is a career fire department, overseen by a Fire Chief.

**FIRE DEPARTMENT STAFFING**

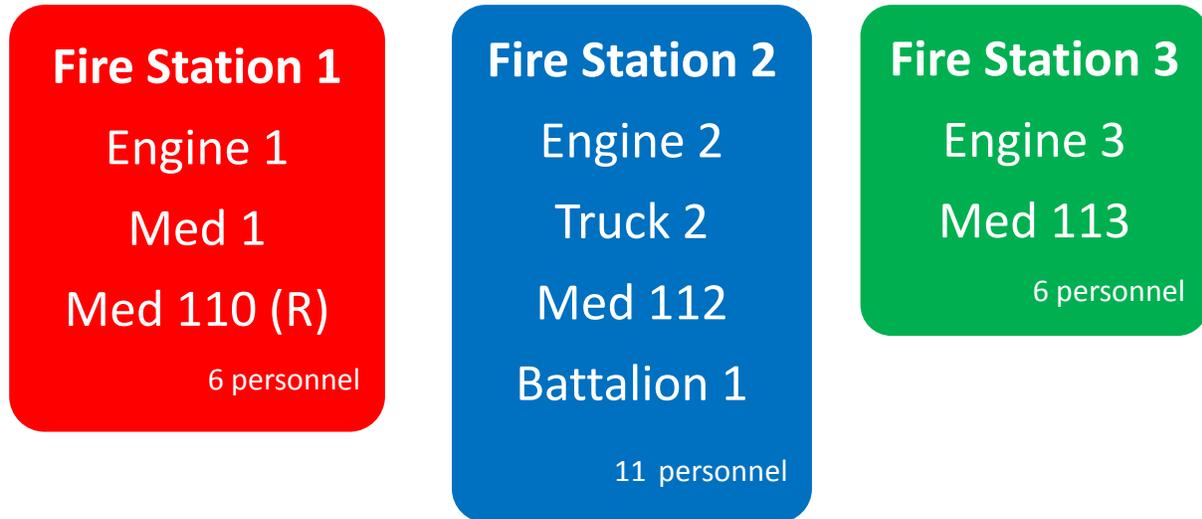
Under supervision of the Fire Chief, four administrative chief officers support the operations of the department. These chief officers are the Assistant Chief of Fire Operations, Assistant Chief of Emergency Medical Services & Fire Prevention, Deputy Chief of the Bureau of Training & Safety, and the Deputy Chief of EMS.

**ORGANIZATIONAL CHART  
FIRE**



TOTAL POSITIONS: 107 (106 City FTE)

The West Allis Fire Department is comprised of 105 sworn members and one civilian Administrative Assistant. Three (4 person) engine companies, one (4 person) aerial ladder company, three (2 person) ALS ambulances, and one battalion chief respond from three fire stations to approximately 8,200 emergency and non-emergency calls per year. The department staffs a minimum of 23 personnel per shift.



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#### MAJOR MILESTONES IN THE PAST FIVE YEARS

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##### **Implementation of Electronic Patient Care Reporting**

In October 2009, The West Allis Fire Department implemented a system of electronic patient care reporting (ePCR) for all EMS patient contacts. Electronic documentation has enhanced operational efficiency, improved access to patient records, and facilitated more accurate data collection. Patient records that have been established in the ePCR system may be accessed at any future time, which allows for more efficient reporting of subsequent patient contacts. In addition, electronic patient care reports have proven useful in identifying areas of need and in achieving quality improvement. Electronic documentation has allowed the department to achieve higher EMS collection rates, ultimately increasing financial performance.

##### **Introduction of Mobile Data Computers into Fire Apparatus**

In October 2009, the West Allis Fire Department deployed mobile data computers (MDC's) on all fire and EMS apparatus. Use of MDCs has produced more accurate time stamping which, in turn, has allowed for a more critical evaluation of response time data.

### **Automatic Entry of Public Safety Answering Point (PSAP) Data into Reports**

The public safety answering point (PSAP's) is located at the West Allis Police Department dispatch center. On April 14, 2011, PSAP data began to automatically migrate into corresponding incident reports. This has allowed for a more critical evaluation of call processing procedures.

### **Deployment of Additional Advanced Life Support (ALS) Ambulances**

In July of 2011, the West Allis Fire Department modified its deployment of EMS transport units so as to provide a higher level of care to those in medical need. The department transitioned from two basic life support (BLS) ambulances and one advanced life support (ALS) ambulance to three ALS ambulances, one of which is housed at each fire station in the city. These three ALS ambulances are equipped with a full complement of advanced life support equipment and are staffed by a minimum of two firefighter/paramedics. For emergency medical responses that are determined to be ALS in nature, the closest engine or truck company is dispatched along with the ALS ambulance. This deployment of additional ALS ambulances has resulted in paramedics being involved in all patient contacts, thus improving the EMS service that is provided by the department.

### **Emergency Medical Dispatching**

In 2012 the fire department began implementing EMD priority dispatching. Certain fire department staff personnel and the city's dispatchers went through training to implement EMD. EMS calls are prioritized based off of answers to medical related questions, the calls are coded, resources are sent and the dispatchers provide pre-arrival instructions to the callers.

### **Shared Services Fire/EMS/Special Operations Response**

In 2014 the West Allis Fire Department joined nine other Milwaukee County fire departments in signing a Shared Services Memorandum of Understanding (MOU). This MOU provided a legal basis for dispatching the closest, most appropriate resource to the scene of an emergency incident regardless of jurisdictional identity.

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## **RECENT DEVELOPMENT IN THE SERVICE AREA**

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### **Highland Commons**

In August of 2012, Boston Capital, a private sector company that provides real estate financing and investment in affordable multifamily housing, opened the Highland Commons. The Highland Commons contains 50 one-room apartments. It will house individuals and families whose income is less than 60% of the area's median income, \$44,136. Prospective residents must be referred by their Medicaid HMO or by the Service Access to Independent Living program. Residents have access to supportive services through TLS Behavioral Health during their transition into the complex.

### **Heritage Square**

Heritage Square is a residential facility that offers personalized housing programs such as senior living, assisted living, and a memory care unit. Heritage Square opened its senior housing in April 2009, with a total of 122 one and two-bedroom apartments. In September 2009, an additional 38 units were opened in the assisted living and memory care wing of the building. Heritage Square prides itself on providing a continuum of ongoing care and transition for seniors.

SECTION TWO:  
**RISK ASSESSMENT**

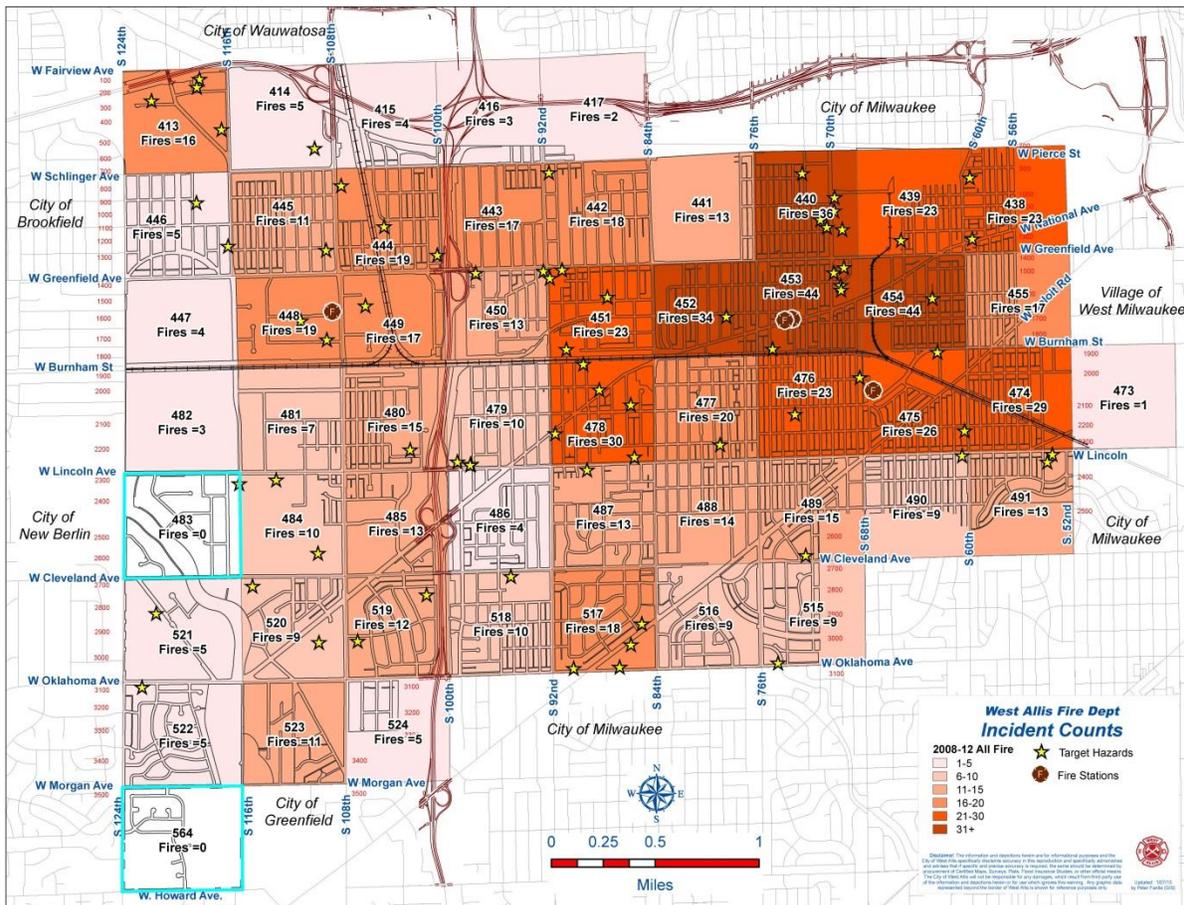


WEST ALLIS FIRE DEPARTMENT  
STANDARDS OF COVERAGE

# RISK ASSESSMENT

Risk assessment is an imperative task that must be performed to determine vulnerability present in the community. The City of West Allis Fire Department performed its original risk assessment in 2001/2002. As development continued to occur, the risk assessment was updated so as to keep pace with these changes. The current risk assessment is a stand-alone document.

## PLEASE SEE RISK ASSESSMENT DOCUMENT



SECTION THREE:

**TIME AND ON-SCENE  
PERFORMANCE EXPECTATIONS**



WEST ALLIS FIRE DEPARTMENT  
STANDARDS OF COVERAGE

# TIME AND ON-SCENE PERFORMANCE EXPECTATIONS

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## INTRODUCTION

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Communities have grappled with emergencies since time immemorial. The modern fire department has become a necessity to citizens that place their lives in the hands of professional and volunteer firefighters. Development of the 911-system in the late 1950s has positively contributed to public safety.

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## MISSION STATEMENT

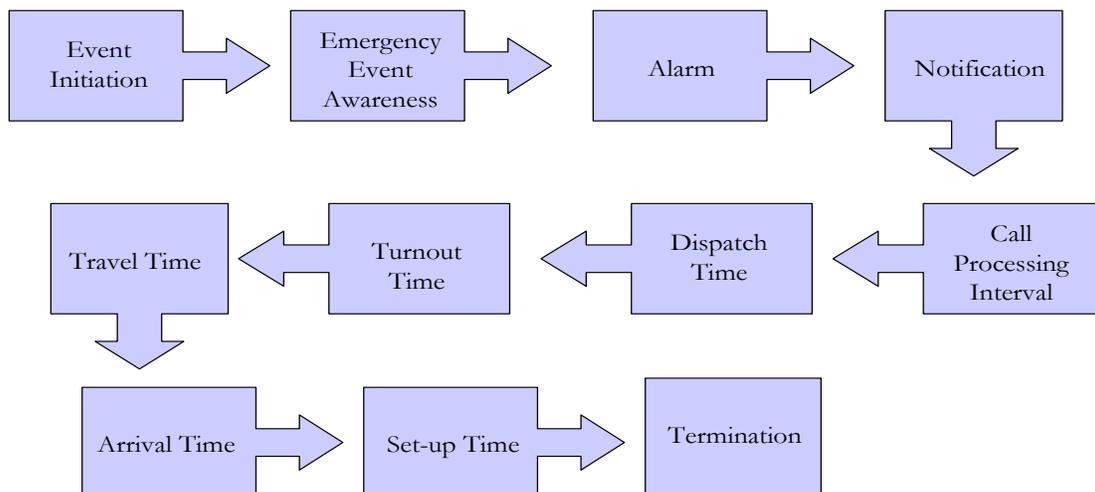
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The West Allis Fire Department's most critical goal is to fulfill its mission statement: *"(We are) organized and dedicated to serve, protect and preserve the life and property of the citizens and businesses of West Allis. We will provide this service with the highest level of professionalism we are capable of delivering in fire prevention, public education, incident stabilization and emergency medical services as effectively as possible. Twenty-four hours a day, seven days a week."* The West Allis Fire Department ensures that its equipment and personnel provide the highest quality of emergency service.

The West Allis Fire Department prides itself on its ability to respond to emergencies quickly and professionally. Studies have confirmed that the time taken to respond to an emergency situation has a direct impact on the situation's outcome. The following chart displays the individual stages of an emergency incident. Each stage organizes the emergency activation system from start to finish.

## Emergency Activation System

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## TIME POINTS AND TIME INTERVALS

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**Event Initiation:** The point at which factors occur that may ultimately result in an activation of the emergency response system. Precipitating factors can occur seconds, minutes, hours, or even days before a point of awareness is reached.

**Point of Awareness:** The point in time when a human being or mechanical device becomes aware of an emergency situation that requires intervention. The need to activate the emergency response system becomes apparent.

**Alarm:** The point at which emergency response system activation is initiated. The interval between awareness of the event and notification of the emergency response system is not constant.

**Notification:** The point at which an alarm is received by the West Allis Public Safety Answering Point. This transmission of alarm may be received via the Enhanced 9-1-1 System or through an alarm-monitoring agency via a non-emergency telephone number.

**Alarm Processing:** The interval between the first ring of the dispatcher's telephone and the time the computer-aided device (CAD) and dispatcher alert fire station(s) and/or fire company(s). Alarm processing and dispatching are provided to the City of West Allis through the West Allis Police Department Dispatch Center.

**Dispatch Time:** The point in time when the dispatcher, having selected appropriate units for response with assistance from the CAD system, initiates the notification of these units.

**Turnout Time:** The interval between the activation of fire station alerting devices and the time when the responding crew/s leave their respective stations. During turnout time, crews cease other activities, don appropriate protective clothing, determine the location of the call, and board fire apparatus. The apparatus operator is expected to address the safety of his crew, making sure each individual is seated and belted, before the apparatus begins to respond.

**Travel Time:** This interval begins at the termination of the turnout time and ends when the responding unit marks arrival on scene.

**Arrival Time:** The point in time when the assigned apparatus arrives on scene.

**Initiating Action:** This interval begins when the first fire company arrives on scene to initiate emergency mitigation.

**Termination of Incident:** The point in time when assigned companies have completed the assignment and are available to respond to another incident.

Described above are eleven essential steps that will result in the activation of emergency services and mitigation of the emergency incident as outlined in the *Fire & Emergency Service Self-Assessment Manual 8<sup>th</sup> Edition*. If one step should not occur, the entire sequence of events will be compromised and ultimately, successful mitigation of the emergency incident will not occur.

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## FIRE ALARM RESPONSES

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The West Allis Fire Department's response to a structure fire, whether residential or commercial, consists of three engine companies, one truck company, one ALS ambulance, and two chief officers. Multi-family dwellings receive an additional ALS Unit. The minimum number of personnel initially responding to the majority of the city's structure fires is 20. Station location allows the fire department to respond to any call for fire suppression with an effective, professional response force.

Once a structure fire is confirmed, the Incident Commander (IC) will initiate a "working still alarm" response. Upon initiation of a "working still alarm", additional apparatus, equipment, and personnel respond to the scene and move up to fill a vacant fire station. All West Allis Chiefs are notified via text alert. A mutual aid engine, truck company and 2 additional chiefs respond to the incident, increasing the on-scene firefighting force to 30/32 personnel. A mutual aid engine company is assigned to Fire Station 3, becoming available for subsequent responses or assignment to the initial incident if required.

In April of 2006, the Mutual Aid Box Alarm System (MABAS) was approved for operation in Wisconsin as a means to deploy fire, rescue, and EMS resources for multi-jurisdictional response. The commander of any incident may request MABAS Box Alarm activation. This is accomplished through direct contact with the MABAS Dispatch Center by means of a dedicated radio channel.

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## EMERGENCY MEDICAL SERVICE RESPONSES

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The West Allis Fire Department provides emergency medical services at the Advanced Life Support (ALS) transport level. The department maintains three ALS ambulances, one at each fire station. Minimally, these units are staffed by two firefighter/paramedics who maintain State of Wisconsin Paramedic licensure. When staffing allows, a third member of the department is assigned to each ALS ambulance. The West Allis Fire Department also maintains EMS mutual aid agreements with neighboring municipalities. Therefore, when West Allis Fire Department resources are stretched to their capacity, emergency medical response and transport is provided by mutual aid partners. A fourth ALS unit is placed in service when staffing allows, which is typically about 4-5 months out of the year.

The West Allis Fire Department has a growing number of personnel (62) who maintain State of Wisconsin Paramedic licensure. This allows for the assignment of ALS personnel to engine and truck companies on a regular basis, thus increasing the availability of advanced medical care to the city's residents and visitors during periods of resource depletion.

The department's paramedic program operates under the Milwaukee County Emergency Medical System (MCEMS). MCEMS provides education, funding, medical control, and consistent quality improvement not only to the West Allis Fire Department, but also to seven Milwaukee County municipal fire departments that operate at the ALS level.

**NFPA STUDY: QUANTITATIVE EVALUATION OF FIRE AND EMS MOBILIZATION TIMES**

Research has been conducted to evaluate the current standards and benchmarks established by the National Fire Protection Agency (NFPA) with regards to alarm handling and turnout times. The Fire Protection Research Foundation examined and tested the attainability of standards documented in the following literature: NFPA 1710 *Standard for the Organization and Deployment of Fire suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* and NFPA 1221 *Standard for the Installation, Maintenance, and Use of Emergency Services Communications System*. In its final review, the Fire Protection Research Foundation indicated that current standards outlined in NFPA 1710 and NFPA 1221 may be unrealistic.

NFPA 1221 requires that 90% of alarms be processed within 60 seconds, and that 99% of alarms be processed within 90 seconds. This is known as alarm handling time.

NFPA 1710 defines the benchmark for career fire departments to place emergency response units (ERU's) en route to an emergency. EMS ERU's must mark en route within 60 seconds 90% of the time, and fire ERU's within 80 seconds 90% of the time. This is known as turnout time.

The Fire Protection Research Foundation analyzed 13,463 alarms of fire and 66,202 requests for EMS response processed by 14 career fire departments. Although there are always assumptions and limitations in quantitative evaluations, analysis of the data revealed as follows:

**Alarm Handling Time**

<b>Emergency Response</b>	<b>Time Frame (seconds)</b>	<b>Percentage (%)</b>
Fire	92 seconds	90%
EMS	84 seconds	90%

**Daytime Turnout Time – (0600-1800)**

<b>Emergency Response</b>	<b>Time Frame (seconds)</b>	<b>Percentage (%)</b>
Fire	123 seconds	90%
EMS	109 seconds	90%

**Evening Turnout Time – (0000-0600)**

<b>Emergency Response</b>	<b>Time Frame (seconds)</b>	<b>Percentage (%)</b>
Fire	158 seconds	90%
EMS	144 seconds	90%

### ALARM HANDLING TIME

The interval between the first ring of the dispatcher’s telephone and the time the computer-aided device (CAD) and dispatcher alert fire station(s) and/or fire company(s).

Alarm Handling Times					
	2010	2011	2012	2013	2014
			EMD Fully Implemented		
All Calls - 60 seconds	29.80%	29.50%	25.80%	17.70%	21.70%
All Calls - 90%	2 Minutes 37 Seconds	2 Minutes 35 Seconds	2 Minutes 47 Seconds	3 Minutes 0 Seconds	2 Minutes 54 Seconds
NFPA - 92 seconds (Fire)	61.40%	64.30%	53.90%	62.00%	83.30%
NFPA - 84 seconds (EMS)	52.90%	54.40%	46.60%	29.50%	35.10%

Currently call processing times are well below the 60 second CPSE recommendations as listed in the FESSEM. The fire department dispatchers began Emergency Medical Dispatching in mid to late 2011. Prior to EMD the performance was sub-standard as well. The goal of the fire department is to let the dispatchers get comfortable with EMD and then assess their progress. If there isn’t significant improvement the department will look at ways to seek improvement. It may be as simple as time stamping earlier in the process or as complex as adjusting the EMD protocols.

### FIRE ON-SCENE PERFORMANCE EXPECTATIONS

The West Allis Fire Department’s benchmark calls for a turnout time of 80 seconds, with safe arrival on scene occurring within 5:20 (4:00 travel + 1:20 turnout) of dispatch 90% of the time. The first arriving fire company is responsible to verbalize command and to initiate fire control and/or rescue. All additional companies responding to the incident must arrive within 9:20 (8:00 travel + 1:20 turnout) of dispatch 90% of the time.

### EMERGENCY MEDICAL SERVICE ON-SCENE PERFORMANCE EXPECTATIONS

The West Allis Fire Department prides itself on a high level of emergency medical system (EMS) response capability. The turnout time benchmark for all EMS alarms is 60 seconds with safe arrival on scene occurring within five minutes (4:00 travel + 1:00 turnout) of dispatch 90% of the time. An ALS transport unit must arrive on scene within nine minutes (8:00 travel + 1:00 turnout) of dispatch 90% of the time.

In the event of high call volume that overwhelms the capability of West Allis Fire Department ALS transport units; mutual aid ambulances are dispatched from neighboring municipalities. These mutual aid ambulances respond along with a West Allis engine or truck company. In the event of a mass casualty incident, the West Allis Fire Department has ready access to all Milwaukee County ALS transport units through MABAS Life Safety card 1-03 and the MCEMS agreement.

<b>Turnout Times</b>					
	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Number of EMS Calls Analyzed</b>	6,075	6,477	6,992	6,976	6,848
<b>CPSE - EMS Calls - 60 seconds</b>	34.00%	38.90%	47.80%	60.00%	54.20%
<b>CPSE - EMS Calls - 90%</b>	127 seconds	125 seconds	111 seconds	100 seconds	105 seconds
<b>Number of Fire Calls Analyzed</b>	152	135	161	160	136
<b>CPSE - Fire Calls - 80 seconds</b>	42.80%	34.80%	49.70%	80.00%	65.10%
<b>CPSE - Fire Calls - 90%</b>	142 seconds	170 seconds	135 seconds	103 seconds	112 seconds
<b>NFPA - 123 seconds (fire) 90%</b>	78.30%	77.78%	86.33%	94.40%	94.50%
0000 - 2359 (entire day)	119	105	139	151	136
<b>NFPA - 158 seconds (fire) 90%</b>	92%	66.67%	93.33%	94.70%	98.20%
0000 - 0600 (nighttime)	23	16	14	18	15
<b>NFPA - 112 seconds (fire) 90%</b>	76.20%	80.41%	83.01%	94.70%	91.90%
0600 - 1800 (daytime)	77	78	88	89	79
<b>NFPA - 109 seconds (ems) 90%</b>	82.00%	83.46%	89.50%	93.20%	91.80%
0000 - 2359 (entire day)	4,987	5,406	6,992	6,976	6,941
<b>NFPA - 144 seconds (ems) 90%</b>	87.00%	88.03%	92.87%	96.60%	93.20%
0000 - 0600 (nighttime)	883	978	1,055	897	1,010
<b>NFPA - 87 seconds (ems) 90%</b>	74.30%	75.16%	84.48%	90.40%	88.50%
0600 - 1800 (daytime)	2,898	3,149	3,719	3,629	4,140

\*\* EXCLUDED CALLS 324 (MVC NO INJURIES); 331 (LOCK IN); 353 (REMOVAL OF VICTIMS FROM ELEVATOR) & 381 (STANDBY)

## Travel Times

Category	2010	2011	2012	2013	2014
<b>EMS Calls - Total</b>	6,450	6,907	7,046	7,044	7,020
<b>EMS Calls - West Allis</b>	6,344	6,836	6,976	6,969	6,927
<b>EMS Calls – West Allis EMS Responses</b>	6,272	6,774	6,896	6,902	6,848
<b>EMS Calls Excluded</b>	130 calls (0 time value) 4 calls (over 900 sec)	214 calls (0 time value) 3 calls (over 900 sec)	148 calls (0 time value) 1 call (over 900 sec.)	115 calls (0 time value) 1 call (over 900 sec.)	254 calls (0 time value) 2 call (over 900 sec.)
<b>EMS Calls Analyzed</b>	6,138	6,557	6,747	6,786	6,593
<b>EMS Calls - 4 Minutes or Less</b>	5,646	5,894	5,962	5,947	5,947
<b>EMS Calls - 4 Minute %</b>	<b>92.00%</b>	<b>89.90%</b>	<b>88.40%</b>	<b>87.60%</b>	<b>87.50%</b>
<b>EMS Calls - 90%</b>	3 Min. 51 Seconds	4 Min. 1 Second	4 Min. 10 Seconds	4 Min. 13 Seconds	4 Min. 11 Seconds
<b>Fire Calls - Total</b>	172	145	172	172	136
<b>Fire Calls - West Allis</b>	166	128	160	164	127
<b>Fire Calls Excluded</b>	6 calls (0 time value)	1 call (0 time value)	9 calls (0 time value)	9 calls (0 time value)	14 calls (0 time value)
<b>Fire Calls Analyzed</b>	160	127	151	155	113
<b>Fire Calls - 4 Minutes or Less</b>	148	113	138	139	139
<b>Fire Calls - 4 Minute %</b>	<b>92.50%</b>	<b>89.00%</b>	<b>91.40%</b>	<b>89.70%</b>	<b>90.30%</b>
<b>Fire Calls - 90%</b>	3 Min. 47 Seconds	4 Min. 6 Seconds	3 Min. 53 Seconds	4 Min. 2 Seconds	3 Min. 57 Seconds

\*\* excluded calls 324 (MVC no injuries); 331 (Lock In); 353 (Removal of victims from Elevator) & 381 (Standby)

### Dispatch To 1st Arriving Unit

Category	2010	2011	2012	2013	2014
<b>EMS Calls - Total</b>	6,450	6,907	7,046	7,044	7,020
<b>EMS Calls - West Allis</b>	6,344	6,836	6,976	6,969	6,927
<b>EMS Calls – West Allis EMS Responses</b>	6,272	6,774	6,896	6,902	6,848
<b>EMS Calls Excluded</b>	10 calls (0 time value) 14 calls (over 1200 sec)	29 calls (0 time value) 5 calls (over 1200 sec)	9 calls (0 time value) 1 call (over 1200 sec.)	17 calls (0 time value)	29 calls (0 time value)
<b>EMS Calls Analyzed</b>	6,258	6,740	6,886	6,885	6,820
<b>EMS Calls - 5 Minutes or Less</b>	5,545	5,962	6,042	6,111	5,979
<b>EMS Calls - 5 Minute %</b>	<b>88.60%</b>	<b>88.50%</b>	<b>87.70%</b>	<b>88.80%</b>	<b>87.70%</b>
<b>EMS Calls - 90%</b>	5 Min. 11 Seconds	5 Min. 13 Seconds	5 Min. 17 Seconds	5 Min. 11 Seconds	5 Min. 19 Seconds
<b>Fire Calls - Total</b>	172	145	172	172	136
<b>Fire Calls - West Allis</b>	166	128	160	164	127
<b>Fire Calls Excluded</b>	5 calls (0 time value)	0 call (0 time value)	6 calls (0 time value)	6 calls (0 time value)	9 calls (0 time value)
<b>Fire Calls Analyzed</b>	161	128	154	158	118
<b>Fire Calls - 5 Minutes 20 Seconds or Less</b>	146	114	139	145	105
<b>Fire Calls - 5 Minute 20 Second %</b>	<b>90.70%</b>	<b>89.10%</b>	<b>90.30%</b>	<b>91.80%</b>	<b>89.00%</b>
<b>Fire Calls - 90%</b>	5 Min. 8 Seconds	5 Min. 23 Seconds	5 Min. 20 Seconds	5 Min. 4 Seconds	5 Min. 26 Seconds
<b>EMS Calls West Allis Emergency Responses</b> - All 300 category calls except 324 (MVC no injuries); 331 (Lock In); 353 (Removal of victims from Elevator) & 381 (Standby)					

<b>NFPA - 123 sec. Turnout (fire) 90% + 4 Min. Travel</b>	<b>96.60%</b>	<b>91.90%</b>	<b>96.30%</b>	<b>93.80%</b>	<b>95.80%</b>
0000 - 2359 (entire day)	141	124	155	120	113
<b>NFPA - 109 sec. Turnout (ems) 90% + 4 Min. Travel</b>	<b>96.00%</b>	<b>96.30%</b>	<b>95.10%</b>	<b>94.40%</b>	<b>93.30%</b>
0000 - 2359 (entire day)	5,921	5,462	5,545	5,967	6,365

Call To First Arriving Unit					
Category	2010	2011	2012	2013	2014
<b>EMS Calls - Total</b>	6,450	6,907	7,046	7,044	7,020
<b>EMS Calls - West Allis</b>	6,344	6,836	6,976	6,969	6,927
<b>EMS Calls – West Allis EMS Responses</b>	6,272	6,774	6,896	6,902	6,848
<b>EMS Calls Excluded</b>	0 calls (0 time value) 69 calls (over 1200 sec)	3 calls (0 time value) 39 calls (over 1200 sec)	0 calls (0 time value) 10 calls (over 1200 sec)	2 calls (0 time value) 11 calls (over 1200 sec)	1 calls (0 time value) 4 calls (over 1200 sec)
<b>EMS Calls Analyzed</b>	6,203	6,732	6,886	6,889	6,843
<b>EMS Calls - 6 Minutes or Less</b>	4,433	4,887	4,754	4,430	4,412
<b>EMS Calls - 6 Minute %</b>	<b>71.50%</b>	<b>72.60%</b>	<b>69.30%</b>	<b>64.30%</b>	<b>64.50%</b>
<b>EMS Calls - 90%</b>	7 Min. 22 Seconds	7 Min. 18 Second	7 Min. 29 Seconds	7 Min. 34 Seconds	7 Min. 36 Seconds
<b>Fire Calls - Total</b>	172	145	172	172	136
<b>Fire Calls - West Allis</b>	166	128	160	164	127
<b>Fire Calls Excluded</b>	0 calls (0 time value) 0 calls (over 1200 sec.)	0 calls (0 time value) 0 calls (over 1200 sec.)	1 call (0 time value) 1 call (over 1200 sec.)	0 calls (0 time value) 0 calls (over 1200 sec.)	0 calls (0 time value) 0 calls (over 1200 sec.)
<b>Fire Calls Analyzed</b>	166	128	158	164	127
<b>Fire Calls - 6 Minutes 20 Seconds or Less</b>	121	101	120	134	114
<b>Fire Calls - 6 Minute 20 Second %</b>	<b>73.30%</b>	<b>78.90%</b>	<b>75.90%</b>	<b>81.70%</b>	<b>89.80%</b>
<b>Fire Calls - 90%</b>	7 Min. 34 Seconds	7 Min. 20 Seconds	7 Min. 04 Seconds	7 Min. 12 Seconds	6 Min. 27 Seconds
<b>West Allis EMS Responses - All 300 category calls except 324 (MVC no injuries); 331 (Lock In); 353 (Removal of victims from Elevator) &amp; 381 (Standby)</b>					

<b>NFPA - 7 Min. 13 Seconds (EMS) 90%</b>	<b>89.60%</b>	<b>88.80%</b>	<b>89.40%</b>	<b>86.30%</b>	<b>89.60%</b>
1 Min 24 second Call Processing + 1 Min. 49 second turnout + 4 Min. Travel Time	5,371	5,511	6,021	5,948	6,129
<b>NFPA - 7 Min. 35 Seconds (FIRE) 90%</b>	<b>90.90%</b>	<b>93.00%</b>	<b>94.90%</b>	<b>93.30%</b>	<b>96.90%</b>
1 Min 32 second Call Processing + 2 Min. 3 second turnout + 4 Min. Travel Time	150	119	150	153	123

Call To Effective Response Force – Changed from “Call to First Alarm Arrival” in 2013					
	2010	2011	2012	2013	2014
<b>Building Fires - Total</b>	39	37	41	54	55
<b>Building Fires - West Allis</b>	34	21	31	48	47
<b>Building Fires - Excluded</b>	14 calls (0 time value) 0 calls (over 1500 sec)	3 calls (0 time value) 0 calls (over 1500 sec)	16 calls (0 time value) 1 calls (over 1500 sec)	22 (0 time value)	20 (0 time value)
<b>Building Fires - Analyzed</b>	20	18	14	26	27
<b>Building Fires - 10 Min. 20 Sec.</b>	15	14	12	18	25
<b>Building Fires - 10 Min. 20 Sec. %</b>	<b>75.00%</b>	<b>77.80%</b>	<b>85.70%</b>	<b>69.20%</b>	<b>96.20%</b>
<b>Building Fires - 90%</b>	12 Min. 21 Seconds	11 Min. 50 Seconds	11 Min. 53 Seconds	12 Min. 28 Seconds	10 Min. 11 Seconds
<b>With NFPA Turnout &amp; Call Processing Times - 11 :35</b>	<b>85%</b>	<b>88.90%</b>	<b>85.70%</b>	<b>84.60%</b>	<b>100%</b>
NOTE: Some units may have responded non-emergent after first in report (if nothing showing or minor fire), unable to filter that data					

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## AUTOMATIC FIRE ALARM RESPONSES

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The West Allis Fire Department responds to all activations of the emergency response system, including those that are triggered by automatic fire alarm systems. In 2002, the West Allis Fire Department adopted a policy addressing risk assessment as it relates to automatic fire alarm responses. Alarms received by companies who monitor building conditions, the activation of sprinkler systems, flow switch activations, and fire alarm system initiation device notifications are processed and handled by the fire department as automatic fire alarms.

Historically, automatic fire alarms have proven to be false or accidental in nature. Should smoke and fire present itself in buildings with smoke detection and/or fire sprinkler systems, these systems have proven to provide early notification and/or to suppress the fire in its incipient stage. These fires have historically proven to be relatively minor in nature, allowing for a single engine and truck company to mitigate the incident. After applying a critical risk assessment to these incidents, the West Allis Fire Department began dispatching two fire companies as opposed to a full structure fire assignment of six companies to these alarms. This deployment modification has drastically reduced the risk of motor vehicle accidents involving fire apparatus and has served to minimize drawdown of resources.

Upon receipt of an automatic fire alarm, the West Allis Public Safety Answering Point assigns one engine company and one truck company to respond, both with four-person crews. The assigned engine company responds emergently, while the truck company typically responds non-emergently to these alarms. If the dispatch center receives a 9-1-1 call for the same structure, the assignment is immediately upgraded to a full structure fire response.

### AUTOMATIC FIRE ALARM ON-SCENE PERFORMANCE EXPECTATIONS

The West Allis Fire Department's benchmark calls for a turnout time of 80 seconds, with safe arrival on scene occurring within 5:20 (4:00 travel + 1:20 turnout) of dispatch 90% of the time. The first arriving fire company, typically an engine company, is responsible to verbalize command and to investigate the alarm activation. In the event that smoke and/or fire conditions are present, the first arriving company must upgrade the assignment, initiating fire control and/or rescue as necessary.

The truck company is to assist the engine company in mitigating the alarm. In the event of an actual fire the truck company is to assist in ventilation and prepare for RIT activities until additional resources arrive on scene.

*\*Automatic fire alarm data is not collected separately from fire response data.*

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## **SPECIAL OPERATIONS**

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The West Allis Fire Department has four distinct Special Operations disciplines. They include hazardous material response, confined space rescue, trench rescue and ice rescue. Currently, all department members are trained in Hazardous Materials to the Operations Level. As of 2012, 30 members hold the NFPA 1670 Confined Space Technician Certification and 27 members hold the NFPA 1670 Ice Rescue Operation Certifications. Most recently in 2009, 15 members completed a train the trainer program for Trench Rescue-Operations Level. All disciplines operate at the operations level while technician level responses are supplemented by mutual aid resources.

### **HAZARDOUS MATERIALS RESPONSE & CONFINED SPACE RESPONSE**

Hazardous material incidents and confined space rescue incidents are initially handled with the same approach. Initial dispatch to these incidents includes the response of three engines, one truck, one ALS ambulance, and a battalion chief. Members of the department will safely recognize and evaluate the level of hazards(s) present. Once hazards are identified from a distance, members will assemble on-site to fill operational functions and technician level assets will be requested as necessary. Development of an incident action plan (IAP) will progress based upon accumulated information.

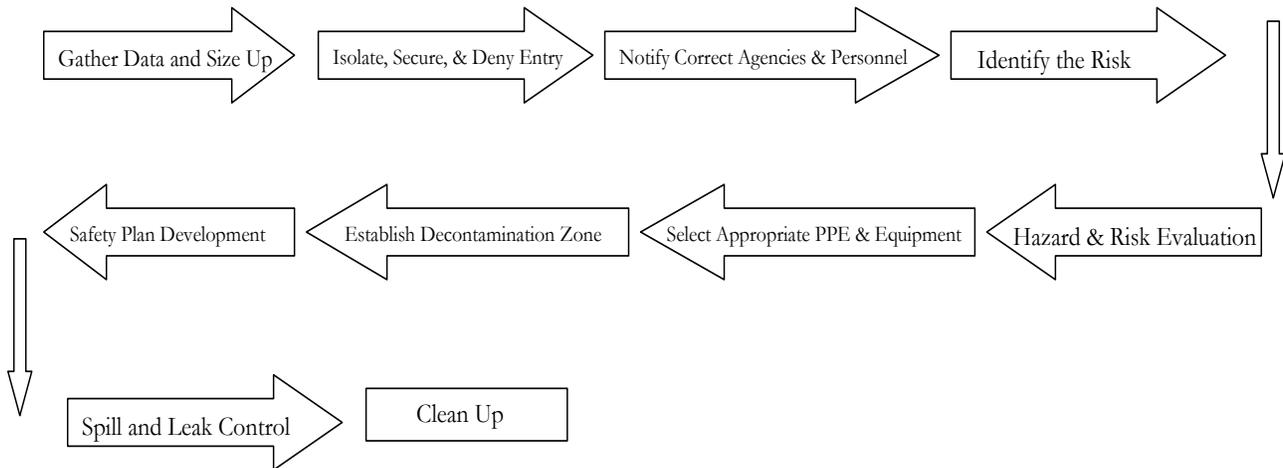
Hazardous material incidents are divided into two general classifications. They are Level A and Level B responses, both of which require a technician level response. The West Allis Fire Department, which currently functions at the Operations Level, will begin mitigating the emergency under NFPA 472 guidelines for that level. Once an initial assessment of the situation has been completed, a technician level response may be initiated by the incident commander. Wisconsin is divided into response zones and each zone has a Technician- A & B Level team assigned to it. The technician level team assigned to the City of West Allis is located in the City of Milwaukee, approximately two miles north of the city limits.

In the event of a Hazardous Materials incident, the personnel assigned to Fire Station 2 will transport the department's hazardous materials trailer to the scene.

**HAZARDOUS MATERIALS AND CONFINED SPACE RESCUE  
ON-SCENE PERFORMANCE EXPECTATIONS**

The West Allis Fire Department expects the first company to arrive within 5:20 (4:00 travel + 1:20 turnout) of dispatch 90% of the time. The remaining first alarm assignment shall arrive within 9:20 (8:00 travel + 1:20 turnout) of dispatch 90% of the time. If deemed necessary, the hazardous materials trailer shall arrive on-scene within 30 minutes of request. Below are the ten functions of a hazardous materials incident.

**THE TEN FUNCTIONS OF A HAZARDOUS MATERIALS INCIDENT**



**ICE RESCUE**

Ice and water rescue are classified as special operations. If a victim is trapped on the ice or in the water, a partial assignment will be dispatched. This will include one engine company, one truck company, one ALS ambulance, and the battalion chief. Truck 2 carries all necessary equipment to perform rescues on the ice or in open water. This equipment includes exposure suits, swim fins, ice cleats, throw ropes, tethers, rescue slings, and a life basket. Engines are equipped with throw ropes and life vests. The initial rescue attempt will involve the use of throw-ropes by first arriving companies.

**ICE RESCUE ON-SCENE PERFORMANCE EXPECTATIONS**

The West Allis Fire Department's benchmark calls for the first company to arrive on-scene safely, within 5:20 (4:00 travel + 1:20 turnout) of dispatch 90% of the time. When dispatched to an ice rescue incident, the turnout time benchmark for most companies is 80 seconds. Truck company members, however, are expected to don exposure suits prior to leaving the fire station. Donning of these suits shall take no more than two minutes. The effective response force shall arrive within ten minutes of dispatch.

The department's fractal response time performance to ice rescue incidents is 100% within 5:20 minutes for the first arriving unit. The fractal response time to ice rescue incidents is 100% within 9:20 by the effective response force. This data, however, is based on a single incident.

## **TRENCH RESCUE**

In 2009, the West Allis Fire Department contracted with the START Group to train 15 members of the technical rescue team in trench rescue operations. This was a train-the-trainer program in which the trained members began facilitating department wide training sessions in this discipline. All members of the department participate in trench rescue training which is held at least bi-annually. Department equipment includes Paratech brand struts, fin form, plywood, and air monitoring / ventilating equipment. In the event of a complex trench incident requiring additional equipment, the West Allis Department of Public Works has an additional trench rescue trailer for fire department use. For incidents beyond Operations Level Trench Rescue, the Milwaukee Fire Department operates two Heavy Urban Rescue Teams (HURT) which are available through mutual aid agreements.

### **TRENCH RESCUE ON-SCENE PERFORMANCE EXPECTATIONS**

The West Allis Fire Department benchmark calls for the first company to arrive on scene safely within 5:20 of dispatch 90% of the time. The turnout time benchmark is 80 seconds. A trench rescue response requires that the technical rescue tow vehicle and trailer be brought to the scene. This specific equipment will typically take an additional ten to fifteen minutes to prepare for response. Thus, the remainder of the effective response force shall arrive within twenty minutes of dispatch.

There is currently no response data for the trench rescue aspects of the department. The department has had no responses for trench rescue since 2009.

SECTION FOUR:

# ESTABLISHING AN EFFECTIVE RESPONSE FORCE



WEST ALLIS FIRE DEPARTMENT  
STANDARDS OF COVERAGE

**Quick Look Dispatch**

**Type of Incident**

**Type of Service**

**Units to Respond**

Anthrax	Non-Emergency Service- <b>NES</b>	Add BC - When Credible Threat
Bomb Threat (Use code of 10-95 or by phone)	Non-Emergency Service- <b>NES</b>	Add BC - When Credible Threat
Broken Gasoline/Oil Pipe	Emergency Service- <b>ES</b>	Full Assignment
Broken Water Pipe	Emergency Service- <b>ES</b>	Truck
Broken Window	Non-Emergency Service- <b>NES</b>	Truck
Bulk Spill - Non-Hazardous	Non-Emergency Service- <b>NES</b>	BC - 2 Engines - Truck
Bulk Spill - Hazardous Material	Emergency Service- <b>ES</b>	Full Assignment***
Carbon Monoxide Alarm	Non-Emergency Service- <b>NES</b>	Truck
Carbon Monoxide Alarm w/ Medical Symptoms	EMD <b>Card 8</b> or Fire Code <b>M</b>	Truck & EMS Unit
Collapse - Building or House	Fire Code- <b>BCO</b>	Full Assignment + 1 EMS Unit***
Chemical Spill ( <b>Get Chemical Info or Guide #</b> )	Chemical Spill- <b>CS</b>	Full Assignment***
Confined Space Rescue - <b>Occurring In WA</b>	EMD <b>Card 22</b> or Fire Code- <b>ES</b>	Full Assignment***
Confined Space Rescue - <b>MABAS Request</b>	Emergency Service- <b>ES</b>	BC & Engine***
Drowning (Swimming Pool)	EMD <b>Card 14</b> or Fire Code <b>DR</b>	Engine & EMS Unit
Drowning (Lagoon, Fell through Ice)	EMD <b>Card 14</b> or Fire Code <b>DR</b>	Partial Assignment + <b>Station 2 Boat</b>
Elevator Alarm	Emergency Service- <b>ES</b>	Truck
EMS Request - No EMD Code BLS Emergency	Fire Code- <b>RS</b>	1 BLS EMS Unit
EMS Request - No EMD Code BLS NonEmergency	Fire Code- <b>RSNE</b>	1 BLS EMS Unit
EMS Request - No EMD Code ALS	Fire Code- <b>M</b>	1 ALS Unit + Engine
Explosion-LARGE	Fire Code- <b>EXP</b>	Full Assignment + 1 EMS Unit***
Fire - Apartment Building	Apartment Fire- <b>AF</b>	Full Assignment + 1 EMS Unit
Fire - Automatic Alarm	Automatic Alarm- <b>AA</b>	Engine & Truck
Fire - Car	Vehicle Fire- <b>VF</b>	Engine
Fire - Car inside/adjacent Bldg.	Fire Code- <b>HF/BF/AF</b>	Full Assignment
Fire - Truck (Delivery or Tractor Trailer)	Vehicle Fire- <b>VF</b> Upgraded	BC - 2 Engines - Truck
Fire - Dumpster	Miscellaneous Fire- <b>MF</b>	Engine
Fire - Dumpster Inside Building	Fire Code- <b>HF/BF/AF</b>	Full Assignment
Fire - Grass	Miscellaneous Fire- <b>MF</b>	Engine
Fire - <b>High Life Hazard</b>	Fire Code- <b>HLF</b>	Full Assignment + 2 EMS Units
Fire - House, Duplex or Garage	Fire Code- <b>HF</b>	Full Assignment
Fire - <b>MABAS</b> or Mutual Aid <i>Fire Unit Request</i>	Fire Code- <b>MAF</b>	BC & Engine or Truck
Fire - <b>MABAS</b> or Mutual Aid <i>EMS Unit Request</i>	Fire Code- <b>MAEMS</b>	Requested EMS Unit
Fire - Smell of Smoke "In The Area"	Miscellaneous Fire- <b>MF</b>	Engine & Truck
Fire - Street Light, Electric Pole etc.	Miscellaneous Fire- <b>MF</b>	Engine
Gasoline Spill - Small	Emergency Service- <b>ES</b>	Engine
Gasoline Spill - Large	Emergency Service- <b>ES</b>	BC - 2 Engines - Truck
Lock In - with child locked in house or room	Emergency Service- <b>ES</b>	Truck
Lock Out - Person locked out of house	Non-Emergency Service- <b>NES</b>	Truck
Natural Gas Leak - Outside	Emergency Service- <b>ES</b>	BC - 2 Engines - Truck
Natural Gas Leak - Inside A Structure	Emergency Service- <b>ES</b>	Full Assignment
O.C. Flush	EMD <b>Card 16-A-1 / RSNE</b>	EMS Unit
P.I. Accident	EMD <b>Card 29</b> or Fire Code <b>ES</b>	EMS Unit & Engine
P.I. Accident - On the Interstate	EMD <b>Card 29</b> or Fire Code <b>ES</b>	EMS Unit & Engine
P.I. Accident - Rollover, Trapped Occupants	EMD <b>Card 29</b> or Fire Code <b>PIT</b>	Partial Assignment
Trapped Person - Machinery, etc	EMD <b>Card 22</b> or Fire Code- <b>ES</b>	Partial Assignment
Taser Deployment	EMD <b>Card 30a1</b> or F Code- <b>ES</b>	1 BLS EMS Unit
Wires Arcing (Electric Power Lines)	Emergency Service- <b>ES</b>	Engine
Wires Down (Electric Power Lines)	Emergency Service- <b>ES</b>	Engine

**Partial Assignment = BC, 1 Engine, Truck & 1 EMS Unit**

**Full Assignment = BC, 3 Engines, Truck & 1 EMS Unit**

\*\*\* Immediately Notify BC Schauz & AC Streicher on or off duty

Service Type	BC	ENG	ENG	ENG	TRK	ALS	Task Analysis
<b>Anthrax</b>	x						BC - Non-Emergent w/ No Radio Traffic (Investigates and Determines Need for Additional Resources)
<b>Bomb Threat</b>	x						BC - Non-Emergent w/ No Radio Traffic (Investigates and Determines Need for Additional Resources)
<b>Broken Pipe - Gasoline/Oil</b>	x	x	x	x	x	x	BC (IC), Engine (Foam), Engine (Evacuation), Engine (Backup or Water Supply), Truck (Support/Containment), ALS Ambulance (EMS)
<b>Broken Pipe – Water</b>					x		Truck - Best Equipped to Handle - 4 Personnel Sufficient (Water/Sprinkler Shutoffs / Ladders if Elevated Pipe)
<b>Broken Window</b>					x		Truck - Best Equipped to Handle - 4 Personnel Sufficient (Lath and Plastic)
<b>Bulk Spill – Non-Hazardous</b>	x	x	x		x		BC (IC), Engine (Fire Suppression), Engine (Containment), Truck (Containment),
<b>Bulk Spill - Hazardous</b>	x	x	x	x	x	x	BC (IC), Engine (Fire Suppression), Engine (Water Supply), Engine (Decon), Truck (Containment / Evacuation), ALS Ambulance (Medical Exams)
<b>CO Alarm</b>					x		Truck (Most Appropriately Equipped for Air Monitoring and ventilation)
<b>CO Alarm - Medical Symptoms</b>					x	x	Truck (Most Appropriately Equipped for Air Monitoring and ventilation), ALS Ambulance (EMS)
<b>Chemical Spill</b>	x	x	x	x	x	x	BC (IC), Engine (Fire Suppression), Engine (Water Supply), Engine (Decon), Truck (Containment/Evacuation), ALS Ambulance (Medical Exams)
<b>Confined Space Rescue</b>	x	x	x	x	x	x	BC (IC), Engine (Entry), Engine (Entry Backup), Engine (Manpower), Truck (Access), ALS Ambulance (EMS)
<b>Confined Space Rescue (MABAS)</b>	x	x					BC (Supervision), Engine (Personnel)
<b>Drowning – Pool</b>		x				x	Engine (Rescue), ALS Ambulance (EMS)
<b>Drowning – Lagoon / Ice</b>	x	x			x	x	BC (IC), Engine (Manpower), Truck (Rescue), ALS Ambulance (EMS)
<b>Elevator Alarm</b>					x		Truck (Most Appropriate Equipment)
<b>Fire – Apt. Building</b>	x	x	x	x	x	x	BC (IC), Engine (Fire Suppression), Engine (Search & Rescue), Engine (R.I.T.), Truck (Rescue / Ventilation), 2 ALS Ambulances (Staged / Evacuation)
<b>Fire – Auto Alarm</b>				x	x		Engine - Emergency (Investigation / Suppression), Truck - Non-Emergency (Forcible Entry / RIT)
<b>Fire – Car</b>				x			Engine (Fire Suppression)
<b>Fire – Car Inside/Adjacent to Building</b>	x	x	x	x	x	x	BC (IC), Engine (Fire Suppression), Engine (Search & Rescue), Engine (R.I.T.), Truck (Rescue / Ventilation), ALS Ambulance (Staged on Scene)
<b>Fire – Truck (Delivery or Tractor/Trailer)</b>	x	x	x		x		BC (IC), Engine (Fire Suppression), Engine (Fire Suppression, Truck (Manpower)

Service Type	BC	ENG	ENG	ENG	TRK	ALS	Task Analysis
Fire – Dumpster		x					Engine (Fire Suppression)
Fire – Dumpster Inside Building	x	x	x	x	x	x	BC (IC), Engine (Fire Suppression), Engine (Search & Rescue), Engine (R.I.T.), Truck (Rescue / Ventilation), ALS Ambulance (Staged On Scene)
Fire – Grass		x					Engine (Fire Suppression)
Fire – House, Duplex or Garage	x	x	x	x	x	x	BC (IC), Engine (Fire Suppression), Engine (Search & Rescue), Engine (R.I.T.), Truck (Recue / Ventilation), ALS Ambulance (Staged On Scene)
Fire – Smell of Smoke In Area				x	x		Engine (Fire Suppression), Truck (RIT)
Fire – Street Light, Electric Pole, etc.		x					Engine (Fire Suppression / Hazard Isolation)
Gasoline Spill - Small		x					Engine (Containment, Absorbent)
Gasoline Spill - Large	x	x	x		x		BC (IC), Engine (Fire Suppression/Foam), Engine (Fire Suppression/Foam), Truck (Manpower),
Lock In (child locked in house or room)					x		Truck - Emergency Response (Most Appropriate Tools / Equipment)
Lock Out					x		Truck - Non-Emergency Response (Most Appropriate Tools / Equipment)
Natural Gas Leak – Outdoors	x	x	x		x		BC (IC), Engine (Suppression/ Evacuation), Engine (Suppression/ Evacuation), Truck (Metering/Evacuation)
Natural Gas Leak - Indoors	x	x	x	x	x	x	BC (IC), Engine (Suppression/ Evacuation), Engine (Suppression/ Evacuation), Engine (R.I.T.), Truck (Metering/Evacuation), ALS Ambulance (EMS)
O.C. Flush						x	ALS Ambulance (EMS)
P.I. Accident				x		x	Engine (Suppression / Fluid Containment / Assist EMS), ALS Ambulance (EMS)
P.I. Accident - Interstate				x		x	Engine (Suppression / Fluid Containment / Assist EMS / Scene Protection), ALS Ambulance (EMS)
P.I. Accident - Rollover, Entrapment	x	x			x	x	BC (IC), Engine (Fire Suppression / Fluid Containment), Truck (Extrication), ALS Ambulance (EMS)
Trapped Person - Machinery, etc.	x	x			x	x	BC (IC), Engine (Manpower), Truck (Extrication), ALS Ambulance (EMS)
Wires Arcing		x					Engine (Fire Suppression / Hazard Isolation)

# ESTABLISHING AN EFFECTIVE RESPONSE FORCE

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## FIREGROUND OPERATIONS & STRATEGIES: STRUCTURE FIRES

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According to industry statistics, the most common structure fire occurs in single-family homes and is confined to the room of origin. Confined room fires *usually* do not present a high-risk when personal protective equipment (PPE) is worn properly and standard operating guidelines (OG's) are followed. Although this is true, the West Allis Fire Department cannot assume that all fires will be low-risk incidents. Every structure fire presents associated risks that make it unique. A comprehensive set of operating guidelines must be in place and closely adhered to so as to perform fire suppression operations with the highest degree of safety and effectiveness. In order to address the incident priorities of life safety, incident stabilization, and property conservation, tactical priorities must be clearly established and integrated into operating guidelines.

Adequate staffing is essential if fire suppression operations are to be performed with a high degree of safety and effectiveness. West Allis Fire Department engine and truck companies are staffed with a minimum of four personnel at all times. EMS units are staffed with a minimum of two personnel, a third member being added to these companies whenever additional personnel are available.

All engines are equipped with a minimum of two 200' pre-connected 1 $\frac{3}{4}$ " hand lines. Engines are also equipped with a 3" reduced load, which can be utilized for longer layouts or when there is a need for unusually high fire flow. Truck companies are equipped with aerial ladders that are minimally 100' in length.

### TACTICAL PRIORITIES

**Fire Attack:** The first arriving engine company is assigned to perform fire attack. In most cases, a 1 $\frac{3}{4}$ " crosslay is deployed from the fire side of the engine. A source of water that is capable of providing a minimum of 150 gpm is secured by the equipment operator of this engine company. The first arriving engine company is also responsible for assuring placement of a positive pressure blower at the entry point and creating an exhaust opening whenever conditions allow for positive pressure attack.

**Search and Rescue:** The second arriving engine company is responsible for search and rescue. Typically, the company will deploy a 1 $\frac{3}{4}$ " crosslay from the first arriving engine to perform this task. A second source of water that is capable of providing a minimum of 150 gpm is secured by the equipment operator of this engine company.

**Ventilation:** The truck company is responsible to perform visible rescue and to ensure effective ventilation. The preferred method of ventilation for the West Allis Fire Department is positive pressure ventilation (PPV). In the event that fire conditions do not permit PPV, vertical ventilation will typically be initiated by this company. It is imperative that the truck company coordinate ventilation with fire attack. In addition to rescue and ventilation, the truck company is assigned to positioning of ground ladders, securing of utilities and provision of support activities.

**Rapid Intervention Team (RIT):** A rapid intervention team (RIT) is established at all structure fires by three members of the third arriving engine company. The RIT will secure a hose line from the second arriving engine and a predetermined cache of RIT equipment from the truck apparatus, staging this equipment in the most advantageous position. The RIT shall perform a 360 degree assessment of the fire building, perform forcible entry and place ground ladders to allow for emergency egress, and remain in contact with the IC at all times. Typically, the RIT will stage near the entry point through which fire attack was initiated.

**Incident Command:** The incident commander (IC) will assume a position outside the structure so as to visualize two sides of it. The IC will coordinate operations and evaluate the effectiveness of operating companies. The IC will assume the roles of operations chief, safety officer and accountability officer until these roles are reassigned.

**Water Supply:** Responsibility for obtaining water supply rests with the equipment operators of the first and second arriving engine companies. When staffing allows, a fifth member on the engine will be assigned to connect supply lines to a water source. Typically, water supply is established by means of a forward layout which allows pumping apparatus to be positioned near the front of the fire building. The truck company equipment operator may assist with establishing water supply when not committed to other activities. Fire hydrants are located no more than 300 feet apart throughout the City of West Allis.

**Equipment Operators:** Unless establishing water supply or assigned to other roles, equipment operators will remain at their apparatus. The equipment operator of the third engine will report to the incident commander as a field incident technician (command aide), typically assuming the role of accountability officer.

**EMS:** An EMS unit will report to staging unless otherwise assigned by the IC. Staging location is determined by the West Allis Incident Commander.

**BREAKDOWN OF PERSONNEL**

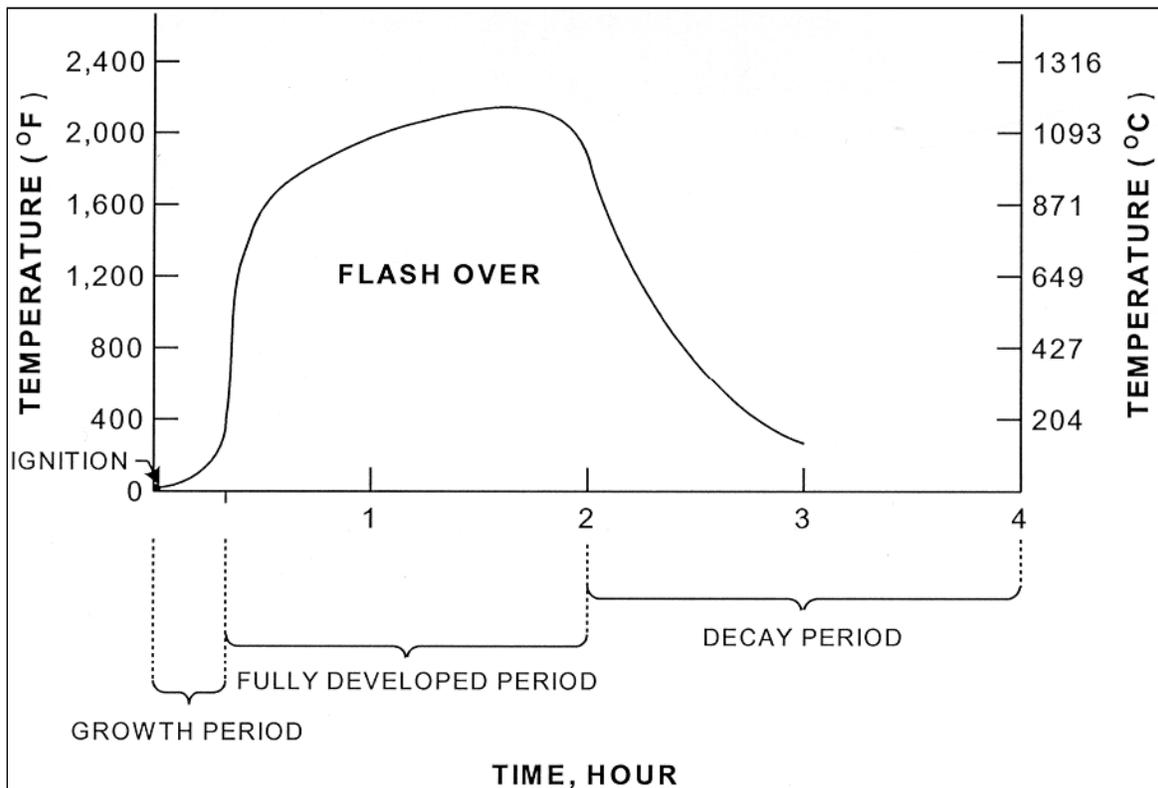
<b>Critical Tasks</b>	<b>Personnel Required</b>
Fire Attack	3
Search and Rescue	3
Rapid Intervention Team	3
Ventilation	3
Pump Operation & Water Supply	2
Aerial Device Operation	1
Incident Command	1
Field Incident Technician	1
ALS Ambulance	2
<b>TOTAL</b>	<b>19</b>

## AVOIDING FLASHOVER

Flashover is defined as a critical point in “the development of a contained fire in which all exposed surfaces reach ignition temperatures more or less simultaneously and fire spreads rapidly throughout the space” (Guide on Methods for Evaluating Potential for Room Flashover, 2000). According to data taken from the National Fire Protection Association (NFPA) and the Insurance Services Organization (ISO), a residential compartment will reach flashover between five and 30 minutes after ignition. In order for flashover to occur, temperatures must achieve a range between 900 to 1200 degrees Fahrenheit. The chart below predicts the time frame of each fire stage.

If a fire should develop in the City of West Allis, the fire department’s primary mission is not simply to extinguish the fire, but to initiate fire attack prior to flashover. In order to accomplish this, the West Allis Fire Department’s benchmark calls for a turnout time of 80 seconds, and arrival of the first company within 5:20 (4:00 travel + 1:20 turnout) of dispatch 90% of the time. All additional companies responding to the incident must arrive within 9:20 (8:00 travel + 1:20 turnout) of dispatch 90% of the time.

TIME-TEMPERATURE CURVE



## RMS REPORT – INCIDENT BENCHMARKS

### 2014 Building Fires - Under Control Benchmark Analysis

Incident Number	Incident Address	Arrival of First Unit	Under Control	All Clear	Loss Stopped	Under Control Time
1400154	2601 S 99 ST	1/7/2014 1:50:04 PM	1/7/2014 2:02:00 PM	1/7/2014 1:55:00 PM	1/7/2014 2:29:00 PM	00:11:56
1400555	9601 W Cleveland AVE	1/24/2014 12:24:05 AM	1/24/2014 12:25:00 AM	1/24/2014 12:29:00 AM	1/24/2014 12:49:00 AM	00:00:55
1400813	2193 S 82 ST	2/5/2014 12:07:25 AM	2/5/2014 12:10:00 AM	2/5/2014 12:10:00 AM	2/5/2014 12:14:00 AM	00:02:35
1400840	11515 W Cleveland AVE	2/6/2014 3:28:44 PM	2/6/2014 3:37:50 PM	2/6/2014 3:51:00 PM	2/6/2014 3:43:00 PM	00:09:06
1401218	2216 S 89 ST	2/24/2014 12:10:34 PM	2/24/2014 12:17:00 PM	2/24/2014 12:17:00 PM	2/24/2014 12:21:00 PM	00:06:26
1401435	1101 S 58 ST	3/6/2014 4:45:41 PM	3/6/2014 4:52:00 PM	3/6/2014 4:58:00 PM	3/6/2014 5:02:00 PM	00:06:19
1401505	1937 S 72 ST	3/10/2014 12:24:51 PM	3/10/2014 12:34:00 PM	12/3/2014 12:40:00 PM	3/10/2014 1:00:00 PM	00:09:09
1401825	1024 S 101 ST	3/28/2014 4:21:33 AM	3/28/2014 4:30:00 AM	3/28/2014 4:22:00 AM	3/28/2014 4:33:00 AM	00:08:27
1401894	10315 W Greenfield AVE	4/1/2014 8:50:22 AM	4/1/2014 9:00:00 AM	4/1/2014 9:05:00 AM	4/1/2014 9:16:00 AM	00:09:38
1402011	7729 W Hicks ST	4/6/2014 3:52:50 PM	4/6/2014 4:05:00 PM	4/6/2014 4:10:00 PM	4/6/2014 4:21:00 PM	00:12:10
1402428	900 S 56 ST	4/26/2014 5:43:25 AM	4/26/2014 5:45:00 AM	4/26/2014 5:45:00 AM	4/26/2014 5:45:00 AM	00:01:35
1402437	1458 S 78 ST	4/26/2014 3:58:22 PM	4/26/2014 3:59:00 PM	4/26/2014 3:59:00 PM	4/26/2014 4:03:00 PM	00:00:38
1403042	7725 W Lincoln AVE	5/21/2014 4:07:30 PM	5/21/2014 4:07:30 PM	5/21/2014 4:07:30 PM	5/21/2014 4:08:00 PM	00:00:00
1403073	11040 W Wildwood LN	5/22/2014 5:20:54 PM	5/22/2014 5:28:00 PM	5/22/2014 5:31:00 PM	5/22/2014 6:01:00 PM	00:07:06
1403174	9501 W Cleveland AVE	5/27/2014 11:26:16 AM	5/27/2014 11:30:00 AM	5/27/2014 11:30:00 AM	5/27/2014 11:30:00 AM	00:03:44
1403498	2002 S 75 ST	6/9/2014 11:37:00 PM	6/9/2014 11:46:00 PM	6/9/2014 11:50:00 PM	6/10/2014 12:12:00 AM	00:09:00
1403684	9400 W National AVE	6/17/2014 12:59:53 PM	6/17/2014 1:04:00 PM	6/20/2014 1:04:00 PM	6/17/2014 1:12:00 PM	00:04:07
1403849	1008 S 61 ST	6/24/2014 6:10:50 PM	6/24/2014 6:34:00 PM	6/24/2014 6:15:00 PM	6/24/2014 6:36:00 PM	00:23:10
1404099	1417 S 89 ST	7/5/2014 2:26:27 PM	7/5/2014 2:33:00 PM	7/5/2014 2:32:00 PM	7/5/2014 2:44:00 PM	00:06:33
1404454	7211 W Becher ST	7/22/2014 5:01:45 AM	7/22/2014 5:04:00 AM	7/22/2014 5:04:00 AM	7/22/2014 5:04:00 AM	00:02:15
1405050	1745 S 71 ST	8/12/2014 8:58:29 PM	8/12/2014 9:24:00 PM	8/12/2014 9:05:00 PM	8/12/2014 9:40:00 PM	00:25:31
1405142	11003 W Oklahoma AVE	8/17/2014 2:57:00 PM	8/17/2014 2:58:00 PM	8/17/2014 2:58:00 PM	8/17/2014 2:58:00 PM	00:01:00
1405957	3013 S 90 ST	9/22/2014 2:58:56 PM	9/22/2014 3:05:00 PM	9/22/2014 3:05:00 PM	9/22/2014 3:15:00 PM	00:06:04
1406116	2043 S 87 ST	9/28/2014 6:09:26 PM	9/28/2014 6:45:00 PM	9/28/2014 6:30:00 PM	9/28/2014 6:50:00 PM	00:35:34
1406352	1450 S 116 ST	10/9/2014 11:34:50 AM	10/9/2014 11:37:00 AM	10/9/2014 11:37:00 AM	10/9/2014 11:43:00 AM	00:02:10
1406434	1459 S 74 ST	10/12/2014 8:05:17 AM	10/12/2014 8:13:00 AM	10/12/2014 8:18:00 AM	10/12/2014 9:15:00 AM	00:07:43
1406952	1009 S 104 ST	11/4/2014 5:34:04 PM	11/4/2014 5:37:00 PM	11/4/2014 5:37:10 PM	11/4/2014 5:37:05 PM	00:02:56
1406957	705 S 57 ST	11/4/2014 7:44:32 PM	11/4/2014 7:47:00 PM	11/4/2014 7:47:00 PM	11/4/2014 7:47:00 PM	00:02:28
1407134	2206 S 98 ST	11/12/2014 8:23:49 AM	11/12/2014 8:25:00 AM	11/12/2014 8:25:00 AM	11/12/2014 8:25:00 AM	00:01:11
1407422	1811 S 66 ST	11/25/2014 10:22:49 AM	11/25/2014 10:27:00 AM	11/25/2014 10:44:00 AM	11/25/2014 11:03:00 AM	00:04:11
1407614	12310 W Oklahoma AVE	12/3/2014 6:42:44 PM	12/3/2014 6:48:00 PM	12/3/2014 6:46:00 PM	12/3/2014 6:48:00 PM	00:05:16
1407891	6205 W Lincoln AVE	12/17/2014 7:04:23 AM	12/17/2014 7:07:12 AM	12/17/2014 7:07:40 AM	12/17/2014 7:07:30 AM	00:02:49
1407922	1545 S 62 ST	12/18/2014 12:48:30 PM	12/18/2014 12:56:00 PM	12/18/2014 12:56:00 PM	12/18/2014 1:00:00 PM	00:07:30
1408089	2408 S 84 ST	12/26/2014 4:01:03 AM	12/26/2014 4:08:00 AM	12/26/2014 4:17:00 AM	12/26/2014 4:10:00 AM	00:06:57
1408109	1736 S 61 ST	12/27/2014 1:02:13 AM	12/27/2014 1:08:10 AM	12/27/2014 1:04:00 AM	12/27/2014 1:35:00 AM	00:05:57
1408136	2153 S 56 ST	12/28/2014 11:10:05 AM	12/28/2014 11:17:00 AM	12/28/2014 11:22:00 AM	12/28/2014 11:17:00 AM	00:06:55
<b>Compliance Ratio</b>						<b>31/36</b>
<b>Under Control Benchmark: Less than 10 Minutes for 90% of Incidents</b>						<b>86%</b>

## RMS REPORT – FIRE SPREAD ANALYSIS

### 2014 Fire Spread - Building Fires

Incident Number	Address	Property Code	Alarm Date	ArrivalDate	Response Time	Fire Spread
1400555	9601 W Cleveland AVE	419	1/24/2014 12:19:41 AM	1/24/2014 12:24:05 AM	00:04:24	2 - Confined to room of origin
1400813	2193 S 82 ST	419	2/5/2014 12:02:18 AM	2/5/2014 12:06:49 AM	00:04:31	1 - Confined to object of origin
1400840	11515 W Cleveland AVE	429	2/6/2014 3:26:35 PM	2/6/2014 3:28:44 PM	00:02:09	2 - Confined to room of origin
1401206	8822 W Lincoln AVE	564	2/23/2014 5:51:40 PM	2/23/2014 5:55:01 PM	00:03:21	1 - Confined to object of origin
1401435	1101 S 58 ST	419	3/6/2014 4:42:04 PM	3/6/2014 4:45:41 PM	00:03:37	2 - Confined to room of origin
1401505	1937 S 72 ST	419	3/10/2014 12:21:44 PM	3/10/2014 12:24:51 PM	00:03:07	2 - Confined to room of origin
1401825	1024 S 101 ST	419	3/28/2014 4:17:21 AM	3/28/2014 4:21:33 AM	00:04:12	5 - Beyond building of origin
1401894	10315 W Greenfield AVE	419	4/1/2014 8:47:29 AM	4/1/2014 8:50:22 AM	00:02:53	2 - Confined to room of origin
1402011	7729 W Hicks ST	419	4/6/2014 3:51:03 PM	4/6/2014 3:52:50 PM	00:01:47	2 - Confined to room of origin
1402361	8208 W Oklahoma AVE	429	4/22/2014 11:48:34 PM	4/22/2014 11:53:21 PM	00:04:47	1 - Confined to object of origin
1402428	900 S 56 ST	419	4/26/2014 5:39:08 AM	4/26/2014 5:43:25 AM	00:04:17	2 - Confined to room of origin
1402437	1458 S 78 ST	419	4/26/2014 3:55:26 PM	4/26/2014 3:58:22 PM	00:02:56	1 - Confined to object of origin
1403073	11040 W Wildwood LN	429	5/22/2014 5:14:59 PM	5/22/2014 5:20:54 PM	00:05:55	2 - Confined to room of origin
1403174	9501 W Cleveland AVE	215	5/27/2014 11:22:02 AM	5/27/2014 11:26:16 AM	00:04:14	2 - Confined to room of origin
1403684	9400 W National AVE	579	6/17/2014 12:56:40 PM	6/17/2014 12:59:53 PM	00:03:13	2 - Confined to room of origin
1403849	1008 S 61 ST	419	6/24/2014 6:07:47 PM	6/24/2014 6:10:50 PM	00:03:03	2 - Confined to room of origin
1404099	1417 S 89 ST	419	7/5/2014 2:22:39 PM	7/5/2014 2:26:27 PM	00:03:48	5 - Beyond building of origin
1404099	1421 S 89 ST	419	7/5/2014 2:22:39 PM	7/5/2014 2:26:27 PM	00:03:48	3 - Confined to floor of origin
1404454	7211 W Becher ST	429	7/22/2014 4:58:48 AM	7/22/2014 5:01:45 AM	00:02:57	2 - Confined to room of origin
1405142	11003 W Oklahoma AVE	581	8/17/2014 2:54:01 PM	8/17/2014 2:57:00 PM	00:02:59	2 - Confined to room of origin
1406352	1450 S 116 ST	429	10/9/2014 11:31:00 AM	10/9/2014 11:34:50 AM	00:03:50	2 - Confined to room of origin
1406434	1459 S 74 ST	419	10/12/2014 8:03:54 AM	10/12/2014 8:05:17 AM	00:01:23	2 - Confined to room of origin
1406952	1009 S 104 ST	419	11/4/2014 5:29:16 PM	11/4/2014 5:34:04 PM	00:04:48	2 - Confined to room of origin
1406957	705 S 57 ST	419	11/4/2014 7:40:49 PM	11/4/2014 7:44:32 PM	00:03:43	1 - Confined to object of origin
1407134	2206 S 98 ST	419	11/12/2014 8:19:31 AM	11/12/2014 8:23:32 AM	00:04:01	1 - Confined to object of origin
1407422	1811 S 66 ST	891	11/25/2014 10:19:32 AM	11/25/2014 10:22:49 AM	00:03:17	2 - Confined to room of origin
1407585	5520 W Burnham ST	429	12/2/2014 2:34:55 PM	12/2/2014 2:36:34 PM	00:01:39	2 - Confined to room of origin
1407614	12310 W Oklahoma AVE	419	12/3/2014 6:39:44 PM	12/3/2014 6:42:44 PM	00:03:00	1 - Confined to object of origin
1407891	6205 W Lincoln AVE	579	12/17/2014 6:59:49 AM	12/17/2014 7:02:59 AM	00:03:10	2 - Confined to room of origin
1408089	2408 S 84 ST	419	12/26/2014 3:55:14 AM	12/26/2014 4:01:03 AM	00:05:49	2 - Confined to room of origin
1408109	1736 S 61 ST	419	12/27/2014 12:59:10 AM	12/27/2014 1:02:13 AM	00:03:03	3 - Confined to floor of origin
1408136	2153 S 56 ST	429	12/28/2014 11:06:47 AM	12/28/2014 11:10:05 AM	00:03:18	2 - Confined to room of origin
<b>Compliance Ratio</b>						<b>28/32</b>
<b>Fire Spread Benchmark: Confined to Room of Origin 70% of Incidents</b>						<b>88%</b>

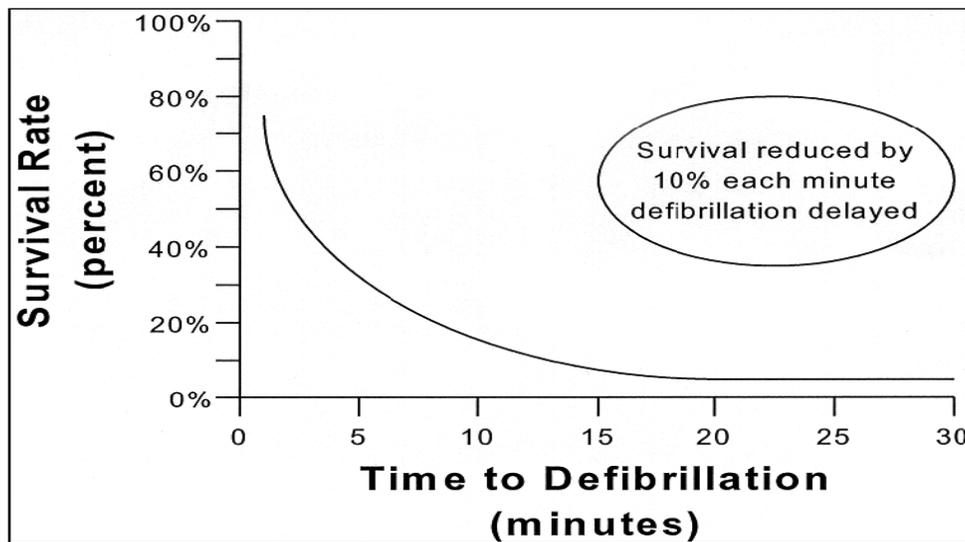
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## EMERGENCY MEDICAL GUIDELINES

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Requesting emergency medical assistance through the enhanced-911 system initiates response of the West Allis Fire Department, the city's principal EMS provider. Strategically located fire stations and prompt responses allowed fire department personnel to arrive on-scene of EMS incidents from the dispatchers notification to arrival within 5 minutes and 17 seconds 90% of the time in 2012. Fire department personnel are equipped and deployed so as to aggressively follow the American Heart Association's (AHA) standard for medical intervention in cases of cardiac arrest. The chart below illustrates the relationship between time of defibrillation and survival rate in cardiac arrest patients.

**CARDIAC ARREST SURVIVAL RATE**



### WEST ALLIS FIRE DEPARTMENT RESPONSE

The City of West Allis provides its citizens with access to three ALS ambulances as primary EMS response units. Each of these ambulances is staffed by a minimum of two firefighter/paramedics. When staffing permits, an additional firefighter/EMT is assigned to the ambulance. Additional paramedics are assigned to engine and truck companies so as to provide ALS intervention, even during times of resource depletion. When additional EMS transport units are needed, mutual aid ambulances from neighboring communities are called into the city through mutual aid agreements and respond with a local engine or truck company. All fire department units are equipped with external defibrillators.

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### EMERGENCY MEDICAL ALARMS: ADVANCED LIFE SUPPORT

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Critical tasks have been established in order to treat critically ill patients. The chain of survival recommends the availability of BLS services, including cardiopulmonary resuscitation (CPR) and defibrillation, within four minutes of cardiac arrest. Also, ALS services must be provided no later than nine minutes after notification of the event. Early notification of emergency response services is imperative to successful resuscitation of a cardiac arrest patient.

### TACTICAL PRIORITIES

**CPR:** The first arriving fire department unit shall immediately initiate CPR. Effective CPR requires the attention of two personnel who are licensed minimally at the BLS level.

**Defibrillation:** Defibrillation is the second tactical priority and shall be accomplished as soon as possible upon arrival. Application and operation of the external defibrillator, whether automatic or manual, shall be accomplished by a single individual who is licensed minimally at the BLS level.

**Airway Management:** Airway management shall be established simultaneously with defibrillation. Establishment of a secured airway must be accomplished as soon as possible and constitutes the third tactical priority. Intubation, whether visualized or non-visualized, shall be accomplished by a single individual who is licensed at the ALS level.

**Medication Administration:** The fourth tactical priority when attempting resuscitation shall be the administration of appropriate medications. Medication administration shall be accomplished by a single individual who is licensed at the ALS level.

**Documentation and Communication:** A member of the fire department's response team must accurately document all interventions performed and medications administered, as well as the patient's response to each. Additionally, this member of the team must maintain communication with a medical control physician. Documentation and communication shall be accomplished by a single individual who may be licensed at the ALS or BLS level, although ALS experience is preferred for this member of the team.

### BREAKDOWN OF PERSONNEL

Critical Tasks	Personnel Required
CPR - BLS	2
Defibrillation – ALS or BLS	1
Intubation - ALS	1
Medication Administration – ALS	1
Documentation/Communication – ALS or BLS	1
<b>TOTAL</b>	<b>6</b>

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## HAZARDOUS MATERIALS OPERATIONS LEVEL

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A Hazardous Materials Incident receives the same initial response as a full structure fire assignment, 19 personnel. Technical Rescue Team members assemble on site to develop an incident action plan based on initial size up information. The following tactical priorities must be accomplished:

### TACTICAL PRIORITIES

**Establish Command:** The first arriving company or fire department representative is responsible to initiate command and determine the scope of the emergency. The initial IC must collect as much data as possible and begin assigning tasks.

**Site Management:** The second arriving company must manage access to the site and establish control of the scene. This company must make an initial determination of hot, warm and cold zones based on initial size up information and initiate evacuation of the site.

**Release Identification:** Once access to the site has been controlled and zones of operation have been established, substance(s) involved must be identified and associated hazards must be identified. Based on this information, specific risks must be identified and analyzed. An incident action plan must be developed and communicated to all personnel.

**Formation of entry and backup teams:** In the event of a necessary rescue, the formation of an entry and backup team may take place. The teams' entry parameters will adhere to NFPA 472 guidelines for "operations Level-Mission Specific Responsibilities". The IC shall make notification to the Southeastern Wisconsin Regional Hazmat team (Technician Level) on all hazmat scenes requiring a rescue.

**Decontamination Team:** A decontamination area must be established and clearly identified.

**Site Safety and Control Plan:** Prior to implementing any response objectives in the Hot Zone, the site safety and control plan must be completed, reviewed, and signed by the Incident Commander, Hazmat Commander, and Safety Officer.

**Implement Response Objectives:** Product control, confinement, containment, and fire control must be accomplished.

**Recovery and Termination:** The scene must be returned to pre-incident status and resources from all responding agencies must be restored to a condition of readiness.

**BREAKDOWN OF PERSONNEL**

<b>Critical Tasks</b>	<b>Personnel Required</b>
Incident Command	1
Incident Safety Officer	1
Communications Officer	1
Hazmat Operations	1
Hazard Safety officer	1
Entry & Backup Teams	4
Decontamination Group	4
Resource Group	2
EMS Group	3
Public Information Officer	1
<b>TOTAL</b>	<b>19</b>

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## CONFINED SPACE RESCUE/TUNNEL RESCUE

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A Confined Space Incident/Tunnel Rescue operation will receive the same initial response as a full structure fire assignment, 19 personnel. Technical Rescue Team members will assemble on site and develop an action plan based on initial information. The following tactical priorities will be accomplished:

### TACTICAL PRIORITIES

**Establish Command:** The first arriving company or person will be responsible to initiate command and determine the scope of the emergency. The initial incident commander will collect as much data as possible and begin assigning tasks.

**Evaluate Confined Space:** The next task will be to evaluate the confined space and the area surrounding it. The area must be secured. Hazards shall be identified and the atmosphere shall be monitored.

**Patient Assessment:** Patient contact shall be established so as to determine the number of patients involved and vital information regarding mechanism of injury, location of patient(s), etc.

**Resource Assessment:** The next priority shall be identification of necessary resources. The incident commander shall ensure that properly trained and equipped personnel are assembled.

**Pre-entry:** Atmospheric monitoring shall be performed.

**Establish Ventilation:** Confined spaces shall be sufficiently ventilated so as to ensure the safety of operating personnel.

**Identify and Control Hazards:** All pertinent power sources shall be secured. All equipment associated with the confined space shall be shut down, tagged and locked out.

**Prepare entry and backup teams:** If space allows entry, teams shall consist of at least two entrants. There shall be an equal number of backup personnel equipped for immediate entry.

**Assign Accountability Officer:** Command shall institute level III accountability for all entries into permit required confined spaces.

**Set up the communication equipment:** Direct, uninterrupted communication shall be maintained with the entry team at all times.

**Set up Entry and Retrieval System:** All personnel entering a confined space shall have a safety line attached to a class III harness. If the confined space is deeper than 5 feet they shall also have fall arrest and retrieval lines in place.

**BREAKDOWN OF PERSONNEL**

<b>Critical Tasks</b>	<b>Personnel Required</b>
Incident Command	1
Accountability Officer	1
Safety Officer	1
Liaison Officer	1
Public Information Officer	1
Entry Team & Backup	4
Operations Officer	1
Confined Space Division	5
EMS Division	3
Staging	1
<b>TOTAL</b>	<b>19</b>

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## ICE/COLD WATER RESCUE

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An Ice/Cold Water Rescue will receive a partial assignment, which consists of one Engine Company, one Truck Company, an ALS ambulance, and the battalion chief, for a total of 11 personnel. The following tactical priorities shall be accomplished:

### TACTICAL PRIORITIES

**Establish Command:** The first arriving company or person will be responsible to initiate command, determining the scope of the emergency. The initial incident commander shall collect as much information as possible begin assigning tasks. The incident commander will determine whether the rescue can be performed from shore, or whether entry onto the ice/ into the water will be required.

**Reach and Throw:** The engine company will don flotation devices and try to reach the victim using equipment such as pike poles. If victims are too far for the reach method to be effective, the engine company will attempt to deploy a throw rope.

**Victim Rescue:** Truck company members wearing exposure suits will perform rescue operations. One member will attempt rescue while the other member fills a backup role.

**Victim Treatment:** The ALS ambulance crews will attend to victims per EMS hypothermia protocols.

### BREAKDOWN OF PERSONNEL

Critical Tasks	Personnel Required
Incident Command	1
Reach and Throw	2
On Ice/In Water Rescue + Backup	4
EMS Treatment	4
<b>TOTAL</b>	<b>11</b>

SECTION FIVE:

# DISTRIBUTION OF RESOURCES



WEST ALLIS FIRE DEPARTMENT  
STANDARDS OF COVERAGE

# DISTRIBUTION OF RESOURCES

## DISTRIBUTION

Distribution refers to a method of strategically planning and placing fire stations within a jurisdiction so as to support rapid deployment of fire and EMS services. The West Allis Fire Department's benchmark calls for a turnout time of 80 seconds, and arrival of the first company within 5:20 minutes of dispatch 90% of the time. Station location and personnel are strategically dispersed so as to consistently meet this benchmark.

### FIRE& EMERGENCY MEDICAL RESPONSE BOUNDARIES

The West Allis Fire Department currently responds out of three fire stations. Station 1 is located in the east end of the city, north of a railroad track that divides the city into north and south sections. Station 1 houses Med 1 and Engine 1. Station 2 is also located in the east end of the city, but on the south side of the abovementioned railroad track. Station 2 houses Battalion 1, Med 112, Engine 2 and Truck 2, as well as the department's technical rescue team resources and training facilities. Station 3 is located in the west end of the city, housing Med 113 and Engine 3. *\*Please refer to the fire and EMS response boundaries map located in the reference section*

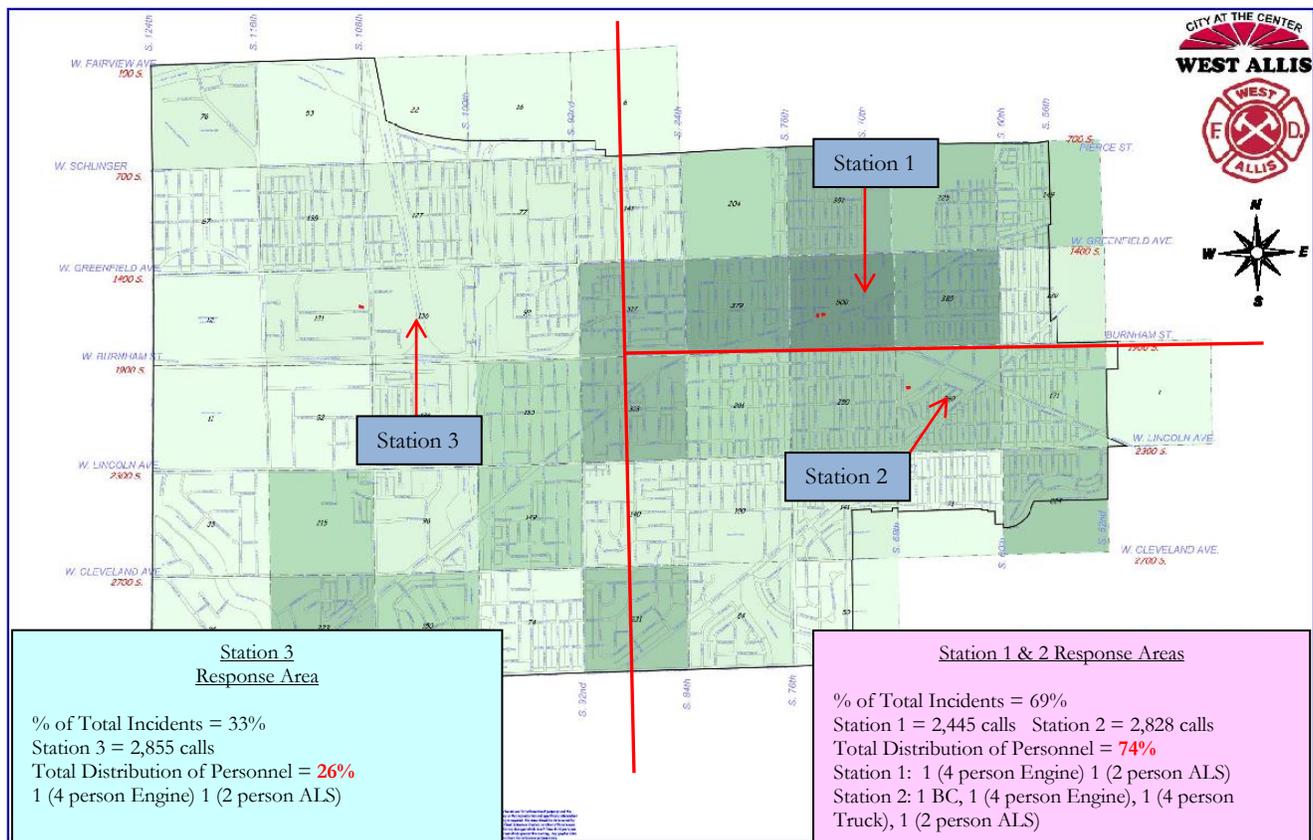
## RESPONSE STANDARDS

Successfully meeting response time benchmarks is a priority for the West Allis Fire Department. Rapid responses truly influence the outcome of emergency incidents, whether they are fire, EMS, or technical in nature. The West Allis Fire Department strives to provide for the arrival of an initial company within five minutes of dispatch 90% of the time for EMS calls and 5 minutes and 20 seconds for all other calls; and an effective response force within nine minutes for EMS calls and 9 minutes and 20 seconds of dispatch 90% of the time for all other calls.

The West Allis Fire Department dispatches a full assignment to each structure fire, hazardous materials release, and technical rescue incident. The full assignment consists of one battalion chief, three engine companies, one truck company, and one ALS ambulance. As a result, a minimum of 19 personnel respond with each full assignment. The fire department maintains a daily staffing of 23 personnel, allowing for full assignments.

Response Times by Station Response Areas (Dispatch To Arrival)										
EMS - 5 Min.	2010		2011		2012		2013		2014	
Fire - 5 Min. 20 sec.	EMS	FIRE								
<b>Records Analyzed</b>	6,258	161	6,740	128	6,258	161	6,740	128	6,848	127
<b>Station 1 Area</b>	93.90%	95.70%	93.90%	97.70%	93.90%	95.70%	93.90%	97.70%	93.40%	95.70%
<b>Station 2 Area</b>	88.10%	91.50%	90.50%	88.60%	88.10%	91.50%	90.50%	88.60%	89.50%	91.40%
<b>Station 3 Area</b>	83.60%	85.20%	80.90%	79.50%	83.60%	85.20%	80.90%	79.50%	80.60%	78.40%
NFIRS 5 – Choose date range, Fires or EMS, filter CWA, Dispatch to Arrival, Data Split “by Station” EMS Calls – Filter out 324, 331, 353, 381										

## DISTRIBUTION OF RESOURCES - 2014



The city of West Allis encompasses 11.4 square miles. The fire department occupies three fire stations. Two stations are located in the eastern half of the city and the third station is located in the western half. The west end of the city is newer, with larger lots and more residential properties. The eastern half of the city was developed in the early 1900's around several large factories. These factories have since disappeared, being replaced by light manufacturing and multifamily residential buildings. The eastern half of the city is comprised of older buildings and smaller residential lots.

Both halves of the city are roughly the same size, the western half being slightly larger, but with only 1/3 of the population. The west end is protected by one Engine Company and one ALS ambulance, a minimum of six personnel per shift. The east end is protected by two engine companies, a truck company, two ALS ambulances, and a Battalion Chief, a minimum of 17 personnel per shift.

Five measures have been combined to provide a quick comparison and assessment of the delivery system by first due unit. Below is a chart that provides data in raw form and in percentages. In addition, each quarter section of the city is broken down for further analysis.

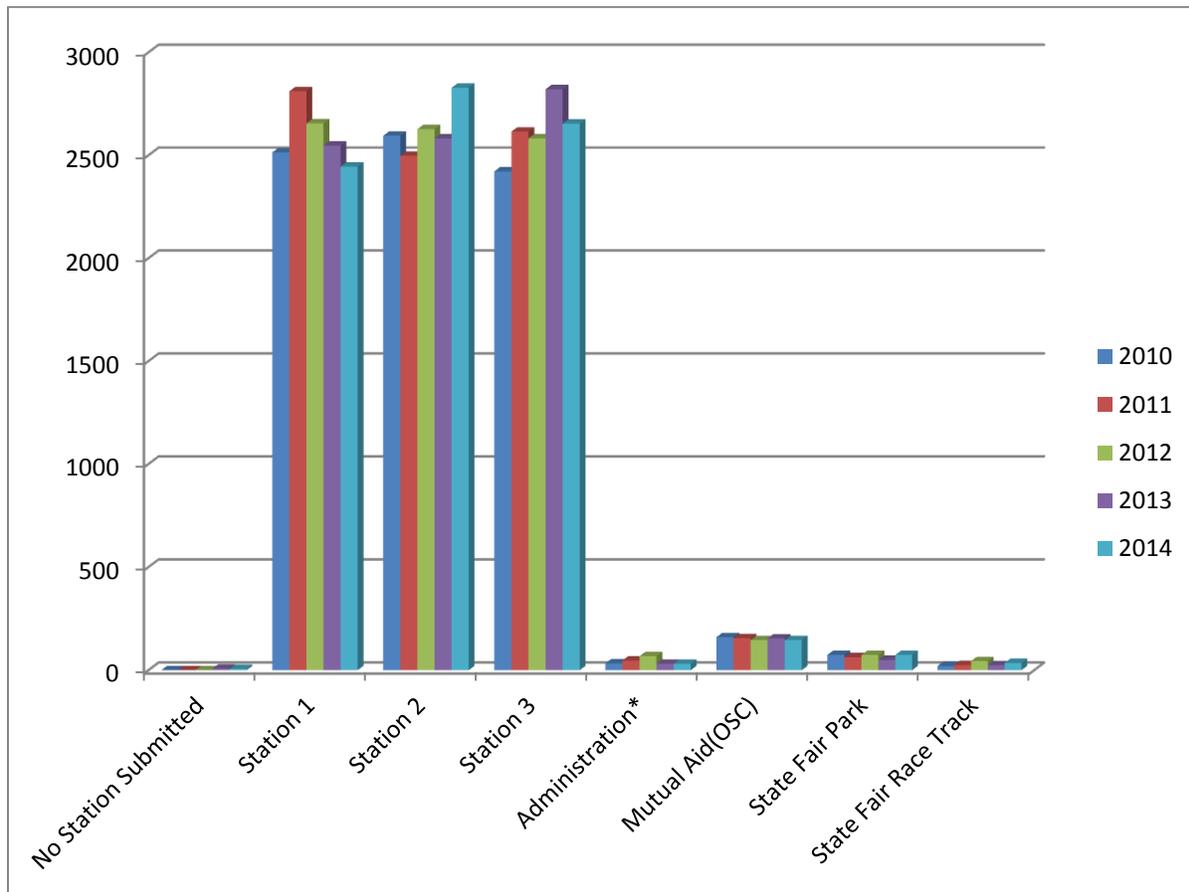
**DISTRIBUTION OF CALLS BY STATION AREA**

<b>Station</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Total</b>
No Station Submitted	0	0	0	8	6	14
Station 1	2,514	2,811	2,655	2,547	2,445	12,972
Station 2	2,595	2,498	2,627	2,582	2,828	13,130
Station 3	2,422	2,615	2,582	2,821	2,654	13,094
Administration*	33	47	68	31	31	210
Mutual Aid(OSC)	160	155	146	154	146	761
State Fair Park	74	63	74	50	74	335
State Fair Race Track	20	25	44	24	35	148
<b>Total</b>	<b>7,818</b>	<b>8,222</b>	<b>8,196</b>	<b>8,217</b>	<b>8,219</b>	<b>40,664</b>

\*Accidental transmissions of alarms -

NFIRS 5 – Preprogrammed Report “Numeric Count of Incidents by Station”

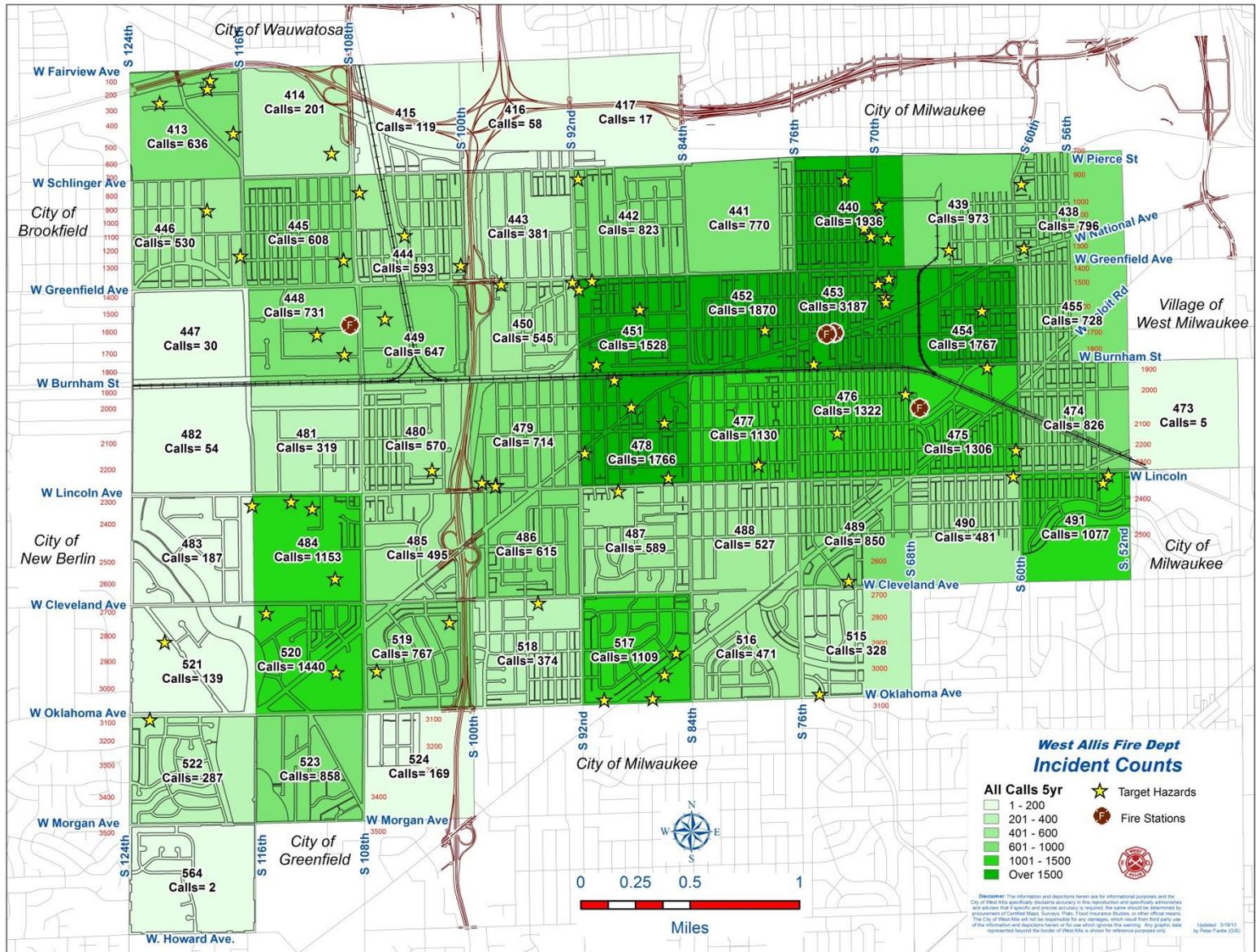
**2010-2014 CALL VOLUME BY STATION AREA**

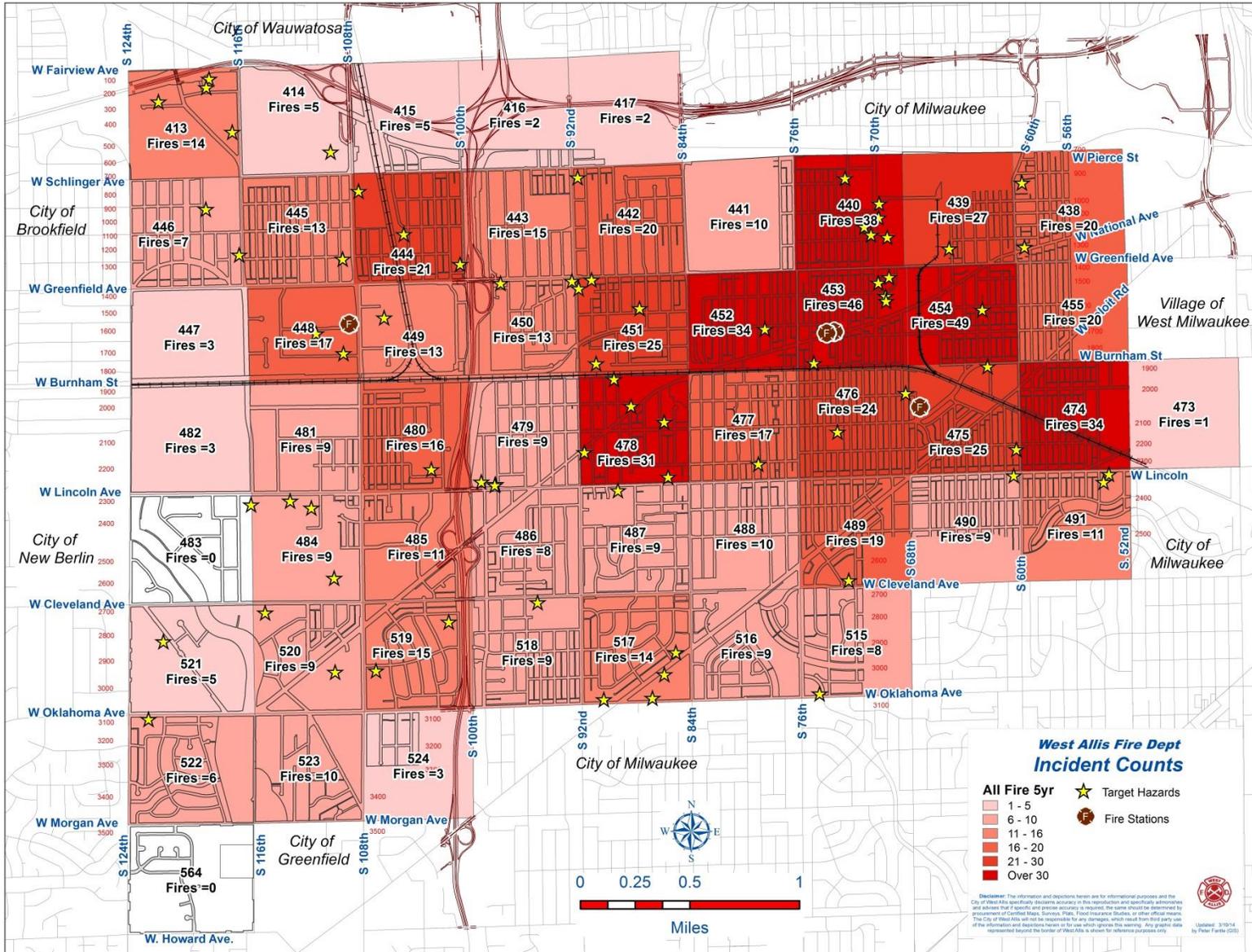


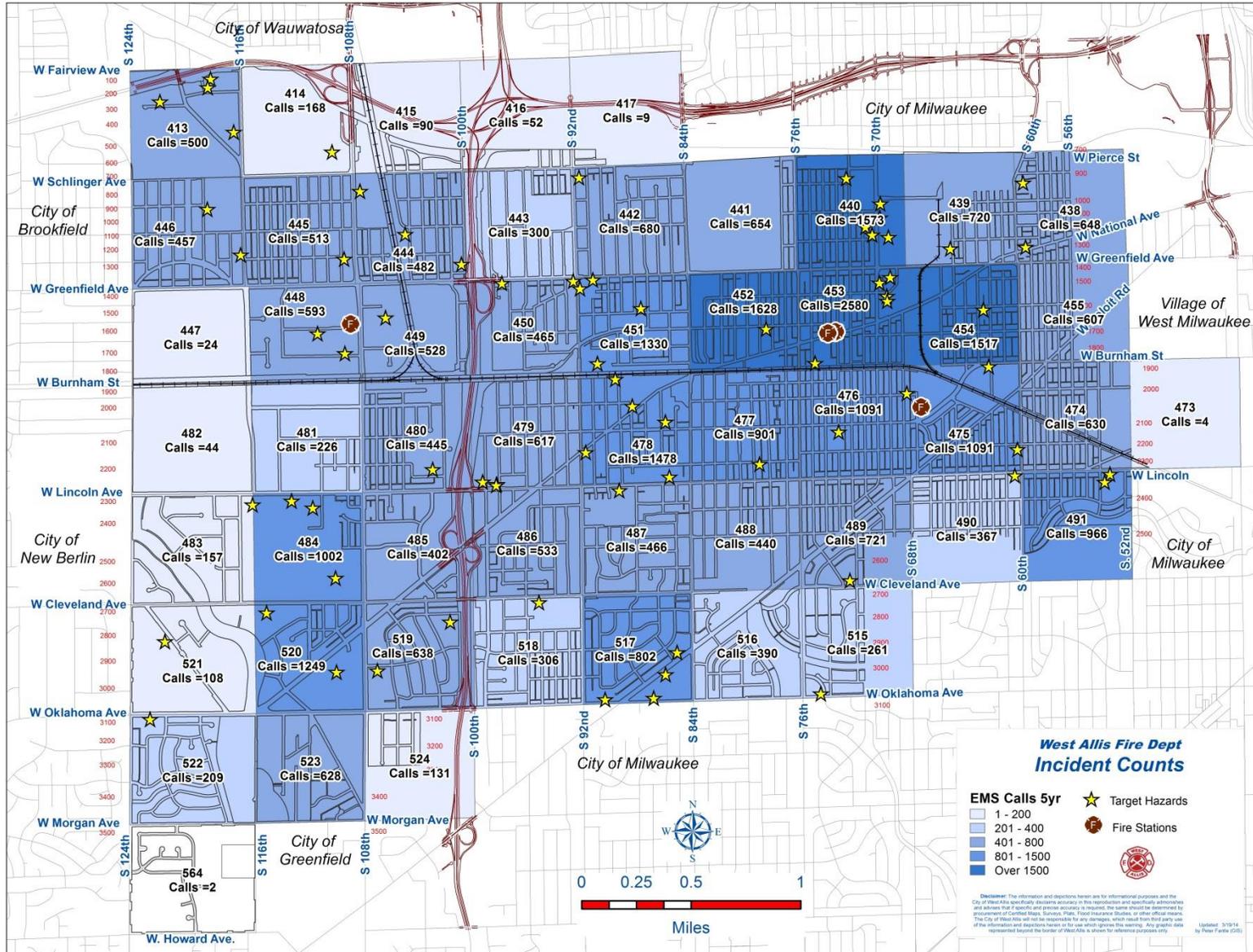
"NUMERIC COUNT OF INCIDENTS BY DISTRICT"  
(JANUARY 2010 – DECEMBER 2014)

CALL VOLUME BY DISTRICT/STATION												
STATION 1	District	Fire	EMS	Other	Count	STATION 3	District	Fire	EMS	Other	Count	
	417	2	12	8	22		413	12	365	90	467	
	438	20	678	98	796		414	2	168	24	194	
	439	25	699	172	896		415	5	99	19	123	
	440	34	1619	290	1943		416	2	56	6	64	
	441	10	679	92	781		443	12	320	55	387	
	442	16	723	74	813		444	25	471	73	569	
	451	31	1332	148	1511		445	14	509	74	597	
	452	34	1700	155	1889		446	5	473	55	533	
	453	50	2783	501	3334		447	2	14	5	21	
	454	47	1499	164	1710		448	17	664	110	791	
	455	21	624	91	736		449	14	512	96	622	
	<b>Total</b>	<b>290</b>	<b>12348</b>	<b>1793</b>	<b>14431</b>		450	8	468	54	530	
	STATION 2	District	Fire	EMS	Other		Count	479	13	652	75	740
		473	1	6	0		7	480	12	456	85	553
474		36	682	145	863	481	8	255	72	335		
475		23	1119	155	1297	482	1	45	5	51		
476		28	1148	175	1351	483	0	154	23	177		
477		17	980	165	1162	484	6	1095	125	1226		
478		30	1488	184	1702	485	11	419	71	501		
487		5	495	96	596	486	11	566	70	647		
488		10	472	56	538	518	8	340	46	394		
489		19	798	103	920	519	15	679	98	792		
490		11	412	79	502	520	10	1327	145	1482		
491		8	936	83	1027	521	4	109	24	137		
515		7	313	37	357	522	5	204	53	262		
516		9	416	55	480	523	13	674	194	881		
517		14	853	266	1133	524	3	129	26	158		
<b>Total</b>	<b>218</b>	<b>10118</b>	<b>1599</b>	<b>11935</b>	<b>Total</b>	<b>238</b>	<b>11223</b>	<b>1773</b>	<b>13234</b>			

PREPROGRAMMED REPORT - "NUMERIC OF INCIDENTS BY DISTRICT, BY INCIDENT TYPE"







Station	Area (Sq. Miles)		Road Miles		Population		Residential Structures		Commercial Structures	
<b>FS1</b>	2.2	19%	41	22%	16,768	27%	8,151	25%	583	20%
<b>FS2</b>	2.7	24%	73	38%	24,224	40%	14,474	45%	669	24%
<b>FS3</b>	6.5	57%	75	40%	19,326	33%	9,827	30%	1608	56%

**STATION 1 QUARTER SECTION BREAKDOWN**

Quarter ID	Road Miles	Population	Residential Structures	Commercial Structures
417	0.19	11	4	9
438	3.46	1287	765	46
439	2.62	871	435	40
440	4.29	1841	872	51
441	1.34	349	195	6
442	5.35	2092	1525	51
451	5.01	2406	1133	86
452	5.18	1893	850	96
453	5.64	2364	836	96
454	4.45	2193	753	73
455	3.19	1461	783	29

**STATION 2 QUARTER SECTION BREAKDOWN**

Quarter ID	Road Miles	Population	Residential Structures	Commercial Structures
473	0.04	0	0	1
474	5.85	1757	973	84
475	4.75	1637	886	71
476	6.32	2961	1725	84
477	5.72	2593	1496	70
478	4.89	1889	1090	65
486	4.74	1757	1131	30
487	5.10	1385	897	41
488	4.77	1370	1004	35
489	5.36	1574	956	37
490	3.88	1155	786	15
491	3.81	1132	574	34
515	3.15	712	429	16
516	4.64	1062	569	22
517	5.07	1859	936	30
518	5.37	1381	1040	34

**STATION 3 QUARTER SECTION BREAKDOWN**

<b>Quarter ID</b>	<b>Road Miles</b>	<b>Population</b>	<b>Residential Structures</b>	<b>Commercial Structures</b>
413	2.16	0	0	42
414	0.49	0	0	5
415	1.24	265	234	6
416	0.35	137	67	29
443	3.88	1167	945	17
444	4.76	1265	959	191
445	6.09	1684	1336	29
446	5.24	1291	934	8
447	1.43	0	0	0
448	1.82	862	18	110
449	2.08	628	54	690
450	3.39	1151	707	18
476	6.32	2961	1725	84
477	5.72	2593	1496	70
478	4.89	1889	1090	65
479	4.48	1771	1301	42
480	3.94	1783	629	48
481	2.41	389	130	76
482	0.75	0	0	11
483	4.73	555	329	0
484	1.20	364	83	30
485	3.11	258	123	50
519	4.61	1213	650	43
520	3.08	921	272	49
521	2.45	396	235	4
522	5.53	977	396	1
523	3.75	1908	209	95
524	1.87	341	198	14
564	0.31	0	0	0

SECTION SIX:  
**CONCENTRATION OF  
RESOURCES**



WEST ALLIS FIRE DEPARTMENT  
STANDARDS OF COVERAGE

# CONCENTRATION OF RESOURCES

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## CONCENTRATION

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The West Allis Fire Department strives to provide effective and efficient service to the citizens of West Allis. This includes timely mitigation of fire incidents and timely response to requests for EMS intervention. The placement of resources directly impacts the fire department's effort to achieve this goal. In short, resources must be sufficiently concentrated so as to effectively halt the escalation of an emergency incident and, ultimately, to provide complete incident stabilization.

### MUTUAL AID BOX ALARM SYSTEM

In September of 2007 the West Allis Fire Department, as well as ten other Milwaukee County suburban fire departments, adopted the Mutual Aid Box Alarm System (MABAS). As a result, the West Allis Fire Department may request assistance from neighboring fire departments to aid in providing a sufficient concentration of units.

When a structure fire (initial response of 19 personnel) is confirmed by the first arriving unit, a working still alarm is typically requested by the initial incident commander. In response to this request, a mutual aid truck company, engine company and 2 chief officers, a West Allis fire investigator, and a second West Allis chief officer are dispatched directly to the scene. Additionally, a mutual aid engine company is dispatched to backfill Fire Station 3. If additional staffing is needed, up to five MABAS box alarms may be requested. Upon activation of the first MABAS box alarm, two additional engine companies, one truck company, one ALS ambulance, three chief officers, one heavy rescue unit, and the Milwaukee Fire Bell (volunteer support agency that provides food and drink to firefighters at extended incidents) are dispatched to the scene. Additionally, two MABAS engine companies and a MABAS truck company are assigned to backfill West Allis fire stations.

The West Allis Fire Department's benchmark calls for a full assignment (19 personnel) to arrive on scene in 10 minutes 20 seconds (1:00 call processing, 1:20 turnout time & 8:00 travel time) or less 90% of the time.

<b>DEPARTMENT NAME:</b> West Allis		<b>BOX ALARM TYPE:</b> Structure Fire			<b>EFFECTIVE DATE:</b> December 12, 2014		<b>MABAS DIVISION</b> 107
<b>BOX ALARM #</b> 1-01		<b>LOCATION OR AREA:</b> Citywide			<b>AUTHORIZED SIGNATURE:</b> <i>Steve Bane</i>		
<b>LOCAL DISPATCH AREA:</b>							
<b>ALARM LEVEL</b>	<b>ENGINES</b>	<b>TRUCKS</b>	<b>SQUADS</b>	<b>AMBULANCES</b>	<b>CHIEFS</b>	<b>SPECIAL EQUIPMENT</b>	<b>CHANGE OF QUARTERS (Station #)</b>
<b>Full</b>	West Allis			West Allis	West Allis		
<b>Still</b>	West Allis West Allis	West Allis		West Allis	West Allis		
<b>Working</b>	Milwaukee	Wauwatosa			*Wauwatosa *Milwaukee	*On Call Fire Investigators	*Brookfield Engine (Sta. 3)
<b>Still</b>							
<b>MABAS BOX ALARM:</b>							
<b>ALARM LEVEL</b>	<b>ENGINES</b>	<b>TRUCKS</b>	<b>SQUADS</b>	<b>AMBULANCES</b>	<b>CHIEFS</b>	<b>SPECIAL EQUIPMENT</b>	<b>CHANGE OF QUARTERS (Station #)</b>
<b>BOX</b>	Milwaukee City of Brookfield	Greenfield		Milwaukee ALS	Greenfield North Shore	Wauwatosa Utility 55 North Shore RIT * Milw. Fire Bell	New Berlin Engine (Sta. 1) Greendale Engine (Sta.3) Franklin Truck (Sta.3)
<b>2ND</b>	New Berlin Greendale	Franklin		Wauwatosa ALS	New Berlin Brookfield	Milwaukee Command Post	H. Corners Engine (Sta. 1) Cudahy Engine (Sta.3) Milwaukee Truck (Sta.3)
<b>3RD</b>	Hales Corners Cudahy	Milwaukee		Greenfield ALS	Oak Creek Milwaukee	Oak Creek RIT	Wauwatosa Engine (Sta. 1) St. Francis Eng (Sta.3) South Milwaukee Truck (Sta.3)
<b>4TH</b>	Wauwatosa St. Francis	South Milwaukee		Franklin ALS	Franklin South Milwaukee		Elm Grove Engine (Sta.1) North Shore Engine (Sta.3) Milwaukee Truck (Sta.3)
<b>5TH</b>	Elm Grove North Shore	Milwaukee		Hales Corners BLS	St. Francis Cudahy		
<b>INTERDIVISIONAL REQUEST</b>		<b>1st Choice</b> 106	<b>2nd Choice</b> 102	<b>3rd Choice</b>			
<b>INFORMATION</b>							
West Allis Station 1 - 7300 W. National Avenue (Engine 1 and Med 1)							
West Allis Station 2 - 2040 S. 67th Place (3 blocks north of Lincoln Avenue) (BC, Engine 2, Truck 2, Med 112)							
West Allis Station 3 - 10830 W. Lapham Street (2 blocks south of Greenfield Avenue, just west of HWY 100) (Engine 3, Med 113)							

DEPARTMENT NAME: West Allis	BOX ALARM TYPE: Life Safety	EFFECTIVE DATE: December 12, 2014	MABAS DIVISION 107
BOX ALARM # 1-03	LOCATION OR AREA: Citywide	AUTHORIZED SIGNATURE: <i>Steven Pano</i>	

**LOCAL DISPATCH AREA:**

ALARM LEVEL	ENGINES	TRUCKS	SQUADS	Ambulances		CHIEFS	SPECIAL EQUIPMENT	CHANGE OF QUARTERS (Station #)
				EMS (ALS)	EMS (BLS)			
Full	West Allis	West Allis (w/ext)		West Allis		West Allis		
Still	West Allis West Allis (w/ext)			West Allis West Allis		West Allis		
Working								
Still								

**MABAS BOX ALARM:**

ALARM LEVEL	ENGINES	TRUCKS	SQUADS	Ambulances		CHIEFS	SPECIAL EQUIPMENT	CHANGE OF QUARTERS (Station #)
				EMS (ALS)	EMS (BLS)			
BOX	Wauwatosa (w/ext)	Milwaukee (w/ext)		Wauwatosa Greenfield Milwaukee	Elm Grove Hales Corners	Wauwatosa Milwaukee Greenfield		New Berlin Engine (Sta. 3)
2ND	New Berlin	Greenfield (w/ext)		Milwaukee Wauwatosa Franklin	Butler Cudahy	New Berlin Cudahy Franklin	Wauwatosa Utility 55 Milw. County Rescue 9 Milwaukee Command Post	City of Brookfield Engine (Sta. 3)
3RD	City of Brookfield (w/ext)	Milwaukee (w/ext)		Milwaukee Oak Creek S. Milwaukee	T. of Brookfield Menomonee Falls	City of Brookfield Oak Creek S. Milwaukee		Elm Grove Engine (Sta. 3)
4TH	Elm Grove	S. Milwaukee (w/ext)		North Shore Milwaukee Milwaukee	Hales Corners Franklin	Elm Grove North Shore Hales Corners		T. of Brookfield Engine (Sta. 3)
5TH	T. of Brookfield	North Shore (w/ext)		City of Brookfield New Berlin City of Waukesha	St. Francis Town of Waukesha	T. of Brookfield S. Milwaukee St. Francis		
INTERDIVISIONAL REQUEST		1st Choice 106	2nd Choice 102	3rd Choice				

**INFORMATION**

West Allis Station 1 - 7300 W. National Avenue (Engine 1, Med 1)  
 West Allis Station 2 - 2040 S. 67th Place (3 blocks north of Lincoln Avenue) (BC, Engine 2, Truck 2, Med 112)  
 West Allis Station 3 - 10830 W. Lapham Street (2 blocks south of Greenfield Avenue, just west of HWY 100) (Engine 3, Med 113)

*NOTE: Cities with an \* asterisk will need to be called by West Allis Dispatch*

### Dispatch To Arrival Performance Analysis: 2010 - 2014

NFIRS Category	1st Unit 5 Min. 20 Sec.	1st Unit Arrival Time (90%)	2nd Unit 9 Min. 20 Sec.	2nd Unit Arrival Time (90%)	3rd Unit 9 Min. 20 Sec.	3rd Unit Arrival Time (90%)	4th Unit 9 Min. 20 Sec.	4th Unit Arrival Time (90%)	5th Unit 9 Min. 20 Sec.	5th Unit Arrival Time (90%)	6th Unit 9 Min. 20 Sec.	6th Unit Arrival Time (90%)	Notes
Fires (100's)	90.7% (595)	5 Min. 13 Sec.	97.7% (341)	6 Min. 13 Sec.	97.7% (256)	6 Min. 38 Sec.	98.6% (219)	7 Min. 08 Sec.	93.7% (178)	8 Min. 41 Sec.	88.1% (133)	9 Min. 45 Sec.	There are 3,055 Apparatus records being analyzed. * 609 records were ignored because of a zero time value. * 77 records were ignored because they were more than limit of 900 seconds.
Ruptures Explosions Overheat (200's)	100.0% (16)	4 Min. 37 Sec.	92.90% (13)	5 Min. 32 Sec.	100.0% (10)	6 Min. 1 Sec.	100.0% (9)	7 Min. 35 Sec.	100.0% (8)	7 Min. 15 Sec.	100.0% (7)	7 Min. 57 Sec.	There are 80 Apparatus records being analyzed. * 13 records were ignored because of a zero time value.
Emergency Medical Service 5 & 9 Minute Response Time Objectives (300's)	91.0% 26,800	5 Min. 12 Sec.	98.4% 13,527	7 Min. 05 Sec.	92.2% 701	8 Min. 33 Sec.	91.9% 125	8 Min. 57 Sec.	91.8% (45)	9 Min. 14 Sec.	87.5% (14)	11 Min. 35 Sec.	There are 53,340 Apparatus records being analyzed. * 2,754 records were ignored because of a zero time value. * 131 records were ignored because they were more than limit of 900 seconds.

NFIRS 5/Apparatus Tab/Date Range/City of West Allis Only/select NFIRS category/fractal report/dispatch to arrival/data split = by arrival sequence

## EFFICIENCY

In the ideal workplace, workload would be equally divided among work sites, response units, and personnel. Unfortunately, this is extremely difficult to accomplish in a fire department. As is true with most municipal fire departments, the majority of the West Allis Fire Department's responses are of an EMS nature. As a result, ALS ambulances (M1, M112, and M113) are the department's busiest units, responding to approximately 80% of all incidents.

On July 1, 2011 the department modified its typical response to requests for ALS service, for the first time the department included engine companies as part of the initial response. This has resulted in a dramatic increase in workload for the department's engine companies and a more evenly divided workload.

The following charts list the breakdown of calls for service by station.

**NUMBER OF RESPONSES PER APPARATUS BY STATION (2009-2013)**

<b>Fire Station One</b>			
	<b>Engine 1</b>	<b>Med 1</b>	<b>M100*/Med 110<sup>^</sup></b>
<b>2010</b>	657	2,828	2,178*
<b>2011</b>	1,133**	2,881	1,099*
<b>2012</b>	1,431	2,583	NA
<b>2013</b>	1,577	2,368	417 <sup>^</sup>
<b>2014</b>	1,607	2,193	417 <sup>^</sup>

\*M100 served as a front line ALS/BLS ambulance from January 1, 2009 to July 1, 2011. M110 in service when staffing allows effective in 2013.

\*\*Engine 1 began responding with Med 1 to all ALS calls on July 1, 2011

<b>Fire Station Two</b>					
	<b>Battalion 1</b>	<b>Engine 2</b>	<b>Truck 2</b>	<b>Ambulance 2</b>	<b>Med 112</b>
<b>2010</b>	293	785	957	2,632	2 (reserve)
<b>2011</b>	285	1,206**	970	1,418*	1,203*
<b>2012</b>	281	1,469	800	NA	2,539
<b>2013</b>	329	1,592	911	NA	2,369
<b>2014</b>	419	1,764	918	NA	2,404

\*M112 placed in service as a front line ALS ambulance and A2 taken out of service as a front line BLS ambulance on July 1, 2011.

\*\*Engine 2 began responding with M112 to all ALS calls on July 1, 2011

<b>Fire Station Three</b>				
	<b>Engine 3</b>	<b>Truck 3</b>	<b>Ambulance 3</b>	<b>Med 113</b>
<b>2010</b>	921	NA	2,164	0
<b>2011</b>	1,302	NA	1,156**	1,149**
<b>2012</b>	1,469	NA	NA	2,196
<b>2013</b>	1,610	NA	NA	2,293
<b>2014</b>	1,734	NA	NA	2,139

\*T3 taken out of service on 1/12/2009. \*\* M113 placed in service as a frontline ALS/BLS ambulance starting on July 1, 2011 and A3 taken out of service as a frontline BLS ambulance.

\*\*Engine 3 began responding with M113 to all ALS calls on July 1, 2011

**Zoll – Incident Report “Apparatus Count Summary”**

Fire Station 3's response area is worthy of special note since it encompasses slightly over half of the total land area in the city. Each fire station protects a civilian population that is approximately equal, despite the fact that each station covers a different number of square miles.

Fire Station 3's territory was annexed by the City of West Allis in the early 1950's. As a result, this area of the city has a lower population density, a higher percentage of commercial properties, and more buildings that are protected by automatic fire detection and sprinkler systems than the other two response territories.

In order to accurately assess the spacing of resources, the volume of calls for service in each geographic area must first be evaluated.

Engine Company Responses / Percentage of Total Responses by Unit Type	Year	Engine 1		Engine 2		Engine 3	
	2010	657	28%	785	33%	921	39%
	2011	1,133	31%	1,206	33%	1,302	36%
	2012	1,431	33%	1,469	33%	1,469	33%
	2013	1,577	33.0%	1,592	33.3%	1,610	33.7%
	2014	1,607	31.5%	1,764	34.6%	1,734	34.0%

ALS Ambulance Responses / Percentage of Total Responses By Unit Type	Year	M1		Med 100		Ambulance 2		Ambulance 3	
	2010	2,824	29%	2,178	22%	2,632	27%	2,164	22%
	2011*	1,536	30%	1,095	21%	1,416	27%	1,155	22%
				M1		M112		M113	
	2011**			1,344	36%	1,199	33%	1,145	31%
	2012			2,583	35%	2,539	35%	2,196	30%
	2013			2,368	33.7%	2,369	33.7%	2,293	32.6%
	2014			2,193	32.6%	2,404	35.7%	2,139	31.8%

*Note: Response to ALS requests was significantly modified on July 1, 2011*

*\*January 1, 2011 – June 30, 2011*

*\*\*July 1, 2011 – December 31, 2011*

As the above tables illustrate, West Allis Fire Department resources are appropriately spaced. When total responses by unit type are considered, analysis reveals that these responses are evenly divided between resources of like type.

SECTION SEVEN:

# RESPONSE RELIABILITY



WEST ALLIS FIRE DEPARTMENT  
STANDARDS OF COVERAGE

# RESPONSE RELIABILITY

## RELIABILITY

Reliability is the measure of consistency. In fire service terms, response reliability is the probability that required personnel and apparatus will be available when an emergency call is received. The West Allis Fire Department staffs a minimum of 23 personnel per day with additional mutual aid resources available through established agreements. Although daily staffing is appropriate to meet community expectations and risk assessment parameters, it is not unusual for the first-due company to be unavailable when a subsequent call for service is received in a given response territory. Whenever the first-due company is unavailable, the next closest company is assigned to the incident in its place. When this occurs, travel time and overall response time benchmarks are difficult to meet.

## 2014 RELIABILITY

2013							
RELIABILITY	Engine 1	Engine 2	Engine 3	Truck 2	Med 1	Med 112	Med 113
All Incidents							
Calls For Service (from Demand Matrix)	1,609	1,769	1,735	920	2,199	2,410	2,139
Number of 1st Arrivals (from Demand Matrix)	526	605	619	240	1,673	1,895	1,710
Percentage of First Arrivals **	32.7%	34.2%	35.7%	26.0%	76.0%	78.6%	79.9%
1st Arrivals In Their Area (Reliability)*	90.6%	91.8%	93.2%	NA	85.3%	84.1%	86.8%

Jurisdiction Button/Vehicles/Select Vehicle/Setting Tab and/or Demand Matrix  
Apparatus Tab / Vehicle Travel by Station

\*\*Regardless of vehicle type the percentage the unit was first in

\*Vehicle Type was first in area by its assigned station (settings tab)

**RESOURCE EXHAUSTION**

Resource exhaustion occurs when required personnel and apparatus are unavailable for emergency response. The City of West Allis has experienced a steady increase in call volume for decades with a corresponding decrease in daily staffing. This trend has increased the probability that prescribed companies will be unavailable when they are needed for emergency response. This, in turn, has served to negatively impact the department’s response reliability.

On average, the West Allis Fire Department responds to 22.5 incidents in each 24 hour period. It is not unusual for multiple incidents to be active simultaneously. Additionally, since engine and/or ladder companies respond to 33% of all EMS calls, these companies are unavailable for full assignment responses on an increasing basis.

Average Number of Calls per Day	
<b>2010</b>	21.43
<b>2011</b>	22.53
<b>2012</b>	22.46
<b>2013</b>	22.55
<b>2014</b>	22.52

Engine & Truck Response to EMS		
Year	Engine	Truck
2010	16%	<1%
2011	34%	3%
2012	46%	2.5%
2013	51%	2.8%
2014	55%	2.9%

Apparatus Tab – Preprogrammed Reports/Numeric of Apparatus Responses by Vehicle Type by Incident Type – EMS responses for Engines and Trucks divided by EMS calls for the year

Fire stations in West Allis each house multiple companies. When companies are dispatched from multiple locations, the first-in company’s arrival time may not be affected. Arrival of the effective response force, however, may be significantly delayed due to companies responding from outlying stations. The negative impact of this is limited due to the small square mileage of the city, which allows companies to maintain relatively short response times even when responding outside of their first-due territories.

**2010 RESPONSE OUT OF FIRST-DUE TERRITORY**

	<b>A2</b>	<b>A3</b>	<b>E1</b>	<b>E2</b>	<b>E3</b>
<b>Out of Station</b>	704	325	195	207	155
<b>Total</b>	2632	2164	657	785	921
<b>Percentage</b>	27%	15%	30%	26%	17%

**West Allis Fire Department Station 1**

**Apparatus responses to other station areas: 2,406**

Responses given for Fires: **107** Percentage: 4.45%  
 Responses given for EMS: **2,108** Percentage: 87.61%  
 Responses given for Other: **191** Percentage: 7.94%

**Apparatus responses from other station areas: 1,166**

Responses received for Fires: **80** Percentage: 6.86%  
 Responses received for EMS: **734** Percentage: 62.95%  
 Responses received for Other: **352** Percentage: 30.19%

**West Allis Fire Department Station 2**

**Apparatus responses to other station areas: 1,705**

Responses given for Fires: **131** Percentage: 7.68%  
 Responses given for EMS: **867** Percentage: 50.85%  
 Responses given for Other: **707** Percentage: 41.47%

**Apparatus responses from other station areas: 1,563**

Responses received for Fires: **107** Percentage: 6.85%  
 Responses received for EMS: **1,313** Percentage: 84.01%  
 Responses received for Other: **143** Percentage: 9.15%

**West Allis Fire Department Station 3**

**Apparatus responses to other station areas: 480**

Responses given for Fires: **56** Percentage: 11.67%  
 Responses given for EMS: **337** Percentage: 70.21%  
 Responses given for Other: **87** Percentage: 18.13%

**Apparatus responses from other station areas: 1,863**

Responses received for Fires: **107** Percentage: 5.74%  
 Responses received for EMS: **1,266** Percentage: 67.95%  
 Responses received for Other: **490** Percentage: 26.30%

**2011 RESPONSE OUT OF FIRST-DUE TERRITORY**

	<b>A2</b>	<b>A3</b>	<b>E1</b>	<b>E2</b>	<b>E3</b>	<b>M100</b>	<b>M1</b>	<b>M112</b>	<b>M113</b>
<b>Out of Station</b>	235	50	48	59	24	87	349	181	52
<b>Total</b>	1408	1156	1133	1206	1302	1099	2881	1203	1149
<b>Percentage</b>	17%	4%	4%	5%	2%	8%	12%	15%	5%

**West Allis Fire Department Station 1**

**Apparatus responses to other station areas: 1,631**

Responses given for Fires: **57** Percentage: 3.49%  
 Responses given for EMS: **1,396** Percentage: 85.59%  
 Responses given for Other: **178** Percentage: 10.91%

**Apparatus responses from other station areas: 1,270**

Responses received for Fires: **93** Percentage: 7.32%  
 Responses received for EMS: **815** Percentage: 64.17%  
 Responses received for Other: **362** Percentage: 28.50%

**West Allis Fire Department Station 2**

**Apparatus responses to other station areas: 1,825**

Responses given for Fires: **118** Percentage: 6.47%  
 Responses given for EMS: **1,009** Percentage: 55.29%  
 Responses given for Other: **698** Percentage: 38.25%

**Apparatus responses from other station areas: 1,118**

Responses received for Fires: **60** Percentage: 5.37%  
 Responses received for EMS: **926** Percentage: 82.83%  
 Responses received for Other: **132** Percentage: 11.81%

**West Allis Fire Department Station 3**

**Apparatus responses to other station areas: 479**

Responses given for Fires: **46** Percentage: 9.60%  
 Responses given for EMS: **334** Percentage: 69.73%  
 Responses given for Other: **99** Percentage: 20.67%

**Apparatus responses from other station areas: 1,548**

Responses received for Fires: **68** Percentage: 4.39%  
 Responses received for EMS: **999** Percentage: 64.53%  
 Responses received for Other: **481** Percentage: 31.07%

**2012 RESPONSE OUT OF FIRST-DUE TERRITORY**

	<b>M1</b>	<b>M112</b>	<b>M113</b>	<b>E1</b>	<b>E2</b>	<b>E3</b>
<b>Out of Station</b>	504	571	243	240	262	162
<b>Total</b>	2,583	2,539	2,196	1,432	1,469	1,469
<b>Percentage</b>	20%	22%	11%	17%	18%	11%

**West Allis Fire Department Station 1**

**Apparatus responses to other station areas: 491**

Responses given for Fires: **35** Percentage: 7.13%

Responses given for EMS: **373** Percentage: 75.97%

Responses given for Other: **83** Percentage: 16.9%

**Apparatus responses from other station areas: 1,014**

Responses received for Fires: **143** Percentage: 14.10%

Responses received for EMS: **590** Percentage: 58.19%

Responses received for Other: **281** Percentage: 27.71%

**West Allis Fire Department Station 2**

**Apparatus responses to other station areas: 987**

Responses given for Fires: **98** Percentage: 9.93%

Responses given for EMS: **529** Percentage: 53.60%

Responses given for Other: **360** Percentage: 36.47%

**Apparatus responses from other station areas: 687**

Responses received for Fires: **62** Percentage: 9.02%

Responses received for EMS: **521** Percentage: 75.84%

Responses received for Other: **104** Percentage: 15.14%

**West Allis Fire Department Station 3**

**Apparatus responses to other station areas: 278**

Responses given for Fires: **42** Percentage: 15.11%

Responses given for EMS: **187** Percentage: 67.27%

Responses given for Other: **49** Percentage: 17.63%

**Apparatus responses from other station areas: 973**

Responses received for Fires: **75** Percentage: 7.71%

Responses received for EMS: **555** Percentage: 57.04%

Responses received for Other: **343** Percentage: 35.25%

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\*NOTE: THERE WERE 918 CALLS FOR APPARTUS RESPONSES TO OTHER STATIONS WITH THE STATION NUMBER BEING 0 (NO STATION NUMBER ENTERED). FIRES (105 CALLS), EMS (577 CALLS), OTHER (236 CALLS)

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ABOVE SPREADSHEET - NFIRS 5/SELECT THE YEAR IN "INCIDENTS"/REPORTING OPTIONS/AID ANALYZER/ SELECT "PROCESS STATION AID/SELECT AN OPTION/COPY AID TEXT TO CLIPBOARD

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**2013 RESPONSE OUT OF FIRST-DUE TERRITORY**

	<b>M1</b>	<b>M112</b>	<b>M113</b>	<b>E1</b>	<b>E2</b>	<b>E3</b>
<b>Out of Station</b>	534	535	236	331	291	198
<b>Total</b>	2,365	2,368	2,292	1,577	1,592	1,610
<b>Percentage</b>	23%	23%	10%	21%	18%	12%

**ABOVE CHART** - APPARATUS/SELECT YEAR/SELECT "OUT OF AREA" TAB/SELECT VEHICLE FROM LIST IN UPPER RIGHT (SCROLL DOWN), CLICK SEARCH ONLY/SELECT VEHICLE ID = \_\_, IS = TO, ADD VEHICLE NUMBER/THE OUT OF STATION RESPONSES WILL BE IN UPPER LEFT CORNER, GET TOTAL RESPONSES FROM PREVIOUS CHARTS

**West Allis Fire Department Station 1**

**Apparatus responses to other station areas: 759**

Responses given for Fires: **68** Percentage: 8.96%  
 Responses given for EMS: **554** Percentage: 72.99%  
 Responses given for Other: **137** Percentage: 18.05%

**Apparatus responses from other station areas: 965**

Responses received for Fires: **193** Percentage: 20.00%  
 Responses received for EMS: **500** Percentage: 51.81%  
 Responses received for Other: **272** Percentage: 28.19%

**West Allis Fire Department Station 2**

**Apparatus responses to other station areas: 1,389**

Responses given for Fires: **169** Percentage: 12.17%  
 Responses given for EMS: **754** Percentage: 54.28%  
 Responses given for Other: **466** Percentage: 33.55%

**Apparatus responses from other station areas: 727**

Responses received for Fires: **90** Percentage: 12.38%  
 Responses received for EMS: **442** Percentage: 60.80%  
 Responses received for Other: **195** Percentage: 26.82%

**West Allis Fire Department Station 3**

**Apparatus responses to other station areas: 372**

Responses given for Fires: **67** Percentage: 18.01%  
 Responses given for EMS: **219** Percentage: 58.87%  
 Responses given for Other: **86** Percentage: 23.12%

**Apparatus responses from other station areas: 1,126**

Responses received for Fires: **127** Percentage: 11.28%  
 Responses received for EMS: **638** Percentage: 56.66%  
 Responses received for Other: **361** Percentage: 32.06%

**2014 RESPONSE OUT OF FIRST-DUE TERRITORY**

	<b>M1</b>	<b>M112</b>	<b>M113</b>	<b>E1</b>	<b>E2</b>	<b>E3</b>
<b>Out of Station</b>	526	503	251	307	283	198
<b>Total</b>	2,193	2,404	2,139	1,607	1,764	1,734
<b>Percentage</b>	24%	21%	12%	19%	16%	11%

**ABOVE CHART** - APPARATUS/SELECT YEAR/SELECT "OUT OF AREA" TAB/SELECT VEHICLE FROM LIST IN UPPER RIGHT (SCROLL DOWN), CLICK SEARCH ONLY/SELECT VEHICLE ID =\_\_, IS = TO, ADD VEHICLE NUMBER/THE OUT OF STATION RESPONSES WILL BE IN UPPER LEFT CORNER, GET TOTAL RESPONSES FROM PREVIOUS CHARTS

**West Allis Fire Department Station 1**

**Apparatus responses to other station areas: 719**

Responses given for Fires: **60** Percentage: 8.34%  
 Responses given for EMS: **527** Percentage: 73.30%  
 Responses given for Other: **132** Percentage: 18.36%

**Apparatus responses from other station areas: 951**

Responses received for Fires: **115** Percentage: 12.09%  
 Responses received for EMS: **518** Percentage: 54.47%

**West Allis Fire Department Station 2**

**Apparatus responses to other station areas: 1,261**

Responses given for Fires: **120** Percentage: 9.52%  
 Responses given for EMS: **655** Percentage: 51.94%  
 Responses given for Other: **486** Percentage: 38.54%

**Apparatus responses from other station areas: 824**

Responses received for Fires: **105** Percentage: 12.74%  
 Responses received for EMS: **526** Percentage: 63.83%  
 Responses received for Other: **193** Percentage: 23.42%

**West Allis Fire Department Station 3**

**Apparatus responses to other station areas: 368**

Responses given for Fires: **55** Percentage: 14.95%  
 Responses given for EMS: **236** Percentage: 64.13%  
 Responses given for Other: **77** Percentage: 20.92%

**Apparatus responses from other station areas: 995**

Responses received for Fires: **120** Percentage: 12.06%  
 Responses received for EMS: **524** Percentage: 52.66%  
 Responses received for Other: **351** Percentage: 35.28%

Above Spreadsheet - NFIRS 5/SELECT THE Year IN "INCIDENTS"/Reporting Options/Aid Analyzer/ SELECT "PROCESS STATION AID/SELECT AN OPTION/COPY AID TEXT TO CLIPBOARD

**RELIABILITY AND COMPLIANCE**

Measuring reliability involves evaluating a specific fire company’s ability to arrive on scene in its assigned response area within the parameters of a response time benchmark. Reliability is adversely impacted by the drawdown of resources, instances when first-due units are unavailable for concurrent responses in their assigned territories. As the tables below demonstrate, response times increase significantly whenever companies are called upon to respond outside of their primary response areas.

**Engine Company Fire Responses by Territory – Dispatch to Arrival 90% Fractal - 2014**

2014 CONCENTRATION All Incidents (Call To Arrival)	1st Engine Arrival		2nd Engine Arrival		3rd Engine Arrival		1st Truck Arrival	
	Number of Incidents	Time						
<b>Station 1</b>	1,280	4:20	37	4:45	18	6:31	169	5:59
<b>Station 2</b>	1,453	4:42	61	5:04	28	7:19	321	5:24
<b>Station 3</b>	1,504	5:25	37	6:41	19	7:06	127	10:59

Jurisdiction Button/Concentration Spreadsheets & Maps Tab

**ALS Ambulance EMS Responses by Territory – Dispatch to Arrival 90% Fractal - 2014**

2014 CONCENTRATION All Incidents (Call To Arrival)	1st EMS Arrival		2nd EMS Arrival		3rd EMS Arrival	
	Number of Incidents	Time	Number of Incidents	Time	Number of Incidents	Time
<b>Station 1</b>	1,966	3:54	31	4:40	2	5:47
<b>Station 2</b>	2,235	4:14	36	4:31	3	8:43
<b>Station 3</b>	2,142	5:26	36	6:52	6	7:26

## DRAW DOWN

### 2010-2014 CONCURRENT INCIDENTS

(INCIDENTS/DATE RANGE/SIMULTANEOUS TAB/ SELECT THE NUMBER OF EXISTING CALLS - HIT "SEARCH ONLY" BUTTON/ONCE SEARCH IS DONE GO TO REPORTING OPTIONS (LOWER LEFT) - SELECT TEMPORAL ACTIVITY SPREADSHEET)

January 1, 2010 - December 31, 2014 (2 calls existing, 3rd call comes in)								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	13	4	5	11	6	5	8	52
01:00-01:59	7	4	2	3	2	5	5	28
02:00-02:59	2	5	3	5	2	14	7	38
03:00-03:59	8	1	0	4	4	6	4	27
04:00-04:59	4	4	4	0	2	5	5	24
05:00-05:59	1	3	5	1	2	3	2	17
06:00-06:59	6	1	5	4	5	4	4	29
07:00-07:59	15	9	8	11	4	7	7	61
08:00-08:59	22	11	17	19	19	10	14	112
09:00-09:59	31	39	30	18	29	23	15	185
10:00-10:59	43	52	51	51	34	32	18	281
11:00-11:59	50	45	61	40	34	28	23	281
12:00-12:59	37	53	44	45	22	32	17	250
13:00-13:59	43	39	47	49	46	23	28	275
14:00-14:59	43	53	58	44	38	32	26	294
15:00-15:59	34	63	44	80	32	16	34	303
16:00-16:59	35	56	45	68	36	29	33	302
17:00-17:59	47	35	42	51	34	33	30	272
18:00-18:59	24	29	43	59	39	24	15	233
19:00-19:59	21	19	27	26	26	21	20	160
20:00-20:59	6	24	22	42	26	34	27	181
21:00-21:59	13	17	21	18	15	31	12	127
22:00-22:59	12	10	10	13	12	20	18	95
23:00-23:59	9	11	10	7	12	14	6	69
<b>Total</b>	526	587	604	669	481	451	378	3,696

January 1, 2010 - December 31, 2014 (3 calls existing, 4th call comes in)								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	4	0	0	3	2	0	3	12
01:00-01:59	2	0	0	0	0	0	1	3
02:00-02:59	0	0	1	1	0	3	2	7
03:00-03:59	1	0	0	0	0	0	0	1
04:00-04:59	1	0	0	0	1	0	0	2
05:00-05:59	0	1	1	0	0	0	1	3
06:00-06:59	1	0	0	2	0	1	0	4
07:00-07:59	4	2	1	2	1	1	2	13
08:00-08:59	6	1	3	6	4	1	3	24
09:00-09:59	7	8	7	1	9	2	5	39
10:00-10:59	10	15	17	19	8	14	5	88
11:00-11:59	9	16	24	10	15	8	5	87
12:00-12:59	14	13	13	14	7	8	5	74
13:00-13:59	14	8	12	17	19	9	10	89
14:00-14:59	16	21	15	16	17	12	8	105
15:00-15:59	6	25	9	25	8	3	9	85
16:00-16:59	8	31	10	20	10	5	10	94
17:00-17:59	10	10	9	17	13	5	5	69
18:00-18:59	3	11	17	19	13	6	4	73
19:00-19:59	8	4	2	10	9	6	6	45
20:00-20:59	2	10	6	13	7	10	6	54
21:00-21:59	2	3	5	2	2	8	5	27
22:00-22:59	1	2	2	2	1	3	6	17
23:00-23:59	2	2	4	3	4	2	0	17
<b>Total</b>	131	183	158	202	150	107	101	1,032

January 1, 2010 - December 31, 2014 (4 calls existing, 5th call comes in)								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	2	0	0	3	0	0	1	6
01:00-01:59	2	0	0	0	0	0	0	2
02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	0	0	0	2	0	0	0	2
09:00-09:59	2	1	0	0	0	0	2	5
10:00-10:59	2	3	4	6	1	2	2	20
11:00-11:59	0	2	7	1	2	1	0	13
12:00-12:59	4	4	2	3	3	0	1	17
13:00-13:59	4	0	0	3	4	2	3	16
14:00-14:59	6	9	3	7	7	7	3	42
15:00-15:59	1	7	1	10	1	0	2	22
16:00-16:59	0	7	3	6	4	1	0	21
17:00-17:59	3	2	0	2	0	1	2	10
18:00-18:59	1	3	6	8	6	0	0	24
19:00-19:59	1	2	0	3	5	0	0	11
20:00-20:59	1	5	3	3	0	2	0	14
21:00-21:59	0	0	2	0	0	1	3	6
22:00-22:59	0	1	0	0	0	0	1	2
23:00-23:59	0	0	1	0	1	0	0	2
<b>Total</b>	29	46	32	57	34	17	20	235

January 1, 2010 - December 31, 2014 (5 calls existing, 6th call comes in)								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	1	0	0	1	0	0	0	2
01:00-01:59	2	0	0	0	0	0	0	2
02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	0	0	0	1	0	0	0	1
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	0	0	1	4	0	0	0	5
11:00-11:59	0	0	1	0	0	0	0	1
12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	0	0	0	1	1	1	0	3
14:00-14:59	1	3	0	3	2	2	1	12
15:00-15:59	0	2	0	3	0	0	0	5
16:00-16:59	0	3	1	1	1	0	0	6
17:00-17:59	0	1	0	0	0	0	0	1
18:00-18:59	0	1	2	2	2	0	0	7
19:00-19:59	0	0	0	1	2	0	0	3
20:00-20:59	0	2	0	0	0	0	0	2
21:00-21:59	0	0	0	0	0	0	0	0
22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	0	0	0	0	0	0	0	0
<b>Total</b>	4	12	5	17	8	3	1	50

January 1, 2010 - December 31, 2014 (6 calls existing, 7th call comes in)								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	0	0	0	0	0	0	0
01:00-01:59	2	0	0	0	0	0	0	2
02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	0	0	0	2	0	0	0	2
11:00-11:59	0	0	0	0	0	0	0	0
12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	0	0	0	0	0	0	0	0
14:00-14:59	0	1	0	0	0	1	0	2
15:00-15:59	0	0	0	1	0	0	0	1
16:00-16:59	0	0	0	0	0	0	0	0
17:00-17:59	0	0	0	0	0	0	0	0
18:00-18:59	0	0	0	0	0	0	0	0
19:00-19:59	0	0	0	0	0	0	0	0
20:00-20:59	0	1	0	0	0	0	0	1
21:00-21:59	0	0	0	0	0	0	0	0
22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	0	0	0	0	0	0	0	0
<b>Total</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>8</b>

January 1, 2010 - December 31, 2014 (7 calls existing, 8th call comes in)								
	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	0	0	0	0	0	0	0	0
01:00-01:59	1	0	0	0	0	0	0	1
02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	0	0	0	0	0	0	0	0
11:00-11:59	0	0	0	0	0	0	0	0
12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	0	0	0	0	0	0	0	0
14:00-14:59	0	0	0	0	0	0	0	0
15:00-15:59	0	0	0	0	0	0	0	0
16:00-16:59	0	0	0	0	0	0	0	0
17:00-17:59	0	0	0	0	0	0	0	0
18:00-18:59	0	0	0	0	0	0	0	0
19:00-19:59	0	0	0	0	0	0	0	0
20:00-20:59	0	0	0	0	0	0	0	0
21:00-21:59	0	0	0	0	0	0	0	0
22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	0	0	0	0	0	0	0	0
<b>Total</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>

**DRAWDOWN**

The West Allis Fire Department fully participates in the Mutual Aid Box Alarm System (MABAS) Division 107. Mutual aid resources are readily available from neighboring municipalities, and West Allis Fire Department resources may be dispatched into neighboring jurisdictions as necessary. The on duty battalion chief assumes responsibility for staffing reserve apparatus with callback personnel whenever companies are deployed to a neighboring jurisdiction for an extended period of time.

In addition to typical mutual aid agreements, West Allis Fire Department ALS ambulances provide automatic aid to a small segment of the City of Milwaukee. In the tables below, annual mutual aid and automatic aid statistics are illustrated.

<b>Aid Received 2010-2014</b>				
Department	EMS	Fire	Other*	Total
City of Brookfield	7	18	2	27
Town of Brookfield				0
Cudahy				0
Elm Grove				0
Franklin	5	1	1	7
Greenfield	185	26	7	218
Greendale	4	1	1	6
Hales Corners	1			1
Menomonee Falls				0
Milwaukee	44	21	4	69
New Berlin	1		1	2
North Shore				0
Oak Creek	1			1
St Francis				0
South Milwaukee				0
Wauwatosa	194	11	12	217

<b>Aid Given 2010-2014</b>				
Department	EMS	Fire	Other*	Total
City of Brookfield	6	16		22
Town of Brookfield		1		1
Cudahy		2		2
Elm Grove		2		2
Franklin	2	3	1	6
Greenfield	75	3	34	112
Greendale				0
Hales Corners	1			1
Menomonee Falls		1		1
Milwaukee	282	5		287
New Berlin	3	1	1	5
North Shore		1	6	7
Oak Creek	1			1
St Francis		1		1
South Milwaukee		3	2	5
Wauwatosa	80	23	79	182

\*Other Includes Cancelled Prior to Arrival

<b>Aid Comparison 2010-2014</b>			
Department	Given	Received	Difference
City of Brookfield	22	27	5
Town of Brookfield	1	0	-1
Cudahy	2	0	-2
Elm Grove	2	0	-2
Franklin	6	7	1
Greenfield	112	218	106
Greendale	0	6	6
Hales Corners	1	1	0
Menomonee Falls	1	0	-1
Milwaukee	287	69	-218
New Berlin	5	2	-3
North Shore	7	0	-7
Oak Creek	1	1	0
St Francis	1	0	-1
South Milwaukee	5	0	-5
Wauwatosa	182	217	35

SECTION EIGHT:

# MISCELLANEOUS RESPONSE DATA



# MISCELLANEOUS RESPONSE DATA

## WEST ALLIS FIRE DEPARTMENT RESPONSE DATA

Data has been collected over the past five year period and broken down to allow for a comprehensive review of West Allis Fire Department response activity. Incident counts, Incident types, and incident distribution from 2010-2014 have been analyzed to establish trends and community expectations.

### ANNUAL INCIDENT TOTALS

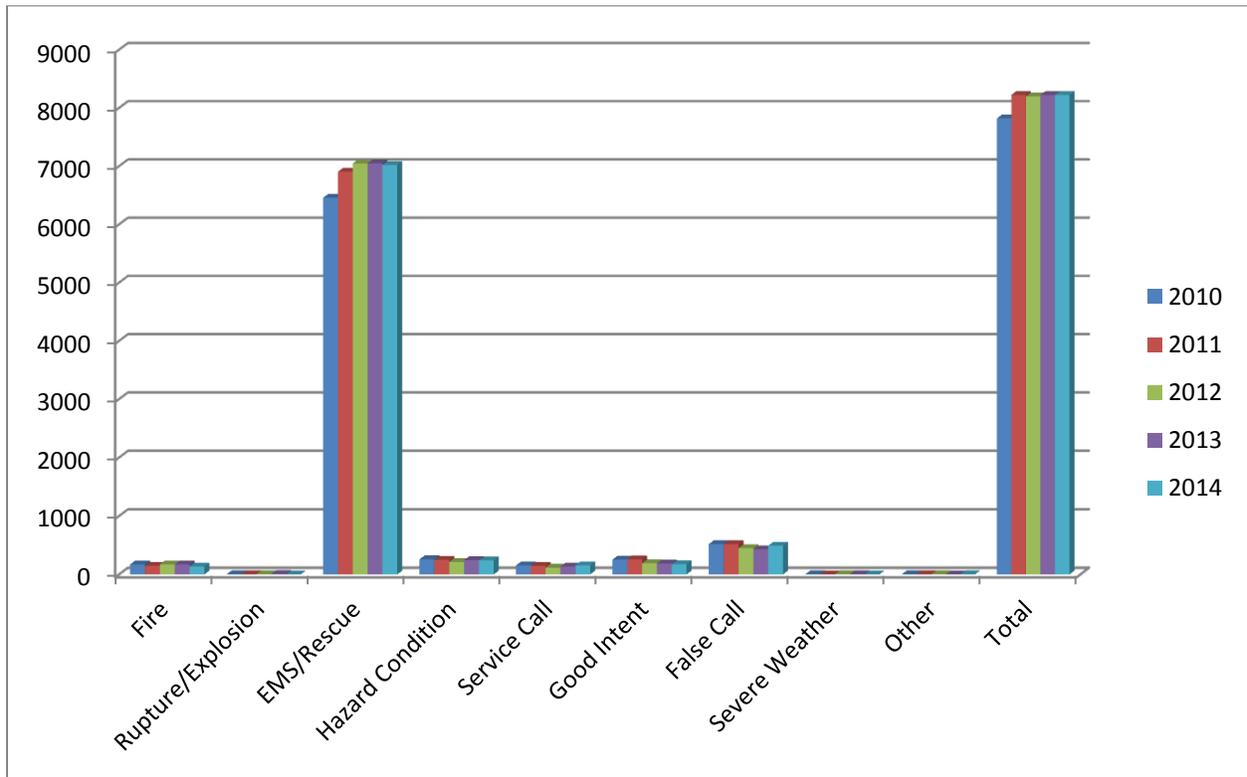
Year	Incidents
2010	7,818
2011	8,222
2012	8,196
2013	8,222
2014	8,220

### INCIDENT TYPE BY YEAR

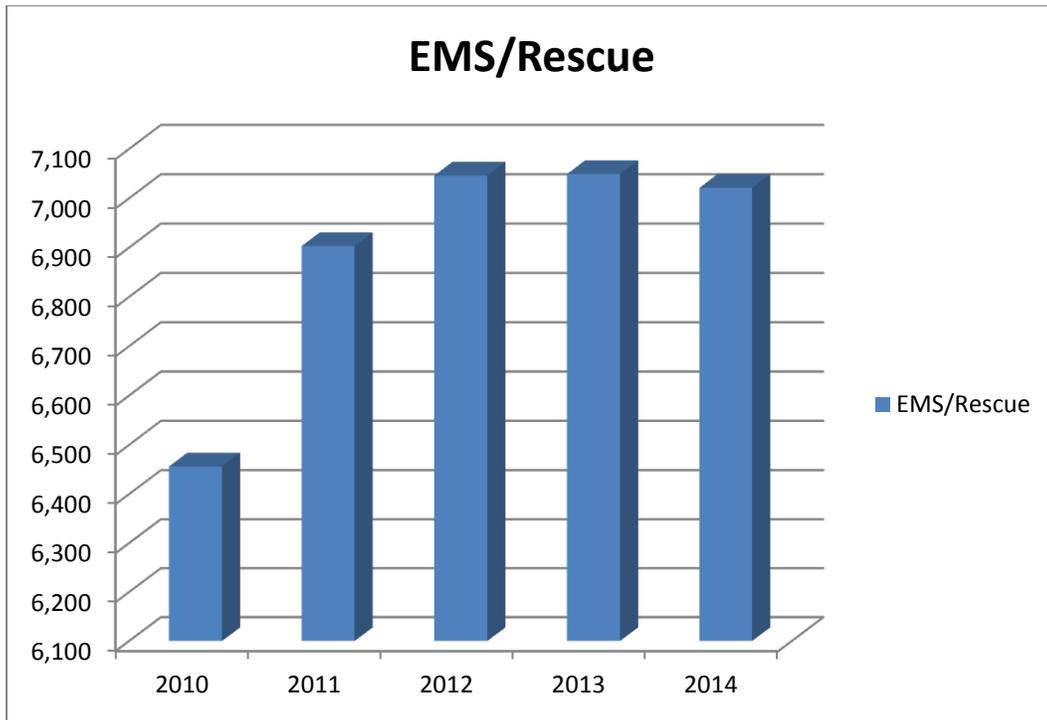
	2010	2011	2012	2013	2014
Fire	172	145	172	172	136
Rupture/Explosion	3	4	3	6	0
EMS/Rescue	6,456	6,903	7,046	7,049	7,021
Hazard Condition	259	248	214	243	239
Service Call	153	145	116	134	154
Good Intent	252	257	190	187	176
False Call	519	517	451	427	491
Severe Weather	2	1	2	3	1
Other	2	2	2	1	2
Total	7,818	8,222	8,196	8,222	8,220

Zoll Fire RMS Report

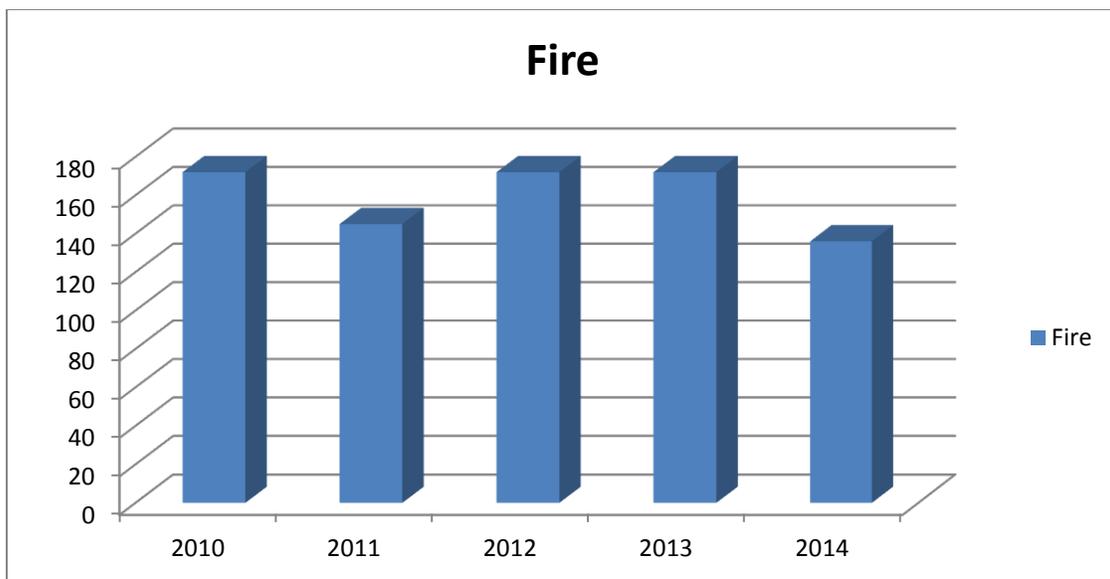
FIRE DEPARTMENT INCIDENTS BY CATEGORY 2010-2014



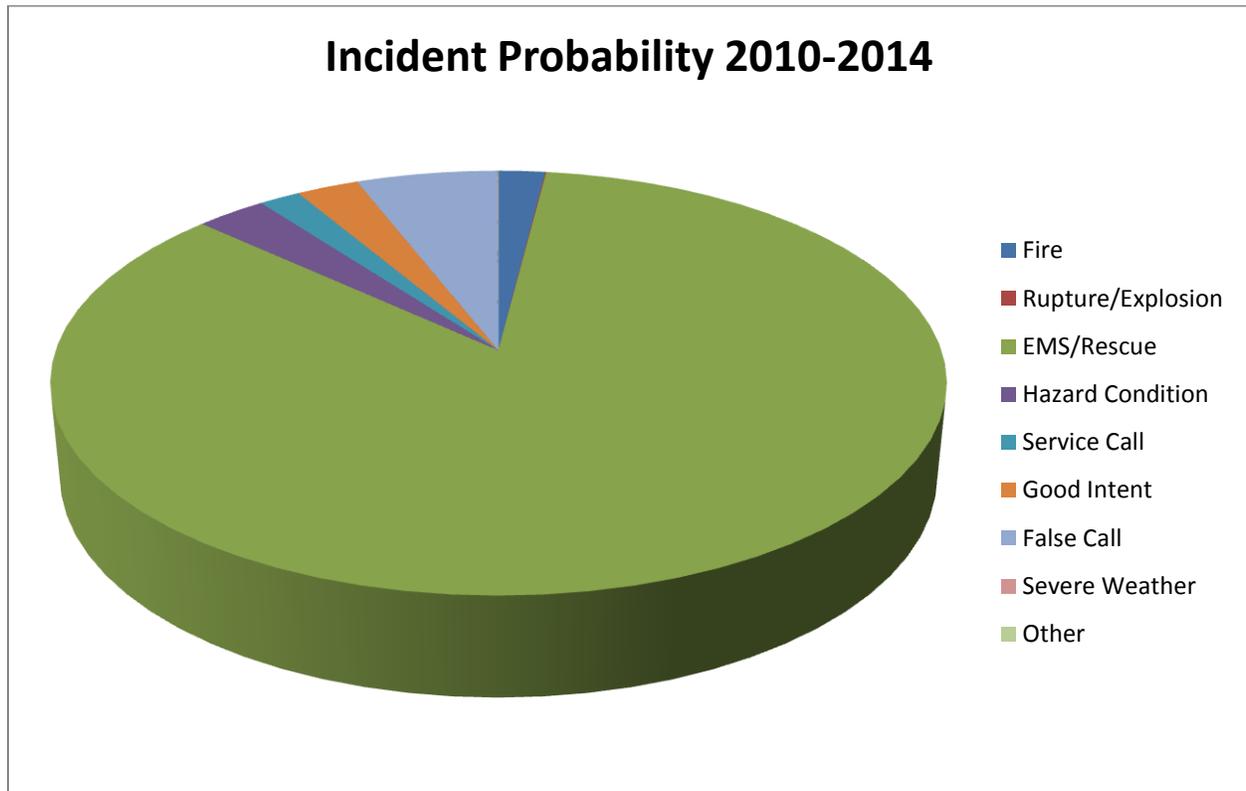
FIRE DEPARTMENT EMS INCIDENTS (NFIRS) 2010-2014



FIRE DEPARTMENT FIRE INCIDENTS (NFIRS) 2010-2014



EMS responses account for 79-84% of total incidents each year, while fires account for only 2% of annual responses. Other call types account the remainder of total incidents.



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#### IMPROVING CALL DATA

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In 2002, the West Allis Fire Department switched from a manual system of recording response times to a computerized system of reporting. This system relied on dispatchers at the Public Safety Answering Point (PSAP) to time stamp fire service benchmarks. This system was found to be deficient.

In October of 2009, the West Allis Fire Department implemented a status messaging system via mobile data computers (MDC's). It is now each fire officer's responsibility to record his or her company's data by time stamping each status change. This program has allowed the West Allis Fire Department to provide more accurate response data.

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## CHANGES MADE IN AMBULANCE RESPONSE AND SERVICE

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Emergency medical services are the fire department's most utilized resource. In order to provide the best and most appropriate emergency medical service, the West Allis Fire Department has increased the number of Advanced Life Support ambulances that are in service each day.

In 2005, the department's minimum staffing level dropped from 30 personnel to 26 personnel per shift. It was no longer possible to maintain three fully staffed BLS units. The fire department began to staff two BLS ambulances (Ambulance 2 and Ambulance 3) and one dedicated ALS ambulance (Med 1). A2 protected the east end of the city while A3 protected the west end, and Med 1 provided ALS treatment and transport city-wide. Med 100 was staffed in a reserve capacity by paramedics that were assigned to Engine 1, and served as a reserve paramedic ambulance.

In 2008, M100 was placed into service as a front line ALS/BLS ambulance. M100 was assigned to BLS responses in Fire Station 1's territory and to ALS responses city-wide whenever Med 1 was unavailable. By placing M100 into service, EMS call volume was dispersed among more units, thus decreasing reliance on mutual aid ambulances.

In July 2011 the department's minimum staffing level once again dropped from 26 personnel to 23 personnel per shift. M100 was taken out of service, while Ambulance 2 and Ambulance 3 were staffed and equipped as ALS transport units, becoming Med 112 and Med 113. This change allows for an ALS ambulance to serve each fire station's response territory. Each time one of the ALS ambulances is assigned to an ALS incident, the closest engine company (or truck company if more appropriate) is assigned to respond with the ambulance. ALS ambulances are staffed with a minimum of two paramedics. Whenever staffing allows, an additional BLS provider is assigned to the ambulance.

**FIRE FRACTAL RESPONSE TIMES BY DISTRICT 2010-2014** – (data split = by district)

Fire Calls by District Dispatch To Arrival (5 Minutes 20 Seconds)	There are 167 Incident records being analyzed. * 19 records were ignored because of a zero time value. * 5 records were ignored because they were more than limit of 1,200 sec.		There are 172 Incident records being analyzed. * 5 records were ignored because of a zero time value.		There are 145 Incident records being analyzed. * One record was ignored because it was more than limit of 1,200 seconds.		There are 160 Incident records being analyzed. * 6 records were ignored because of a zero time value.		There are 172 Incident records being analyzed. 6 records were ignored because of a 0 time value. 2 records were ignored because they were more than limit of 1,200 sec.			
	District	2010	2011	2012	2013	2014	2010	2011	2012	2013	2014	
none entered in report	.0% (0)	.0% (0)	.0% (0)	.0% (0)	20.0% (1)	40.0% (2)	413	75.0% (3)	50.0% (1)	50.0% (1)	100.0% (2)	.0% (0)
413	75.0% (3)	50.0% (1)	50.0% (1)	50.0% (1)	100.0% (2)	.0% (0)	414	.0% (0)	.0% (0)	100.0% (1)	.0% (0)	.0% (0)
414	.0% (0)	.0% (0)	.0% (0)	100.0% (1)	.0% (0)	.0% (0)	415	.0% (0)	100.0% (2)	50.0% (1)	.0% (0)	.0% (0)
415	.0% (0)	100.0% (2)	100.0% (2)	50.0% (1)	.0% (0)	.0% (0)	416	100.0% (1)	.0% (0)	100.0% (1)	.0% (0)	.0% (0)
416	100.0% (1)	.0% (0)	.0% (0)	100.0% (1)	.0% (0)	.0% (0)	417	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)
417	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	438	100.0% (2)	100.0% (4)	100.0% (5)	100.0% (3)	100.0% (6)
438	100.0% (2)	100.0% (4)	100.0% (4)	100.0% (5)	100.0% (3)	100.0% (6)	439	100.0% (4)	100.0% (6)	100.0% (3)	100.0% (6)	83.3% (5)
439	100.0% (4)	100.0% (6)	100.0% (6)	100.0% (3)	100.0% (6)	83.3% (5)	440	100.0% (7)	100.0% (4)	100.0% (7)	100.0% (11)	100.0% (5)
440	100.0% (7)	100.0% (4)	100.0% (4)	100.0% (7)	100.0% (11)	100.0% (5)	441	100.0% (1)	100.0% (3)	.0% (0)	100.0% (3)	100.0% (2)
441	100.0% (1)	100.0% (3)	100.0% (3)	.0% (0)	100.0% (3)	100.0% (2)	442	100.0% (3)	100.0% (3)	71.4% (5)	100.0% (2)	.0% (0)
442	100.0% (3)	100.0% (3)	100.0% (3)	71.4% (5)	100.0% (2)	.0% (0)	443	100.0% (5)	100.0% (2)	100.0% (1)	.0% (0)	100.0% (2)
443	100.0% (5)	100.0% (2)	100.0% (2)	100.0% (1)	.0% (0)	100.0% (2)	444	100.0% (7)	66.7% (2)	100.0% (5)	75.0% (3)	100.0% (3)
444	100.0% (7)	66.7% (2)	66.7% (2)	100.0% (5)	75.0% (3)	100.0% (3)	445	100.0% (3)	100.0% (2)	100.0% (3)	75.0% (3)	100.0% (2)
445	100.0% (3)	100.0% (2)	100.0% (2)	100.0% (3)	75.0% (3)	100.0% (2)	446	.0% (0)	100.0% (1)	33.3% (1)	100.0% (1)	.0% (0)
446	.0% (0)	100.0% (1)	100.0% (1)	33.3% (1)	100.0% (1)	.0% (0)	447	100.0% (1)	.0% (0)	100.0% (1)	.0% (0)	.0% (0)
447	100.0% (1)	.0% (0)	.0% (0)	100.0% (1)	.0% (0)	.0% (0)	448	100.0% (3)	100.0% (3)	85.7% (6)	100.0% (2)	50.0% (1)
448	100.0% (3)	100.0% (3)	100.0% (3)	85.7% (6)	100.0% (2)	50.0% (1)	449	50.0% (1)	100.0% (5)	75.0% (3)	100.0% (1)	50.0% (1)
449	50.0% (1)	100.0% (5)	100.0% (5)	75.0% (3)	100.0% (1)	50.0% (1)	450	100.0% (2)	100.0% (1)	100.0% (3)	50.0% (1)	.0% (0)
450	100.0% (2)	100.0% (1)	100.0% (1)	100.0% (3)	50.0% (1)	.0% (0)	451	80.0% (4)	100.0% (5)	100.0% (5)	87.5% (7)	100.0% (7)
451	80.0% (4)	100.0% (5)	100.0% (5)	100.0% (5)	87.5% (7)	100.0% (7)	452	100.0% (10)	100.0% (4)	100.0% (7)	100.0% (8)	100.0% (4)
452	100.0% (10)	100.0% (4)	100.0% (4)	100.0% (7)	100.0% (8)	100.0% (4)	453	100.0% (7)	91.7% (11)	100.0% (11)	88.9% (8)	100.0% (8)
453	100.0% (7)	91.7% (11)	91.7% (11)	100.0% (11)	88.9% (8)	100.0% (8)	454	75.0% (9)	100.0% (7)	100.0% (11)	100.0% (9)	100.0% (7)
454	75.0% (9)	100.0% (7)	100.0% (7)	100.0% (11)	100.0% (9)	100.0% (7)	455	100.0% (2)	100.0% (5)	100.0% (3)	100.0% (8)	100.0% (3)
455	100.0% (2)	100.0% (5)	100.0% (5)	100.0% (3)	100.0% (8)	100.0% (3)	473	100.0% (1)	.0% (0)	.0% (0)	.0% (0)	.0% (0)
473	100.0% (1)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	474	100.0% (4)	100.0% (4)	100.0% (8)	100.0% (7)	75.0% (3)
474	100.0% (4)	100.0% (4)	100.0% (4)	100.0% (8)	100.0% (7)	75.0% (3)	475	71.4% (5)	50.0% (1)	100.0% (6)	100.0% (6)	100.0% (2)
475	71.4% (5)	50.0% (1)	50.0% (1)	100.0% (6)	100.0% (6)	100.0% (2)	476	100.0% (7)	100.0% (6)	100.0% (2)	100.0% (3)	100.0% (7)
476	100.0% (7)	100.0% (6)	100.0% (6)	100.0% (2)	100.0% (3)	100.0% (7)	477	100.0% (4)	100.0% (3)	100.0% (3)	100.0% (4)	100.0% (3)
477	100.0% (4)	100.0% (3)	100.0% (3)	100.0% (3)	100.0% (4)	100.0% (3)	478	100.0% (5)	100.0% (4)	100.0% (3)	100.0% (5)	100.0% (6)
478	100.0% (5)	100.0% (4)	100.0% (4)	100.0% (3)	100.0% (5)	100.0% (6)	479	.0% (0)	66.7% (4)	.0% (0)	100.0% (2)	100.0% (4)
479	.0% (0)	66.7% (4)	66.7% (4)	.0% (0)	100.0% (2)	100.0% (4)	480	100.0% (2)	50.0% (1)	100.0% (4)	66.7% (2)	100.0% (1)
480	100.0% (2)	50.0% (1)	50.0% (1)	100.0% (4)	66.7% (2)	100.0% (1)	481	100.0% (1)	100.0% (3)	.0% (0)	100.0% (4)	.0% (0)
481	100.0% (1)	100.0% (3)	100.0% (3)	.0% (0)	100.0% (4)	.0% (0)	482	.0% (0)	.0% (0)	.0% (0)	.0% (0)	100.0% (1)
482	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	100.0% (1)	483	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)
483	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	484	100.0% (3)	.0% (0)	.0% (0)	100.0% (2)	100.0% (1)
484	100.0% (3)	.0% (0)	.0% (0)	.0% (0)	100.0% (2)	100.0% (1)	485	100.0% (2)	100.0% (1)	100.0% (2)	100.0% (3)	100.0% (3)
485	100.0% (2)	100.0% (1)	100.0% (1)	100.0% (2)	100.0% (3)	100.0% (3)	486	100.0% (1)	100.0% (1)	100.0% (1)	100.0% (3)	50.0% (1)
486	100.0% (1)	100.0% (1)	100.0% (1)	100.0% (1)	100.0% (3)	50.0% (1)	487	100.0% (3)	.0% (0)	.0% (0)	100.0% (1)	.0% (0)
487	100.0% (3)	.0% (0)	.0% (0)	.0% (0)	100.0% (1)	.0% (0)	488	100.0% (4)	100.0% (2)	.0% (0)	100.0% (2)	50.0% (1)
488	100.0% (4)	100.0% (2)	100.0% (2)	.0% (0)	100.0% (2)	50.0% (1)	489	100.0% (5)	100.0% (2)	100.0% (4)	66.7% (4)	100.0% (2)
489	100.0% (5)	100.0% (2)	100.0% (2)	100.0% (4)	66.7% (4)	100.0% (2)	490	100.0% (3)	100.0% (3)	100.0% (2)	100.0% (1)	100.0% (2)
490	100.0% (3)	100.0% (3)	100.0% (3)	100.0% (2)	100.0% (1)	100.0% (2)	491	100.0% (4)	100.0% (2)	.0% (0)	100.0% (1)	.0% (0)
491	100.0% (4)	100.0% (2)	100.0% (2)	.0% (0)	100.0% (1)	.0% (0)	515	100.0% (3)	.0% (0)	100.0% (1)	66.7% (2)	.0% (0)
515	100.0% (3)	.0% (0)	.0% (0)	100.0% (1)	66.7% (2)	.0% (0)	516	.0% (0)	50.0% (1)	100.0% (5)	.0% (0)	100.0% (1)
516	.0% (0)	50.0% (1)	50.0% (1)	100.0% (5)	.0% (0)	100.0% (1)	517	100.0% (1)	33.3% (1)	80.0% (4)	100.0% (2)	66.7% (2)
517	100.0% (1)	33.3% (1)	33.3% (1)	80.0% (4)	100.0% (2)	66.7% (2)	518	100.0% (3)	.0% (0)	.0% (0)	.0% (0)	66.7% (2)
518	100.0% (3)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	66.7% (2)	519	75.0% (3)	100.0% (3)	50.0% (1)	75.0% (3)	50.0% (1)
519	75.0% (3)	100.0% (3)	100.0% (3)	50.0% (1)	75.0% (3)	50.0% (1)	520	100.0% (4)	100.0% (1)	100.0% (2)	100.0% (2)	100.0% (2)
520	100.0% (4)	100.0% (1)	100.0% (1)	100.0% (2)	100.0% (2)	100.0% (2)	521	100.0% (1)	.0% (0)	.0% (0)	.0% (0)	50.0% (1)
521	100.0% (1)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	50.0% (1)	522	.0% (0)	.0% (0)	100.0% (1)	.0% (0)	50.0% (1)
522	.0% (0)	.0% (0)	.0% (0)	100.0% (1)	.0% (0)	50.0% (1)	523	.0% (0)	.0% (0)	50.0% (1)	.0% (0)	100.0% (7)
523	.0% (0)	.0% (0)	.0% (0)	50.0% (1)	100.0% (7)	100.0% (7)	524	100.0% (1)	.0% (0)	.0% (0)	.0% (0)	100.0% (4)
524	100.0% (1)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	100.0% (4)	564	.0% (0)	.0% (0)	.0% (0)	.0% (0)	100.0% (8)
564	.0% (0)	.0% (0)	.0% (0)	.0% (0)	.0% (0)	100.0% (8)						

### EMS FRACTAL RESPONSE TIME BY DISTRICT 2010-2014

EMS Dispatch To Arrival 5 Minutes	There are 5,934 Incident records being analyzed. 11 records were ignored because of a 0 time value. * 5 records were ignored because they were more than limit of 1,200 sec.	There are 6,411 Incident records being analyzed. 23 records were ignored because of a 0 time value. 5 records were ignored because they were more than limit of 1,200 sec.	There are 6,451 Incident records being analyzed. 8 records were ignored because of a 0 time value. * One record was ignored because it was more than limit of 1,200 seconds.	There are 6,976 Incident records being analyzed. 15 records were ignored because of a 0 time value. 1 record was ignored because it was more than limit of 1,200 sec.	There are 6,976 Incident records being analyzed. 15 records were ignored because of a 0 time value. 1 record was ignored because it was more than limit of 1,200 sec.
District	2010	2011	2012	2013	2014
none	46.9% (38)	45.5% (35)	77.2% (71)	72.0% (136)	33.3% (1)
413	86.9% (73)	86.5% (64)	80.0% (12)	75.6% (34)	82.9% (29)
414	86.4% (19)	89.7% (26)	94.4% (17)	75.0% (27)	73.1% (19)
415	77.8% (7)	70.0% (7)	100.0% (9)	60.9% (14)	76.2% (16)
416	100.0% (3)	63.6% (7)	64.3% (9)	75.0% (9)	100.0% (7)
417	100.0% (1)	.0% (0)	.0% (0)	75.0% (3)	50.0% (2)
438	93.9% (108)	88.5% (108)	89.9% (125)	97.7% (126)	91.7% (132)
439	92.8% (129)	94.7% (126)	87.8% (115)	96.9% (126)	93.3% (126)
440	95.5% (276)	94.3% (298)	92.7% (304)	97.1% (335)	94.8% (275)
441	89.1% (82)	94.4% (67)	92.8% (90)	89.5% (77)	82.5% (118)
442	79.6% (82)	78.1% (107)	77.1% (131)	85.3% (116)	74.7% (115)
443	93.5% (43)	94.4% (51)	87.9% (58)	67.2% (45)	86.8% (59)
444	92.6% (63)	93.7% (74)	93.4% (71)	90.2% (101)	89.4% (93)
445	97.7% (85)	88.2% (90)	89.9% (89)	88.3% (91)	90.8% (79)
446	91.0% (81)	90.9% (90)	88.8% (79)	89.2% (99)	81.6% (62)
447	100.0% (3)	100.0% (4)	.0% (0)	100.0% (2)	.0% (0)
448	96.1% (99)	93.1% (108)	93.1% (122)	89.8% (115)	95.7% (155)
449	92.9% (79)	95.1% (77)	94.1% (95)	90.9% (110)	91.8% (89)
450	83.8% (67)	94.2% (97)	88.8% (79)	77.5% (79)	90.7% (68)
451	87.6% (211)	87.8% (281)	86.4% (241)	89.2% (207)	86.0% (190)
452	94.5% (273)	97.1% (367)	95.7% (333)	97.7% (299)	96.1% (299)
453	96.9% (438)	97.3% (615)	97.5% (539)	96.9% (504)	98.5% (524)
454	97.6% (283)	97.2% (313)	96.1% (274)	98.0% (289)	96.1% (248)
455	95.1% (136)	98.1% (102)	94.5% (86)	94.5% (120)	95.6% (130)
473	100.0% (2)	.0% (0)	100.0% (1)	.0% (0)	50.0% (1)
474	88.5% (108)	92.6% (113)	91.5% (97)	98.3% (113)	90.8% (167)
475	95.5% (192)	98.7% (155)	96.2% (229)	95.2% (237)	95.5% (232)
476	98.0% (195)	97.8% (179)	97.9% (235)	96.4% (244)	97.8% (224)
477	95.1% (193)	96.4% (132)	97.6% (166)	96.3% (183)	93.4% (214)
478	90.7% (254)	90.6% (250)	85.9% (261)	92.3% (276)	89.2% (249)
479	79.6% (74)	82.7% (86)	81.7% (85)	87.5% (161)	82.3% (116)
480	92.6% (87)	87.9% (58)	81.4% (70)	92.0% (80)	93.4% (85)
481	96.4% (27)	87.2% (34)	92.5% (37)	93.5% (58)	87.3% (62)
482	100.0% (4)	100.0% (7)	80.0% (8)	77.8% (7)	75.0% (6)
483	71.4% (20)	76.3% (29)	66.7% (18)	78.1% (25)	58.3% (14)
484	96.0% (191)	87.4% (160)	86.4% (190)	85.9% (183)	88.8% (221)
485	92.7% (51)	95.5% (63)	86.9% (53)	85.9% (79)	87.1% (74)
486	77.4% (82)	83.9% (94)	77.2% (78)	84.3% (86)	76.7% (92)
487	61.3% (49)	67.3% (66)	61.1% (58)	83.3% (75)	81.1% (86)
488	90.0% (72)	91.2% (83)	85.6% (89)	89.3% (75)	92.7% (89)
489	98.6% (137)	94.4% (134)	94.6% (139)	96.9% (154)	93.9% (170)
490	95.5% (63)	96.9% (63)	93.8% (60)	98.6% (73)	89.9% (107)
491	88.5% (192)	90.5% (201)	87.2% (150)	90.0% (108)	89.6% (163)
515	77.4% (41)	88.9% (40)	81.1% (43)	76.7% (46)	75.3% (67)
516	60.4% (32)	66.7% (44)	69.4% (77)	78.0% (71)	75.7% (53)
517	54.9% (90)	67.1% (96)	72.2% (96)	73.5% (147)	72.4% (144)
518	52.3% (23)	43.1% (31)	61.0% (36)	57.0% (45)	58.3% (42)
519	80.2% (85)	78.7% (129)	82.3% (102)	76.1% (86)	73.0% (92)
520	84.2% (181)	80.6% (183)	83.2% (183)	86.1% (290)	81.0% (234)
521	45.5% (5)	52.4% (11)	82.1% (23)	64.7% (11)	40.9% (9)
522	35.5% (11)	27.3% (9)	37.1% (13)	49.1% (27)	39.6% (19)
523	51.7% (60)	47.7% (52)	57.8% (78)	61.4% (102)	54.9% (73)
524	60.0% (9)	71.4% (15)	74.2% (23)	63.3% (19)	75.0% (18)
576	.0% (0)	.0% (0)	.0% (0)	.0% (0)	100.0% (1)

**2010 -2014 NUMERIC OF INCIDENTS BY HOUR BY INCIDENT TYPE**

<b>2010</b>				
Hour	Total	Fire	EMS	Other
0:00	229	3	190	36
1:00	199	6	165	28
2:00	196	6	167	23
3:00	175	11	146	18
4:00	146	0	123	23
5:00	172	2	148	22
6:00	182	5	144	33
7:00	285	1	244	40
8:00	326	6	275	45
9:00	414	7	345	62
10:00	401	7	337	57
11:00	404	7	339	58
12:00	416	7	355	54
13:00	402	13	323	66
14:00	429	12	355	62
15:00	449	10	370	69
16:00	455	11	354	90
17:00	467	10	378	79
18:00	407	10	321	76
19:00	410	8	336	66
20:00	360	12	286	62
21:00	326	6	276	44
22:00	297	8	243	46
23:00	267	4	230	33
	<b>7814</b>	<b>172</b>	<b>6450</b>	<b>1192</b>

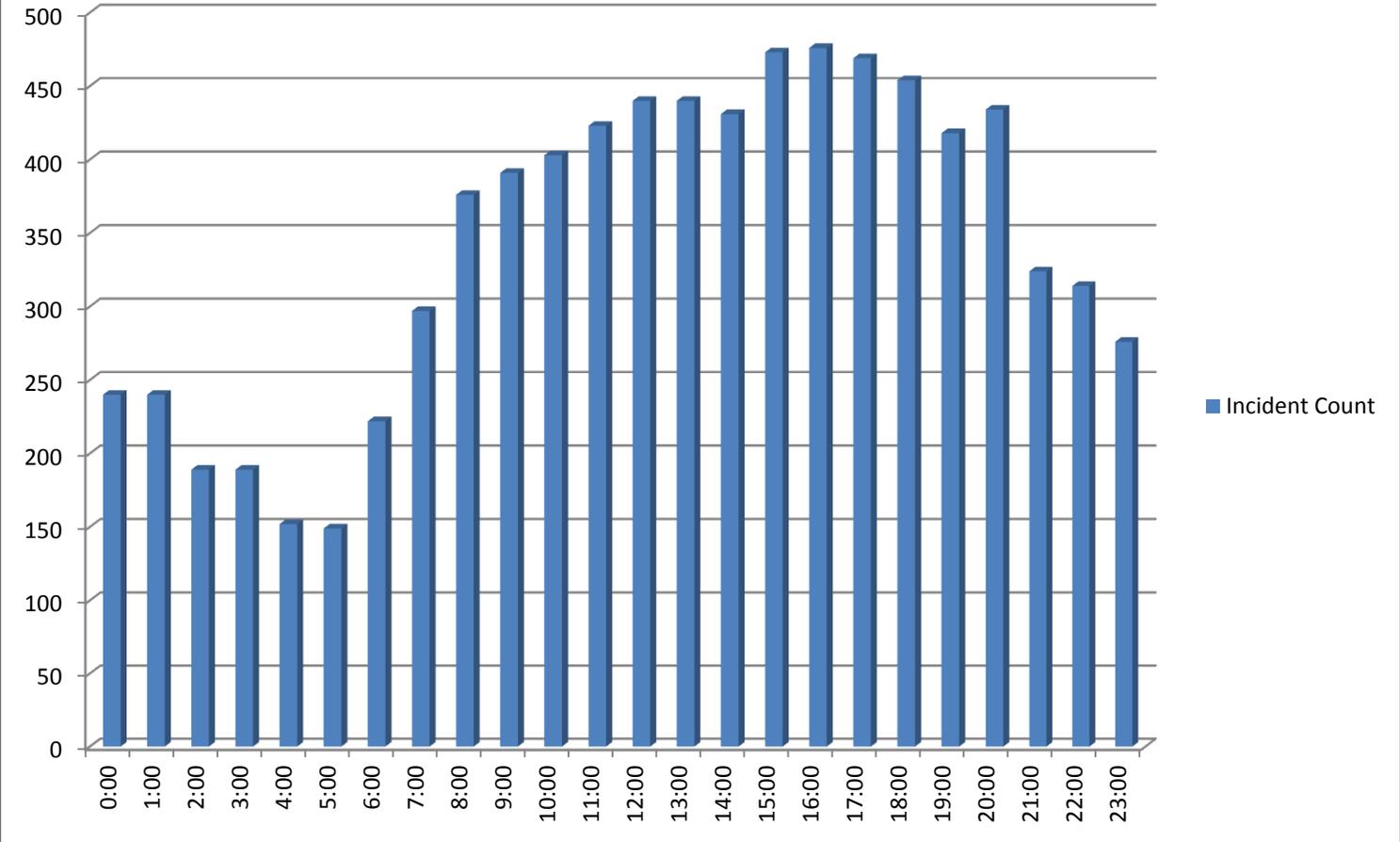
<b>2011</b>				
Hour	Total	Fire	EMS	Other
0:00	241	3	211	27
1:00	226	5	192	29
2:00	218	2	197	19
3:00	168	3	152	13
4:00	173	3	146	24
5:00	120	3	104	13
6:00	209	0	174	35
7:00	278	6	238	34
8:00	380	3	337	40
9:00	378	5	324	49
10:00	461	8	393	60
11:00	446	5	368	73
12:00	449	10	361	78
13:00	434	7	361	66
14:00	427	7	347	73
15:00	483	13	386	84
16:00	530	12	450	68
17:00	491	10	404	77
18:00	409	10	342	57
19:00	413	8	345	60
20:00	385	5	324	56
21:00	368	5	308	55
22:00	280	8	221	51
23:00	259	4	222	33
	<b>8226</b>	<b>145</b>	<b>6907</b>	<b>1174</b>

<b>2012</b>				
Hour	Total	Fire	EMS	Other
0:00	218	10	191	17
1:00	240	2	211	27
2:00	202	1	183	18
3:00	169	4	153	12
4:00	155	2	140	13
5:00	153	3	138	12
6:00	178	0	158	20
7:00	260	3	225	32
8:00	382	3	336	43
9:00	401	4	357	40
10:00	467	8	403	56
11:00	454	2	386	66
12:00	453	15	381	57
13:00	458	8	394	56
14:00	463	13	398	52
15:00	509	9	438	62
16:00	467	16	374	77
17:00	462	11	391	60
18:00	439	17	366	56
19:00	363	10	315	38
20:00	372	10	317	45
21:00	380	7	318	55
22:00	308	5	265	38
23:00	245	9	208	28
	<b>8198</b>	<b>172</b>	<b>7046</b>	<b>980</b>

<b>2013</b>				
Hour	Total	Fire	EMS	Other
0:00	206	2	186	18
1:00	207	3	190	14
2:00	192	7	160	25
3:00	166	4	141	21
4:00	158	1	146	11
5:00	147	3	126	18
6:00	193	4	167	22
7:00	269	6	234	29
8:00	353	2	301	50
9:00	404	6	353	45
10:00	438	8	375	55
11:00	424	8	364	52
12:00	456	8	390	58
13:00	438	11	376	51
14:00	476	8	408	60
15:00	446	11	381	54
16:00	508	11	425	72
17:00	504	17	410	77
18:00	473	13	389	71
19:00	464	12	406	46
20:00	387	11	328	48
21:00	349	5	297	47
22:00	292	8	256	28
23:00	267	3	235	29
	<b>8217</b>	<b>172</b>	<b>7044</b>	<b>1001</b>

<b>2014</b>				
Hour	Total	Fire	EMS	Other
0:00	240	3	208	29
1:00	240	1	217	22
2:00	189	2	168	19
3:00	189	2	171	16
4:00	152	5	130	17
5:00	149	2	132	15
6:00	222	2	194	26
7:00	297	6	253	38
8:00	376	5	333	38
9:00	391	4	325	62
10:00	403	6	351	46
11:00	423	8	348	67
12:00	440	9	379	52
13:00	440	5	376	59
14:00	431	8	368	55
15:00	473	11	406	56
16:00	476	4	409	63
17:00	469	11	398	60
18:00	454	13	372	69
19:00	418	7	353	58
20:00	434	10	355	69
21:00	324	3	271	50
22:00	314	1	265	48
23:00	276	8	238	30
	<b>8220</b>	<b>136</b>	<b>7020</b>	<b>1064</b>

**Incident Count by Time of Day - 2014**



Provided below is an analysis of fire and EMS incident response data from 2010 – 2014.

**2010-2014 FIRE CALL PROCESSING PERFORMANCE INDICATORS**

**2014 - 1:00 BENCHMARK = 48.8%**

	<b>90%</b>	<b>80%</b>	<b>70%</b>	<b>60%</b>	<b>50%</b>
<b>2014</b>	00:01:58	00:01:29	00:01:16	00:01:09	00:01:01
<b>2013</b>	00:02:21	00:02:03	00:01:43	00:01:31	00:01:21
<b>2012</b>	00:02:38	00:01:57	00:01:44	00:01:31	00:01:22
<b>2011</b>	00:02:39	00:02:05	00:01:42	00:01:27	00:01:17
<b>2010</b>	00:02:19	00:01:58	00:01:46	00:01:31	00:01:20

**2010-2014 FIRE TURNOUT TIME PERFORMANCE INDICATORS**

**2014- 1:20 BENCHMARK = 65.1%**

	<b>90%</b>	<b>80%</b>	<b>70%</b>	<b>60%</b>	<b>50%</b>
<b>2014</b>	00:01:52	00:01:33	00:01:26	00:01:19	00:01:10
<b>2013</b>	00:01:43	00:01:19	00:01:08	00:00:58	00:00:47
<b>2012</b>	00:02:15	00:01:54	00:01:38	00:01:28	00:01:21
<b>2011</b>	00:02:38	00:02:06	00:01:50	00:01:39	00:01:31
<b>2010</b>	00:02:18	00:02:02	00:01:51	00:01:36	00:01:24

**2010-2014 FIRE TRAVEL TIME PERFORMANCE INDICATORS**

**2014- 4:00 BENCHMARK = 90.3% (EXCLUDE MUTUAL AID GIVEN)**

	<b>90%</b>	<b>80%</b>	<b>70%</b>	<b>60%</b>	<b>50%</b>
<b>2014</b>	00:03:57	00:03:22	00:03:01	00:02:20	00:02:21
<b>2013</b>	00:04:02	00:03:23	00:03:03	00:02:40	00:02:23
<b>2012</b>	00:04:13	00:03:31	00:03:02	00:02:43	00:02:23
<b>2011</b>	00:04:10	00:03:23	00:02:54	00:02:29	00:02:09
<b>2010</b>	00:03:48	00:03:18	00:02:52	00:02:39	00:02:24

**2010-2014 FIRE DISPATCH TO ARRIVAL PERFORMANCE INDICATORS**

**2014- 5:20 BENCHMARK = 89.0% (EXCLUDE MUTUAL AID GIVEN)**

	<b>90%</b>	<b>80%</b>	<b>70%</b>	<b>60%</b>	<b>50%</b>
<b>2014</b>	00:05:26	00:04:45	00:04:12	00:03:57	00:03:34
<b>2013</b>	00:05:09	00:04:45	00:04:20	00:03:56	00:03:31
<b>2012</b>	00:05:41	00:04:54	00:04:35	00:04:02	00:03:42
<b>2011</b>	00:05:19	00:04:53	00:04:36	00:04:19	00:03:53
<b>2010</b>	00:05:13	00:04:52	00:04:38	00:04:20	00:04:00

2010-2014 – EMS CALL PROCESSING PERFORMANCE INDICATORS

2014- 1:00 BENCHMARK = 20.1%

	90%	80%	70%	60%	50%
<b>2014</b>	00:02:57	00:02:29	00:02:10	00:01:56	00:01:43
<b>2013</b>	00:03:01	00:02:33	00:02:16	00:02:02	00:01:49
<b>2012</b>	00:02:45	00:02:13	00:01:55	00:01:40	00:01:27
<b>2011</b>	00:02:34	00:02:03	00:01:46	00:01:31	00:01:20
<b>2010</b>	00:02:35	00:02:03	00:01:45	00:01:33	00:01:21

2010-2014 EMS 321 TURNOUT TIME PERFORMANCE INDICATOR

2014- 1:00 BENCHMARK = 54.2% (EXCLUDE 324, 331, 353, 381)

	90%	80%	70%	60%	50%
<b>2014</b>	00:01:45	00:01:27	00:01:15	00:01:06	00:00:58
<b>2013</b>	00:01:40	00:01:22	00:01:09	00:01:00	00:00:54
<b>2012</b>	00:01:50	00:01:33	00:01:21	00:01:11	00:01:02
<b>2011</b>	00:02:04	00:01:43	00:01:30	00:01:19	00:01:10
<b>2010</b>	00:02:06	00:01:46	00:01:33	00:01:23	00:01:14

2010-2014 EMS 321 TRAVEL TIME PERFORMANCE INDICATOR

2014- 4:00 BENCHMARK = 87.6% (EXCLUDE 324, 331, 353, 381 & MUTUAL AID GIVEN)

	90%	80%	70%	60%	50%
<b>2014</b>	00:04:11	00:03:36	00:03:12	00:02:53	00:02:34
<b>2013</b>	00:04:13	00:03:35	00:03:12	00:02:53	00:02:33
<b>2012</b>	00:04:12	00:03:32	00:03:10	00:02:51	00:02:34
<b>2011</b>	00:04:00	00:03:26	00:03:03	00:02:47	00:02:30
<b>2010</b>	00:03:51	00:03:22	00:03:01	00:02:44	00:02:26

2010-2014 EMS 321 DISPATCH TO ARRIVAL PERFORMANCE INDICATORS

2014- 5:00 BENCHMARK = 87.7% (EXCLUDE 324, 331, 353, 381 & MUTUAL AID GIVEN)

	90%	80%	70%	60%	50%
<b>2014</b>	00:05:18	00:04:43	00:04:19	00:03:56	00:03:37
<b>2013</b>	00:05:11	00:04:40	00:04:14	00:03:53	00:03:32
<b>2012</b>	00:05:20	00:04:46	00:04:23	00:04:02	00:03:41
<b>2011</b>	00:05:11	00:04:43	00:04:22	00:04:02	00:03:43
<b>2010</b>	00:05:13	00:04:52	00:04:38	00:04:20	00:03:59

SECTION NINE:

# RISK HAZARD AND VALUE EVALUATION



WEST ALLIS FIRE DEPARTMENT  
STANDARDS OF COVERAGE

# RISK HAZARD AND VALUE EVALUATION

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## RISK HAZARD

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In February 2001, the West Allis Fire Department adopted the Risk Hazard and Value Evaluation (RHAVE) program. Using RHAVE software, the department evaluated and identified potential risks throughout the city. The West Allis Fire Department utilized on-duty fire companies and fire inspectors to evaluate all commercial properties. Residential property information was obtained through the city assessor's office. The results of this analysis were recorded according to a system that has been in existence for more than a century. In the early 1900's, the State of Wisconsin was divided into quarter sections, with each quarter section measuring ½ mile by ½ mile. The City of West Allis has 52-quarter sections which became the department's planning zones (districts). RHAVE data has been organized by quarter section.

**Five factors are considered in the formula for assessing commercial property, including multi-family housing units of 20 or more occupants:**

- I. Building**  
Building factors include building construction, exposure separation, building height, ease of access, and square footage.
- II. Life Safety**  
Life safety factors include occupant load, occupant mobility, as well as the type and degree of alarm system present
- III. Value**  
Value factor is based on the impact the building's destruction would have on the city's economy and infrastructure
- IV. Water**  
Water factor is based on a formula which determines required fire flow
- V. Risk**  
Risk factor is based on the frequency and the consequence of fire according to occupancy type. Frequency measures the number of times a fire has occurred in a particular occupancy type. Consequence measures the community impact suffered as a result of past fires in occupancies of a particular type.

Once factor scores are totaled, the sum is multiplied by a Property Use Factor (PUF) which takes an occupancy's type and size into consideration. A final score is calculated, by means of which the building is classified as a low, moderate, significant, or maximum risk. Low hazard scores fall below 15, while moderate hazards range from 16-39. Significant hazards range from 40-59 and maximum hazards score higher than 60. The West Allis Fire Department added a "Target Hazard" category for buildings that, though not falling into the maximum risk category, are given special consideration in the RHAVE process. For example, buildings with hazardous contents or unusual occupant profiles are noted as "Target Hazards" by the fire department.

RISK ASSESSMENT MATRIX

<p>High Probability Low Consequence</p> <p><b>Moderate Hazard</b></p> <p>15-39 points</p>	<p>High Probability High Consequence</p> <p><b>High Hazard</b></p> <p>&gt;60 points</p>
<p>Low Probability Low Consequence</p> <p><b>Low Hazard</b></p> <p>&lt;15 points</p>	<p>Low Probability High Consequence</p> <p><b>Significant Hazard</b></p> <p>40-59 points</p>

**TABLE ONE  
RISK HAZARD AND VALUE EVALUATION FORM**

PREMISE	
Address:	
Description (Bldg Name: ie. McDonalds)	
Planning Zone (District/Quartersection):	1st Due Station: <input type="text"/>
Property Use: FPU	
Property Description:	
Occupancy Type: <small>ie: assembly educational</small>	
Number of Units:	
Assessed Value: <small>from city website</small>	
Does the business pay property tax?	YES      NO
Does the business collect sales tax?	YES      NO
Is the business Owner Occupied?	YES      NO
Number of Employees:	

WATER DEMAND	
Sprinklers	yes or no
Fire Flow:	

see sheet for fire flow

BUILDING INFORMATION					
Exposure Separation:	0-10	11-30	31-60	61-100	101+
Construction Type:	Type I - F.R. Type II - F.R.	Type II - 1 Hr. Type III - 1 Hr.	Type IV - H.T. Type V - 1Hr.	Type II - N.C. Type III - N.C.	Type V - N.C.
Building Height:	1 - 2 stories	3 - 4 stories	5 - 6 stories	7 - 9 stories	10+ stories
Access:	All Sides	3 Sides	2 Sides	1 Side	Extra Ordinary Effort
Square Footage:	0 - 7,500	7,501 - 15,000	15,001 - 25,000	25,001 - 40,000	> 40,000

LIFE SAFETY						
Occupant Load:	0 - 10	11 - 50	51 - 100	101 - 300	> 300	
Occupant Mobility:	awake/ambulatory 1 - 2 stories	asleep/ambulatory 1 - 2 stories	awake/ambulatory 3+ stories	asleep/ambulatory 3+ stories	non-ambulatory restrained	not a factor
Warning/Alarm:	Automatic - Central	Automatic - Local	Manual - Central	Manual - Local	No Alarm System	not a factor
Exiting System:	conforming	non-conforming				

RISK: FREQUENCY AND CONSEQUENCE						
Capacity to Control:	control within building of origin	exposure to complex of bldgs	major deployment	extreme resistance to control	hazardous to f.f activities	
Hazard Index:	Limited Hazards	Common Hazards (residential types)	Mixed Hazards (business types)	Industrial Hazards F.L., F.G., Explos.	Multiple/Complex Hazards	
Fire Load:	Light	Ord. Hazard I	Ord. Hazard II	Extra Hazard I	Extra Hazard II	
Regulatory Oversight:	Highly Regulated Mand. Oversight	Highly Regulated Insp. Scheduled	Regulated Inspect. Random	Regulated Vol. Compliance	Unregulated Uninspected	not a factor
Human Activity:	No access to unauthorized persons	Controlled access to unauthorized persons	Business Activity sales & retail	Group Activity transient population	Domestic Activity no occupant control	not a factor
Experience:	Daily Events	Weekly Events	Monthly Events	Annually Events	Rare Occurance	

VALUE					
Property Value:	personal/family loss	business loss minor casualty exposure	moderate economic impact to community	severe economic impact to community (tax base or loss of jobs)	irreplaceable loss to community