

A photograph of a community event on a sunny day. A red fire truck is parked on a street, and a firefighter in a blue uniform is spraying water from a hose onto the sidewalk. A group of people, including several children and two adults, are gathered on the sidewalk, watching the activity. The scene is set in a residential area with trees and houses in the background.

2017 GRFD ANNUAL REPORT

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2017 SUMMARY

FY 2018 FISCAL

CITY BUDGET	\$ 528,907,424
CITY GENERAL FUND	\$ 137,112,916
GRFD ADOPTED BUDGET.....	\$29,863,932

2017 BREAK – EVEN DATE

APRIL 10TH

THE DAY THAT THE CUMULATIVE VALUE OF PROPERTY AND CONTENTS SAVED BY THE GRFD SURPASSED THE DEPARTMENT'S ANNUAL BUDGET EXPENDITURE.

PERSONNEL

202 (YEAR END)	2017 PERSONNEL (100%)
176	OPERATIONS PERSONNEL (87%)
13.....	ADMIN. PERSONNEL (6.5%)
9.....	PREVENTION PERSONNEL (4.5%)
4	TRAINING PERSONNEL (2%)

EMERGENCY OPERATIONS

32,275	APPARATUS RESPONSES
24,020 ..	EMERGENCY INCIDENTS (ALL TYPES)
15,345	EMERGENCY MEDICAL SERVICE
2,152	FIRES AND FIRE ALARMS
615	FIRES EXTINGUISHED
97.32%	PROPERTY SAVED RATE
\$204,283,444	PROPERTY SAVED VALUE
2.68%	PROPERTY LOST RATE
\$5,616,069	PROPERTY LOST VALUE
20	CIVILIAN INJURIES
3	CIVILIAN DEATHS
36	FIREFIGHTER INJURIES
0	FIREFIGHTER DEATHS

FIRE CHIEF'S MESSAGE



2017 was an extremely active year for all areas of the Grand Rapids Fire Department. The hiring of large classes of recruits between 25 and 30 years ago means we are now seeing several years with high numbers of retirements, including nine in 2017. Those nine retirements and some carryovers from 2016 resulted in 27 promotions in 2017. We have identified a need for formalized succession planning and have begun to implement this in all ranks. This is accomplished by mentoring the newly promoted and providing leadership and development training through Davenport University, as well as tactical and strategic education at the National Fire Academy. Retirements and promotions also result in recruitment, and I am proud to say that as a result of a lot of hard work on the part of many, we graduated the most diverse recruit class in our history in January of 2017.

We have been working hard as an organization on other fronts

as well. Our efforts to keep responders and citizens safe on high speed roadways were recognized this year in Washington, D.C. by the Federal Highway Administration and the Roadway Safety Administration for our Traffic Incident Management Program. The Grand Rapids Neighborhood Business Alliance also recognized the Fire Department with its John H. Logie

Neighborhood Business Champion Award. This award recognized our efforts to make the City of Grand Rapids a safer community through our vast Fire Prevention efforts. Our Fire Prevention month open houses, held at all 11 stations, were also noted as a very positive and successful way of engaging with the community.

The 2019-2021 Strategic Planning process for the Grand Rapids Fire Department was started this year in



order to have a plan in place when our 2018 plan times out. This was an extremely valuable process, involving 35 members from all ranks of our organization. The planning group was able to craft new Mission and Vision statements for the Fire Department and provide a detailed roadmap to lead us through the next 3 years of growth. The plan sets goals, objectives and accountability to keep us on track to achieve our mission and vision. The Fire Department has also endeavored to use lean methods to improve internal processes and create a more efficient organization. We continue to see change

in our administration and each rank, making this is an exciting time for many in the Department.

The Grand Rapids Fire Department continues to work on seeking improvement at all levels and responding to the needs in our community. We are proud professionals who are innovative, creative, and dedicated to being the best.

I am very encouraged by the accomplishments of our organization and I look forward to 2018 and the challenges and opportunities that await us.

Sincerely, Chief Lehman



2017 MISSION STATEMENT

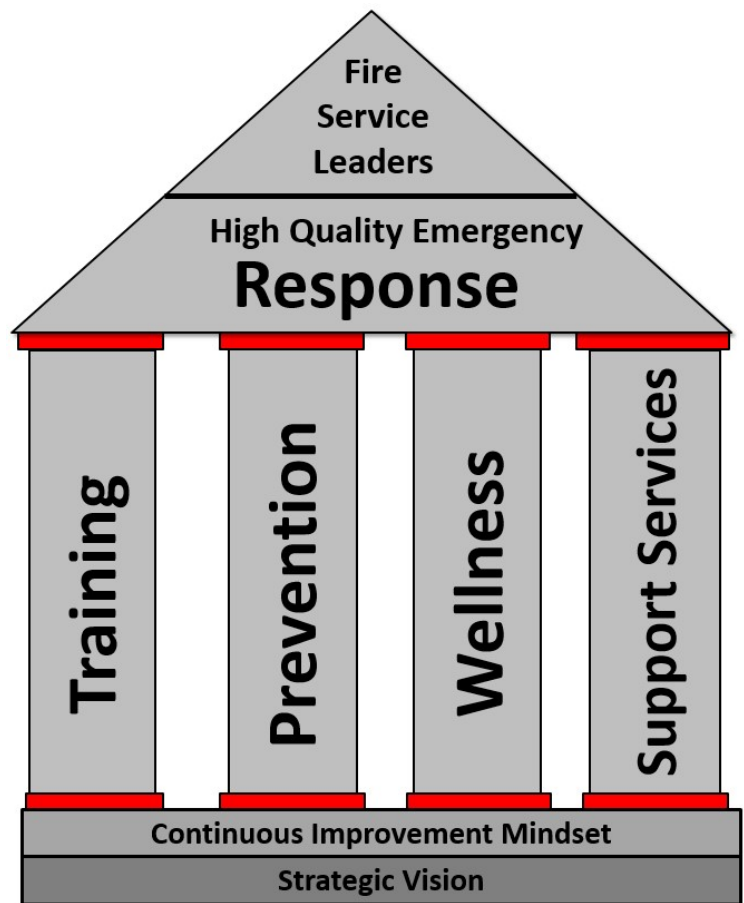
The GRFD will provide the highest level of service to our community through a commitment to excellence.

2017 VISION STATEMENT

The GRFD strives to maintain accredited status and serve as a national fire service leader that aligns with community needs and provides a secure work environment for its members. This is accomplished by diverse partnerships, increased adaptability, fluid communication, complete transparency and a preventative mindset towards all endeavors.

VALUE STATEMENT

THE GRFD IS
COMMITTED
TO DOING WHAT IS
RIGHT THROUGH:
HONESTY
INTEGRITY
LOYALTY
TEAMWORK
EXCELLENCE

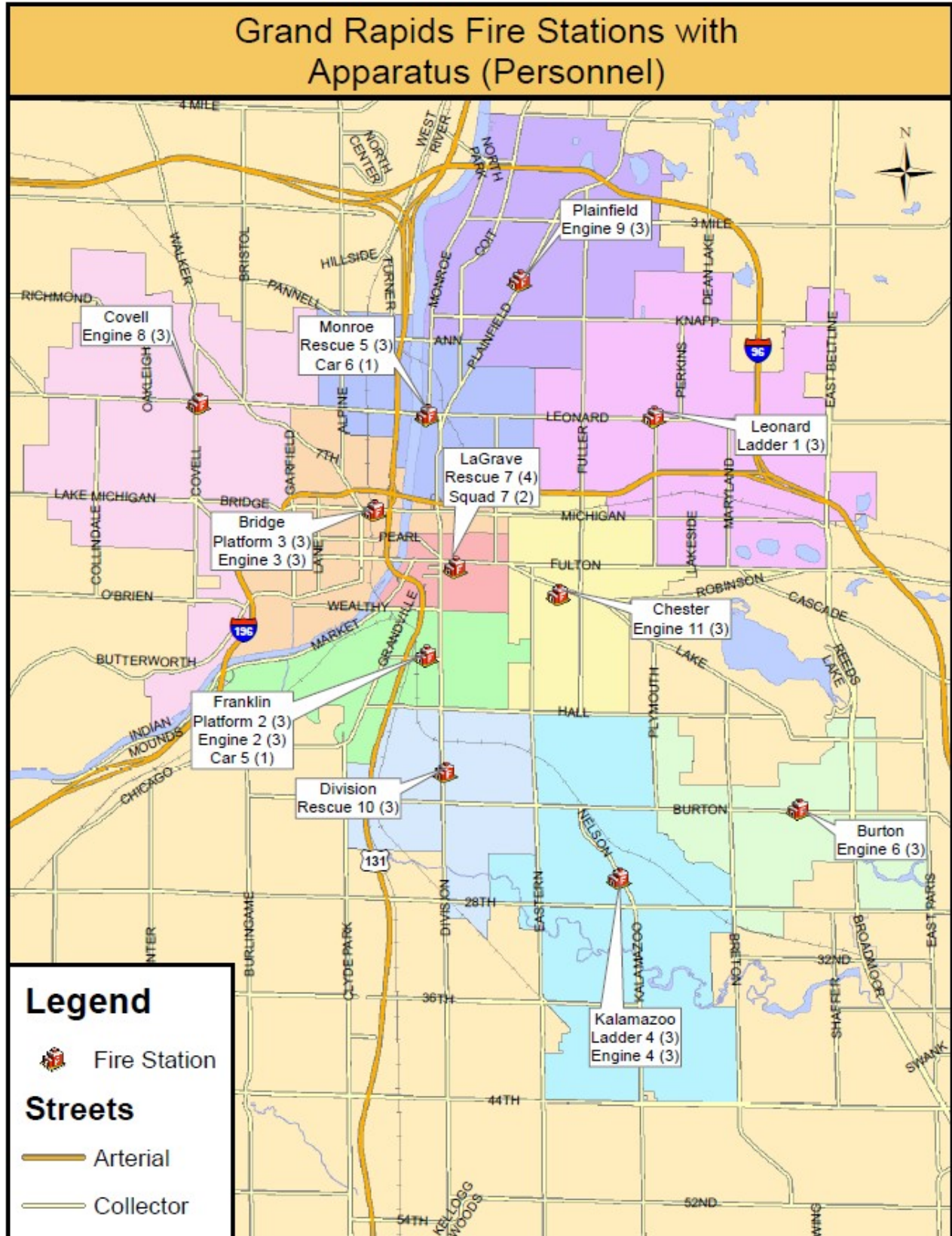


GRFD PILLARS



2017 GRFD JURISDICTIONAL MAP

WITH ASSIGNED APPARATUS/(PERSONNEL COUNTS)



SUPPORT SERVICES

HUMAN RESOURCES— FISCAL SERVICES— MAINTENANCE—PPE—PREVENTION



DEPUTY FIRE CHIEF RON TENNANT

OVERVIEW:

Human Resources

In January of 2017, the Grand Rapids Fire Department hired 11 recruit firefighters and eight members left our service during the year. 27 promotions were made over the course of the year. The higher number was due in part to the backlog created as we did not promote pending the arrival of the new Fire Chief. This office coordinated and managed the department's portion of the various promotional processes, working closely with many members of the Human Resources department. Promotional processes conducted this year included the annual

Equipment Operator, Lieutenant, Captain and Battalion Chief ranks, as well as Captain of Fire Prevention and Fire Prevention Inspector. Work began for the Assistant Fleet Maintenance Supervisor position. Our second Promotional Ceremony was held on Tuesday, May 16, 2017 at Franklin Street station.

Recruitment and Outreach

The safety of our youth is very important to the Grand Rapids Fire Department. To that end, we have enhanced our screening of all employees who interact with our youth on a regular basis. We have instituted a policy that requires annual background checks as well as annual Youth Safety training.

We conducted our first annual Summer Youth Academy. Nine local students participated in a 4 day program that exposed the students to CPR and first aid, firefighting, ladders, hose deployment and water supply, fire prevention, rescue and extrication, traffic incident management and the GRFD hiring process. A graduation ceremony was conducted the last night of class for the students to be able to celebrate and show off to their family and/or friends their accomplishments. .

Fire Companies and staff have been regularly attending Neighborhood and Business Association meetings this past year. We have also supported this effort by providing a brief monthly update that provides current, consistent, and relevant speaking points for use, as needed, when conversing with the public. Automated mapping has also been developed that shows fire department activity in each neighborhood on a monthly basis. A map that shows Fire Department response and inspection activity for the past 7 days is available on the public website.

Under the leadership of Battalion Chief Thompson, our partnership with the Grand Rapids Public Schools Junior ROTC Program is working through its first full year. We have an assigned Fire Department coordinator at each High School (Union High School – EO Tony Beurkens, Innovation Central High School – FF Xavier Greenfield, Ottawa Hills High School – FF Jeremy Chesla). On average, we spend over 14 hours in the schools and interact with over 150 students per month. Activities include fire/rescue skills, physical exercise as it relates to the fire service and knowledge based training and education.

The Office of Support Services organized the first GRFD “All Stations Open Houses” during Fire Prevention week. We participated in National Night Out at a variety of locations, the MDA Fill The Boot campaign and the MDA “Lock Up”.

SUPPORT SERVICES

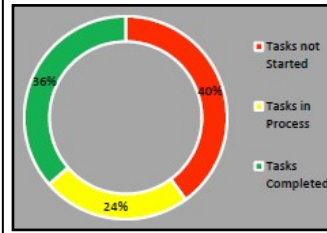
HUMAN RESOURCES— FISCAL SERVICES— MAINTENANCE—PPE—PREVENTION

Planning and Pillar Oversight

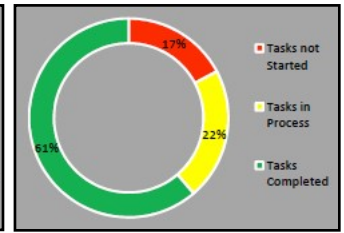
I continue to participate in regular Master, Budget, Strategic, Operational and Succession Planning meetings with the Planning Division and Administrative Chiefs. I am the “Owner” of the Support Services Pillar, and the Quality Assurance oversight for the Fire Prevention Pillar. As we close out 2017, we are well into our planning and construction of the FY19-FY21 GRFD Strategic and Operational Plan. Gathering community and membership input, investing resources in analyzing the data, and formulating the new plan will be well worth the effort to focus our efforts for the next three years.

Support Services—Operational Plan Progress

January 1, 2017



January 1, 2018



Department Communications

Frequent, accurate communications continue to be a goal of Fire Administration. We conduct monthly Command Staff meetings with all Chief level officers. Towards the end of the year, we began holding monthly (instead of quarterly) Captains Meetings for all Department Captains. Each Monday we conduct an MDI (Managing Daily Improvement) Update and Quality Assurance check so all Pillar Owners and other key program managers can brief Command Staff on the latest actions, activities encountered, and request any assistance that may be required. On a weekly basis, Support Services records a video highlighting the activities of the Fire Department as reported at these MDI updates for all personnel to review. We continued to meet regularly with the Executives of IAFF Local 366. Suppression personnel continue to spend about 2 weeks in the administrative office when they are promoted to a new position. Administrative staff have begun to ride-along with fire crews on an infrequent basis. We conducted our second annual “All Officers” Meeting. I visited stations and shifts 122 times, and responded to 25 alarms this year.

Programs and Budgeting

The Fire Department has 41 different budgeted programs to address and deal with a variety of our operational and support needs. These range in scope from Emergency Medical Services and Suppression to Small Engine Repair and the Sign Shop. We are working towards a more consistent and formalized structure to each of the programs, including program member selection, leadership structure and delineation of duties. I met with each Program manager twice this year, once after the new budget was issued for the fiscal year, and once after the end of the first quarter. The goal is to meet quarterly.

SUPPORT SERVICES

HUMAN RESOURCES— FISCAL SERVICES— MAINTENANCE—PPE—PREVENTION

Public Information

In 2017 we developed and instituted a formal Public Information Program. The purpose is to foster our relationship with various media agencies, solidify the image of the Grand Rapids Fire Department in the eyes of the public, and present factual, timely information through the use of a Public Information Officer (PIO). The program establishes guidelines to share accurate, timely and relevant information with the news media and the public regarding serious incidents or departmental activities. This will be accomplished through training specific members by means of a standardized process, increasing the delivery of accurate communication to the public, and cooperating with the members of the media in their efforts to gain factual public information. These activities do not interfere with departmental operations, endanger departmental members, hinder or disclose privileged on-going investigation information, infringe upon individual rights or violate the law.

Mask Repair

Early in 2017 we received our new Scott Safety Air Compressor and Fill Station system, and ended up having to work through several issues. Diligence by the leadership of our Mask Repair Program, the crews at LaGrave Station, and near-weekly conference calls with Scott Safety helped us to work through most of the variety of issues we experienced.

Other Activities

I continue to represent the City of Grand Rapids and the fire services as a member of the West Michigan Traffic Safety Advisory Committee, and as Co-Chair of the Governors Traffic Safety Advisory Commission Traffic Incident Management Action Team.

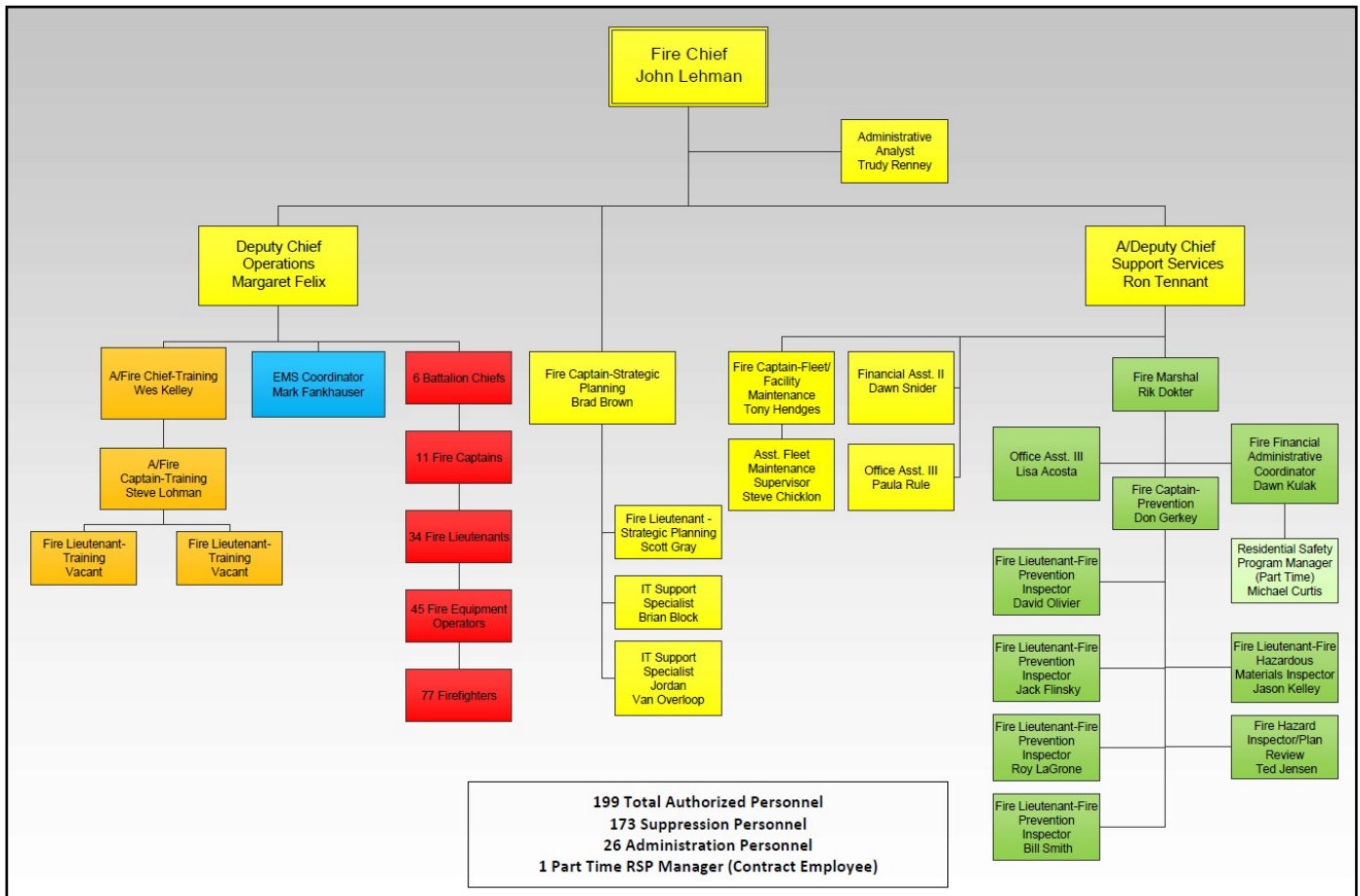
Support Services also manages and/or participates in the following fire department programs and activities:

- Annual physicals exams
- Probationary evaluations of promoted employees
- Conducting the quarterly draw and managing the roster
- Filling acting assignment positions as needed
- Supervising the payroll process
- Military leave requests and tracking
- Equipment, supplies and services requisitions

We also organized and provided the resources for the Summer High Rise training conducted in the Medical Mile parking ramps.

It is my honor and privilege to serve the citizens of Grand Rapids and the members of this Fire Department in the role of Support Services. This is truly a team effort, and we would not have been able to accomplish any of the activities reported without the hard work and dedication of the many members stepping up and working these projects.

2017 ORGANIZATIONAL CHART



GRAND RAPIDS FIRE DEPARTMENT STRATEGIC PLAN FY 2016 - FY 2018				Updated By: Fire Chief John Lehman		Date: 9/9/2016		
Mission Statement		The GRFD will provide the highest level of service to our community through a commitment to excellence.			Values Statement	The GRFD is committed to doing what is right through: Honesty Integrity Loyalty Teamwork Excellence		
Vision Statement		The GRFD strives to maintain accredited status and serve as a national fire service leader that aligns with community needs and provides a secure work environment for its members. This is accomplished by diverse partnerships, increased adaptability, fluid communication, complete transparency and a preventative mindset towards all endeavors.						
Command Staff COWS Analysis		<div><div><div>These are how well we appear to align in the following areas of focus:</div><div><div>Politics</div><div>Money</div><div>Resources</div><div>Community</div><div>Media</div><div>Events</div></div><div><div>Regional Cooperation</div><div>City/Police Education</div><div>Private Partnership</div><div>Mobile Integrated Health Care</div><div>Finance</div><div>Diversity</div></div></div><div><div>Challenges</div><div>Opportunities</div></div><div><div>11</div><div>10</div><div>8</div><div>7</div><div>2</div><div>2</div></div><div><div>11</div><div>11</div><div>11</div><div>11</div><div>11</div><div>11</div></div></div> <div><div>Weaknesses</div><div>Strengths</div></div> <div><div>Human Resources</div><div>Attitude</div><div>Communication</div><div>Time Management</div><div>Training</div><div>Labor Relations</div><div>CIO's</div></div> <div><div>Continuous Improvement Model</div><div>Leadership</div><div>Training</div><div>Appearance</div><div>Workforce</div><div>Operations</div></div> <div><div>12</div><div>5</div><div>5</div><div>3</div><div>3</div><div>3</div><div>2</div></div> <div><div>12</div><div>5</div><div>5</div><div>3</div><div>3</div><div>3</div><div>2</div></div> <div><div>Internal Survey - 98 Responses (48.51%)</div><div>External Survey - 114 Responses</div></div> <div><div>What are the roadblocks to creating a positive work environment in the GRFD?</div><div>Do you feel you are properly trained in the field areas to do your job?</div><div>Do you receive regular and useful feedback from your direct supervisor?</div><div>Would it be helpful for your personal/professional development to receive formal feedback on a more consistent basis?</div><div>Q2-How would you rate the timeliness of our response?</div><div>Q3-How often do you see the GRFD at a community or school event?</div><div>Q4-If the GRFD develops a community CPR class, would you be willing to host or attend?</div></div> <div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 Responses</div><div>98 Responses (48.51%)</div><div>114 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HUMAN RESOURCES

Retirements

Nine personnel concluded their service with the GRFD during 2017.

Lt. Jeff Smith	January 2nd
BC Dan Stoddard	January 4th
BC Bart Perry	January 20th
Lt. Don VanDyke	February 10th
EO Dan Kersjes	April 24th
FPI Kevin Robinson	May 11th
EO Dan Nelson	October 24th
TC Lee Finlayson	November 1st
Lt. Joe Donohoe	November 28th

Promotions

27 personnel received promotions within the GRFD during 2017:

Deputy Chief
Ron Tennant November 6th

Battalion Chiefs
Collin Kelly February 16th
Kathy Thompson February 16th
Dave Noorman November 26th

Captains
Rich Clark March 3rd
Bill Race March 3rd
Don Gerkey October 22nd
Mark Fankhauser December 17th

Lieutenants
Ryan Sparks January 6th
Kara Johnson January 6th
Joel Boyer February 20th
Andrew Nowack February 20th
Joaquin Martinez March 3rd
Mike Witteveen March 3rd
Roy LaGrone November 5th
Dave Olivier November 5th
Josh Veldkamp December 3rd

Equipment Operators
Alex Atwood February 2nd
Dan Ryan February 2nd
Abe Schneider February 24th
Justin Steeby March 3rd
Robert Rood April 23rd
Jon VanLente October 23rd
Adam Lubbers November 26th
Dave Fountain December 3rd
Joel MacDonald December 24th
Darcy Cooper December 24th



FISCAL SERVICES – TRUDY RENNEY

FY2017 began with an amended Fire Department general fund budget of \$29,575,322 and \$407,551 in capital funds for a total budget of \$29,982,873. Revenue received in FY2017 was \$686,620 from fees and State funding. Total budget funds utilized in FY2017 budget year resulted in the department being .22% under budget for FY2017.

FY2018 began with a general fund budget of \$29,863,937 and \$340,375 in capital funds for a budget of \$30,204,312. In September 2017, GRFD received a Federal Emergency Management Agency Fire Prevention and Safety grant award in the amount of \$365,170 for continuation and expansion of the Residential Safety Program. The estimated revenue of \$613,599 is a combination of fees and State funding. The first half of FY2018 closed with approximately 57.75% of the amended budget remaining and 66.79% of projected revenues having been received.

HONOR GUARD AND AWARDS COMMITTEE

HONOR GUARD – CAPTAIN MARK NOORMAN AND LT. MATT KEUSCH

The Honor Guard consists of 14 members who volunteer their time to represent the Fire Department at parades, training, and funerals, as well as posting colors as requested at different events. In March of 2017 the members of the Grand Rapids Fire Department Honor Guard attended a four day Honor Guard Boot camp, where we trained with the Kent County Metro Honor Guard. In April, the GRFD Honor Guard spent a day training with several Honor Guards in the Lansing area. We participated in visitations and funerals for several retired members who passed away in 2017. We marched in 3 parades and 3 opening ceremonies for events at Van Andel Arena, as well as several other events including the GRFD awards ceremony, GRFD promotional ceremony, Firefighter of the Year ceremony, St. Florian Mass, and the Boy Scout salute on 9/11 at the Ford museum. Honor Guard members logged over 929 hours representing the Grand Rapids Fire Dept. With the following breakdown of hours:

Training
611 hours
Events
78 hours
Funerals
105 hours
Administration
35 hours



AWARDS COMMITTEE – LT. MATT KEUSCH

Chair – Matthew Keusch

John Keillor

Jeffrey VanderWall

David Noorman

Jeffrey Lysiak

William Smith

Corey Kernodle

The awards committee meets monthly to review award nominations. To ultimately vote whether a nominee is award worthy, there is typically an investigation and interviews are conducted. Much of the committee members' time is spent on this work, as well as preparing for the annual awards ceremony.

EO James McIntyre was honored as the 2017 Fire Fighter of the Year. Congratulations to all of the other recipients of service awards and commendations that were presented last October!

GRAND RAPIDS
FIRE DEPARTMENT
2017 AWARDS
CEREMONY



OCTOBER 17, 2017
7:00PM
GVSU - RICHARD M. DEVOS
CENTER
LOOSEMORE AUDITORIUM
401 W. FULTON
GRAND RAPIDS, MI 49504

FLEET AND FACILITIES - CAPTAIN HENDGES

Buildings:

- All projects align with the City's Asset Management Plan
- Building exterior repairs and preventative maintenance at multiple Fire Stations
- Tuck pointing
- Storefront and window sealing/caulking
- Washers and dryers for non PPE items installed at all locations including the Training Center

Apparatus:

- Continued work on Platform 3
- Standardization of the pumper fleet
- Purchase of 2 new pumpers to align the front-line and reserve engines with the new staffing matrix



PERSONAL PROTECTIVE EQUIPMENT - CAPTAIN DEFOREST

The PPE program continued to upgrade the personal protective equipment for members of the department by purchasing forty-seven sets of Morning Pride Viper turn out gear. This was the final year of a four year department-wide replacement program.

- Sixty-five pairs of Globe leather fire boots were purchased in phase two of a three-year program to provide each member a new pair of leather boots. In addition, a complete ensemble of protective equipment was purchased for all newly hired members of the department.
- The goal of the program continues to be ensuring each member has two sets of useable gear that are less than ten years old, the PPE committee continues to plan for the future by replacing gear on a set schedule for a percentage of the department each year, rather than waiting to replace

eve-



SELF CONTAINED BREATHING APPARATUS (SCBA) - CAPTAIN CRAIG VANDERWALL

Compressor and Fill Stations: 2017 was a year of transition in the mask room. The new compressor and 3 Revolve Air fill stations were delivered and installed. Upgrading to a 7500 PSI system came with challenges. We worked through the problems with Scott Safety and now have a system that is in operation. There are still some communication upgrades to follow as the programming is developed that will further enhance our ability to provide air filling services to the department.

In addition, each air cylinder is now fitted with an RFID tag in the cylinder bumper. This provides us the ability to track important data about each cylinder including filling dates, hydrostatic testing dates, and proper fill pressures. This data becomes extremely important should there be an investigation into an SCBA problem, or should there be an air quality problem.

SCBA's: All 154 SCBA's in use in the Grand Rapids Fire Department were factory flow tested by Scott Safety. While completing this procedure, Scott Safety also upgraded the PASS sound in each mask to the new universal standard. This upgrade will allow us to be ahead of the curve and avoid retrofitting our SCBA's in the future.

Fit Testing: The Grand Rapids Fire Department also upgraded our face piece fit testing program. We replaced our single fit tester that moved between both battalions with two Occupation Health Dynamics Quantifit fit testers, one for each battalion. The new fit testers have upgraded technology that allow faster testing and more easily accessible documentation.

In summary, the SCBA program has upgraded its technology in all areas and is compliant with the latest industry standards.



FIRE PREVENTION

FIRE INSPECTIONS – PLAN REVIEW

PUBLIC EDUCATION – RESIDENTIAL SAFETY PROGRAM – FIRE INVESTIGATIONS

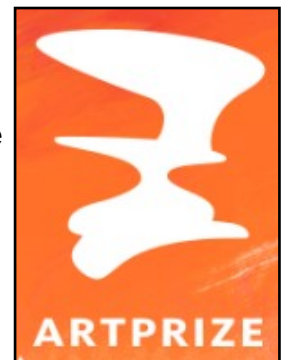
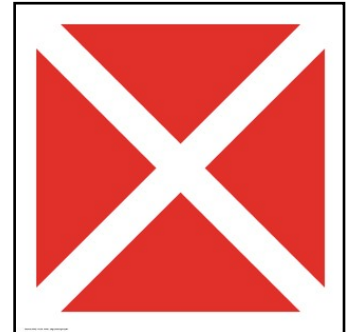


FIRE MARSHAL ERIC DOKTER

FIRE INSPECTIONS

The Fire Prevention Division focuses inspection efforts to support the department's risk assessment. In 2017, the bureau's building inspectors continued to focus on the city's highest risk buildings and processes through the bureau's Operational Permit program. Existing inspections staff and office staff also work to administer the maintenance of installed fire protection systems throughout the city as a part of the GRFD's Fire & Life Safety Program.

- In the second half of 2017, the Fire Prevention Division added a personnel position in the form of Captain—Fire Prevention (CFP) in order to continue to implement a Risk-Based Inspection Cycle (RBIC) within the City. The principal role of the CFP will be to implement and administer a self-inspection program for lower hazard business occupancies. Other responsibilities will involve supervision of inspectors and other program personnel.
- Higher risk occupancies in the city were identified via the Risk Assessment Program. In 2015, 2016, and 2017 both high and moderate risk occupancies were identified and key fire protection and hazard information was gathered by fire suppression crews. This information is collated and available to fire companies through the CAD system as they respond to alarms.
- Fire safety inspections were performed in 18 residential high-rises and at least 9 large re-adapted multi-use buildings (mostly former heavy timber or ordinary construction warehouse and factory buildings).
- A vacant building identification and evaluation program was developed to decrease the likelihood of firefighter injuries which are more common in this type of fire. Due to staffing and legal issues, program implementation is on-going into 2018.
- Inspection activities were conducted in more than 1,000 existing buildings in 2017. These activities include initial inspections, follow-up inspections, and other enforcement activities.
- The Fire Prevention Division continued its efforts to ensure that installed fire protection systems continue to function as designed. Well over 2,000 fire suppression and fire alarm system inspection reports were reviewed in 2017. Follow-up to ensure repairs of defective systems and inspections of occupancies that had deficient systems were performed.
- All ArtPrize venues (over 160 locations) were inspected over a week in Early September
- On nine evenings in 2017, nightclub inspections were conducted to ensure adequate crowd management and guard against overcrowding in approximately 100 venues
- The Fire Prevention Division became responsible in 2017 for following up on nuisance reports associated with the City's two-year Recreational Fire Permit program. Fire suppression crews respond to active complaints of smoke due to recreational fires, and FPD personnel evaluate the reports for possible additional education and, where needed, enforcement efforts.



CONSTRUCTION/PLAN REVIEW

Our Fire prevention staff continues to provide technical expertise in the area of fire protection system installation and acceptance for new building and remodeling projects. This application of fire protection technical expertise begins in pre-construction meetings with builders and developers, continues through system plan reviews and consultation with contractors, and culminates with the acceptance inspection and testing of the installed systems. During this whole process GRFD fire inspectors work closely with City personnel from a variety of different departments in order to provide as seamless an integration of services as possible.

- The Grand Rapids Fire Department contributed to the successful development of the City's Vital Streets Framework Plan and Design Guide as part of the City's Design Team. GRFD's participation ensures that adequate fire department apparatus access is maintained while street geometry and design is responsive to all users of the street.
- GRFD personnel are involved in pre-construction meetings with architects, engineers, and designers; on-site consultation with superintendents and installers; inter-departmental meetings to coordinate requirements and inspections, and Design Team meetings where developers consult with City decision-makers on potential issues and project considerations before plans must be finalized.
- Due to the increase in construction, 598 Fire Alarm and suppression system plan reviews were performed, which shows continuing strong construction activity in the City.
- Approximately 664 Fire Alarm and suppression system rough-in and final inspections were performed, which is virtually the same as in 2016 and which again shows continuing strong growth in construction within the City of Grand Rapids.

FIRE MATCH - LT. HAROLD ELMORE

Last year was another very busy and successful year for the Fire Match program. The Grand Rapids Fire Department's Fire Match program is the leading educator in juvenile fire setting programs across the state of Michigan. With our partnership with the state of Michigan's DHHS, Kent County Courts and local counseling programs such as DA/Blodgett, Arbor Circle and Family Outreach, we are the blueprint of what a successful juvenile fire setting educational program looks like.

The year 2017 was very special for our Fire Match program. The popularity of our program prompted an inquiry from the largest fire department in the state (Detroit) with hopes to help them design a program of their own. Also, it was special because this was the first year that the popularity of our program has led to counseling programs reaching out to us for referral and partnership to help with their clients. This contact and partnership has checked one of the most critical boxes for the advancement of the Fire Match program (counseling). For the first time, we now have multiple counseling agencies that are willing to refer and accept referrals to help the families in our community that have problems which extend beyond the fire setting element. We still have unchecked boxes that the program is striving to accomplish. One of those boxes is the never ending need to have willing and dedicated individuals within our organization to help with the demands of this growing program. To help with a smooth transition into becoming an important part of the Fire Match program, it is my desire to have Davenport University design a two or three month sociology and psychology program that will assist a Fire Match case worker address the needs of participants in the program. Also, there is still a large segment of unreported fire setters that I believe can easily be reached with the 311 system and advertisement. In short, with all of the success of our Fire Match program, I wholeheartedly believe that the program will continue to provide positive results.

So, what did we accomplish in 2017 by the numbers? This was the program's highest referral year in recent years. We had 21 referrals with 17 of those referrals having successful contact (4 parents did not return messages). Along with those 17 juveniles that the program handled, there were three juveniles from the previous year that returned to fire setting behavior and were re-entered into the program. The majority of referrals came from within the department from officer's fire reports. DA/Blodgett had the next highest rate of referrals with three.

PUBLIC EDUCATION

The GRFD is always educating the public about fire safety. In addition to Home Safety Assessments, our firefighters attend block parties, make school visits, and drop in at festivals and trade shows to spread the word about smoke alarms and fire safety.

This year, the Fire Prevention Division assisted fire suppression personnel in inviting the public to learn about fire safety topics and fire department operations during Fire Safety Week Station Open Houses in October. The success of the Open House has led to planning for this to become an annual event for GRFD during Fire Safety Week.



Also during the Fire Safety Month of October, and into November, our fire crews reached out to all of the second graders in schools near their fire stations to talk about the fact that matches are “tools for adults” and to bring them to a responsible older person if found around the house. We had a lot of fun “Stop-Drop and Rolling”; and we talked about smoke alarms, the loud sound they make, and what to do if they heard the smoke alarm in their house sounding. Over the course of that time, we were able to reach over 2000 of our future fire-safe citizens.

In 2017, Bill VanderVennen, our chaplain and a former volunteer firefighter, continued to deliver our Senior Fire Safety Program message to more than 545 of our senior citizens in the city’s many retirement communities and churches. These tailored, interactive presentations serve as a great awareness builder and reminder for our more seasoned citizens.

Lastly, more than 2,113 children received home fire safety education through the use of the Residential Safety Program’s Safety Trailer, a mobile classroom that simulates a home. During the program, children learn to identify safety hazards in the home, and respond to a simulated fire with the use of theatrical smoke and actual smoke detectors by safely evacuating the “home.” The children leave with educational materials to share with their parents so that the skills they learn can be used by the entire family.



RESIDENTIAL SAFETY PROGRAM

The Residential Safety Program continues to support the department's federally funded, home safety assessments. This program gives us the opportunity to deliver fire safety education and install smoke alarms utilizing our on-duty fire crews. In addition, GRFD's latest FEMA grant request included funds for the installation of carbon monoxide (CO) alarms as a part of the Residential Safety Program (RSP). It is planned that the CO alarm installation will continue along with the smoke alarm installation program to continue to increase the ability of our citizens to respond safely to hazardous conditions in their homes.

- Home Safety Assessments were conducted in 1,318 homes, with 8,132 smoke alarms installed. A total of 47,620 alarms have been installed in 7,723 homes since the beginning of the program.
- 70% of the homes we assessed had two or less working smoke alarms installed and 377 (29%) of those had no working smoke alarms. For comparison, the average home requires approximately 6 to 8 smoke alarms for proper protection.
- 38% of the 818 alarms removed were inoperable.
- The Residential Safety Trailer program continued to be presented to children in a variety of venues in 2017. American Red Cross Americorps personnel performed many of the presentations, and we thank them for their generous work in this effort. In 2017, at least 2,113 children learned about home fire hazards, evacuation planning, and what to do when a smoke alarm goes off in their homes!
- A survey of users of the RSP showed a satisfaction rate of more than 99%, with many respondents praising both the program and GRFD personnel for their knowledge and professionalism.
- Smoke alarm purchases were funded by a FEMA grant and installed by on-duty GRFD fire crews.
- To help further promote the program, we partner with organizations such as LINC, Helen DeVos Children's Hospital, American Red Cross, GRPS, neighborhood associations and similar institutions.

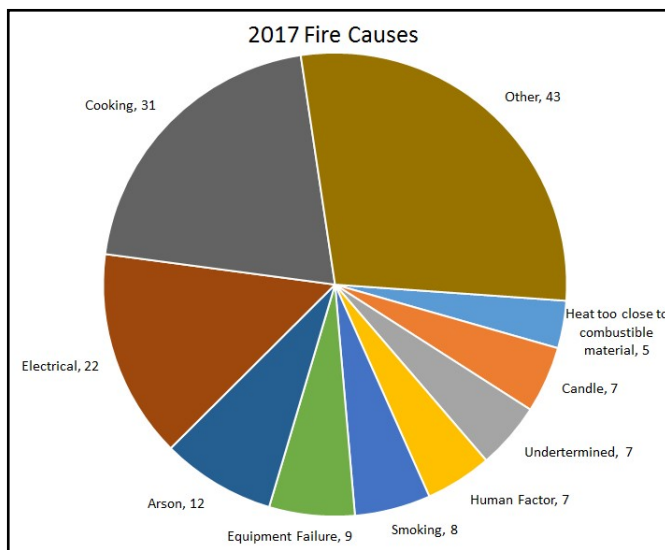


FIRE INVESTIGATIONS

Fire inspectors are trained by the Michigan State Police or at the National Fire Academy to provide origin and cause determination. While the identification of intentionally set fires is a very important component of the reason fire investigations are conducted, identifying the cause of even accidental fires assists the fire department in formulating its approach to the development of its overall fire prevention message.

In 2017, GRFD fire inspectors performed 41 fire investigations, including three fatal incidents. Arrests were made in 3 cases, with prosecution of the suspects ongoing into 2018.

Support is provided to our fire investigation efforts by the Grand Rapids Police Department, Kent County Sheriff's Department, The Federal Bureau of Alcohol, Tobacco, Firearms, and Explosives, and the Michigan State Police.



PLANNING DIVISION

STRATEGIC PLANNING OFFICE - INFORMATION TECHNOLOGY

STRATEGIC PLANNING OFFICE - CAPTAIN BRAD BROWN



State of Michigan Community Risk Reduction Taskforce 2018-2020 Strategic Plan			
Mission To provide sustainable Community Risk Reduction (CRR) programs to minimize fire deaths, injuries, and property loss within the state of Michigan.		Vision The State of Michigan will provide a model Community Risk Reduction (CRR) program seeking the continual decrease of fire deaths, injuries and property loss. This will be accomplished by fostering collaborative relationships, implementing education programs, and community outreach.	
Values Compassion - Education - Professionalism - Integrity - Data Driven			
Education	Engineering	Enforcement	Economic
Desired Outcome Provide consistent, accurate, education programs for communities, schools, and the fire service to continually decrease fire deaths, injuries and property loss.	Desired Outcome Ensure sufficient and appropriate CRR material, which includes smoke and CO alarms in 100% of dwellings in the state of Michigan.	Desired Outcome Develop and enforce a statewide fire code requiring NFIRS data collection with municipal funding contingencies and interconnected smoke and CO alarms.	Desired Outcome Establish dedicated revenue streams for operating CRR expenditures resulting in an overall positive economic impact.
2018 Strategy <ul style="list-style-type: none"> Identify and create model CRR programs. Identify high-risk populations. Network and create mentorship opportunities. 	2018 Strategy <ul style="list-style-type: none"> Pursue grant funding and partnerships. Pilot checks to initiate residential safety programs for residents. Develop relationships with insurance companies. 	2018 Strategy <ul style="list-style-type: none"> Promote and encourage a CRR message. Educate fire service leaders. Educate legislators and lobbyists. 	2018 Strategy <ul style="list-style-type: none"> Pursue grants and/or private funding. Educate fire service leaders. Educate legislators and lobbyists.
2019 Strategy <ul style="list-style-type: none"> Increase the target audience. Identify and establish local community leaders. Network and create mentorship opportunities. 	2019 Strategy <ul style="list-style-type: none"> Partner with colleges/universities, communities and organizations (i.e. Red Cross). Promote legislation to require CO and smoke alarms are installed in homes at the time of sale. 	2019 Strategy <ul style="list-style-type: none"> Obtain buy-in from legislators and lobbyists. Obtain buy-in from the fire service and community leaders. Begin the legislative process towards the adoption of a statewide fire code. 	2019 Strategy <ul style="list-style-type: none"> Pursue grants and/or private funding. Create legislative partnerships. Continue to strengthen relationship with insurance companies.
2020 Strategy <ul style="list-style-type: none"> Develop a relationship with the Department of Education for CRR in school curriculum. Establish substantial training for recruitment. Evolution/modify CRR program where needed. 	2020 Strategy <ul style="list-style-type: none"> Secure bulk pricing of smoke and CO alarms. Create partnerships with building officials. Create and develop a CRR succession plan. 	2020 Strategy <ul style="list-style-type: none"> Promote the passing of legislation to support a statewide fire code. Develop a statewide CRR educational conference. Develop curriculum for fire academy CRR education. 	2020 Strategy <ul style="list-style-type: none"> Pursue grants and/or private funding. Change legislation to provide funding. Establish a strategic plan for future CRR funding.

Planning – The planning division began work during 2017 to develop the next strategic plan for the organization. New methods to gather input were tested in Lansing by Battalion Chief Dave Noorman and the Planning Division through the development of a community risk reduction strategic plan. In Grand Rapids, community and agency luncheons were held, providing valuable input for the all day work session held in December at the Salvation Army Kroc Center.

Fire station planning consumed a large amount of time, revisiting potential sites, attending a fire station design conference, and developing capital budget requests for the Division Ave., Chester St., and Training Center locations.

Division Avenue Fire Station

Estimated Cost: \$6,280,160

Brief Description: Built in 1926. Apparatus have to back in off of Division Ave. There are several options in the immediate area for redevelopment. Potentially purchase a large lot in the Division Avenue Corridor. Redevelop the current lot into affordable housing. Make the new station conspicuous to serve as an anchor for the redevelopment taking place in the Division Corridor.

Financing Method: GRBA Bonds

Funding Source: Capital Reserve Fund

Connected Plan (Where does this come from?): Asset Management Plan

ROI: Reduce cost of operation and asset management. Create place through redevelopment

Annual Cost: \$450,000

Why should we invest? Project could redevelop two block faces in the South Division neighborhood. Current lots on the east side of Division could be redeveloped for affordable housing. New site on Division corridor would set pattern for redevelopment. Current fire station is functionally obsolete, several lots in area are underutilized.

Consequences of not investing? Missed catalyst opportunity for South Division rehabilitation

FY of Construction: Design FY2019. Construction FY2020

Leverage? Private investment in Division Corridor



Accreditation – The GRFD is an active member of the accreditation community, serving on the Center for Public Safety Excellence educational taskforce, providing peer assessors for site visits to other agencies and co-managing the Michigan-Ohio-Indiana consortium, which holds quarterly meetings. This past year, Captain Brown led the quarterly meeting held at the Indianapolis Fire Department during the week of the Fire Department Instructors Conference. These relationships have proven valuable when working through issues here at the GRFD, as many other agencies have already implemented solutions that could save us time, money, and frustration.

ISO – The planning division has implemented a six month plan for an ISO re-evaluation due to several positive changes that have taken place during 2017 including a reduction in dispatch times and an increase in daily staffing levels.

Lean – The fire department continues to be lean leaders in Grand Rapids, with several other city departments adopting our planning and lean methodology. Lt. Scott Gray graduated from the Grand Rapids Community College lean champion program, providing valuable facilitation skills for our organization.

PLANNING DIVISION

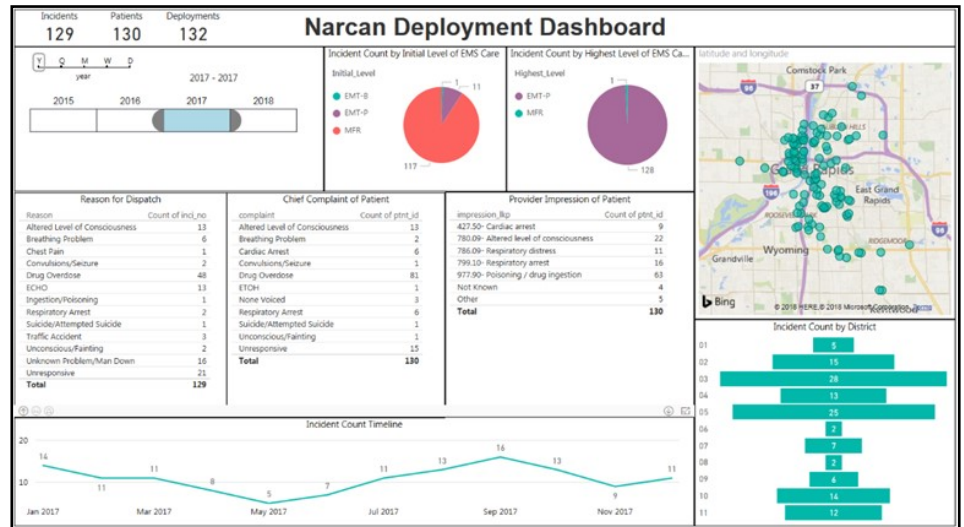
STRATEGIC PLANNING OFFICE - INFORMATION TECHNOLOGY

INFORMATION TECHNOLOGY

Jordan Van Overloop

Areas of focus for data analysis in 2017 included:

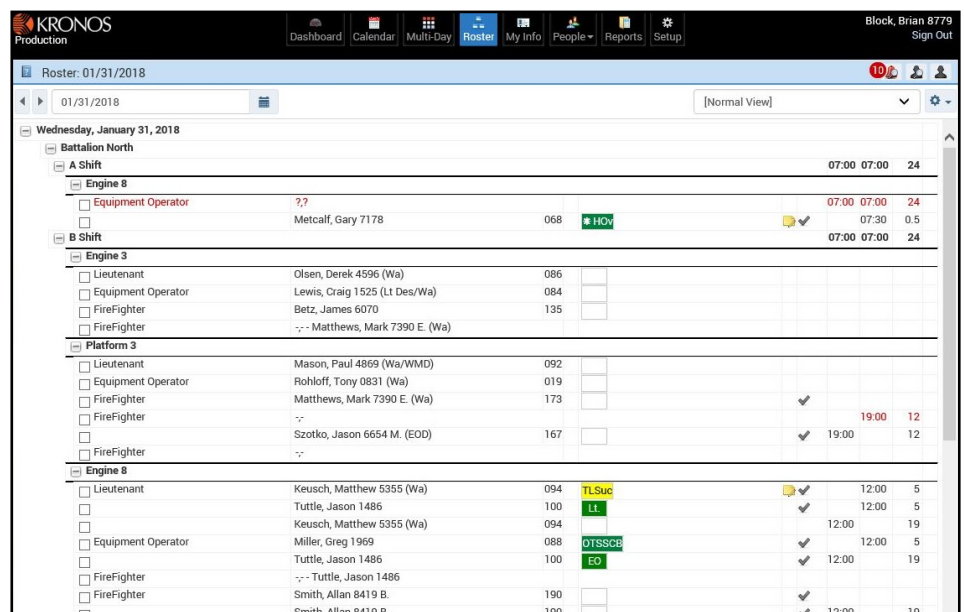
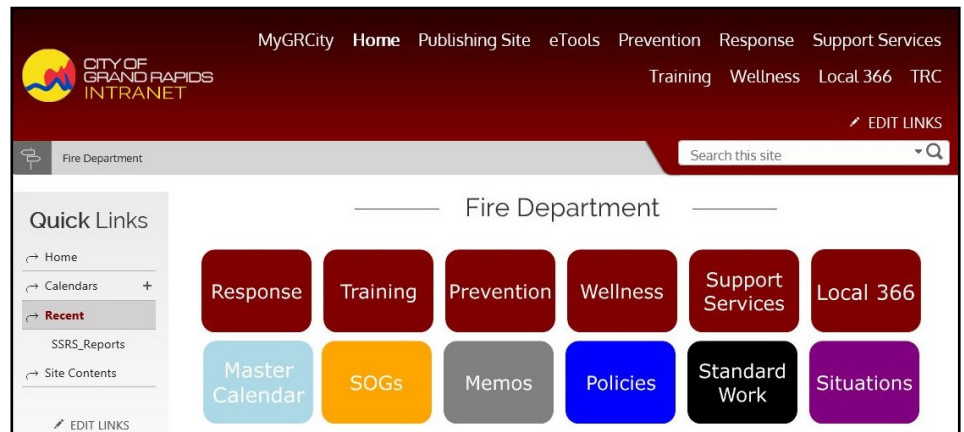
- Heartside Neighborhood EMS Research
- Fire Station Relocation Study
- Training Center Relocation Study
- Post Wind Storm Analysis
- New Round of Risk Assessments Started
- Refinement of the Annual Compliance Report Baseline Performance Tables



Brian Block

IT improvements for the GRFD in 2017 included:

- Upgraded to SharePoint 2013 and redesigned the Portal.
- Improved HAAS Alert reliability with newly installed hardware to utilize the light bar as a trigger.
- Setup Call-em-All to enable overtime calling and texting, making staffing easier.
- Residential Safety Program Home Safety Assessments on iPad
- Major Telestaff Upgrade providing increased mobile functionality.



OPERATIONS

BATTALION FIRE CHIEFS - EMS

GRFD TRAINING – GRFD REGIONAL TRAINING CENTER



DEPUTY FIRE CHIEF MARGARET FELIX

The women and men of the Grand Rapids Fire Department responded to 24,020 incidents in 2017. These responses represent another year of increased opportunities to provide a positive outcome in an emergency situation for the citizens of Grand Rapids and its surrounding communities.

The Training Division held another recruit class to continue to meet the needs of staffing for emergency response. 13 candidates were hired, and 10 completed their first year of probation to become a firefighter for the Grand Rapids Fire Department.

The group graduated the academy well versed in firefighting, medical care, river rescue, and extrication. After 16 weeks in the academy, they were placed on an apparatus to continue their training. They rotated among the various types of units to complete all the aspects of their training. Daily evaluation forms were developed to track their progress and remedy any deficiencies.

The Training Division also assisted with the GRFD's first "Fire Ops 101" program. This effort involved all areas of the Grand Rapids Fire Department, and allowed members of the City Commission and Public Safety Committee to experience hands on firefighting skills. The participants were educated on Personal Protective Equipment and Self-Contained Breathing Apparatus, practiced some hands-on activities, and then observed a live-fire training scenario.

Suppression crews maintained the successful Residential Safety program. The scheduling system set up in 2016 proved advantageous on the repeating nine-week firefighter schedule. This allows the 311 call center to book the appointments at fixed reoccurring times for each area of the city. Time block appointments were added to allow the crews to complete the home safety inspections quickly and effectively. The suppression crews installed 8,132 smoke detectors began installing carbon monoxide detectors while completing home safety inspections on 1,318 homes.



OPERATIONS

BATTALION FIRE CHIEFS - EMS

GRFD TRAINING – GRFD REGIONAL TRAINING CENTER

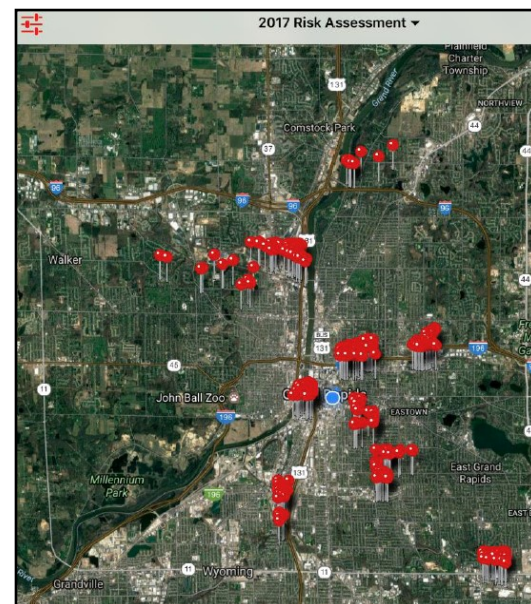


High rise training continued in 2017 using six Saturdays in the summer. We engaged our Spectrum Health partners at 25 Michigan, who allowed training in their parking ramps, giving us the ability to flow water in a structure. This

training offered Spectrum a method to improve their facility operations when dealing with a fire in this extensive six-level parking structure, which is under the seven-story building, and allowed the GRFD to practice their procedures in a high rise structure.

Suppression crews also advanced the company level risk assessments. The major change in 2017 was to collect additional information on each building. Due to the time demands and the capacity on the calendar for the crews, it was decided to decrease the frequency of assessments from a two year to a four-year cycle. These risk assessments are converted into pre-fire plans that are available to the responding crews. The operations division continued to work closely with the Emergency Communication Center to enhance dispatch operations for the department. The emergency communication center worked tirelessly on creating a quality assurance program for their dispatchers which measures call answering time and fire dispatch time. This also improved the dispatching times for the police department. With one year into Automatic Resource Location (ARL) dispatching, which sends the closest apparatus with the correct capabilities to a call for help, we are continuing to see our overall turnout and travel times decrease, thereby rendering aid to the citizens in a quicker manner. Quality assurance protocols within the GRFD were developed to ensure changes to CAD were improvements, and for coaching our personnel on why a specific unit was sent.

I am honored by the commitment of our personnel to do what's right for our citizens and the visitors of this city.





EMERGENCY MEDICAL SERVICES - (EMS) COORDINATOR

CAPTAIN MARK FANKHAUSER

The professional delivery of Emergency Medical Services (EMS) is one of many service platforms the Grand Rapids Fire Department (GRFD) strives to provide the citizens and visitors of Grand Rapids. The EMS program operates under the proven practice that high quality training and education will transfer into high quality patient care. Our department is licensed and compliant with the State of Michigan and the West Michigan Regional Medical Control Consortium (WORMCC) as a Medical First Responder (MFR) Agency.

The GRFD has 27 apparatus and 209 personnel licensed by the Michigan Department of Licensing and Regulatory Affairs (LARA), in addition to a professional relationship with the Michigan Department of Health and Human Services (MDHHS) – EMS Section, ensuring compliance with regulatory and industry driven best practices. An in-depth review of two record management systems was conducted as we strive to become NEMSIS 3 compliant.

2017 Medical Licensure Levels	2017 EMS Training Statistics
12 Licensed EMS Instructor Coordinators	112 Hands-On Training Sessions
20 Licensed Paramedics	3,136 Online EMS Training Sessions
51 Licensed EMTs	7,494 Hours of EMS Department Education
138 Licensed Medical First Responders	112 Hours Community-Based EMS Education
43 MDHHS Personnel Licensure Renewals	3 Multi Agency Training Opportunities
5 MDHHS Licensure Audits	340 Hours of EMS I/C Education

The GRFD responded to 15,345 requests for medical service in 2017 accounting for 64% of the total call volume. Sudden cardiac arrest incidents have trended slightly upward in 2017. Those incidents were targeted for review under the West Michigan Regional Medical Control Consortium (WORMCC) Quality Assurance program, with data indicating that 38.6% of documented sudden cardiac arrests experienced a return of spontaneous circulation (ROSC) pre-hospital. These statistics validate the utilization of AHA High Quality CPR which has shown beneficial for potential survival of sudden cardiac arrests. The use of Naloxone trended slightly upwards in 2017 with 132 administrations. The heightened national awareness and joint efforts by the WORMCC, local pre hospital providers, and social programs regarding the harmful effects of opioid abuse has proven Naloxone to be a successful addition to the MFR scope of practice.

Several significant events occurred in 2017 that stand as a testimony to our high standard of care:

- 45 Medical Service Awards to GRFD Personnel
- Department-wide AHA Healthcare Provider Renewal
- Provided Initial EMS education to the 2017 Recruit Class
- Renewal of MDHHS vehicle licensures
- Hands Only CPR initiative with City of Grand Rapids employees
- Continued participation with School Emergency Response Coalition / Super CPR & AED
- Community CPR initiative with Ottawa Hill High School
- Community CPR initiative with Godfrey Lee High School
- Committee involvement with EMS Partnership of Kent County (formerly Kent County EMS Consortium)
- Committee involvement with WORMCC Agency and Advisory groups
- Committee involvement with WORMCC EMD Dispatch Steering and Review groups
- Continued utilization of the Lean 5S for EMS equipment and supply handling at individual stations
- Partnership and development of education and training opportunities with area medical facilities and pre-hospital care providers.



SAFETY COMMITTEE – CAPTAIN MARK FANKHAUSER

The members of the Grand Rapids Fire Department Safety Committee are committed to ensuring that safety related issues are taken seriously, extensively reviewed, and recommendations are made that support industry best practices, providing the safest working environment possible for members of the Grand Rapids Fire Department. For many of the concerns raised by individual members, we suggest using the Chain of Command if that has not been attempted yet. We encourage personnel to come to us only if the system is not be addressing their concerns

2017 Safety Committee Statistics		2017 Safety Committee Members		
Committee Meetings	9	Appointed by Local 366		
Accidents Reviewed	21	FF Adamczyk	Captain Carmel	FF Lysiak
Injuries Reviewed	45	Appointed by Management		
Official Recommendations	1	Capt. Wes Kelley	Capt. Hendges	Capt. Fankhauser *
Reported Injuries	45	Mutual Appointment		
Reported Accidents	21	Deputy Chief Felix	* Denotes Committee Chair	

2017 Activities:

- Cancer Prevention transitioned into the Wellness pillar with ongoing evaluation.
- Provided cancer awareness and prevention education and training including the use of Water Wipes.
- Performed particulate hood evaluation and provided recommendations in conjunction with the Wellness and PPE committees.
- Evaluated the SCOTT Self-Contained Breathing Apparatus program.
- Analyzed air quality at stations specific to diesel exhaust particulates.
- Promoted the use of station washers and dryers to launder duty uniforms (non-biohazardous), reducing the risk of transmitting pathogens to our families.
- Posted Fitness Safety Reminder posters at department physical fitness facilities.
- Conducted hydration education and provided effective hydration for personnel at emergency incidents.
- Deputy Chief Tennant continued to represent the fire service on the West Michigan Traffic Safety Advisory Committee
- Deputy Chief Tennant and Captain Fankhauser continued to participate with the City of Grand Rapids Accident Review Team.
- Annually we assess our mission as outlined by the Labor Agreement between the City and the IAFF Local 366 to ensure that we are performing the duties we have been chartered to accomplish.





LT. MIKE WITTEVEEN

HAZARDOUS MATERIALS /RRT 61

The Grand Rapids Fire Department Hazardous Materials (Hazmat) Team is based at Franklin Station, and is part of Michigan's Regional Response Team Network (RRTN) - Team 61.

The Hazmat team is



responsible for all Hazmat and Weapons of Mass Destruction (WMD) threats and emergencies in the City of Grand Rapids, and is also ready to assist anywhere within the 13 Counties of Michigan State Police Region 6.

The personnel assigned to the Hazmat Team participate in several all-hands training events throughout the year, such as awareness training for the tank car flaring operation seen below, as well as regular training in house. All members of the team are currently, or are seeking to be, Technician level. Several members are at the Specialist level.

2017 Personnel:

There has been a shift in team membership this year with some long time members stepping down or taking different roles, and new members joining the team. It is exciting to see fresh faces stepping up to the challenges and adding new blood to the program. The Hazmat Team moved away from Franklin personnel being the hazmat team, to a dispersed staffing model where members can be from any station. We currently have 31 members on the team, lead by:

- Program Manager – Lt. Mike Witteveen
- Assistant Program Manager/Training Lead – EO Justin Steeby
- Hazmat Planner – Lt. Jason Kelley

2017 Incidents:

Hazmat 61 responded to 16 incidents this year. The types of calls responded covered just about every type of call we could expect to face. Fuel spills on the highway, chemical spills at commercial facilities, structure fires with hazardous materials involved, threat of Weapons of Mass Destruction, and assisting police with identification of illicit drug materials were just a sampling of the types of runs encountered. We are trained and equipped to respond effectively to those calls and more.



BATTALION FIRE CHIEFS

The Battalion Chiefs coordinate and supervise the daily operations of the fire department. The Chiefs are located at Monroe Ave. Station (North Battalion) and Franklin St. Station (South Battalion). The North Chief supervises the operations of Leonard, Bridge, Monroe, LaGrave, Covell and Plainfield Stations, while the South Chief supervises the operations of Franklin, Kalamazoo, Burton, Division and Chester Stations.

Battalion Chiefs serve as the Incident Commander at any large scale incident such as a structure fire, vehicle extrication, confined space incident, hazardous materials incident or other events typically requiring 3 or more responding units. A Battalion Chief may also assist at an incident as a Safety Officer, Operations



Officer, Branch Director, or as a Division/Group Supervisor as determined by the Incident Commander.

Battalion Chiefs have a variety of administrative duties which include the following:

- Coordinating the daily staffing of suppression personnel for the entire department. The South Chief determines overages and vacancies for suppression units for the oncoming shift, and balances personnel accordingly to meet the needs of the staffing matrix as determined by the department Standards of Coverage.
- Conducting a daily Live Meeting via Skype to coordinate suppression activities. The North Chief conducts the meeting at the start of each duty day. Information is shared regarding special events in the city, apparatus readiness status, weather conditions, river conditions, road closures, safety items, communications from administration and shift changeovers.
- Conducting training events with personnel in the battalion. Battalion Chiefs meet with personnel in the battalion on a monthly basis to engage in incident scenarios with the crews. The training could be a presentation on a particular topic, a simulated scenario, or a training evolution.
- Promoting a continuous improvement mindset. Chiefs coordinate an After Action Review (AAR) with the responding crews on all large scale incidents to take a critical look at how the events of the incident unfolded. The Battalion Chief writes a review that details which actions went well and areas of improvement that need to be addressed. The information is forwarded to the Deputy Chief of Operations in order to implement improved training or possible policy changes.
- Meeting with suppression personnel to foster department communication and problem solving. Chiefs schedule a monthly meeting with the station officer and crew to discuss current issues and concerns. The group works together to identify obstacles and generate solutions to problems or concerns.



NORTH BATTALION - BATTALION FIRE CHIEF KATHY THOMPSON

I was promoted to Battalion Chief along with BC Collin Kelly in February of 2017.

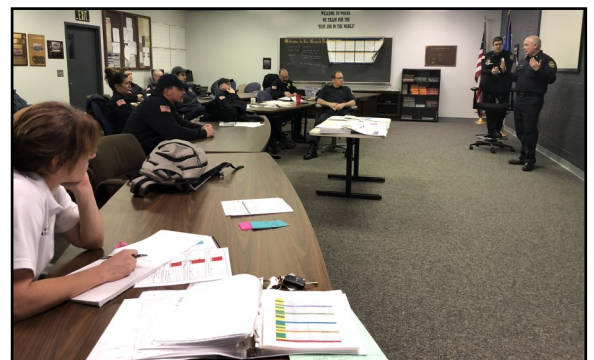
I was assigned to the Fire Prevention Improvement team and volunteered to coordinate a Video Production for residential high rise fire safety. With the integral help of FM Dokter, Captain Dan VanderHyde and Ted Jensen and a partnership with ADT and 8 interns from the Compass College of Cinematic Art, we developed a five minute video which will be utilized by the residential high-rise buildings annual safety training. FF Brandon Mika and FF Casey Spielmaker were 2 of the actors in the video. This is a segment of our City's population which is growing rapidly and a

group that we have never reached effectively before. The five minute video, which was written, filmed, and produced by the team, will be part of the annual required training for every residential high rise building in the City. We are very pleased with the final product and with the professionalism and enthusiasm displayed by the team throughout.

The ROTC program was started in February 2017. We believe it is the first partnership of its kind in the nation. We have three firefighters assigned to the three city high schools with ROTC programs, Innovation Central, Ottawa Hills and Union, and one Administrator. The GRFD Firefighters teach hands on fire skills such as: dragging a charged hose line, handling a flowing nozzle, and riding in an aerial bucket. They also learn/practice in the driving simulator, mock agility test, search techniques, Hands Only CPR, Basic First Aid, firefighting tools and tactics, career exploration and a Training Center field trip with actual scenarios such as search techniques under heavy smoke conditions utilizing the maze. We believe this is an extremely valuable program which costs the department minimal money, while being a huge part of the department's role in "Growing our Own" recruitment process.



As the new pillar owner of Wellness, from BC Bruce Veldkamp, we conducted a Planning Rapid Improvement Event to get organized. We have multiple committee's working. First we have had 4 people trained in Functional Movement Screening. Equipment is a subcommittee which ensure all the equipment at the stations is adequate. We have two more teams, one studying nutrition and another studying sleep. We have a group studying cancer prevention and insurance and regulations and finally we have a small group functioning as a union liaison and reviewing the IAFF Health and Wellness initiative. The Wellness pillar is quite extensive. It also contains PPE (reports to DC Tennant) and Mental/Supportive Health (reports to BC VanderWall). The Wellness team is working hard to help make the GRFD a healthier workforce by researching, designing, and implementing a structured wellness program.





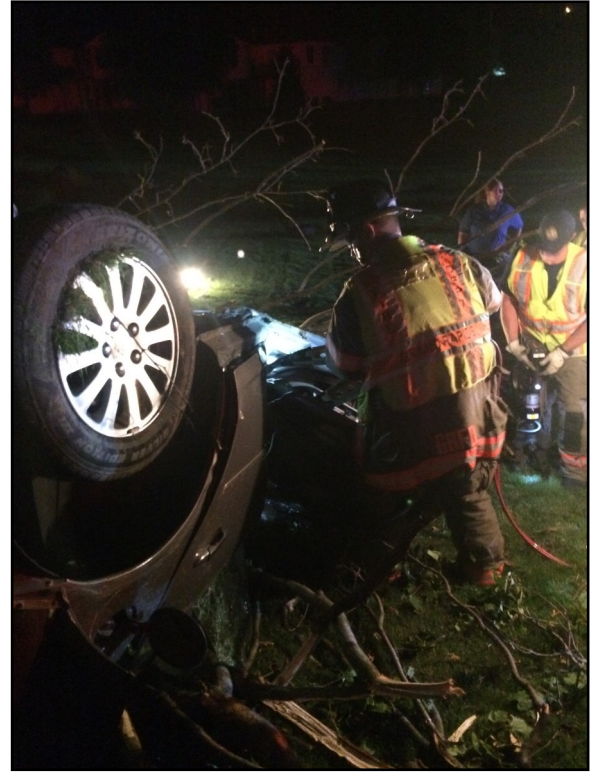
NORTH BATTALION - BATTALION FIRE CHIEF DAVE NOORMAN

2017 was indeed an exciting year. November saw me promoted to full time Battalion Chief after serving in a long term acting position. Along with my new duties I continue to oversee the Extrication and Thermal imaging programs.

Below are a few highlights of my involvement and accomplishments over the past year:

- Increased our department's involvement at both Neighborhood and Business Association meetings and community events.
- Led and facilitated strategic planning meetings for our department, mapping out a sustainable path of continuous improvement.
- Attended and assisted with strategic planning sessions for community risk reduction at the State level for the State Fire Marshal.
- Became involved with developing and reviewing Incident Action Plans for large and small scale events held within the City.
- Increased training and development of our officers and future officers
- Increased our partnerships with the private sector to facilitate better extrication and rescue trainings.
- Upgraded the extrication equipment carried on our Truck and Rescue Companies.
- Completed upgrading our thermal imagers on all front line apparatus.

I am excited for the opportunities that 2018 will bring, and look forward to working with the men and women of the Grand Rapids Fire Department in building a better tomorrow for our citizens.





NORTH BATTALION - BATTALION FIRE CHIEF COLLIN KELLY

2017 was a remarkable year! Transitioning from a long term acting position to a promoted Battalion Chief provided me with a valuable opportunity to learn and grow as an employee. I feel the North Battalion “C” shift grew exponentially with me, especially in the areas of Incident Command, community interaction and involvement, and fine tuning the day to day skills of managing companies and people. Major milestones reached include, but are not limited to, the following:

- Learning the A3 process and the importance of data research for the cellulose vacuum program.
- Completion of the updated “Line of Duty Death/Duty Injury” reference books. These provide a condensed quick reference guide for incident commanders.
- Completion of the new FormSite online form to streamline the process of fire apparatus and Community Interaction Opportunity requests. This tool makes it easier for the public to make requests.



- Monthly scenario based teaching including mentoring and coaching interactions with company officers and acting officers.
- High rise training and review at 25 Michigan Street helped to hone skills for large scale incident command operations, and facilitated networking with other company officers.
- As an EMS-IC, created a scenario-based medical training for 4th quarter continuing education.
- Multiple strategic planning meetings and luncheons to facilitate our next 3 year plan
- Provided input for the EMS portion of the recruit evaluations and skill set review sheets.
- Assignment as the new Gerald R Ford International Airport Liaison has me working with Chief Joe Dancz at GRFIA to improve automatic mutual aid responses.

I am eagerly looking forward to 2018 and reaching new milestones with my fellow firefighters to excel and improve our already top-notch department.

SOUTH BATTALION - BATTALION FIRE CHIEF TODD VANDERWALL



CRITICAL INCIDENT STRESS MANAGEMENT

Firefighters are continually responding to traumatic events which in turn can take a physical and emotional toll on our members. It is very important that we look out for the wellness of our members by making them aware of the stressors in the workplace and how to cope with that stress. Our Critical Incident Stress Management (CISM) Team's goal is to help restore good health to our personnel who are experiencing symptoms of stress, which may occur after exposure to an identifiable critical incident or when stress has built up over time due to a series of events.

The CISM team is comprised of 16 members who are trained to deliver pre-crisis education, stress impact awareness, and post-event defusing for our personnel. Our CISM team members maintain a situational awareness for all events that our department responds to and frequently follow up with our personnel by contacting our members on an individual or crew basis to check on their health status. Our members stand ready and are available for contact 24 hours a day 7 days a week.

2017 was a year of transition for our team. Program Manager Battalion Chief Bart Perry retired and Lt. Larry Hayden and Lt David Marchinda were appointed as our Co-Program Managers for the team. Lt Hayden oversees training for the team, and Lt. Marchinda is in charge of administrative duties. We also added 4 new members.



Training for our team was a big emphasis this past year. Many team members were involved in our May training with the Mid-West Michigan CISM Team, and again in September in Tustin, at the



Michigan Crisis Response Association annual training event. We continually strive to stay updated and trained in the increasing awareness of critical incident stress recognition and methods of treatment. We also made training available to our department members and their loved ones to help them recognize the causes of stress on the job and how to implement stress prevention techniques.

Other areas of focus for 2017 were:

- My transition from North Battalion to South meant more involvement with daily staffing.
- Time management continues to be an issue for our crews.
- Administration of call backs has seen better efficiencies through improvements with Call-em-All.
- I have a monthly goal to bring three challenges from suppression to the Command Staff meeting to drive continuous improvement.



SOUTH BATTALION – BATTALION FIRE CHIEF NANCY BOSS

EMERGENCY COMMUNICATIONS

2017 has been a wonderful year for the last in my fire department career.

The South Battalion conducted 2 officer meetings and participated in the all officer meeting in November.

We engaged in high rise training at 25 Bridge this summer and implemented the revised high rise/low rise SOG. With the added ability to flow water from a stand pipe connection, having divisions assigned and accountable, and having simulated fires on multiple floors, everyone learned a lot.



The workshops associated with this training included:

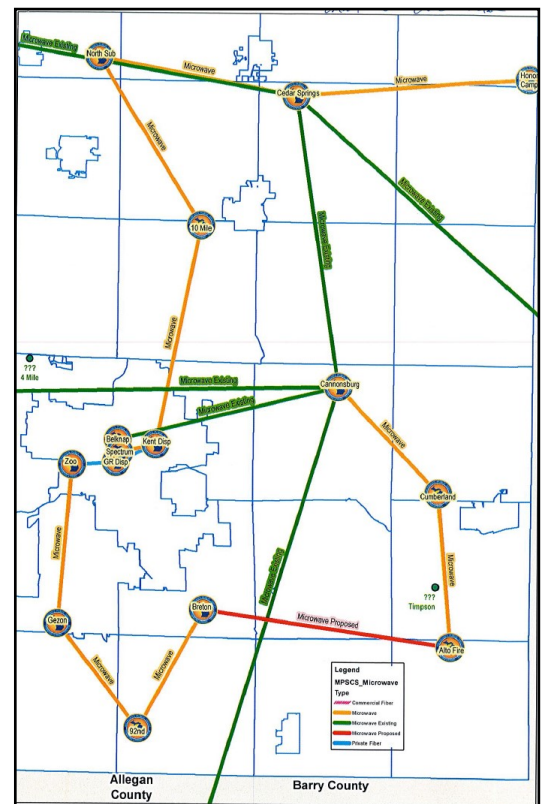
- Elevator control
- Stairwell pressurization
- Deployment of the tactical repeater
- Utilization of the in house communication system.

These workshops were an integral part of learning about the complexity of dealing with high rise fires.



Radios are my other responsibility. The transition within Kent County to the 800MHz radio system has required a great deal of time to be invested by the Grand Rapids Fire Department and especially Deputy Chief Margaret Felix to make the transition seamless. From location and building of additional towers, to the acquisition of mobile and portable radios, training and programming for all of the new equipment is being planned in detail.

Until the deployment of the new system, the radio program continues to provide a cohesive communication system that crews use daily.



SOUTH BATTALION - BATTALION FIRE CHIEF BRUCE VELDkamp



Chief Veldkamp is involved in the areas of Wellness, and Technical Rescue, along with the regular duties of the South Battalion Chiefs.

WELLNESS

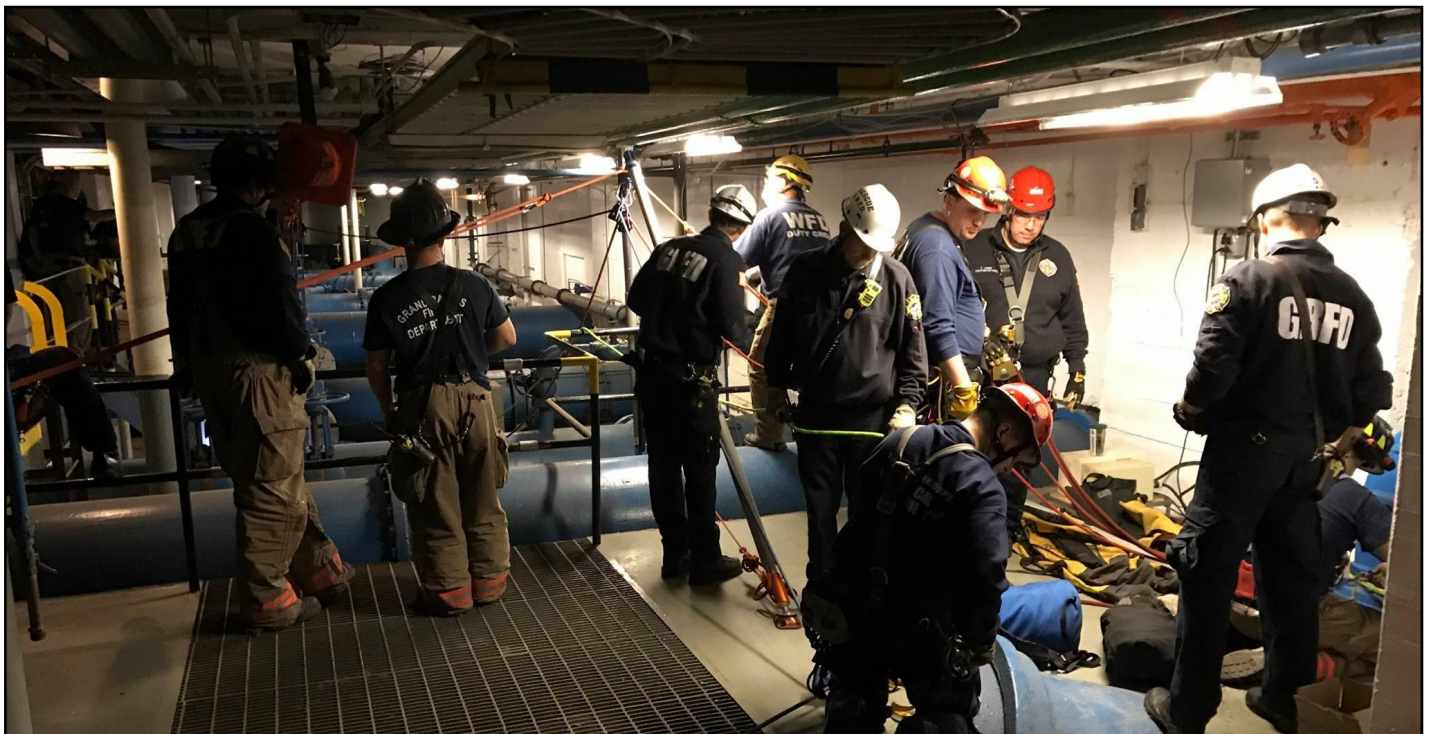
We again made some good strides in the area of Wellness this year. We were able to send 4 of our personnel to be trained as Functional Fitness Evaluators and acquire the needed equipment for them to test our employees. We set up a test group of approximately 40 personnel, each one was evaluated and then given exercises to correct any deficiencies found. We were also able to purchase the equipment needed for the corrective exercises to be accomplished. We once again

had interns working with us delivering good information on nutrition and sleep deprivation along with physical training. We keep looking at ways to enhance the Intern program and make it successful for all involved. Washing machines and dryers were installed in every station as a part of our ongoing efforts to have a good cancer prevention plan.

The Wellness Pillar has now been handed over to Chief Thompson and I look forward to the future accomplishments of the Pillar under her leadership. I would like to thank all of the members of the committee that have worked tirelessly for the good of our department and have made this a better and safer place to work. Thank You.

TECHNICAL RESCUE

I was given the opportunity to take over the Tech Rescue Team in late 2017. Since that time we have been working on a budget for 2018, identifying the instructors and leaders for each discipline we are responsible for, and setting a schedule for trainings in the year 2018. We have accomplished a lot in a short amount of time, but still have a long way to go and will be working hard at making the team a success.





A/FIRE CHIEF-TRAINING WES KELLEY

GRFD TRAINING - GRFD REGIONAL TRAINING CENTER

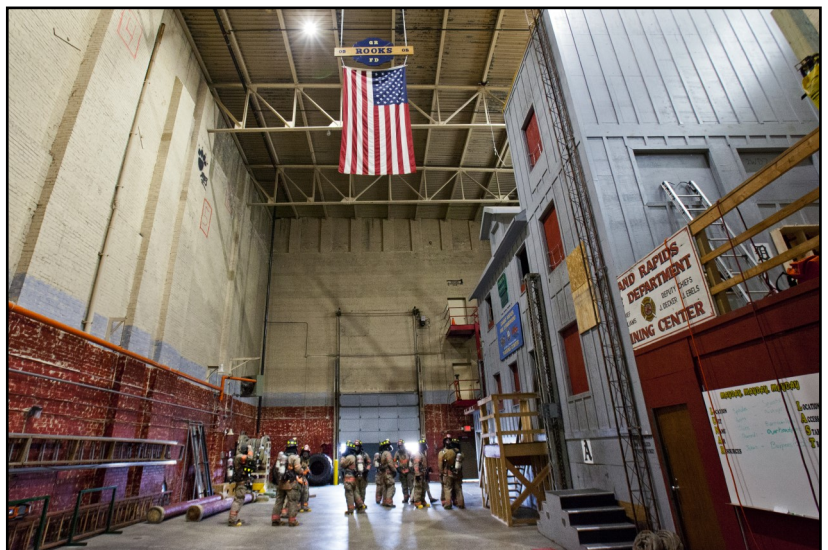
2017 GRFD RECRUIT ACADEMY

The Training Division began 2017 with its third Recruit Academy in as many years. The 2017 Recruit Academy ran from January 23 until May 19 and graduated the GRFD's newest eleven members.



The Training Division was fortunate to be afforded the use of several vacant buildings for training during the Academy. In addition to basic firefighting skills, the recruits received training in Hazardous Materials and Rope Rescue response.

To improve the transition process from the Academy into Suppression, each recruit was assigned to one of three Training Officers for the remainder of their probationary year. The Training Officers also participated in a "ride along" with each probationary firefighter, allowing for the direct observation of their performance "on the street".



GRFD REGIONAL TRAINING CENTER

The Training Center was able to host a variety of training opportunities over the course of 2017. The Michigan Bureau of Fire Services Company Officer I and II series, Fire Officer III series, and Instructor I course were hosted and funded largely through the “Fireworks Fund”. The Training Division was able to secure just over \$28,000 in course funding, through a combination of fireworks funds and the Hazardous Materials Grant Program. Two 40-hour Acting Equipment Operator certification courses were offered in April and September, assisting with the certification of 16 new acting Equipment Operators. The Training Division also assisted with providing training in the areas of High Rise Operations, Rapid Intervention, and Forcible Entry.

To assist in keeping our staff operating at a high level of professionalism, the Training Division hosted an Instructor Credential course from the International Society of Fire Service Instructors. All four members of the Training Division completed the course and received their credential, along with several attendees from outside the GRFD. Members of the Training Division also completed courses from the National Fire Academy in 2017.

The GRFD Training Center was utilized by several organizations outside the GRFD and for additional programs. Among these were:

- GRPD SRT and Canine Units
- GRFD Summer Youth Academy
- Michigan State Police
- GRPS JROTC Program
- Michigan Volunteer Defense Force
- Safety and CPR training for City of Grand Rapids employees



The Training Division assisted with the GRFD’s first “Fire Ops 101” program. This cooperative effort between Fire Administration, Training, and IAFF Local 366 introduced members of the City Commission and Public Safety Committee to some basic firefighting skills. The participants were able to don bunker gear and SCBA, participate in some hands-on activities, and observe a live-fire training scenario. All the participants remarked that they had a better appreciation for the knowledge and physical effort required for firefighting.

BENCHMARK PERFORMANCE STATEMENTS

Structure Fires

For 90% of all **structure fires** (low, moderate, high and special risk), the total response time for the arrival of the first due unit, staffed with a minimum of two firefighters, is **7 minutes**.

Benchmark	(Low) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	02:31	Not Enough Data	Not Enough Data	Not Enough Data	02:32	02:29
				634	0	0	0	339	295
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:40	Not Enough Data	Not Enough Data	Not Enough Data	01:32	01:48
				570	0	0	0	305	265
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	05:24	Not Enough Data	Not Enough Data	Not Enough Data	05:19	05:37
				566	0	0	0	304	262
04:00		Travel Time ERF Concentration	Urban	05:25	Not Enough Data	Not Enough Data	Not Enough Data	05:19	05:37
				566	0	0	0	304	262
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	08:25	Not Enough Data	Not Enough Data	Not Enough Data	08:14	08:26
				566	0	0	0	304	262
07:00		Total Response Time ERF Concentration	Urban	08:25	Not Enough Data	Not Enough Data	Not Enough Data	08:14	08:26
				566	0	0	0	304	262

The **effective response force (ERF)** is the minimum amount of staffing and equipment that must reach a specific emergency zone located within a maximum prescribed total response time and is capable of initial mitigation. The ERF is the result of the critical task analysis conducted as part of the community risk assessment process.

Benchmark	(Moderate) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	02:01	Not Enough Data	Not Enough Data	Not Enough Data	01:43	02:14
				369	0	0	0	175	194
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:46	Not Enough Data	Not Enough Data	Not Enough Data	01:42	01:54
				365	0	0	0	175	190
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	04:27	Not Enough Data	Not Enough Data	Not Enough Data	04:16	04:29
				364	0	0	0	174	190
08:00		Travel Time ERF Concentration	Urban	09:16	Not Enough Data	Not Enough Data	Not Enough Data	09:22	08:41
				114	0	0	0	59	55
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	06:51	Not Enough Data	Not Enough Data	Not Enough Data	06:29	07:14
				364	0	0	0	174	190
11:00		Total Response Time ERF Concentration	Urban	11:14	Not Enough Data	Not Enough Data	Not Enough Data	11:32	10:52
				114	0	0	0	59	55

For 90 % of **moderate risk structure fires**, the total response time for the arrival of the effective response force, consisting of **19 personnel**, shall be **11 minutes**.

BENCHMARK PERFORMANCE STATEMENTS

For 90% of **high risk structure fires**, the total response time for the arrival of the effective response force, consisting of **25 personnel**, shall be **13 minutes**.

Benchmark	(High) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	02:00	Not Enough Data	Not Enough Data	Not Enough Data	01:47	02:08
				249	0	0	0	112	137
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:46	Not Enough Data	Not Enough Data	Not Enough Data	01:42	01:50
				246	0	0	0	110	136
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	04:00	Not Enough Data	Not Enough Data	Not Enough Data	04:07	03:59
				245	0	0	0	109	136
10:00		Travel Time ERF Concentration	Urban	09:36	Not Enough Data	Not Enough Data	Not Enough Data	08:55	10:21
				48	0	0	0	19	29
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	07:08	Not Enough Data	Not Enough Data	Not Enough Data	06:42	07:10
				245	0	0	0	109	136
13:00		Total Response Time ERF Concentration	Urban	12:43	Not Enough Data	Not Enough Data	Not Enough Data	11:44	14:22
				48	0	0	0	19	29

For 90% of **special risk structure fires**, the total response time for the arrival of the effective response force, consisting of **34 personnel**, shall be **15 minutes**.

*Note that in 2017 there were not enough special risk structure fires to perform a 90th percentile baseline analysis.

Emergency Medical Services (EMS)

For 90% of **all emergency medical services incidents** (low, moderate, high and special risk), the total response time for the **arrival of the first due unit**, staffed with a minimum of two firefighters is **7 minutes and 30 seconds**.

Benchmark	(Low) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
02:00	Alarm Handling	Pick-up to Dispatch	Urban	03:07	Not Enough Data	Not Enough Data	Not Enough Data	03:09	03:05
				33,309	0	0	0	17,106	16,203
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:35	Not Enough Data	Not Enough Data	Not Enough Data	01:31	01:39
				30,600	0	0	0	15,743	14,857
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	04:59	Not Enough Data	Not Enough Data	Not Enough Data	04:58	05:02
				29,612	0	0	0	15,240	14,372
04:00		Travel Time ERF Concentration	Urban	04:59	Not Enough Data	Not Enough Data	Not Enough Data	04:58	05:02
				29,612	0	0	0	15,240	14,372
07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	08:22	Not Enough Data	Not Enough Data	Not Enough Data	08:18	08:26
				29,612	0	0	0	15,240	14,372
07:30		Total Response Time ERF Concentration	Urban	08:22	Not Enough Data	Not Enough Data	Not Enough Data	08:18	08:26
				29,612	0	0	0	15,240	14,372

BENCHMARK PERFORMANCE STATEMENTS

For 90 % of **moderate risk EMS incidents**, the total response time for the arrival of the effective response force, consisting of **5 personnel**, shall be **9 minutes and 30 seconds**.

Benchmark	(Moderate) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
02:00	Alarm Handling	Pick-up to Dispatch	Urban	02:58	Not Enough Data	Not Enough Data	Not Enough Data	02:50	03:02
				3,205	0	0	0	1,645	1,560
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:33	Not Enough Data	Not Enough Data	Not Enough Data	01:30	01:36
				2,990	0	0	0	1,538	1,452
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	05:36	Not Enough Data	Not Enough Data	Not Enough Data	05:36	05:37
				2,835	0	0	0	1,445	1,390
06:00		Travel Time ERF Concentration	Urban	07:32	Not Enough Data	Not Enough Data	Not Enough Data	07:42	07:30
				1,416	0	0	0	773	643
07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	08:48	Not Enough Data	Not Enough Data	Not Enough Data	08:47	08:52
				2,835	0	0	0	1,445	1,390
09:30		Total Response Time ERF Concentration	Urban	10:42	Not Enough Data	Not Enough Data	Not Enough Data	10:42	10:42
				1,416	0	0	0	773	643

For 90% of **high risk EMS incidents**, the total response time for the arrival of the effective response force, consisting of **10 personnel**, shall be **11 minutes and 30 seconds**.

Benchmark	(High) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
02:00	Alarm Handling	Pick-up to Dispatch	Urban	02:40	Not Enough Data	Not Enough Data	Not Enough Data	02:32	02:42
				387	0	0	0	173	214
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:37	Not Enough Data	Not Enough Data	Not Enough Data	01:32	01:43
				368	0	0	0	164	204
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	05:56	Not Enough Data	Not Enough Data	Not Enough Data	06:19	05:22
				356	0	0	0	155	201
08:00		Travel Time ERF Concentration	Urban	09:43	Not Enough Data	Not Enough Data	Not Enough Data	09:58	09:27
				67	0	0	0	32	35
07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	08:50	Not Enough Data	Not Enough Data	Not Enough Data	09:13	08:33
				356	0	0	0	155	201
11:30		Total Response Time ERF Concentration	Urban	12:42	Not Enough Data	Not Enough Data	Not Enough Data	12:49	12:28
				67	0	0	0	32	35

For 90% of **special risk EMS incidents**, the total response time for the arrival of the effective response force, consisting of **19 personnel**, shall be **11 minutes and 30 seconds**.

*Note that in 2017 there were not enough special risk EMS incidents to perform a 90th percentile baseline analysis.

BENCHMARK PERFORMANCE STATEMENTS

Hazardous Materials

For 90% of **all hazardous materials incidents** (low, moderate, high and special risk), the total response time for the arrival of the first due unit, staffed with a minimum of two firefighters, is 7 minutes.

The **effective response force (ERF)** is the minimum amount of staffing and equipment that must reach a specific emergency zone located within a maximum prescribed total response time and is capable of initial mitigation. The ERF is the result of the critical task analysis conducted as part of the community risk assessment process.

For 90% of **moderate risk hazardous materials incidents**, the GRFD will respond with an effective

Benchmark	(Low) HazMat - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	17:57	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	05:19
				13	0	0	0	3	10
01:30	Turnout Time	Turnout Time 1st Unit	Urban	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data
				5	0	0	0	1	4
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data
				5	0	0	0	1	4
04:00		Travel Time ERF Concentration	Urban	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data
				4	0	0	0	1	3
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data
				5	0	0	0	1	4
07:00		Total Response Time ERF Concentration	Urban	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data
				4	0	0	0	1	3

response force of **7 personnel**, including a minimum of 1 hazardous materials technician, within **9 minutes total response time**.

For 90% of **high risk hazardous materials incidents**, the GRFD will respond with an effective response force of **13 personnel**, including a minimum of 5 hazardous materials technicians and 1 hazardous materials specialist, within **11 minutes total response time**.

For 90% of **special risk hazardous materials incidents**, the GRFD will respond with an effective response force of **5 personnel**, comprised of 5 weapons of mass destruction technicians, within 11 minutes total response time.

*Note that in 2017 there were not enough low, moderate, high, and special risk hazardous materials incidents to perform a 90th percentile baseline analysis.

BENCHMARK PERFORMANCE STATEMENTS

Technical Rescue

For 90% of all **technical rescue incidents**, the total response time for the arrival of the first due unit, staffed with a minimum of two firefighters, is 7 minutes.

For 90% of **trench rescue incidents**, the GRFD will respond with an effective response force of **16 personnel**, with a minimum of 7 operations level responders, within **11 minutes** total response time.

For 90% of **collapse rescue incidents**, the GRFD will respond with an effective response force of **16 personnel**, with a minimum of 7 technician level responders, within **11 minutes** total response time.

For 90% of **confined space rescue incidents**, the GRFD will respond with an effective response force of **16 personnel**, with a minimum of 8 operations level responders, within **11 minutes** total response time.

For 90% of **vehicle extrication incidents**, the GRFD will respond with an effective response force of **11 personnel**, within **11 minutes** total response time.

For 90% of **machine extrication incidents**, the GRFD will respond with an effective response force of **13 personnel**, within 11 minutes total response time.

For 90% of **elevator incidents**, the GRFD will respond with an effective response force of **10 personnel**, within **11 minutes** total response time.

For 90% of **river rescue incidents**, the GRFD will respond with an effective response force of **17 personnel**, within **11 minutes** total response time.

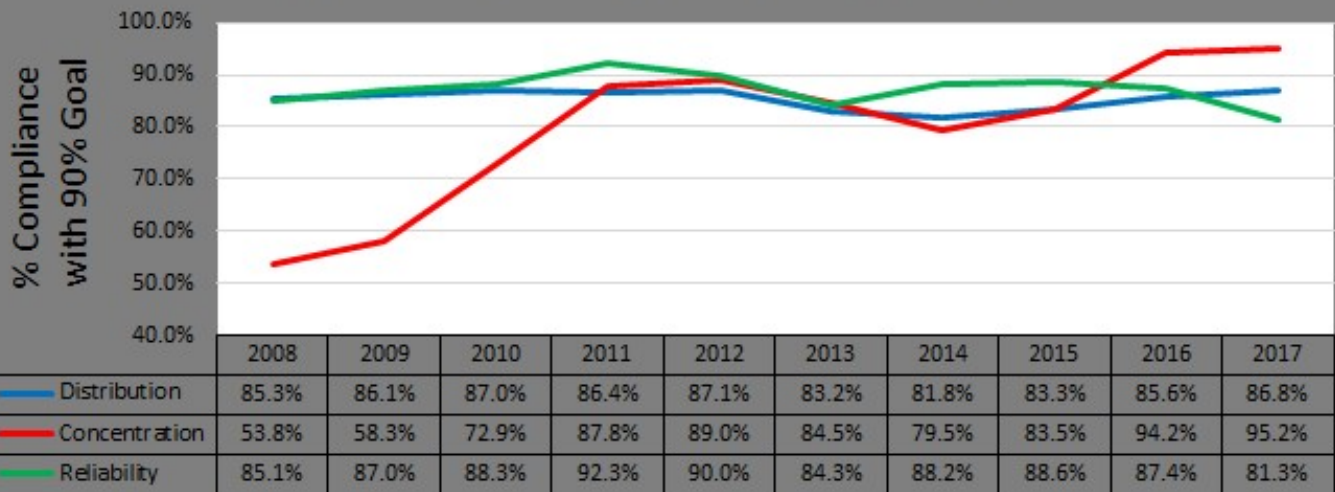
For 90% of **lake/ice rescue incidents**, the GRFD will respond with an effective response force of **13 personnel**, within **11 minutes** total response time.

Benchmark	Vehicle Extrication - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
01:30	Alarm Handling	Pick-up to Dispatch	Urban	02:59	Not Enough Data	Not Enough Data	Not Enough Data	02:00	03:06
				50	0	0	0	20	30
01:30	Turnout Time	Turnout Time 1st Unit	Urban	01:42	Not Enough Data	Not Enough Data	Not Enough Data	01:39	01:46
				47	0	0	0	19	28
04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	05:05	Not Enough Data	Not Enough Data	Not Enough Data	05:03	05:17
				44	0	0	0	18	26
08:00		Travel Time ERF Concentration	Urban	09:43	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data
				13	0	0	0	7	6
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	07:34	Not Enough Data	Not Enough Data	Not Enough Data	07:08	08:59
				44	0	0	0	18	26
11:00		Total Response Time ERF Concentration	Urban	15:21	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data	Not Enough Data
				13	0	0	0	7	6

*Note that in 2017 there were not enough technical rescue, trench rescue, collapse rescue, confined space, machine extrication, elevator, river rescue or lake/ice rescue incidents to perform a 90th percentile baseline analysis.

CRITICAL PERFORMANCE MEASURES

Critical Performance Measures 2008 - 2017



Aligning with the best practices in the fire service and the international accreditation process, the GRFD monitors the distribution, concentration (measures structure fires only) and reliability of our apparatus in service at the unit, fire management zone, first due district, and citywide levels. The citywide numbers for 2017 exhibit compliance in all three areas. Distribution, the ability to get our first unit on scene within 6.5 minutes of notification, scaled incrementally to 86.8%. Concentration, the ability to assemble an effective response force, rose to 95.2%. Reliability, the ability for a company to answer calls within their own district, fell to 81.3%. This is the result of the switch to Automatic Resource Location, which will pull the nearest available unit, even if that district's first due apparatus is available for a response.

Simultaneous Call Percentage by Station District

Station	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Bridge	8.9%	5.7%	6.9%	9.14%	9.00%	9.07%	9.54%	10.19%	10.01%	11.49%
Burton	2.7%	2.6%	4.2%	4.16%	4.29%	4.85%	4.43%	6.07%	4.80%	5.50%
Chester	4.6%	3.8%	5.1%	6.12%	4.88%	7.69%	8.57%	7.05%	9.00%	11.59%
Covell	2.6%	3.2%	4.3%	6.31%	7.40%	6.52%	7.22%	7.28%	7.31%	9.39%
Division	4.1%	3.7%	6.1%	7.69%	6.72%	8.70%	6.71%	7.18%	9.53%	9.31%
Franklin	10.1%	5.4%	7.6%	6.39%	6.52%	5.03%	5.60%	7.30%	6.61%	7.05%
Kalamazoo	8.1%	7.4%	8.8%	8.92%	9.87%	11.31%	10.79%	11.56%	12.73%	13.70%
LaGrave	5.6%	5.1%	9.5%	10.50%	10.97%	9.72%	10.32%	7.45%	9.81%	10.49%
Leonard	2.6%	6.1%	3.8%	4.95%	5.64%	6.86%	8.70%	6.97%	9.23%	7.70%
Monroe	4.1%	3.3%	3.9%	4.74%	5.89%	6.90%	5.37%	8.59%	8.25%	6.75%
Plainfield	4.2%	3.1%	2.5%	4.39%	2.69%	3.62%	4.14%	6.68%	3.96%	5.27%

City Wide Simultaneous

2008	53.74%
2009	50.16%
2010	51.94%
2011	54.80%
2012	56.04%
2013	51.81%
2014	56.18%
2015	55.29%
2016	60.04%
2017	59.60%

Simultaneous incidents serve as a decision point for both the distribution and concentration of resources. When multiple alarms occur in a single first due district, either a second unit in that district or resources from adjoining districts must be utilized for response. 2017 saw the simultaneous call rate dip slightly from 60.04% to 59.60%. Chester, Kalamazoo, Bridge, and LaGrave districts led the city in the rate of concurrent calls for 2017, with most other districts seeing minor changes for this metric.

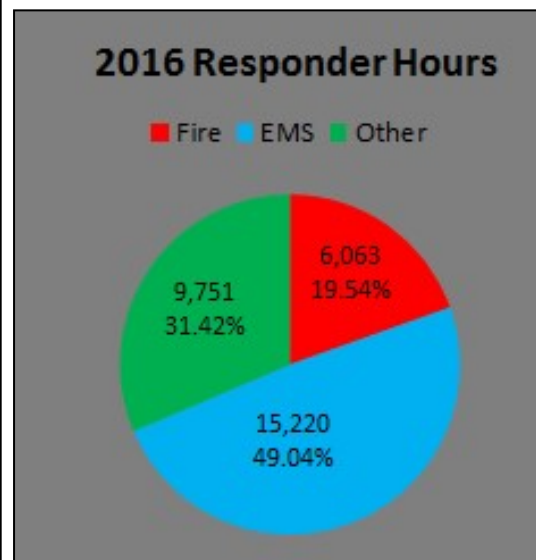
Total Incidents by Type	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Fires	716	658	689	648	751	557	580	617	661	615
Overpressure/Rupture	48	46	36	43	36	36	45	43	51	191
EMS	13,864	12,649	12,601	13,672	13,749	13,085	13,510	14,792	14,687	15,345
Hazardous Conditions	1,108	686	747	791	647	1,035	990	898	1,166	1,155
Service Call	864	1,263	1,653	1,921	2,366	2,037	2,003	1,368	1,492	1,704
Good Intent	1,867	1,970	2,294	2,679	3,193	3,085	3,143	2,976	3,315	3,462
False Alarm/Calls	1,554	1,424	1,581	1,670	1,609	1,579	1,600	1,555	1,774	1,537
Severe Weather	20	5	16	12	2	3	9	4	14	10
Special Incident	16	8	17	17	19	5	5	3	6	1
Total	20,057	18,709	19,634	21,453	22,372	21,422	21,885	22,256	23,166	24,020

2017 saw a 4.48% rise in the number of EMS incidents, moving from 14,687 to 15,345. This marks a return to rising EMS calls volumes. Overpressure/Rupture incidents saw nearly a 275% increase from 51 to 191 alarms. The remainder of the incident types displayed predictable yearly fluctuations.

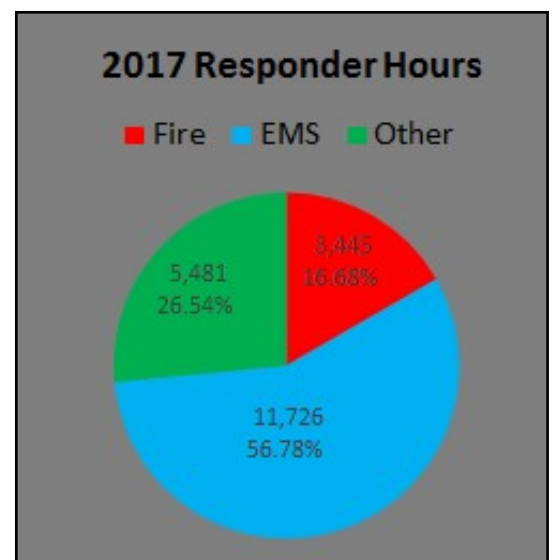


Total Incidents by Type	Numerical Change from 2016 to 2017	Percent Change from 2016 to 2017	Percentage of Total 2017 Incidents
Fires	-46	-6.96%	2.56%
Overpressure/Rupture	140	274.51%	0.80%
EMS	658	4.48%	63.88%
Hazardous Conditions	-11	-0.94%	4.81%
Service Call	212	14.21%	7.09%
Good Intent	147	4.43%	14.41%
False Alarm/Calls	-237	-13.36%	6.40%
Severe Weather	-4	-28.57%	0.04%
Special Incident	-5	-83.33%	0.00%
Total	854	3.69%	100.00%

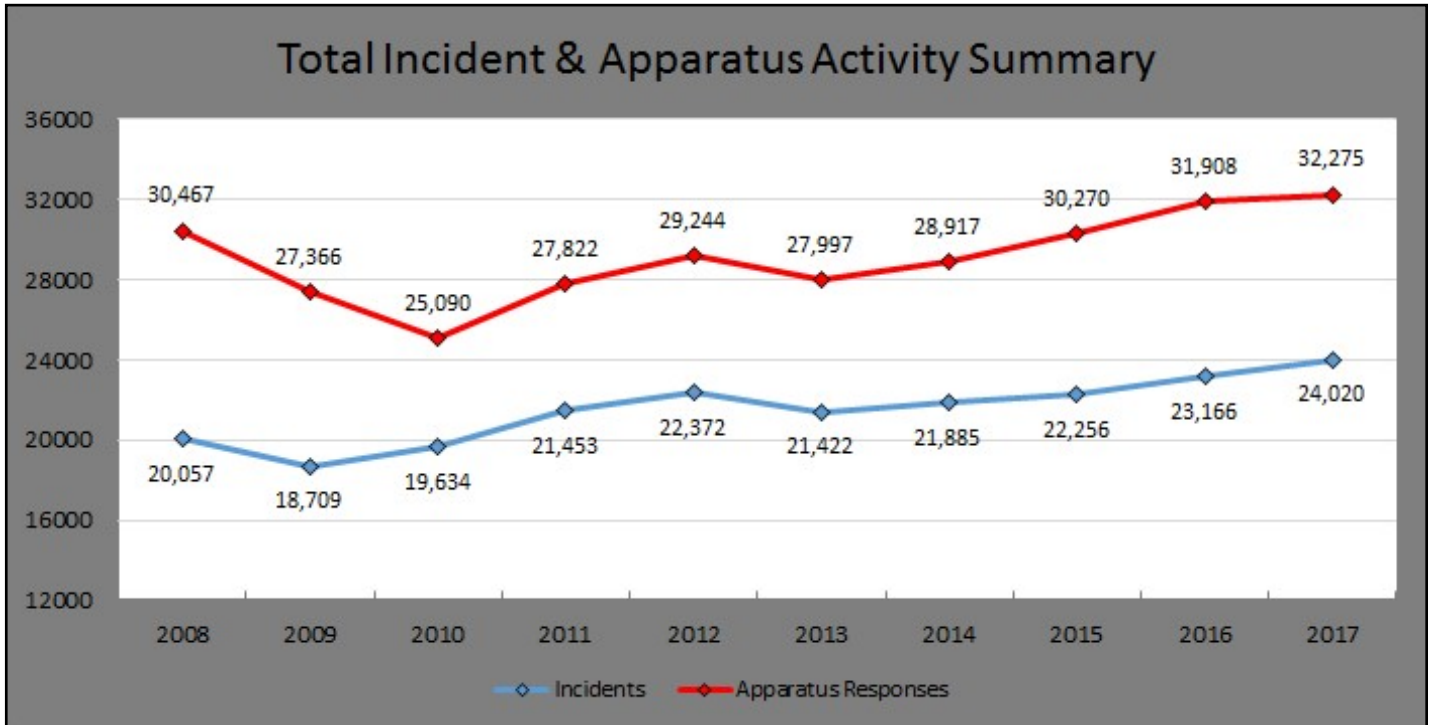
EMS incidents accounted for 63.88% of the emergency incidents in 2017, almost identical to 2016,



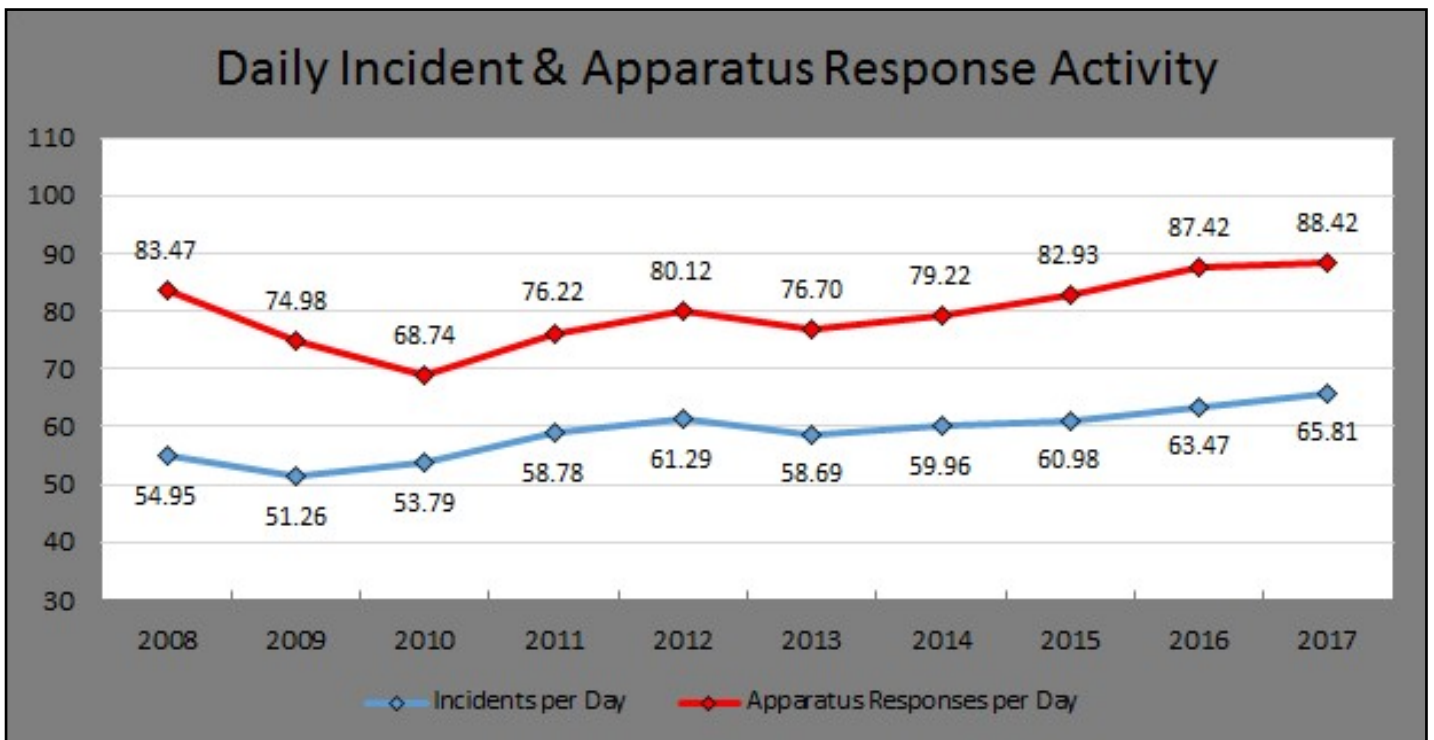
and accounted for 56.78% of the time personnel spent on scene, compared with 49.04% last year. Fires generated only 2.56% of the total incident volume, but required 16.68% of deployed time for effective mitigation, compared with 19.54% in 2016.



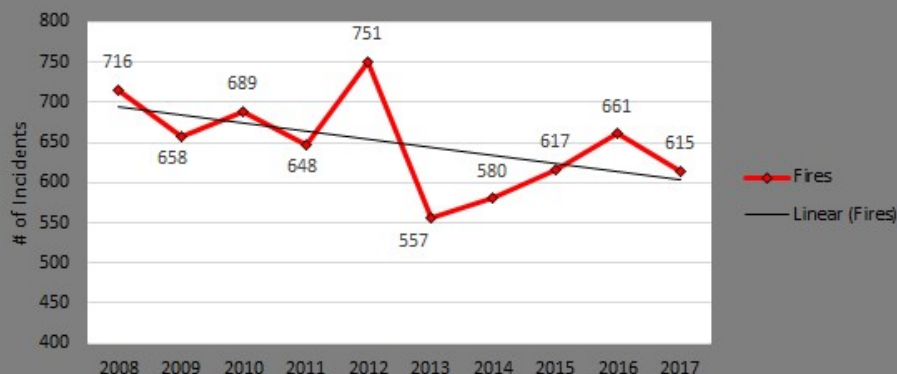
2017 OVERALL PERFORMANCE METRICS



The emergency incident count grew by 854 in 2017, for an increase of 3.69%. The number of average daily incidents edged up from 63.47 in 2016 to 65.81 in 2017. Apparatus responses rose by 1.15%, to 32,275. These statistics conform with a pattern of increasing call volumes over the last several years.



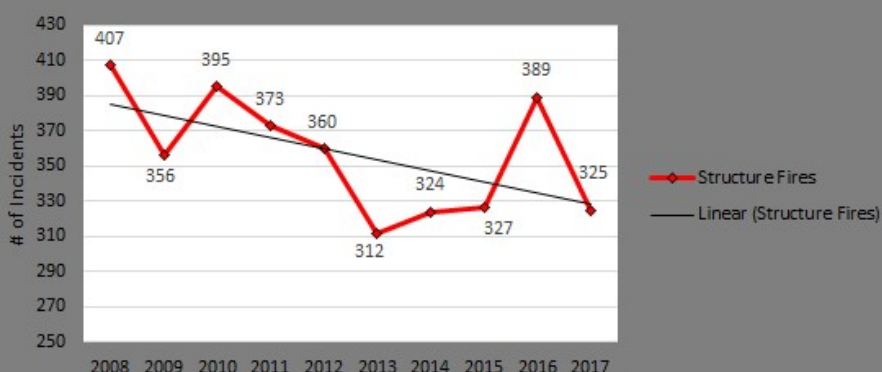
GRFD All Fire Incidents 2008-2017



2017 saw a return to total fire incident call volume that was nearly identical to 2015's metric. This was a 6.96% decrease from 2016. The ten year trend line continues to edge lower.

2017 also saw a return to 2015's structure fire volume, falling 64 (16.45%) from 389 to 325. This represents the largest single year decrease in structure fires in the last decade.

GRFD Structure Fire Incident 2008-2017



For 2017, there were structure fires on 210 days, representing a 57.53% chance of a structure fire occurring on any given day. Although the average number of structure fires was just under 1 per day, the city still experiences many days during the year with multiple fires. In 2017 this happened 82 times (22.47% of days). There were also 11 days with

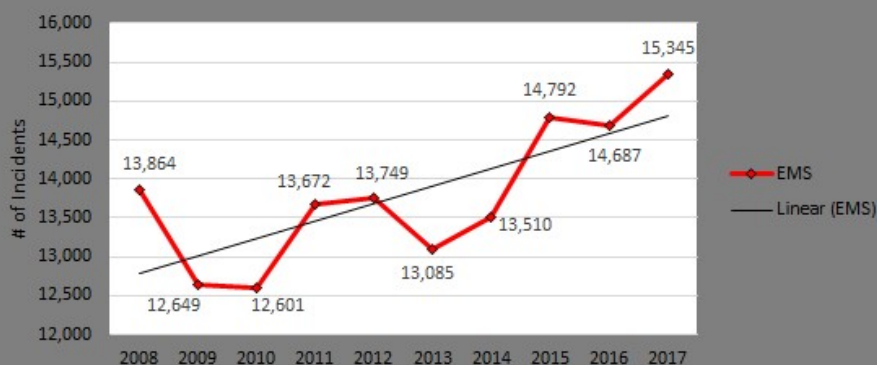
2017 Simultaneous Structure Fires		
Description	Count	%
2 Structure Fires at Same Time	11	2.83%
3 Structure Fires at Same Time	0	0.00%
4 Structure Fires at Same Time	0	0%

simultaneous fires, requiring

twice the typical amount of personnel and equipment to provide positive outcomes for our citizens.

2017 Structure Fires		
# Per Day	Frequency	Total
1	128	128
2	57	114
3	17	51
4	8	32
5	0	0
Total		325

GRFD Emergency Medical Incidents 2008-2017



2017 saw another increase in the number of EMS incidents, rising 658 calls to 15,345. EMS accounted for 63.88% of the emergency incidents in the city in 2017, an incremental upturn in total call volume from 2016. The trend line for EMS incidents continues to ascend.

2017 TEMPORAL ANALYSIS (Depicts time of day/day of week demand)

Temporal Analysis - 2017 All Alarms								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	143	99	97	109	115	89	107	759
01:00-01:59	146	78	67	92	108	72	155	718
02:00-02:59	126	65	83	71	61	63	122	591
03:00-03:59	75	68	56	75	72	86	84	516
04:00-04:59	84	50	58	56	59	108	83	498
05:00-05:59	79	59	65	63	68	96	52	482
06:00-06:59	67	72	91	82	115	90	75	592
07:00-07:59	94	105	115	127	128	132	93	794
08:00-08:59	127	149	152	139	135	152	97	951
09:00-09:59	122	165	197	184	181	137	130	1,116
10:00-10:59	132	162	167	169	177	174	149	1,130
11:00-11:59	162	194	184	210	191	170	159	1,270
12:00-12:59	157	189	180	224	179	181	164	1,274
13:00-13:59	150	190	196	215	203	196	178	1,328
14:00-14:59	154	170	185	200	190	183	166	1,248
15:00-15:59	175	193	201	221	178	189	186	1,343
16:00-16:59	156	203	206	208	195	204	176	1,348
17:00-17:59	168	199	190	195	210	195	208	1,365
18:00-18:59	180	185	195	176	178	176	192	1,282
19:00-19:59	157	176	173	161	177	178	179	1,201
20:00-20:59	177	174	153	168	164	217	195	1,248
21:00-21:59	149	174	141	152	159	172	166	1,113
22:00-22:59	135	138	123	128	123	164	177	988
23:00-23:59	112	124	120	124	97	150	138	865
Total	3,227	3,381	3,395	3,549	3,463	3,574	3,431	24,020

Temporal Analysis - 2017 EMS								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	90	63	59	61	73	44	70	460
01:00-01:59	93	52	42	50	64	46	91	438
02:00-02:59	72	45	43	46	40	35	73	354
03:00-03:59	49	45	40	51	50	43	47	325
04:00-04:59	55	39	34	37	32	55	49	301
05:00-05:59	59	42	42	44	50	34	33	304
06:00-06:59	40	53	61	41	76	36	45	352
07:00-07:59	67	72	72	80	89	67	54	501
08:00-08:59	81	100	104	89	93	77	55	599
09:00-09:59	83	106	125	111	131	86	87	729
10:00-10:59	84	111	119	103	106	112	93	728
11:00-11:59	107	133	117	115	124	108	108	812
12:00-12:59	108	118	110	143	118	114	108	819
13:00-13:59	99	124	116	134	130	122	112	837
14:00-14:59	95	103	125	124	123	121	99	790
15:00-15:59	109	129	107	150	109	119	120	843
16:00-16:59	97	145	127	132	128	116	118	863
17:00-17:59	111	112	126	126	133	121	133	862
18:00-18:59	119	122	121	113	106	102	117	800
19:00-19:59	101	113	98	102	109	113	109	745
20:00-20:59	111	117	111	111	115	143	120	828
21:00-21:59	89	120	98	104	109	110	115	745
22:00-22:59	91	90	71	76	84	104	117	633
23:00-23:59	78	85	74	90	64	84	94	569
Total	2,088	2,239	2,142	2,233	2,256	2,112	2,167	15,237

For 2017, the most active time period for day of the week and hour of the day occurred on Wednesdays between noon and 1 pm, with 224 calls for service. This is up from the 176 calls experienced during this time period in 2016. In 2016, the busiest day and hour were Saturdays between 5:00 and 6:00 pm.

EMS responses continue to be higher between 9 am and 10 pm, the time period most people are active and awake. This year's busiest hour for EMS calls was on Wednesdays from 3:00 to 4:00 pm, with a total of 150 incidents.

With most fires occurring in residences, it is no surprise that these alarm levels peak in the evenings when people are home from work and school. This year was no exception, with the time period between 5:00 pm and 1:00 am accounting for 266 of 616 fires, or 43.18% of all fire incidents.

Temporal Analysis - 2017 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	2	1	2	3	3	1	1	13
01:00-01:59	2	1	0	3	2	2	1	11
02:00-02:59	4	1	3	2	1	3	0	14
03:00-03:59	4	4	1	1	0	3	0	13
04:00-04:59	2	2	3	3	2	2	7	21
05:00-05:59	1	2	1	2	0	0	0	6
06:00-06:59	1	2	1	3	1	2	4	14
07:00-07:59	4	2	2	1	3	0	2	14
08:00-08:59	5	3	2	2	0	1	4	17
09:00-09:59	3	7	4	4	1	0	1	20
10:00-10:59	2	6	2	8	2	2	4	26
11:00-11:59	0	7	2	3	1	9	4	26
12:00-12:59	3	7	3	3	1	5	3	25
13:00-13:59	7	3	4	6	5	6	4	35
14:00-14:59	9	5	6	7	4	4	7	42
15:00-15:59	7	3	5	3	1	1	7	27
16:00-16:59	7	6	6	4	7	7	2	39
17:00-17:59	4	11	3	4	14	6	9	51
18:00-18:59	9	11	8	6	5	6	8	53
19:00-19:59	2	8	8	7	5	3	7	40
20:00-20:59	8	6	5	6	3	5	7	40
21:00-21:59	5	6	6	1	4	2	3	27
22:00-22:59	5	3	2	0	1	6	7	24
23:00-23:59	3	2	4	1	2	3	3	18
Total	99	109	83	83	68	79	95	616



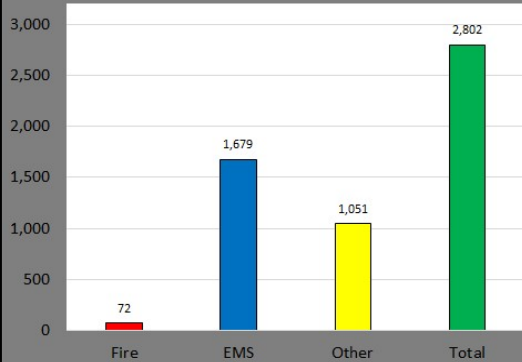
Grand Rapids Fire Department 2017 Mutual Aid Chart

Location	Mutual aid received	Automatic aid received	Total Received	Mutual aid given	Automatic aid given	Other aid given	Total Given
East Grand Rapids	1	0	1	1	0	0	1
Grand Rapids Township	3	0	3	1	0	0	1
Kentwood	2	16	18	7	13	1	21
Plainfield Charter Township	2	24	26	6	12	1	19
Walker	1	21	22	6	11	0	17
Wyoming	1	0	1	14	1	0	15
Total Aid Received			71	Total Aid Given			74

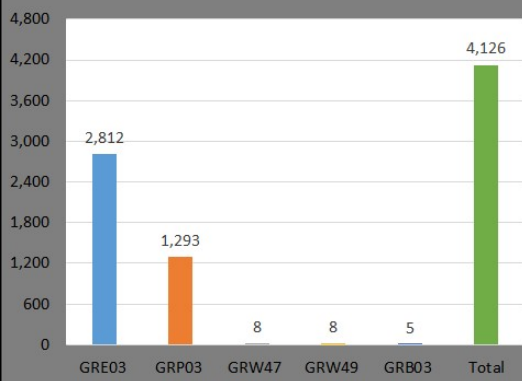


BRIDGE STREET STATION

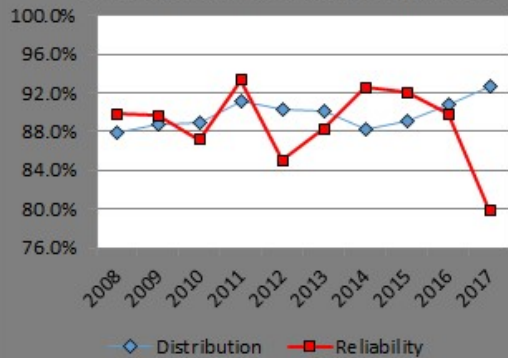
2017 Incidents in District



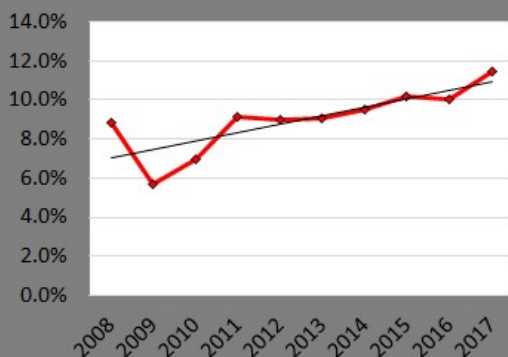
2017 Apparatus Responses



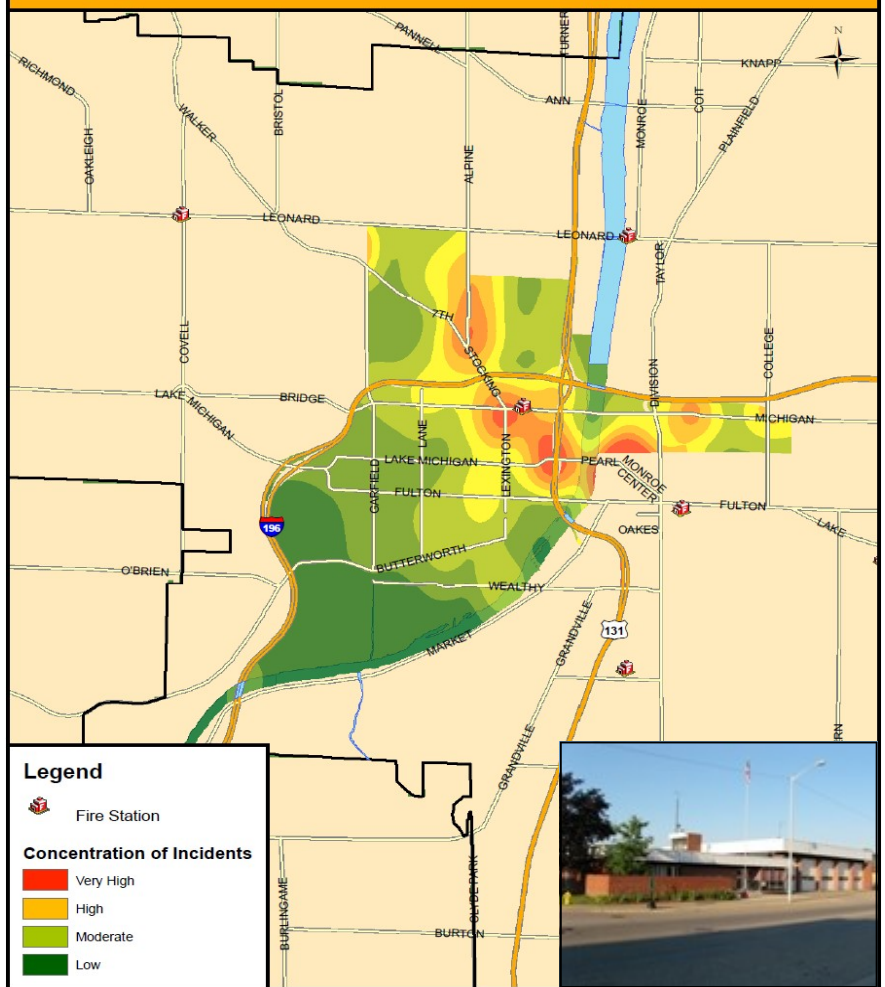
Distribution & Reliability Compliance



Simultaneous Calls



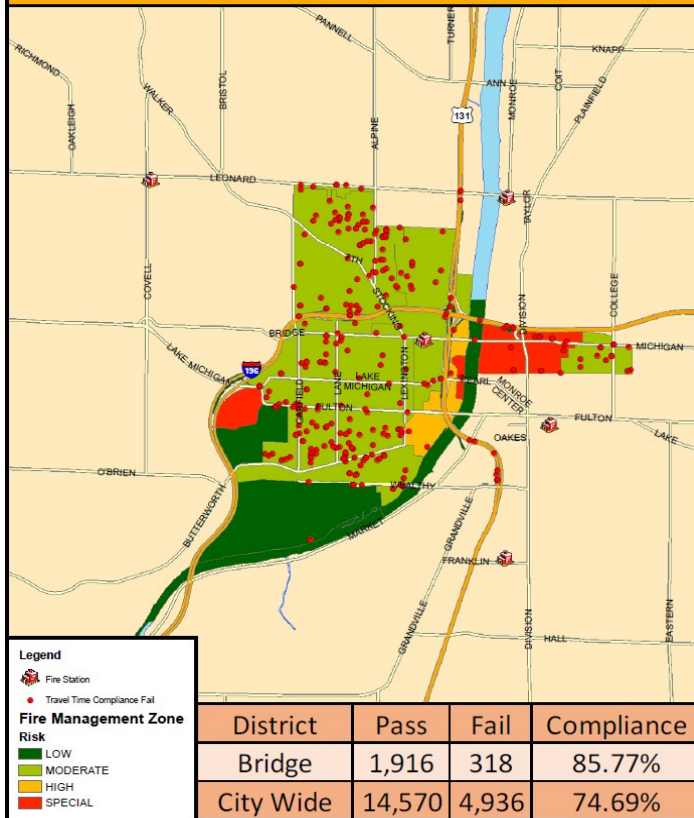
Hot Spot Map of 2017 Incidents



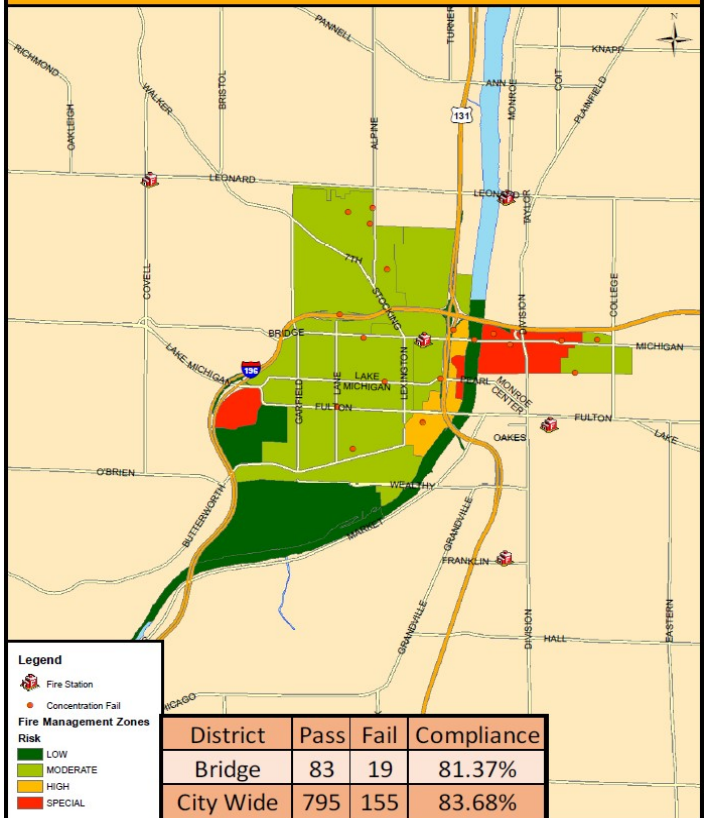
Temporal Analysis - 2017 EMS									Temporal Analysis - 2017 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	8	10	6	9	10	2	9	54	00:00-00:59	0	0	0	0	2	0	0	2
01:00-01:59	14	2	7	4	7	7	17	58	01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	6	3	6	7	5	3	8	38	02:00-02:59	0	1	0	1	0	0	0	2
03:00-03:59	9	6	5	6	5	3	7	41	03:00-03:59	0	1	0	0	0	1	0	2
04:00-04:59	2	4	5	5	1	5	5	27	04:00-04:59	0	0	0	1	0	0	2	3
05:00-05:59	1	6	4	3	4	3	2	23	05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	4	4	9	5	8	3	3	36	06:00-06:59	0	0	0	0	0	0	1	1
07:00-07:59	7	5	2	9	12	3	6	44	07:00-07:59	0	0	1	0	0	0	0	1
08:00-08:59	3	10	12	15	13	13	8	74	08:00-08:59	0	1	0	0	0	1	1	3
09:00-09:59	9	4	21	11	15	9	12	81	09:00-09:59	0	1	0	0	0	0	0	1
10:00-10:59	12	10	17	6	12	12	9	78	10:00-10:59	0	1	0	2	0	1	1	5
11:00-11:59	10	10	14	10	20	11	18	93	11:00-11:59	0	0	0	0	0	1	1	2
12:00-12:59	8	18	14	17	19	14	6	96	12:00-12:59	0	2	0	0	0	0	1	3
13:00-13:59	11	11	13	19	25	19	16	114	13:00-13:59	0	1	0	0	0	0	0	1
14:00-14:59	10	11	12	14	14	14	12	87	14:00-14:59	1	1	1	1	0	1	0	5
15:00-15:59	13	14	14	21	10	10	16	98	15:00-15:59	2	0	2	1	0	0	0	5
16:00-16:59	16	16	18	10	19	20	11	110	16:00-16:59	0	2	1	1	0	3	0	7
17:00-17:59	12	5	19	14	10	14	12	86	17:00-17:59	1	3	0	0	0	1	0	5
18:00-18:59	9	15	9	7	10	10	9	69	18:00-18:59	1	0	1	0	2	0	1	5
19:00-19:59	6	13	7	11	12	16	15	80	19:00-19:59	0	2	0	0	1	1	1	5
20:00-20:59	9	18	10	11	9	14	18	89	20:00-20:59	0	0	0	0	1	1	1	3
21:00-21:59	12	12	6	9	15	7	7	68	21:00-21:59	0	2	2	0	0	1	0	5
22:00-22:59	7	7	7	12	12	11	17	73	22:00-22:59	0	0	0	0	0	1	0	1
23:00-23:59	8	11	6	9	5	3	15	57	23:00-23:59	1	0	0	0	1	1	1	4
Total	206	225	243	244	272	226	258	1,674	Total	6	18	8	7	7	14	11	71

BRIDGE STREET STATION

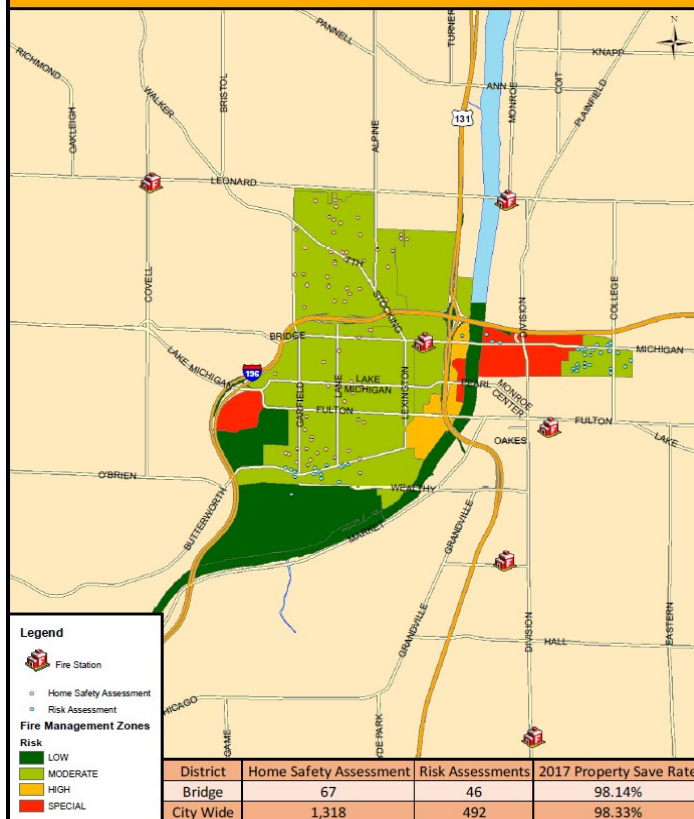
4 Minute Travel Compliance



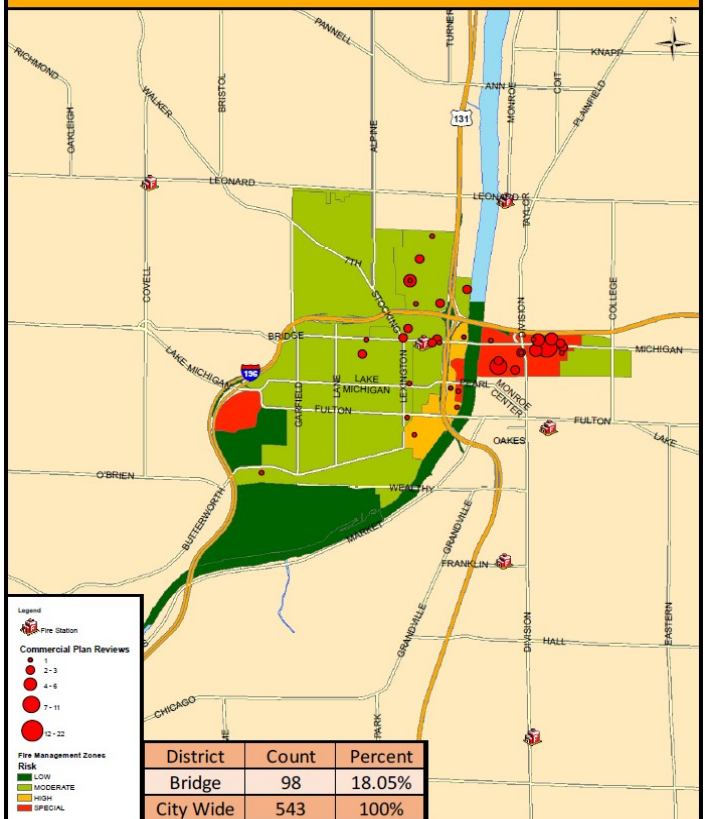
Effective Response Force Compliance



Community Risk Reduction Evaluation

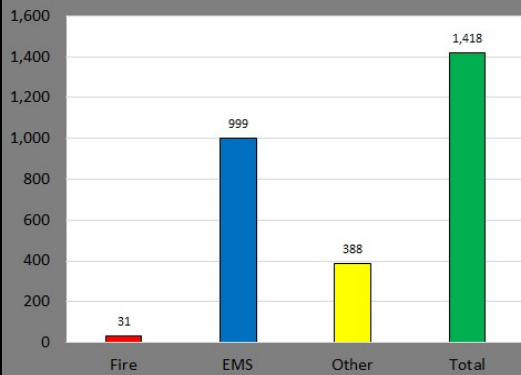


Commercial Plan Reviews

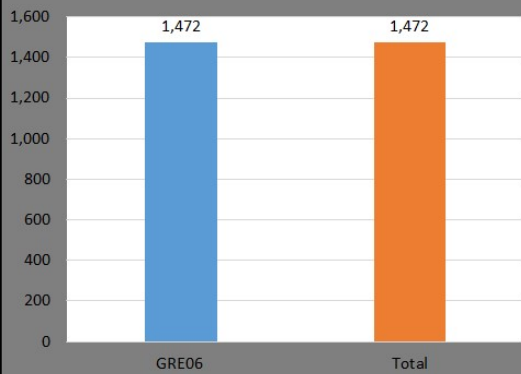


BURTON STREET STATION

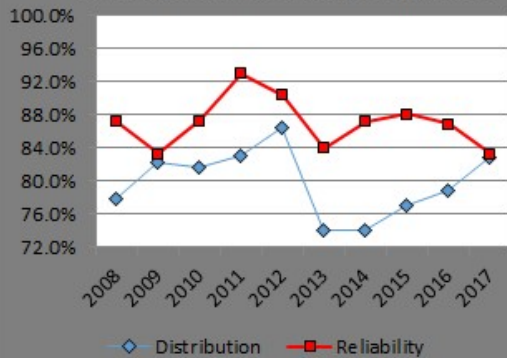
2017 Incidents in District



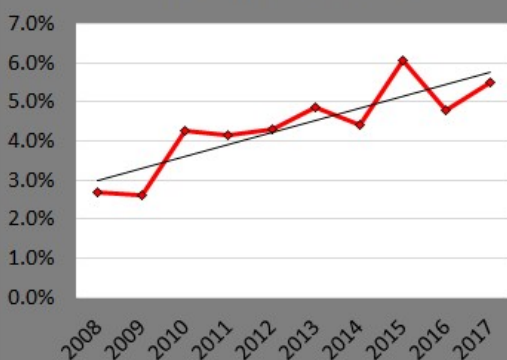
2017 Apparatus Responses



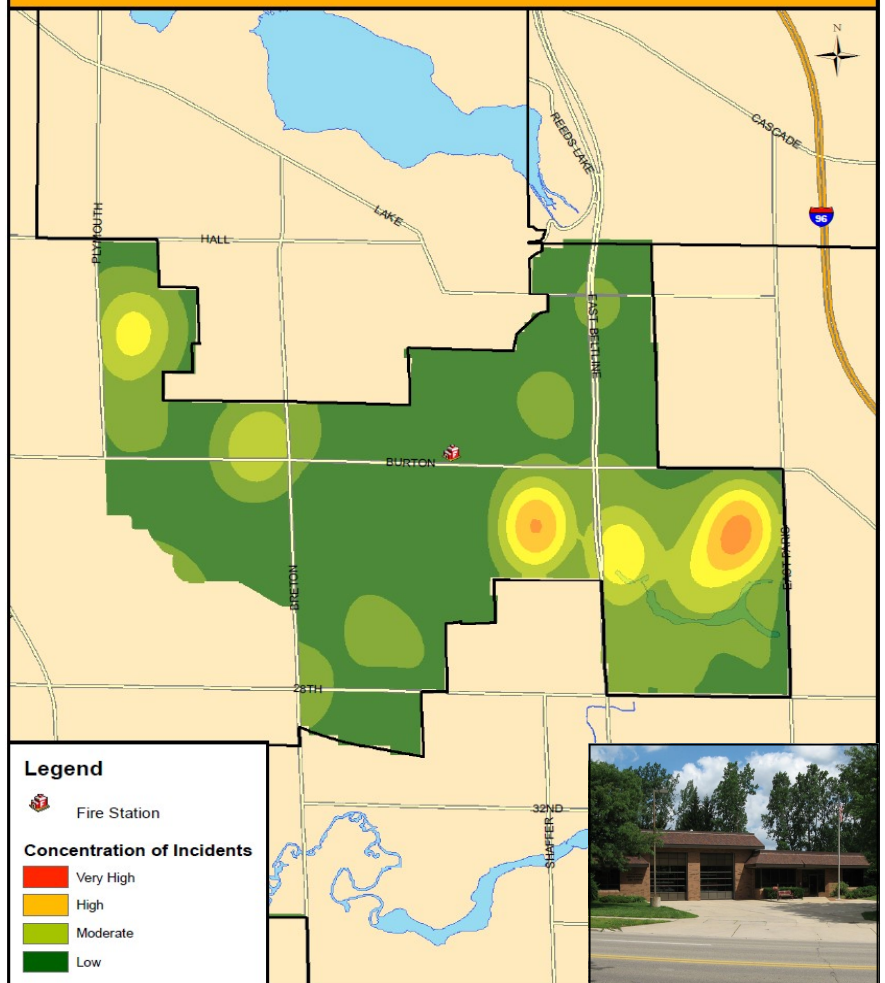
Distribution & Reliability Compliance



Simultaneous Calls



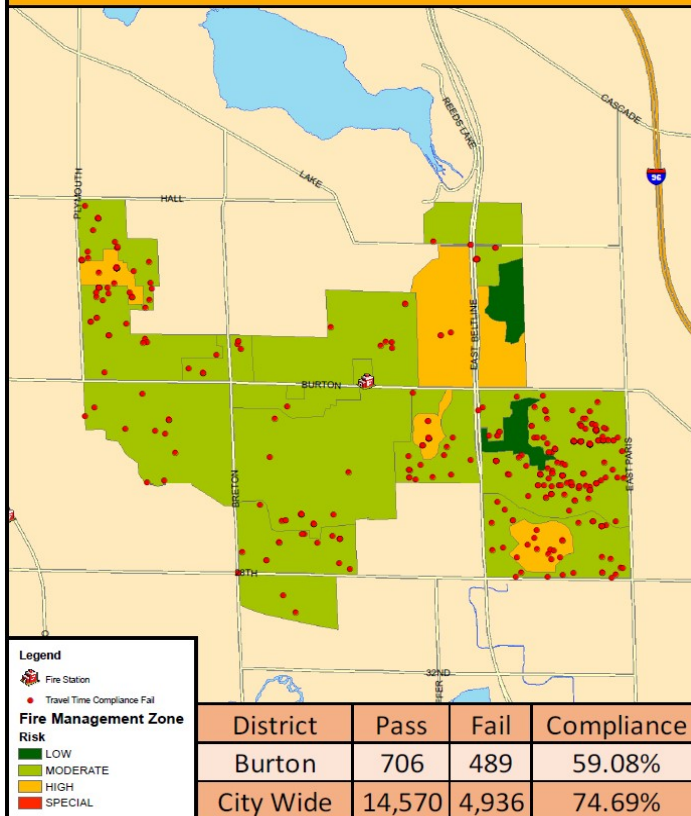
Hot Spot Map of 2017 Incidents



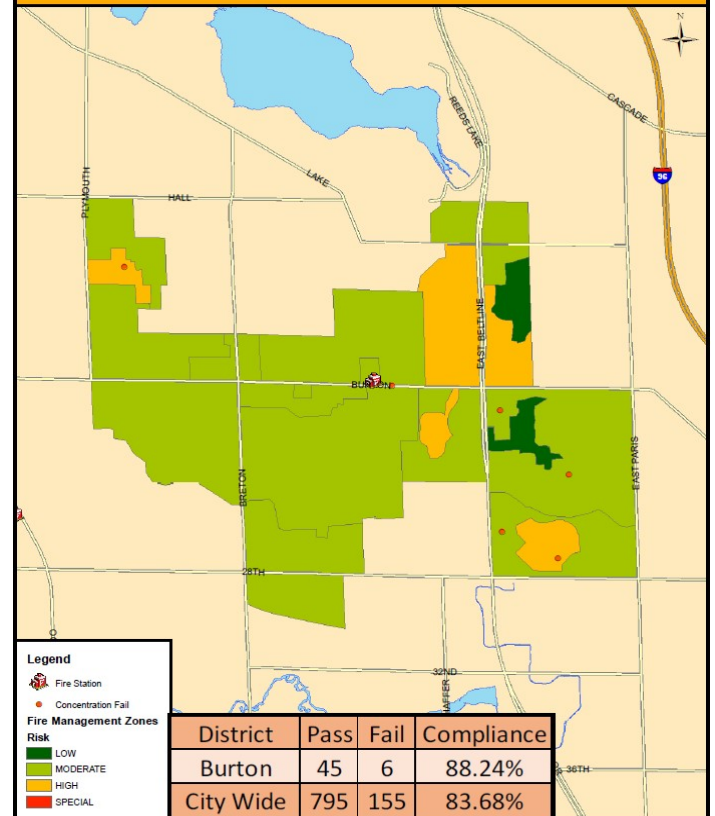
Temporal Analysis - 2017 EMS										Temporal Analysis - 2017 Fire									
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total		Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	
00:00-00:59	4	6	5	2	4	1	7	29		00:00-00:59	0	0	1	0	0	0	0	1	
01:00-01:59	4	4	2	3	4	1	3	21		01:00-01:59	0	0	0	0	1	0	0	1	
02:00-02:59	3	2	4	1	1	0	5	16		02:00-02:59	0	0	0	0	0	0	0	0	
03:00-03:59	4	1	4	7	2	3	1	22		03:00-03:59	0	0	0	0	0	1	0	1	
04:00-04:59	3	2	4	1	4	3	4	21		04:00-04:59	0	0	0	0	0	0	1	1	
05:00-05:59	7	5	2	5	5	1	3	28		05:00-05:59	0	0	0	0	0	0	0	0	
06:00-06:59	3	0	2	3	1	2	3	14		06:00-06:59	0	0	0	0	0	0	0	0	
07:00-07:59	7	6	5	8	10	7	5	48		07:00-07:59	1	0	0	0	0	0	0	1	
08:00-08:59	4	5	9	5	11	8	3	45		08:00-08:59	0	0	0	0	0	0	0	0	
09:00-09:59	7	11	7	8	18	12	5	68		09:00-09:59	2	0	0	1	0	0	0	3	
10:00-10:59	7	11	10	8	3	7	8	54		10:00-10:59	0	0	1	1	0	0	0	2	
11:00-11:59	6	7	11	11	9	11	5	60		11:00-11:59	0	0	0	0	0	0	0	0	
12:00-12:59	13	9	9	10	10	9	8	68		12:00-12:59	0	1	0	0	0	1	0	2	
13:00-13:59	1	7	9	12	7	9	9	54		13:00-13:59	0	0	0	2	0	0	0	2	
14:00-14:59	7	7	9	5	12	5	7	52		14:00-14:59	0	0	0	1	0	0	1	2	
15:00-15:59	8	9	5	10	3	8	7	50		15:00-15:59	0	0	0	1	0	0	1	2	
16:00-16:59	6	10	5	9	6	5	8	49		16:00-16:59	0	0	0	0	0	1	0	1	
17:00-17:59	11	7	13	5	10	4	8	58		17:00-17:59	0	0	1	0	1	0	1	3	
18:00-18:59	5	7	12	7	8	3	13	55		18:00-18:59	0	1	1	0	0	1	0	3	
19:00-19:59	4	5	4	5	5	6	6	35		19:00-19:59	0	0	0	0	1	0	1	2	
20:00-20:59	5	6	7	5	8	4	6	41		20:00-20:59	1	0	1	0	0	1	0	3	
21:00-21:59	4	6	6	1	3	10	7	37		21:00-21:59	0	0	0	0	0	0	0	0	
22:00-22:59	7	8	5	3	6	8	6	43		22:00-22:59	0	0	0	0	0	0	0	0	
23:00-23:59	4	4	3	4	3	10	4	32		23:00-23:59	1	0	0	0	0	0	0	1	
Total	134	145	152	138	153	137	141	1,000		Total	5	2	5	6	3	5	5	31	

BURTON STREET STATION

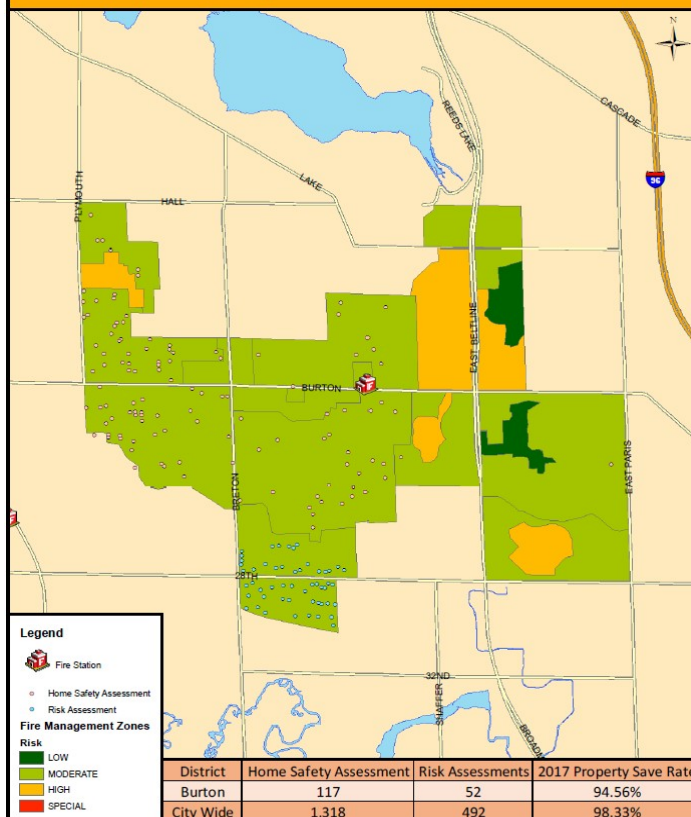
4 Minute Travel Compliance



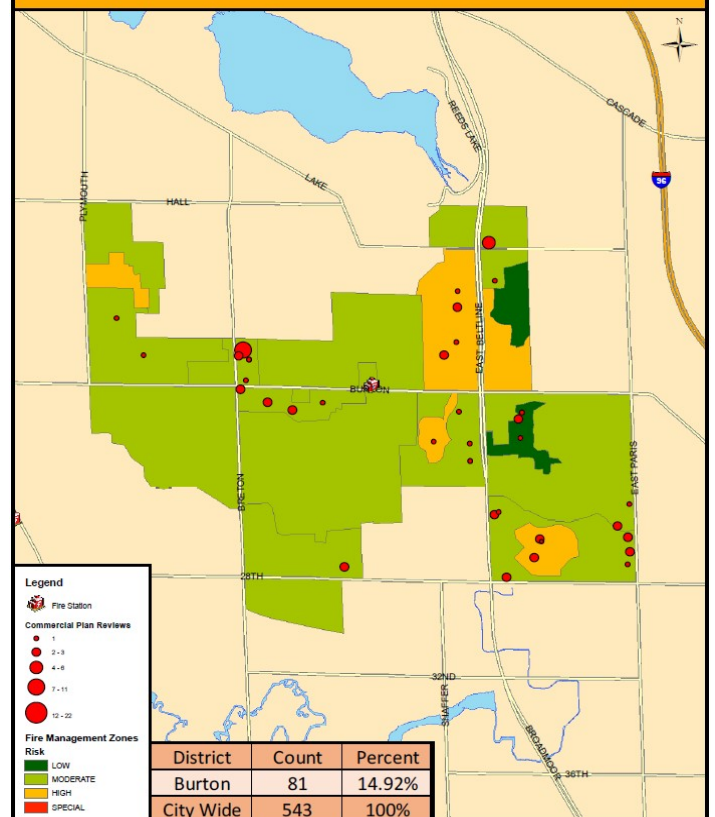
Effective Response Force Compliance



Community Risk Reduction Evaluation

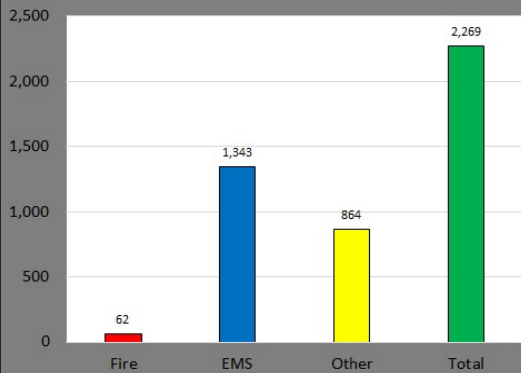


Commercial Plan Reviews

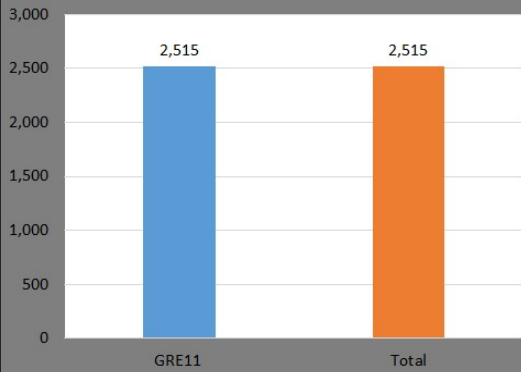


CHESTER STREET STATION

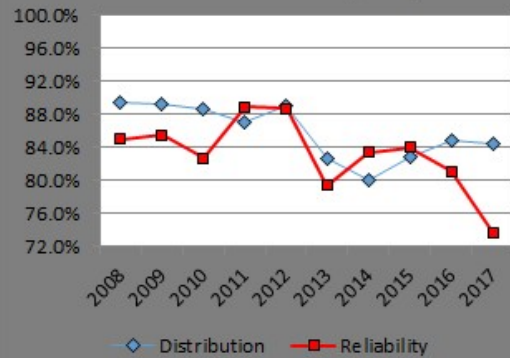
2017 Incidents in District



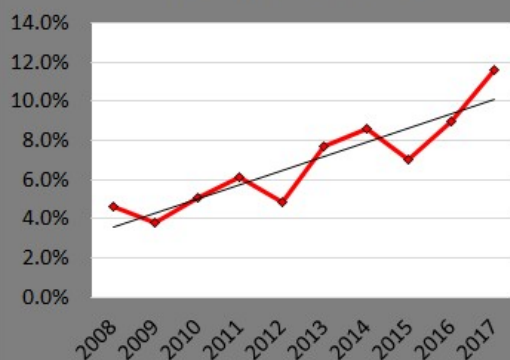
2017 Apparatus Responses



Distribution & Reliability Compliance



Simultaneous Calls



Hot Spot Map of 2017 Incidents



Temporal Analysis - 2017 EMS

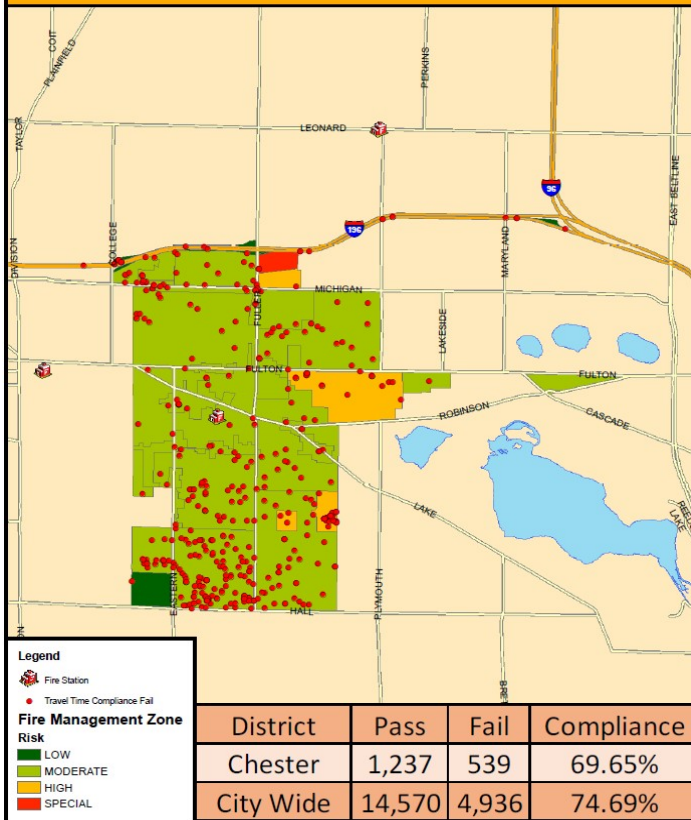
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	9	5	6	6	4	3	1	34
01:00-01:59	8	5	2	6	8	3	8	40
02:00-02:59	9	6	2	3	5	6	10	41
03:00-03:59	3	4	4	2	4	3	2	22
04:00-04:59	7	6	5	1	3	4	5	31
05:00-05:59	5	4	1	4	5	4	3	26
06:00-06:59	1	6	8	3	8	2	2	30
07:00-07:59	6	6	7	5	9	7	4	44
08:00-08:59	6	14	8	6	6	5	6	51
09:00-09:59	10	13	9	10	12	11	8	73
10:00-10:59	9	17	7	7	8	16	13	77
11:00-11:59	10	20	12	13	10	7	11	83
12:00-12:59	3	11	5	9	12	11	10	61
13:00-13:59	7	9	9	11	12	10	3	61
14:00-14:59	9	7	13	13	8	7	12	69
15:00-15:59	11	12	7	17	12	9	8	76
16:00-16:59	5	17	12	14	9	12	13	82
17:00-17:59	12	12	11	8	13	7	9	72
18:00-18:59	18	8	10	11	9	8	18	82
19:00-19:59	6	15	8	7	7	10	14	67
20:00-20:59	10	10	9	12	12	8	8	69
21:00-21:59	7	11	5	13	6	14	5	61
22:00-22:59	8	10	12	5	14	4	8	61
23:00-23:59	9	5	7	6	6	10	5	48
Total	188	233	179	192	202	181	186	1,361

Temporal Analysis - 2017 Fire

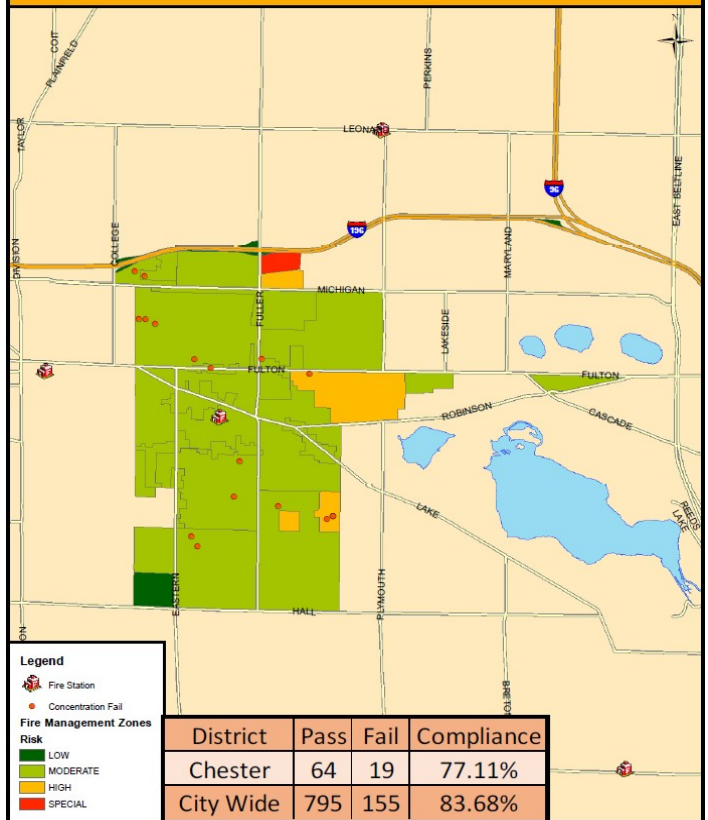
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	0	0	0	0	0	0	1	1
01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	0	0	0	0	0	1	0	1
03:00-03:59	1	1	0	1	0	0	0	3
04:00-04:59	0	1	1	0	0	1	1	4
05:00-05:59	0	1	0	1	0	0	0	2
06:00-06:59	0	0	0	0	0	0	1	1
07:00-07:59	1	1	1	0	0	0	1	4
08:00-08:59	1	1	0	0	0	0	0	2
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	0	0	0	2	0	0	2	4
11:00-11:59	0	2	0	0	0	0	0	2
12:00-12:59	1	0	0	0	0	0	1	2
13:00-13:59	1	0	0	0	1	1	1	4
14:00-14:59	1	0	0	0	2	0	0	3
15:00-15:59	0	0	0	0	0	0	1	1
16:00-16:59	1	1	1	0	0	0	1	4
17:00-17:59	1	1	0	0	1	0	1	4
18:00-18:59	3	1	0	1	0	1	0	6
19:00-19:59	0	0	1	0	0	0	2	3
20:00-20:59	0	0	2	0	0	0	1	3
21:00-21:59	0	0	0	0	1	0	0	1
22:00-22:59	1	1	2	0	0	0	1	5
23:00-23:59	0	0	1	1	1	0	0	3
Total	12	11	9	6	6	4	15	63

CHESTER STREET STATION

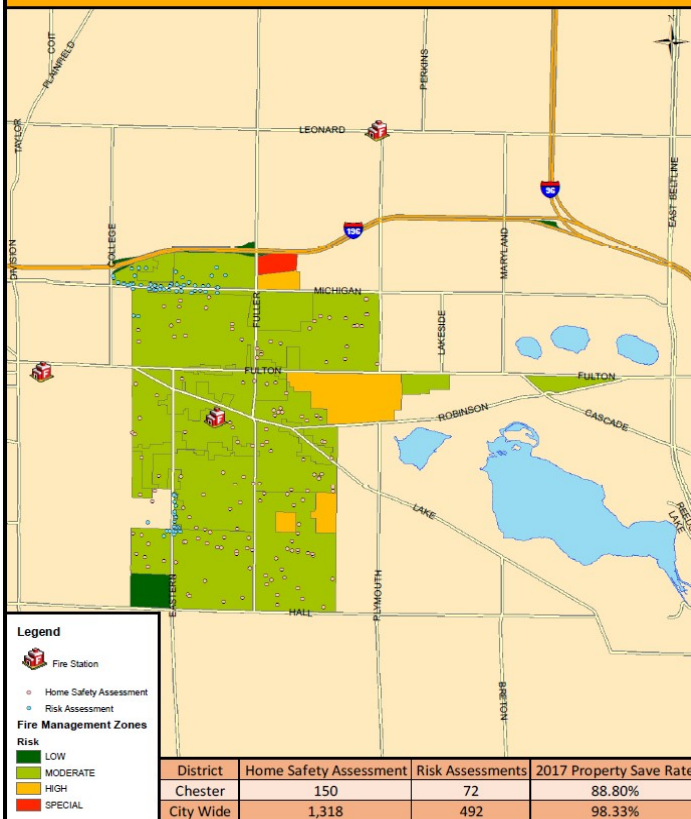
4 Minute Travel Compliance



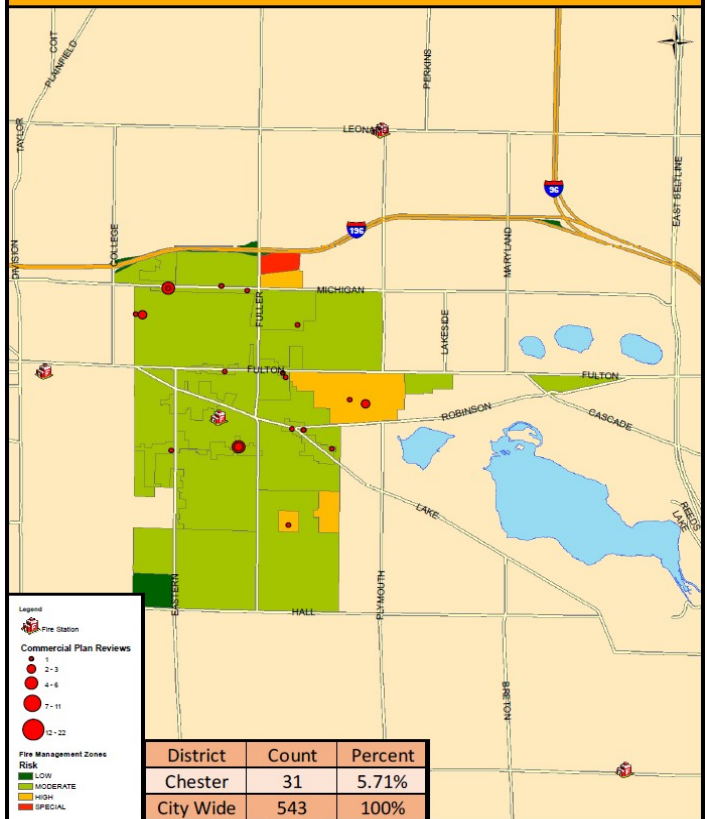
Effective Response Force Compliance



Community Risk Reduction Evaluation

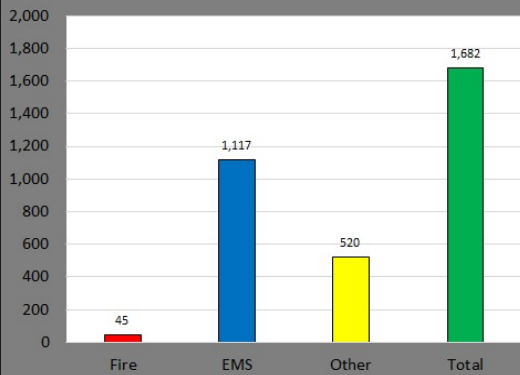


Commercial Plan Reviews

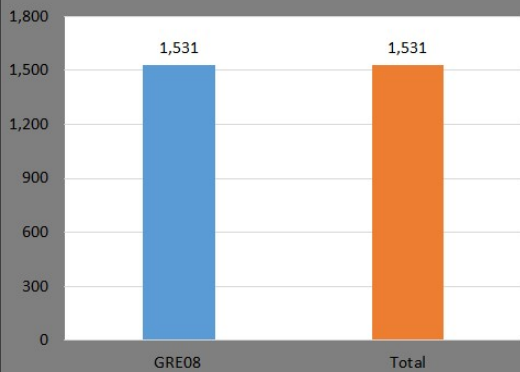


COVELL AVENUE STATION

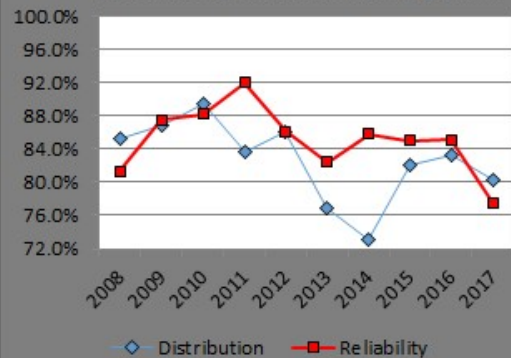
2017 Incidents in District



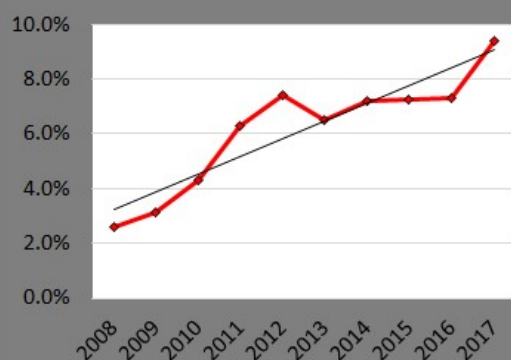
2017 Apparatus Responses



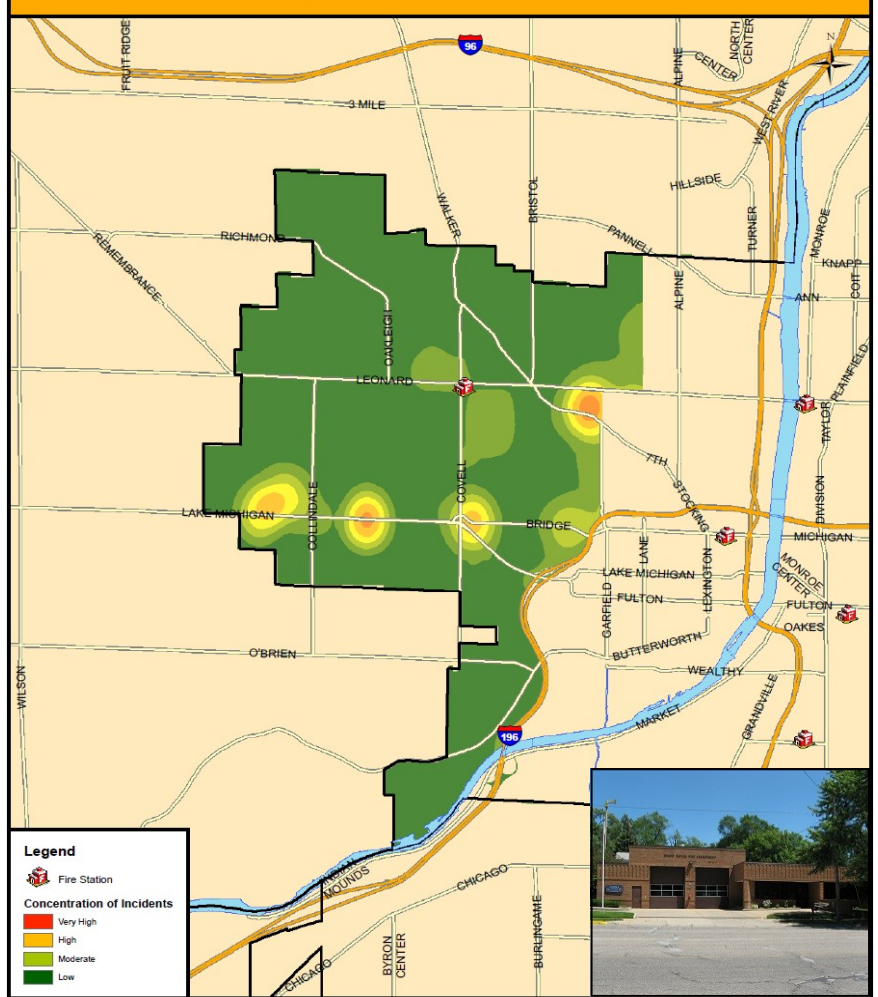
Distribution & Reliability Compliance



Simultaneous Calls



Hot Spot Map of 2017 Incidents



Temporal Analysis - 2017 EMS

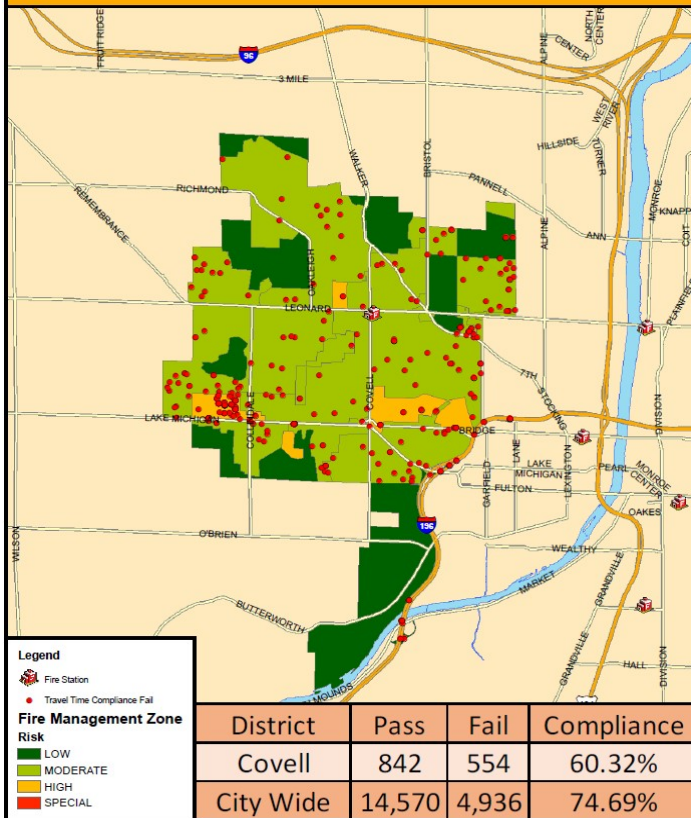
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	6	4	3	2	5	8	2	30
01:00-01:59	3	5	2	2	3	4	2	21
02:00-02:59	5	2	2	3	3	1	3	19
03:00-03:59	4	0	4	5	5	4	3	25
04:00-04:59	3	5	1	3	4	4	5	25
05:00-05:59	7	3	6	6	7	5	1	35
06:00-06:59	7	5	2	0	8	2	2	26
07:00-07:59	8	4	8	11	5	3	2	41
08:00-08:59	8	8	7	13	11	4	8	59
09:00-09:59	11	4	10	8	9	10	14	66
10:00-10:59	12	9	8	9	11	10	8	67
11:00-11:59	14	13	13	8	9	6	7	70
12:00-12:59	12	7	9	15	8	8	8	67
13:00-13:59	10	9	8	18	9	8	9	71
14:00-14:59	4	9	11	10	6	8	10	58
15:00-15:59	9	10	7	7	8	9	8	58
16:00-16:59	11	8	10	5	6	8	5	53
17:00-17:59	7	7	5	7	14	9	5	54
18:00-18:59	9	9	4	9	7	7	6	51
19:00-19:59	7	10	4	8	5	6	3	43
20:00-20:59	10	13	9	5	10	15	6	68
21:00-21:59	6	11	4	6	5	4	5	41
22:00-22:59	10	8	3	3	4	8	6	42
23:00-23:59	4	7	4	9	5	7	3	39
Total	187	170	144	172	167	158	131	1,129

Temporal Analysis - 2017 Fire

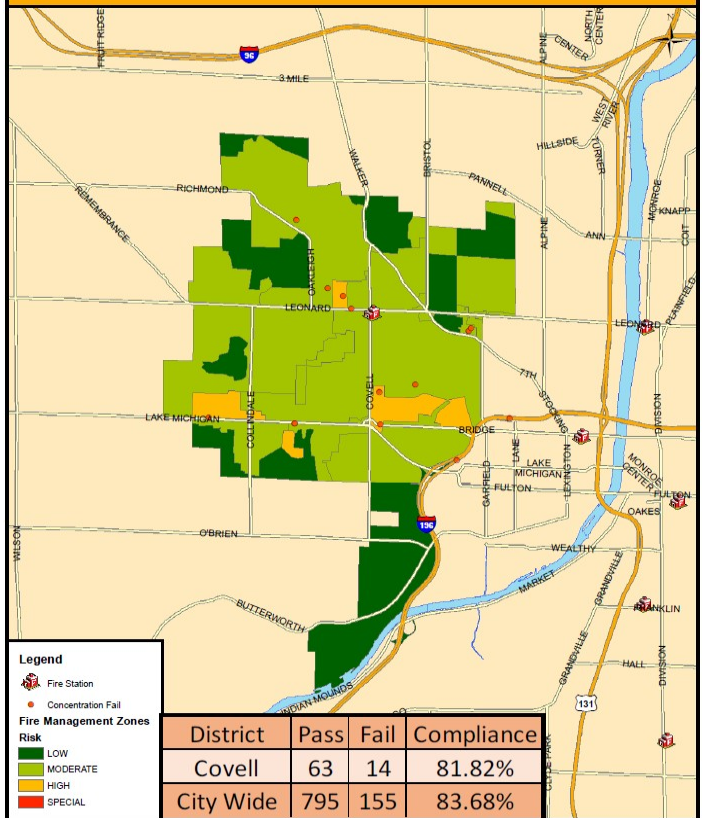
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	0	0	0	0	0	0	0	0
01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	0	0	0	0	1	0	0	1
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	1	0	0	1	0	2
05:00-05:59	0	0	1	0	0	0	0	1
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	1	0	0	0	0	0	1	2
09:00-09:59	0	1	1	0	0	0	0	2
10:00-10:59	0	1	0	0	0	0	0	1
11:00-11:59	0	0	0	0	0	3	0	3
12:00-12:59	1	0	0	0	0	2	0	3
13:00-13:59	2	0	1	1	1	2	0	7
14:00-14:59	1	0	1	0	0	0	0	2
15:00-15:59	1	0	0	0	1	0	0	2
16:00-16:59	1	1	0	0	0	0	0	2
17:00-17:59	0	0	0	1	2	0	1	4
18:00-18:59	2	1	1	1	0	0	1	6
19:00-19:59	0	0	0	0	1	0	0	1
20:00-20:59	1	1	0	0	0	1	1	4
21:00-21:59	0	0	0	0	0	0	0	0
22:00-22:59	0	0	0	0	0	0	1	1
23:00-23:59	0	0	0	0	0	0	0	0
Total	10	5	6	3	6	9	5	44

COVELL AVENUE STATION

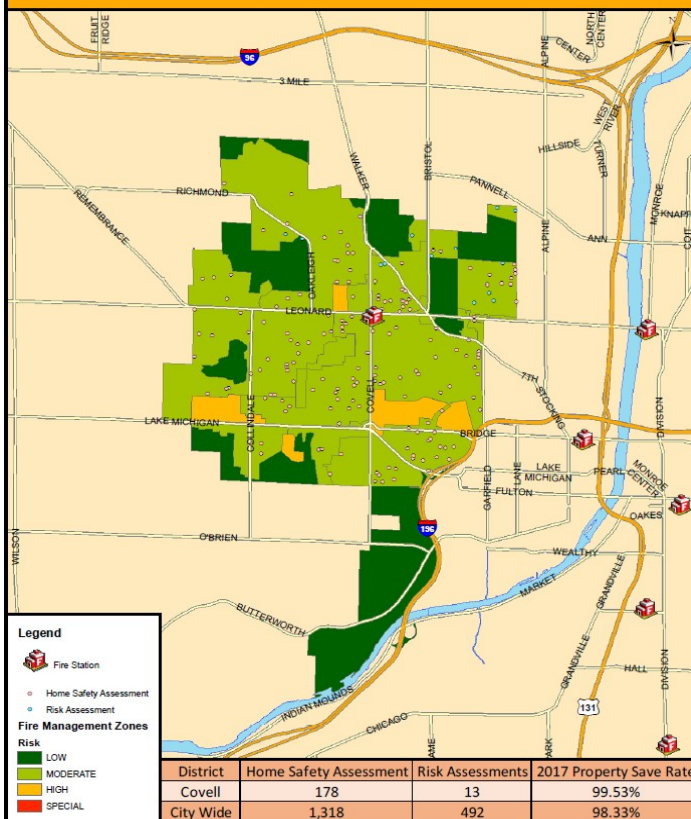
4 Minute Travel Compliance



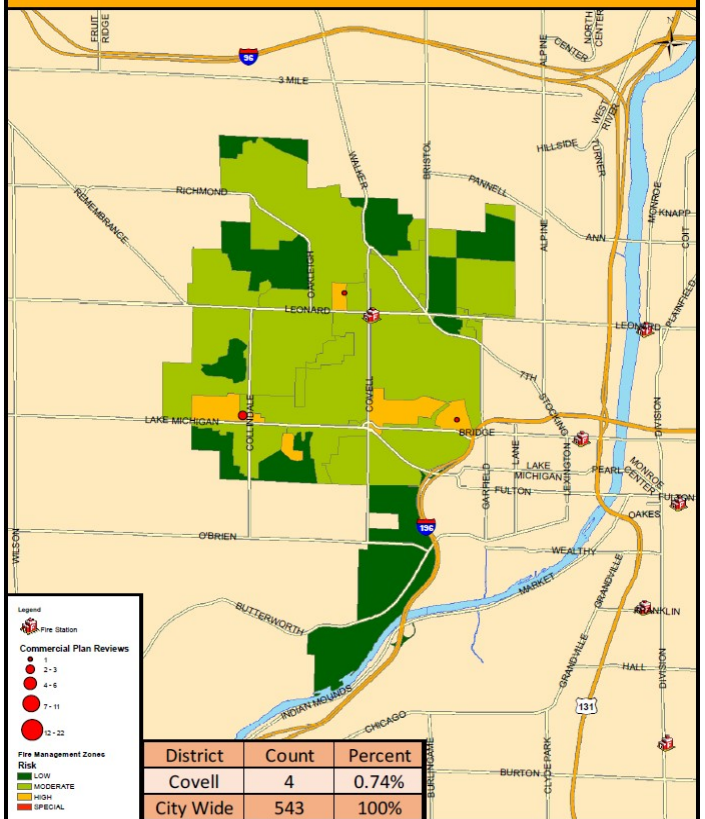
Effective Response Force Compliance



Community Risk Reduction Evaluation

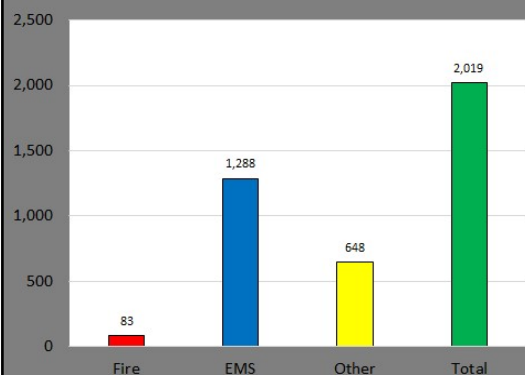


Commercial Plan Reviews

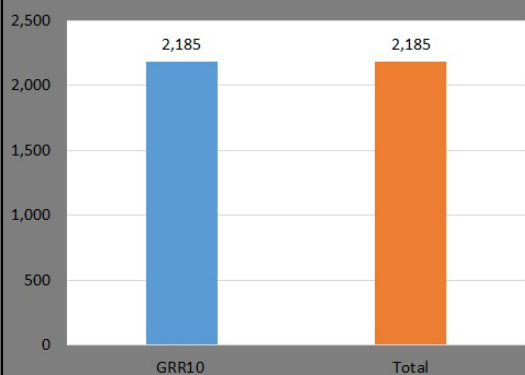


DIVISION AVENUE STATION

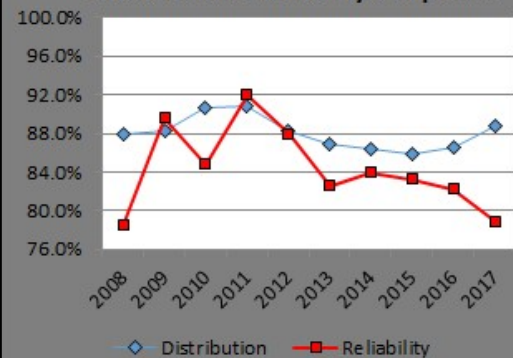
2017 Incidents in District



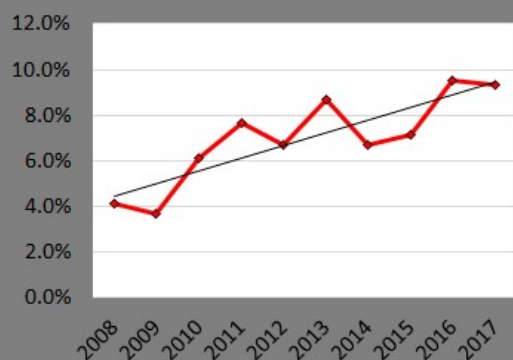
2017 Apparatus Responses



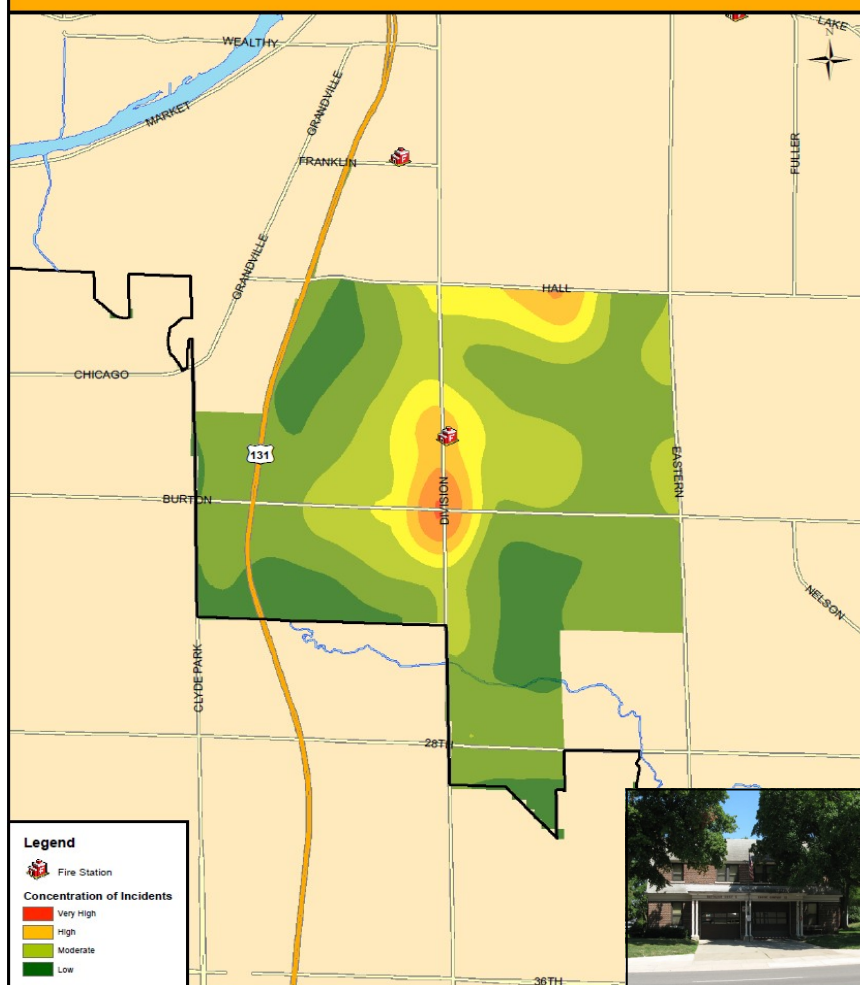
Distribution & Reliability Compliance



Simultaneous Calls



Hot Spot Map of 2017 Incidents



Temporal Analysis - 2017 EMS

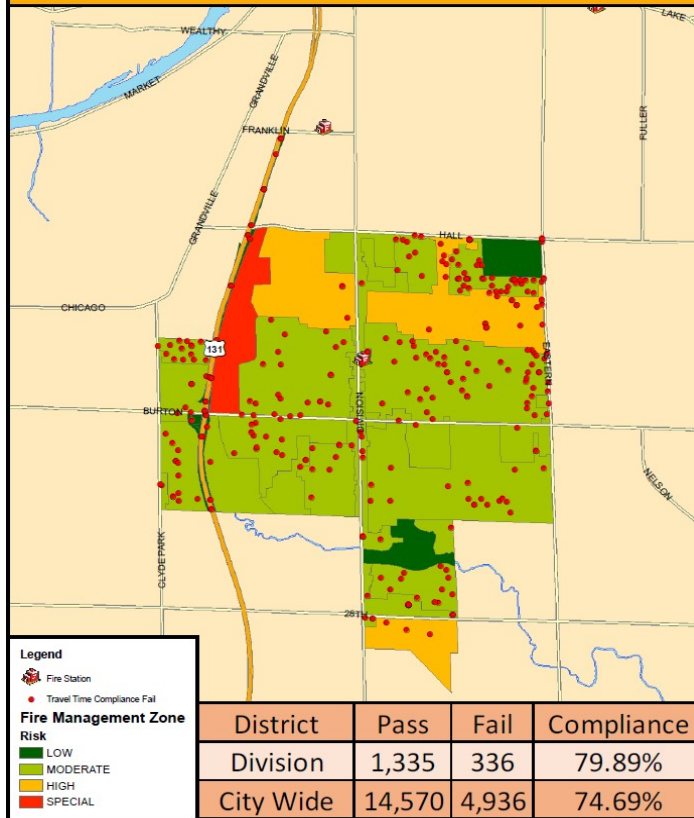
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	8	6	6	5	9	2	14	50
01:00-01:59	8	6	2	6	6	6	7	41
02:00-02:59	3	4	6	4	1	1	10	29
03:00-03:59	5	3	4	4	3	1	5	25
04:00-04:59	7	4	4	3	1	9	5	33
05:00-05:59	8	4	11	1	5	3	1	33
06:00-06:59	2	8	8	1	5	4	6	34
07:00-07:59	2	6	7	7	9	4	3	38
08:00-08:59	9	4	5	5	8	4	3	38
09:00-09:59	9	7	6	7	3	4	7	43
10:00-10:59	5	3	5	14	11	2	10	50
11:00-11:59	12	11	7	4	12	6	13	65
12:00-12:59	9	9	8	10	7	11	12	66
13:00-13:59	8	10	8	9	9	10	12	66
14:00-14:59	4	10	7	15	7	10	7	60
15:00-15:59	5	9	8	11	8	14	11	66
16:00-16:59	12	8	10	9	9	10	9	67
17:00-17:59	8	8	10	17	10	11	13	77
18:00-18:59	5	10	14	11	9	10	9	68
19:00-19:59	11	15	14	9	8	7	16	80
20:00-20:59	8	12	8	12	18	9	18	85
21:00-21:59	11	13	7	5	11	11	11	69
22:00-22:59	12	10	7	6	6	13	13	67
23:00-23:59	14	3	9	9	7	6	9	57
Total	185	183	181	184	182	168	224	1,307

Temporal Analysis - 2017 Fire

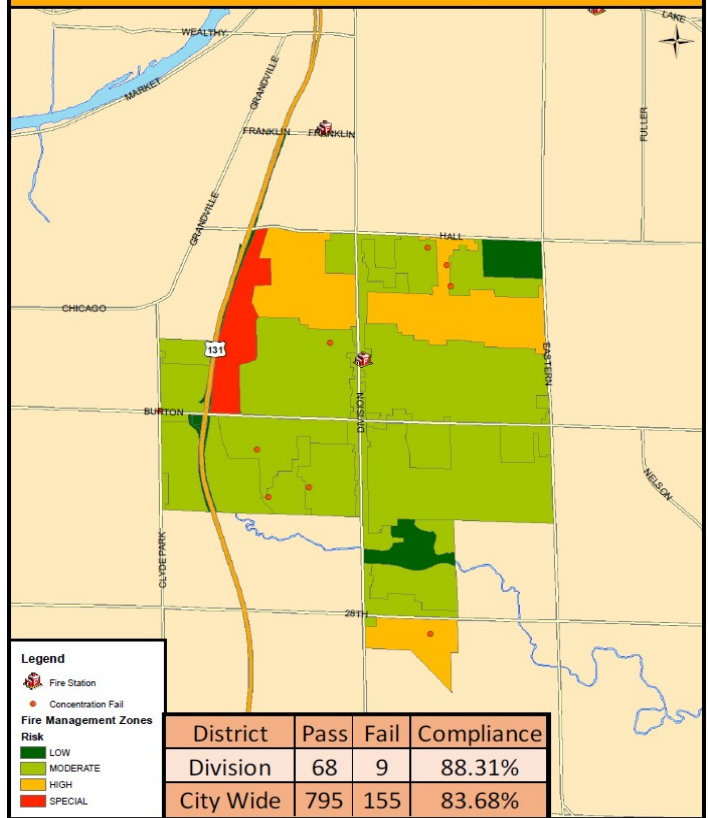
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	1	1	0	0	0	0	0	2
01:00-01:59	0	0	0	0	0	1	0	1
02:00-02:59	0	0	1	0	0	1	0	2
03:00-03:59	1	2	0	0	0	0	0	3
04:00-04:59	0	1	0	2	0	0	1	4
05:00-05:59	1	0	0	0	0	0	0	1
06:00-06:59	0	1	0	3	1	0	0	5
07:00-07:59	1	1	0	1	1	0	0	4
08:00-08:59	0	1	0	1	0	0	0	2
09:00-09:59	0	2	0	0	0	0	0	2
10:00-10:59	1	1	0	0	0	0	0	2
11:00-11:59	0	1	0	0	0	2	0	3
12:00-12:59	0	0	1	0	1	0	0	2
13:00-13:59	1	0	0	1	1	1	0	4
14:00-14:59	0	1	1	1	0	0	0	3
15:00-15:59	0	1	0	0	0	0	1	2
16:00-16:59	1	0	0	1	1	2	0	5
17:00-17:59	0	2	1	0	1	1	1	6
18:00-18:59	1	1	0	1	0	0	2	5
19:00-19:59	0	2	1	2	0	0	1	6
20:00-20:59	3	0	1	2	1	0	0	7
21:00-21:59	0	2	1	0	0	1	0	4
22:00-22:59	0	1	0	0	0	0	2	3
23:00-23:59	0	0	0	0	0	1	1	2
Total	11	21	7	15	7	10	9	80

DIVISION AVENUE STATION

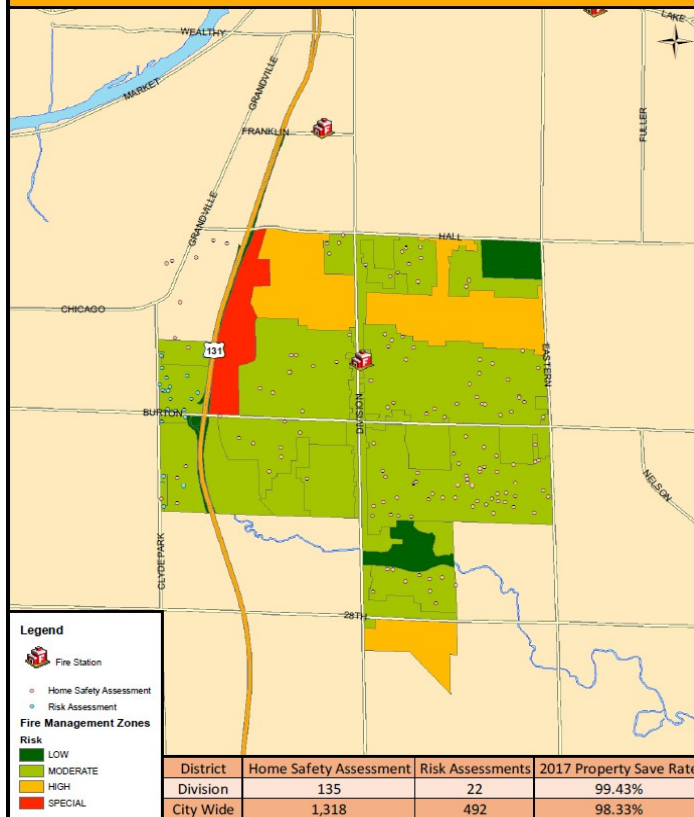
4 Minute Travel Compliance



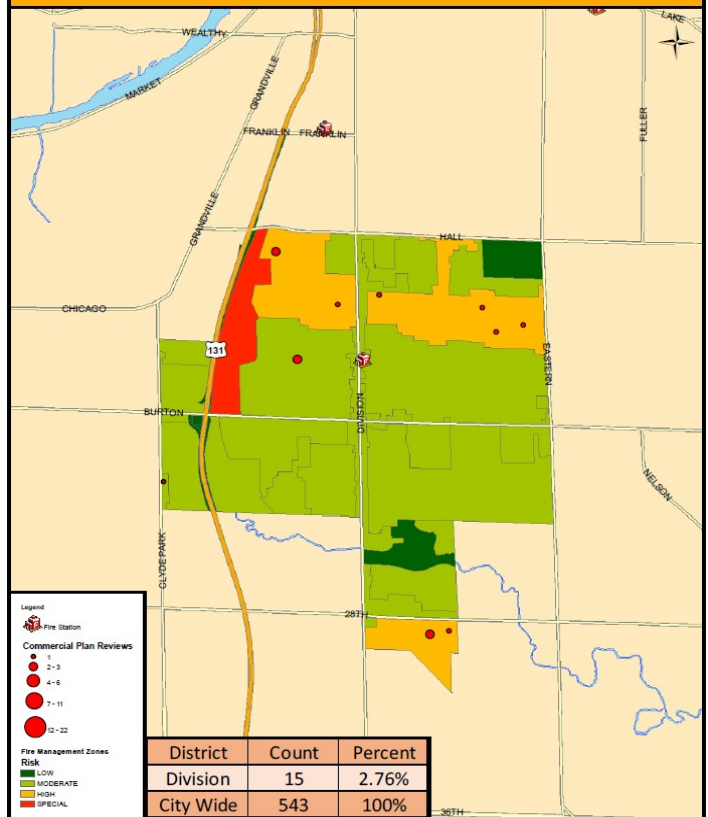
Effective Response Force Compliance



Community Risk Reduction Evaluation

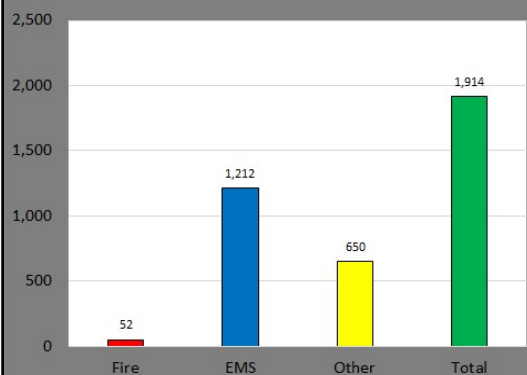


Commercial Plan Reviews

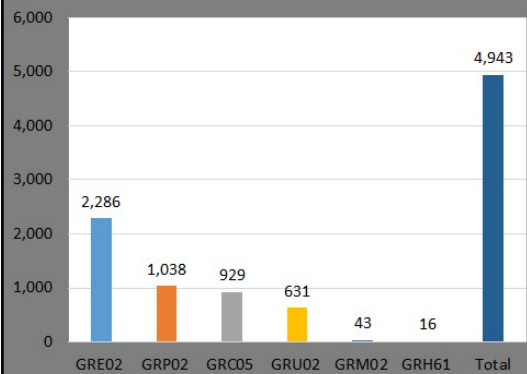


FRANKLIN STREET STATION

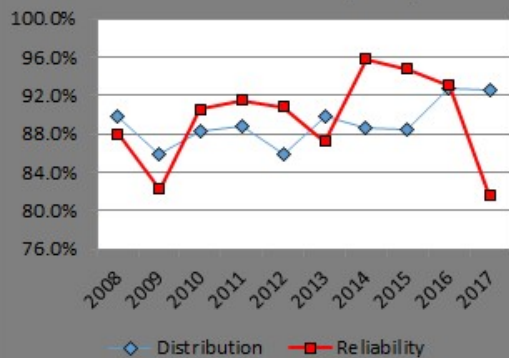
2017 Incidents in District



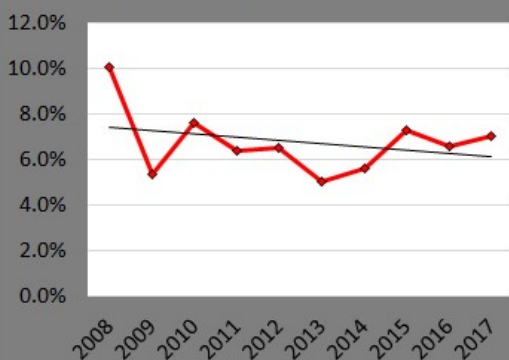
2017 Apparatus Responses



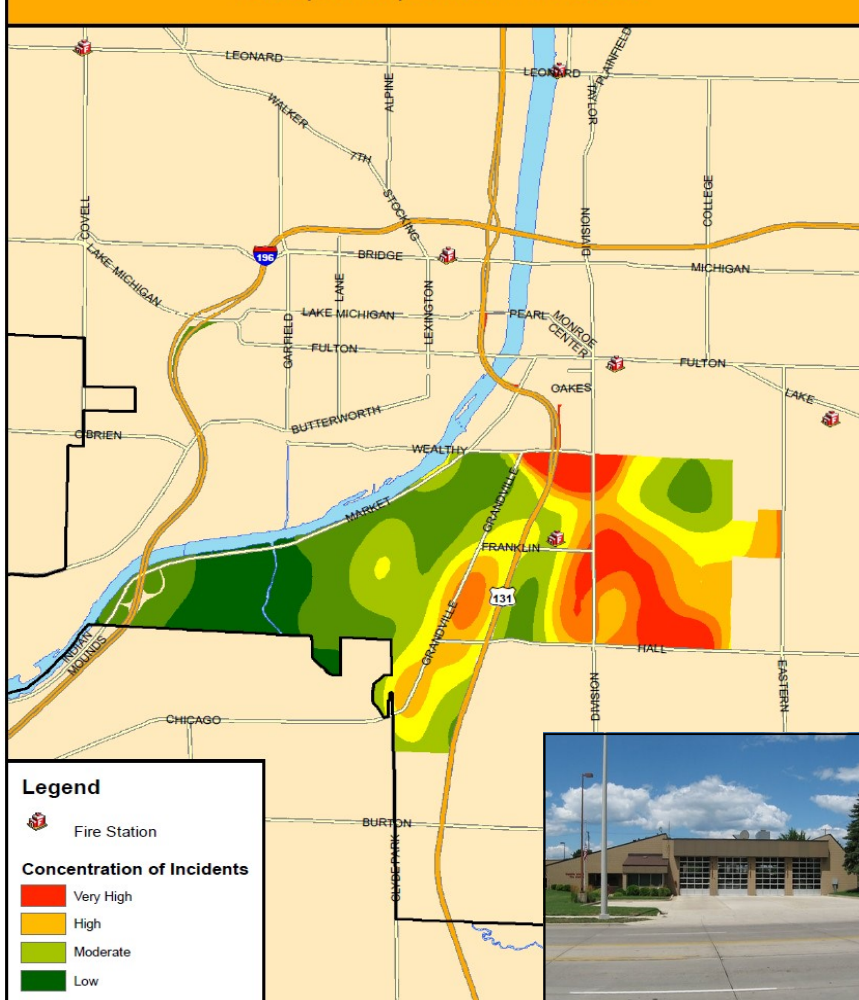
Distribution & Reliability Compliance



Simultaneous Calls



Hot Spot Map of 2017 Incidents



Temporal Analysis - 2017 EMS

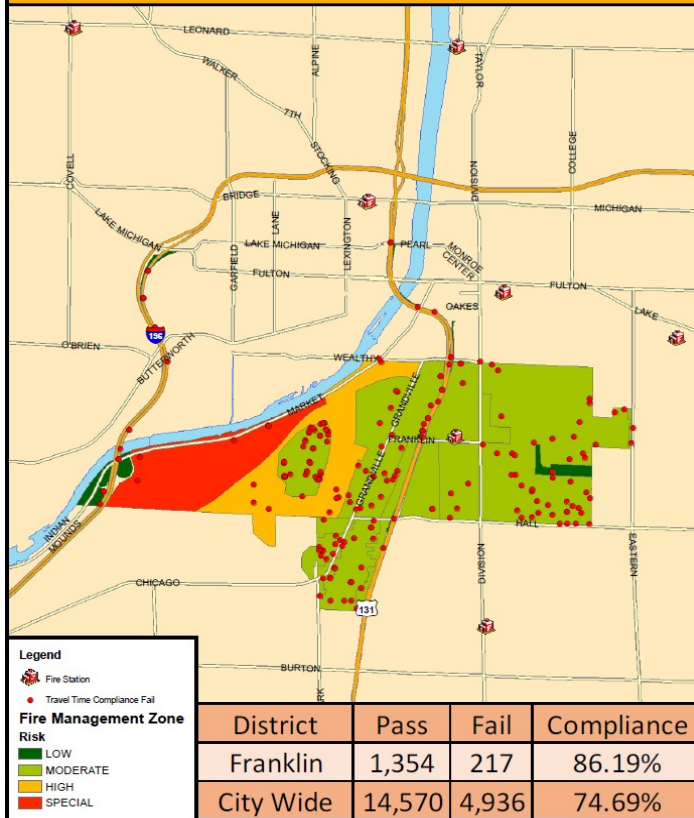
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	6	6	4	5	5	1	3	30
01:00-01:59	4	6	2	4	3	4	8	31
02:00-02:59	6	5	4	8	9	6	7	45
03:00-03:59	4	2	2	3	4	6	4	25
04:00-04:59	4	1	1	3	1	6	4	20
05:00-05:59	4	3	2	1	3	3	5	21
06:00-06:59	0	3	2	5	5	2	4	21
07:00-07:59	2	4	7	5	3	8	4	33
08:00-08:59	7	7	8	2	4	9	4	41
09:00-09:59	4	7	11	8	11	5	5	51
10:00-10:59	8	8	11	6	9	10	5	57
11:00-11:59	4	9	8	10	8	8	9	56
12:00-12:59	6	8	4	5	5	13	11	52
13:00-13:59	4	9	4	12	5	7	10	51
14:00-14:59	12	10	12	8	9	9	6	66
15:00-15:59	10	14	8	14	5	9	12	72
16:00-16:59	7	12	8	13	14	8	5	67
17:00-17:59	12	12	10	11	8	9	13	75
18:00-18:59	13	10	8	11	6	9	9	66
19:00-19:59	11	5	9	5	5	10	8	53
20:00-20:59	5	10	5	11	11	10	9	61
21:00-21:59	8	12	10	13	7	13	9	72
22:00-22:59	5	8	5	7	3	8	8	44
23:00-23:59	7	6	4	9	5	5	7	43
Total	153	177	149	179	148	178	169	1,153

Temporal Analysis - 2017 Fire

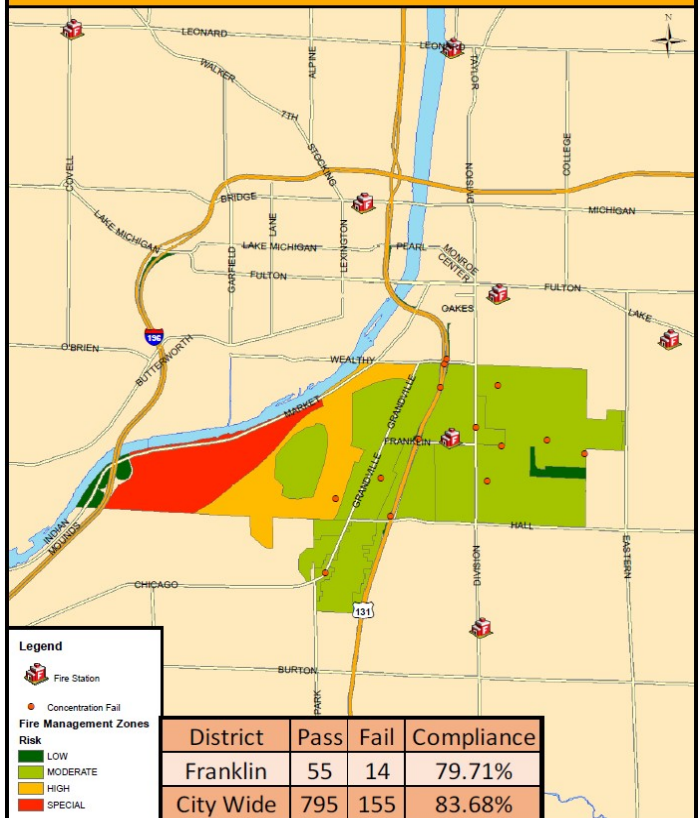
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	0	0	0	1	0	0	0	1
01:00-01:59	1	0	0	1	1	0	0	3
02:00-02:59	1	0	2	1	0	1	0	5
03:00-03:59	1	0	0	0	0	0	0	1
04:00-04:59	1	0	0	0	1	0	1	3
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	1	1
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	0	0	0	0	0	0	1	1
09:00-09:59	0	0	0	1	1	0	0	2
10:00-10:59	0	0	0	0	0	0	1	1
11:00-11:59	0	1	0	1	0	0	0	2
12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	1	1	0	0	1	0	0	3
14:00-14:59	0	1	1	1	0	0	1	4
15:00-15:59	1	0	0	0	0	0	2	3
16:00-16:59	0	0	1	1	1	0	0	3
17:00-17:59	0	0	0	0	1	0	1	2
18:00-18:59	0	2	0	0	0	1	0	3
19:00-19:59	0	1	1	2	0	0	0	4
20:00-20:59	0	0	0	0	0	0	1	1
21:00-21:59	1	0	0	0	1	0	0	2
22:00-22:59	2	0	0	0	0	2	1	5
23:00-23:59	0	2	0	0	0	0	0	2
Total	9	8	5	9	7	4	10	52

FRANKLIN STREET STATION

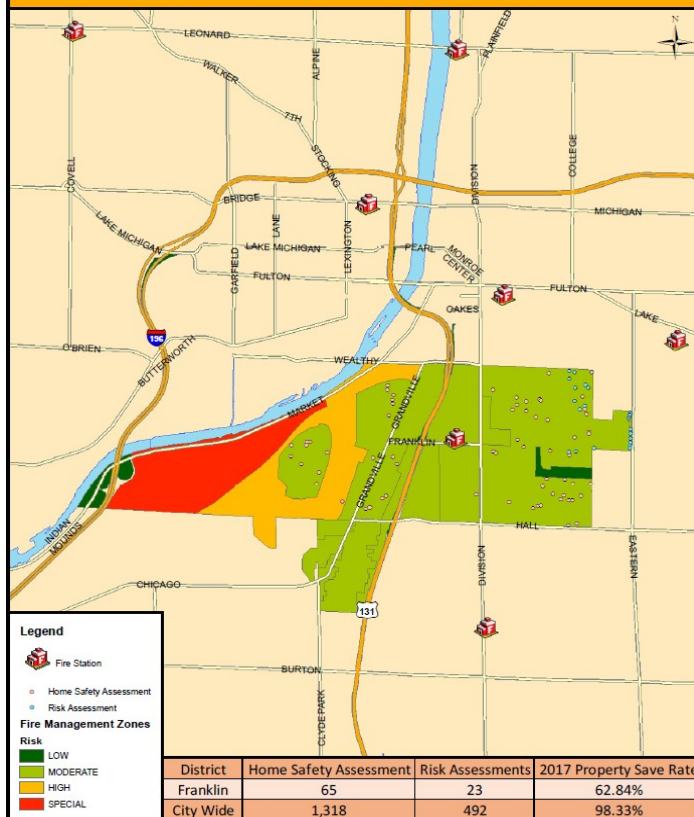
4 Minute Travel Compliance



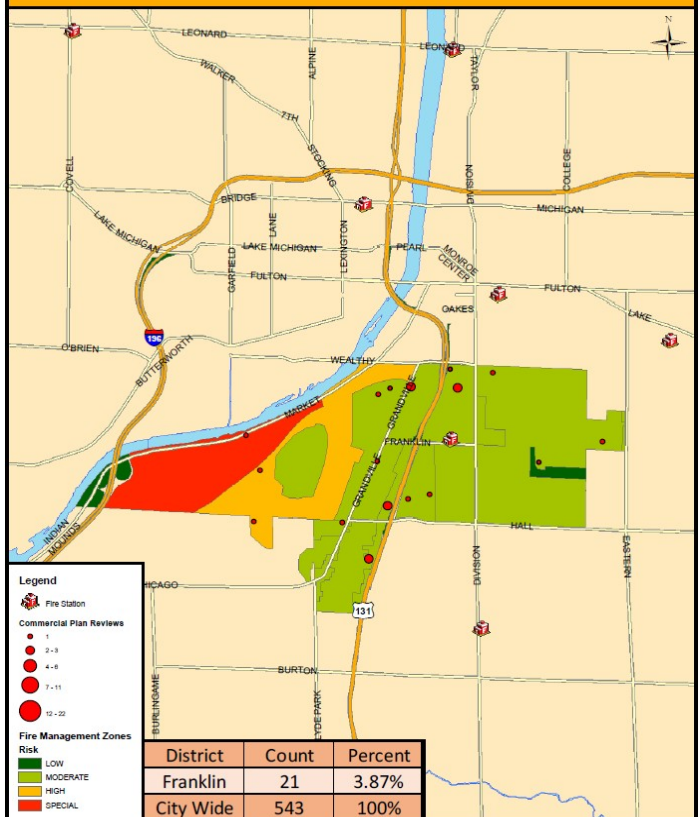
Effective Response Force Compliance



Community Risk Reduction Evaluation

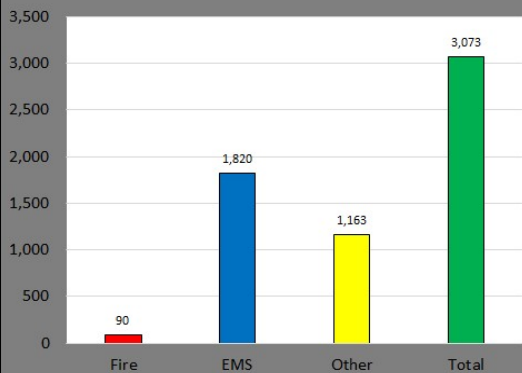


Commercial Plan Reviews

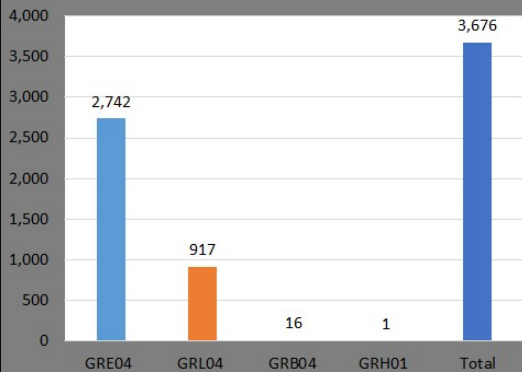


KALAMAZOO AVENUE STATION

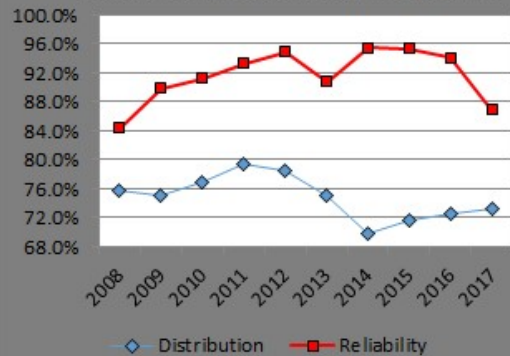
2017 Incidents in District



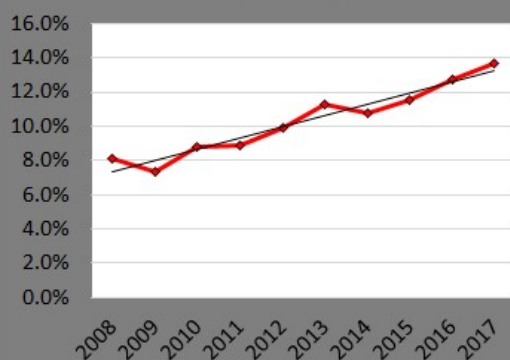
2017 Apparatus Responses



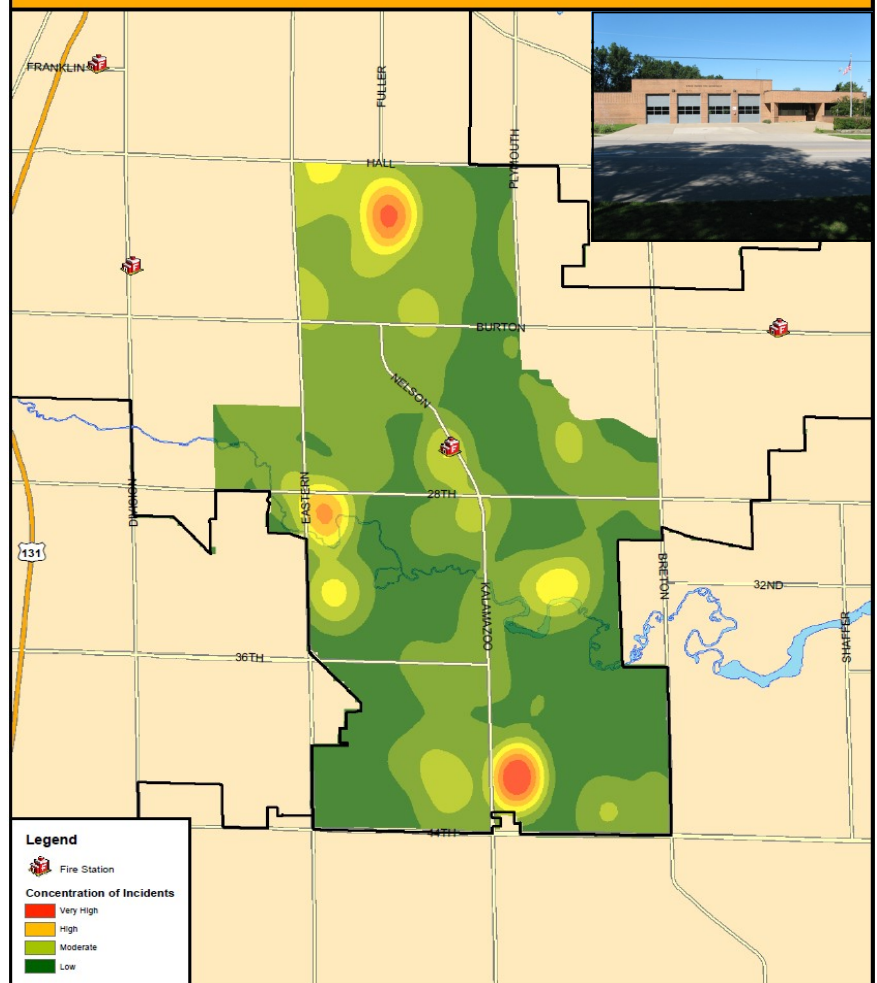
Distribution & Reliability Compliance



Simultaneous Calls



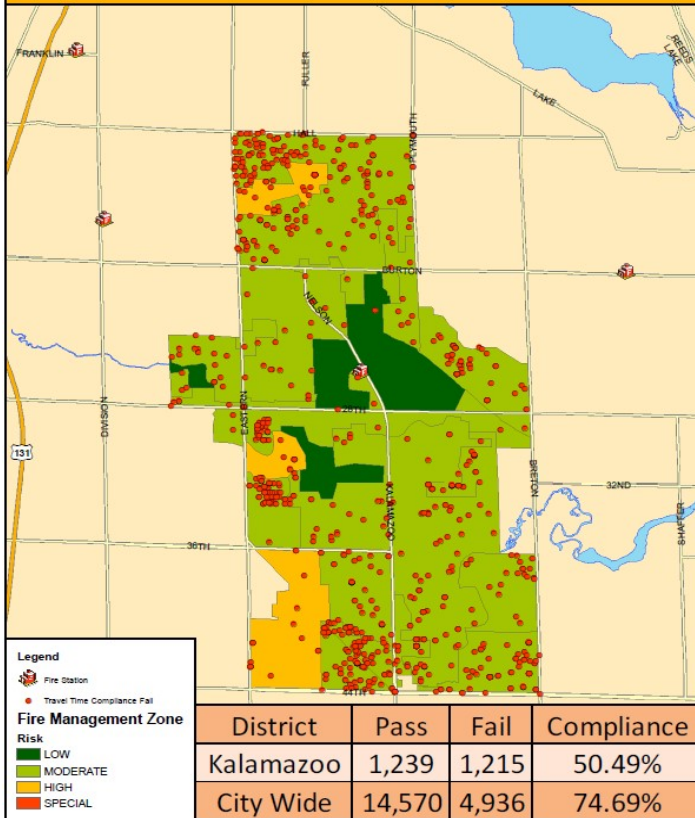
Hot Spot Map of 2017 Incidents



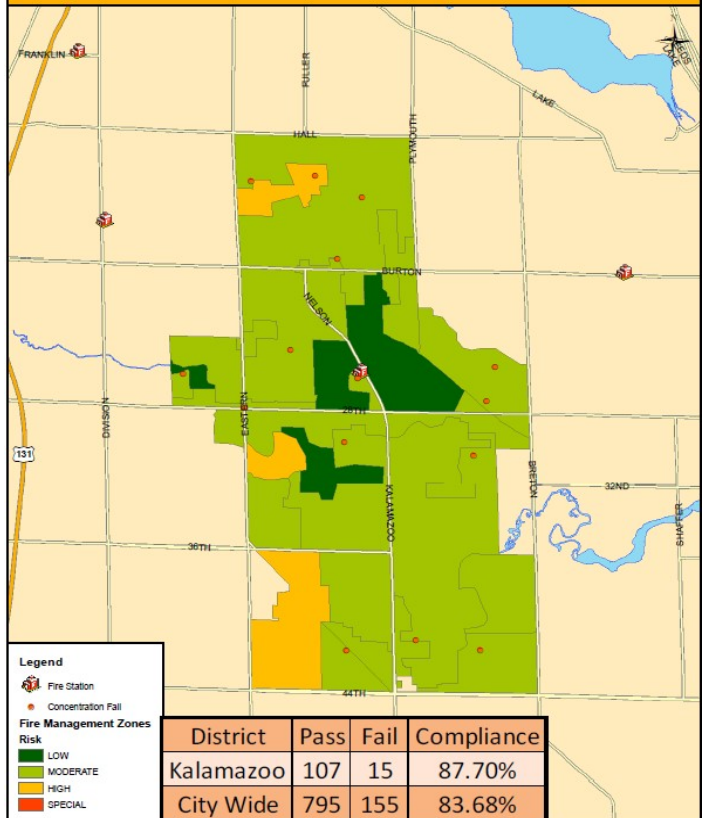
Temporal Analysis - 2017 EMS									Temporal Analysis - 2017 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	11	3	6	9	8	7	9	53	00:00-00:59	0	0	1	0	0	0	0	1
01:00-01:59	20	8	6	4	8	7	7	60	01:00-01:59	1	0	0	2	0	0	0	3
02:00-02:59	9	8	4	4	4	4	4	37	02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	2	8	5	10	6	6	5	42	03:00-03:59	1	0	0	0	0	1	0	2
04:00-04:59	10	2	5	6	4	5	7	39	04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	6	4	4	7	5	7	2	35	05:00-05:59	0	0	0	1	0	0	0	1
06:00-06:59	3	9	4	8	16	4	3	47	06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	9	10	10	7	8	11	7	62	07:00-07:59	0	0	0	0	2	0	0	2
08:00-08:59	17	16	16	13	16	10	9	97	08:00-08:59	1	0	1	0	0	0	0	2
09:00-09:59	10	19	14	20	17	10	11	101	09:00-09:59	1	1	1	1	0	0	0	4
10:00-10:59	10	17	13	16	16	18	11	101	10:00-10:59	0	1	0	2	0	0	0	3
11:00-11:59	15	16	16	13	20	19	13	112	11:00-11:59	0	3	1	0	1	0	1	6
12:00-12:59	12	17	14	16	7	7	12	85	12:00-12:59	1	1	1	0	0	0	0	3
13:00-13:59	8	18	16	18	16	13	14	103	13:00-13:59	0	0	1	0	0	1	2	4
14:00-14:59	6	13	18	11	15	17	11	91	14:00-14:59	0	1	1	2	0	1	1	6
15:00-15:59	10	14	18	11	11	8	19	91	15:00-15:59	0	1	0	0	0	1	1	3
16:00-16:59	6	17	17	16	10	10	15	91	16:00-16:59	2	0	1	0	0	1	0	4
17:00-17:59	16	6	14	13	15	13	15	92	17:00-17:59	1	2	1	1	1	4	2	12
18:00-18:59	15	5	15	9	10	12	10	76	18:00-18:59	1	2	0	3	2	0	1	9
19:00-19:59	12	12	10	13	10	10	14	81	19:00-19:59	0	2	0	0	1	0	0	3
20:00-20:59	7	13	14	12	10	20	13	89	20:00-20:59	0	3	0	3	0	0	1	7
21:00-21:59	13	12	11	12	8	12	14	82	21:00-21:59	1	1	3	0	0	0	1	6
22:00-22:59	10	10	6	11	10	12	20	79	22:00-22:59	2	0	0	0	1	2	1	6
23:00-23:59	4	15	10	11	5	4	11	60	23:00-23:59	1	0	1	0	0	0	1	3
Total	241	272	266	270	255	246	256	1,806	Total	13	18	13	15	8	11	12	90

KALAMAZOO AVENUE STATION

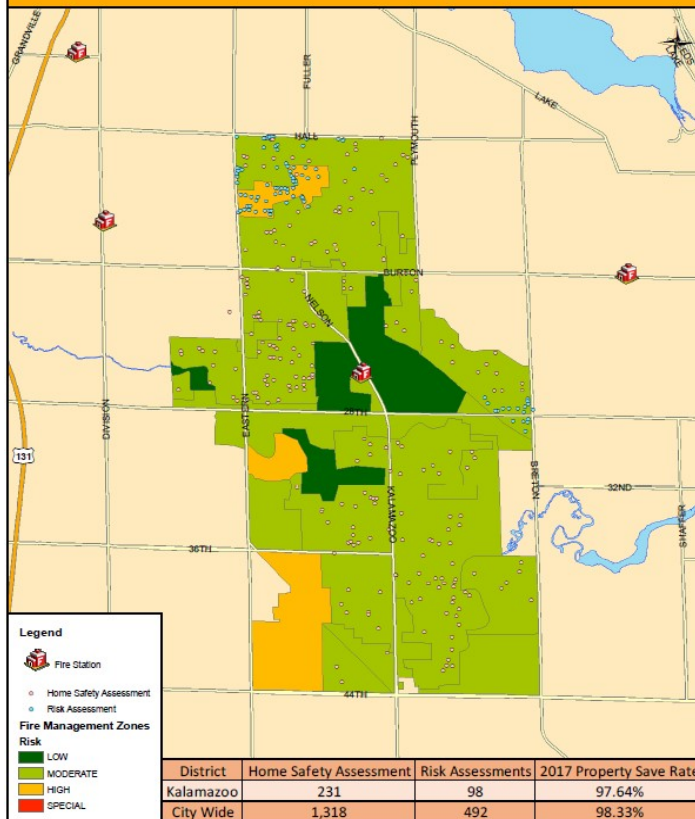
4 Minute Travel Compliance



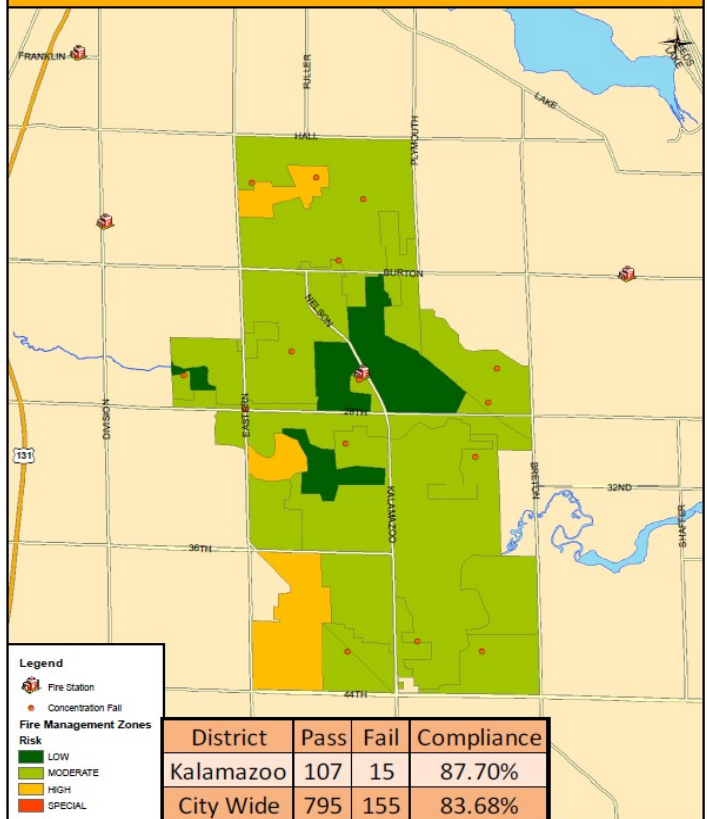
Effective Response Force Compliance



Community Risk Reduction Evaluation

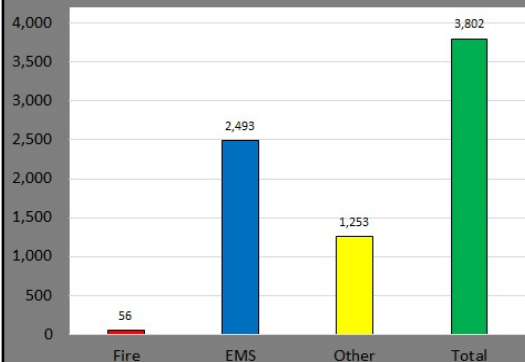


Effective Response Force Compliance

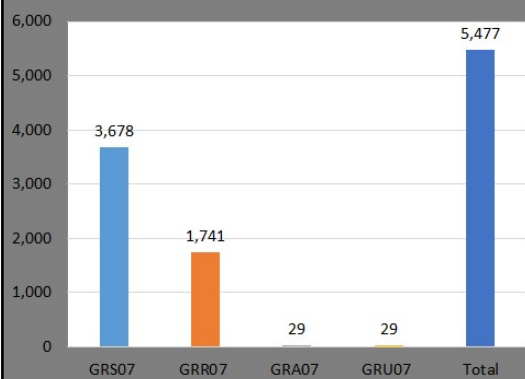


LAGRAVE AVENUE STATION

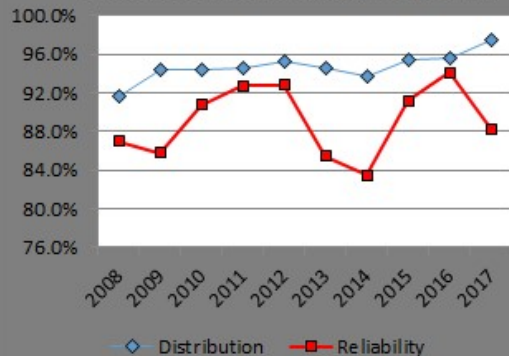
2017 Incidents in District



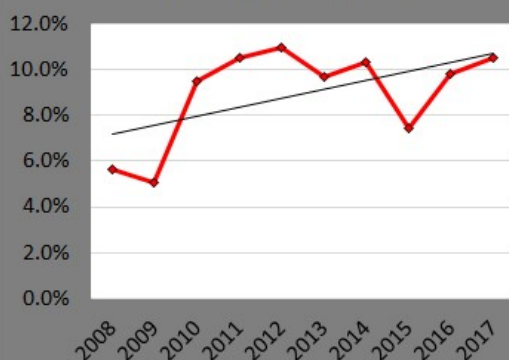
2017 Apparatus Responses



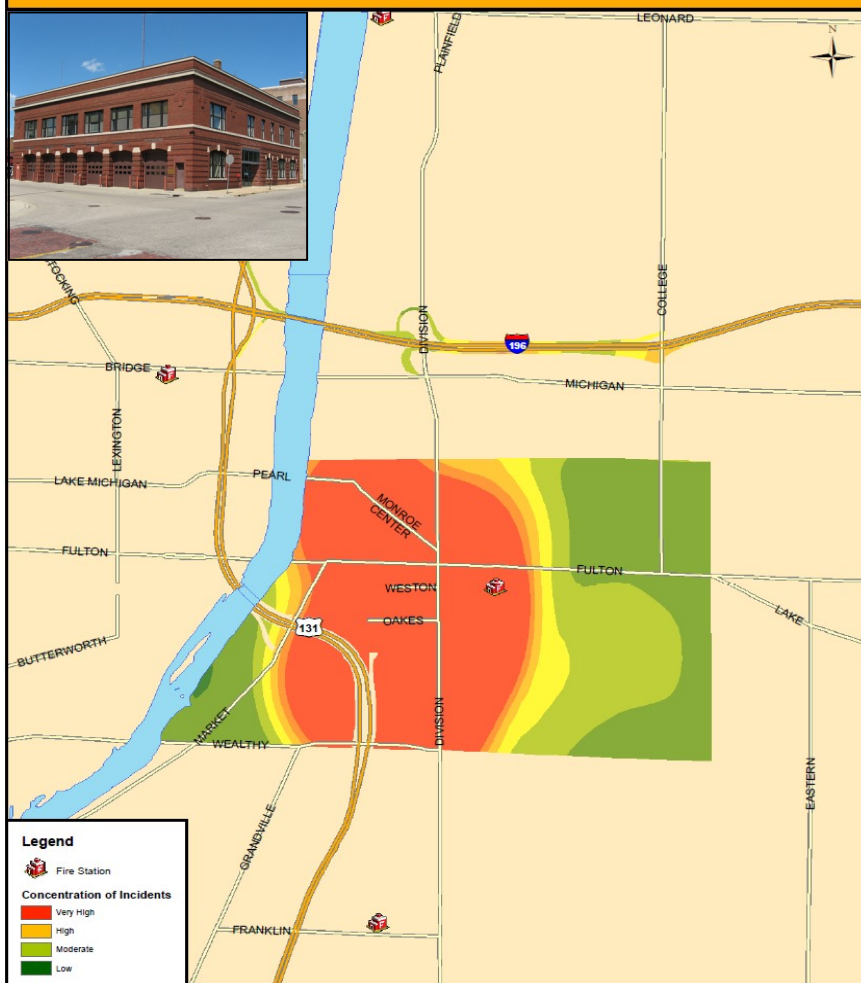
Distribution & Reliability Compliance



Simultaneous Calls



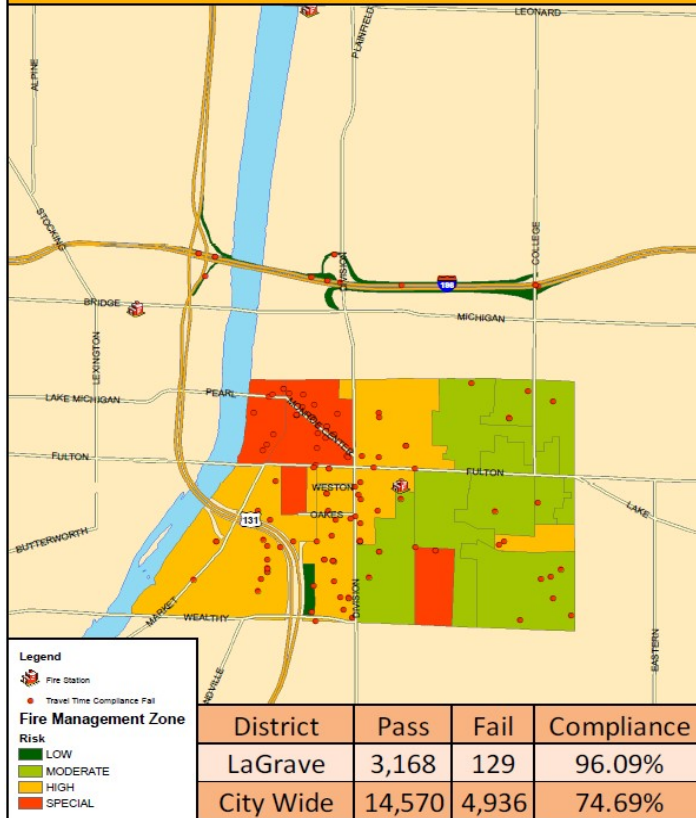
Hot Spot Map of 2017 Incidents



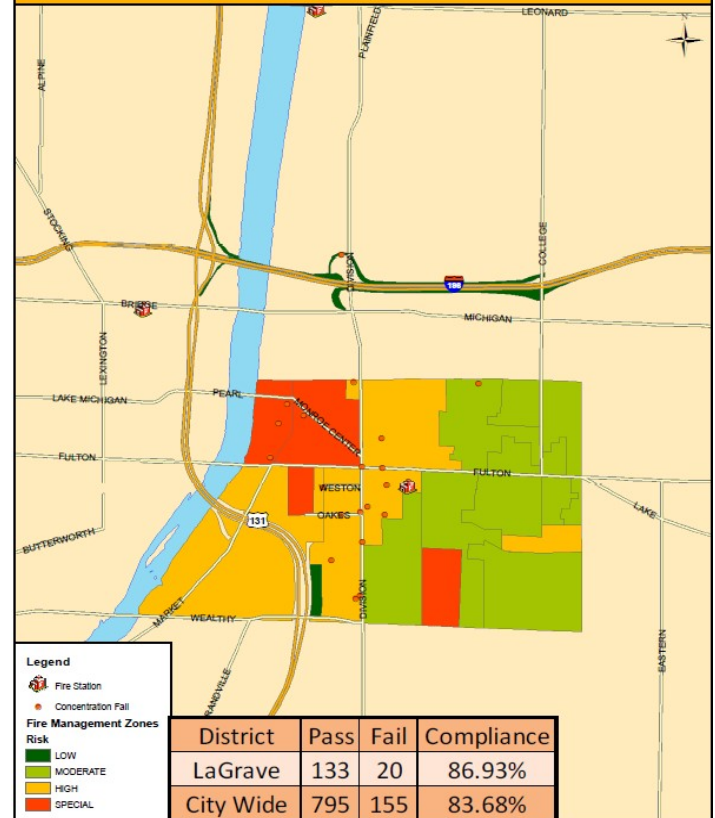
Temporal Analysis - 2017 EMS									Temporal Analysis - 2017 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	19	8	10	10	6	8	13	74	00:00-00:59	0	0	0	1	1	1	0	3
01:00-01:59	19	5	10	6	10	5	17	72	01:00-01:59	0	1	0	0	0	1	1	3
02:00-02:59	18	6	7	6	5	8	12	62	02:00-02:59	2	0	0	0	0	0	0	2
03:00-03:59	7	5	2	3	9	5	8	39	03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	7	3	3	5	3	5	6	32	04:00-04:59	0	0	1	0	1	0	1	3
05:00-05:59	6	4	6	3	9	4	3	35	05:00-05:59	0	1	0	0	0	0	0	1
06:00-06:59	8	9	10	7	9	7	10	60	06:00-06:59	1	0	0	0	0	1	0	2
07:00-07:59	10	10	12	10	9	11	8	70	07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	7	12	13	8	9	6	9	64	08:00-08:59	1	0	0	1	0	0	0	2
09:00-09:59	9	12	16	14	16	5	10	82	09:00-09:59	0	0	1	0	0	0	0	1
10:00-10:59	11	12	15	15	12	13	15	93	10:00-10:59	0	1	1	0	0	0	0	2
11:00-11:59	16	25	13	20	12	20	18	124	11:00-11:59	0	0	0	0	0	1	0	1
12:00-12:59	17	19	17	29	24	20	20	146	12:00-12:59	0	2	0	1	0	0	0	3
13:00-13:59	23	22	19	17	20	25	14	140	13:00-13:59	0	1	0	1	1	1	0	4
14:00-14:59	17	14	22	25	26	26	18	148	14:00-14:59	1	0	0	1	1	0	1	4
15:00-15:59	26	18	20	29	19	25	18	155	15:00-15:59	1	0	1	0	0	0	0	2
16:00-16:59	13	18	25	20	27	16	26	145	16:00-16:59	0	1	0	1	1	0	0	3
17:00-17:59	16	22	25	18	25	21	31	158	17:00-17:59	0	1	0	1	1	0	0	3
18:00-18:59	20	33	26	28	20	22	21	170	18:00-18:59	0	2	1	0	1	0	0	4
19:00-19:59	22	15	21	22	27	22	14	143	19:00-19:59	1	0	1	1	0	0	1	4
20:00-20:59	31	18	23	15	18	34	17	156	20:00-20:59	1	2	0	1	0	0	1	5
21:00-21:59	11	16	21	22	26	22	20	138	21:00-21:59	2	1	0	0	0	0	0	3
22:00-22:59	19	10	7	5	12	23	17	93	22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	10	16	19	19	17	17	22	120	23:00-23:59	0	0	1	0	0	0	0	1
Total	362	332	362	356	370	370	367	2,519	Total	10	13	7	9	7	5	5	56

LAGRAVE AVENUE STATION

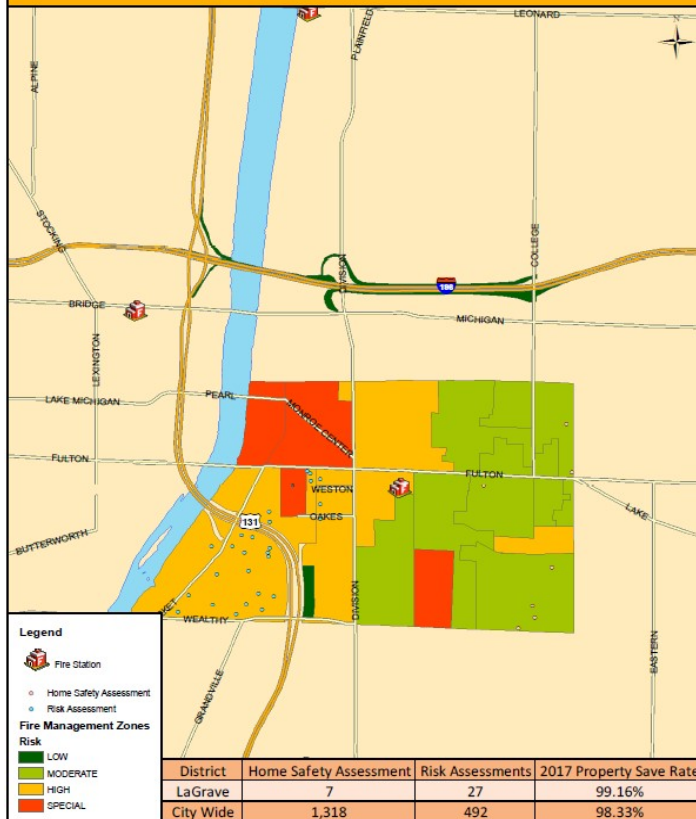
4 Minute Travel Compliance



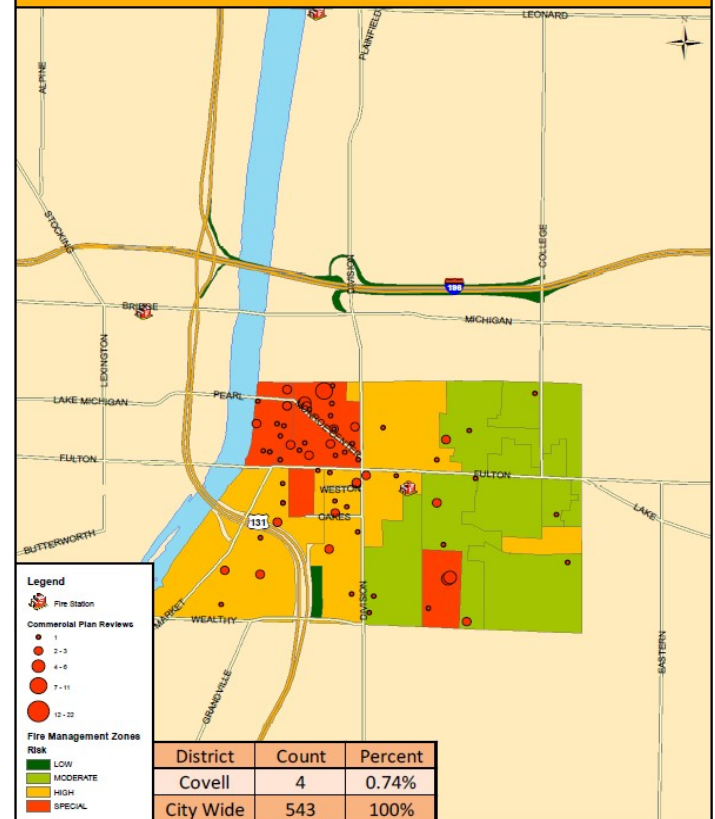
Effective Response Force Compliance



Community Risk Reduction Evaluation

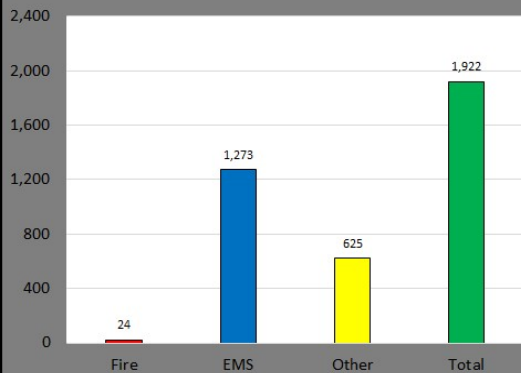


Commercial Plan Reviews

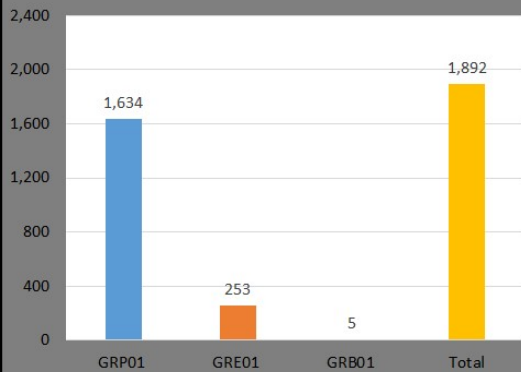


LEONARD STREET STATION

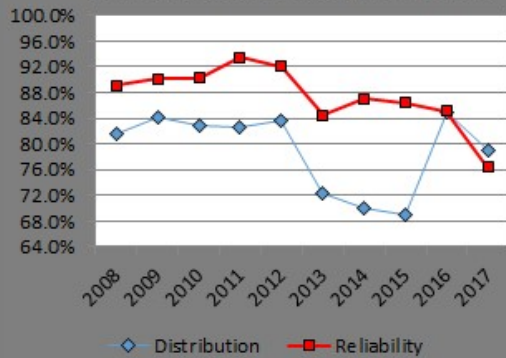
2017 Incidents in District



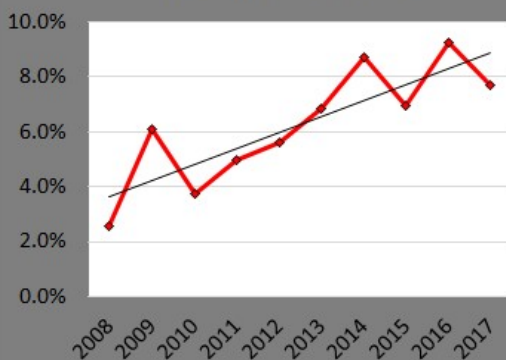
2017 Apparatus Responses



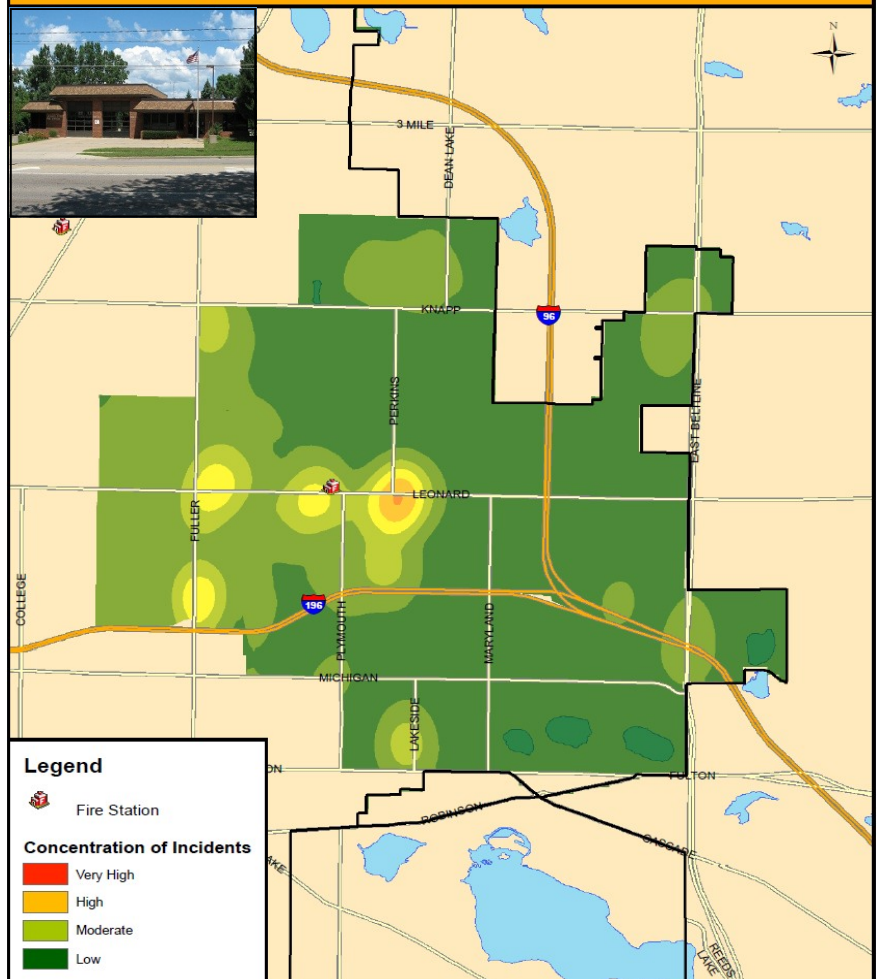
Distribution & Reliability Compliance



Simultaneous Calls



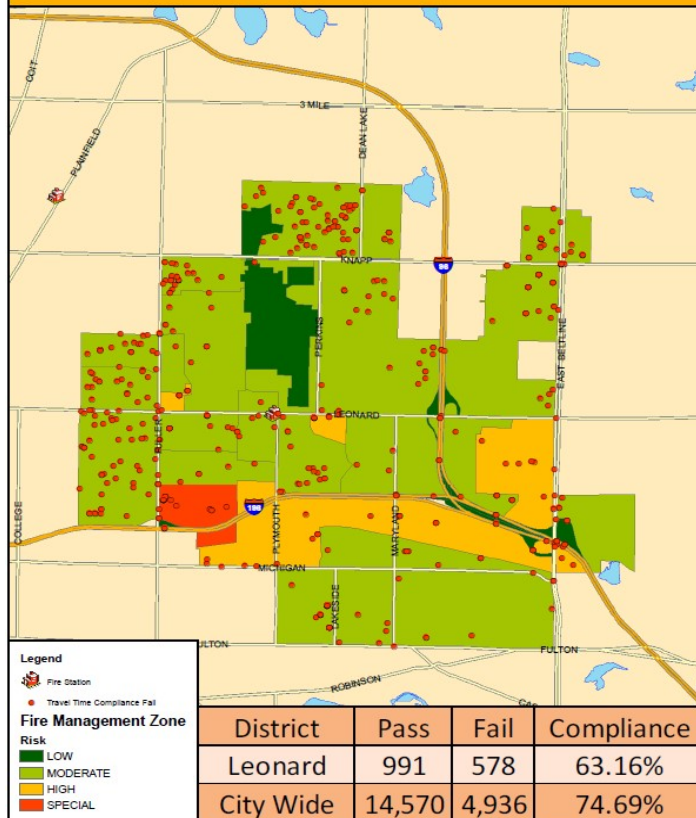
Hot Spot Map of 2017 Incidents



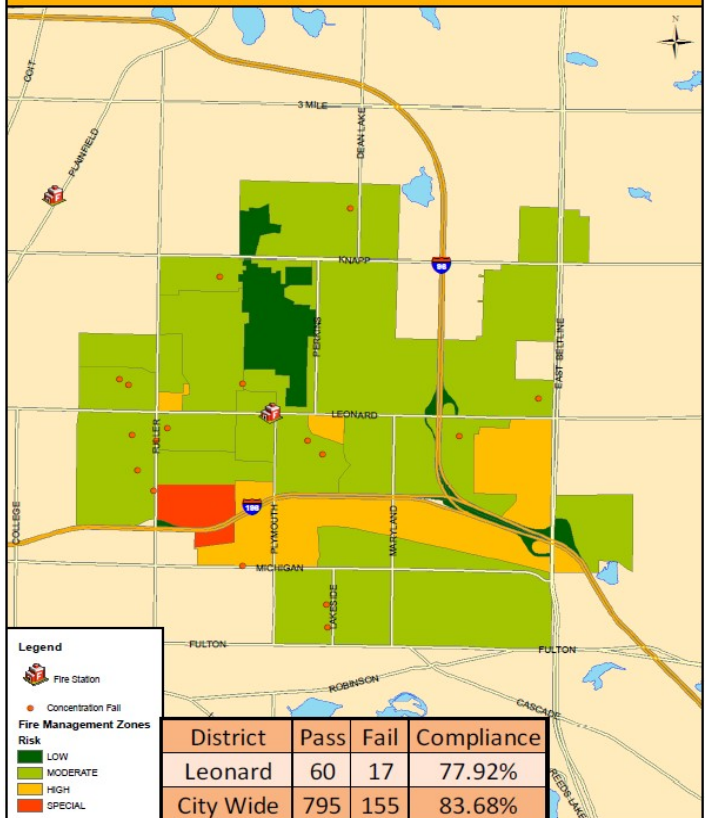
Temporal Analysis - 2017 EMS									Temporal Analysis - 2017 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	7	6	5	3	10	2	3	36	00:00-00:59	0	0	0	0	0	0	0	0
01:00-01:59	1	6	3	3	6	3	4	26	01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	4	7	4	5	4	3	4	31	02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	5	4	6	3	5	4	3	30	03:00-03:59	0	0	1	0	0	0	0	1
04:00-04:59	4	8	3	5	4	3	5	32	04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	8	4	1	6	3	2	6	30	05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	5	7	6	4	9	2	6	39	06:00-06:59	0	0	0	0	0	1	0	1
07:00-07:59	9	9	9	9	5	6	5	52	07:00-07:59	0	0	0	0	0	0	1	1
08:00-08:59	7	7	14	13	5	7	3	56	08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	9	12	13	8	14	10	7	73	09:00-09:59	0	1	0	0	0	0	0	1
10:00-10:59	6	9	17	9	12	10	7	70	10:00-10:59	0	1	0	0	1	0	0	2
11:00-11:59	8	9	8	11	14	9	4	63	11:00-11:59	0	0	1	0	0	1	1	3
12:00-12:59	7	11	10	7	9	9	8	61	12:00-12:59	0	0	0	0	0	0	1	1
13:00-13:59	11	10	11	10	13	10	6	71	13:00-13:59	0	0	0	1	0	0	0	1
14:00-14:59	11	6	10	11	11	13	4	66	14:00-14:59	0	0	0	0	0	1	1	2
15:00-15:59	8	11	9	12	16	10	9	75	15:00-15:59	0	0	0	0	0	0	0	0
16:00-16:59	7	11	12	15	7	12	5	69	16:00-16:59	1	0	0	0	1	0	0	2
17:00-17:59	4	16	10	10	12	14	11	77	17:00-17:59	1	0	0	0	1	0	0	2
18:00-18:59	13	6	9	6	12	6	8	60	18:00-18:59	0	0	0	0	0	1	0	1
19:00-19:59	8	10	8	9	11	12	8	66	19:00-19:59	0	1	0	0	0	0	0	1
20:00-20:59	8	7	13	7	7	7	9	58	20:00-20:59	0	0	1	0	0	1	0	2
21:00-21:59	7	9	12	11	9	4	10	62	21:00-21:59	0	0	0	1	0	0	0	1
22:00-22:59	7	7	8	8	4	4	6	44	22:00-22:59	0	0	0	0	0	1	1	1
23:00-23:59	3	7	3	3	2	11	5	34	23:00-23:59	0	0	0	0	0	0	0	0
Total	167	199	204	188	204	173	146	1,281	Total	2	3	3	2	3	5	5	23

LEONARD STREET STATION

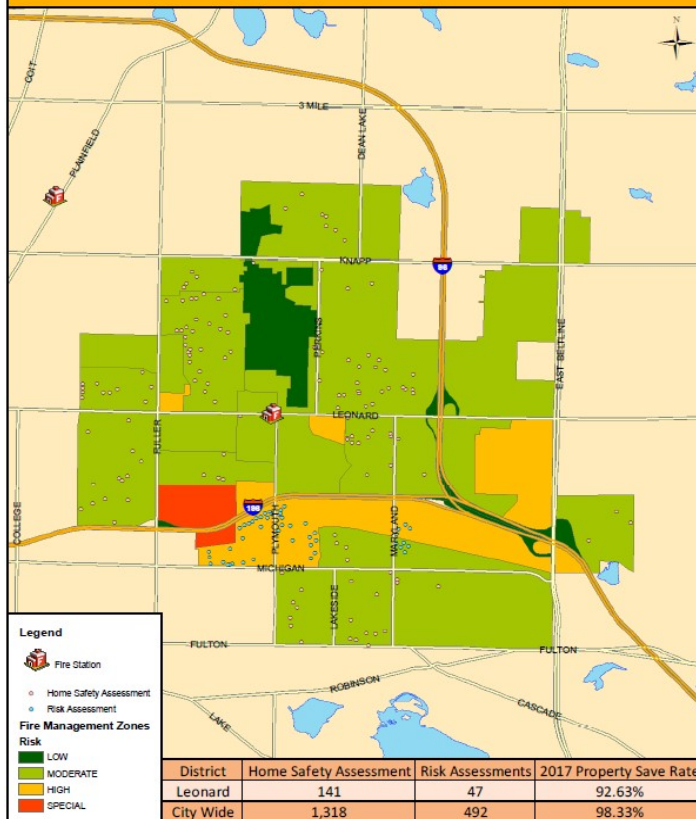
4 Minute Travel Compliance



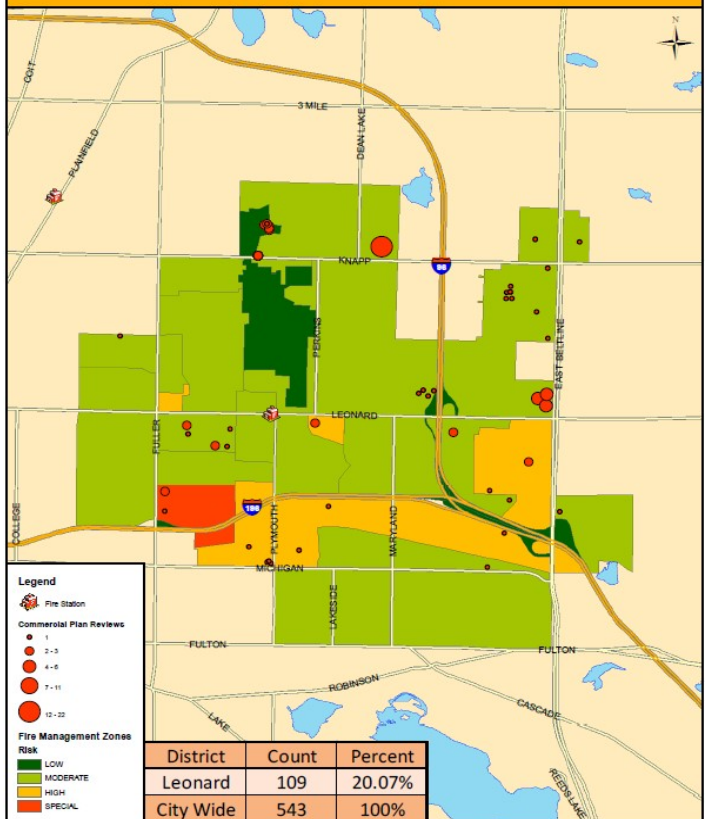
Effective Response Force Compliance



Community Risk Reduction Evaluation

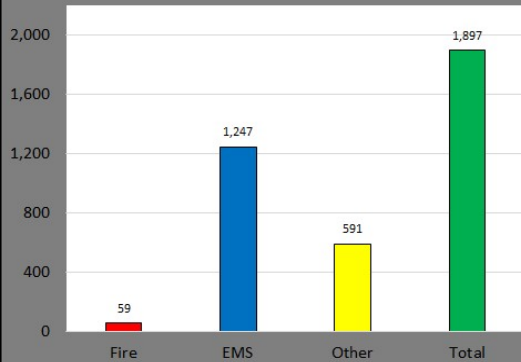


Commercial Plan Reviews

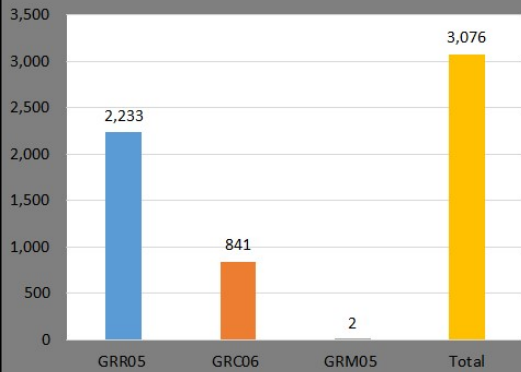


MONROE AVENUE STATION

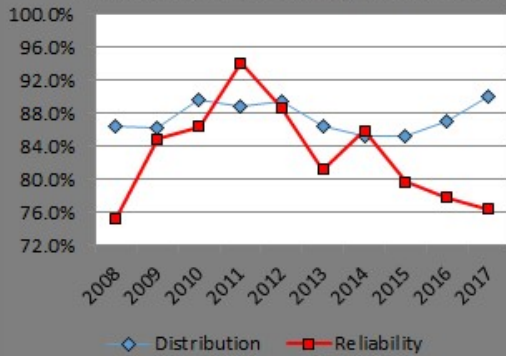
2017 Incidents in District



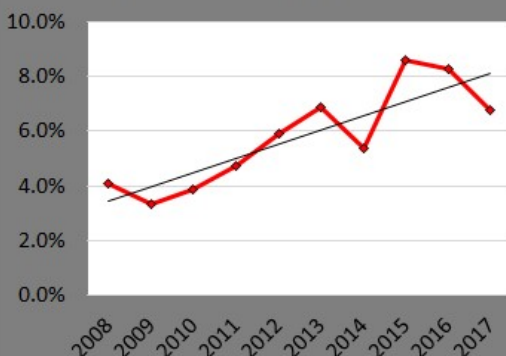
2017 Apparatus Responses



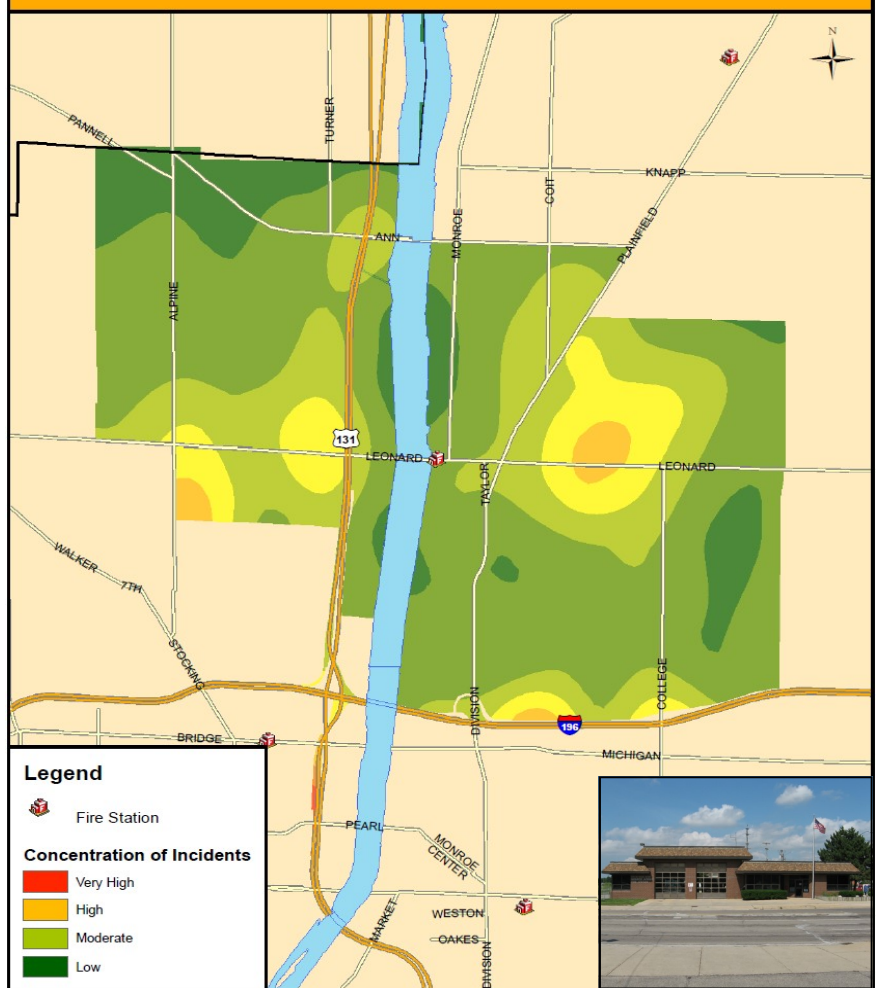
Distribution & Reliability Compliance



Simultaneous Calls



Hot Spot Map of 2017 Incidents



Temporal Analysis - 2017 EMS

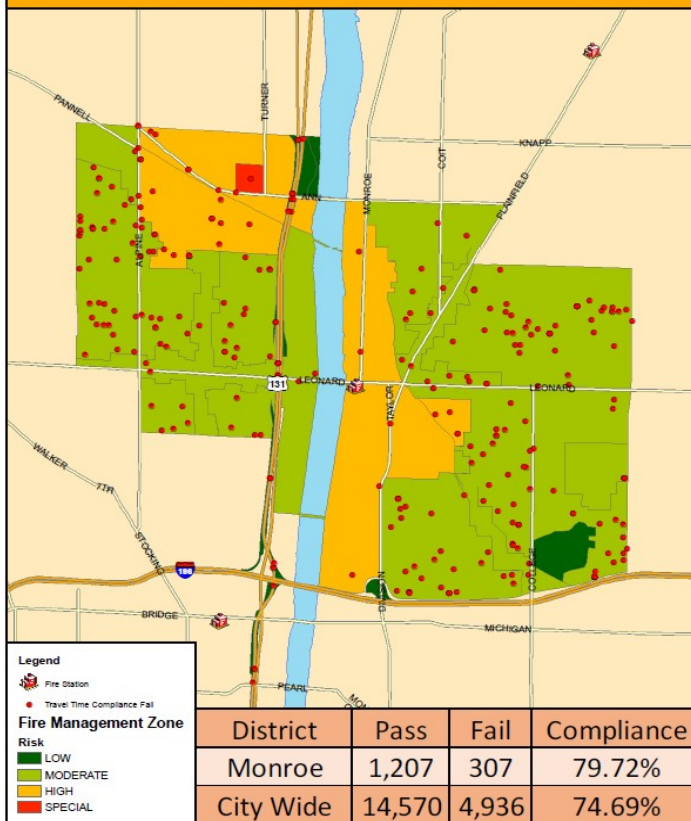
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	7	9	6	6	9	8	4	49
01:00-01:59	10	4	5	10	7	4	10	50
02:00-02:59	6	1	3	3	3	3	8	27
03:00-03:59	6	9	3	4	4	5	5	36
04:00-04:59	3	2	2	3	6	6	3	25
05:00-05:59	7	1	4	6	2	2	5	27
06:00-06:59	2	0	6	2	5	3	3	21
07:00-07:59	4	5	3	7	9	5	6	39
08:00-08:59	9	9	6	7	7	7	1	46
09:00-09:59	3	7	10	8	7	6	5	46
10:00-10:59	3	4	10	5	5	9	5	41
11:00-11:59	7	6	10	4	5	7	9	48
12:00-12:59	11	6	13	12	10	7	5	64
13:00-13:59	9	13	14	3	7	5	14	65
14:00-14:59	12	11	8	5	10	7	5	58
15:00-15:59	7	13	8	12	10	14	8	72
16:00-16:59	10	18	7	15	16	10	15	91
17:00-17:59	6	14	5	14	12	9	12	72
18:00-18:59	7	8	8	11	10	9	8	61
19:00-19:59	9	2	9	9	15	5	10	59
20:00-20:59	13	3	10	15	10	12	10	73
21:00-21:59	7	11	10	7	11	7	16	69
22:00-22:59	5	7	9	11	8	8	8	56
23:00-23:59	8	6	6	8	5	6	10	49

Temporal Analysis - 2017 Fire

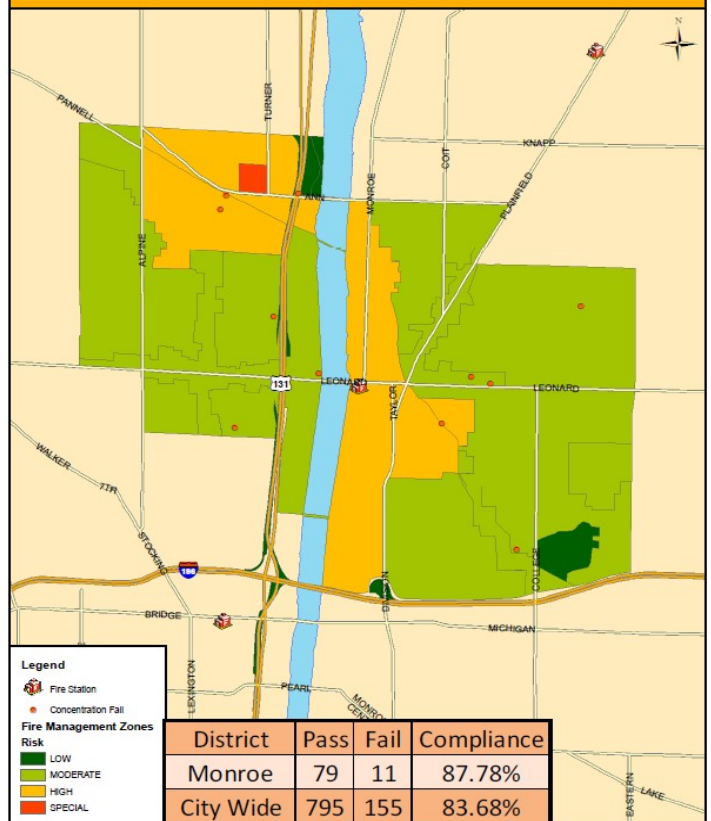
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	1	0	0	1	0	0	0	2
01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	1	0	0	0	0	0	0	1
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	1	1	0	0	0	0	2
07:00-07:59	1	0	0	0	0	0	0	1
08:00-08:59	1	0	1	0	0	0	0	2
09:00-09:59	0	1	0	1	0	0	1	3
10:00-10:59	0	0	0	1	1	1	0	3
11:00-11:59	0	0	0	2	0	1	1	4
12:00-12:59	0	1	1	0	0	1	0	3
13:00-13:59	0	0	1	0	0	0	0	1
14:00-14:59	1	1	0	0	1	1	0	4
15:00-15:59	1	1	1	0	0	0	0	3
16:00-16:59	1	0	1	0	1	0	0	3
17:00-17:59	0	0	0	1	3	0	2	6
18:00-18:59	1	1	2	0	0	2	2	8
19:00-19:59	0	0	2	0	1	0	0	3
20:00-20:59	2	0	0	0	1	0	0	3
21:00-21:59	1	0	0	0	0	0	1	2
22:00-22:59	0	0	0	0	0	1	0	1
23:00-23:59	0	0	1	0	0	1	0	2

MONROE AVENUE STATION

4 Minute Travel Compliance



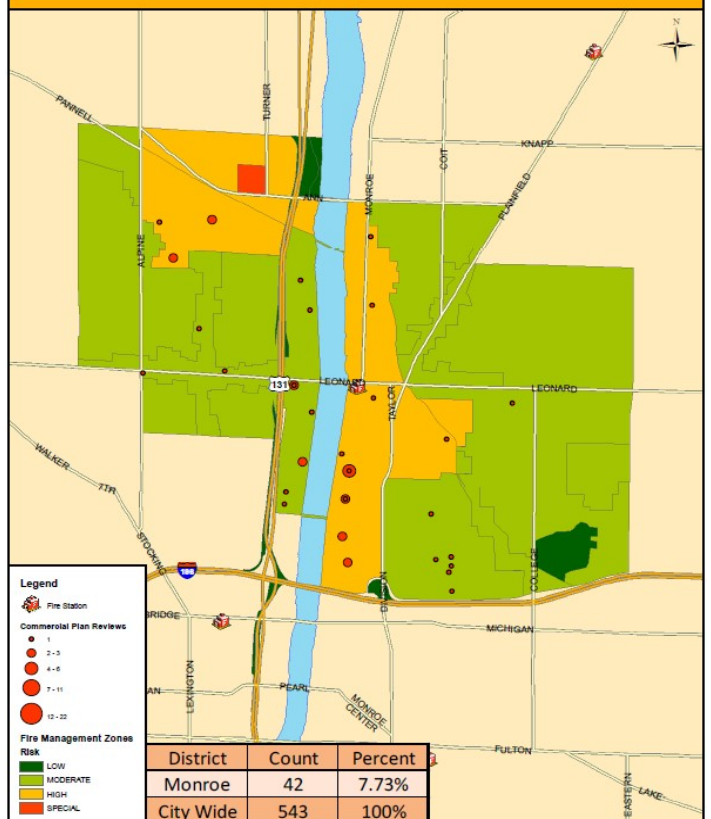
Effective Response Force Compliance



Community Risk Reduction Evaluation

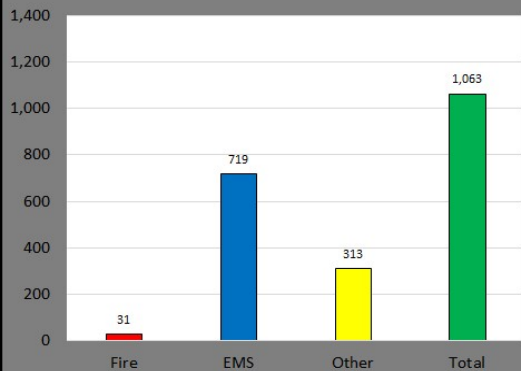


Commercial Plan Reviews

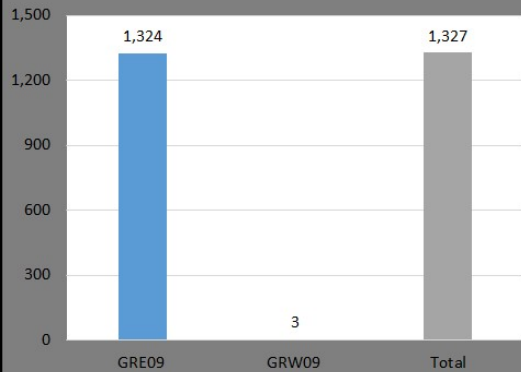


PLAINFIELD AVENUE STATION

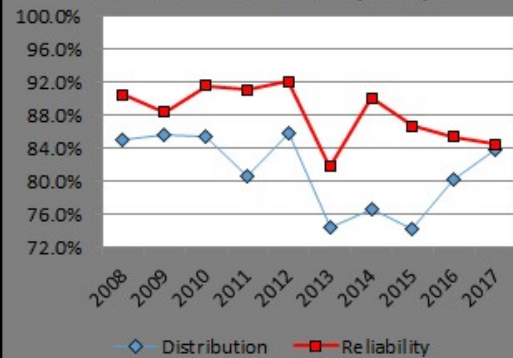
2017 Incidents in District



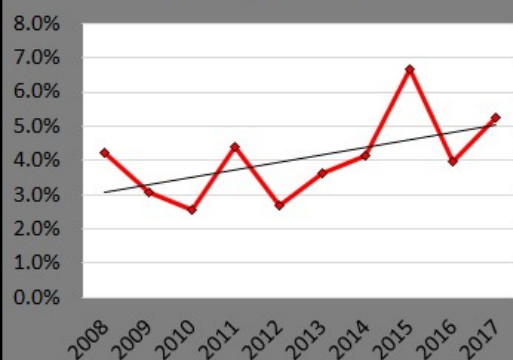
2017 Apparatus Responses



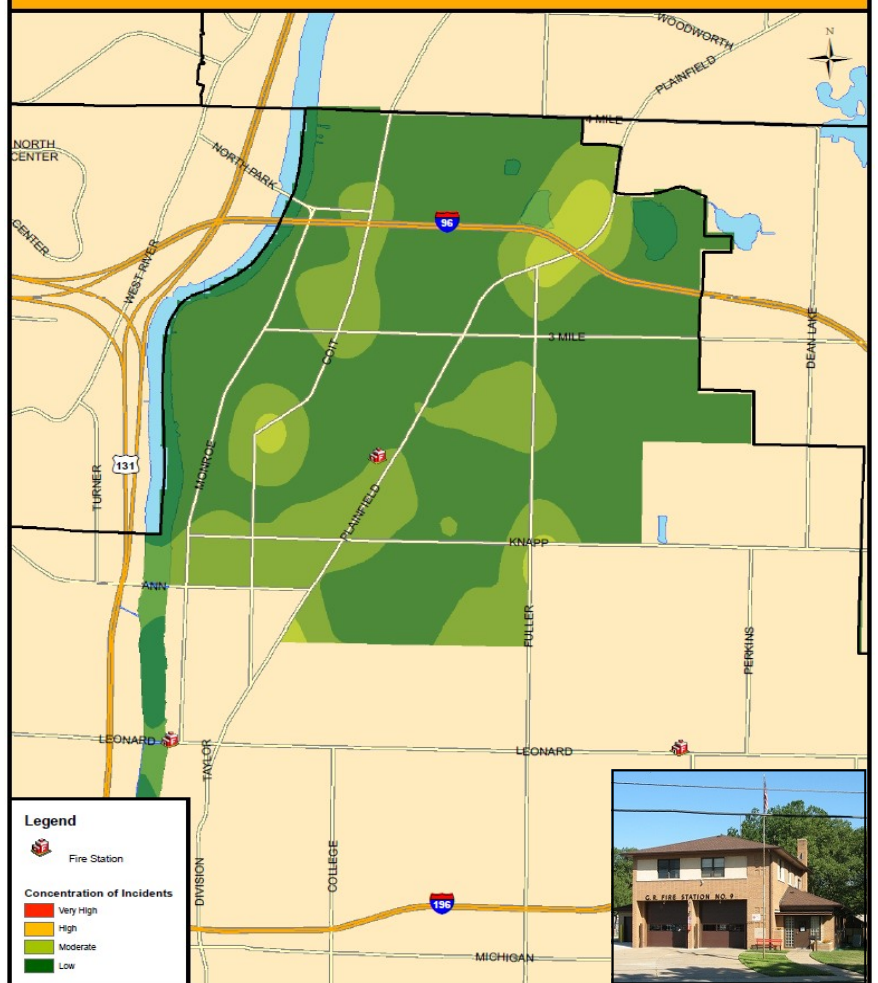
Distribution & Reliability Compliance



Simultaneous Calls



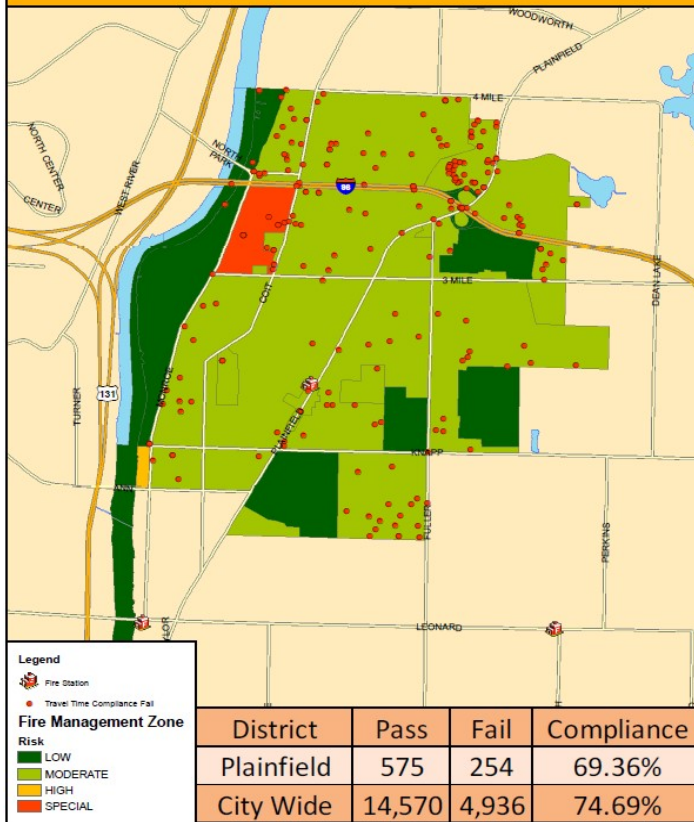
Hot Spot Map of 2017 Incidents



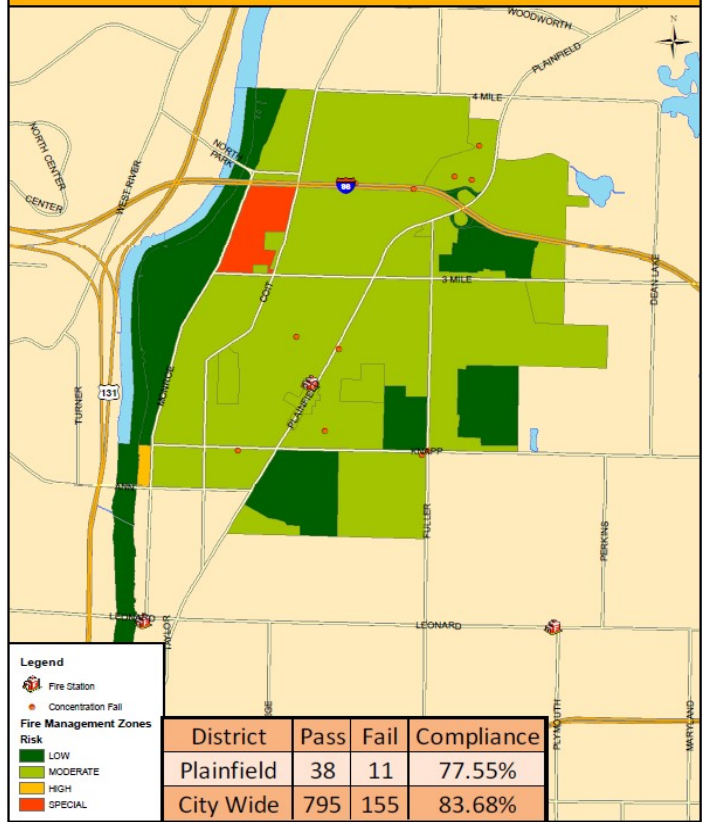
Temporal Analysis - 2017 EMS									Temporal Analysis - 2017 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	5	0	2	4	3	2	4	20	00:00-00:59	0	0	0	0	0	0	0	0
01:00-01:59	2	1	1	2	2	2	8	18	01:00-01:59	0	0	0	0	0	0	0	0
02:00-02:59	3	1	1	2	0	0	2	9	02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	0	3	1	4	2	3	4	17	03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	5	2	1	2	1	5	0	16	04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	4	1	2	2	0	2	11	05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	4	1	4	3	1	5	3	21	06:00-06:59	0	0	0	0	0	0	1	1
07:00-07:59	3	7	2	2	9	2	4	29	07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	4	8	6	2	3	4	1	28	08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	2	10	8	8	8	4	1	41	09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	1	11	6	8	7	5	2	40	10:00-10:59	1	0	0	0	0	0	0	1
11:00-11:59	5	6	5	9	5	3	1	34	11:00-11:59	0	0	0	0	0	0	0	0
12:00-12:59	10	3	7	12	6	4	8	50	12:00-12:59	0	0	0	1	0	1	0	2
13:00-13:59	5	6	5	5	7	6	5	39	13:00-13:59	1	0	0	0	0	0	1	2
14:00-14:59	3	4	3	7	5	3	7	32	14:00-14:59	3	0	1	0	0	0	0	4
15:00-15:59	2	5	3	6	7	3	4	30	15:00-15:59	1	0	1	1	0	0	1	4
16:00-16:59	3	10	3	5	5	4	6	36	16:00-16:59	0	0	1	0	0	0	1	2
17:00-17:59	7	3	3	8	4	10	4	39	17:00-17:59	0	0	0	0	0	0	0	0
18:00-18:59	5	10	5	3	5	6	6	40	18:00-18:59	0	0	1	0	0	0	1	2
19:00-19:59	5	11	4	4	4	9	1	38	19:00-19:59	1	0	2	2	0	1	0	6
20:00-20:59	5	6	3	6	2	10	5	37	20:00-20:59	0	0	0	0	0	1	0	1
21:00-21:59	3	7	6	5	8	6	10	45	21:00-21:59	0	0	0	0	1	0	1	2
22:00-22:59	1	5	2	5	5	5	8	31	22:00-22:59	0	1	0	0	0	0	0	1
23:00-23:59	7	3	3	3	4	4	2	26	23:00-23:59	0	0	0	0	0	0	0	0
Total	90	127	85	117	105	105	98	727	Total	7	1	6	4	1	3	6	28

PLAINFIELD AVENUE STATION

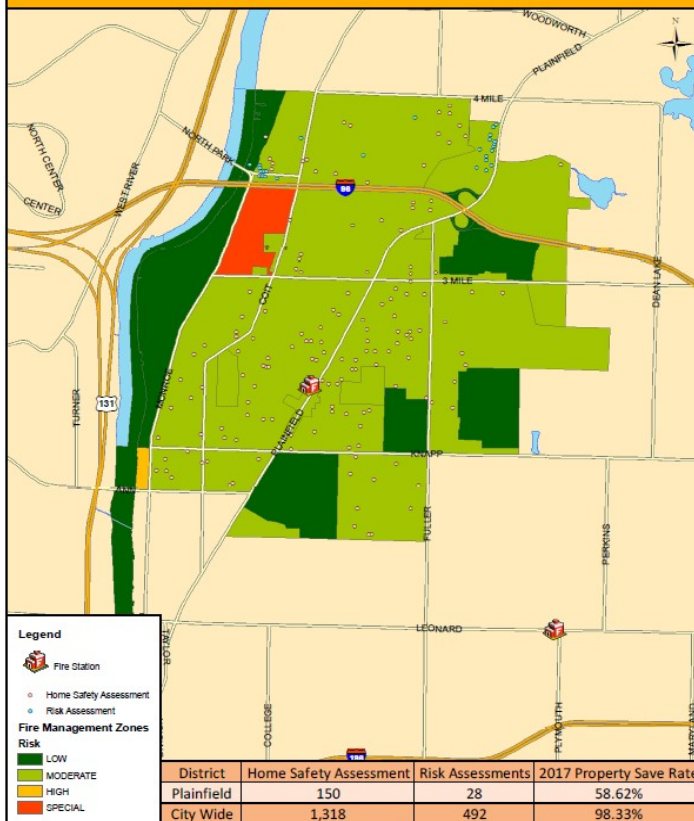
4 Minute Travel Compliance



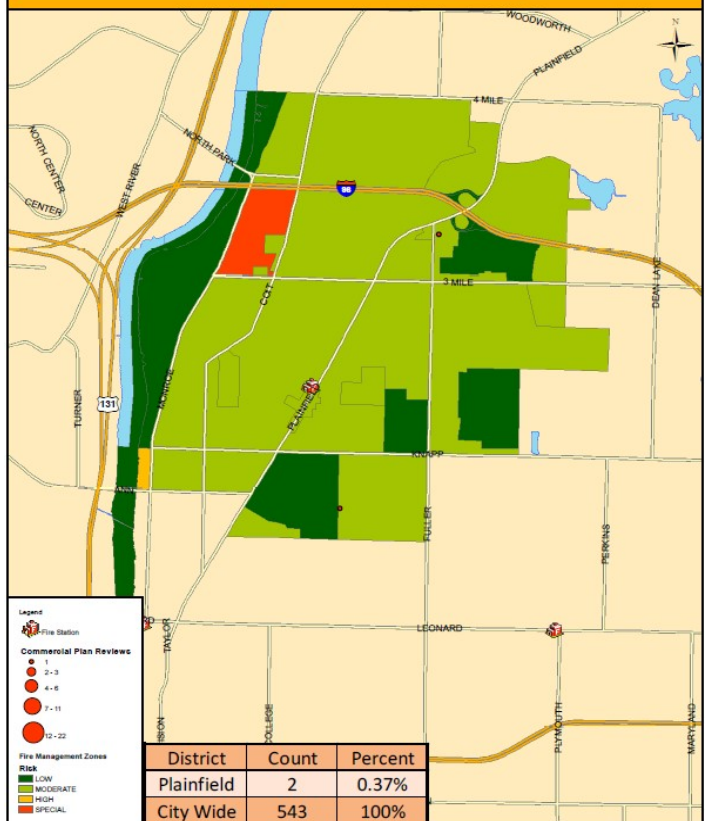
Effective Response Force Compliance



Community Risk Reduction Evaluation



Commercial Plan Reviews



CURRENT AND FUTURE DEPLOYMENT ANALYSIS

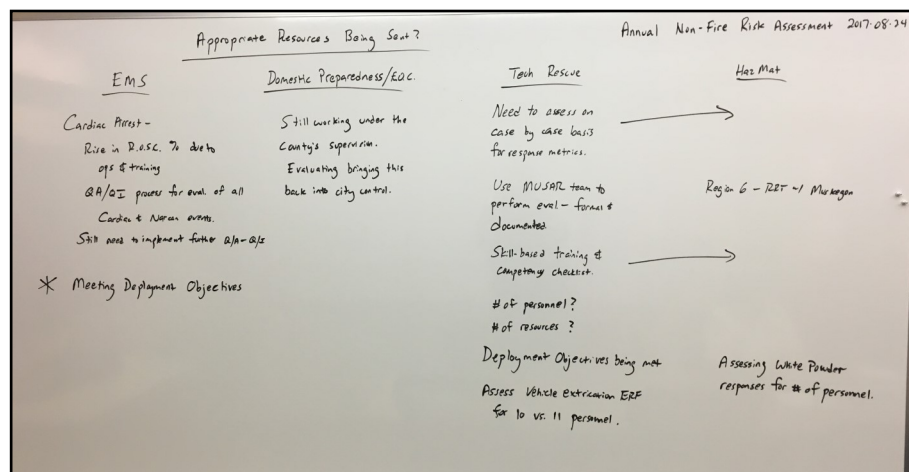
This page evaluates current and future deployment demands for the organization. Risk categorization, service impact considerations, and deployment practices are analyzed for efficiency and effectiveness measurements that consider overall response, consistency, reliability, resiliency and outcomes. The agency demonstrates that its current deployment strategy adequately addresses risk in the community, while adapting to or improving upon the effectiveness, efficiency and safety of its operations. A team representing all areas of the department met on August 24th to perform this analysis.

Fire

- Discussion was held regarding any deployment changes that need to be made in relation to the annual duty draw. At this time no changes to deployment or critical tasking are being considered.

EMS

- Currently meeting deployment objectives
- Return of Spontaneous Circulation has been addressed by operations and training
- Quality assurance is in place for all cardiac and Narcan deployments.
- Still need to implement further quality assurance for other call types.



Domestic Preparedness/EOC

- Still working with the county emergency manager to provide these services.
- The department is compliant under the current arrangement.
- The GRFD is working towards bringing these duties back in house.

Technical Rescue

- Due to the low overall number of incidents for most call types, response will need to be analyzed on a case-by-case basis for metrics.
- Plans are in place to use the MUSAR team to perform formal and documented evaluations.
- Discussion over skills-based training and competency checklist.
- Review of Effective Response Forces for all tech rescue types found that deployment objectives are being met for these alarm types.
- An assessment of vehicle extrications will be made to determine if 10 personnel meet the critical tasking needs, as opposed to the current 11.

Hazardous Materials

- Due to the low overall number of incidents for most call types, response will need to be analyzed on a case-by-case basis for metrics.
- Need to review the Region 6 agreement with Muskegon and operational considerations relating to that relationship.
- Discussion over how to conduct skills-based training and competency checklist
- Review of Effective Response Forces for hazardous materials responses found that deployment objectives are being met for these alarm types.
- White Powder responses will be assessed to determine if the correct resources are being sent to these incidents.

PERFORMANCE GAP ANALYSIS

This page evaluates performance gaps for the total response area, such as inadequacies, inconsistencies, and negative trends. In addition, this data compares the current operational capabilities and capacity of the department to the identified risk level within the community.

Once the gaps have been identified, a continuous improvement plan will be developed and tracked throughout the following year to address these existing gaps and variations.

Distribution

- Page 39 - **Citywide Distribution** increased slightly to **86.8%**. This gap is driven by large single company districts on the edge of the city and increasing population/risk.
- Page 62 - **Leonard Distribution** fell to **79.05%**, due to increased call volume at the boundaries of its district.
- Page 58 - **Kalamazoo Distribution** at **73.28%**, also due to a large amount of calls at the southern and northern extremes of the district.

Concentration (Effective Response Force)

- Concentration compliance maps measure concentration for all call types.
- Page 51 - **Chester ERF** is at **77.11%** lagging slightly behind the city wide average of 83.68%.
- Page 63 - **Leonard ERF** is at **77.92%** a significant improvement over the 46.55% mark in 2016.
- Page 67 - **Plainfield ERF** is at **77.55%**, a slight dip from 2016's 80.00% .

Reliability

- Page 64 - **Monroe Reliability** at **76.35%**. This can be attributed to responding as a rescue on the north half of the city without a second unit in the station, and covering for Plainfield or Leonard when they experience simultaneous alarms.

Simultaneous

Bridge, Kalamazoo and LaGrave districts call for continued analysis as their simultaneous trends continue to rise and impact multiple surrounding districts.

- Page 50 - **Chester Simultaneous** at **11.59%**, required assistance 263 times.
- Page 52 and page 54 - **Covell Station** at **9.39%** and **Division Station** at **9.31%**, continue to warrant attention with very high simultaneous alarm rates for single unit districts.

Benchmark Performance Statements

- Page 31 - **Low risk fire response** is over target by 1 minutes and 26 seconds.
- Page 31 - **Moderate risk fire response** is over target by 32 seconds.
- Page 32 - **High risk fire response** is over target by 44 seconds.
- Page 32 - **Low risk EMS** is over target by 38 seconds.
- Page 33 - **Moderate risk EMS** is over target by 1 minute and 12 seconds.
- Page 33 - **High risk EMS** is over target by 1 minute and 19 seconds.

All other response types had insufficient data sets to perform fractile analysis.

**FOR FURTHER INFORMATION ON THIS
ANNUAL REPORT PLEASE CONTACT THE
GRAND RAPIDS FIRE DEPARTMENT
PLANNING DIVISION
616-456-3900
WWW.GRCITY.US/FIRE**

