

# 2020 GRFD ANNUAL REPORT



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# 2020 SUMMARY

## FY 2021 FISCAL

CITY BUDGET .....	\$530,736,624
CITY GENERAL FUND .....	\$142,892,121
GRFD ADOPTED BUDGET.....	\$31,942,351

## 2020 BREAK – EVEN DATE

MARCH 8TH

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

## PERSONNEL

2020 PERSONNEL (100%) .....	204 (YEAR END)
OPERATIONS PERSONNEL (86.27%) .....	176
ADMIN. PERSONNEL (7.35%) .....	15
PREVENTION PERSONNEL (4.90%) .....	10
TRAINING PERSONNEL (1.47%) .....	3

## EMERGENCY OPERATIONS

APPARATUS RESPONSES .....	31,580
EMERGENCY INCIDENTS (ALL TYPES) .....	23,120
EMERGENCY MEDICAL SERVICE INCIDENTS .....	15,539

## FIRE INCIDENT DATA

FIRES AND FIRE ALARMS .....	2,154
FIRES EXTINGUISHED .....	666
PROPERTY SAVED RATE .....	96.90%
PROPERTY SAVED VALUE .....	\$197,935,000
PROPERTY LOSS RATE .....	3.10%
PROPERTY LOSS VALUE .....	\$6,334,301
CIVILIAN INJURIES .....	7
CIVILIAN DEATHS .....	9
FIREFIGHTER INJURIES .....	11
FIREFIGHTER DEATHS .....	0



# FIRE CHIEF'S MESSAGE

## FIRE CHIEF, JOHN S. LEHMAN



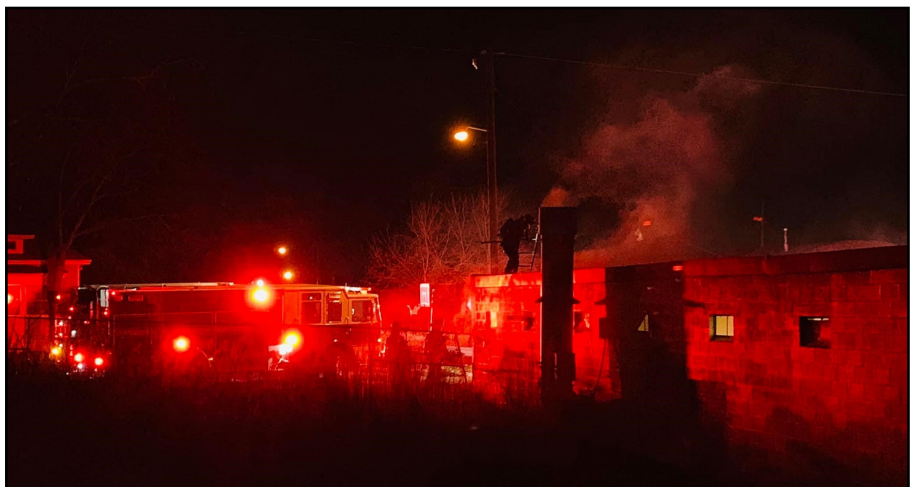
The men and women of the Grand Rapids Fire Department demonstrate their professionalism and commitment daily, serving and protecting everyone in our community. Together, we have worked hard to strengthen our organization, develop our personnel, improve our equipment and facilities, and provide more equitable service delivery. In May 2020, we were extremely sad to have lost our Chaplain Father Dennis Morrow to a long fight with cancer. His imprint on our department is an important testament to the relationship he built with the GRFD during 44 years of service to us. He touched many of us with his passion and love of our history and his compassion and humor. We are all better off for his involvement in our lives and his guidance will be sorely missed.

The Grand Rapids Fire Department strives for excellence and professionalism. Last year we achieved an ISO grading level of 1, making us the first fire department in the State of Michigan with that designation. We have been recommended for accreditation for a second time and will appear before the Commission on Fire Accreditation International this summer. In September we will begin building our 4th strategic plan. We use these as tools to measure our outcomes and assist in setting direction.

2020 has provided some challenges which no one living today in the fire service can say that they have any experience with. We have experienced the extreme effects of COVID-19, impacting both our employees and their families. COVID-19 forced the department to reexamine its daily operations to manage the pandemic, and also drove changes to the department's strategic planning timeline.



We have dealt with civil unrest in our community and suffered the destruction of some vibrant areas of our community. Civil unrest also highlighted the need to improve the City's Emergency Operations Plan, ensuring a framework for an all-hazards response to any large-scale emergency incident.

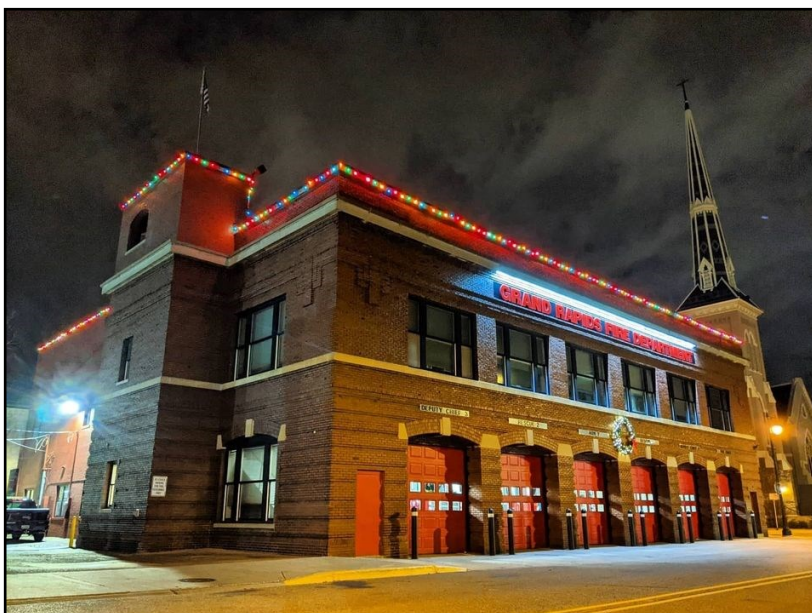




To keep everything moving, we need a fleet that is dependable and crews that can maintain them. In 2020, we introduced 17 new vehicles to our fleet, 8 gently used vehicles to support our reserve fleet and 9 new vehicles to keep our front line up to date. Additionally, we acquired an airboat which will assist with our changing river environment.



As attached as we become to our fire houses, nothing is built to last forever. We do face challenges in the fact we have three stations over or approaching 100 years old. We recently purchased land on South Division to provide a larger site for the replacement of Station 10 in 2026. We also hope to look at a major remodel of Station 11 and ultimately develop a plan around a station replacement schedule.



There has been much more accomplished than can be put into this letter. It is important to praise those in our department who have retired after years of working to pave the way for our success today. The men and women working today are as solid as they come. The Honor, Integrity, Loyalty, Team Work and Excellence of our work force is something that drives us every day.

Fraternally,

A handwritten signature in black ink, likely belonging to Chief John S. Lehman.

Chief John S. Lehman





## **MISSION STATEMENT**

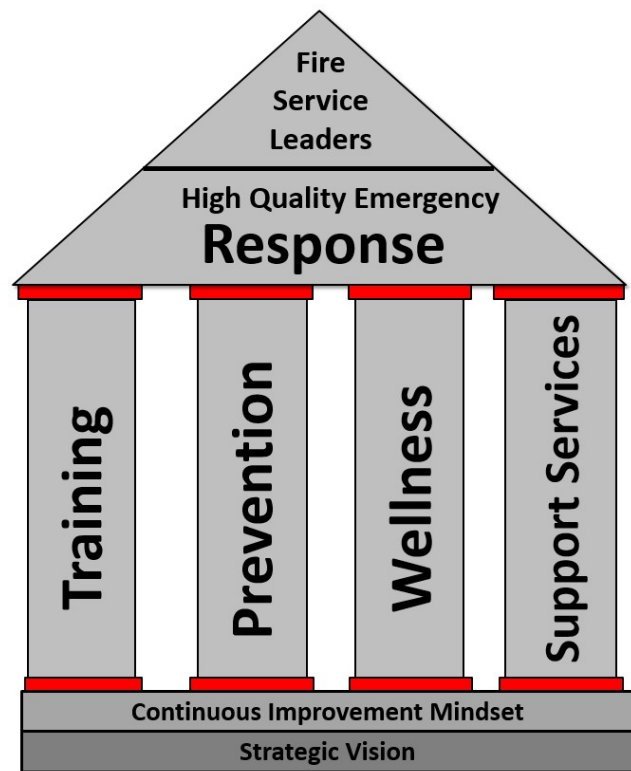
THE GRAND RAPIDS FIRE DEPARTMENT  
VALUES PEOPLE BY SAVING LIVES,  
PROTECTING PROPERTY, AND RESPONDING TO  
THE NEEDS OF OUR COMMUNITY

## **VISION STATEMENT**

PROVIDING WORLD CLASS FIRE SERVICES  
FOR OUR COMMUNITY BY EMPLOYING A  
DIVERSE WORKFORCE WHICH RESPECTS,  
VALUES, AND DEVELOPS OUR MEMBERS

## **VALUE STATEMENT**

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



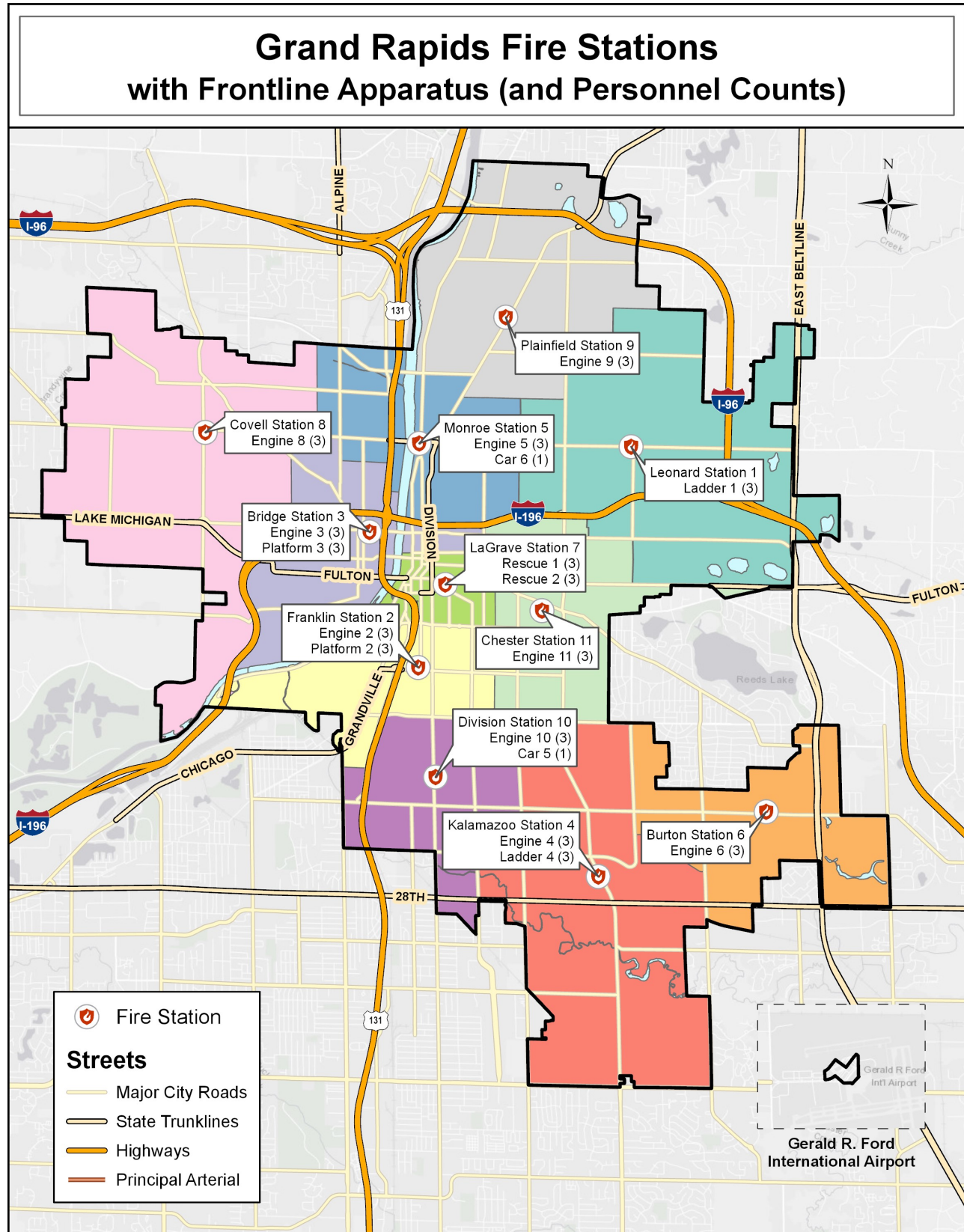
## **GRFD PILLARS**





# 2020 GRFD JURISDICTIONAL MAP

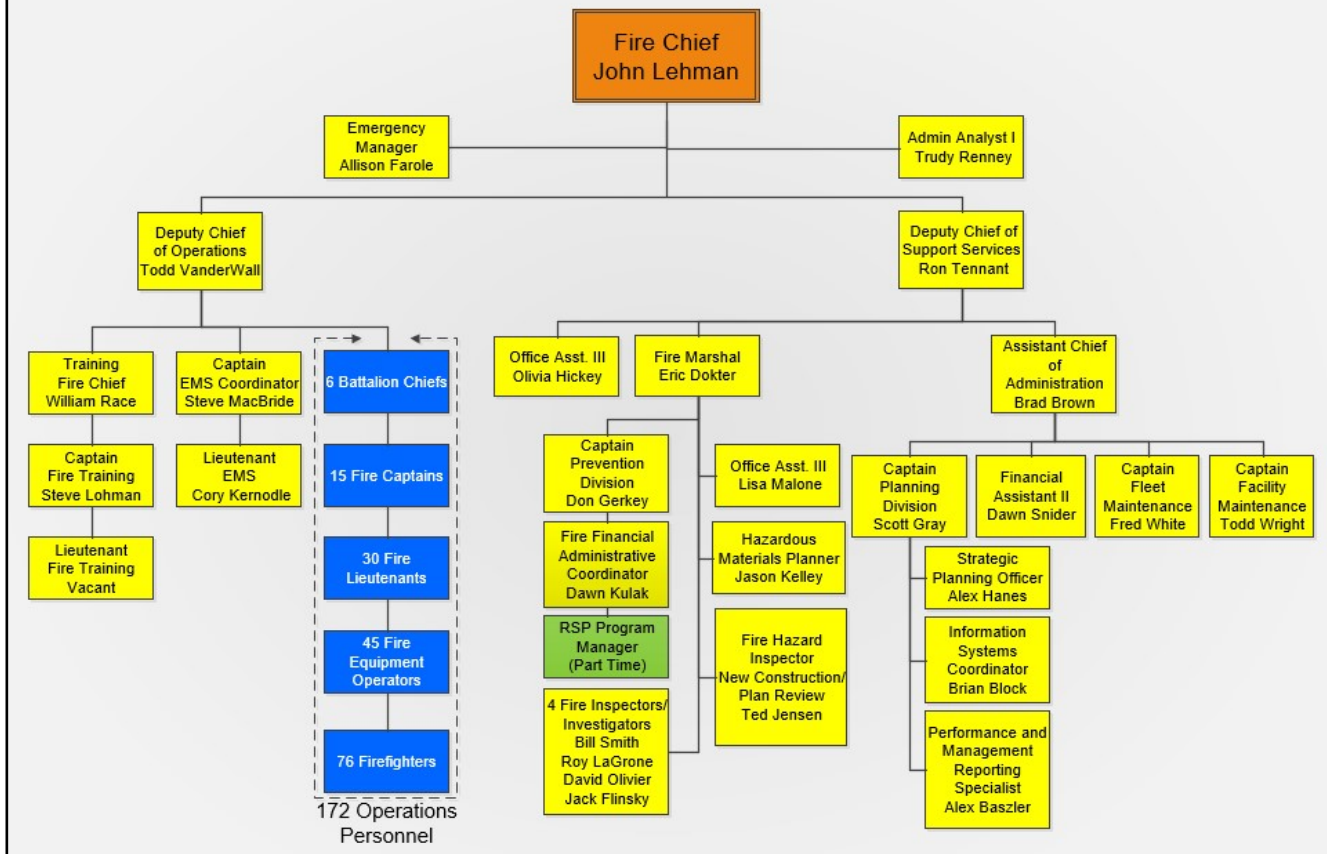
## WITH ASSIGNED APPARATUS (PERSONNEL COUNTS)





# GRFD ORGANIZATIONAL CHART

GRFD 2020 Organizational Chart



## FY19-22 STRATEGIC PLAN

### MISSION

The Grand Rapids Fire Department values people by saving lives, protecting property, and responding to the needs of our community






### VISION

Providing world class fire services for our community by employing a diverse workforce which respects, values, and develops our members

### VALUES

Honesty • Integrity • Loyalty • Teamwork • Excellence



	 <b>OWNER</b> Todd VanderWall <b>BACKUP</b> Chief Lehman	 <b>OWNER</b> Bill Race <b>BACKUP</b> Steve Lohman	 <b>OWNER</b> Eric Dokter <b>BACKUP</b> Don Gerkey	 <b>OWNER</b> Brad Brown <b>BACKUP</b> Kathy Thompson	 <b>OWNER</b> Ron Tennant <b>BACKUP</b> Eric Freeman
DESIRED OUTCOME	Effective all hazards deployment model with appropriate staff and apparatus	Provide the appropriate skills and education to ensure sustainability and growth at all ranks	Create a safer community by implementing an effective community risk reduction program	A healthier workforce through researching, designing, and implementing a structured wellness program	Provide continuous improvement of resources in a deliberate and planned manner
FY19 STRATEGIES	Increase community awareness of firefighting, EMS, and Special Operations	Comprehensive training curriculum development	Perform a community risk assessment to identify areas of concern	Research baseline insurance costs to ensure best value	Ensure continuity of operations through development of a promotion pathway and succession plan
FY20 STRATEGIES	Ensure appropriate response to high-risk building and events	Implementation of training curriculum	Develop formal community risk reduction modules	Design and develop a structured wellness program	Develop of a diverse hiring plan to ensure our workforce represents the community we serve
FY21 STRATEGIES	Ensure appropriate response to high-risk buildings and events	Make adjustments to the training curriculum based on current conditions (COVID-19)	Produce community risk reduction plans that align with Vision 2020	Address identified gaps in the wellness program	Provide comprehensive asset management in a fiscally responsible manner
FY22 STRATEGIES	Increase staffing levels to meet community risks	Evaluate whether the training program ensures sustainability and growth at all ranks	Implement community risk reduction plans	Evaluate program and focus on succession planning	Incorporate Emergency Management, COVID-19, and Fleet & Facilities as GRFD focal areas

v 2020.1



# SUPPORT SERVICES

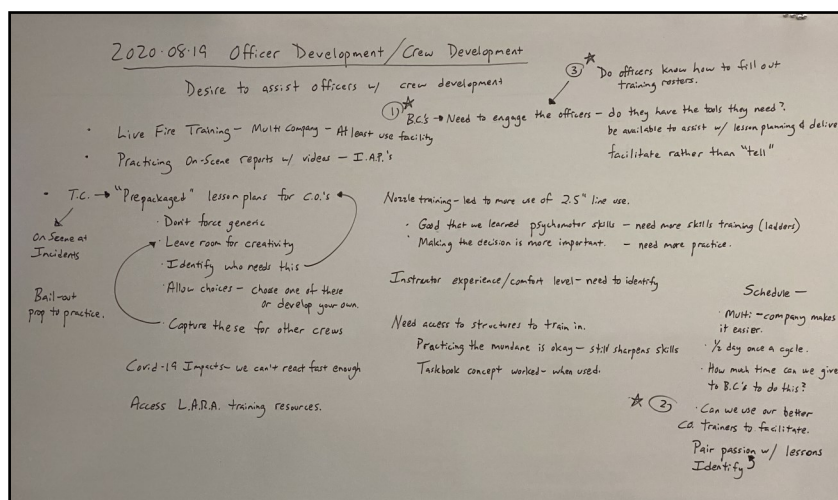
## DEPUTY FIRE CHIEF RON TENNANT



The Deputy Chief of Support Services primary responsibilities are personnel and human resources related issues within the Grand Rapids Fire Department. This includes direct responsibility for the FY19–22 Support Services strategic and operational plan outcomes, strategies, goals and tasks, as well as supervision of the assistant chief, fire marshal and an office assistant III. The support services office also provides oversight for the public information officer, Fire Match program, recruitment, and the critical incident stress management/behavioral health programs.

Additional responsibilities include:

- Managing the monthly Command Staff meetings.
- Management, supervision and scheduling of personnel assigned to light duty.
- Oversight and administration of the scheduling and documentation of our alternative work schedules for 40 hour personnel
- Liaison to the City of Grand Rapids Office of Oversight and Public Accountability, investigate and resolve rules violations, investigate and resolve externally generated complaints, review and investigate fire department injuries, vehicle crashes, damaged and/or lost equipment
- Late for Roll Call Review
- Employee evaluation administration, management and review
- Management and oversight of leave usage, including Military, Sick, FMLA, Parental and Vacation (including administering the annual suppression vacation draws),
- Regular meetings and frequent consultations with Labor Executives
- Updating SOPs, SOGs, personnel, and other city departments during implementation of the changes negotiated in the 2019 – 2022 IAFF Labor Agreement
- ◇ 2020 Meetings with IAFF Leadership: 16
- Managing retirement services, equipment collection, and exit interviews for retiring personnel.
- Review and approval of bi-weekly payroll submissions.





# SUPPORT SERVICES

## THE 2020 COVID-19 PANDEMIC



Like every other aspect of society, COVID-19 had a significant impact on the Grand Rapids Fire Department. A significant portion of time and resources were focused on dealing with the impact of the disease, and many of the personnel related side effects that resulted. Many areas addressed were under the responsibility of Support Services. Most of these initiatives were in collaboration with other fire department partners, including Craig Coulson, Mary Karcis and Ken Godwin of the Risk Management Department, Lance Corey of Kent County Emergency Medical Services (KCEMS), Sgt. Brendan Albert of the Grand Rapids Police Department and our department Physician, Dr. Julianne Little of our occupational health services provider Med One.

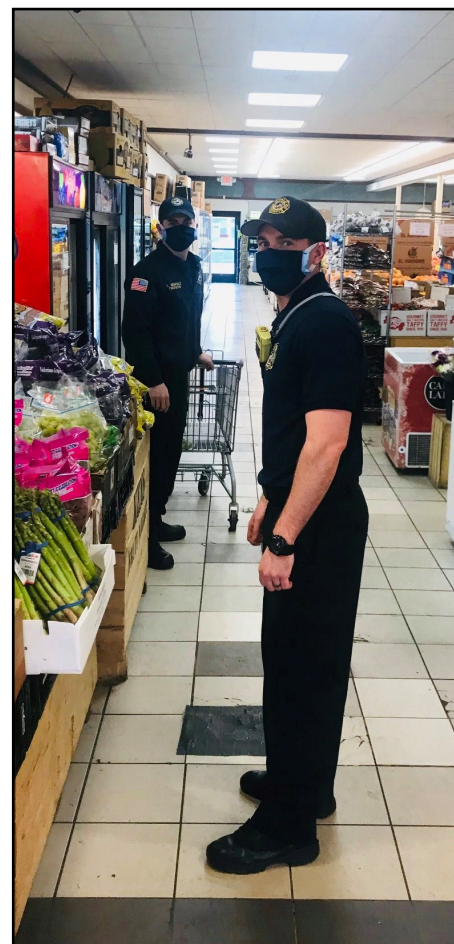
### GRFD Personnel Affected

The Center for Disease Control (CDC), Kent County Health Department (KCHD), KCEMS and Governor of Michigan Executive orders all governed many of the actions we had to take to continue to provide our services to the community in a safe manner. Primary among these responsibilities was dealing with employees infected by COVID-19, employees who had close contact with those infected, employees who had symptoms but were not yet diagnosed, and those exposed on scene to a patient diagnosed or potentially having COVID-19. Questions answered included when they should work and when they should not, how long they should be off duty, what to do if they were in close contact with others, how to go about getting tested, and getting cleared medically to return to duty. A Standard of Work was developed to address how employees and the organization would respond when each of these situations was encountered. We worked to not only develop our Standard of Work, but also determine the details of how we would operate within that document, then review and update it 6 times over the course of the year as additional information and new directives were issued. We were also able to assist the City of Grand Rapids and the Risk Management Office in developing similar directives for all City employees.

The City of Grand Rapids took the proactive approach to protecting our service by allowing for personnel who were ordered off duty due to the pandemic to be off without charge to leave. This undoubtedly ensured that personnel who did indeed or may have been suffering from the illness were not tempted to report to duty and potentially infect others.

### Safety

Support Services was called upon to assist other GRFD initiatives in how to safely carry out their responsibilities and duties during the pandemic. This included working with the Wellness Pillar to build a Safety Plan that would allow “O2X” training to proceed in a safe and protected manner. Other training safety assessments included CPR Safety as well as the Firefighter Stand Down Day deployment of “Traffic Incident Management” training.





# THE 2020 COVID-19 PANDEMIC



## Employee Testing

The Support Services office twice managed the “Mass Testing” of personnel to attempt to identify the true impact of the infection on our organization. In May, we worked with the Kent County Health Department to provide the non-mandated test to employees at the Grand Rapids Fire Department Training Center. In August, we did the same thing with Spectrum Health. We were able to develop a strong working relationship with the Spectrum Health COVID-19 testing operation. Their manager, Carrissa Stalsonburg, worked hard for us to be able to provide the August opportunity. In addition, as members had close contact with infected people, we always required a test for personnel to return to work. Carrissa was able to work out a system that allowed us to efficiently schedule COVID tests for our employees and provide expedited results. Our members were nearly always able to be tested as soon as it was effective to test, and we nearly always had results back within 24 hours, versus the typical 3 – 5 days for the general public. This effort undoubtedly kept many more of our personnel from becoming infected and put available personnel back to work much more quickly which reduced the impact on our customer service during their emergencies.

## Vaccination

As the year came to a close, vaccinations had been approved for emergency use in the nation, and licensed emergency medical service providers were among the first group to be able to receive the vaccinations. Support Services worked with the Kent County Health Department, Grand Rapids Emergency Manager, and the Risk Management Department to develop a plan for providing for the vaccination of employees desiring to be vaccinated.



## Specialized Leave

Office Assistant III (Payroll) Olivia Hickey has had a tremendous amount of work keeping up with all the different and new leaves necessitated by the pandemic. Due to HIPAA legalities, we are not able to always mark leave with enough detail in our primary staffing and payroll database to keep clear records, so all entries had to be handled manually. Specialized leave included Stay Home Ordered Leave (SHORD), Emergency Personal Sick Leave (EPSL), Emergency Family Medical Leave Act (EFMLA) and Hazard Leave Accrual and use. Typically, the OAI (Payroll) has some time to assist other clerical staff at headquarters with their duties. This was not the case for the better part of 2020.

## The Fire Department Experience

For most of the time over the course of the year, the Fire Department typically had one to four employees off duty for the variety of pandemic related issues we could encounter. However, we experienced two surges in cases in August and November. The November surge resulted in approximately 50% of our suppression personnel ordered off duty at one point. The number of cases experienced required us to bring Battalion Chief Freeman to work as Acting Deputy Chief to assist with managing the volume of phone calls, testing, contact tracing, and record keeping demanded by our experience.

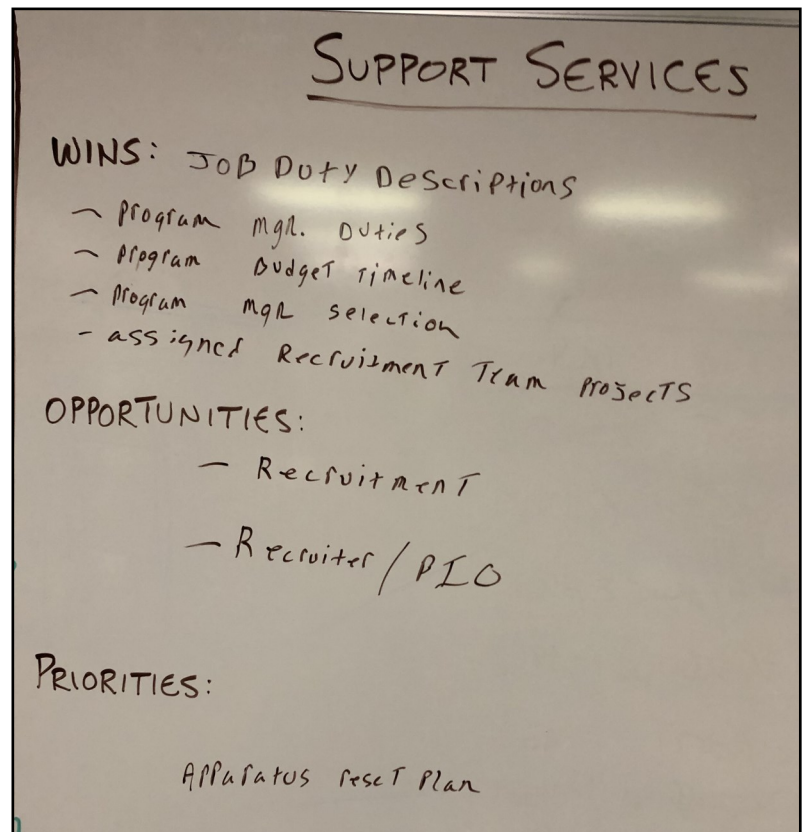


# SUPPORT SERVICES

## PLANNING AND PILLAR OVERSIGHT



Chief Tennant is the owner of the Support Services Pillar, and is supported by Battalion Chief Eric Freeman, with Quality Assurance oversight by Fire Chief Lehman. 6-month Strategic Plan review meetings are held to ensure progress and accountability as well as provide guidance and direction in the pursuit of completion of the FY19 – 22 Operational Plan. Those occurred in January and September. The review team consists of Chiefs Tennant, Mark Noorman and Eric Freeman, Capt. Craig VanderWall, Lt. Joel Boyer, EO Joel MacDonald and Trudy Renney. Due to the pandemic, the 3 Year Strategic Plan was extended through a fourth year. This resulted in new goals and tasks being identified for FY22. In the calendar year, we moved from 78% to 81% tasks completed, 14% to 7% in process, and from 8% to 11% not started.



FY19 - FY22 Operational Plan		Desired Outcome: Provide continuous improvement of resources in a deliberate and planned manner.				Metrics			
	Owner	Deputy Chief Ron Tennant				Tasks	Count	Percentage	Last Updated
	Support	Battalion Chief Eric Freeman				Not Started	10	10.31%	
						In Process	5	5.15%	
						Complete	82	84.54%	
						Total	97	100.00%	1/20/2021
<b>FY19 Strategy:</b> Ensure continuity of operations through development of a promotional pathway and succession plan.		<b>FY20 Strategy:</b> Develop a diverse hiring plan to ensure our workforce represents the community we serve.		<b>FY21 Strategy:</b> Provide comprehensive asset management in a fiscally responsible manner.		<b>FY22 Strategy:</b> Incorporate Emergency Management, Covid-19, and Fleet & Facilities as GRFD focal areas.			
<b>Goal 1: Establish a continuity of operations framework.</b>		<b>Goal 1: Youth Outreach</b>		<b>Goal 1: Program Management Consistency</b>		<b>Goal 1: Develop plans and finish work effected by COVID-19</b>			
Tasks		Tasks		Tasks		Tasks			
1. Define the actual job duties for positions		1. Establish an Explorer Program/Cadet Program		1. Assign coordinators to reduce the span of control		1. Implement the Explorer Program			
2. Define the actual job duties for program managers		2. Maintain the ROTC program		2. Establish a selection process for program managers		2. Use the intern/cadet/Grow 1000 programs as needed			
3. Identify essential tasks		3. Conduct a Summer Youth Academy		3. Create standard work for essential processes		3. Follow through with EO promotions			
4. Identify back-up personnel		4. Develop 2nd grade presentation pamphlets		4. Establish an annual calendar		4. Finalize the Career Development Document			
5. Define expectations in regards to the duty draw		5. Investigate existing city and private programs							
<b>Goal 2: Promotional Planning</b>		<b>Goal 2: Community Awareness</b>		<b>Goal 2: Stations meet operational needs of the department.</b>		<b>Goal 2: Establish foundation for the Emergency Management program</b>			
Tasks		Tasks		Tasks		Tasks			
1. Define requirements and classes needed		1. Year-round marketing		1. Revisit the fire station needs assessment		1. City-wide continuity of operations planning			
2. Accurately record the KSA's of applicants		2. Make staff available to candidates as necessary		2. Revisit the FY18 work done by the architect		2. Rework Hazard Mitigation Plan			
3. Provide consistency in the process		3. Provide awareness of skill-set needed to get hired		3. Form a focus group to develop final specifications		3. Deliver needed ICS and EOC training			
4. Communicate assessment results to individuals		4. Provide hiring education at station open houses		4. Establish a construction team to assist with the process		4. Training on incident management tools (VIECI)			
5. Assess viability of general rank-based civil service tests				5. Send groups annually to a fire station conference					
<b>Goal 3: Succession Planning</b>		<b>Goal 3: Recruitment Taskforce</b>		<b>Goal 3: Continuous evaluation of long-term apparatus plans.</b>		<b>Goal 3: Stabilize funding for Fleet/Facility programs</b>			
Tasks		Tasks		Tasks		Tasks			
1. Provide classes and training		1. Formalize the Recruitment Taskforce		1. Maintain the Apparatus Reset Plan		1. Conduct needs assessment for 40hr fleet LT/EVT			
2. Assess and provide feedback to LTAA & STAA officers		2. Establish a budget and materials needed list		2. Maintain the medium duty apparatus plan		2. Manage facilities 5-year capital plan			
3. Provide coaching		3. Advertise the availability of recruitment		3. Establish a capital equipment plan		3. Site prep and final design for Division Station			
4. Develop a pool of talent at each rank		4. Produce a step-by-step description of the hiring process		4. Evaluate the ROI of refurbishment vs. new purchases					

P:\Support\_Services\Strategic Planning\Office\Planning Meetings\Operational Planning\Monthly Operational Plan Report-Outs



# SUPPORT SERVICES



## FY19 Strategy

The only task left unfinished is the Career Development document. This task was moved into the FY22 Plan. This document will guide members as they determine training, education and experiences that will help them prepare for advancement within the profession. We are very deliberately ensuring that this document lines up with our updated job descriptions. This project is 90% complete and should be available by the end of the fiscal year.



## FY20 Strategy

The following tasks were not completed:

Establishing an Explorer/Cadet program – This initiative has been delayed while we work through the pandemic. Preparation work continues so that we can start when it is safe to do so.

Year-round marketing and the Recruitment Task Force goals are ongoing with time and will complete as we close out the fiscal year.



## FY21 Strategy

Due to fiscal constraints, the station related tasks that remain incomplete will need to be moved to another fiscal year's strategy.

## FY22 Strategy

Due to the extension of the Strategic Plan for one year, 3 new goals with 11 associated tasks were identified to work towards in FY22. The first goal is to identify plans to finish work affected by the pandemic. Second, we built a home for the goals and tasks of the new Emergency Management program. Third, we built a home for the Fleet and Facility goals and tasks.



# SUPPORT SERVICES



## Health and Wellness

Support Services supports the GRFD Wellness pillar in the following manner:

- Scheduling and managing the annual GRFD Physicals with our occupational health provider.
- Review of injuries, work status and follow up care
- Oversight and support of the Critical Incident Stress Management/ Behavioral Health Team, which includes peer support and employee assistance programs, managed by Captain David Marchinda and assisted by EO Darcy Cooper.



## Prevention

Support Services supports the Fire Prevention Division in the following manner:

- Guidance, oversight and periodic meetings with the fire marshal and other fire prevention leadership.
- Assistance with billing processes, and issues with the city treasurer and comptrollers' offices.

## Training

Support Services coordinated and worked with the GRFD Training pillar in the following manner:

- Career Development Manual
- Coordinated Recruitment and Hiring process administration
- Assist in the development and review of Training Safety Plans related to COVID-19

## Response

Support Services supports the Response pillar in the following manner:

- Ensuring shift balance of assigned suppression personnel. Coordinating and making duty assignments for new hires, after promotions, and when the need for long-term acting assignment occurs. Management of the quarterly duty draws.
- We continue to emphasize succession planning, continuity of operations and mentoring of our personnel as they work towards the next steps in their careers.
- The Fire Chief, both Deputy Chiefs and the Assistant Chief alternate taking the role of Duty Officer. The Duty Officer stays available during their assigned timeframe, maintaining the ability to respond to extra alarms, make emergency callbacks and be available for the on-duty suppression forces 24/7 as an additional resource for consultation and decision making.
- Emergency Medical Services support by providing Program Education Sponsor oversight and participating in the rotating on call Infection Control Officer schedule. Chief Tennant maintains an EMT-B and Instructor Coordinator license

◇ 2020 Car 2 Alarm Responses: 34

Example of screening table to be set up at the dedicated entry point of fire stations:

Location:		Date:					
Question 1 (Q1)- Have you been <b>diagnosed</b> w/COVID-19 or had a positive test?				If you answer yes to any of the screening questions, do not report to work or enter building.			
Question 2 (Q2)- Have you recently had a <b>cough, difficulty breathing, body aches or sore throat?</b>				STOP			
Question 3 (Q3)- Have you recently had a <b>fever</b> (> 100.4 degrees F / 38 degrees C; take temp if unsure)							
Name	Date	Agency/Company	Time in	Time out	Q1	Q2	Q3
					Y/N	Y/N	Y/N
					Y/N	Y/N	Y/N
					Y/N	Y/N	Y/N
					Y/N	Y/N	Y/N
					Y/N	Y/N	Y/N



# SUPPORT SERVICES



## Hiring and Recruitment

Support Services oversees and works closely with the Recruitment Team, led by Battalion Chief Eric Freeman. We are working in collaboration with the City of Grand Rapids Human Resources Department towards ongoing recruitment, and a more regularly scheduled method of bringing interested individuals into organization.



This includes work towards periodically scheduled written examinations and the implementation of the Candidate Physical Ability Test (CPAT) certification to allow candidates more opportunities for success. In the spring of 2020, it was determined to extend the eligibility list from 2019 and hire our newest 12 personnel from that list. Those 12 individuals started their careers with the Grand Rapids Fire Department on August 3, 2020.

## Promotions

This office works with Human Resources to conduct Civil Service examinations. This includes examination content review, scheduling, and assisting as needed with delivering the exams and protest adjudication. In addition, we develop and coordinate job specific assessments for all positions, including interviews, skills demonstrations, oral presentations, and operational assessments. At the annual operations assessment center 15 Lieutenant, 8 Captain and 4 Battalion Chief candidates were assessed. We assessed 3 candidates for the position of Equipment Operator, 1 candidate each for the position of Fire Captain – Building and Fire Captain – Fleet, and 3 candidates for the position of Battalion Chief – Training.

A Job description review was conducted, with all of the job descriptions being brought into line with current duties and responsibilities. Job and classification terminology were lined up between the budget, job descriptions and human resource software utilized for managing human resources.

Work is nearly complete on a career development document that is in line with these documents and points candidates in the direction that they should go to be ready for any of these jobs. The next steps are ensuring that the promotional assessments, promotional candidate determinations and post promotion evaluations all line up with the expectations, duties and responsibilities of the different positions.

Work is well along on a Support Services continuous operations/succession document. This resource will provide guidance, direction and steps for many of the variety of duties and responsibilities of the Deputy Chief of Support Services.



## HUMAN RESOURCES

### Retirements

Seven personnel concluded their service with the GRFD during 2020:

1-3-2020 Paula Rule, Office Assistant III (Payroll)  
1-6-2020 Captain Anthony Hendges (Fleet/  
Facilities)  
3-16-2020 Firefighter Craig Jones  
3-20-2020 Firefighter Kurtis Kolenda  
5-2-2020 Captain Doug Carley  
6-2-2020 Battalion Chief Wes Kelley (Training)  
7-6-2020 Equipment Operator Kevin Fox

### Promotions

Thirteen personnel received promotions within the GRFD during 2020:

#### BATTALION CHIEF

5-31-2020 William Race (Training)

#### CAPTAIN

5-2-2020 Keith Borreson  
5-31-2020 Mike Witteveen  
6-12-2020 Todd Wright (Building  
Maintenance)  
6-12-2020 Fred White (Fleet Maintenance)

#### LIEUTENANTS

5-2-2020 Jim McIntyre  
5-31-2020 Jim Betz

#### EQUIPMENT OPERATORS

12-4-2020 Tobias Grantham  
12-4-2020 Christopher Knapp  
12-4-2020 Jason Szotko

### **FISCAL SERVICES – TRUDY RENNEY**

FY2020 began with a general fund budget of \$32,418,005 and \$266,863 in capital funds for a budget of \$32,684,868. The FY20 estimated revenue of \$925,224 is a combination of fees and State funding. Total budget funds utilized in FY2020 budget year resulted in the department being 0.01% under budget for FY2020.

FY2021 began with a general fund budget of \$31,942,351 and \$200,000 in capital funds for a budget of \$32,142,351. The FY21 estimated revenue of \$899,883 is a combination of fees and State funding. The first half of the FY2021 year closed with approximately 47.00% of the amended budget remaining and 73.08% of projected revenues having been received.

### New Hires – August 3, 2020

Charles Benton  
Kyle Bowers  
John Godush  
Nicholas Goodfellow  
Travis Gregg  
Jared Haisma  
Trenton McAlary  
Austin Petroelje  
Danny Roque  
Ronald “RJ” Tennant Jr  
Grant VanderWall  
Michael Voss



# SUPPORT SERVICES



## GRANTS – LT. RYAN SPARKS

Grant endeavors are primarily focused on FEMA's Assistance to Firefighters Grants (AFG) and the Fire Prevention and Safety (FPS) programs. The 2020 grant cycle was interrupted, like almost everything, by the impact of COVID-19. Grant projects awarded in FY19 were delayed significantly; specifically, the fire station exhaust removal systems. Much of our time was spent working with purchasing and engineering to manage that project and see it through to completion (May 2021). Other activities included:

- We received a FEMA AFG–COVID Supplement award for \$145,000 to reimburse for pandemic-related PPE expenditures.
- We submitted two other FEMA grants: 2020 AFG (\$467,000 for vehicle extrication equipment) and 2020 FP&S (\$325,000 for RSP). The results of those applications are still pending.
- We learned that we were unsuccessful in two of our 2019 funding endeavors (AFG and FP&S).
- We closed out several open grants (2015 & 2016 FP&S and 2016 AFG).
- We researched the feasibility of submitting a SAFER application but decided against it, due to future economic uncertainties.

## COMMUNITY INTERACTIONS AND OUTREACH

- Until the pandemic suspended these opportunities, Support Services managed ride along and job shadow requests.
- Support Services continues to respond to frequent employment opportunity inquiries, fundraising requests and internship requests and community good will outreach.

### ◇ 2020 Employment Inquiries: 338

- Chief Tennant continues to represent the fire service and the City of Grand Rapids as Co-Chair of the Michigan Governor's Traffic Safety Advisory Commission Traffic Incident Management Action Team
- Planned the Statewide Press release during Traffic Incident Management Awareness week in November, which we had to cancel at the last opportunity due to pandemic restrictions.
- Attended and spoke at the annual Michigan Traffic Safety Summit in Lansing





## EMERGENCY MANAGEMENT

### EMERGENCY MANAGER—ALLISON FAROLE



2020 challenged the Office of Emergency Management. Six months after coming on board, Allison Farole, the Emergency Management Administrator, activated the Emergency Operations Center (EOC) in response to the COVID-19 pandemic. Upon opening the EOC on March 13, no one anticipated this activation would last into 2021. During this activation Captain Braman was moved from suppression to be embedded in the Kent County Health Department's EOC. This added support facilitated the coordination with Kent County Health Department while Ms. Farole managed the EOC actions for the City of Grand Rapids. The City of Grand Rapids and EOC personnel faced many challenges during the beginning of the pandemic. Primarily, it was evident personal protection equipment (PPE) was in short supply. Due to the global impacts of the COVID-19 pandemic, the supply chain for good and services was strained.

In addition to responding to the COVID-19 pandemic, the EOC was activated at the end of May in response to peaceful demonstrations, which unfortunately turned violent. The civil unrest that occurred on the evening of May 30 and 31, caused over \$2 million dollars in damage and expenditures.

With concerns around the 2020 Presidential Election being held safely and securely, the EOC was activated to support the City of Grand Rapids City Clerk's Office. Overall, the 2020 Presidential Election went smoothly with no incidents or major issues.

Even though the Office of Emergency Management was busy responding to multiple major incidents impacting the City, extensive work on the development of the Emergency Operations Plan (EOP) occurred. Due to the COVID-19 Pandemic, the timeline for the adoption of the EOP was pushed back to June 2021. Additionally, many of the twenty-one initial actions outlined in the 2019 Annual Report are still on track with minor timeline impacts due to the COVID-19 pandemic.

#### The Office of Emergency Management activated the EOC for the following incidents:

911 Outage (January)

COVID-19 Pandemic (March – Present)

Civil Unrest (May)

Breonna Taylor Grand Jury Announcement (September)

2020 Presidential Election (November)

#### After-Action Reports Developed:

September 2019 Windstorm

COVID-19 Pandemic Quarter 1 Response

COVID-19 Pandemic Quarter 2 Response and Recovery

#### Major Accomplishments and Progress:

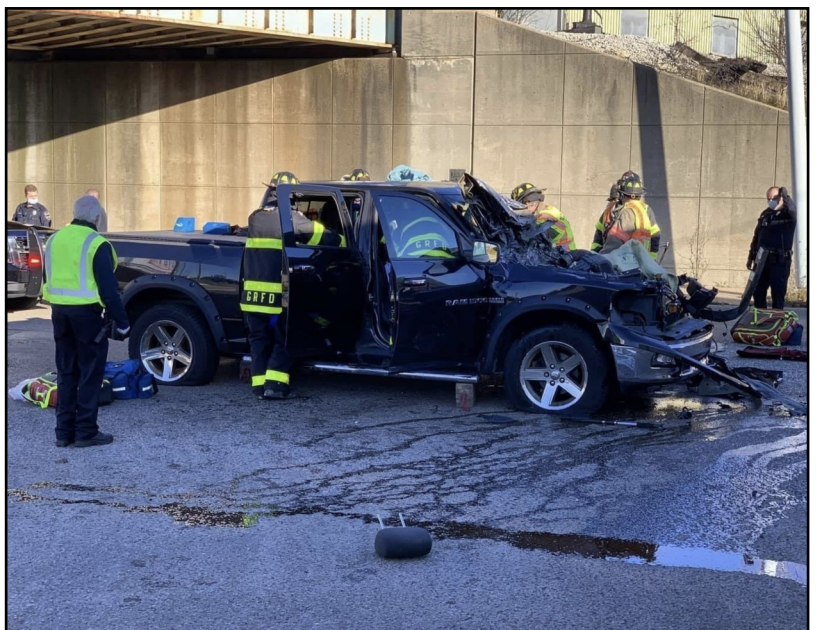
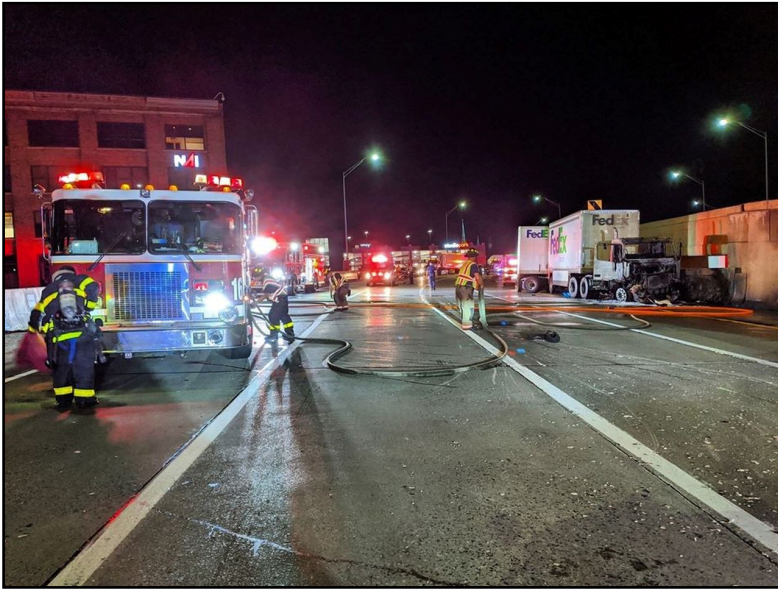
Emergency Operations Plan (EOP) (in final draft)

Emergency Action Plan for City Facilities (in final draft)

EOC Guide

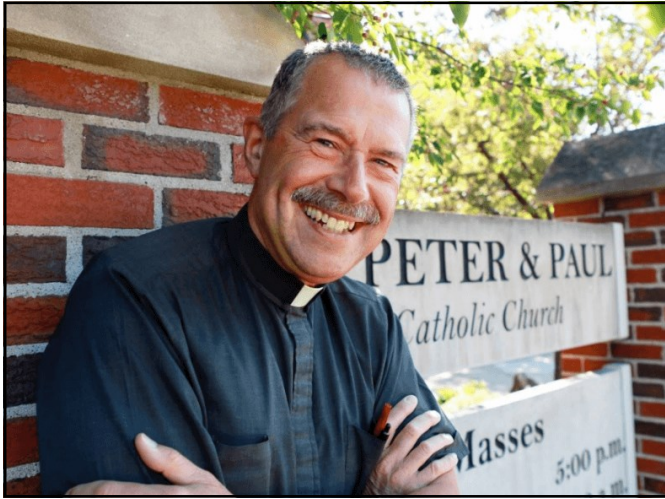
IPAWS established in Nixle Emergency Alert System



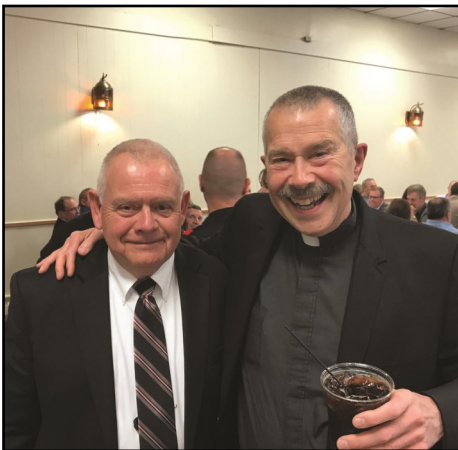




## REMEMBERING OUR CHAPLAIN FATHER DENNIS MORROW



Dennis W. Morrow was born on May 3, 1948, in Grand Rapids, MI. He was keenly aware of the daily activities of the fire department, his father having begun a career as a firefighter just prior to his son's birth. Dennis W. Morrow was appointed by the City Manager as Chaplain of both the Grand Rapids Fire and Police Departments in 1976. Chaplain Father Den, as he came to be known, served as Grand Rapids Fire Car 17, bringing stability, peace, and solace to the members of the Grand Rapids Fire Department for the next 44 years.



Father Den was eager to lend a hand at any incident – no matter how big or small. Having worked earlier as a mail carrier for the Postal Service, his knowledge of city streets and addresses often contributed to his speedy response, and he could often be seen comforting families in crisis. At fire scenes, Father Den would often provide drinking water, drag hoses, and walk the sidewalk in silent prayer. The fire station was an intuitive and comfortable place for Father Den. He understood firefighters, their humor, and their culture. It was not uncommon for him to share a joke, or a story, that would fill the fire station with deep laughter. He was a welcomed presence both on scene and in the engine house,

where things seemed to slow down whenever he stepped in. Firefighters gladly welcomed a few moments of fellowship with the man whom they knew truly cared.



Even off duty, Father Den remained committed to his fire and police family. He coordinated the placement of memorial flags at the gravesites of past members, reminding us of the importance of honoring those that came before. On the first Sunday in May, every year, Father Den was there to organize and lead the St. Florian's mass and breakfast at his parish in northwest Grand Rapids (SS. Peter and Paul). He attended promotional ceremonies, Christmas parties, the Pray and Spray softball game, funerals, weddings, and countless other events.

In 2020, Father Den was appropriately recognized as the GRFD Firefighter of the Year. Some would say this recognition was long overdue. Others might say he was Firefighter of the Year, every year. Then, after leading a life of selfless service and faithful dedication to God and his community, Father Den passed away on May 16, 2020, at the age of 72, after battling with a long term illness. For hundreds of GRFD members, Father Den was a mentor, a confidant, and a role-model. But most of all, he was a brother.



## HONOR GUARD

### HONOR GUARD – CAPTAIN MATT KEUSCH

The honor Guard is comprised of 13 members who volunteer their time to represent the Grand Rapids Fire Department at fire department functions and retiree funerals. Last year, honor guard activities were limited due to the COVID-19 pandemic. One significant exception to this was the memorial services held for Chaplain Dennis Morrow on May 21st, 2020.



### AWARDS COMMITTEE – LT. CORY KERNODLE

2020 Awards Committee Membership			
Chair – Cory Kernodle	Daniel Veneklas	Robert Rood	David Noorman
Alex VanPutten	William Smith	John Keillor	Matthew Sheffer

The awards committee encourages and reviews award nominations for the following awards: Medal of Honor, Medal of Merit, Commendation Medal, Achievement Medal, Unit Citation, Medical Award, Live Birth Award, Civic Award, and Distinguished Service Recognitions. The committee conducts investigations and interviews to verify information to ensure that the proper awards are given out to the deserving people. In 2020, the Annual Awards Ceremony was postponed and eventually cancelled. There were several nominations made, Live Birth Awards, Unit Citations, Medical Awards, and Civic Awards were all submitted and approved.

Another responsibility of the Awards Committee is to assist the American Legion's Firefighter of the Year Banquet. The committee reviews applications and narrows it down to three for submission. The 2020 Firefighter of the Year was Chaplain Father Dennis Morrow.





# FLEET — FACILITIES — BUDGET



## ASSISTANT CHIEF BRAD BROWN

A monumental shift in the fleet and facilities divisions of the fire department took place during 2020. Even though the department put into motion an apparatus plan back in 2013, after a long hiatus without consistent funding, the department was once again at the breaking point with worn out apparatus.

A never ending cycle of breaking and fixing left the department without the capacity to perform preventative maintenance. This cycle was exacerbated by the fact that there were often few to no reserves available, and when placed into service the two decades old reserve fleet often broke as well.



December of 2019 saw Captain Tony Hedges retire and it was quickly realized that the scope for one person to manage fire stations and apparatus was just too much to be done in a proactive and efficient manner. The position was once again split out to the pre-recession structure with Captain Fred White overseeing the fleet and Captain Todd Wright overseeing facilities.

A multi-faceted plan was quickly put into place to address the dire needs of our personnel to have reliable apparatus to serve the city. In addition to the restructuring of positions, an Emergency Vehicle Technician (EVT) program was started with our personnel, allowing us to utilize our skilled members both on duty in an acting assignment role and off duty via overtime to assist with the myriad needs of the fleet. The maintenance vendor contract was bid out, with four local vendors awarded pieces of the contract, allowing us to spread the work around and get rigs back from service much quicker.

The next step to revitalize the fleet was to get some machines here quick. This posed several issues from both a finance perspective and a fiscal constraint position. The idea was floated to purchase both gently used equipment from other departments and simultaneously purchase several new apparatus. A purchase of this magnitude had never been attempted before in Grand Rapids. Ultimately 8 used apparatus were purchased from Brindlee Mountain Fire Apparatus out of Alabama and 4 new apparatus were purchased from Pierce in Wisconsin.



The used apparatus cost the department \$1,824,000 after trading in Platform 3 and the three HME rescues. The new apparatus cost the department \$3,176,599, for a total of \$5,000,599 dollars spent on the fleet in just a few short months. Moving forward, big changes have taken place to capitalize on the positive momentum from the acquisition of apparatus, with annual contributions to the apparatus fund doubling, allowing the department to shorten the length of service time for the apparatus. It also gave the ability to fold specialty apparatus into the fund such as hazardous materials, technical rescue, or water rescue vehicles/boats, which were previously purchased through the capital process.



# FLEET – FACILITIES – BUDGET



*2020 GRFD Fire Station Age Assessment*

Station	Year Constructed	Age
1- Leonard St.	1981	39
2- Franklin St.	1979	41
3- Bridge St.	1966	54
4- Kalamazoo Ave.	1987	33
5- Monroe Ave.	1982	38
6- Burton St.	1981	39
7- LaGrave Ave.	1910	110
8- Covell Ave.	1987	33
9- Plainfield Ave.	1951	69
10- Division St.	1926	94
11- Chester St.	1902	118
Average Age		61

The department is in a similar situation on the building side of the house, with decades of lapsed maintenance or replacement of failing components resulting in multiple emergency repairs needed for roofs, HVAC, concrete, etc. taking place during the year. The City of Grand Rapids currently has 11 fire stations serving the 45.3 square miles within the city, in addition to a training center and live fire training facility. Even though an annual station inspection plan was resurrected and many smaller maintenance items are being addressed, some

stations are simply worn out and functionally obsolete. Current plans are to replace the Division Ave. Fire Station within the next several years and undertake an extensive remodel/addition for the Chester St. Fire Station a few years after that. As evidenced by the table, the average age of the stations as of this writing is 61 years old.

Following extensive evaluation by the GRFD Planning division it was determined that the current location and lot size for Division Ave. station was unable to meet the needs of our modern organization. After years of site searching and negotiations, the fire department secured a large lot just south of the current location (1734 S. Division) at In The Image which is at 1823 S. Division. After working with station crews and Integrated Architecture, initial renderings were generated. In 2021, the fire department will garner community input before finalizing plans, with construction to take place the following year at an estimated cost of \$8.3 Million Dollars. With the exception of a few senior personnel, this will be the first time any current GRFD employee will get to operate out of a new station in the city.

Building upon the success of the Emergency Vehicle Technician program with our apparatus, a Fire Station Technician (FST) program was created, allowing a small group of skilled tradespeople within our ranks to assist with projects that are outside of our budget or the scope of what a contractor would be interested in doing. Two great examples of this are a recent small concrete pour at the Plainfield station which was too small for a company to bid on, and the need to create new office space for the fleet and facilities division without a robust budget to support it. We have seen very high quality work and pride of ownership from the FST team and are excited to have them helping us out!





# FLEET — FACILITIES — BUDGET



In addition to extensive work with buildings and apparatus during the year, there were several important events that Car 4 took part in. The passing of our beloved longtime department chaplain Father Dennis Morrow saw the need to send him off in true GRFD fashion to honor his legacy. Chief Brown's family was humbled to bring up their draft horse "Jack" to give Father Morrow a ride along a packed parade route from the Cathedral of St. Andrews to his final resting place.

Chief Brown was asked by Eastern Michigan University to deliver both a strategic planning and budget course to the School of Staff and Command. Departments from all across the state had students participate in several hands on workshops to sharpen their critical thinking skills and hopefully return to their departments better able to face the administrative challenges of their organization, with the final outcome being a better managed fire department that can serve the needs of their community.



The culmination of almost four years of academic work took place this fall where I successfully

defended my dissertation with the support of Chief Lehman and Captain Gray in the audience. The research titled "Turning Strategy Into Action: A Multi-Site Case Study Assessing the Impact of Hoshin Kanri Routines on Relational Coordination Dimension within the Context of Strategic Planning" once again confirmed the great work of the GRFD. Results showed a statistically significant difference (in a positive way) between the GRFD and a similar fire agency in terms of our ability to communicate and relate for tasks associated with a strategic plan.






# WELLNESS – PLANNING

## WELLNESS



A final milestone in 2020 was from our incredible wellness team and all of the GRFD members that participated in our four day long O2X human performance workshops. After one event in the spring, we hit pause due to the Covid-19 pandemic, but were able to conduct the other three workshops in the fall in a beautiful outdoor setting thanks to the generosity of the Salvation Army. Feedback from the participants has been overwhelmingly positive!

The grant for O2X also included the replacement of the apparatus exhaust systems at the stations and provided one particulate blocking hood for our suppression personnel. Personal protective equipment (PPE) bags were also purchased and issued to each fire suppression member to insure they are not spreading carcinogens to families members while transporting their firefighting gear in privately owned vehicles.



FY19 - FY22 Operational Plan

Owner

Assistant Chief Brown

Support

Battalion Chief Thompson

Desired Outcome: A healthier workforce by researching, designing, and implementing a structured wellness program.

Metrics			
Tasks	Count	Percentage	Last Updated
Not Started	15	19.23%	1/20/2021
In Progress	10	12.82%	
Complete	53	67.95%	
Total	78	100.00%	

FY19 Strategy:

Research baseline insurance costs and industry standards.

FY20 Strategy:

Design and develop a structured well-being program

FY21 Strategy:

Address identified gaps in the wellness program.

FY22 Strategy:

Evaluate program and focus on succession planning

Goal 1: Research industry standards.

Lt. Zinn

Tasks	Q1	Q2	Q3	Q4
1: NFPA 1502				
2: NFPA 1503				
3: IAFF Wellness/Fitness Initiative				
4: Personal trainer costs				

Goal 1: Use the budget process to fund and obtain required education, training, and equipment.

BC Thompson

Tasks	Q1	Q2	Q3	Q4
1: Certify/its of appropriate personnel for physical fitness* (Moved to FY21 - Goal 1)				
2: Determine scheduling and overtime needs* (Moved to FY21 - Goal 1)				
3: Draft requirements for a wellness program manager* (Moved to FY22 - Goal 1)				
4: Behavioral Health continuing education				
5: Equipment replacement plan* (Moved to FY21 - Goal 1)				

Goal 1: Implement structural changes to the wellness program.

BC Thompson

Tasks	Q1	Q2	Q3	Q4
1: Certify appropriate personnel as trainers				
2: Determine scheduling and overtime needs				
3: Integrate wellness into the Master Calendar				
4: Develop equipment replacement schedule				
5: COVID-19 PPE assessment				

Goal 1: Define job descriptions for wellness team members

AC Brown

Tasks	Q1	Q2	Q3	Q4
1: Administrative job descriptions				
2: Physical trainer job descriptions				
3: Behavioral health job descriptions				

Goal 2: Work with internal stakeholders.

BC Thompson

Tasks	Q1	Q2	Q3	Q4
1: HR, Risk Management, Safety Committee				
2: Med 1				
3: Encompass and CISM team				
4: Health Plan Advocate				
5: GRFD membership				

Goal 2: Work with Local 366 on voluntary annual well-being checkups.

BC Thompson

Tasks	Q1	Q2	Q3	Q4
1: Annual mental and physical wellness assessments				
2: Work with calendar flexibility to use trainers* (Moved to FY21 - Goal 1)				
3: Content of annual physicals - Blood work local?				
4: Health Plan Advocate - A3 at City Hall				
5: Annual behavioral health assessments				

Goal 2: Implement O2X curriculum

BC Thompson

Tasks	Q1	Q2	Q3	Q4
1: Sleep				
2: Nutrition				
3: Stress				
4: Cancer				
5: Physical				

Goal 2: Measure and analyze results.

BC Thompson

Tasks	Q1	Q2	Q3	Q4
1: Biometric information				
2: HPA metrics and participation level				
3: Robertson Brain Health				
4: GRFD use of trainers and interns				
5: O2X reassessment				

Goal 3: Compare with external stakeholders.

AC Brown

Tasks	Q1	Q2	Q3	Q4
1: Private industry				
2: Fire agencies				
3: Governmental agencies				
4: Robertson Brain Health				

Goal 3: Seek partnerships with nutritionists, dieticians, and physical therapists for facilitation and oversight of wellness program.

BC Thompson

Tasks	Q1	Q2	Q3	Q4
1: Supervision of graduate level interns/licensure needs				
2: Determine the viability of Robertson Brain Health				
3: Educate membership on the availability of resources				
4: Investigate BCBS tracking app				

Goal 3: Support Candidate Physical Ability Test implementation

BC Thompson

Tasks	Q1	Q2	Q3	Q4
1: Work with Local 366 on CPAT use				
2: Train proctors				
3: Develop training program/handouts				

Goal 3: Institutionalize program objectives

AC Brown

Tasks	Q1	Q2	Q3	Q4
1: Finalize wellness organizational chart				
2: Finalize wellness budget				
3: Finalize wellness team roles				
4: Finalize recurring survey and metrics				

Support: Services/Strategic Planning Office/Planning Meeting/Operational Planning/Monthly Operational Plan Report/Outs

Assistant Chief Brown is the owner of the Wellness pillar, supported by Battalion Chief Kathy Thompson.

## PLANNING

The focus for the Planning Division in 2020 was preparing for reaccreditation in 2021. Activities included gathering and analyzing disparate data resources and cataloguing other supporting materials for the Standards of Coverage and Self Assessment Manual.



## FLEET AND FACILITIES

### FACILITIES – CAPTAIN TODD WRIGHT

2020 has brought many positive changes to the GRFD, along with a new roof at LaGrave Ave. we added new generators at Leonard St. and Covell Ave. stations.

We were able to construct a workout room and a more private dormitory at Covell Ave. station. We also did some upgrades at Chester St. with new countertops and removal of the ceiling for a more open look to the kitchen.

New offices were built in the LaGrave Ave. annex to house the Fleet and Facilities programs. Lastly, the facilities program was able to establish a Building Maintenance team with nine members to assist in getting projects at the stations completed.

### FLEET – CAPTAIN FRED WHITE

- Instituted the Emergency Vehicle Technician Program
- Reorganized the Annex for better accessibility
- Rebuilt the preventive maintenance schedule and added vendors for faster repairs
- Purchased 4 new apparatus, 9 used apparatus, and 3 new Deputy Chief vehicles

## PERSONAL PROTECTIVE EQUIPMENT

### CAPTAIN BRIAN DEFOREST AND F.F. JEFF LYSIAK

The PPE program upgraded the personal protective equipment for members of the department by purchasing fifty-one sets of Morning Pride turn-out gear. This was the third year of a four-year replacement program which will see the department return to black gear, resulting in a greater level of comfort, and a higher visibility reflective material.

All members of the department have been provided the latest technology in particulate blocking firefighting hoods, to reduce our exposure to carcinogens. Gear storage bags were also provided for this reason. Due to the difficulty of keeping glasses from fogging up while wearing surgical or N95 masks, new anti-fog safety glasses were purchases from local manufacturer - Hex Armor.

The goal of the program continues to be ensuring each member has two sets of turnout gear that are less than ten years old. The PPE committee prepares for the future by replacing gear for a percentage of the department each year, rather than waiting to replace everything at once.





## SELF CONTAINED BREATHING APPARATUS (SCBA)

CAPTAIN SCOTT STEVENSON

SCBA's: Flow testing was completed on all 159 SCBAs, plus RIC packs, specialty team equipment, and police equipment. We changed PASS alarm batteries on every mask in April and October. Warranty repairs were on the rise as our equipment nears its half-life, and as we began to identify and work with SCOTT Safety on common repairs/engineering issues. The majority of our 350 air bottles began cycling through hydrostatic testing just ahead of their 5-year service mark

Compressor and Fill Stations: Continued to work with our service contractors and SCOTT Safety to maintain our equipment and improve its functionality and reliability.

Fit Testing: Annual face piece fit testing was accomplished for all personnel, and preparations were underway for N-95 fit testing department-wide. This included extensive research, training and acquisition of new equipment .

In summary, the SCBA program has worked to keep our equipment reliable and compliant with the latest industry standards.



## RADIO PROGRAM

CAPTAIN KEITH BORRESON

The goal of the GRFD radio program is firefighter safety and awareness through improved radio communication. New equipment, efficient maintenance, evaluation of transmission quality, and ongoing training are key components to achieving program goals. Radio program management transitioned to Capt. Borreson after the promotion of Battalion Chief Race.

January 4th of 2021 saw the implementation of 800MHz radios. The Kent County Dispatch Authority 800MHz radio system operates under the Michigan Public Safety Communication System. This project has been underway for several years with planning, development, acquisition, training, and now implementation. Prior to implementation, in-building testing was conducted by the GRFD on 30 buildings to determine the transmission and reception quality of the 800MHz system. Results showed an improvement over our previous 700MHz UHF system.

Quality improvement through review of dispatch recordings is allowing the GRFD to understand how each of us can improve the way we communicate over the radio. Radio straps and retractable microphone keepers are being purchased to further enhance how the portable radios are used. An alliance with the Kent County Sheriff's Department will aid in maintaining the intricate programming of our radios, allowing for future improvements towards firefighter safety and awareness.



<b>Assistant Program Manager:</b> <b>Lt. Robert Rood</b>
Technician: Jeremy Chesla
Technician: Cody Haisma
Technician: EO Zamarron



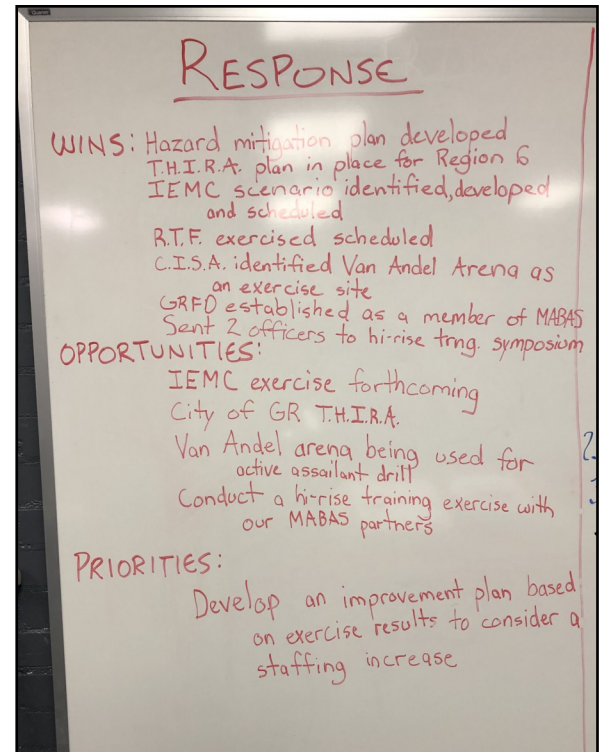
# PLANNING DIVISION

STRATEGIC PLANNING OFFICE - CAPTAIN SCOTT GRAY



**Planning** — The planning division facilitates the department's strategic, operational, and budget meeting cycle and helps to organize special projects throughout the year.

- **Strategic and Operational Planning**—During 2020, the planning division organized two strategic plan review meetings. Thanks to the efforts of our 36 member strategic planning review team, the department is able to prioritize efforts to keep the needle moving on the strategic plan. Lt. Hanes managed the monthly operational plan updates. The planning division also coordinates risk assessment and critical tasking review for the fire suppression, EMS, hazardous materials and technical rescue programs.
- **City Strategic Plan**—Captain Gray serves as an objective lead for the city's strategic plan, providing updates and feedback on operational metrics that support the plan.
- **Emergency Management**—the planning division worked with Allison Farole to plan activities for the FEMA Integrated Emergency Management Course and the Cybersecurity and Infrastructure Security Administration exercise at Van Andel Arena.



**Accreditation** — The GRFD is an active member of the accreditation community, serving on the Center for Public Safety Excellence (CPSE) educational taskforce, providing peer assessors for site visits to other agencies, and working with local agencies seeking accreditation.

- **Peer Assessors** — Captain Gray participated in a site visit for Hartford, CT. Lt. Hanes conducted a virtual site visit for Naval Support Activity—Panama City, FL. Visits to other jurisdictions provide insight into our operations at GRFD.
- **Reaccreditation** — GRFD is at the end of its five year accreditation and began preparing documentation for the next cycle. A comprehensive review of the Self-Assessment Manual and updating of the Standards of Coverage was conducted to ensure our compliance with these elements of the process.
- **Michigan-Ohio-Indiana Consortium** — Captain Gray is a co-manager of the consortium, which holds quarterly meetings. The relationships built through the consortium have provided insights into how our department can utilize the accreditation process to make our own agency better.

**Lean** — The fire department continues to promote lean methodology throughout the City of Grand Rapids, with several other city departments adopting elements of our planning and management system.

- **Managing for Daily Improvement**—The planning division hosts many outside groups during our Monday management walks (MDI) and continues to deliver A3 problem solving courses for the city each year.
- **Metrics**—Lt Hanes worked with program managers to update their MDI boards with relevant information and formatting. He also worked with the Homelessness Outreach Team to set up systems for tracking and sharing information in the offices at 1101 Monroe Ave. NW.



# PLANNING DIVISION



**ISO** — During 2020, the planning division conducted a review of the 2016 and 2018 ISO documentation to ensure consistency for the next round of assessments.

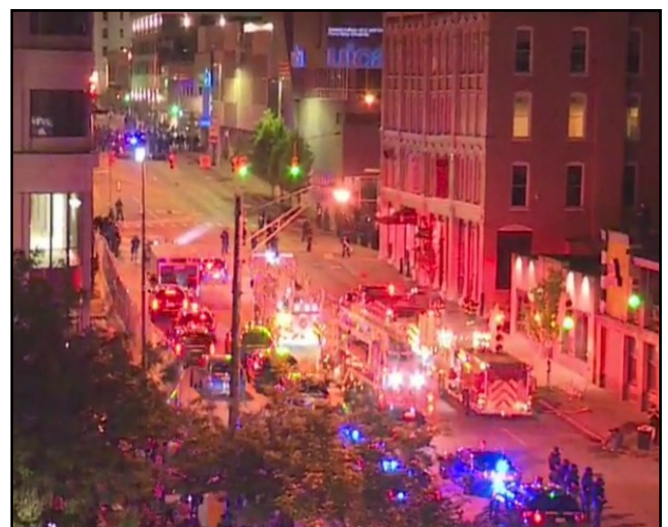
**RMS/IT** — Improvements for Image Trend, Vector Solutions, and Check It were the focus of the RMS team in 2020. The team also revamped the process for conducting risk assessments using Image Trend as the platform for gathering building information and tracking completions.

**Dispatch Liaison** — Deputy Chief VanderWall and the planning division meet regularly with Reed Wakeman and John Kalinowski from the Grand Rapids Emergency Communications Center (dispatch). Highlights for 2020 included:

- **800 MHz radios** — The planning team, along with Chief Race, attended the Kent County 800 MHz technical steering committee meetings to ensure the move to the new system will meet our operational needs. They system finally went live in late 2020, and GRFD was one of the first users on the system.
- **CAD Problem Reports** — When our personnel identify potential errors in incident recommendations, the team works to assess the issue and communicate its findings back to suppression personnel. Out of 30 incidents that were forwarded to dispatch, 13 were resolved and 17 were still under investigation. This process has led to the discovery of numerous mapping issues and the need to ensure modifying circumstances in CAD align with our effective response force requirements.
- **Recommendations** — Deputy Chief VanderWall and the battalion chiefs reviewed all of the alarm type recommendations to ensure they match our effective response force (ERF) deployment model.
- **Civil Unrest** — Planning division personnel worked alongside fire dispatchers during the civil unrest event in May to facilitate identification and deployment of GRFD resources.



Grand Rapids Emergency Communications Center





# PLANNING DIVISION

## INFORMATION TECHNOLOGY

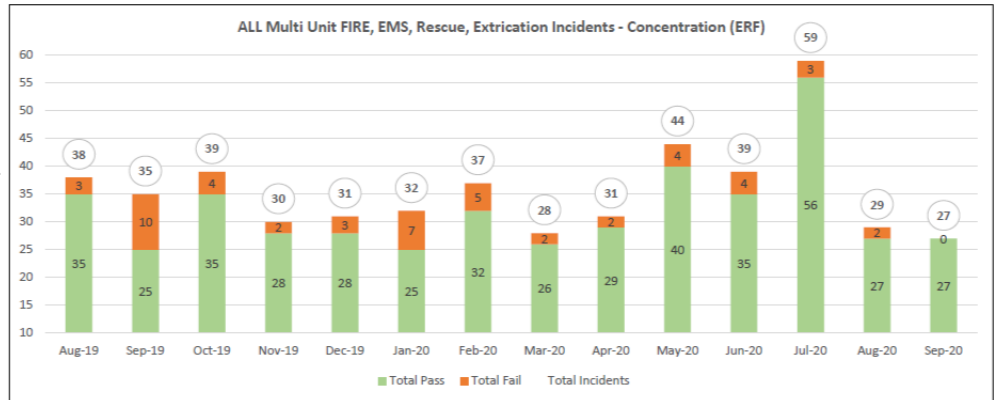


### PERFORMANCE MANAGEMENT AND REPORTING SPECIALIST

#### ALEXANDRIA BASZLER

Areas of focus for data analysis in 2020 included:

- Analysis of concentration data for continuous improvement in response.
- Started using ArcGIS Pro for mapping and analysis of performance metrics.
- Pulling data for grant and NFPA survey programs.
- Served as a member of the NFPA Technical Committee on Fire Service Analysts and Informational Technology Specialists Professional Qualifications.
- Developed a custom database consolidating essential CAD, Firehouse, and Image Trend incident data for response metrics.
- Preparation for Standards of Coverage data analysis
- Preparation of Location, Occupant and Inspection records in Image Trend for the risk assessment process
- Established a Check-It continuous improvement process for maintenance and inspection activities.



### INFORMATION SYSTEMS

#### COORDINATOR - BRIAN BLOCK

IT improvements for the GRFD in 2020 included:

- Tablets purchased and setup for Training and Recruits
- Fiber running to Plainfield and Division Stations
- All computers finished upgrading to Windows 10
- New laptop docks installed in Fire Apparatus
- Telestaff was updated to version 6.8.13
- Training Center setup and activated as an Emergency Operations Center
- Replacement of Apple TVs
- Computer Replacement on 4 year plan
- Work from home setups in response to COVID-19.





# FIRE PREVENTION



## FIRE MARSHAL ERIC DOKTER

As with every other entity, the year 2020 offered the Fire Prevention Division (FPD) of the Grand Rapids Fire Department plenty of opportunities to display adaptability in a new and unprecedented environment of a global pandemic. Many of the occupancies that inspection efforts are focused on were not operating for much of the year. Places of assembly were especially challenged to find ways to continue to operate. FPD personnel ended up working with a number of parties to ensure that safe operations could be maintained in temporary and outdoor gathering places which adhered to the rules for separation and sanitation issued by local, state, and national health agencies.

- As in 2019, the division's existing building inspectors continued to focus on the city's highest risk buildings and processes through the Operational Permit program. Existing building 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.
- A vacant building identification and evaluation program was developed in 2018 to decrease the likelihood of firefighter injuries which are more common in this type of fire. As the program continues, vacant buildings identified by fire crews or inspectors will be inspected, evaluated for hazards, and very hazardous buildings will be referred to the Building Department and City Attorney's Office for repair or demolition.

FY19 - FY22 Operational Plan		Desired Outcome: Create a safer community by implementing an effective community risk reduction (CRR) program.				Metrics			
Owner	Fire Marshal Dokter					Tasks	Count	Percentage	Last Updated
Support	Captain Gerkey					Not Started	20	42.55%	
						In Progress	10	21.28%	
						Complete	17	36.17%	1/20/2021
						Total	47	100.00%	

FY19 Strategy: Perform a community risk assessment to identify areas of concern.		FY20 Strategy: Develop and implement community risk reduction plans.		FY21 Strategy: Produce community risk reduction plans that align with Vision 2020.		FY22 Strategy: Implement community risk reduction plans.	
Goal 1: Identify gaps in current risk reduction efforts.	FM Dokter	Goal 1: Develop countermeasures to address identified risks.	FM Dokter	Goal 1: Identify community risks.	FM Dokter/Cpt. Gerkey	Goal 1: Provide public education for residential risks.	FM Dokter/Cpt. Gerkey
Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4
1: Research the Standards of Coverage		1: Research resources needed and costs		1: Determine behavioral causes for smoking and cooking fires		1: Provide education for high risk areas	
2: Research the Emergency Action Guidelines		2: Use priority matrix to triage interventions		2: Perform a housing stock analysis		2: Provide education for moderate risk areas	
3: Identify unknown risks		3: Use budget process to fund options		3: Perform data analysis by census tract and neighborhood		3: Provide education for low risk areas	
				4: Analyze the recreational fire program		4: Provide education on HUD loan process	
				5: Review commercial data (low-risk inspection program)			
Goal 2: Gather data on gaps for areas of concern.	FM Dokter	Goal 2: Draft individual CRR plans, implement high impact/low effort interventions.	Capt. Gerkey	Goal 2: Produce community risk reduction interventions.	FM Dokter/Cpt. Gerkey	Goal 2: Provide public education for commercial risks.	FM Dokter/Cpt. Gerkey
Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4
1: Analyze census and other demographic data		1: Minor program changes during fire prevention week		1: Prepare written plan for residential interventions		1: Provide education on business self-inspections	
2: Analyze incident data				2: Prepare written plan for commercial interventions		2: Perform risk assessment for commercial recreational fires	
3: Analyze statistical data						3: Perform risk assessment for social zones	
4: Identify stakeholders							
Goal 3: Communicate community risks to stakeholders and gather feedback.	FM Dokter	Goal 3: Identify resources needed to implement high impact/high effort interventions.	FM Dokter	Goal 3: Adjust delivery of services to account for COVID-19 social distancing	FM Dokter/Cpt. Gerkey	Goal 3: Perform environmental scan for emerging technologies	FM Dokter/Cpt. Gerkey
Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4
1: Meet with stakeholders		1: Choose one pilot program		1: Explore virtual inspection visits		1: Explore new smoke detector technology (wireless interaction, etc.)	
2: Communicate gaps to the community		2: Utilize the grant process for funding		2: Explore online opportunities for training and public education		2: Explore emerging commercial FLS technology	
		3: Research other funding mechanisms		3: Determine best delivery method for each type of service (PSA, one-sheet, Teams, etc.)		3: Determine impacts of 800 MHz on in-building communication	

P:\Support\_Services\Strategic Planning Office\Planning Meetings\Operational Planning\Monthly Operational Plan Report-Outs



# FIRE PREVENTION



- The Division played a vital role in working with the City's Development Center, Traffic Safety, and the City Manager's Office to develop rules for Social Zones and Social Districts to enable restaurants and bars to be able to continue to serve clients in out-of-door settings. Working with Business Districts, DGRI, Chamber of Commerce, and other entities, FPD personnel were an integral component in adapting to the requirements of socially distanced gathering, responding to more than 120 applications for such arrangements across the city.
- Higher risk occupancies in the city continue to be identified via the Risk Assessment Program. Both high and moderate risk occupancies were identified and key fire protection and hazard information gathered by fire suppression crews. This information is collated and available to fire companies through the Image Trend records management system as they respond to alarms.
- Inspection activities were conducted in only approximately 200 higher-hazard existing buildings in 2020. These activities include initial inspections, follow-up inspections, and other enforcement activities. This number will be expected to increase based on the economy opening up as we approach herd immunity for the coronavirus.
- The Fire Prevention Division continued its efforts to ensure that installed fire protection systems continue to function as designed, while adapting to many businesses being in partial or complete shutdown. A modification in the rules removed the penalty for overdue inspections during the height of the lockdown. As it was, well over 2,000 fire suppression and fire alarm system inspection reports were reviewed in 2020. Follow-up to ensure repairs of defective systems and inspections of occupancies that had deficient systems was performed. At the end of the year, 82.4% of identified life safety fire protection systems were in appropriate working order.
- Consortium along with the office of the State Fire Marshal has continued to develop statewide agreements for MFVs. Kalamazoo Fire Marshal Jim Williams is the chair, and a member from GRFD is co-chair of this consortium.
- In 2020, the FPD supported efforts to permit installations where larger amounts of carbon dioxide (CO<sub>2</sub>) are used in beverage dispensing operations, after several alarms to locations which had such installations were experienced. FPD has been locating installations that require additional CO<sub>2</sub> detection and alarm systems to be installed and will continue this in 2021.





# FIRE PREVENTION



## City of Grand Rapids Development Center

1120 Monroe Ave. NW Ste. 300  
Grand Rapids

devcenter@grcity.us

616-456-4100

grandrapidsmi.gov



## RECREATIONAL FIRE PERMITS

HOW TO APPLY &  
GENERAL REQUIREMENTS

LEARN MORE AT [GRANDRAPIDSMI.GOV/  
RECREATIONAL-FIRES](http://GRANDRAPIDSMI.GOV/RECREATIONAL-FIRES)

- The Fire Prevention Division is responsible for following up on nuisance reports associated with the City's two-year Recreational Fire Permit program. Fire suppression crews responded to active complaints of smoke due to recreational or nuisance fires, and FPD personnel continued to evaluate the reports for possible additional education or enforcement action.
- GRFD Fire Prevention Division personnel worked alongside a multi-department team to commission medical marijuana grow and provisioning centers in the city. Inspections for these required increased staffing resources from GRFD as well as other city departments as the grow and provisioning centers began operations.

- FPD personnel conducted additional training events to educate operators of Mobile Food Preparation Vehicles (MFVs) in the safety regulations as part of the City's efforts to encourage the growth of the food truck scene in the city. Also, a group within the Michigan Fire Inspectors Society (MFIS) known as Mobile Food Service Unit Inspection.





# FIRE PREVENTION



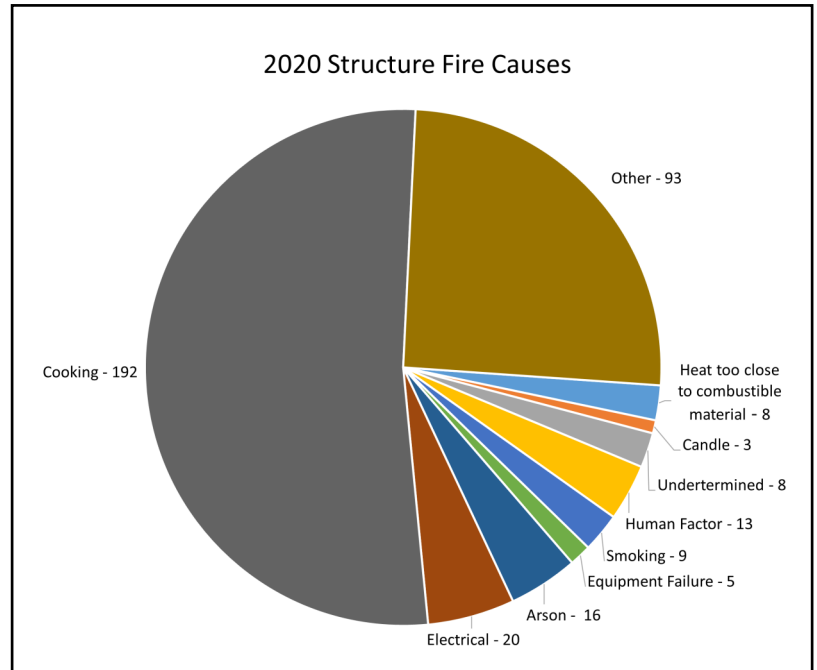
## FIRE INVESTIGATIONS

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 2020, Grand Rapids experienced an increase in fire fatalities, with 9 fatalities including two multiple fatality fires. Prosecution is ongoing in one of those, as well as several other incendiary fires. Fire

investigators from FPD conducted investigations in at least 26 incidents. The leading cause of fires in Grand Rapids is outlined in the table to the right.

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.





# FIRE PREVENTION



## PUBLIC EDUCATION

The opportunities for GRFD to educate the public about fire safety were limited by the pandemic and the lockdowns and restrictions that have been in place. Despite this, educational opportunities with children, parents of school-age children, and homeowners were developed and delivered:

- Block party, in-person school visits, and festival and trade show attendance was not possible.
- FPD provided virtual fire safety training to elementary and secondary schools for children in all grade levels, as well as to parents of school-age children through GRPS's Parents University program in 2020. Topics for 2021 included:
  - ◇ March: Change your clock/change your batteries, smoke alarm testing and home escape planning.
  - ◇ April: Spring safety, toxic fume awareness, outdoor grilling safety, and recreational fire safety.
  - ◇ May: Gearing up for summer safety, arson awareness, and what to do in a fire emergency in a public building.
  - ◇ June: Fire safety and the great outdoors, fireworks safety, and water safety.
  - ◇ July: Youth fire safety, stop-drop-cover-and-roll, matches and lighters, escape planning.
  - ◇ August: Eliminate hazards in living spaces, fire safety for people with disabilities, fire safety for older adults, fire safety for pets, and hoarding hazards.
  - ◇ September: Fire safety in public places, tampering with smoke alarms, carbon monoxide safety, and 911 for emergencies.
  - ◇ October: Elements of a fire-safe home, serving fire safety in the kitchen, home fire escape planning, and Halloween safety.
  - ◇ November: A fire-safe Thanksgiving, electrical hazards, home heating, and ice awareness.
  - ◇ December: Holiday fire safety, candles and holiday décor hazards, New Year's celebration safety, holiday cooking safety, and Christmas tree safety.
- The Residential Safety Program developed a Self-Install program to continue its work in insuring that homes in Grand Rapids are equipped with the required number of smoke and carbon monoxide alarms and fire safety education. Alarms and instructions for installation and for a home safety assessment were delivered to the homeowner, and a virtual visit was later conducted to ensure correct placement of devices and to provide additional home safety educational messaging.





## RESIDENTIAL SAFETY PROGRAM



Now in its seventh year, the Residential Safety Program (RSP) continues to support the department's federally-funded Home Safety Assessments. This program gives us the opportunity to deliver fire safety education directly to our citizens, and install smoke and carbon monoxide alarms utilizing our on-duty fire crews. GRFD's latest FEMA grant request included funds for the purchase and installation of smoke and carbon monoxide (CO) alarms as a part of the Residential Safety Program.

The COVID-19 virus greatly impacted our program as events and Home Safety Assessments were cancelled after March 12, 2020. In



August, we started a Self-Home Safety Assessment opportunity allowing homeowners to install their own alarms. Homeowners are required to complete the assessment form online followed by an educational phone conference with staff before receiving the alarms.

### In 2020:

- 2,267 smoke alarms and 1,081 CO alarms were installed in 357 homes. Since 2013, 65,104 smoke and 9,576 CO alarms have been installed in 10,810 homes.
- 68% of assessed homes had two or less working smoke alarms installed, and 97 (40%) of those had no working smoke alarms. For proper protection, the average home requires approximately 6 to 8 smoke alarms.
- 34% of the 600 smoke alarms removed were inoperable.

Typically, the RSP's community outreach efforts – coordinating local homeowners to receive their safety devices and providing home safety education – reaches nearly 4,000 youth and approximately 2,700 adults annually. In addition, RSP coordinates with a multitude of local institutions and agencies such as GRPS, American Red Cross, Bethany Christian Services, Spectrum Health Services, Disability Advocates of Grand Rapids, DTE Energy, neighborhood associations, Grand Rapids African American Health Institute, the Children's Museum, among many others in nearly 200 city-wide events to expand its educational directive.



However, with the onslaught of the COVID-19 virus, this initiative was put on hiatus in order to follow social distancing guidelines. Although we were able to utilize popular online tools including Zoom and Microsoft Teams, the overall educational reach for 2020 was severely handicapped since community engagement events were removed from the social calendar.



## 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.



- GRFD personnel are involved in preconstruction 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.
- In 2020, more than 350 Fire Alarm and suppression system plan reviews were performed, which shows continuing strong construction activity in the City.
- Approximately 850 Fire Alarm and suppression system rough-in and final inspections were performed in 2020. Approximately 50 of the final inspections were for larger projects which required the participation of two to five inspectors.



## FIRE MATCH - LT. HAROLD ELMORE



This past 2020 calendar year was both unique and challenging for the Fire Match program. Like other programs, the COVID-19 virus forced the Fire Match program to adapt creatively and safely to what appears to be our new norm for a while.

Some of the newer protocols that the Fire Match program had to adopt for safety were those that were universal and recommended by the CDC in regards to person to person contact. Before any client could be seen, the family had to facilitate these safety measure in their home in order to be seen by the Fire Match program. Further, the department's

Information Systems Coordinator (Brian Block) set up the Fire Match program to be able to communicate with our juvenile clients that are on 6-month monitoring through the use of virtual meetings. This was really a big help that allowed continuous monitoring of our juvenile fire setters, without putting the Fire Match staff or the families at risk of catching the virus.

During 2020, there were a combined 13 referrals asking for help from the Fire Match program (GRFD, Kent County Courts, Arbor Circle etc.). Though the referrals were lower than usual, it is anticipated that juvenile fires were still happening. However, because of the restrictions for the virus, reporting was either neglected or no one was available from an agency to report them.

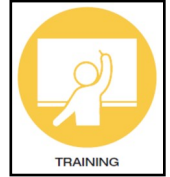
Out of the 13 referrals in 2020, the Fire Match program was able to make contact and work with 12 of the families. One family stopped and contact was lost during the 6-month monitoring period. Out of the remaining 11 families seen, 4 juveniles have completed their 6-month monitoring without returning to any fire setting activity and the remaining 7 are still in their 6-month monitoring period.







# TRAINING



## FIRE CHIEF – TRAINING WILLIAM RACE

The Training Division was able to assist in providing a wide variety of training and development opportunities during 2020. Although multi-company training was hampered due to COVID-19 in 2020, we were still able to maintain and hone our skills on High Rise Fire Attack.

Wellness has ramped up its efforts through training to continue its efforts in keeping our people healthy and safe.

The GRFD Regional Training Center

held Instructor I and Fire Apparatus Operator classes, which are scheduled on a yearly basis.

Through the use of State Fireworks Funds, the opportunity to host statewide classes is pivotal in maintaining our status as a state training facility.



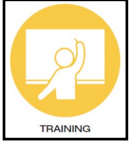
High rise fire attack training evolution.

FY19 - FY22 Operational Plan		Desired Outcome: Provide the appropriate training to ensure sustainability and growth at all ranks.				Metrics			
Owner	Training Chief Race					Tasks	Count	Percentage	Last Updated
Support	Captain Lohman					Not Started	12	20.69%	
						In Progress	17	29.31%	
						Complete	29	50.00%	1/20/2021
						Total	58	100.00%	
FY19 Strategy:		FY20 Strategy:		FY21 Strategy:		FY22 Strategy:			
Develop a training curriculum to provide comprehensive program content.		Implement a training program that builds sustainability and growth at all ranks.		Make adjustments to the training curriculum based on current conditions. (COVID-19)		Evaluate whether the training program ensures sustainability and growth at all ranks.			
Goal 1: Perform a training gap analysis.	Training Chief Race	Goal 1: Identify and develop subject matter experts and instructors.	Training Chief Race	Goal 1: Enhance certification and skill sets of all members to improve concentration metric.	Training Chief Race	Goal 1: Perform a training gap analysis	Training Chief Race		
Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4		
1: Establish a baseline		1: Develop a Subject matter expert list		1: Create a member certification level spreadsheet		1: Compare to FY 19 baseline			
2: Establish current training levels		2: Develop an instructor list		2: Analyze data for gaps		2: Assess recruit testing			
3: Identify Instructor 1's, Fire Officer 1 and 2's		3: Identify back-ups/successors for each position		3: Develop classes to address gaps		3: Does rank-based job training provide value?			
4: Assess testing of recruits vs. street performance				4: Research annual class for CSR/Trench/Hazmat/Collapse		4: Identify needed adjustments			
5: Develop rank-based job description training needs.									
Goal 2: Alignment of industry standards with each position and specific needs to the GRFD	Training Chief Race	Goal 2: Scheduling of training	Training Chief Race	Goal 2: Expand available training options to account for social distancing.	Training Chief Race	Goal 2: Implement needed adjustments.	Training Chief Race		
Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4		
1: Identify industry best practices.		1: Determine capacity for training		1: Utilize MI Bureau of Fire Services virtual Fire Officer I/II curriculum		1: Ensure all officers are Instructor 1 certified			
2: Formalize acting officer and E.O. certification		2: Company taskbook		2: Utilize regional training center to deliver trainings (internal and external)		2: Enhance Equipment Operator certification			
3: Implement better internal tracking of certificates.		3: Operator Balance Chart for Fire/EMS/Other		3: Online ICS 300 for Captain (Goal = 5 participants)					
4: Capture the benefit of outside training.									
Goal 3: Enhance company officer instructor capabilities	Training Chief Race	Goal 3: Educate the workforce on the "why" of needing this training.	Training Chief Race	Goal 3: Develop flexible, relevant, and effective training plans.	Training Chief Race	Goal 3: Develop a sustainability plan for the training curriculum.	Training Chief Race		
Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4	Tasks	Q1 Q2 Q3 Q4		
1: Provide the NFPA Instructor 1 course		1: Engage crews for buy-in - build ownership		1: Develop training handbook with pre-built lesson plans and training outlines		1: Research the latest skills/techniques needed			
2: Develop an Instructor 1 addendum class		2: Ask for feedback at training - 30/60/90 days later (Moved to FY21 Goal 3)		2: Gather feedback from training - 30/60/90 days later					
3: Develop an internal post-class assessment		3: End of course summaries - lessons learned							
4: Require new instructors to teach at the academy		4: "Did You Know" follow-up							

Training Chief William Race and Training Captain Steve Lohman are assigned as the pillar owner and support for the Training Operational Plan.



# TRAINING



## GRFD TRAINING CENTER

The GRFD Training Center was utilized by several organizations outside the GRFD and for additional programs. In particular, the GRFD helped to increase City employee and citizen safety through CPR classes, Confined Space Entry certification, and education and inspections for the operators of Mobile Food Vehicles. Other organizations and activities included:

- Grand Rapids Police Department
- Kent County Sheriff
- DEA
- Michigan Volunteer Defense Force
- Kent County CERT
- Wyoming Fire Department
- GRFD Summer Youth Academy



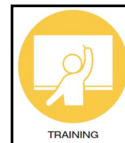
## 2020 RECRUIT ACADEMY

The 2020 Recruit Academy saw many hurdles, from COVID-19 shutdown to civil unrest. I am proud to say, through it all, the Class of 2020 came through with flying colors.





## SAFETY COMMITTEE – CAPTAIN MARK FANKHAUSER



### GRFD SAFETY COMMITTEE

The GRFD Joint Labor – Management Safety Committee investigated accidents and injuries, responded to member safety concerns, and made recommendations to the Fire Chief to improve safety. Deputy Chief Ron Tennant serves as the safety committee counsel.

2020 Safety Committee Members		
Training Chief William Race	Captain Kevin Carmel	Captain Dan VanderHyde
Captain Mark Fankhauser	Firefighter Steve Adamczyk	Firefighter Matt Stevens

The global pandemic of COVID-19 drastically impacted the safety of our members. The Safety Committee worked in junction with multiple agencies (internal and external) to ensure continuous best practices were implemented, striving to provide safer workplace practices for our members and the community we serve. Personal Protective Equipment (PPE) Respiratory and Universal was evaluated for its effectiveness to protect against COVID-19 following guidelines from the Centers for Disease Control and the Michigan Department of Health and Human Services.

The committee evaluated 138 COVID-19 related exposures, 54 injuries, and 19 accidents. Based upon these incidents, the department enhanced its deep cleaning of stations and apparatus weekly and after potential COVID-19 exposures.

The Safety Committee is working towards a more inclusive reporting system that enables the committee to review all the gathered information to assist in formulating future recommendations. We continue to improve accident and injury reporting in the attempt to understand trends and patterning of situations.

Consideration for a more ergonomic step height for entrance and exit from apparatus to reduce potential injuries.

Significant work was accomplished with our Line of Duty Death (LODD) / Line of Duty Injury (LODI) process.

Previous recommendations that have made a positive impact:

- The ongoing concern for respiratory protection from diesel emissions was resolved with grant funds for exhaust systems in each station with installation occurring beginning of CY 2021.
- Additional emergency lighting on Utility 2 occurred improving advanced warning to motorists and enhancing the safety for the driver.





# RESPONSE

## OPERATIONS



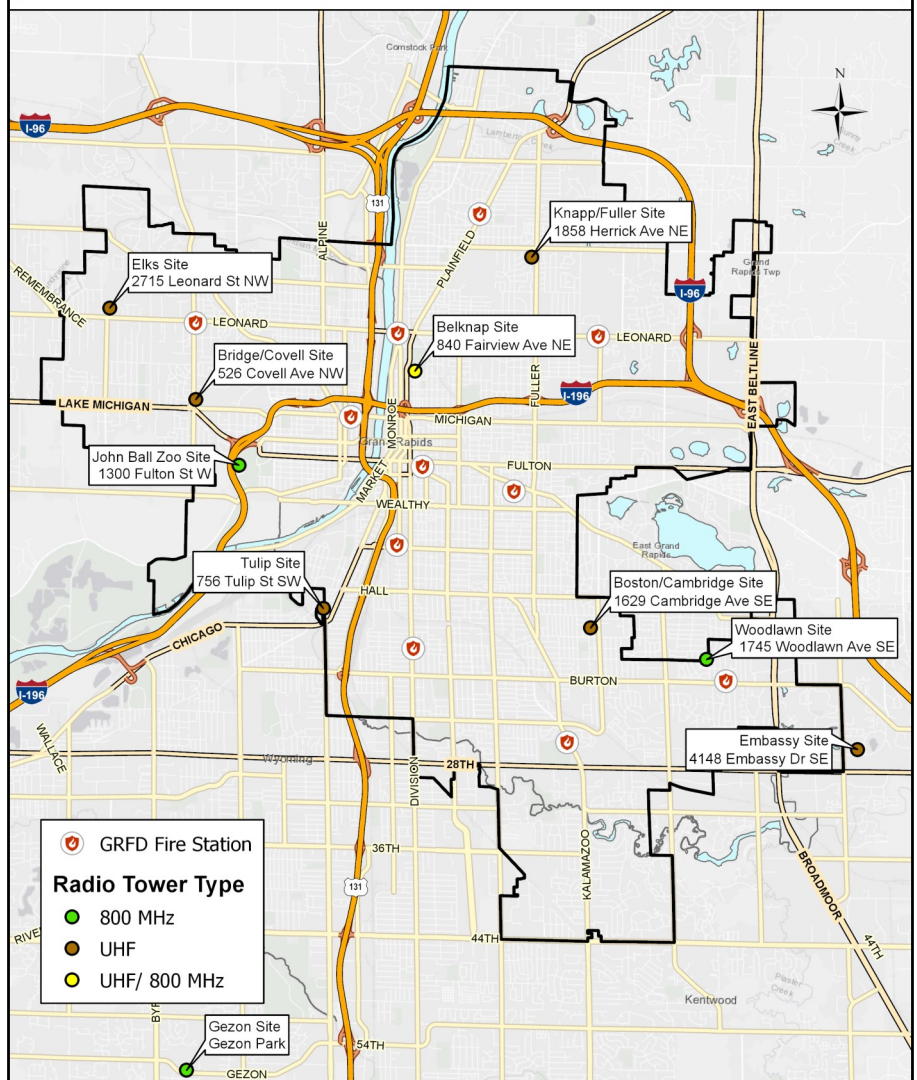
### DEPUTY FIRE CHIEF TODD VANDERWALL

The Grand Rapids Fire Department answered 23,120 alarms last year. After steadily trending upward over the last decade, total responses dropped slightly from the record level of responses set in 2019 at 24,124 alarms. Total responses to fire incidents dropped slightly as well from 555 fires calls in 2019 to 536 fire calls in 2020. Unfortunately there were 9 fire related deaths in 2020. 8 of the 9 occurred in residences that had no working smoke detectors. Smoke detectors save lives!

In 2016 the Kent County Dispatch Authority, of which the Grand Rapids Fire Department is a member, decided to transition over to the 800 MHz trunked radio communication network with the Michigan Public Safety Communications System (MPSCS). “MPSCS provides a stable, secure

framework for interoperable communications among local, state, federal, tribal and private first responders. This standards-based public safety communication system supports first responders in their service to citizens. MPSCS handles the second-largest trunked communication system in the world. As of March 2020 the system spans 59,415 square miles, has 279 radio towers and includes more than 108,000 radios” ([michigan.gov/mpscs](http://michigan.gov/mpscs)). After countless meetings, several new communication tower installations, apparatus radio retrofits and system testing the GRFD transitioned over to the new system. We and GRPD were the first two agencies to make the transition in Kent County. Initial metrics indicate the system is a big improvement to our UHF radio system that we utilized as our primary means of communication. As more agencies come on line in 2021 we are excited to take advantage of the enhanced communications interoperability.

### Grand Rapids Fire Department Radio System



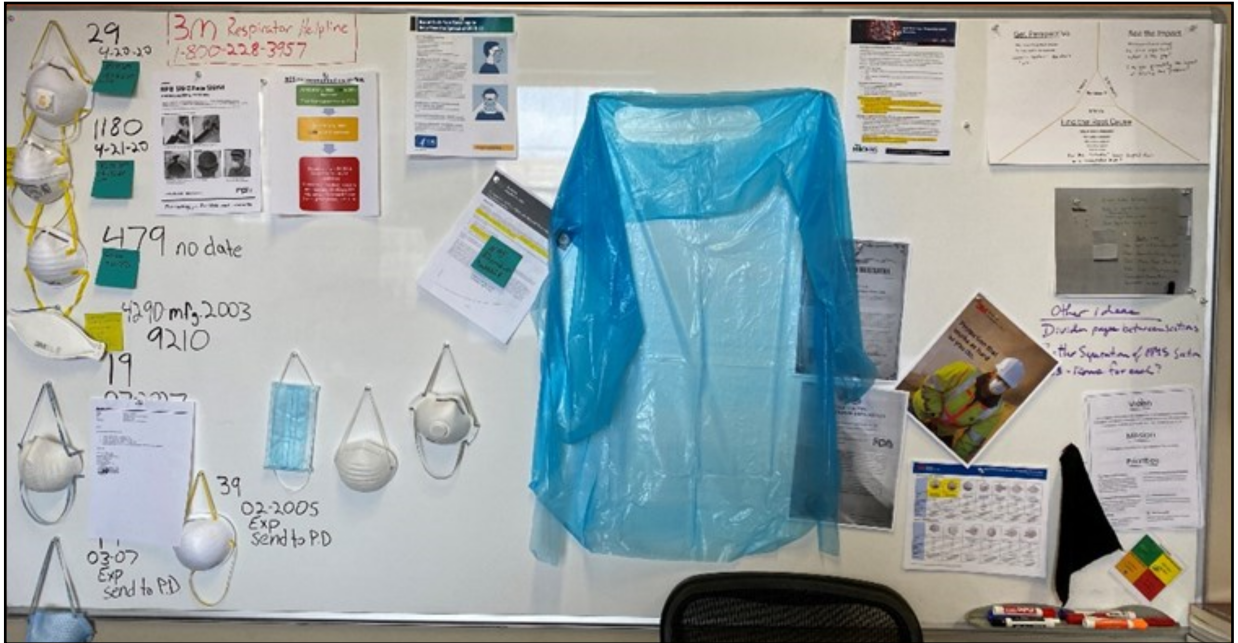


# RESPONSE



No different than any other organization, the fire department made quite a few adjustments over the last year due to the COVID-19 pandemic. Initially our concerns were focused on determining the proper

personal protective equipment (PPE) and other necessary precautions to protect our members as they responded to COVID-19 positive calls. What became more of a challenge



was acquiring additional stores of PPE to keep up with the increased usage. Our procurement personnel were scouring the world to obtain PPE and more specifically N95 masks. Thankfully we never ran short! Additional cleaning and disinfecting procedures, and in station PPE requirements were instituted to reduce the possibility of spread within each engine house and among our personnel. While we believe these were effective measures to reduce the spread of the virus within the organization, we still had to manage 2 major COVID-19 outbreaks among our personnel that put us on the brink of altering our staffing schedule to continue to maintain coverage within our City. During these outbreaks our members stepped up big time! Several members worked multiple days in a row over a week, while other members not assigned to the suppression schedule filled in at stations for those who were out sick. Other operational impacts included the temporary discontinuation of our in-person residential smoke detector installations, and our community interaction opportunities at various schools and events. Training with fire companies from other stations was halted and more training was conducted with individual fire companies or online. As with most other organizations all meetings that could be moved online were. At the end of the year our personnel began receiving COVID-19 vaccinations. We are hopeful that a greater understanding of the virus and vaccinations will allow us to return to normal operations at some point in 2021.

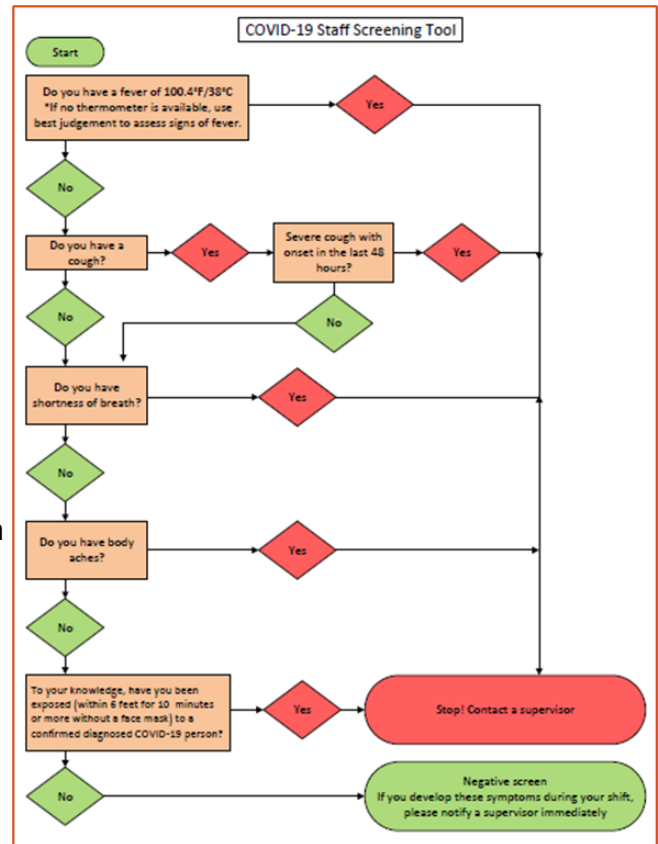




# RESPONSE



Between the response to COVID-19 that started in March and the civil unrest event that occurred in May our personnel have responded admirably to events that have been uncharacteristic over many decades. And, as we evaluate our response and learn from our after action reviews, we continue to adapt and improve in our delivery of service to our community.



FY19 - FY22 Operational Plan		Desired Outcome: Effective all-hazards deployment model with appropriate staff and apparatus levels 90% of the time.				Metrics			
Owner	Deputy Chief VanderWall					Tasks	Count	Percentage	Last Updated
Support	Chief Lehman					Not Started	16	37.21%	
						In Process	6	13.95%	
						Complete	21	48.84%	
						Total	43	100.00%	1/20/2021

FY19 Strategy: Increase community awareness of firefighting, EMS and special operations.					FY20 Strategy: Ensure appropriate response to high-risk buildings and events.					FY21 Strategy: Ensure appropriate response to high-risk buildings and events.					FY22 Strategy: Increase staffing levels to meet community risks.				
Goal 1: Conduct Fire Ops 102 for various stakeholders within the community.					Goal 1: Conduct a large scale high-risk training exercise to identify deployment gaps.					Goal 1: Formalize Homelessness Outreach Team Mission, Goals and Objectives					Goal 1: Conduct a large scale multi-jurisdictional training exercise to identify deployment gaps.				
DC Vanderwall					DC VanderWall					Chief Lehman					DC VanderWall				
Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4
1. Establish priority of attending groups					1-Develop an Incident Action Plan-format					1. Secure workspace for HOT Team					1. Identify participating partners				
2. Determine if more than one Fire Ops class is needed					2-Review and revise the current high-rise SOG					2. Determine team makeup					2. Plan a large-scale exercise that can expand/contract				
3. Pick dates and establish the agenda					3-Host a large-scale exercise that can expand/contract					3. Determine metrics and define lines of reporting					3. Conduct a large-scale exercise that can expand/contract				
					4-Identify gaps in operational readiness					4. Establish partnerships					4. Identify gaps in operational readiness				
					* These tasks moved to FY22 Q1 and Q2 due to COVID-19														
Goal 2: Institute station open houses - foster community engagement					Goal 2: Adjust staffing matrix to address gaps identified during the large scale exercise.					Goal 2: Develop an internal high risk training exercise to assess organizational capabilities.					Goal 2: Adjust staffing matrix to address gaps identified during the large scale exercise.				
Deputies/ Asst. Chief					DC Vanderwall/ Planning					DC VanderWall Training Chief					DC Vanderwall/ Planning				
Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4
1. Gain input from Captains					1-Develop a matrix to fix gaps from FY20 Goal 1- Task 1					1. Review current SOG					1. Develop a deployment model to fix gaps from FY22 Goal 1, Task 3				
2. Develop a schedule					2-Prioritize operational gaps					2. Conduct large-scale high rise training					2. Prioritize operational gaps				
3. Determine who has priority on Fire Prevention week					3-Implement high impact/low effort interventions					3. Identify gaps in operational readiness					3. Implement high impact/low effort interventions				
4. Advertise in school and neighborhood newsletters					* These tasks moved to FY22 Q4 due to COVID-19														
5. Develop standard work for agenda and timeline																			
Goal 3: Host an annual expo at LaGrave Station					Goal 3: Assess vulnerability to natural and man-made disasters.					Goal 3: Enhance Auto-aid agreements with surrounding jurisdictions					Goal 3: Seek diverse avenues of funding to ensure adequate operational resources.				
DC Vanderwall					DC Vanderwall/ Planning					DC VanderWall					Chief Lehman				
Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4	Tasks	Q1	Q2	Q3	Q4
1. Determine the best time of year for event					1-Find a location					1. Meet and review with Kentwood					1. Hold a meeting with the DDA				
2. Apply for a permit with Office of Special Events					2-Develop a scenario					2. Meet and review with Walker					2. Research ISO staffing impacts				
3. Assemble an internal committee					3-Develop a schedule					3. Meet and review with Plainfield					3. Research reduction in overtime vs. hiring additional				
4. Secure resources - supplies and personnel					4-Analyze responses					4. Meet and review with Wyoming					4. Secure permanent funding for the Homelessness Outreach Team				
5. Host the event and hold a hot wash for improvements					* These tasks were reassigned to the Emergency Planning section in the FY22 Support Services plan.					5. Meet and review with Airport									



## EMERGENCY MEDICAL SERVICES - (EMS) COORDINATOR

### CAPTAIN STEVE MACBRIDE



Learning to navigate medical calls and hands on medical training in the face of a global



pandemic was the challenge overcome by the Grand Rapids Fire Department in 2020. While our members have routinely worn personal protective equipment (PPE) since they began providing medical care, it took on a new meaning in March with updated recommendations from the CDC, State and County oversight agencies using new Covid-19 protocols. While we had a stock of specialized masks and equipment to keep the members protected, the volume of PPE that they used increased to a point that Keith Borreson and Eric Ryder temporarily moved to administration to assist. They worked tirelessly to purchase more PPE and provided valuable information regarding sanitizing our stations and apparatus, new equipment, and optimized our stock of personal

protective equipment. To integrate other city department's needs, this purchasing was later reassigned to city supply.

18 of our Medical First Responders completed a hybrid course to obtain their Emergency Medical Technician- Basic licensure. This was a first for GRFD, in collaboration with Great Lakes EMS, and by year-end 17 are now licensed at that higher level. Due to staffing shortages brought on by the COVID-19 sick leaves, there were 4 recruits who went through a Medical First Responder course taught by Lt. Kernodle. This was very successful, and the recruits are now on the fire apparatus helping the citizens of Grand Rapids.

#### 2020 Medical Licensure Levels

16 Licensed EMS Instructor Coordinators
23 Licensed Paramedics
87 Licensed EMTs
85 Licensed Medical First Responders
25 Licensed medical vehicles were certified
46 Individual medical licenses were reviewed

#### 2020 Major Accomplishments:

171 patients received Narcan as the opioid crisis continues. This number is up from 111 in 2019, but includes situations where bystanders or police administered Narcan.

2,958 hours of hands on training was completed.

2,180 hours of on line training was completed.

120 hours of EMS instructor specific training was completed.

We provided Rescue Task Force training in conjunction with GRPD for all personnel.

We provided CPR and 1st aid training to 13 city employees.





## BATTALION FIRE CHIEFS



Battalion Chiefs play an important part in the Grand Rapids Fire Department's fulfilling of its mission: "To value people by saving lives, protecting property and responding to the needs of the community".

Battalion Chiefs help to save lives and protect property by working in their roles coordinating the effective mitigation of emergencies. There are six Battalion Chiefs, or "BCs", three shifts each with two Battalion Chiefs: one BC housed at the Monroe Avenue Fire Station and one who works out of the Division Avenue Fire Station. While these Chiefs have historically operated on the North and South ends of the city respectively, times have evolved and the Chiefs increasingly work together to address incidents.



The "North Chief" mainly cares for the needs of the personnel stationed at the Leonard, Bridge, Monroe, LaGrave, Covell and Plainfield fire stations. The "South Chief" is responsible for the crews at the Franklin, Kalamazoo, Burton, Division and Chester Stations. However, just as at incidents, the two Battalion Chiefs work together to make sure that the entire shift has whatever they need.

Battalion Chiefs have the primary responsibility of taking command of large-scale incidents. As such, the Battalion Chief must ensure that crews are able to mitigate the incident in a coordinated manner, have the resources they need (including enough personnel) and provide for the safety of everyone on scene, both firefighters and civilians.

There are a number of other duties that are performed by Battalion Chiefs. Many of these may be administrative in nature but are important in providing for the non-emergency needs of their crews. These include items such as:

- Staffing- The South BC coordinates staffing for each shift. This Chief ensures that there are enough personnel on duty to meet at least the minimum required and makes adjustments throughout the day to make sure that the City has appropriate coverage.
- Training- Battalion Chiefs work with the Training Division and each other to make sure that all personnel keep current with new training information and techniques. They also keep abreast of the specific training needs of their respective shifts to ensure that necessary training is provided.
- Program Managers- Each Battalion Chief has a specific area of oversight as a Program Manager and works to make sure the entire Department benefits from their assignment. These programs include such things as Special Operations, Wellness, Recruitment/Outreach, Support Services, Extrication and Liaison with other local fire departments.

Each month, the Battalion Chiefs meet with all of the Chief Officers of the GRFD discussing important matters in the department that help to shape major decisions that steer the direction that the GRFD takes.

Whether a Battalion Chief is managing a major emergency incident, is spending time listening to the concerns of crews on their shifts, is helping in the development of a member or providing needed direction, it is clear that the role of Battalion Chief is a vital one in the growth and success of the Grand Rapids Fire Department!



## **SOUTH BATTALION - BATTALION FIRE CHIEF KATHY THOMPSON**



### **WELLNESS PILLAR**

An Assistance to Firefighters Grant was awarded to the GRFD during 2020. It allowed for 4 sessions of the best Human Performance training for functional athletes in the United States to be conducted for the GRFD and area departments by O2X. 180 people participated including 32 guest students. The overall goal of the O2X 3 pillar model of training: Eat, Sweat, Thrive was well received and we believe it has changed the trajectory of the health for the members who participated. The training surveys identified that the department personnel are stressed, with 82% reporting that the stress impacts them

physically while 86% reported it impacted them mentally. It identified our negative sleep habits and provided training on how to improve them. Finally, it showed that the GRFD has a positive mindset.

From the guests who attended the training, Detroit Fire and Canton Fire worked together to get the 32 hour training, Q course approved state-wide and will be offering the class on their side of the state in 2021.



Dan Weatherwax and Vincenzo Lorelli both passed their National Strength and Conditioning Association certification to become certified personal trainers for the department. Two more people are in the process as well.

GRFD Wellness has worked hand-in-hand with City of Grand Rapids Wellness. This has provided some wonderful opportunities, including Pre-Diabetes Training, Yoga Classes, Mental Resiliency Classes such as the “Science of Happiness and Creating Behavior Change in America”, and the City Wide Physical Wellbeing Challenge last summer.

Cardiovascular stress tests were again provided at this year’s annual physical, and it was also the first year to include a mental health screening.

The work with Robertson Brain Health continued again this year, with Dr. Robertson continuing to improve his delivery method for continued education which now includes short monthly training videos.

Two financial wellness lessons per shift began in December 2020 and will continue into the first quarter of 2021. It was learned that 78% of Americans live paycheck to paycheck and that financial stress can have harmful effects on the longevity of American workers.

Research has started investigating the effects of blue and red trip light systems in terms of sleep and the ability to wake up quickly for efficient and effective response. Also, the effects of disturbed sleep and testosterone are started to be researched. The wellness pillar is proud of the work accomplished during 2020 and is looking forward to a healthier 2021!



## **SOUTH BATTALION - BATTALION FIRE CHIEF ERIC FREEMAN**



### **RECRUITMENT AND OUTREACH**

The Grand Rapids Fire Department counts excellence among its core values. We also strive to live up to our vision: “To provide world class fire services for our community by employing a diverse workforce”. To do this in a world that provides stiff competition for the best employees, we make it a point of emphasis to reach out to find the gems in our community and recruit them as firefighters for the City of Grand Rapids.

We do this in several ways:

- Programs that engage members of the community and expose them to the fire service such as:
  - ◊ The Fire Youth Academy- A week-long fire academy style program to introduce high school students to the fire service
  - ◊ The Explorer Program- A program that allows youths to perform volunteer service in the community
  - ◊ JROTC- A partnership with the Grand Rapids Public Schools that pairs the GRFD with the local JROTC students
  - ◊ Year-round attendance at various community events where we can engage people and stimulate an interest in the fire service
- Partnerships with organizations such as Michigan Works and Our Community’s Children
- Connecting with local high schools and colleges
- Correspondence with people who show specific interest in the GRFD

We also collaborate with the City of Grand Rapids Human Resources Department to reach out and engage people with diverse backgrounds to provide a strong pool of candidates who will fit the needs of this community.

The global COVID-19 pandemic affected Recruitment and Outreach in 2019/2020. We did not have the opportunity to attend a typical year’s worth of community events as many of these were canceled. We also could not hold the Fire Youth Academy that has gained in popularity over the last few years. However, we have continued using our time and resources wisely to prepare for post-pandemic Recruitment and Outreach efforts:

- We were able to refine the programs that we currently have
- We have continued to network and solidify our community and City of Grand Rapids partnerships
- We have laid the groundwork to develop an intern/Cadet program and are looking forward to launching it in 2021
- We are continuing to work with HR to develop a more equitable hiring model that will gather an even larger group of quality firefighter candidates
- We are partnering with University of Michigan students to develop a Fire Department dedicated website to highlight to the public the path to start a career with the GRFD

The future of the Grand Rapids Fire Department depends largely on continuing to find quality people from a diverse background who fit the needs of and want to protect this community. We eagerly look forward to continuing to find Recruitment and Outreach opportunities in 2021 and beyond!



## **SOUTH BATTALION — BATTALION FIRE CHIEF MARK NOORMAN**



### **APPARATUS INVENTORY AND ORGANIZATION**

There has been a lot of moving parts in the way of machine inventories this year, a minimum standard inventory for all front line and reserve machines was established.

A significant portion of time was invested this year into fast water. Changes came in a variety of delivery methods. We adjusted everything that could make us more successful. We modernized the nozzles we utilize, the hose we deploy, and the monitors we can setup.

As part of our faster water delivery efforts a committee was established to look at the way we load our hose beds. The team began meeting in the fall of 2019 and by the spring of 2020, we had a solid grasp on the moves we wanted to make. After a test was set up on Engine Co. #4 the decision was made to switch all engine companies. The current underutilized three-inch hose was going to be split for a more deliverable usage. There are now two stacks of hose for a variety of incidents. We can now supply monitors, sprinkler connections, FDC's, a second line off the hydrant, and an extended bundle. In the short time of using this new design it has been useful on grass fires several hundred feet away. The bundle was also successfully utilized in a commercial building fire. Next the old way of dead loading 200' of 2 ½" hose with 200' pre connect stacked on top of it was changed. Now we have 400' pre connected on the officer side and on the EO side. One side with a smoothbore and the other with the fog tip.

After a successful study and comparison test, we moved to a new nozzle this year. The new nozzle operates at a lower pressure which allows more maneuverability and fast deployment. The switch from Task Force Tips to Elkhart XD breakaway nozzles will allow for a more efficient stream. We can deliver the correct flows which are recognized by NFPA. All members were trained on the new nozzles and the simplicity of their operations.

With fires getting bigger and growing faster we wanted a more efficient appliance for large water delivery. We chose to purchase the Elkhart Ram, which stands for Rapid Application Monitor. We now can deliver 500 gallons per minute with one 3" line. These new "Rams" should be in service this coming year. Along with the monitors we purchased all new high-rise equipment, hose straps, and water can harnesses.





## NORTH BATTALION - BATTALION FIRE CHIEF DAVE NOORMAN



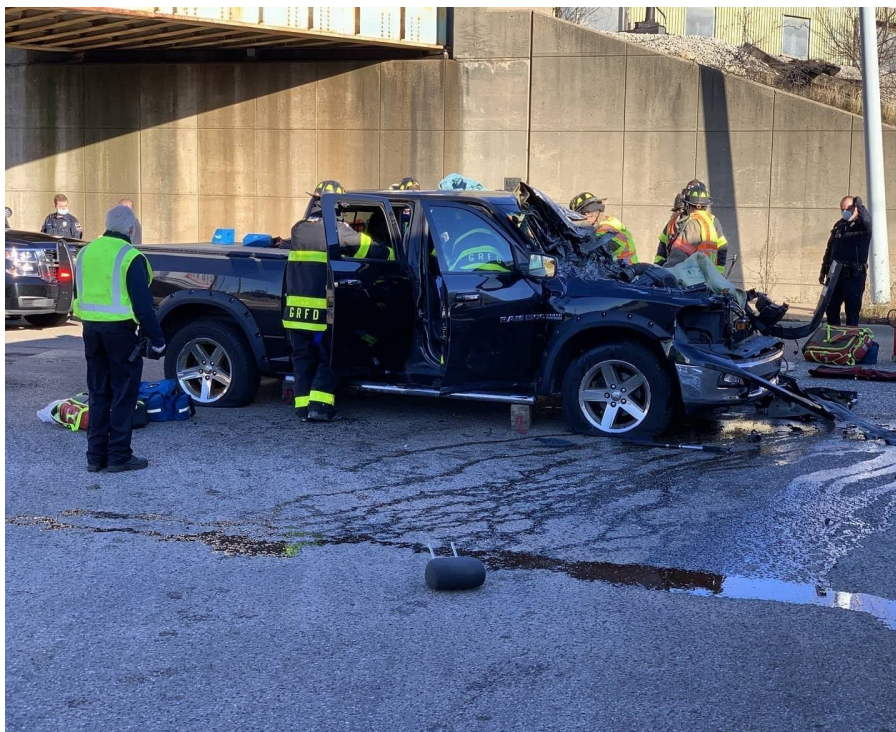
### EXTRICATION

In 2020 the extrication program, like all other programs, felt the effects of the pandemic. During most of the year all multi-company trainings were suspended as a precaution against spreading Covid. Crews met the challenge by conducting single company trainings while adhering to masks and

social distancing guidelines.

Our partnerships with salvage yards on both the North and South ends of the City continue to have a positive impact on our metrics by keeping fire companies in their response districts during training.

We have written and submitted a grant request to replace high pressure lift bags and hydraulic equipment at or nearing its serviceable life.



I, as well as our extrication crews, look forward to the opportunities 2021 will bring to meet the needs of our citizens and visitors.



## NORTH BATTALION - BATTALION FIRE CHIEF COLLIN KELLY



### G.R. FORD AIRPORT, TRAINING, AND MUTUAL AID LIAISON

2020 in hindsight, pun intended. Looking forward to my last year with the GRFD as retirement looms in November of 2021. Words cannot convey the appreciation and overwhelming pride I feel for 31+ years with such a splendid organization. Hopefully, a return to normalcy for the new year upcoming will help expunge the chaos of 2020.

**Ford Airport:** Completed the FAA 3-year requirement Mass Casualty scenario in August. COVID-19 restrictions limited the spectrum compared to years past. Big thanks to Emergency Manager Farole and Training Chief Race for their assistance and representation. Although not as grandiose, valuable preparedness lessons were gleaned, and response issues were evaluated for future improvements.



**Training:** Facilitated several “Quick Hit” exercises out at the burn building this summer utilizing 2 crews per scenario. Focus was on structural firefighting arrival tactics incorporating R.E.C.E.O. and S.L.I.C.E./R.S. This training provided valuable deployment and prioritization essentials especially for the younger Acting Officers. I learned a great deal as well during hot washes afterwards to further enhance tactical awareness from a command/control standpoint.

**Mutual Aid:** Multi company trainings with our neighboring departments were significantly handcuffed due to the pandemic. As with other venues, progress still moved forward utilizing live meetings with our mutual and auto-aid constituents on a regular basis. Covell’s Captain Braman and I welcomed in via video new Battalion Chief Host with the Walker Fire Department.

**Miscellaneous:** I was able to sit down with several candidates after the assessment center on an informal basis to update myself with their ideas and thoughts about the promotional process. We discussed their department involvement and we bounced ideas as to how to improve both the process and their personal development. This time was invaluable to me when the time came for recommendations.

Overall, while frustrating to say the very least, 2020 did help bring things into perspective. When an organization is forced to prioritize and identify the foundation of our basic mission, it encourages a much needed push of the “Reset” button. Thank you again GRFD for giving me the opportunity to serve the community.



## NORTH BATTALION - BATTALION FIRE CHIEF JACK JOHNSON



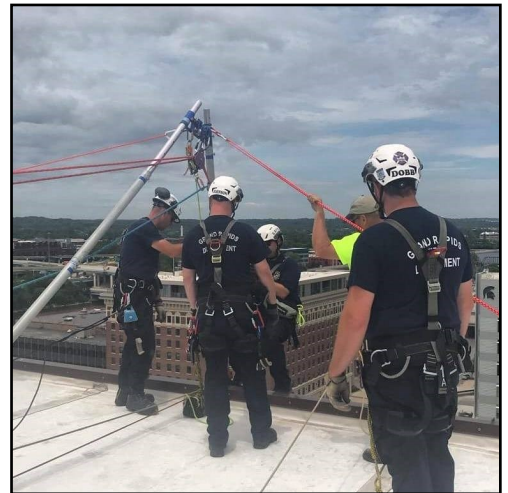
### SPECIAL OPERATIONS CHIEF

For 2020 I was assigned to the North Battalion after working for two years in the South Battalion. This is the first year of our 3-year assignment. A change that has better streamlined the Operations Division of the Fire Department. It was a challenging year that found us responding to a global pandemic early in the year, to civil unrest in the summer months and a staffing crisis in November caused by the pandemic. This was a challenge that was met with tenacity and resolve from the crews of the North Battalion A shift.

In addition to my regular response duties, I also have the responsibility of oversight of the Special Operations Division. This division encompasses the advanced level tasks of Technical Rescue, Water Rescue and Hazardous Materials Response. The global pandemic brought with it unique training challenges to our special operations division. We have continued to train monthly to ensure we are able to respond to the needs of our community.

## TECHNICAL RESCUE TEAM - CAPTAIN ED BRAMAN

This year found the T.R.T. starting out the year with an aggressive training schedule and major equipment updates in the works! Like the rest of the world, the T.R.T.'s plans were forced to change. Despite restrictions, cancelations, and an everchanging landscape, the T.R.T. was able to continue regularly scheduled, on shift training. In addition to the continued shift training, the GRFD was able to safely host a rope rescue technician class which was successfully completed by 15 team members. As a result of the successful completion of the rope technician class, and with the support of the Training Division, we are lobbying for and hope to be granted State of Michigan funds for rope rescue classes to be held by the GRFD in 2021!



The team's capabilities, as well as training levels, were expanded in 2020 with the allocation of a wide variety of equipment. Replacements for the "ADV" and "Heavy Rescue" were received and preparations are being made to put them in service. It is the team's intention to have both vehicles in service as soon as possible! The team also received three Michigan Region 6 technical rescue trailers. The trailers were equipped with a wide variety of tools and equipment, as well as lumber. The team continues to work hard on improving in all facets of technical rescue and as always is ready to respond, with the highest level of professionalism, to most anything that man or Mother Nature throws at us!





## HAZARDOUS MATERIALS TEAM – CAPTAIN MIKE WITTEVEEN



The Grand Rapids Hazmat Team once again responded to several alarms within the city, while also providing technical assistance to outside agencies when requested. Our most common call continues to be leaking fuel spills, however we responded to a large acid incident in a facility, gas leaks, and odor investigations. The hazmat team assisted with developing the decontamination procedures for the station due to COVID-19. We also provided material support for units involved in protecting the downtown area during the riots this summer.

2020 was a quiet year for extra training opportunities due to the pandemic shutdowns, so we focused on training that could be accomplished in-house. Despite the pandemic, we were able to pull off one coordinated training event with other Region 6 teams. We had teams from Muskegon, Kentwood, Caledonia, Grandville, and the 51st Civil Support Team from Battle Creek come together for a one-day event. It was great to reconnect with some old colleagues.

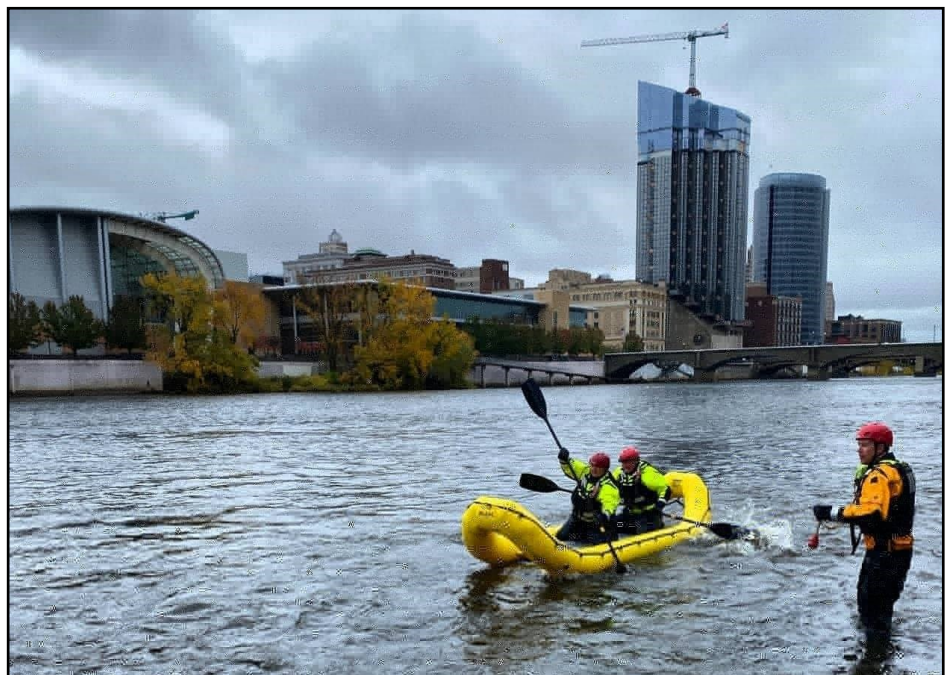
We continue to streamline our response to hazmat incidents: PPE, decontamination, radiological response, product identification, and product transfer have all been tweaked in the goal of making hazmat as simple a process as possible. Our system is faster, more reliable, and better equipped than ever before to do the job asked of us.

## WATER RESCUE TEAM – CAPTAIN RICH CLARK

Like everyone else, 2020 took its toll on the plans laid out for the Water Rescue Team. We were able to train the team in basic open water dive and are planning on advanced training in 2021, the goal is to have a Dive Rescue Team in place during 2021. Dive training has been added to our monthly routine which will nearly double our training hours from 2020.

We are still on schedule to provide a Grand Rapids specific swift water class in the spring of 2021 for all our team members.

We responded to 14 alarms in 2020 that included assistance with body recovery, search for missing persons multiple stranded citizens and one rescue.





## MICHIGAN TASK FORCE -1 DEPLOYMENT — LT. CURTIS WALSH



Amid the global COVID-19 pandemic, 2020 was another successful year for the Task Force. MI-TF1 had its first in-state deployment and was also placed on Alert status for Hurricane Sally. Furthermore, MI-TF1 initiated the development of a Helicopter Aquatics Rescue Team (HART).

On May 19th 2020, five GRFD personnel attached to MI-TF1, as part of a Type 1 Swift Water/ Flood Water Mission Ready Package (MRP) along with 23 other team members from across the state, responded to the flooding in the City of Midland area that resulted from the Edenville Dam failure. Multiple rescues were performed, and no fatalities or major injuries were reported. Through thoughtful preplanning, the team's Concept of Operation was updated prior to this event allowing the team to operate successfully and safely under the current challenges faced during the global pandemic.

The six GRFD members attached to MI-TF1, completed 460 hours of training covering water rescue, collapse rescue, trench rescue, decontamination, and land navigation. Additionally, members were certified as Rescue Boat Operators.

MI-TF1 consists of over 130 members ranging from first responders, emergency department physicians, structural engineers, heavy equipment operators, and canine search specialists.

The GRFD is proud to support the mission of MI-TF1 and looks forward to continued involvement as an integral part of Michigan's premier special operations USAR response team.





# BENCHMARK PERFORMANCE STATEMENTS

The **effective response force (ERF)** is the minimum amount of staffing and equipment that must reach a specific emergency zone, 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. Actual baseline performance is noted in the tables.

## 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 three firefighters, is **7 minutes**.

Benchmark	(Low) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:01:30	Alarm Handling	Pick-up to Dispatch	Urban	0:02:14 1,813	0:02:06 398	0:02:11 342	0:02:06 356	0:02:28 371	0:02:30 346
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:01:53 4,100	0:02:10 794	0:01:52 885	0:01:41 709	0:01:36 619	0:01:55 1,093
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:05:21 1,645	0:05:14 349	0:05:28 308	0:05:10 332	0:05:13 339	0:05:29 317
0:04:00		Travel Time ERF Concentration	Urban	0:05:21 1,645	0:05:14 349	0:05:28 308	0:05:10 332	0:05:13 339	0:05:31 317
0:07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:08:25 1,645	0:08:39 349	0:08:28 308	0:08:05 332	0:08:06 339	0:08:28 317
0:07:00		Total Response Time ERF Concentration	Urban	0:08:25 1,645	0:08:39 349	0:08:28 308	0:08:04 332	0:08:06 339	0:08:28 317

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	(Moderate) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:01:30	Alarm Handling	Pick-up to Dispatch	Urban	0:01:46 1,274	0:01:38 267	0:01:40 253	0:01:50 270	0:01:45 217	0:02:08 267
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:01:55 8,560	0:02:03 1,893	0:01:57 1,760	0:01:47 1,717	0:01:46 1,365	0:01:57 1,825
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:04:19 1,263	0:03:58 266	0:04:17 250	0:04:14 267	0:04:31 216	0:04:35 264
0:08:00		Travel Time ERF Concentration	Urban	0:09:20 515	0:07:48 113	0:08:52 99	0:09:50 122	0:09:35 78	0:09:15 103
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:06:54 1,263	0:06:30 266	0:06:55 250	0:06:52 267	0:06:40 216	0:07:21 264
11:00		Total Response Time ERF Concentration	Urban	0:12:09 515	0:10:31 113	0:11:43 99	0:12:42 122	0:11:46 78	0:12:59 103



# 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
0:01:30	Alarm Handling	Pick-up to Dispatch	Urban	0:02:02 278	0:01:51 25	0:01:40 17	0:02:34 20	0:01:56 107	0:02:19 109
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:01:58 2,177	0:02:18 238	0:02:13 149	0:02:00 158	0:01:48 800	0:01:56 832
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:03:56 275	0:03:21 25	0:04:47 17	0:04:22 20	0:04:33 105	0:03:50 108
0:10:00		Travel Time ERF Concentration	Urban	0:09:09 90	0:07:43 13	0:06:49 6	0:09:04 8	0:08:41 27	0:11:21 36
07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:07:06 275	0:06:11 25	0:07:01 17	0:07:15 20	0:07:42 105	0:06:50 108
13:00		Total Response Time ERF Concentration	Urban	0:13:36 90	0:11:06 13	0:08:52 6	0:12:06 8	0:12:41 27	0:16:25 36

\*Note that for 2018 and 2019 the methodology for classifying incidents was modified, resulting in more high risk fire incidents.

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

Benchmark	(Maximum) Fire Suppression - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:01:30	Alarm Handling	Pick-up to Dispatch	Urban	0:01:43 25	0:02:43 8	0:01:26 3	0:01:40 2	0:01:38 7	0:01:19 5
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:02:00 238	0:02:09 83	0:01:42 28	0:01:44 10	0:01:56 72	0:01:47 45
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:03:49 24	0:04:05 8	0:02:40 3	0:03:52 1	0:03:29 7	0:02:56 5
0:12:00		Travel Time ERF Concentration	Urban	0:10:34 4	0:09:21 1	N/A 0	N/A 0	0:03:33 2	0:11:06 1
0:07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:06:21 24	0:08:36 8	0:05:30 3	0:06:38 1	0:05:40 7	0:05:11 5
0:15:00		Total Response Time ERF Concentration	Urban	0:28:14 4	0:31:41 1	N/A 0	N/A 0	0:19:58 2	0:17:19 1

\*Note that in 2018 and 2019 there were not enough maximum risk fire incidents to perform a 90th percentile baseline analysis.



# BENCHMARK PERFORMANCE STATEMENTS

## 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 3 personnel is 7 minutes and 30 seconds.

Benchmark	(Low) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:02:00	Alarm Handling	Pick-up to Dispatch	Urban	0:03:16	0:03:31	0:03:20	0:03:14	0:03:08	0:03:05
				86,672	17,353	17,278	16,786	18,042	17,213
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:01:42	0:01:56	0:01:44	0:01:34	0:01:31	0:01:38
				83,823	17,119	16,887	16,091	17,344	16,382
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:05:02	0:05:04	0:05:06	0:05:02	0:04:57	0:05:01
				77,841	15,746	15,615	15,067	16,116	15,297
0:04:00		Travel Time ERF Concentration	Urban	0:05:02	0:05:04	0:05:06	0:05:02	0:04:57	0:05:01
				77,822	15,746	15,609	15,062	16,111	15,294
0:07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:08:39	0:09:03	0:08:45	0:08:30	0:08:21	0:08:31
				77,841	15,746	15,615	15,067	16,116	15,297
0:07:30		Total Response Time ERF Concentration	Urban	0:08:39	0:09:03	0:08:45	0:08:30	0:08:21	0:08:31
				77,822	15,746	15,609	15,062	16,111	15,294

For 90 % of moderate risk EMS incidents, the total response time for the arrival of the effective response force, consisting of 6 personnel, shall be 9 minutes and 30 seconds.

Benchmark	(Moderate) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:02:00	Alarm Handling	Pick-up to Dispatch	Urban	0:03:02	0:03:04	0:03:13	0:02:52	0:02:49	0:03:14
				4,115	809	1,001	828	787	690
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:01:56	0:02:18	0:01:56	0:01:44	0:01:42	0:01:49
				8,014	1,956	1,880	1515	1,442	1,221
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:06:18	0:06:04	0:06:32	0:06:08	0:06:27	0:06:14
				3,661	770	913	731	657	590
0:06:00		Travel Time ERF Concentration	Urban	0:08:16	0:08:01	0:08:33	0:08:09	0:08:36	0:08:03
				2,627	571	585	566	474	431
0:07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:09:49	0:09:43	0:10:07	0:09:35	0:09:41	0:09:51
				3,661	770	913	731	657	590
0:09:30		Total Response Time ERF Concentration	Urban	0:11:43	0:11:41	0:12:12	0:11:31	0:11:34	0:11:17
				2,627	571	585	566	474	431



# BENCHMARK PERFORMANCE STATEMENTS

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

Benchmark	(High) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:02:00	Alarm Handling	Pick-up to Dispatch	Urban	0:03:01 128	0:02:22 24	0:03:16 30	0:03:04 17	0:02:43 31	0:03:01 26
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:02:02 345	0:02:29 78	0:03:28 74	0:01:43 42	0:01:47 86	0:01:52 65
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:06:38 112	0:06:19 22	0:06:54 28	0:05:42 15	0:06:17 23	0:06:17 24
0:08:00		Travel Time ERF Concentration	Urban	0:09:38 9	N/A 0	0:09:46 1	0:03:22 1	0:08:26 5	0:07:50 2
0:07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:10:15 112	0:09:58 22	0:09:30 28	0:11:39 15	0:10:11 23	0:08:52 24
0:11:30		Total Response Time ERF Concentration	Urban	0:26:11 9	N/A 0	0:26:31 1	0:26:07 1	0:13:14 5	0:10:24 2

For 90% of **maximum 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**.

Benchmark	(Maximum) EMS - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:02:00	Alarm Handling	Pick-up to Dispatch	Urban	0:06:48 3	N/A 0	0:02:15 2	N/A 0	0:07:53 1	N/A 0
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:02:18 12	N/A 0	0:02:39 7	N/A 0	0:01:22 5	N/A 0
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:04:19 3	N/A 0	0:04:30 2	N/A 0	0:01:43 1	N/A 0
0:08:00		Travel Time ERF Concentration	Urban	0:09:38 9	N/A 0	0:09:46 1	0:03:22 1	0:08:26 5	0:07:50 2
0:07:30	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:10:14 3	N/A 0	0:07:47 2	N/A 0	0:10:48 1	N/A 0
0:11:30		Total Response Time ERF Concentration	Urban	N/A 0	N/A 0	N/A 0	N/A 0	N/A 0	N/A 0

\*Note that in 2020 there were not enough maximum 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 three firefighters, is 7 minutes.

For 90% of **moderate risk hazardous materials incidents**, the GRFD will respond with an effective 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 **maximum risk hazardous materials incidents**, the GRFD will respond with an effective response force of **3 personnel**, comprised of 2 hazardous materials technicians and one battalion chief, within 11 minutes total response time.

Benchmark	(Low) HazMat - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:01:30	Alarm Handling	Pick-up to Dispatch	Urban	0:03:47	0:03:42	0:03:55	0:03:19	0:02:40	0:04:11
				82	28	30	2	6	16
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:02:20	0:02:21	0:02:17	0:00:43	0:02:43	0:01:34
				86	26	19	1	21	19
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:05:31	0:05:31	0:04:43	0:04:32	0:05:39	0:05:12
44				14	15	1	5	9	
0:04:00		Travel Time ERF Concentration	Urban	0:05:33	0:05:31	0:04:43	0:04:32	0:05:39	0:05:25
				43	14	15	1	5	8
0:07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:08:49	0:09:39	0:08:44	0:08:45	0:07:15	0:08:01
44				14	15	1	5	9	
0:07:00		Total Response Time ERF Concentration	Urban	0:08:49	0:09:39	0:08:44	0:08:45	0:07:15	0:08:08
				43	14	15	1	5	8

\*Note that in 2020 there were not enough moderate, high, or maximum 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 three firefighters, is 7 minutes.

For 90% of **trench rescue incidents**, the GRFD will respond with an effective response force of **13 personnel**, with a minimum of 8 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 8 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 **13 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.

Benchmark	Vehicle Extrication - 90th Percentile Times - Baseline Performance			2016 - 2020	2020	2019	2018	2017	2016
0:01:30	Alarm Handling	Pick-up to Dispatch	Urban	0:01:54	0:01:31	0:01:30	0:01:43	0:01:54	0:02:38
				229	60	39	43	41	46
0:01:30	Turnout Time	Turnout Time 1st Unit	Urban	0:01:58	0:02:18	0:02:01	0:01:46	0:01:38	0:01:50
				1,172	342	200	218	215	197
0:04:00	Travel Time	Travel Time 1st Unit Distribution	Urban	0:04:50	0:05:05	0:04:51	0:04:52	0:04:51	0:04:39
				225	60	39	43	39	44
0:08:00		Travel Time ERF Concentration	Urban	0:08:59	0:10:38	0:07:54	0:09:09	0:08:35	0:08:57
				113	32	18	25	17	21
0:07:00	Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	0:08:05	0:07:28	0:08:15	0:08:03	0:07:48	0:08:02
				225	60	39	43	39	44
0:11:00		Total Response Time ERF Concentration	Urban	0:16:53	0:19:25	0:16:20	0:13:51	0:15:32	0:13:51
				113	32	18	25	17	21

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 **7 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.

\*Note that in 2020 there were not enough trench rescue, collapse rescue, confined space, machine extrication, elevator, river rescue or lake/ice rescue incidents to perform a 90th percentile baseline analysis.



# DATA ANALYSIS METHODOLOGY

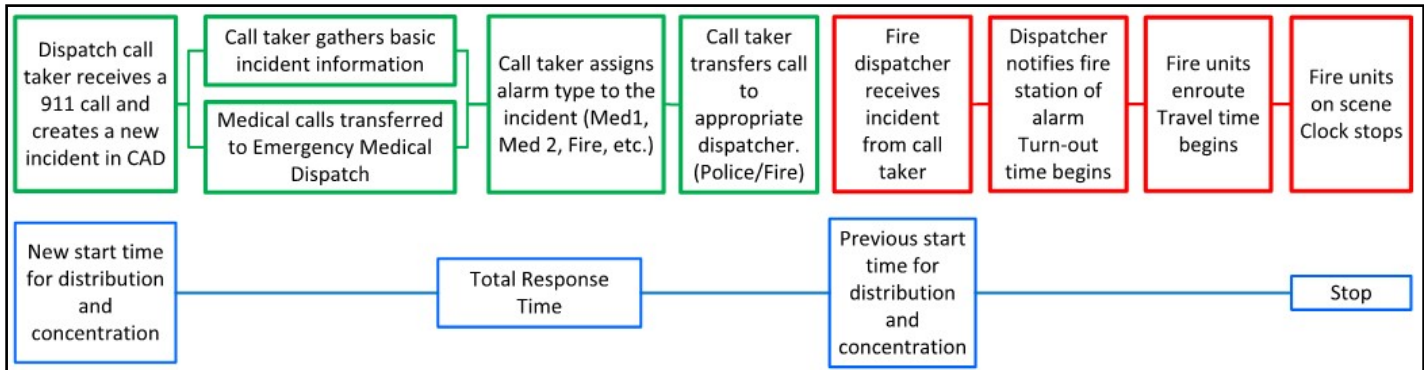
Incidents must meet the following criteria to be included in the Baseline charts and Critical Performance Measures charts:

- The incident location must be within city boundaries.
- The incident must be defined as an emergency response type.
- Units must respond and arrive in **Emergency** mode.

Incidents that undergo data review:

- Any duplicate Incident record.
- Any unit record missing a **Response Mode**.
- Any unit record with an **On Scene** time but no **Enroute Time**.
- Any incident record missing a **CAD Final Alarm Type**.
- Any incident record missing an **Incident Type**.
- Any incident record missing an **Aid Type**.
- Any unit record where the **Unit Canceled Time** and **Unit On Scene** time are both entered.
- Any incidents where Total Response Time is greater than 35 minutes.
- Any incident that never reaches an Effective Response Force.

In 2019, the methodology used to measure distribution and concentration compliance for the annual report was changed. In prior years, we were only able to measure time beginning when the fire dispatcher received the call. These times are now measured from the point when the call taker creates the incident in CAD. This allows us to capture all of the call processing time. This gives us a more realistic view of system-wide performance. These times now align with how the baseline performance charts are generated. Please see the flowchart below as a reference.



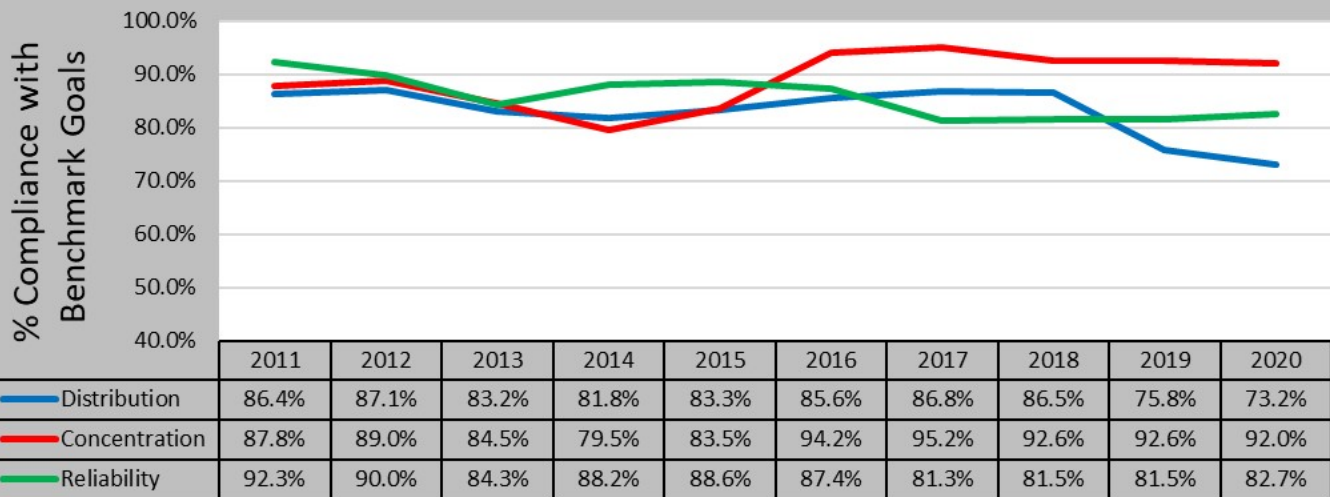
Percentage Compliance with Distribution Goal of 7 / 7:30 Minutes

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bridge	91.2%	90.3%	90.1%	88.31%	89.12%	90.85%	92.63%	91.82%	84.05%	79.79%
Burton	83.0%	86.5%	74.1%	73.98%	77.11%	78.93%	82.82%	81.10%	68.43%	63.62%
Chester	87.1%	89.0%	82.6%	80.04%	82.79%	84.93%	84.41%	85.18%	75.21%	73.51%
Covell	83.7%	86.0%	76.8%	73.15%	82.11%	83.25%	80.29%	82.78%	70.80%	64.35%
Division	90.8%	88.2%	86.9%	86.34%	85.87%	86.53%	88.72%	89.22%	76.32%	74.20%
Franklin	88.9%	85.9%	89.9%	88.69%	88.46%	92.69%	92.59%	91.99%	84.71%	83.17%
Kalamazoo	79.3%	78.4%	75.1%	69.88%	71.74%	72.46%	73.28%	75.74%	59.69%	56.57%
LaGrave	94.6%	95.2%	94.6%	93.64%	95.40%	95.55%	97.55%	96.58%	91.69%	90.11%
Leonard	82.7%	83.6%	72.4%	69.91%	69.08%	84.93%	79.05%	81.14%	67.55%	67.78%
Monroe	88.8%	89.3%	86.3%	85.09%	85.24%	87.08%	89.93%	88.86%	76.73%	75.31%
Plainfield	80.6%	85.8%	74.4%	76.54%	74.20%	80.15%	83.83%	79.77%	66.88%	62.26%
Average	86.43%	87.11%	82.11%	80.51%	81.92%	85.21%	85.92%	85.83%	74.73%	71.88%



# CRITICAL PERFORMANCE MEASURES

## Critical Performance Measures 2011 - 2020



Aligning with the best practices in the fire service and the international accreditation process, the GRFD monitors the distribution, concentration (structure fires only represented above) and reliability of our apparatus in service at the unit, geographical planning zone, first due district, and citywide levels. The citywide numbers for 2020 show stability in all three areas. As noted on the previous page, the method used to measure distribution and concentration has changed. Distribution has dropped to 73.2% due to our ability to measure more of the total response time. Concentration, the ability to assemble an effective response force, fell to 92.0%. Reliability, the ability for a company to answer calls within their own district, rose slightly to 82.7%. Reliability has stabilized since the introduction of Automatic Resource Location in 2017.

### Simultaneous Call Percentage by Station District

Station	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bridge	9.14%	9.00%	9.07%	9.54%	10.19%	10.01%	11.49%	9.62%	10.62%	10.18%
Burton	4.16%	4.29%	4.85%	4.43%	6.07%	4.80%	5.50%	6.07%	6.90%	5.97%
Chester	6.12%	4.88%	7.69%	8.57%	7.05%	9.00%	11.59%	8.61%	11.80%	8.10%
Covell	6.31%	7.40%	6.52%	7.22%	7.28%	7.31%	9.39%	7.84%	13.15%	7.45%
Division	7.69%	6.72%	8.70%	6.71%	7.18%	9.53%	9.31%	8.00%	9.38%	9.91%
Franklin	6.39%	6.52%	5.03%	5.60%	7.30%	6.61%	7.05%	7.35%	7.85%	7.10%
Kalamazoo	8.92%	9.87%	11.31%	10.79%	11.56%	12.73%	13.70%	22.65%	13.07%	10.26%
LaGrave	10.50%	10.97%	9.72%	10.32%	7.45%	9.81%	10.49%	11.71%	11.22%	7.88%
Leonard	4.95%	5.64%	6.86%	8.70%	6.97%	9.23%	7.70%	7.57%	12.89%	8.79%
Monroe	4.74%	5.89%	6.90%	5.37%	8.59%	8.25%	6.75%	7.45%	11.69%	8.41%
Plainfield	4.39%	2.69%	3.62%	4.14%	6.68%	3.96%	5.27%	4.59%	10.40%	5.51%

### City Wide Simultaneous

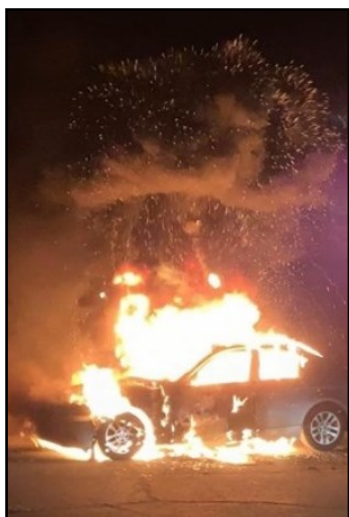
2011	54.80%
2012	56.04%
2013	51.81%
2014	56.18%
2015	55.29%
2016	60.04%
2017	59.60%
2018	63.15%
2019	61.05%
2020	57.88%

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. A major factor driving this metric is storm events, which were less frequent in 2020. 2020 saw the simultaneous call rate fall again to 57.88%. All districts saw a decrease in simultaneous calls. Continued evaluation of this metric will aid in future station planning and resource



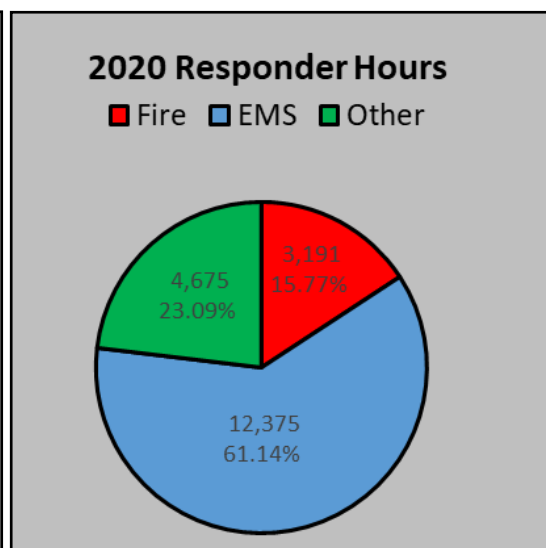
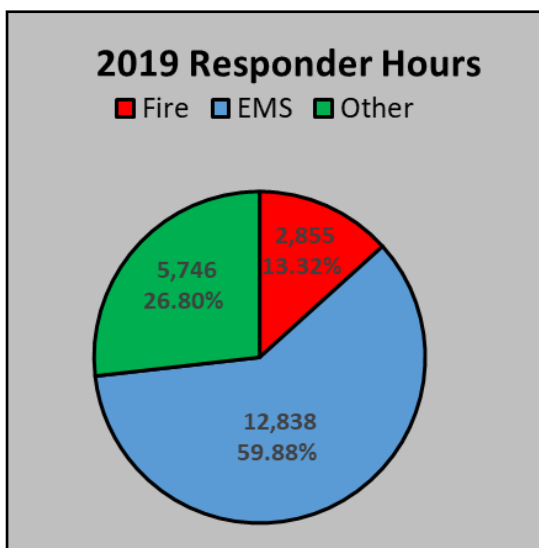
Total Incidents by Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fires	689	648	751	557	580	617	661	615	608	555	666
Overpressure/Rupture	36	43	36	36	45	43	51	191	202	158	113
EMS/Rescue	12,601	13,672	13,749	13,085	13,510	14,792	14,687	15,345	14,509	15,465	15,539
Hazardous Conditions	747	791	647	1,035	990	898	1,166	1,155	1,006	1,574	1,006
Service Call	1,653	1,921	2,366	2,037	2,003	1,368	1,492	1,704	1,542	1,252	1,053
Good Intent	2,294	2,679	3,193	3,085	3,143	2,976	3,315	3,462	3,033	3,258	3,252
False Alarm/Calls	1,581	1,670	1,609	1,579	1,600	1,555	1,774	1,537	1,487	1,849	1,488
Severe Weather	16	12	2	3	9	4	14	10	6	11	2
Special Incident	17	17	19	5	5	3	6	1	2	2	1
Total	19,634	21,453	22,372	21,422	21,885	22,256	23,166	24,020	22,395	24,124	23,120

2020 saw a 20.00% increase in the number of Fire incidents, up to 666 from 555. This marks the highest number of Fire incidents since 2012. EMS calls rose slightly to 15,539, another record year for this incident type. Hazardous Condition and Service Call incidents types fell significantly, indicating a year without many significant storm events.



Total Incidents by Type	Numerical Change from 2019 to 2020	Percent Change from 2019 to 2020	Percentage of Total 2020 Incidents
Fires	111	20.00%	2.88%
Overpressure/Rupture	-45	-28.48%	0.49%
EMS/Rescue	74	0.48%	67.21%
Hazardous Conditions	-568	-36.09%	4.35%
Service Call	-199	-15.89%	4.55%
Good Intent	-6	-0.18%	14.07%
False Alarm/Calls	-361	-19.52%	6.44%
Severe Weather	-9	-81.82%	0.01%
Special Incident	-1	-50.00%	0.00%
Total	-1,004	-4.16%	100.00%

EMS incidents accounted for 67.21% of the emergency incidents in 2020, and accounted for 61.14% of the time personnel spent on scene, compared with 59.88% last year. Fire incidents generated only 2.88% of the total incident volume in 2020, but required 15.77% of our deployed time for safe and effective mitigation, compared with 13.32% in 2019.







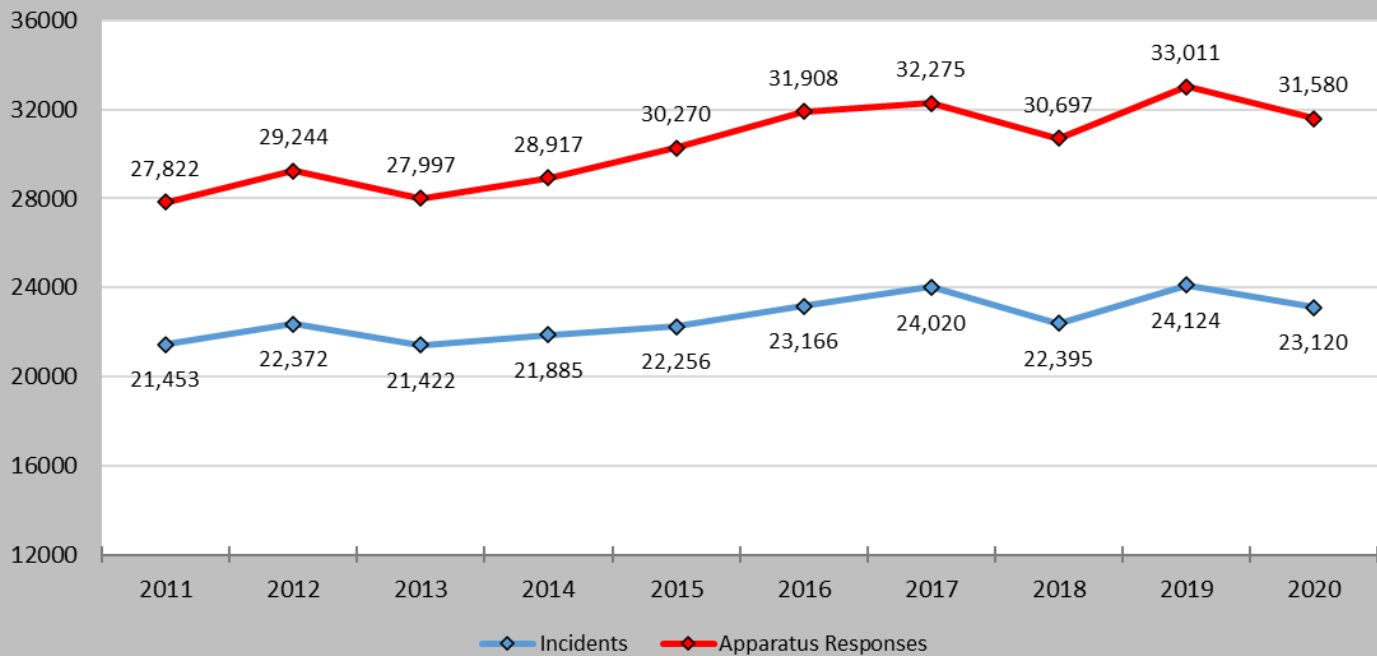
Grand Rapids Fire Department 2020 Mutual Aid Chart

Location	Mutual aid received	Automatic aid received	Total Aid Received	Mutual aid given	Automatic aid given	Other aid given	Total Aid Given
Gerald R Ford Int'l Airport FD	0	0	0	1	0	0	1
Grand Rapids Township Fire Dept	9	0	9	2	0	0	2
Kentwood Fire Department	4	13	17	7	4	0	11
Plainfield Township Fire Dept	2	12	14	9	6	0	15
Walker Fire Department	11	9	20	3	4	0	7
Wyoming Fire Dept	4	0	4	20	0	0	20
Responses to other communities without Mutual Aid Given							11
Total Aid Received			64	Total Aid Given			67



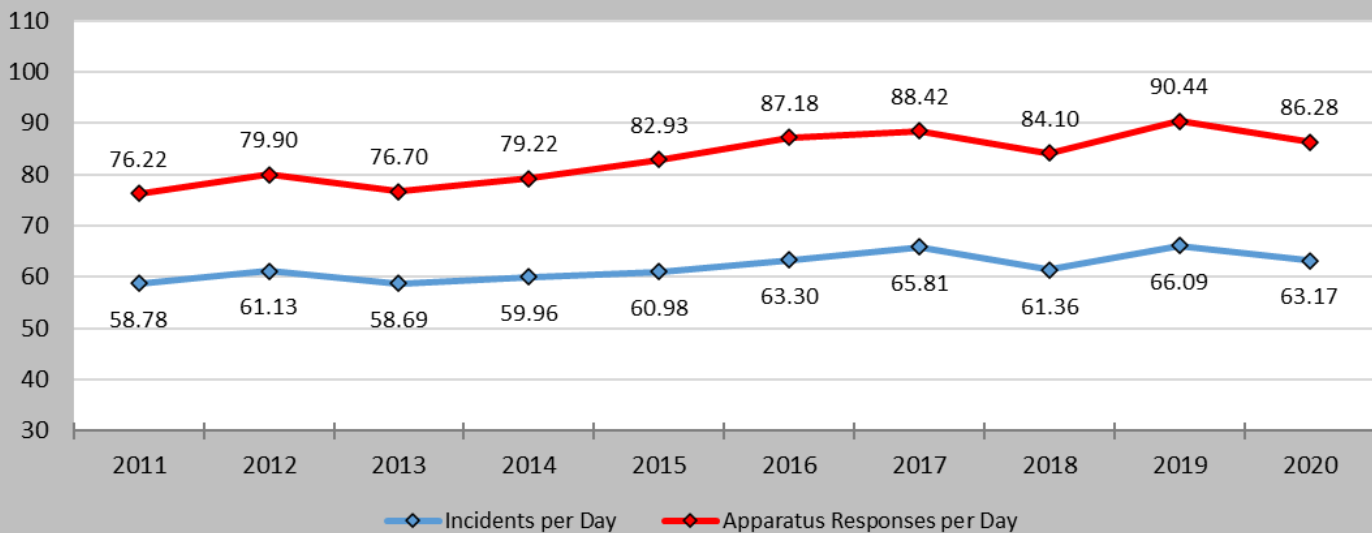
# 2020 OVERALL PERFORMANCE METRICS

## Total Incident & Apparatus Activity Summary



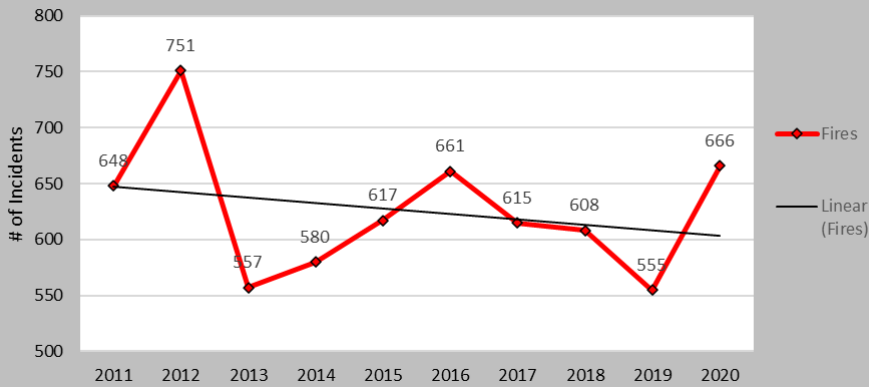
The total emergency incident count fell by 1,004 in 2020, for a decrease of 4.16%. The number of average daily incidents decreased from 66.09 in 2018 to 63.17 in 2019. Apparatus responses fell 4.33%. In 2019, the GRFD saw the highest number of incidents and apparatus responses in department history. The overall trend lines continue to rise, with each of the last five years being in the top five busiest years for the department.

## Daily Incident & Apparatus Response Activity





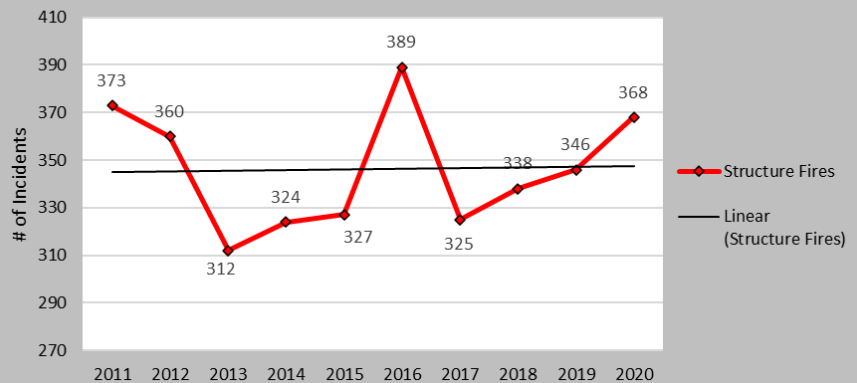
**GRFD All Fire Incidents 2011-2020**



2020 saw a total fire incident call volume of 666, which was a significant increase over 2019's 555. This represents a 20.00% increase from 2019. The ten year trend line for fire incidents continued to edge incrementally lower.

2020 saw a another increase in structure fire volume, rising 24 (6.36%) from 346 to 368. The trendline for structure fires in the city is relatively flat when viewed over a ten year time span.

**GRFD Structure Fire Incident 2011-2020**



**2020 Simultaneous Structure Fires**

Description	Count	%
2 Structure Fires at Same Time	10	2.96%
3 Structure Fires at Same Time	0	0.00%
4 Structure Fires at Same Time	0	0.00%

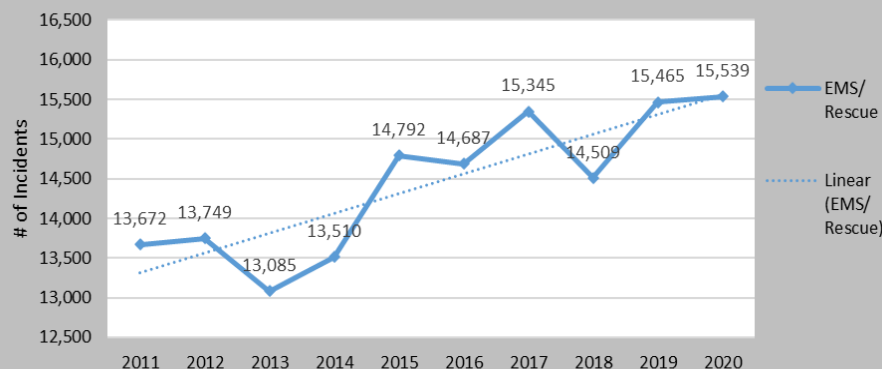
During 2020 there were structure fires on 225 days, representing a 61.48% chance of a structure fire

**2020 Structure Fires**

# Per Day	Frequency	Total
1	130	130
2	68	136
3	18	54
4	6	24
5	3	15
Total		359

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 2020 this happened 95 times (25.96% of days). There were also 10 days with simultaneous fires; these events require twice the typical amount of personnel, apparatus, and equipment to provide positive outcomes for our citizens and the community.

**GRFD Emergency Medical and Rescue Incidents 2011-2020**



2020 saw an increase in the number of EMS incidents, rising 74 calls to 15,539. EMS calls accounted for 67.21% of the emergency incidents in the city in 2019, compared with 64.11% in 2019. The trend line for EMS incidents continues to ascend.



# 2020 TEMPORAL ANALYSIS (Depicts time of day/day of week demand)

Temporal Analysis - 2020 All Alarms								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	141	101	89	107	101	94	126	759
01:00-01:59	124	89	84	88	73	78	120	656
02:00-02:59	106	91	64	81	86	68	95	591
03:00-03:59	74	53	59	61	59	61	85	452
04:00-04:59	78	54	67	58	56	71	64	448
05:00-05:59	58	57	75	69	46	66	71	442
06:00-06:59	63	85	68	70	76	88	76	526
07:00-07:59	85	84	94	84	113	96	90	646
08:00-08:59	93	125	119	127	111	121	78	774
09:00-09:59	123	143	143	148	174	159	130	1,020
10:00-10:59	118	184	152	170	158	169	137	1,088
11:00-11:59	170	167	173	168	199	173	172	1,222
12:00-12:59	176	193	192	207	192	179	166	1,305
13:00-13:59	195	157	196	240	206	205	177	1,376
14:00-14:59	176	188	192	215	221	204	168	1,364
15:00-15:59	166	192	216	181	219	195	171	1,340
16:00-16:59	147	193	199	197	195	192	163	1,286
17:00-17:59	194	186	209	215	167	176	185	1,332
18:00-18:59	182	171	143	190	202	157	194	1,239
19:00-19:59	167	177	160	173	190	183	202	1,252
20:00-20:59	153	140	179	167	152	182	182	1,155
21:00-21:59	151	140	146	163	146	155	176	1,077
22:00-22:59	148	132	144	113	132	136	169	974
23:00-23:59	112	102	98	112	110	130	132	796
Total	3,200	3,204	3,261	3,404	3,384	3,338	3,329	23,120

Temporal Analysis - 2020 EMS								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	83	60	52	72	65	60	80	472
01:00-01:59	80	61	51	57	50	55	72	426
02:00-02:59	61	55	41	49	60	40	60	366
03:00-03:59	42	39	36	37	41	49	59	303
04:00-04:59	53	37	48	34	42	48	44	306
05:00-05:59	40	41	53	44	32	46	50	306
06:00-06:59	45	57	52	42	51	62	49	358
07:00-07:59	59	67	67	59	73	65	66	456
08:00-08:59	70	83	77	84	83	73	53	523
09:00-09:59	72	105	104	99	112	110	81	683
10:00-10:59	88	125	108	110	99	114	94	738
11:00-11:59	113	126	121	120	129	121	123	853
12:00-12:59	117	132	128	111	130	127	122	867
13:00-13:59	134	100	127	145	140	140	115	901
14:00-14:59	112	126	137	131	145	138	106	895
15:00-15:59	112	141	164	122	140	146	113	938
16:00-16:59	106	139	144	140	118	143	116	906
17:00-17:59	122	126	152	139	118	127	125	909
18:00-18:59	115	108	92	133	127	107	137	819
19:00-19:59	115	110	104	108	120	119	131	807
20:00-20:59	99	92	120	124	100	118	117	770
21:00-21:59	105	87	89	99	94	107	119	700
22:00-22:59	91	92	92	78	87	84	105	629
23:00-23:59	64	74	58	78	68	86	79	507
Total	2,098	2,183	2,217	2,215	2,224	2,285	2,216	15,438

For 2020, the most active time period for day of the week and hour of the day occurred on Wednesdays between 1pm and 2pm, with 240 calls for service. In 2019, the busiest day and hour were Thursdays between 11am and 12pm, with 237 calls.

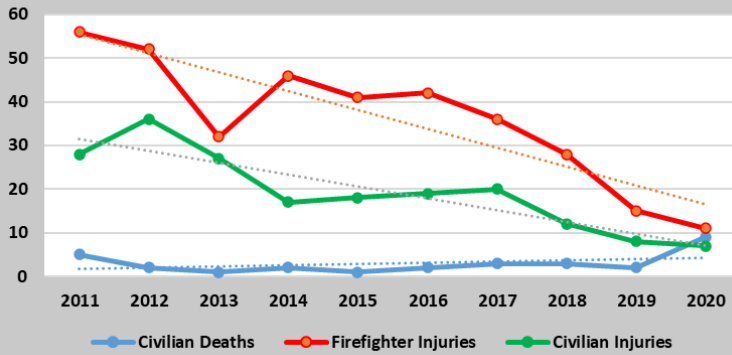
EMS responses continue to be higher between 9 am and 10 pm, the time period most people are active and awake. This year's busiest hours for EMS calls was on Tuesdays from 3pm to 4pm with a total of 164 incidents.

The most responses to fire incidents were seen around the noon hour and between 5pm and 7pm. This corresponds with the continued trend of cooking being the most common cause of fires in Grand Rapids

Temporal Analysis - 2020 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	9	2	6	1	4	6	3	31
01:00-01:59	8	1	4	1	2	3	3	22
02:00-02:59	6	3	2	3	4	2	2	22
03:00-03:59	5	1	2	1	1	2	3	15
04:00-04:59	2	0	3	1	2	0	3	11
05:00-05:59	3	1	1	4	1	3	0	13
06:00-06:59	2	3	1	3	2	1	2	14
07:00-07:59	2	0	4	2	1	2	1	12
08:00-08:59	3	3	0	1	3	2	0	12
09:00-09:59	4	2	2	2	3	2	6	21
10:00-10:59	1	3	2	4	7	3	1	21
11:00-11:59	6	1	4	5	4	4	8	32
12:00-12:59	3	1	5	5	4	2	3	23
13:00-13:59	7	5	4	5	8	6	8	43
14:00-14:59	4	3	3	8	4	3	9	34
15:00-15:59	6	4	2	7	9	6	8	42
16:00-16:59	2	3	3	5	6	4	4	27
17:00-17:59	14	8	9	9	7	8	9	64
18:00-18:59	11	6	5	6	8	4	8	48
19:00-19:59	5	6	3	3	8	4	7	36
20:00-20:59	7	7	2	3	2	9	4	34
21:00-21:59	4	6	4	5	5	4	3	31
22:00-22:59	4	3	4	4	4	1	9	29
23:00-23:59	3	3	5	1	5	2	10	29
Total	121	75	80	89	104	83	114	666



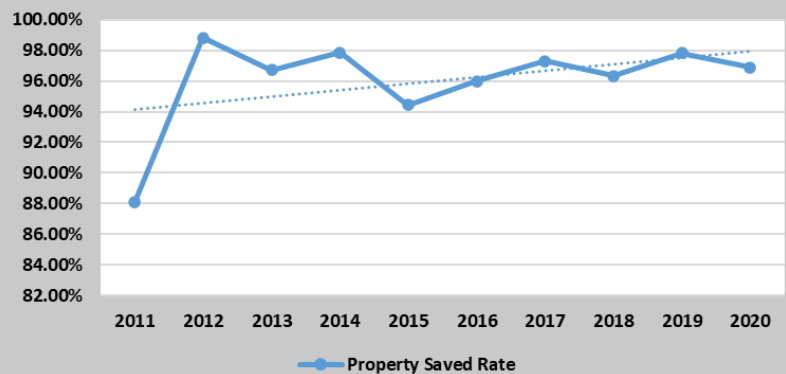
### 2011-2020 Fire Casualties



Fire casualties are reported anytime a civilian or firefighter is injured or killed during a fire incident. Firefighter and civilian fire injuries have decreased significantly in the last decade. 2020 saw an unfortunate rise in civilian fire deaths. A lack of working smoke alarms was a contributing factor to almost all of these fatalities.

Property saved rate is calculated by subtracting the fire property losses from the total value of the property. These save rates have remained high, varying only slightly from year to year. 2011 was the only year that property saved rates dipped below 90%. Looking at the past decade, the trend shows an overall increase in the rate of property saved.

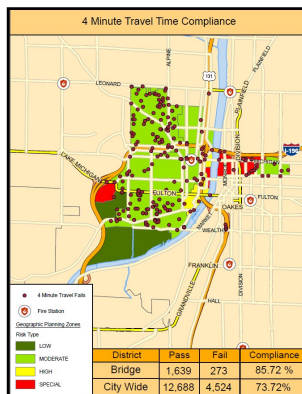
### 2011-2020 Property Saved Rate



## STATION PAGES – MAPS AND DATA

### 4 Minute Travel Time Compliance

Displays data and locations of incidents where our four minute travel time benchmark goals were not achieved.



### Effective Response Force Compliance for Multi-Company Alarms

Displays data and locations of multi-company alarms where the benchmark response times for concentration were not met.



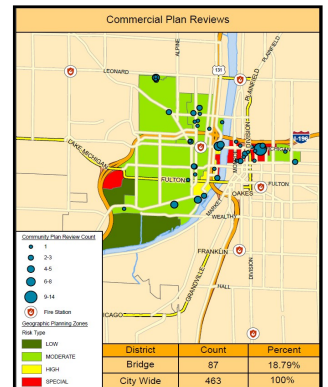
### Community Risk Reduction Evaluation

Displays the combined efforts of prevention and suppression personnel to assess risk through inspections and home safety assessments.



### Commercial Plan Reviews

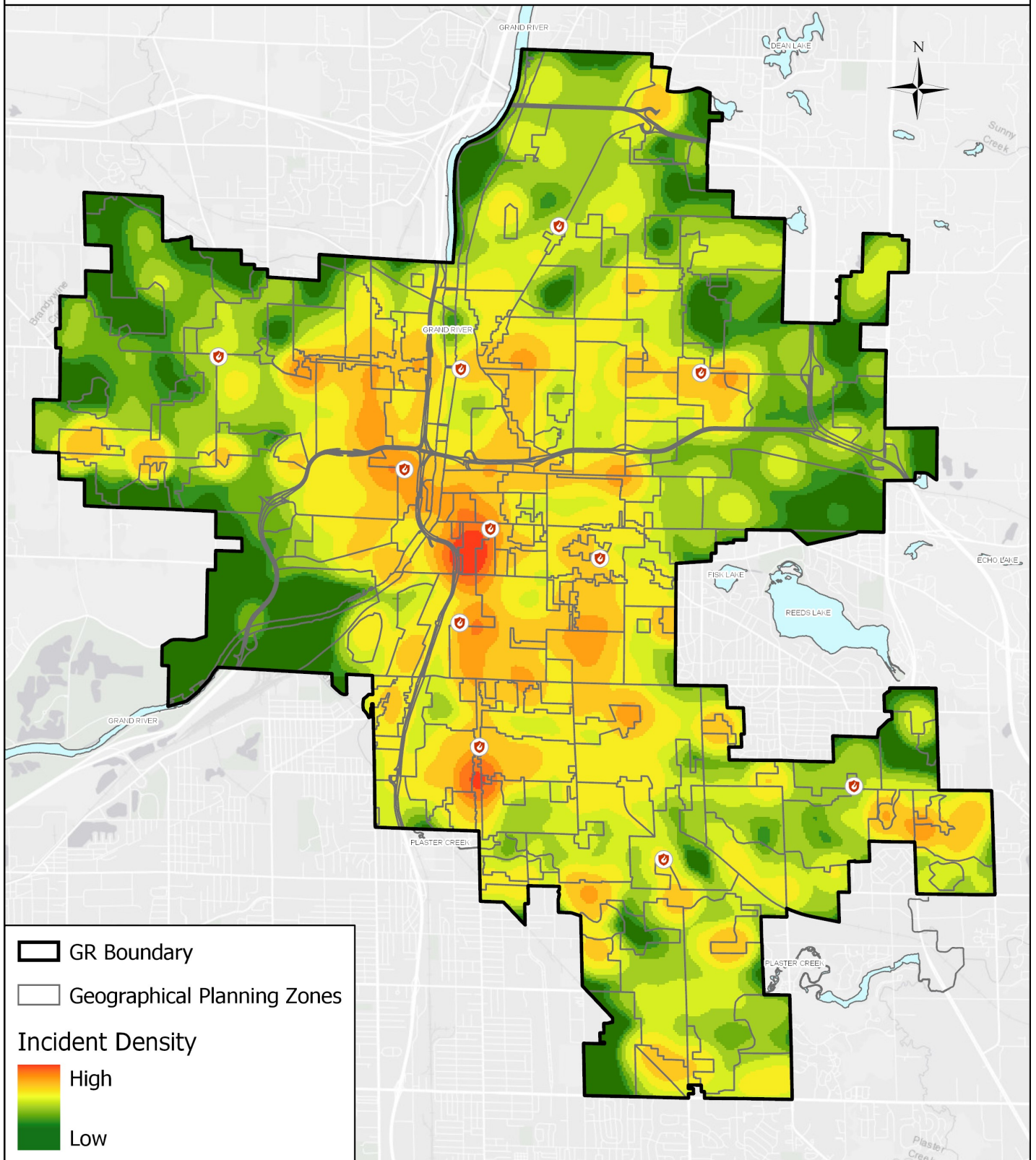
Displays new construction and additional assets protected, which correlates with potential risk in the community related to economic growth.





# STATION PAGES – MAPS AND DATA

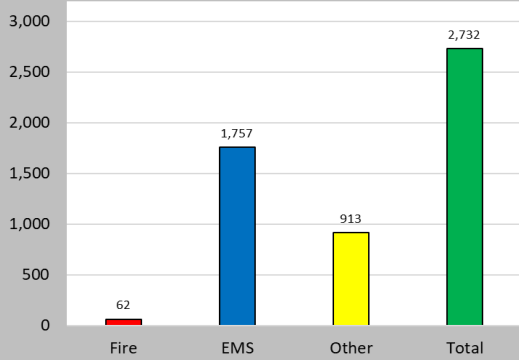
## 2020 Incident Hotspots



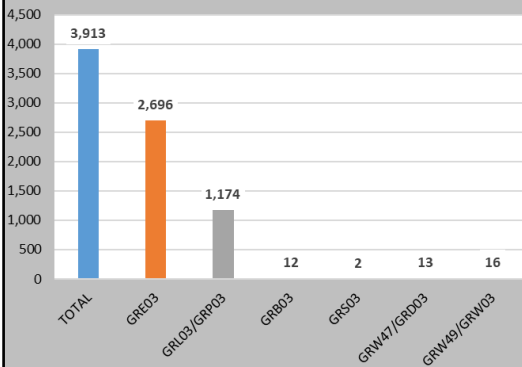


# BRIDGE STREET STATION

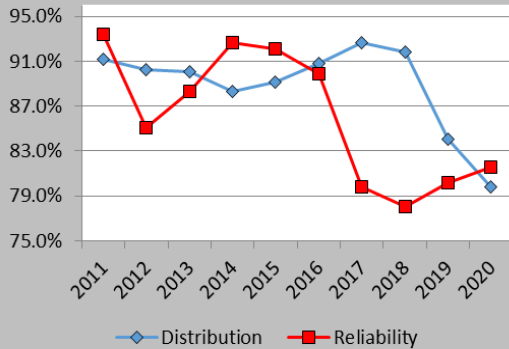
## 2020 Incidents in District



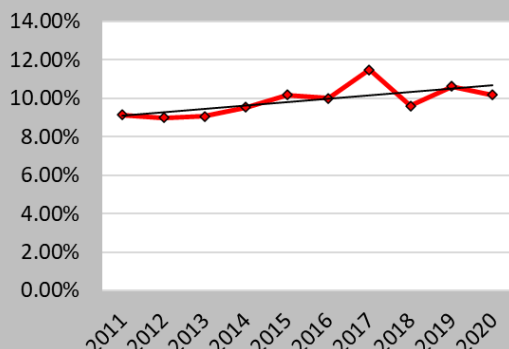
## 2020 Apparatus Responses



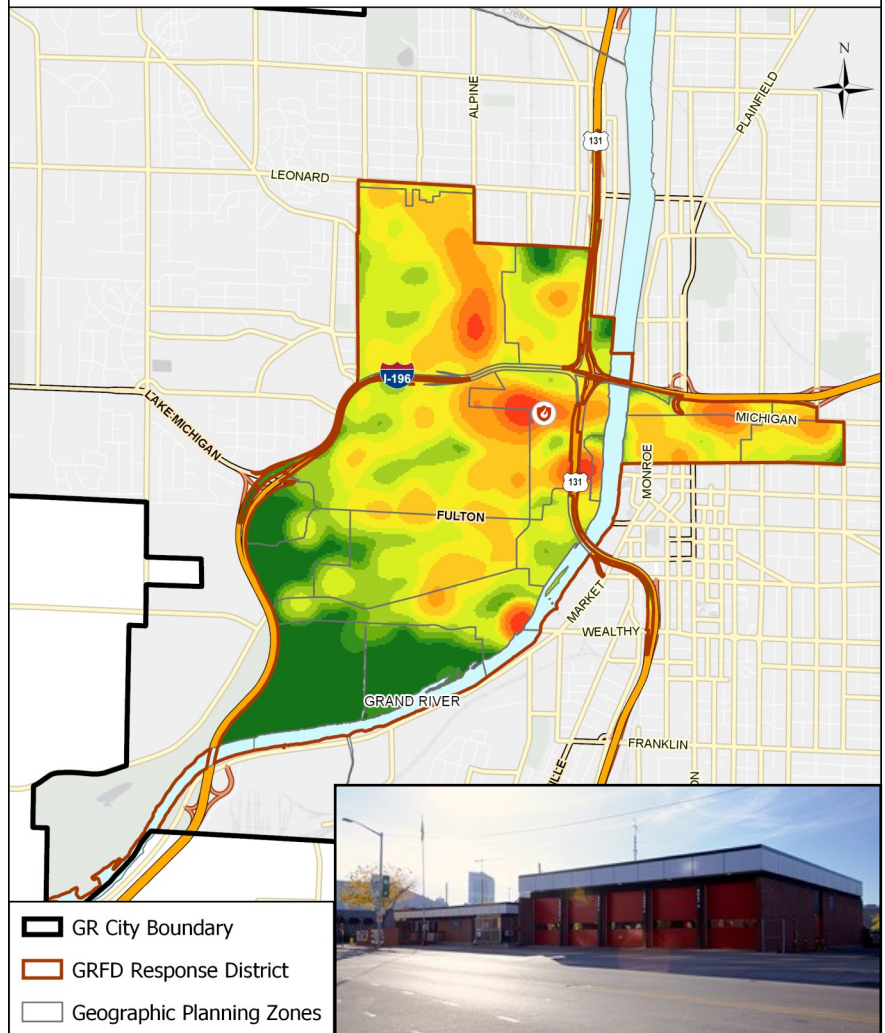
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



### Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	15	4	8	12	6	6	13	64
01:00-01:59	9	5	2	7	8	5	7	43
02:00-02:59	14	5	5	3	5	5	5	42
03:00-03:59	2	1	3	6	4	5	6	27
04:00-04:59	8	5	3	4	5	8	2	35
05:00-05:59	2	5	6	2	1	4	5	25
06:00-06:59	2	4	3	2	2	4	5	22
07:00-07:59	7	8	4	6	6	2	5	38
08:00-08:59	2	5	10	10	9	10	9	55
09:00-09:59	6	12	20	12	15	14	7	86
10:00-10:59	9	22	15	15	10	14	10	95
11:00-11:59	10	9	17	15	17	12	11	91
12:00-12:59	14	11	19	14	21	17	11	107
13:00-13:59	9	9	9	19	16	17	16	95
14:00-14:59	16	14	13	19	20	23	10	115
15:00-15:59	10	14	21	10	18	11	11	95
16:00-16:59	12	27	20	17	15	8	19	118
17:00-17:59	22	11	23	21	12	18	12	119
18:00-18:59	8	11	10	16	14	7	16	82
19:00-19:59	15	14	15	9	15	13	14	95
20:00-20:59	15	10	16	14	15	14	11	95
21:00-21:59	15	8	14	13	12	8	13	83
22:00-22:59	9	10	16	8	11	7	11	72
23:00-23:59	6	9	5	10	7	9	11	57
Total	237	233	277	264	264	241	240	1,756

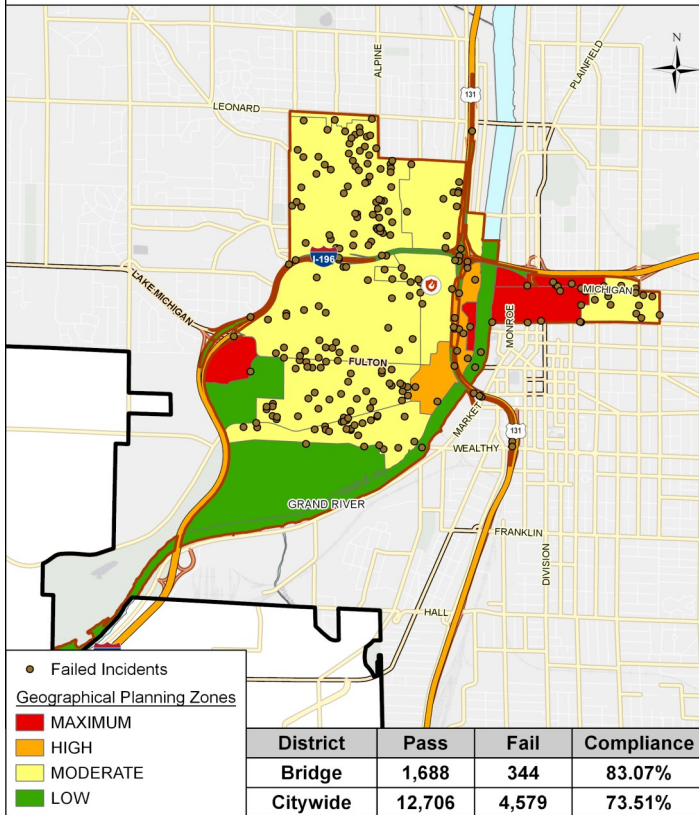
### Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	2	1	2	0	0	0	0	5
01:00-01:59	1	0	1	0	0	0	0	2
02:00-02:59	2	1	1	1	1	0	0	6
03:00-03:59	0	0	0	0	0	0	1	1
04:00-04:59	0	0	0	0	1	0	0	1
05:00-05:59	0	0	0	0	0	1	0	1
06:00-06:59	1	1	0	0	0	0	1	3
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	0	1	0	0	0	0	0	1
09:00-09:59	0	0	0	0	1	0	0	1
10:00-10:59	0	0	1	1	0	0	0	2
11:00-11:59	1	0	0	0	0	0	1	2
12:00-12:59	1	0	0	0	0	0	0	1
13:00-13:59	2	1	2	1	2	2	0	10
14:00-14:59	0	0	0	1	1	1	0	3
15:00-15:59	0	1	0	0	0	1	0	2
16:00-16:59	1	0	1	0	2	0	0	4
17:00-17:59	1	1	0	1	1	0	2	6
18:00-18:59	0	0	0	0	0	0	0	0
19:00-19:59	0	0	0	0	1	0	0	1
20:00-20:59	0	1	0	0	0	0	0	1
21:00-21:59	0	0	0	0	0	1	1	2
22:00-22:59	0	0	1	0	0	0	4	5
23:00-23:59	0	0	1	0	0	0	1	2
Total	12	8	10	5	10	6	11	62

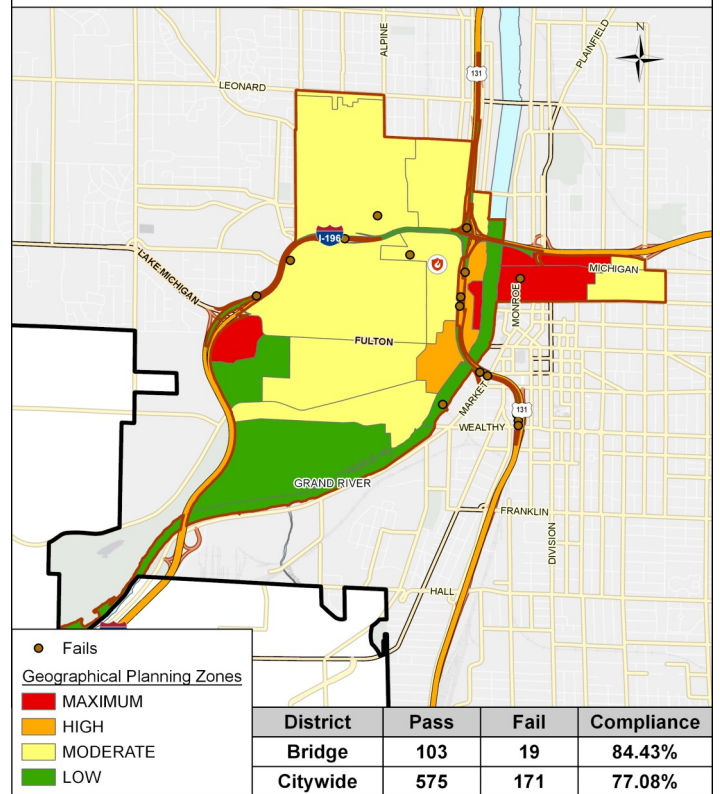


# BRIDGE STREET STATION

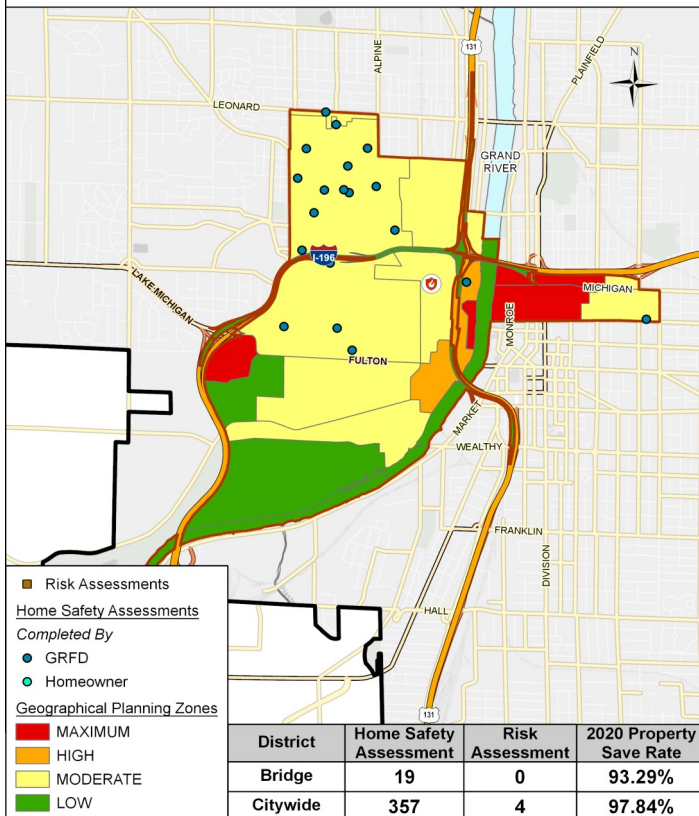
## 4 Minute Travel Time Compliance



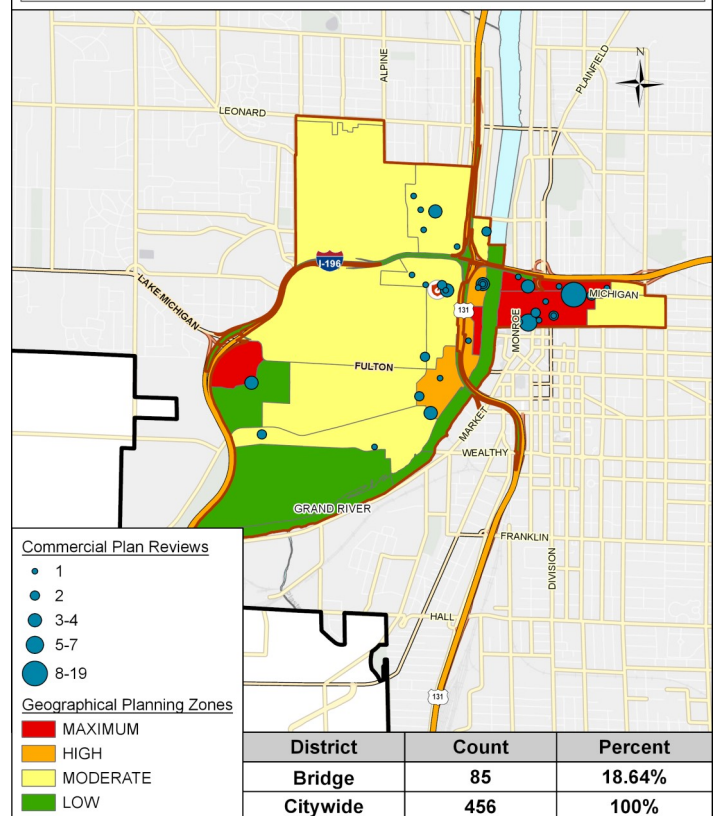
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



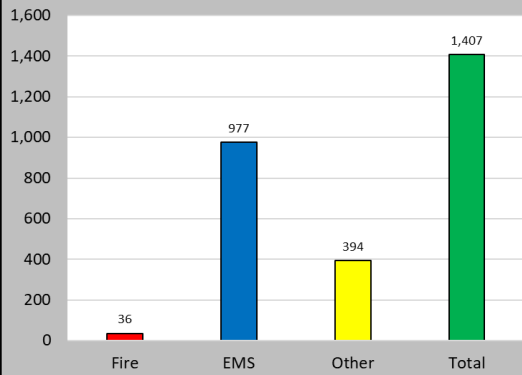
## Commercial Plan Reviews



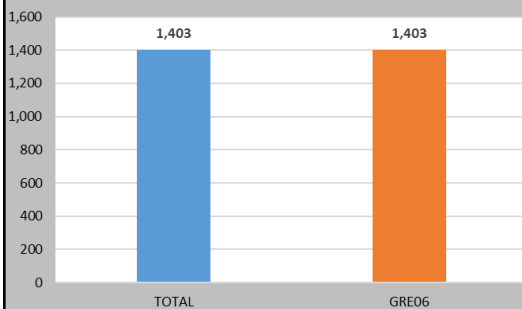


# BURTON STREET STATION

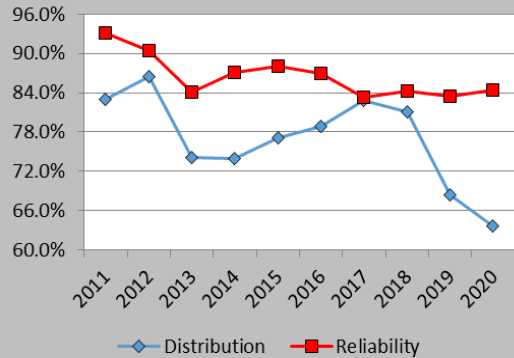
## 2020 Incidents in District



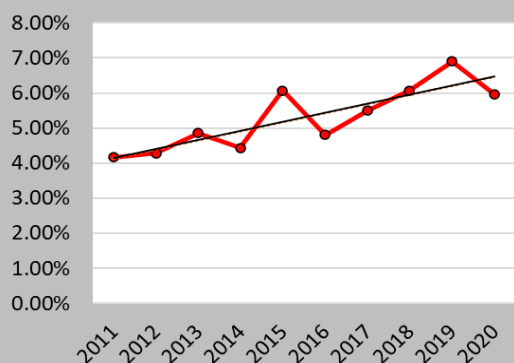
## 2020 Apparatus Responses



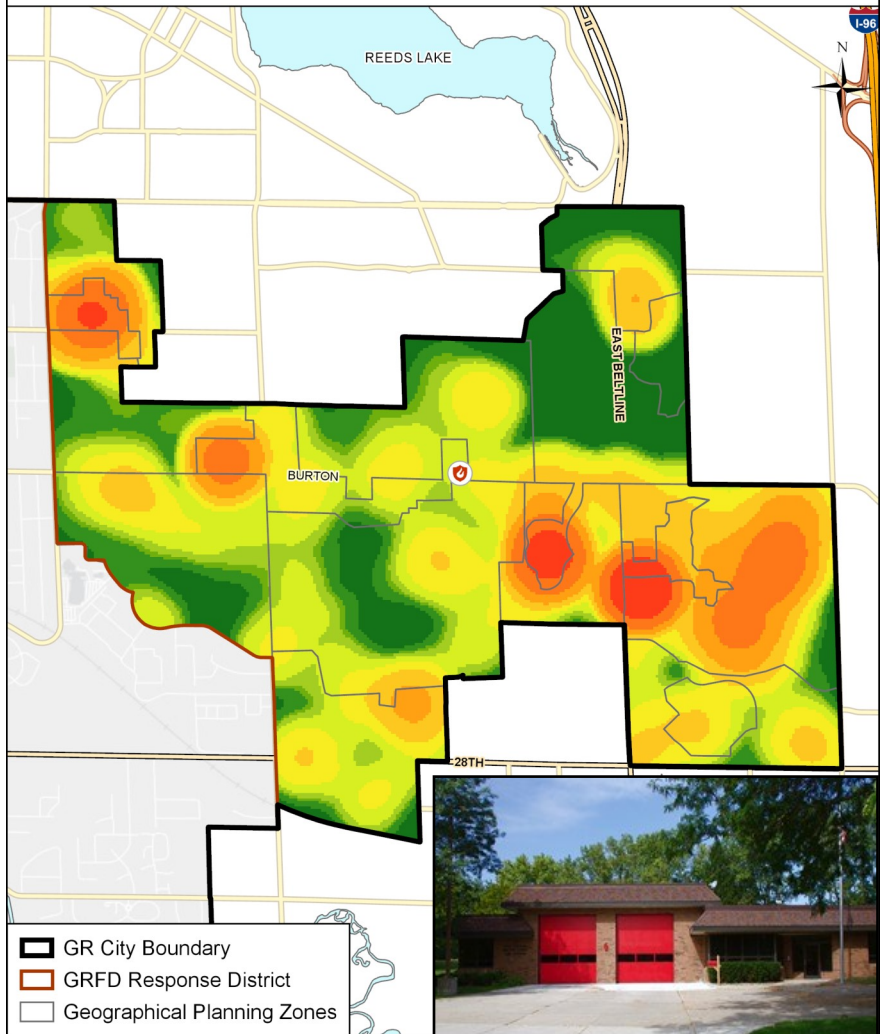
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



### Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	3	7	2	2	7	5	3	29
01:00-01:59	6	2	5	5	4	3	5	30
02:00-02:59	0	6	5	2	7	0	1	21
03:00-03:59	3	3	0	3	2	3	4	18
04:00-04:59	3	2	1	4	2	3	4	19
05:00-05:59	4	5	2	3	1	4	4	23
06:00-06:59	4	2	5	2	0	1	3	17
07:00-07:59	4	3	3	5	9	1	5	30
08:00-08:59	8	10	4	2	6	4	8	42
09:00-09:59	3	8	8	6	9	12	6	52
10:00-10:59	7	5	5	11	6	7	3	44
11:00-11:59	6	13	15	8	6	8	11	67
12:00-12:59	5	17	8	4	12	7	10	63
13:00-13:59	9	10	16	9	9	8	2	63
14:00-14:59	3	6	10	5	6	11	8	49
15:00-15:59	9	9	8	7	10	4	5	56
16:00-16:59	3	6	7	9	3	13	3	44
17:00-17:59	6	3	12	7	8	9	4	49
18:00-18:59	7	6	3	11	7	10	9	53
19:00-19:59	5	7	4	11	5	4	8	44
20:00-20:59	12	6	10	7	8	15	8	66
21:00-21:59	5	10	3	3	5	5	1	32
22:00-22:59	3	8	6	2	5	3	7	34
23:00-23:59	5	6	1	3	6	5	6	32
Total	123	160	144	132	140	151	127	977

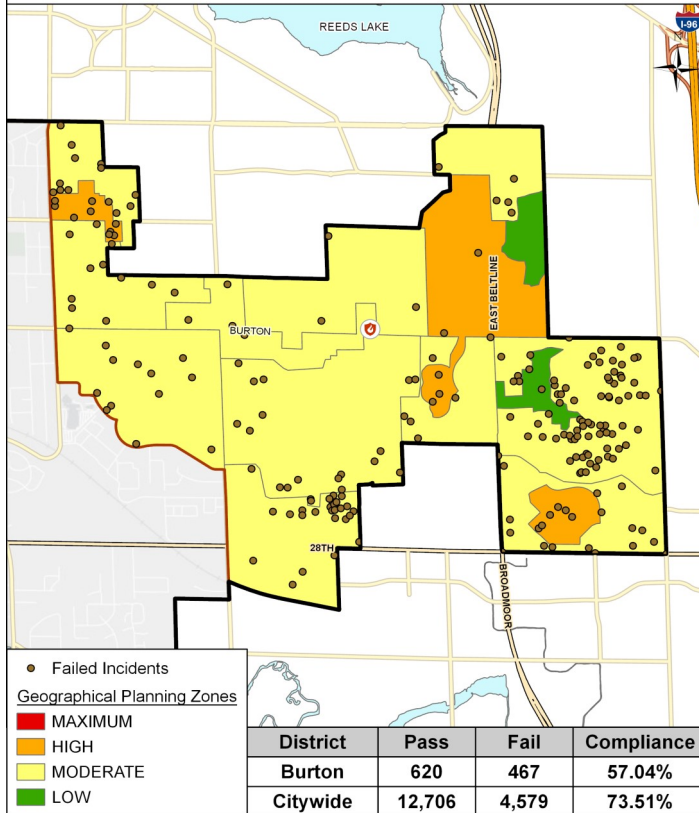
### Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	0	0	0	0	0	1	1	2
01:00-01:59	0	0	0	0	0	1	0	1
02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	1	0	0	0	0	0	1	2
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	0	0	1	1
07:00-07:59	0	0	0	0	0	0	0	0
08:00-08:59	0	0	0	0	1	0	0	1
09:00-09:59	0	0	1	0	0	0	1	2
10:00-10:59	0	0	0	1	1	0	0	2
11:00-11:59	0	0	0	2	0	0	0	2
12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	1	0	0	1	1	1	0	4
14:00-14:59	0	0	0	0	0	0	1	1
15:00-15:59	1	0	0	0	2	0	0	3
16:00-16:59	0	0	0	2	1	0	0	3
17:00-17:59	1	1	1	0	1	0	0	4
18:00-18:59	0	1	0	1	0	0	1	3
19:00-19:59	0	1	0	0	0	1	0	2
20:00-20:59	0	1	0	0	0	0	0	1
21:00-21:59	0	0	0	0	0	0	0	0
22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	0	0	1	0	0	1	0	2
Total	4	4	3	7	8	4	6	36

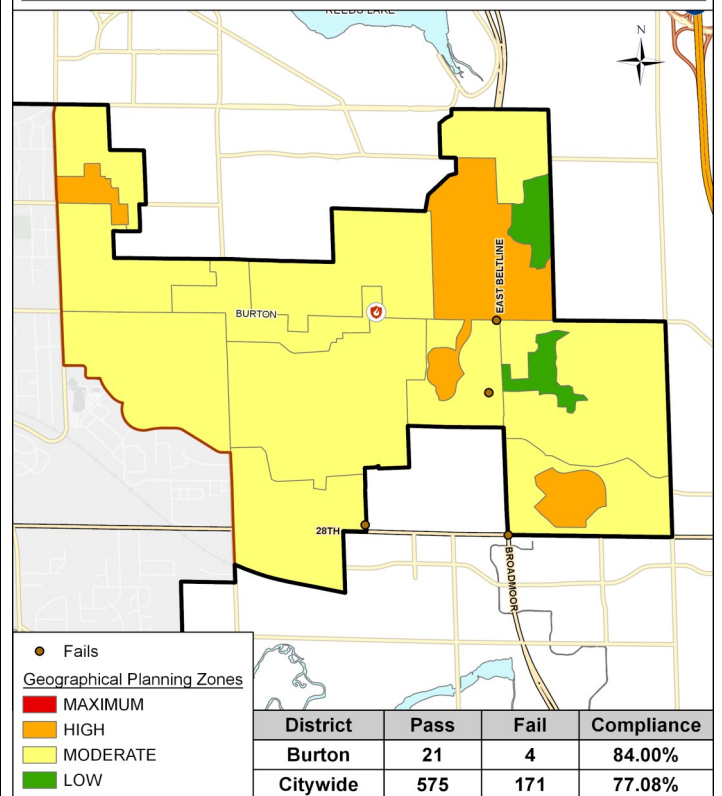


# BURTON STREET STATION

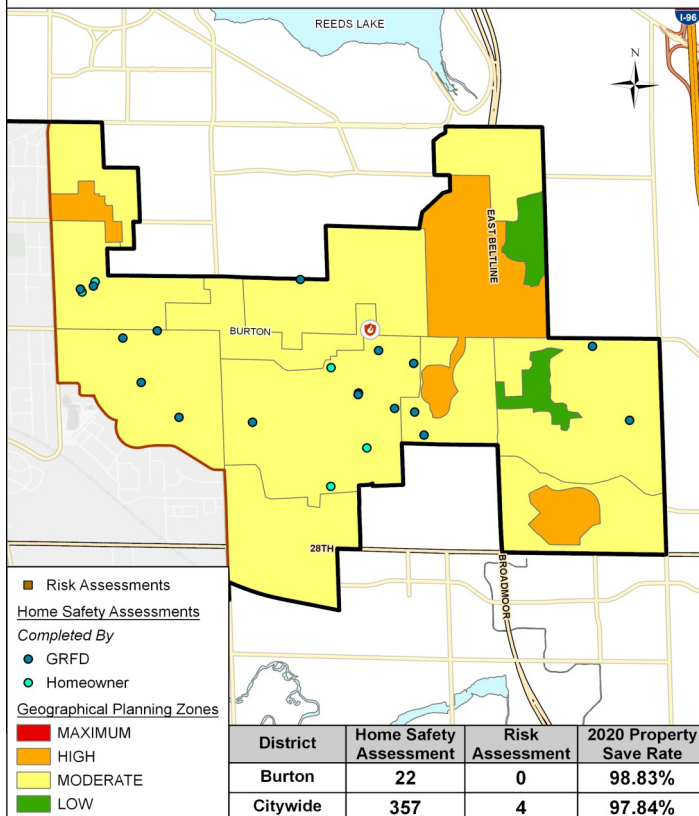
## 4 Minute Travel Time Compliance



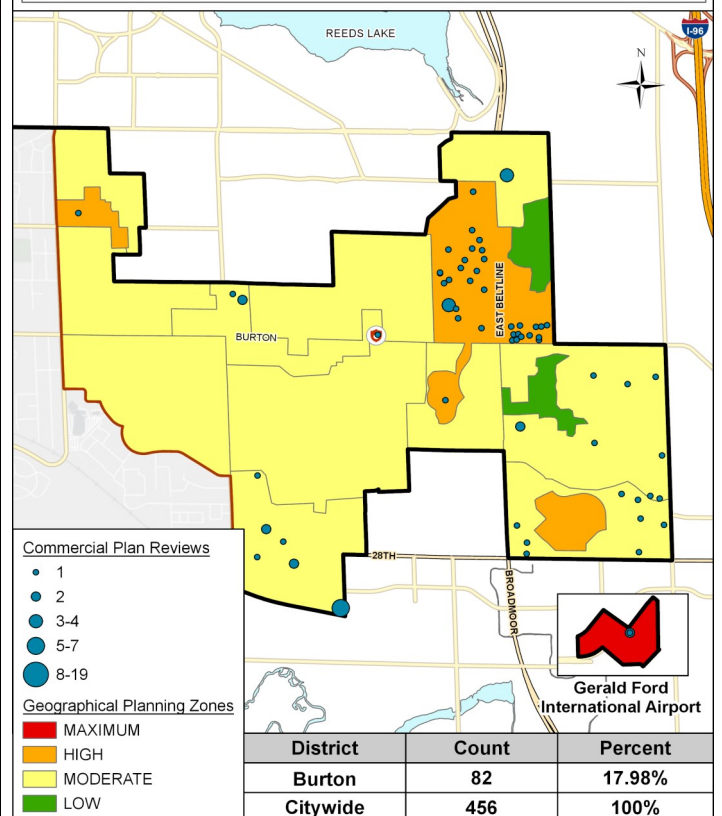
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



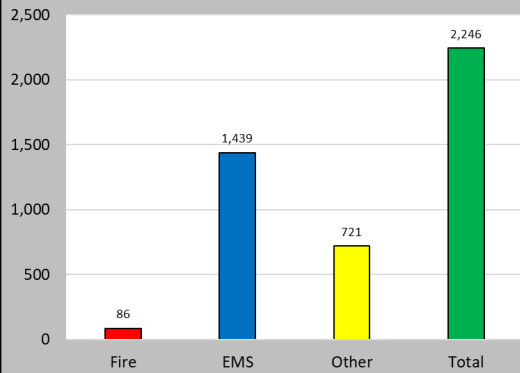
## Commercial Plan Reviews



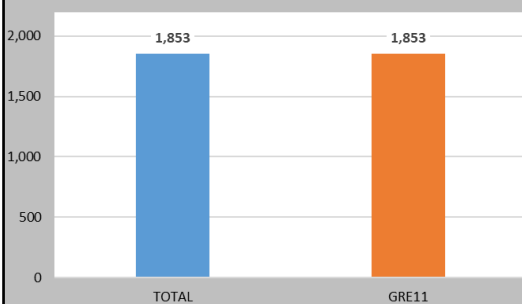


# CHESTER STREET STATION

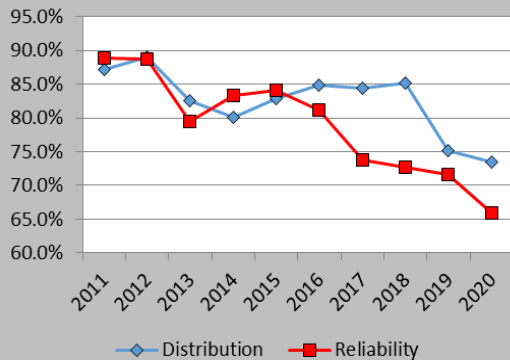
## 2020 Incidents in District



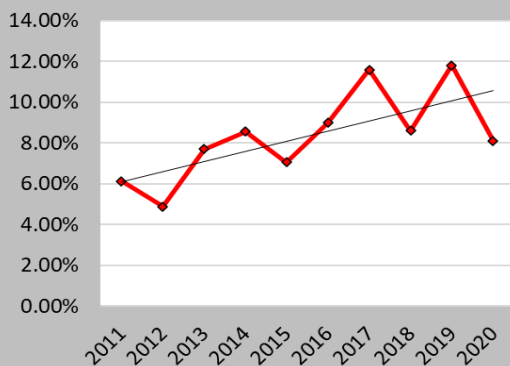
## 2020 Apparatus Responses



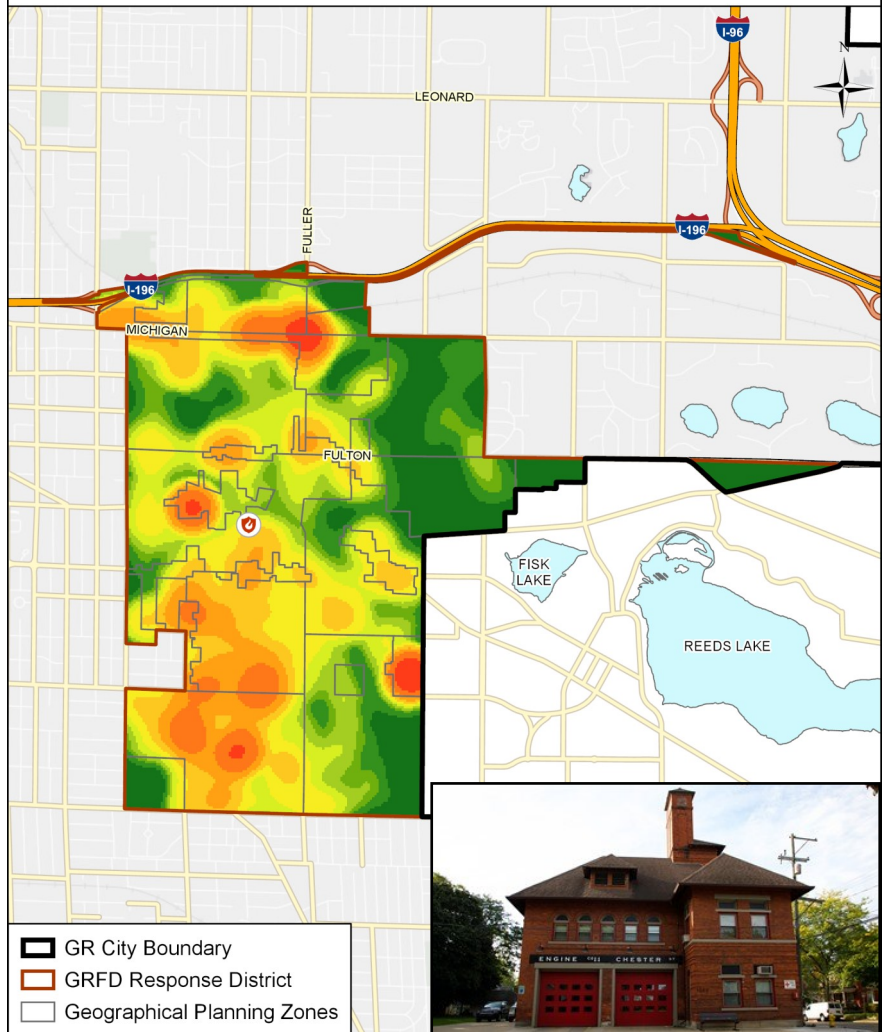
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



## Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	10	3	5	6	5	12	6	47
01:00-01:59	11	8	7	4	2	9	3	44
02:00-02:59	4	6	8	6	8	3	7	42
03:00-03:59	5	8	2	3	7	5	7	37
04:00-04:59	4	2	6	1	7	4	5	29
05:00-05:59	7	4	8	7	2	3	7	38
06:00-06:59	1	5	6	9	6	6	2	35
07:00-07:59	7	8	7	4	5	4	5	40
08:00-08:59	7	5	11	13	10	8	4	58
09:00-09:59	6	13	6	7	12	8	7	59
10:00-10:59	9	15	16	11	12	11	9	83
11:00-11:59	7	10	8	10	11	12	23	81
12:00-12:59	7	14	7	10	7	14	10	69
13:00-13:59	12	10	6	11	11	7	9	66
14:00-14:59	9	14	17	13	14	11	9	87
15:00-15:59	11	9	15	11	5	18	15	84
16:00-16:59	10	10	11	16	11	14	10	82
17:00-17:59	12	11	13	17	9	12	14	88
18:00-18:59	16	10	12	9	10	8	8	73
19:00-19:59	10	8	4	8	8	12	14	64
20:00-20:59	7	10	11	11	4	4	10	57
21:00-21:59	11	8	9	13	4	13	13	71
22:00-22:59	9	13	6	7	10	6	8	59
23:00-23:59	3	6	10	6	6	9	6	46
Total	195	210	211	213	186	213	211	1,439

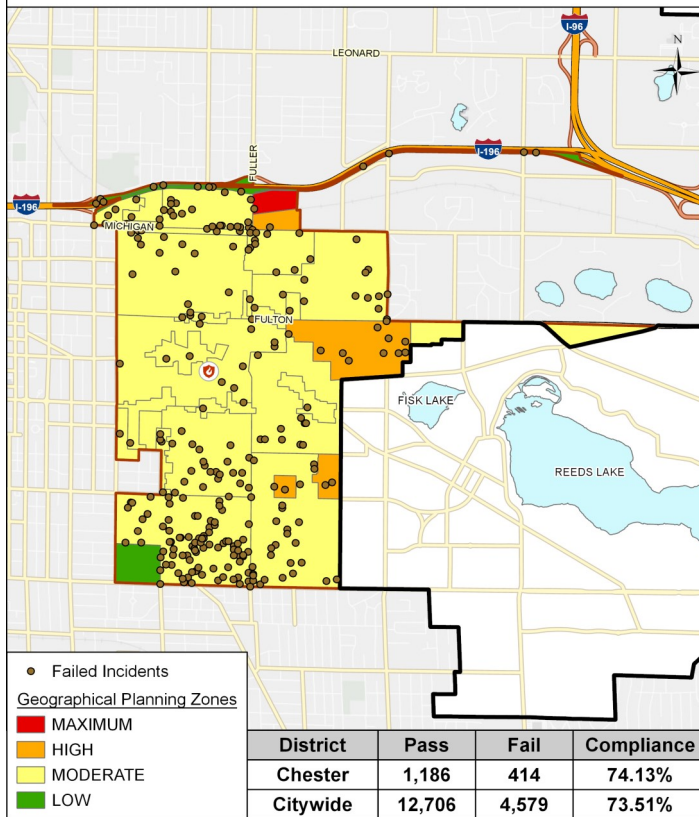
## Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	0	1	1	0	0	1	0	3
01:00-01:59	1	0	1	0	1	0	0	3
02:00-02:59	1	0	0	0	0	1	1	3
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	1	0	0	0	0	0	0	1
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	0	1	0	0	1
07:00-07:59	0	0	2	0	0	1	0	3
08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	1	0	1	0	0	1	2	5
10:00-10:59	0	0	0	0	1	0	0	1
11:00-11:59	1	1	0	0	0	1	1	4
12:00-12:59	0	0	1	2	0	1	2	6
13:00-13:59	2	0	0	0	2	1	2	7
14:00-14:59	0	0	1	1	0	0	2	4
15:00-15:59	0	0	0	0	1	0	1	3
16:00-16:59	0	0	0	1	0	0	0	1
17:00-17:59	1	0	2	1	1	1	1	7
18:00-18:59	2	2	2	1	0	2	1	10
19:00-19:59	0	1	0	0	0	1	2	4
20:00-20:59	1	0	1	1	1	2	1	7
21:00-21:59	0	1	0	0	1	0	1	3
22:00-22:59	1	1	1	0	1	0	1	5
23:00-23:59	0	1	0	0	1	1	2	5
Total	12	8	13	8	11	14	20	86

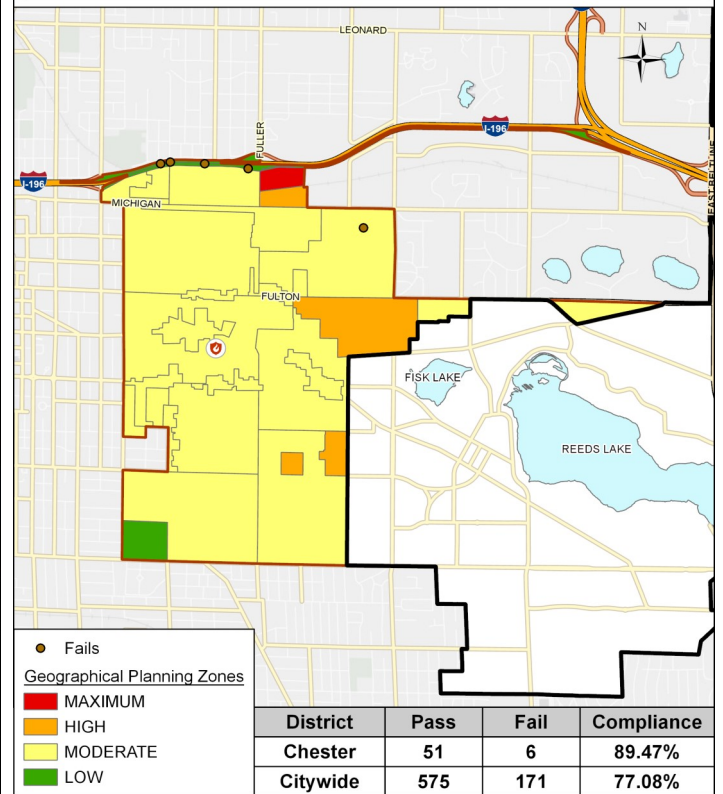


# CHESTER STREET STATION

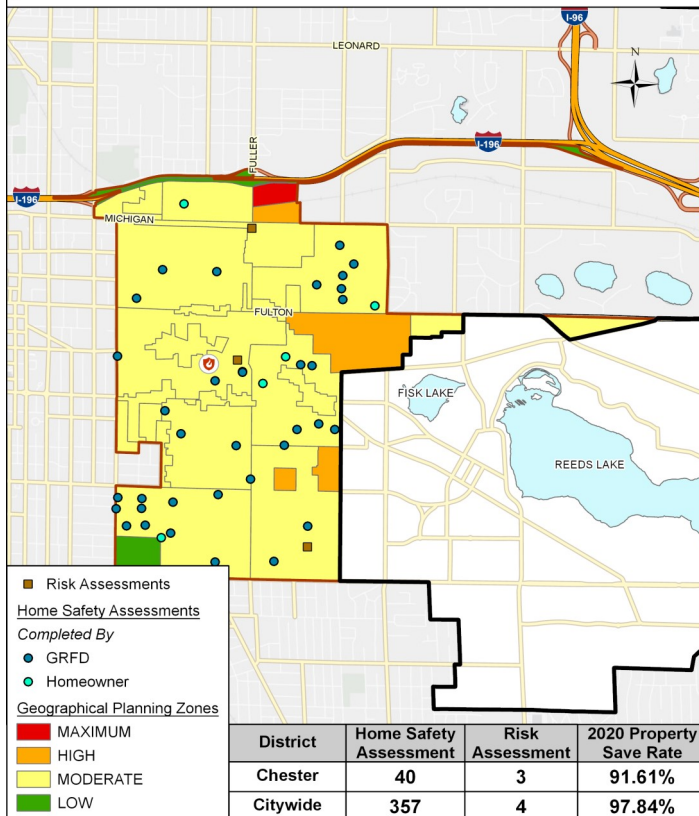
## 4 Minute Travel Time Compliance



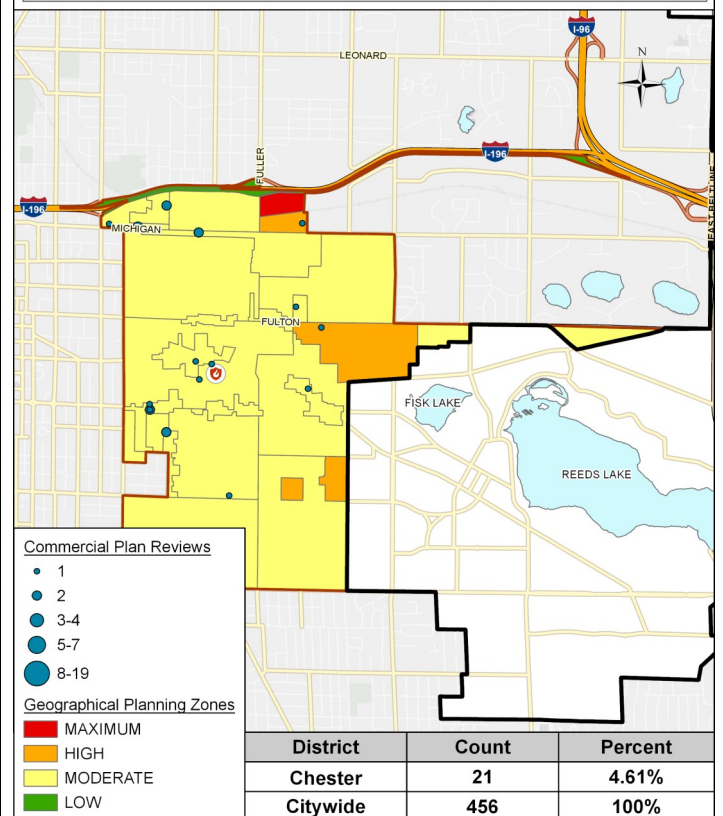
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



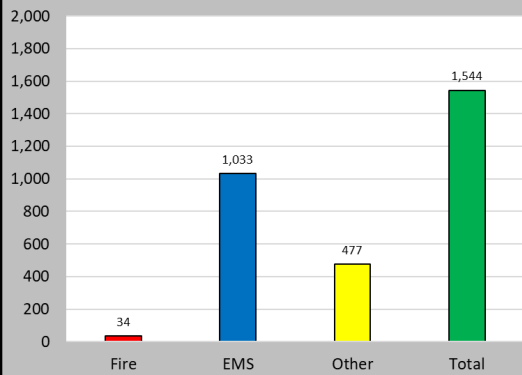
## Commercial Plan Reviews



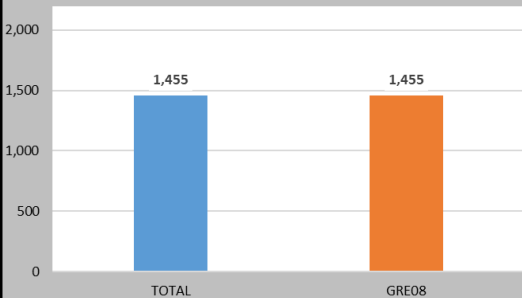


# COVELL AVENUE STATION

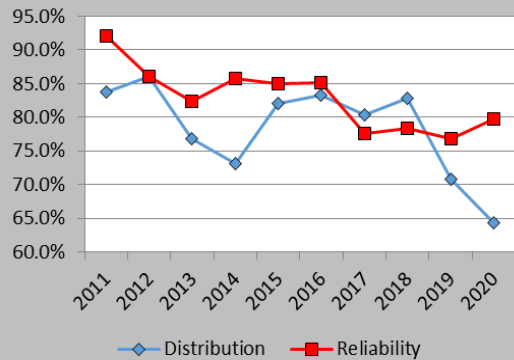
## 2020 Incidents in District



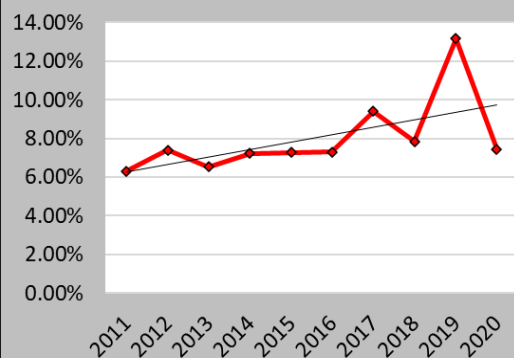
## 2020 Apparatus Responses



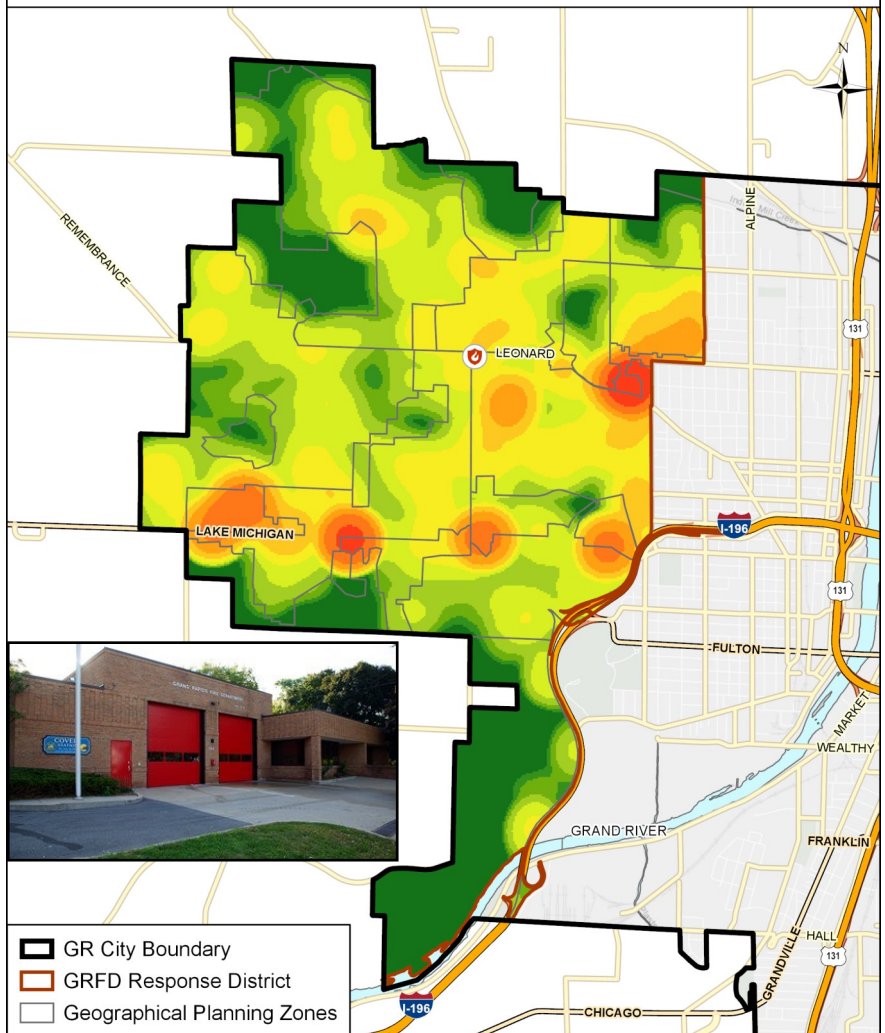
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



### Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	6	0	0	3	5	5	3	22
01:00-01:59	3	4	3	9	2	5	8	34
02:00-02:59	6	5	2	4	6	2	4	29
03:00-03:59	0	3	2	3	1	8	3	20
04:00-04:59	2	2	6	1	0	5	1	17
05:00-05:59	2	3	4	4	3	2	1	19
06:00-06:59	3	5	2	2	3	1	2	18
07:00-07:59	7	9	9	4	7	6	5	47
08:00-08:59	6	11	5	7	9	3	4	45
09:00-09:59	9	9	10	6	9	10	3	56
10:00-10:59	6	12	9	8	13	9	8	65
11:00-11:59	6	9	6	9	10	13	6	59
12:00-12:59	14	8	9	11	10	10	11	73
13:00-13:59	8	9	7	13	13	11	6	67
14:00-14:59	8	10	9	4	11	7	7	56
15:00-15:59	8	7	13	10	11	12	5	66
16:00-16:59	10	7	12	8	5	7	6	55
17:00-17:59	7	9	5	11	6	0	8	46
18:00-18:59	10	8	2	5	6	6	11	48
19:00-19:59	8	11	5	6	6	10	8	54
20:00-20:59	8	4	1	3	5	5	10	36
21:00-21:59	2	5	3	6	7	5	7	35
22:00-22:59	8	4	6	6	5	8	7	44
23:00-23:59	4	6	2	3	2	3	3	23
<b>Total</b>	<b>151</b>	<b>160</b>	<b>132</b>	<b>146</b>	<b>155</b>	<b>153</b>	<b>137</b>	<b>1,034</b>

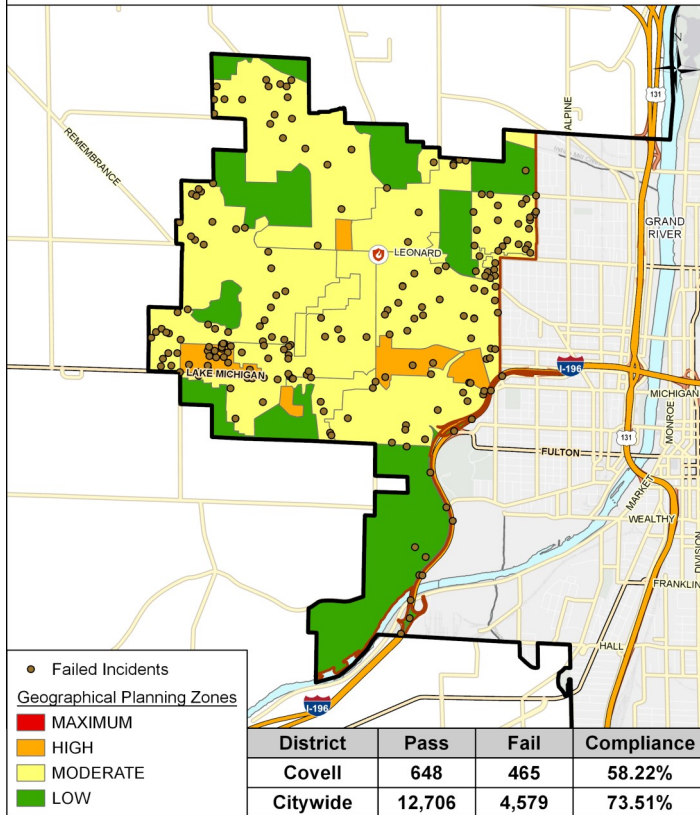
### Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	1	0	0	0	1	0	0	2
01:00-01:59	0	0	0	1	0	0	0	1
02:00-02:59	0	1	0	0	0	0	0	1
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	1	0	0	0	0	1
05:00-05:59	0	0	0	0	1	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	0	1
09:00-09:59	0	0	0	1	0	0	0	1
10:00-10:59	0	1	0	1	0	1	1	4
11:00-11:59	0	0	0	2	0	0	1	3
12:00-12:59	0	1	1	0	0	0	0	2
13:00-13:59	0	0	0	0	0	0	1	1
14:00-14:59	0	0	0	1	0	0	0	1
15:00-15:59	1	0	0	0	0	0	0	1
16:00-16:59	0	0	0	0	1	0	0	1
17:00-17:59	1	1	0	0	1	1	0	4
18:00-18:59	0	0	0	0	0	1	0	1
19:00-19:59	1	0	0	0	0	0	0	1
20:00-20:59	2	0	0	0	0	0	0	2
21:00-21:59	1	0	0	1	1	0	0	3
22:00-22:59	0	0	0	1	0	1	0	2
23:00-23:59	0	0	0	0	0	0	0	0
<b>Total</b>	<b>8</b>	<b>4</b>	<b>2</b>	<b>8</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>34</b>

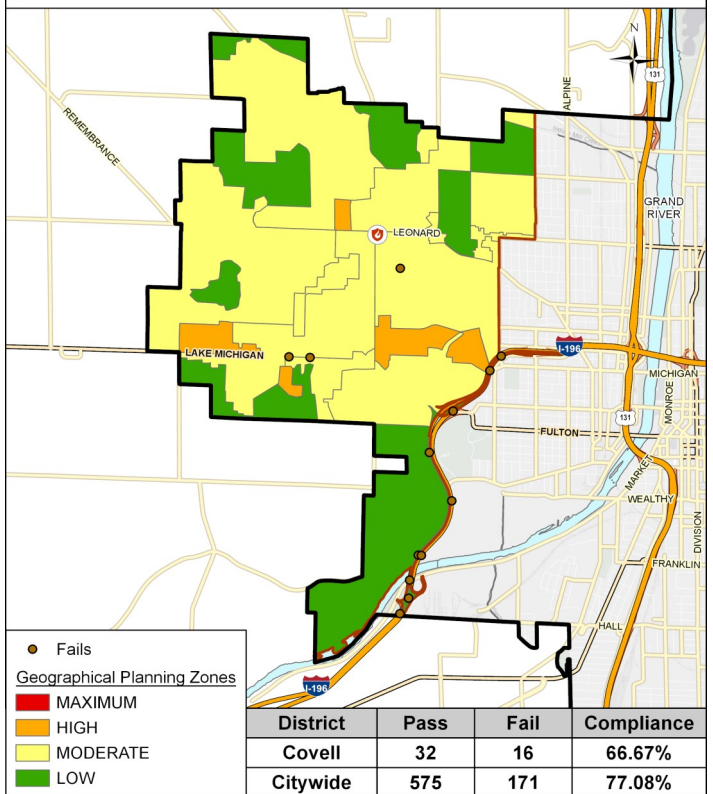


# COVELL AVENUE STATION

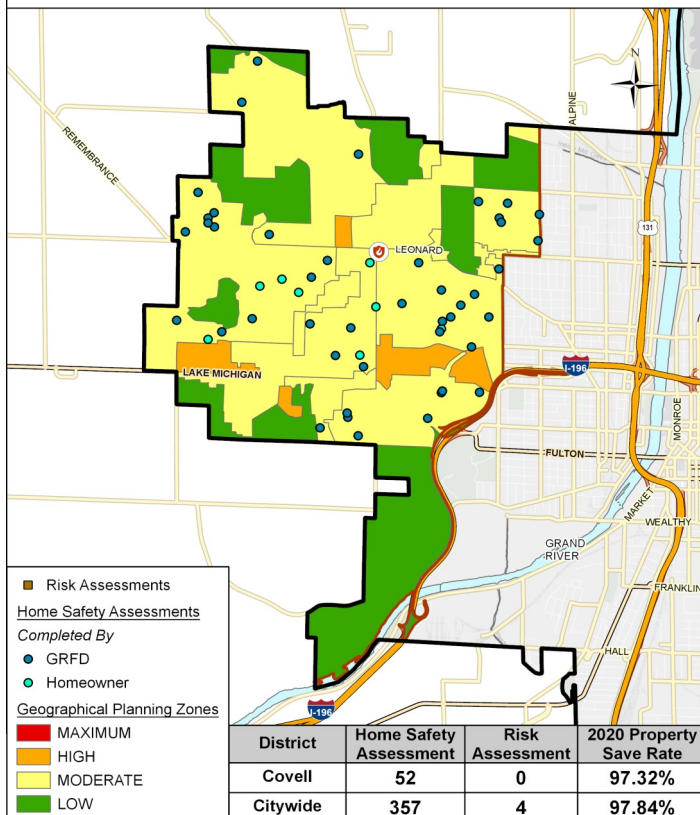
## 4 Minute Travel Time Compliance



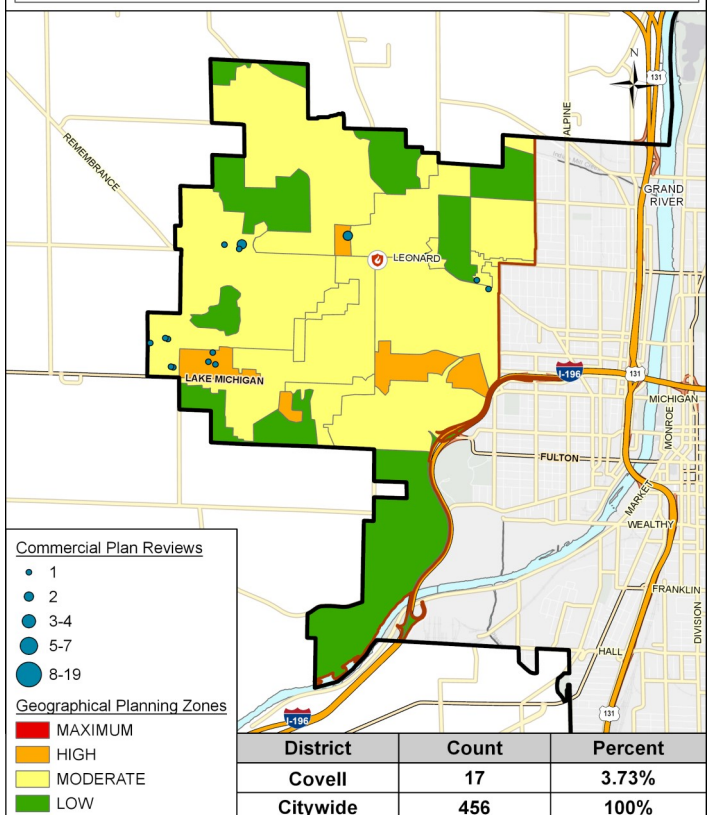
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



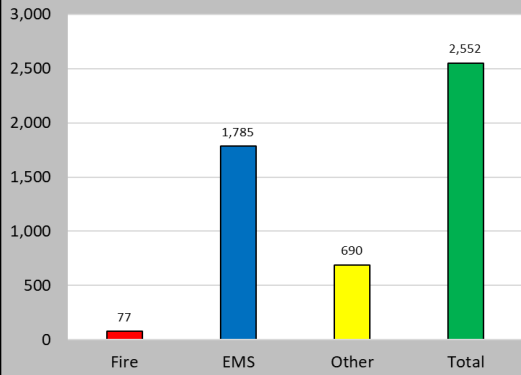
## Commercial Plan Reviews



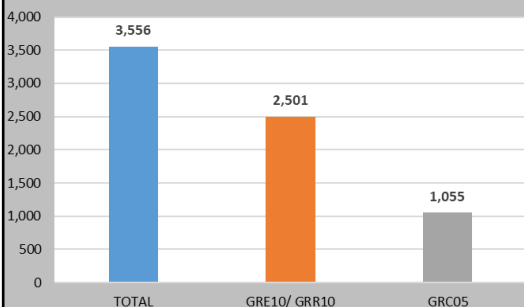


# DIVISION AVENUE STATION

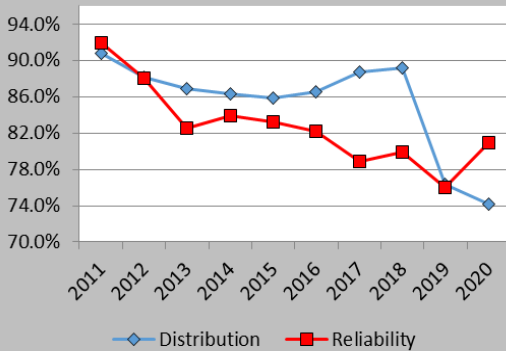
## 2020 Incidents in District



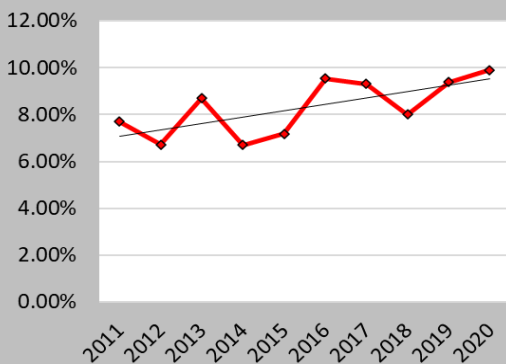
## 2020 Apparatus Responses



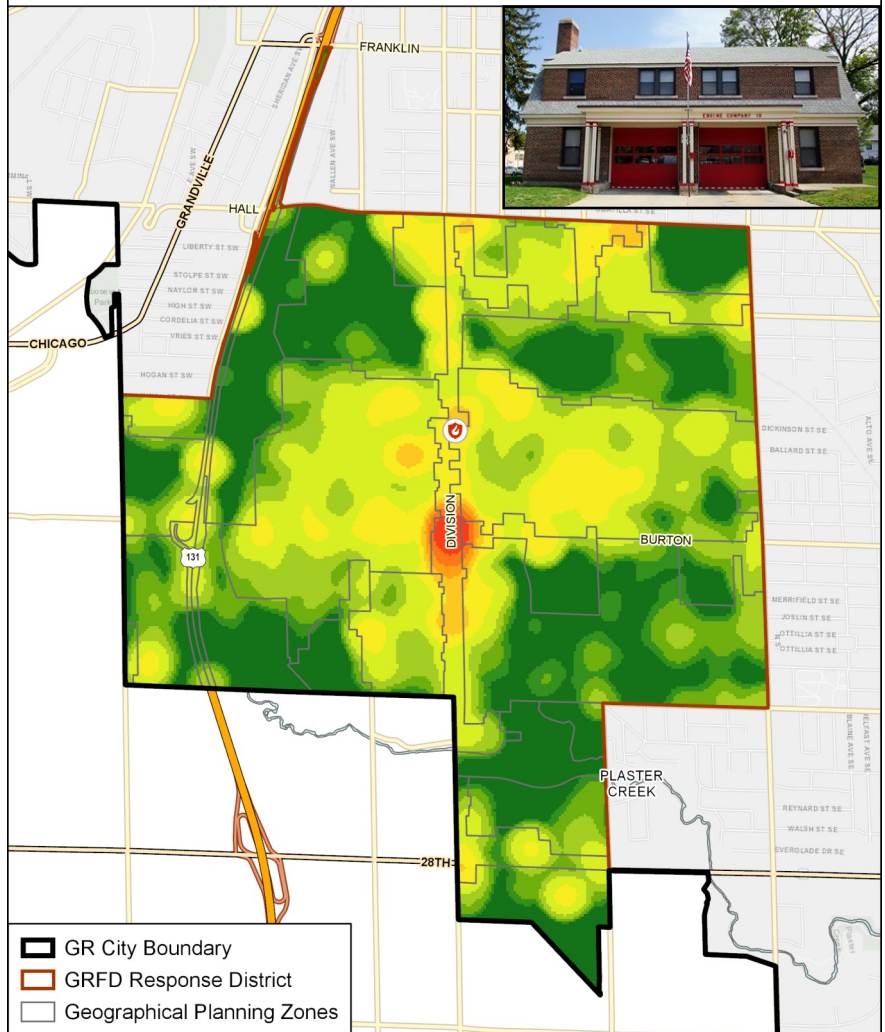
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



### Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	7	4	7	7	6	3	10	44
01:00-01:59	8	12	4	3	4	6	7	44
02:00-02:59	3	3	3	4	4	3	9	29
03:00-03:59	5	3	4	2	4	7	11	36
04:00-04:59	5	7	5	4	4	5	8	38
05:00-05:59	5	1	3	3	5	7	6	30
06:00-06:59	7	3	8	1	6	7	8	40
07:00-07:59	4	5	7	4	3	4	6	33
08:00-08:59	10	15	6	6	4	7	6	54
09:00-09:59	7	11	12	9	14	9	10	72
10:00-10:59	12	5	7	14	8	15	20	81
11:00-11:59	22	16	10	20	17	15	16	116
12:00-12:59	11	9	12	11	13	16	20	92
13:00-13:59	17	12	16	15	13	24	15	112
14:00-14:59	20	13	15	14	12	19	15	108
15:00-15:59	13	19	28	14	16	14	18	122
16:00-16:59	11	11	20	21	12	15	12	102
17:00-17:59	14	20	23	14	13	12	13	109
18:00-18:59	15	17	8	25	16	14	18	113
19:00-19:59	12	11	17	18	17	18	16	109
20:00-20:59	9	13	14	12	12	17	13	90
21:00-21:59	15	15	14	8	12	12	16	92
22:00-22:59	8	9	7	6	9	17	12	68
23:00-23:59	7	3	9	6	7	9	10	51
Total	247	237	259	241	231	275	295	1,785

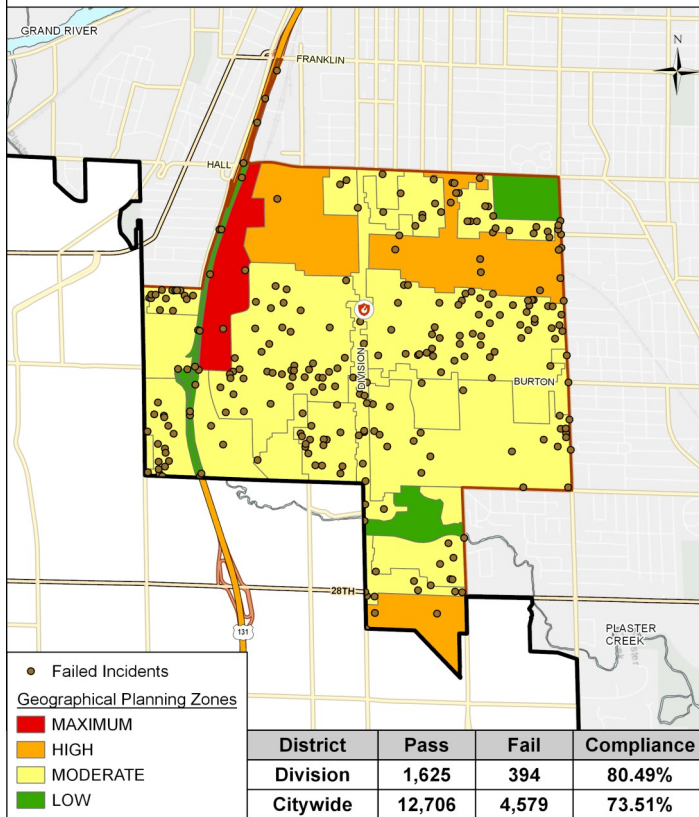
### Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	0	0	0	0	1	1	0	2
01:00-01:59	1	0	0	0	0	0	0	1
02:00-02:59	1	0	0	0	0	0	0	1
03:00-03:59	0	0	2	0	1	0	0	3
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	0	0	0	0	1	0	1
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	0	0	1	0	1
08:00-08:59	0	0	0	0	0	1	0	1
09:00-09:59	0	1	0	0	0	0	1	2
10:00-10:59	0	0	0	0	0	1	0	1
11:00-11:59	0	0	0	1	2	0	2	5
12:00-12:59	0	0	0	1	1	0	0	2
13:00-13:59	0	2	0	0	1	1	2	6
14:00-14:59	1	1	1	0	0	0	2	5
15:00-15:59	2	2	1	0	3	0	1	9
16:00-16:59	0	0	1	0	1	2	1	5
17:00-17:59	0	1	1	0	1	1	1	5
18:00-18:59	0	0	0	2	1	0	0	3
19:00-19:59	2	0	0	1	2	0	1	6
20:00-20:59	0	1	1	0	0	2	1	5
21:00-21:59	1	0	1	0	2	1	1	6
22:00-22:59	2	0	0	0	0	0	1	3
23:00-23:59	0	0	0	1	2	0	0	3
Total	10	8	8	6	18	12	15	77

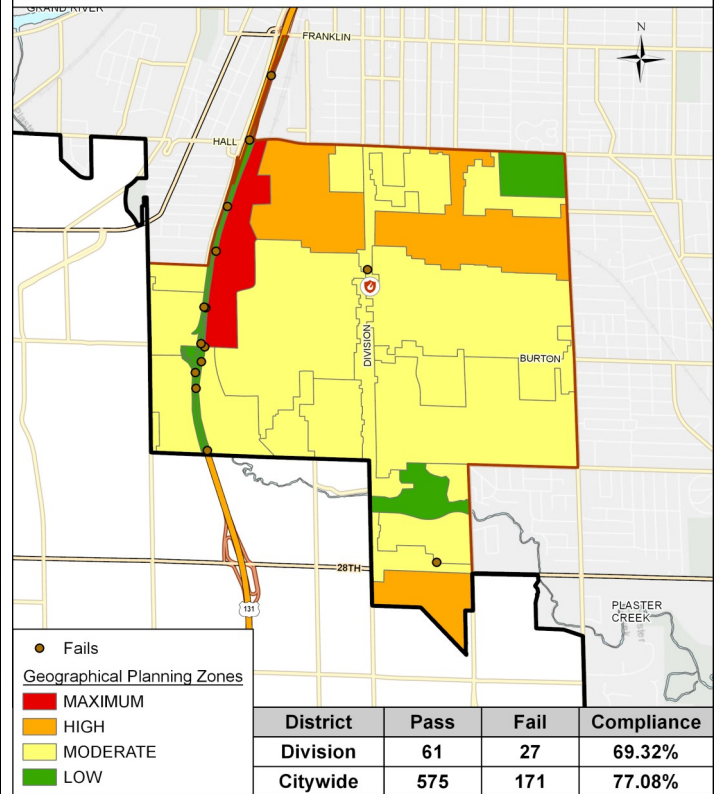


# DIVISION AVENUE STATION

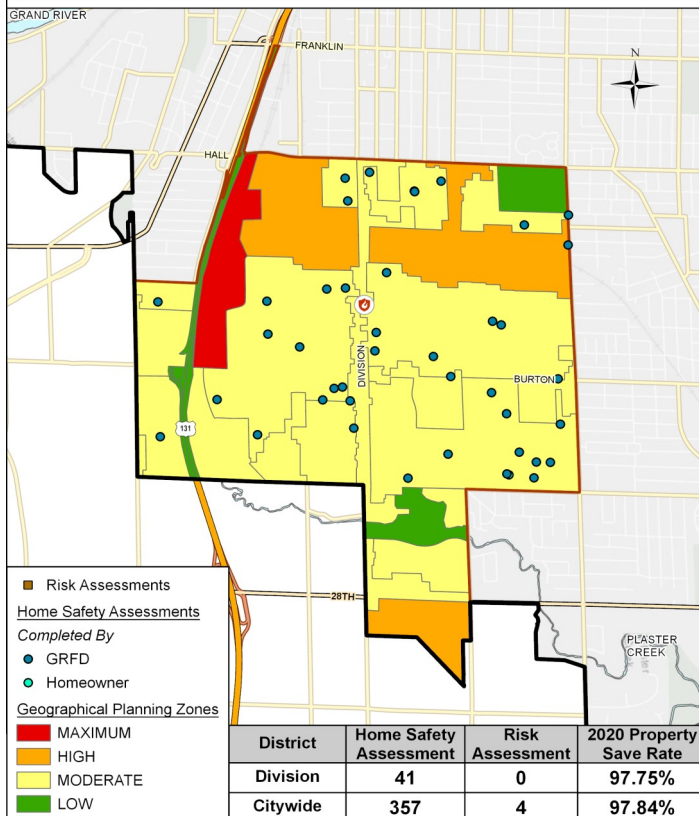
## 4 Minute Travel Time Compliance



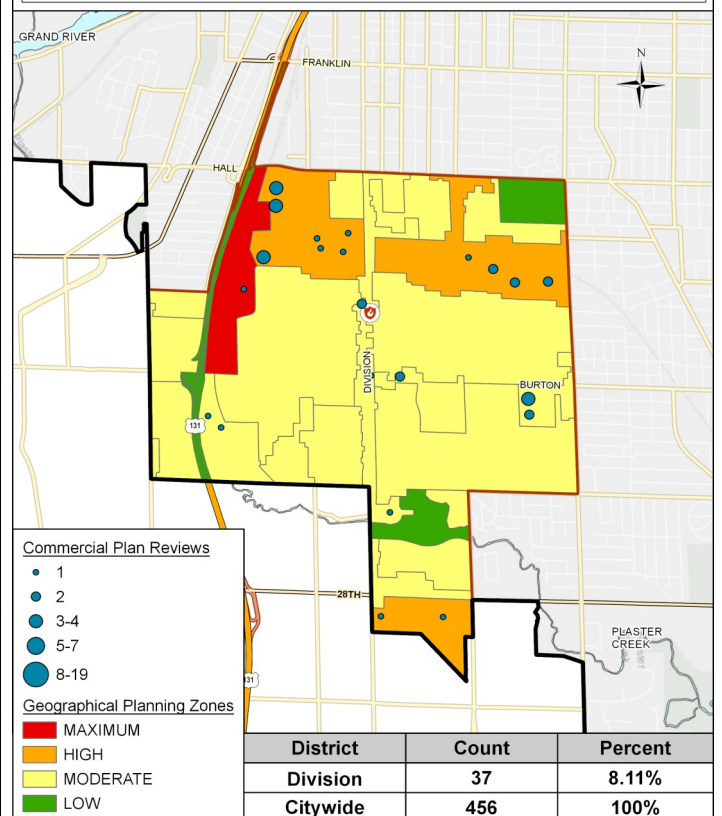
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



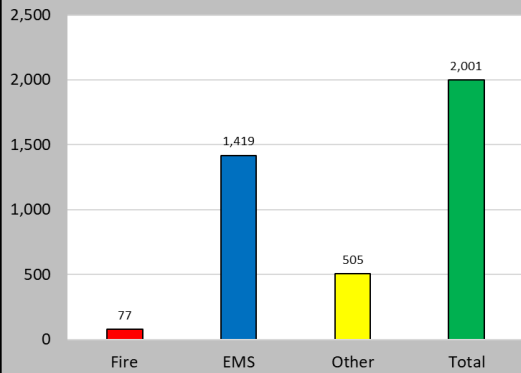
## Commercial Plan Reviews



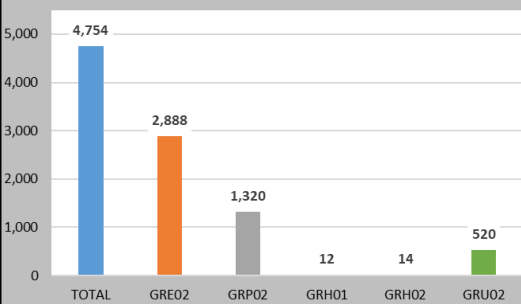


# FRANKLIN STREET STATION

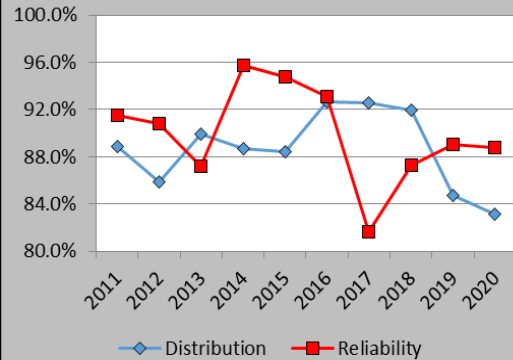
## 2020 Incidents in District



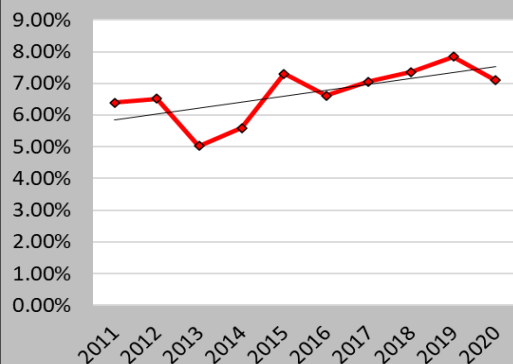
## 2020 Apparatus Responses



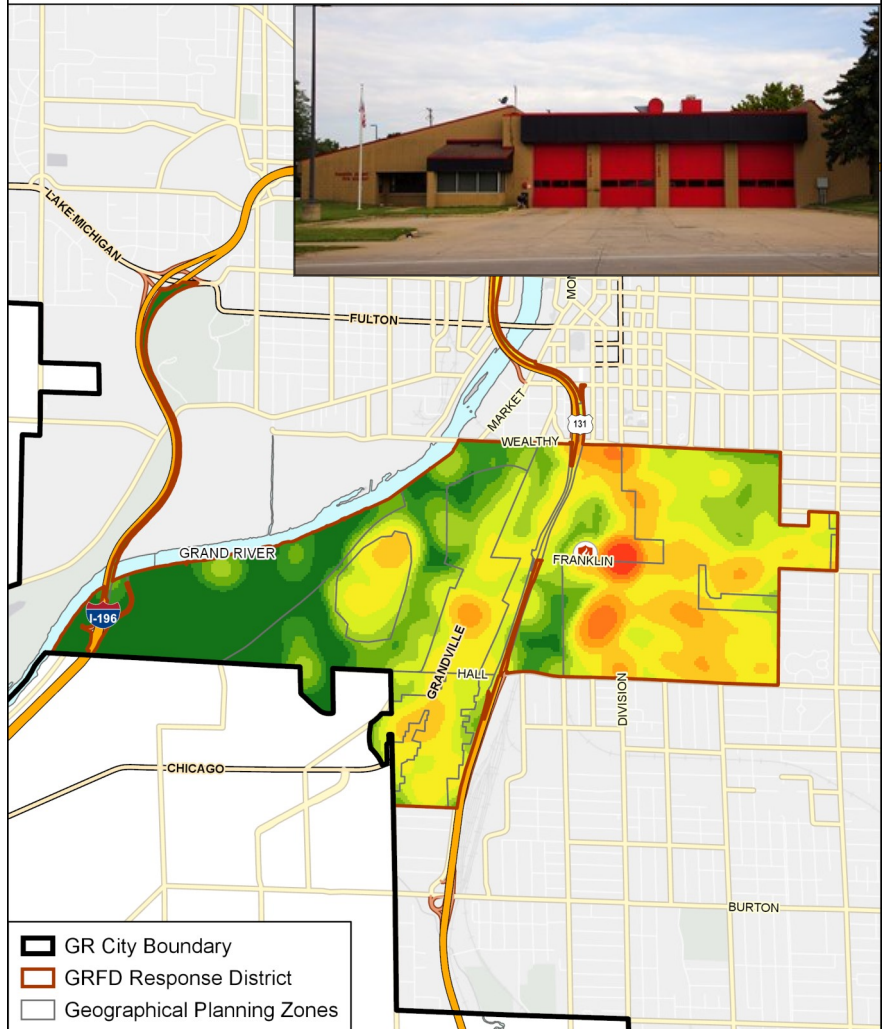
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



### Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	5	10	10	8	9	6	12	60
01:00-01:59	10	6	8	5	8	3	10	50
02:00-02:59	7	13	3	8	10	6	6	53
03:00-03:59	6	6	5	5	4	5	5	36
04:00-04:59	8	1	4	4	2	3	4	26
05:00-05:59	5	3	1	1	1	1	2	14
06:00-06:59	2	5	6	1	5	8	4	31
07:00-07:59	3	5	2	4	7	5	3	29
08:00-08:59	7	4	8	3	8	7	0	37
09:00-09:59	5	9	9	9	7	4	5	48
10:00-10:59	8	6	9	9	7	9	2	50
11:00-11:59	12	14	7	8	11	7	14	73
12:00-12:59	8	7	9	15	13	10	12	74
13:00-13:59	12	10	6	7	14	15	12	76
14:00-14:59	7	13	12	12	10	12	11	77
15:00-15:59	11	24	11	9	14	14	10	93
16:00-16:59	15	10	10	11	10	10	6	72
17:00-17:59	10	8	16	8	14	12	14	82
18:00-18:59	12	8	13	13	13	12	18	89
19:00-19:59	9	10	12	13	14	10	10	78
20:00-20:59	7	11	9	15	15	11	16	84
21:00-21:59	9	10	6	12	10	11	9	67
22:00-22:59	11	9	14	6	9	6	12	67
23:00-23:59	6	9	4	12	7	11	4	53
Total	195	211	194	198	222	198	201	1,419

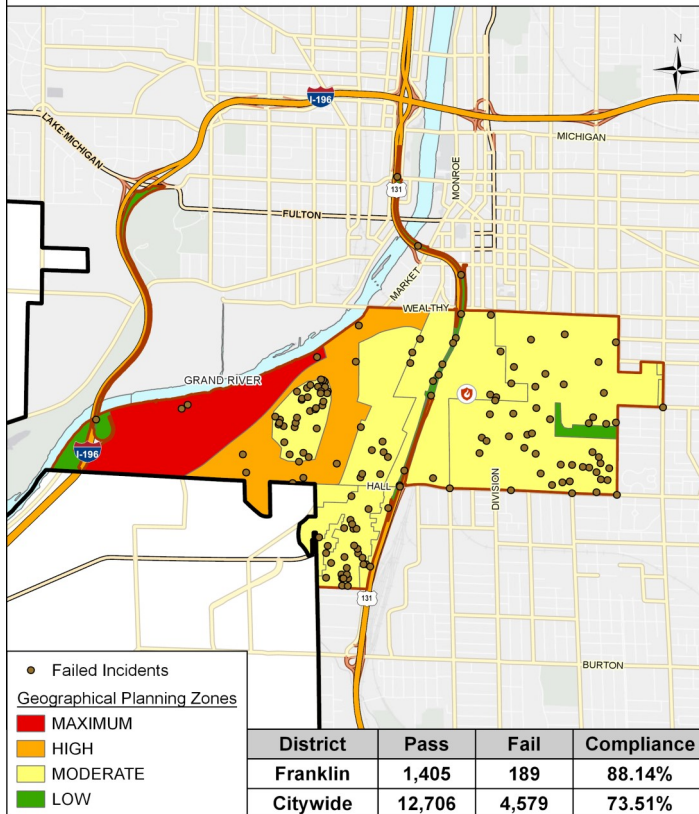
### Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	1	0	2	0	1	0	1	5
01:00-01:59	1	0	0	0	0	0	0	1
02:00-02:59	0	0	0	0	1	0	0	1
03:00-03:59	1	1	0	0	0	0	1	3
04:00-04:59	0	0	0	0	0	0	0	0
05:00-05:59	0	1	0	0	0	0	0	1
06:00-06:59	0	1	0	1	0	0	0	2
07:00-07:59	0	0	2	0	0	0	0	2
08:00-08:59	0	1	0	0	0	0	0	1
09:00-09:59	1	0	0	0	0	0	2	3
10:00-10:59	0	0	0	1	0	1	0	2
11:00-11:59	0	0	0	0	0	3	2	5
12:00-12:59	0	0	1	1	0	0	0	2
13:00-13:59	0	1	0	0	0	0	0	1
14:00-14:59	0	1	0	2	1	1	1	6
15:00-15:59	0	0	0	2	1	0	2	5
16:00-16:59	0	2	0	0	1	0	0	3
17:00-17:59	3	1	1	2	2	1	1	11
18:00-18:59	1	1	1	0	2	0	1	6
19:00-19:59	1	1	0	1	1	0	0	4
20:00-20:59	1	0	0	0	0	2	2	5
21:00-21:59	0	0	2	0	0	0	0	2
22:00-22:59	0	1	2	1	0	0	0	4
23:00-23:59	1	0	1	0	0	0	0	2
Total	11	12	12	11	10	8	13	77

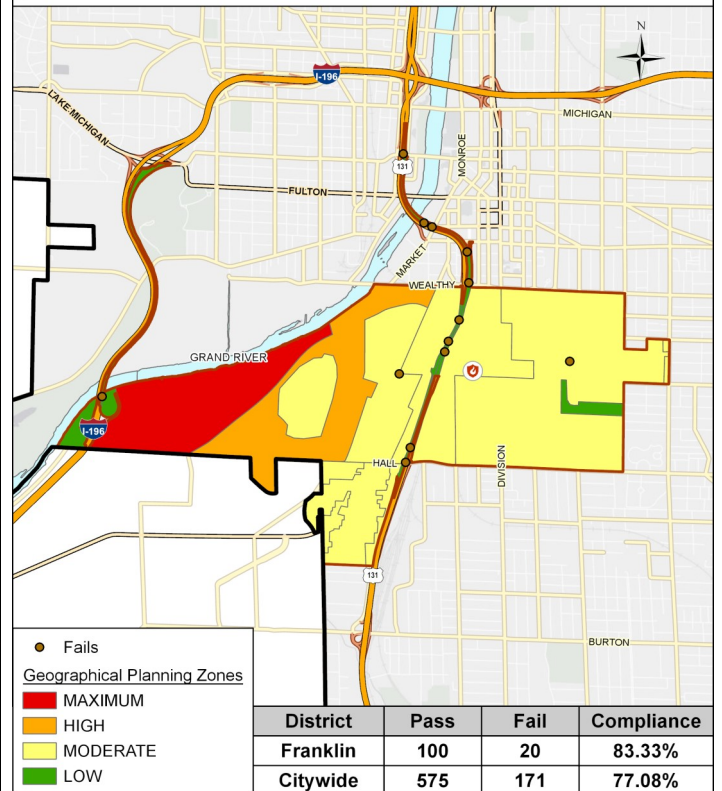


# FRANKLIN STREET STATION

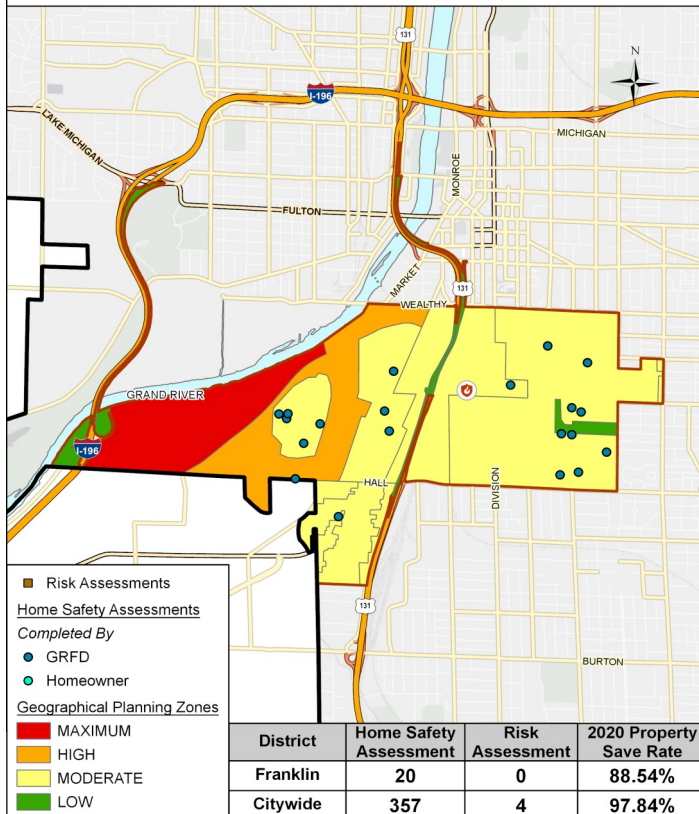
## 4 Minute Travel Time Compliance



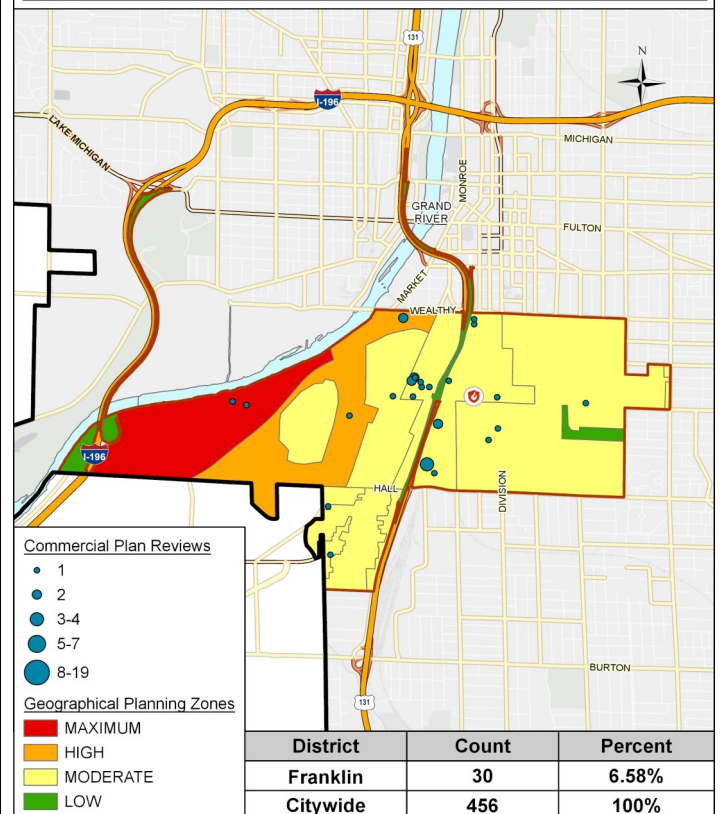
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



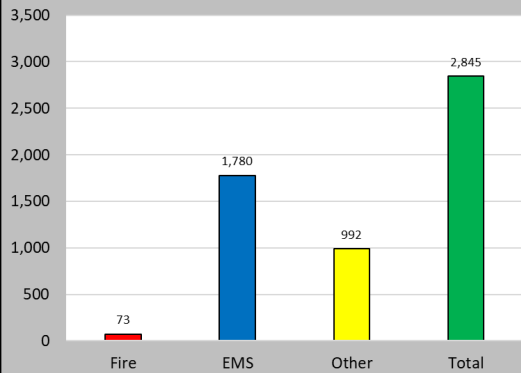
## Commercial Plan Reviews



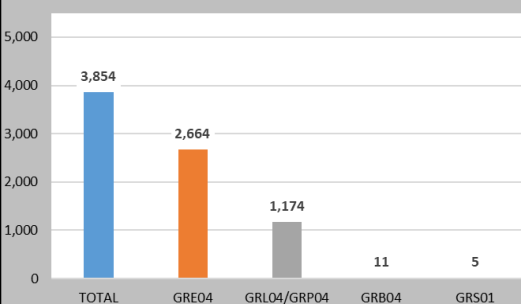


# KALAMAZOO AVENUE STATION

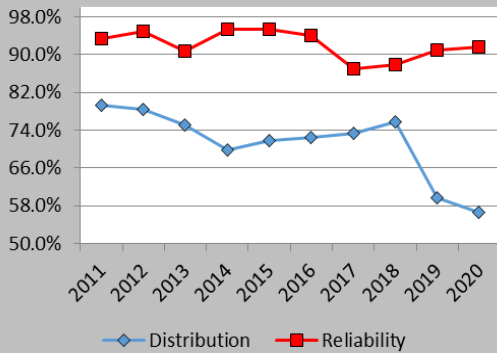
## 2020 Incidents in District



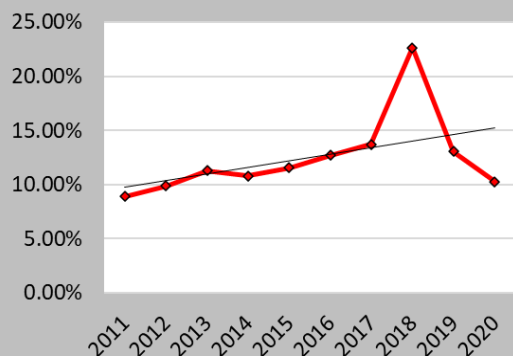
## 2020 Apparatus Responses



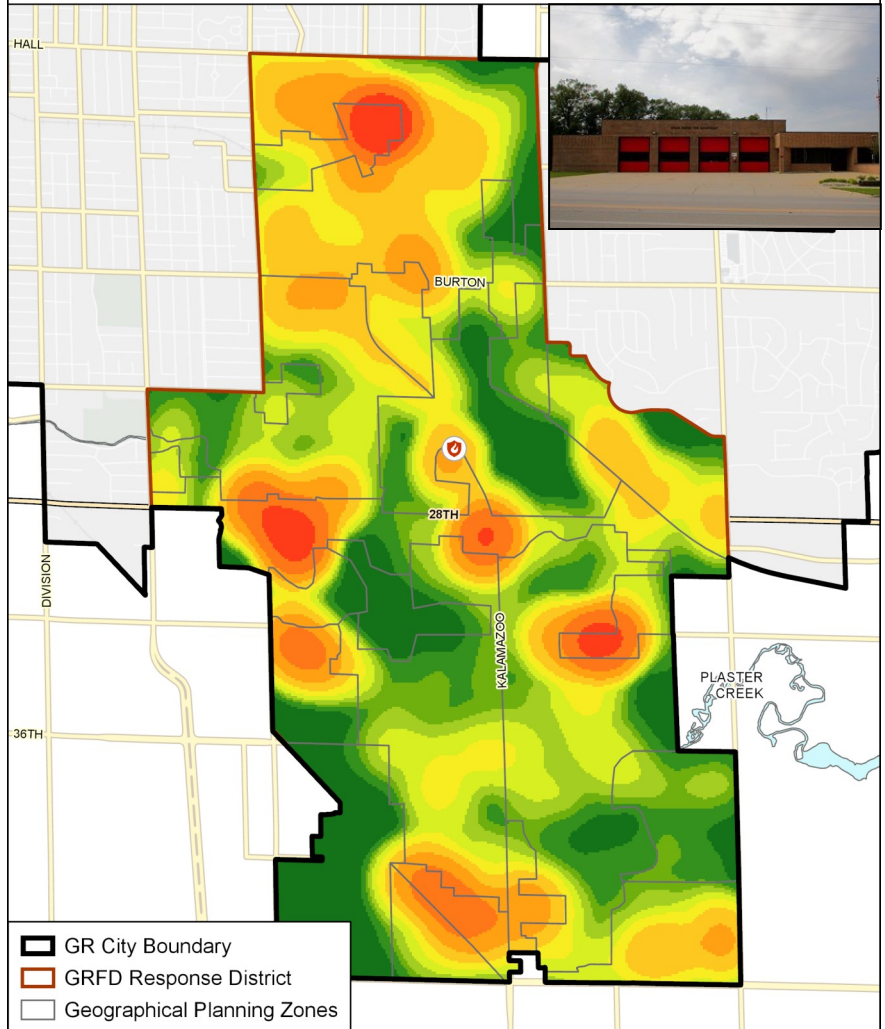
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



### Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	10	7	6	7	6	6	9	51
01:00-01:59	6	7	6	5	5	4	9	42
02:00-02:59	8	6	1	8	5	5	7	40
03:00-03:59	7	3	4	5	6	3	7	35
04:00-04:59	9	3	7	4	5	6	4	38
05:00-05:59	4	7	10	7	7	3	7	45
06:00-06:59	10	11	6	6	5	6	9	53
07:00-07:59	5	5	6	6	9	14	7	52
08:00-08:59	10	6	7	11	10	6	5	55
09:00-09:59	9	11	10	11	15	11	14	81
10:00-10:59	6	12	13	12	17	15	15	90
11:00-11:59	9	17	16	10	19	12	14	97
12:00-12:59	16	14	20	8	10	9	16	93
13:00-13:59	16	10	18	24	18	15	20	121
14:00-14:59	7	15	11	16	17	6	13	85
15:00-15:59	16	13	20	14	9	16	17	105
16:00-16:59	10	21	12	11	17	29	13	113
17:00-17:59	10	19	13	17	14	11	14	98
18:00-18:59	16	14	9	11	16	8	8	82
19:00-19:59	10	16	12	8	13	9	19	87
20:00-20:59	8	8	16	19	7	15	13	86
21:00-21:59	10	12	9	12	13	14	13	83
22:00-22:59	9	11	9	11	12	12	17	81
23:00-23:59	7	15	2	14	9	11	9	67
Total	228	263	243	257	264	246	279	1,780

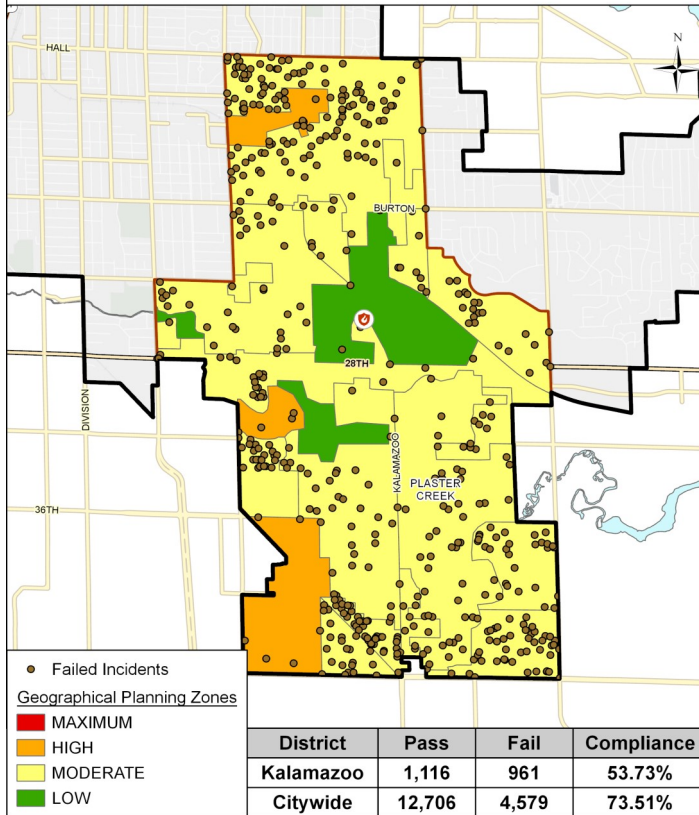
### Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	1	0	0	1	1	1	0	4
01:00-01:59	2	0	1	0	0	0	0	3
02:00-02:59	0	0	0	0	1	0	0	1
03:00-03:59	0	0	0	1	0	1	0	2
04:00-04:59	1	0	0	0	0	0	1	2
05:00-05:59	1	0	0	2	0	1	0	4
06:00-06:59	0	1	0	1	1	0	0	3
07:00-07:59	1	0	0	0	0	0	0	1
08:00-08:59	0	0	0	0	0	0	0	0
09:00-09:59	0	1	0	0	1	0	0	2
10:00-10:59	0	1	0	0	0	0	0	1
11:00-11:59	1	0	1	0	1	0	0	3
12:00-12:59	0	0	0	0	2	1	1	4
13:00-13:59	1	0	1	1	0	0	0	3
14:00-14:59	1	0	0	1	0	0	0	2
15:00-15:59	0	0	0	1	0	0	3	4
16:00-16:59	1	0	0	1	0	0	1	3
17:00-17:59	1	0	1	2	0	2	1	7
18:00-18:59	2	1	0	0	1	0	1	5
19:00-19:59	0	2	2	0	1	2	0	7
20:00-20:59	0	0	0	0	1	2	0	3
21:00-21:59	0	1	0	0	1	1	0	3
22:00-22:59	0	0	0	1	1	0	2	4
23:00-23:59	0	1	0	0	0	0	1	2
Total	13	8	6	12	12	11	11	73

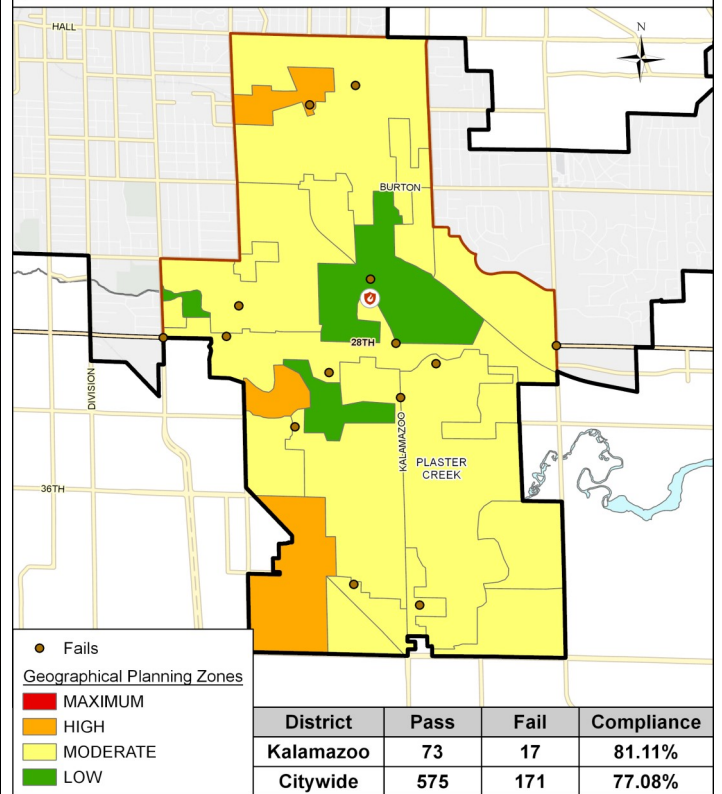


# KALAMAZOO AVENUE STATION

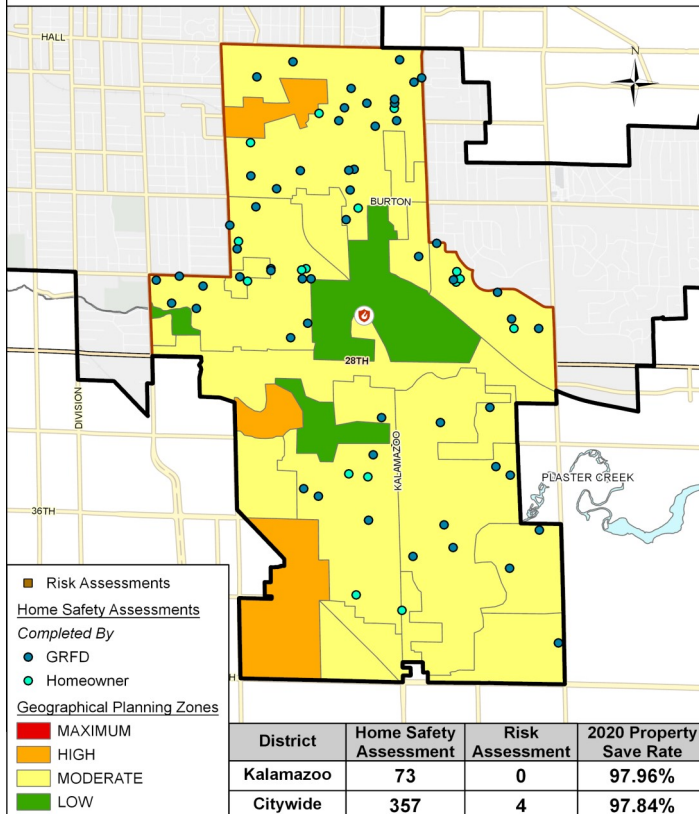
## 4 Minute Travel Time Compliance



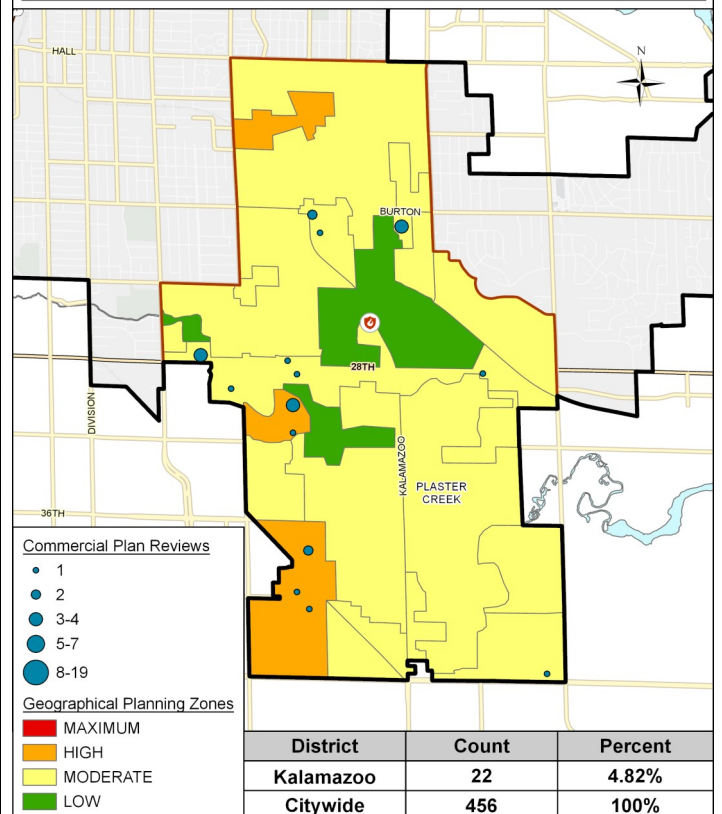
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



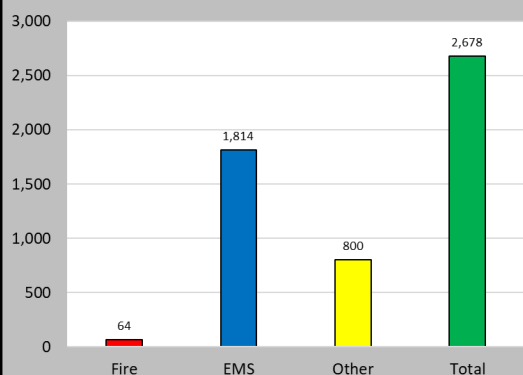
## Commercial Plan Reviews



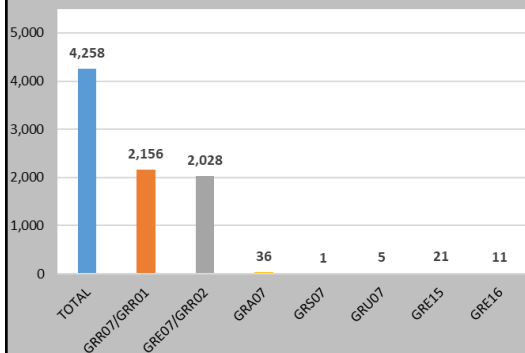


# LAGRAVE AVENUE STATION

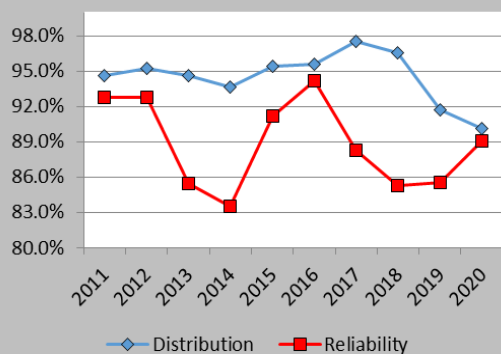
## 2020 Incidents in District



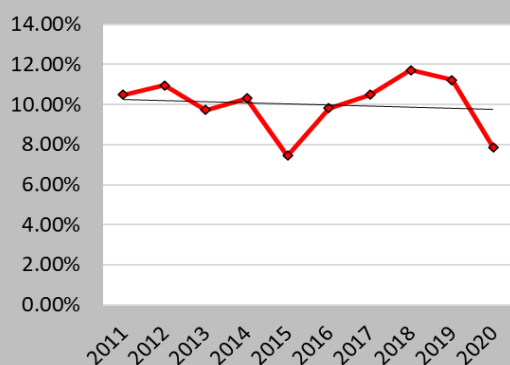
## 2020 Apparatus Responses



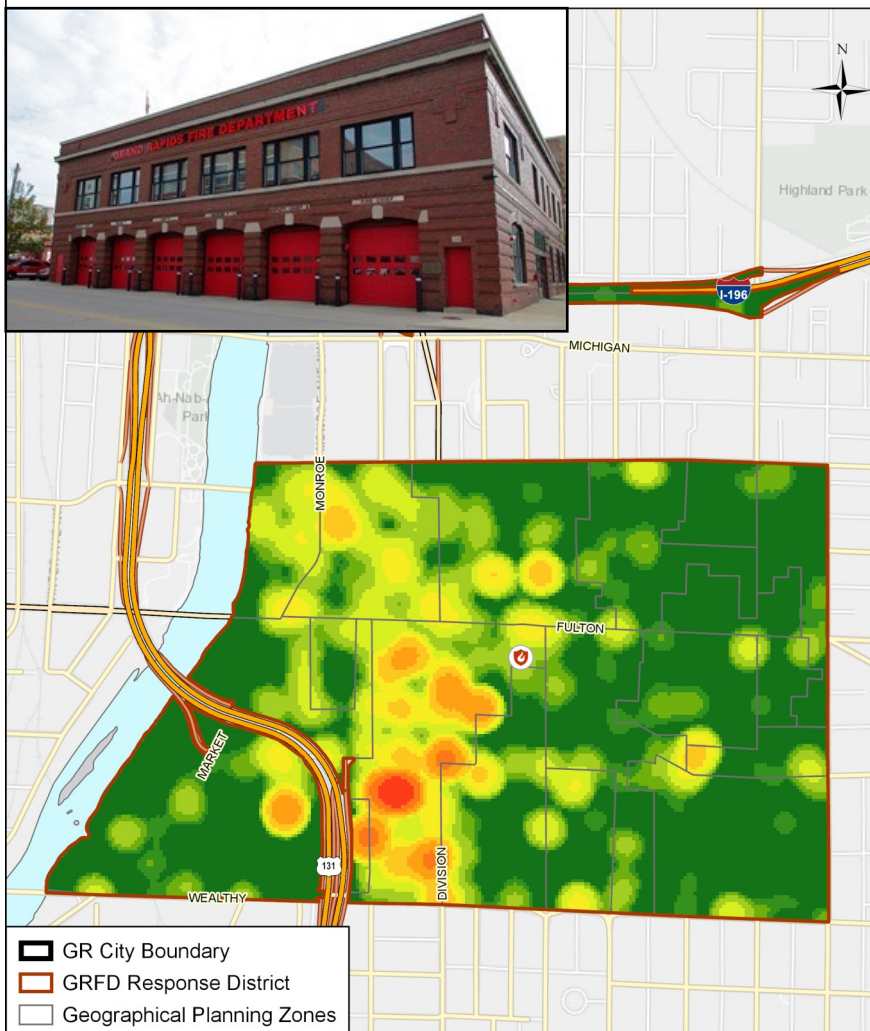
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots

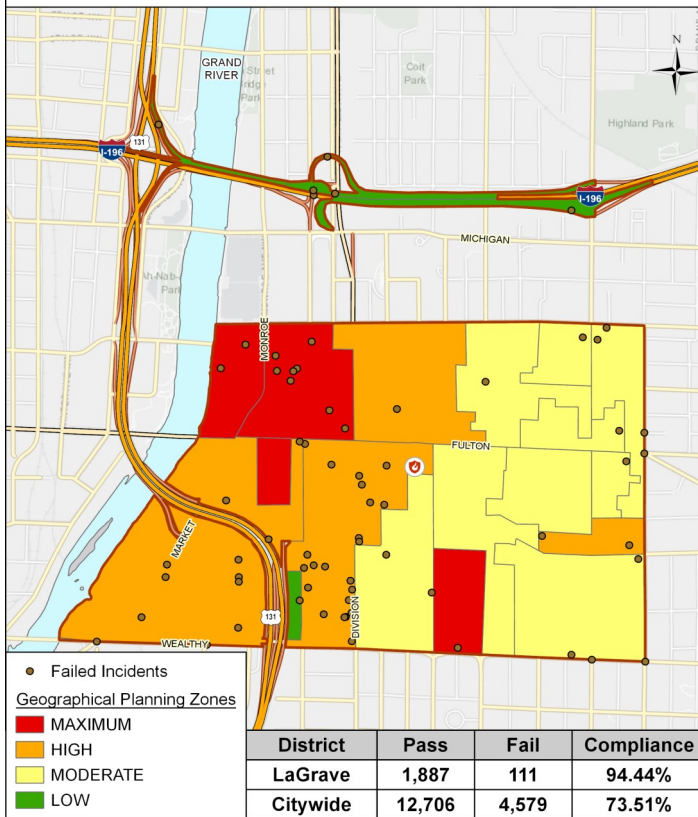


Temporal Analysis - 2020 EMS									Temporal Analysis - 2020 Fire								
Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total	Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	16	8	7	7	3	4	10	55	00:00-00:59	1	0	0	0	0	2	0	3
01:00-01:59	9	8	6	6	3	7	12	51	01:00-01:59	2	0	0	0	0	0	1	3
02:00-02:59	9	4	4	4	5	8	10	44	02:00-02:59	2	0	1	1	1	0	0	5
03:00-03:59	6	4	7	2	4	5	4	32	03:00-03:59	2	0	0	0	0	0	0	2
04:00-04:59	3	6	5	4	4	4	6	32	04:00-04:59	0	0	1	0	0	0	1	2
05:00-05:59	3	5	9	6	5	7	10	45	05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	5	8	7	4	7	16	6	53	06:00-06:59	1	0	0	0	0	0	0	1
07:00-07:59	5	5	6	4	11	9	13	53	07:00-07:59	0	0	0	0	1	0	0	1
08:00-08:59	8	9	7	11	10	9	5	59	08:00-08:59	1	0	0	0	0	0	0	1
09:00-09:59	10	11	9	12	12	13	11	78	09:00-09:59	2	0	0	0	0	0	0	2
10:00-10:59	9	12	10	7	9	10	7	64	10:00-10:59	1	0	0	0	1	0	0	2
11:00-11:59	12	8	18	16	18	12	10	94	11:00-11:59	0	0	0	0	0	0	1	1
12:00-12:59	11	18	16	9	12	10	13	89	12:00-12:59	1	0	0	0	0	0	0	1
13:00-13:59	14	9	13	21	19	19	8	103	13:00-13:59	0	1	0	2	0	1	1	5
14:00-14:59	13	12	28	11	20	17	8	109	14:00-14:59	0	0	1	0	0	0	1	2
15:00-15:59	12	20	17	16	20	13	16	114	15:00-15:59	1	0	1	1	1	2	0	6
16:00-16:59	13	14	17	19	21	15	9	108	16:00-16:59	0	0	0	0	0	1	1	2
17:00-17:59	20	14	11	21	17	16	18	117	17:00-17:59	3	0	1	1	0	2	1	8
18:00-18:59	11	7	12	11	19	16	21	97	18:00-18:59	1	0	0	0	0	1	1	3
19:00-19:59	15	8	18	18	15	10	18	102	19:00-19:59	0	0	0	0	0	0	1	1
20:00-20:59	11	11	18	17	21	14	10	102	20:00-20:59	0	2	0	0	0	0	0	2
21:00-21:59	14	7	12	11	15	18	16	93	21:00-21:59	0	2	1	1	0	0	0	4
22:00-22:59	15	10	8	8	4	8	14	67	22:00-22:59	1	1	0	0	1	0	1	4
23:00-23:59	6	3	7	8	6	12	11	53	23:00-23:59	0	0	0	0	0	0	3	3
Total	250	221	272	253	280	272	266	1,814	Total	19	6	6	6	5	9	13	64

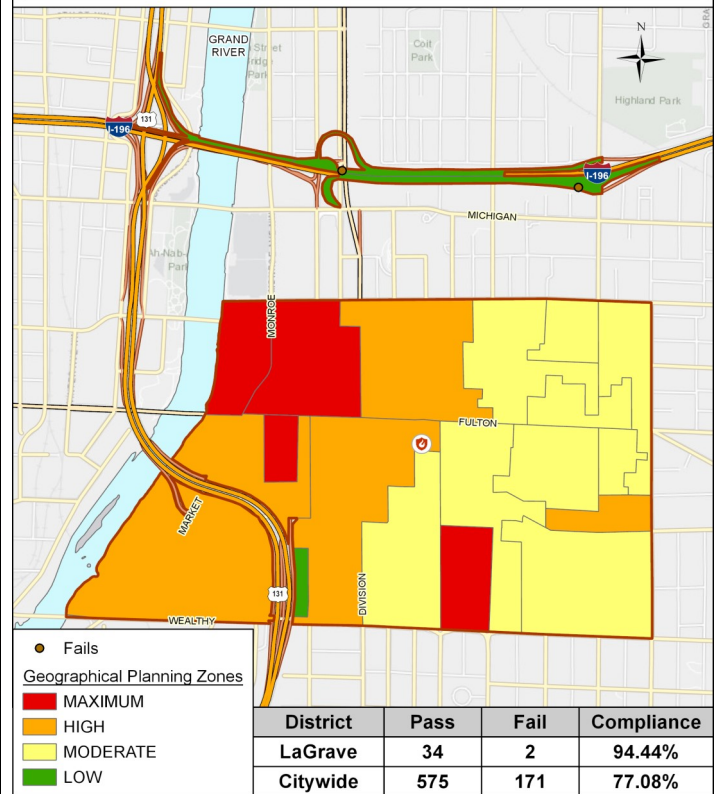


# LAGRAVE AVENUE STATION

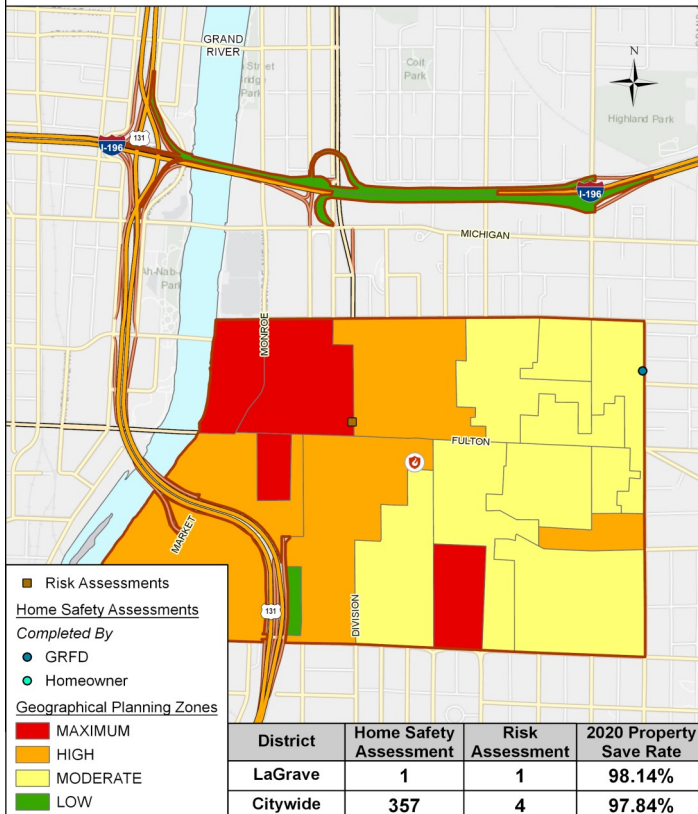
## 4 Minute Travel Time Compliance



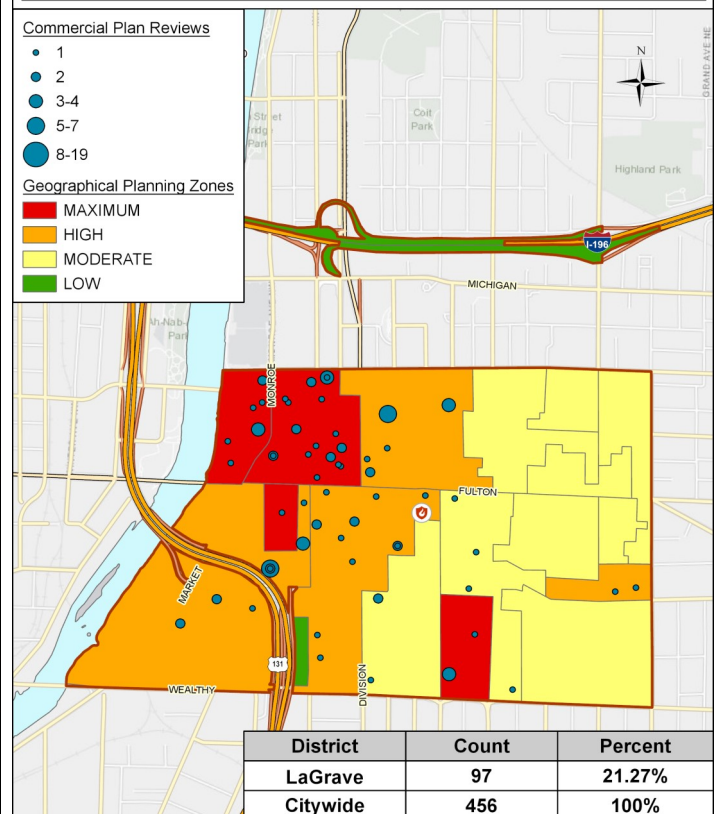
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



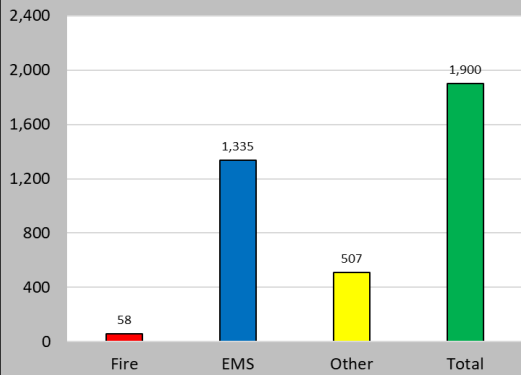
## Commercial Plan Reviews



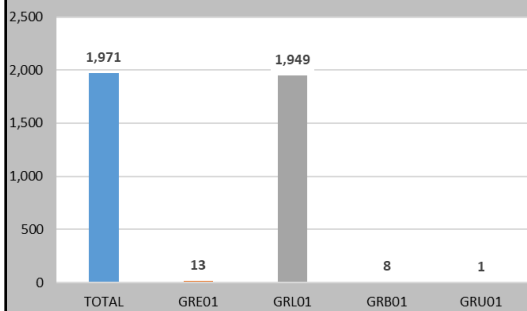


# LEONARD STREET STATION

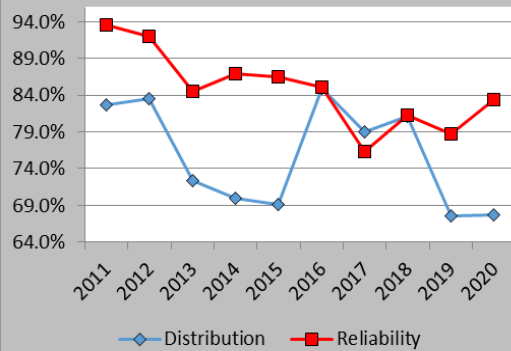
## 2020 Incidents in District



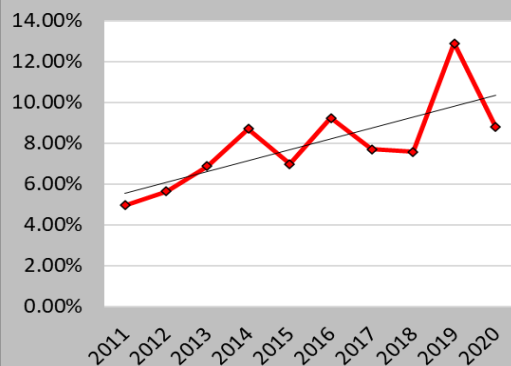
## 2020 Apparatus Responses



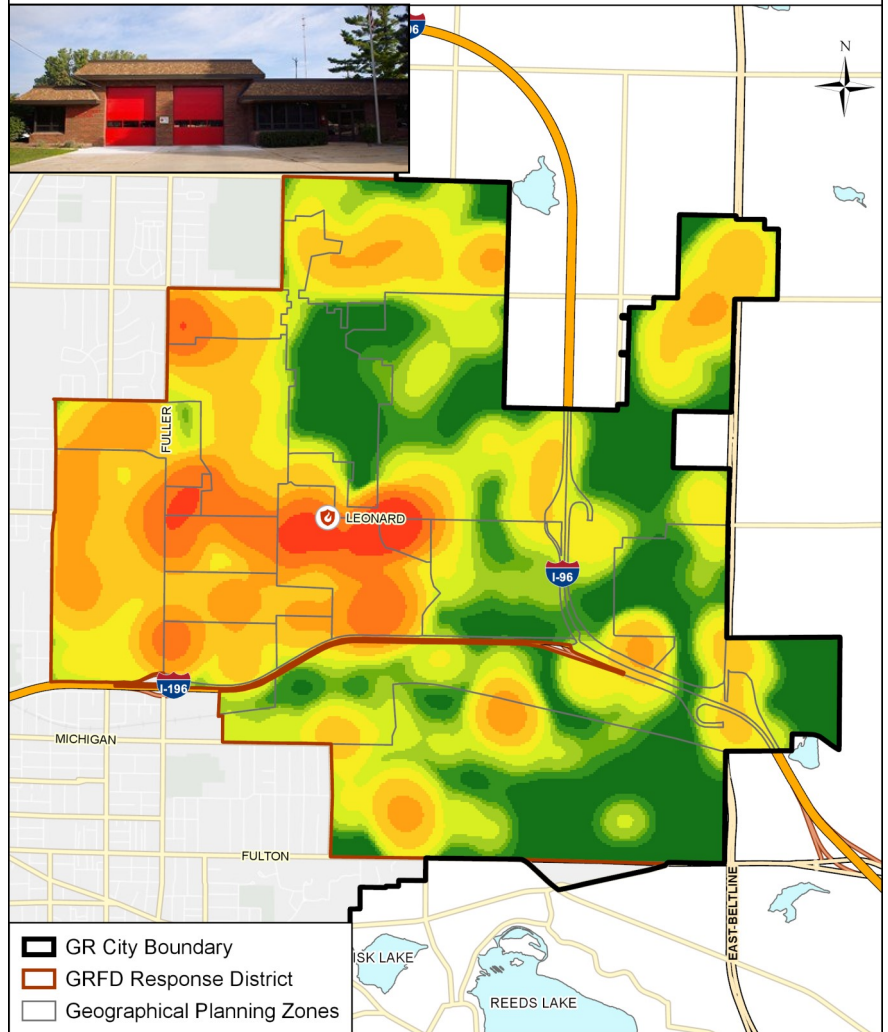
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



### Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	1	6	5	11	8	5	6	42
01:00-01:59	6	2	5	6	3	5	5	32
02:00-02:59	2	0	3	2	3	3	6	19
03:00-03:59	4	2	4	2	1	2	4	19
04:00-04:59	2	2	7	4	4	4	1	24
05:00-05:59	3	3	2	4	4	6	2	24
06:00-06:59	3	7	3	8	4	5	6	36
07:00-07:59	9	5	12	8	5	9	7	55
08:00-08:59	3	9	6	7	10	8	6	49
09:00-09:59	7	10	11	11	10	15	8	72
10:00-10:59	8	16	12	11	7	10	10	74
11:00-11:59	16	9	11	12	11	11	9	79
12:00-12:59	12	16	14	12	15	15	5	89
13:00-13:59	14	8	9	13	15	7	10	76
14:00-14:59	10	16	7	13	18	10	10	84
15:00-15:59	7	10	15	11	15	10	5	73
16:00-16:59	12	13	17	12	14	12	12	92
17:00-17:59	11	10	16	6	9	13	10	75
18:00-18:59	10	8	3	20	10	9	15	75
19:00-19:59	10	6	7	7	14	11	12	67
20:00-20:59	10	3	10	5	7	6	8	49
21:00-21:59	11	5	7	8	5	5	11	52
22:00-22:59	6	9	5	9	7	2	6	44
23:00-23:59	7	5	2	1	9	3	7	34
Total	184	180	193	203	208	186	181	1,335

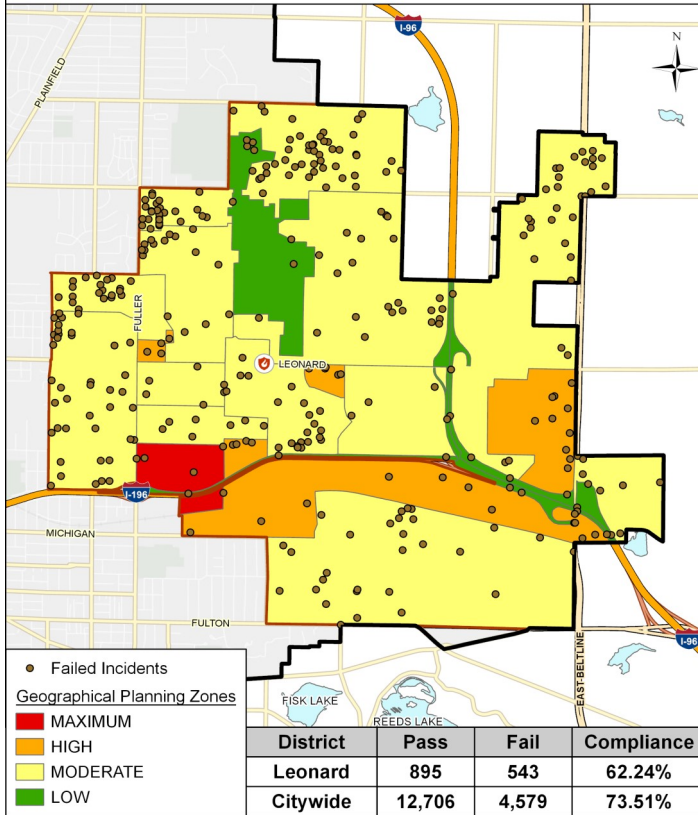
### Temporal Analysis - 2020 Fire

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	1	1	0	1	0	0	3
02:00-02:59	0	0	0	0	0	0	0	0
03:00-03:59	0	0	0	0	0	0	0	0
04:00-04:59	0	0	1	0	1	0	0	2
05:00-05:59	0	0	0	1	0	0	0	1
06:00-06:59	0	0	0	0	0	0	0	0
07:00-07:59	0	0	0	1	0	0	0	1
08:00-08:59	0	1	0	0	2	0	0	3
09:00-09:59	0	0	0	0	0	0	0	0
10:00-10:59	0	0	0	0	1	0	0	1
11:00-11:59	0	0	1	0	0	0	0	1
12:00-12:59	0	0	1	1	1	0	0	3
13:00-13:59	1	0	0	0	0	0	1	2
14:00-14:59	2	0	0	1	0	1	1	5
15:00-15:59	0	1	0	1	1	0	0	3
16:00-16:59	0	1	1	0	0	1	1	4
17:00-17:59	1	2	1	1	0	0	0	5
18:00-18:59	1	0	1	0	1	0	2	5
19:00-19:59	1	1	0	0	2	1	1	6
20:00-20:59	0	1	0	0	0	1	0	2
21:00-21:59	1	1	0	1	0	0	0	3
22:00-22:59	0	0	0	1	1	0	0	2
23:00-23:59	1	0	2	0	1	0	1	5
Total	8	9	9	8	12	4	8	58

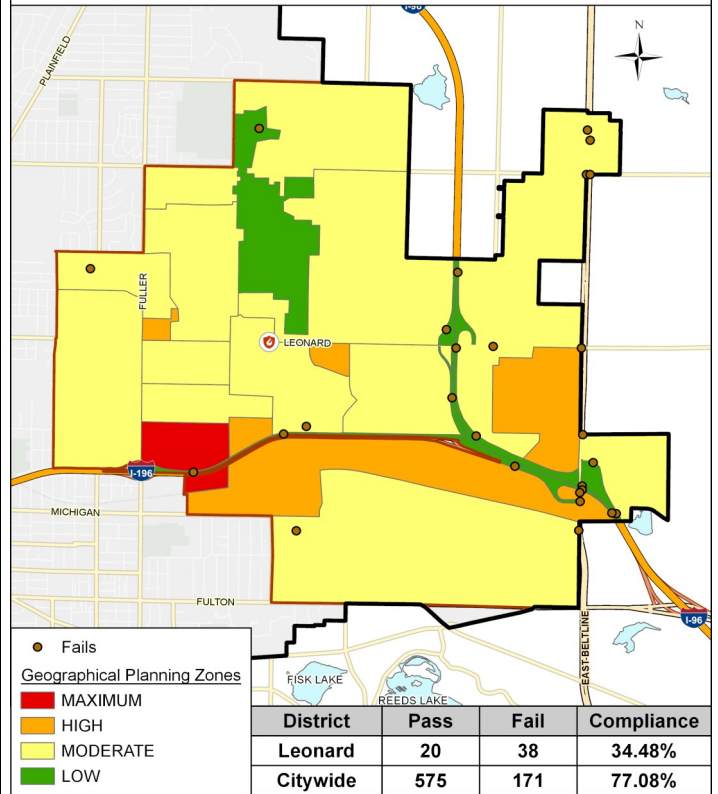


# LEONARD STREET STATION

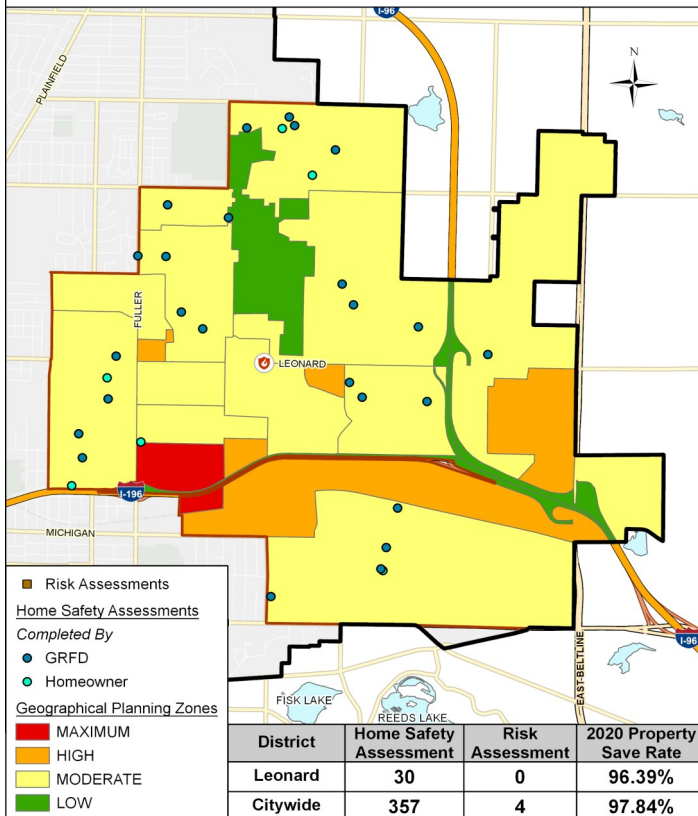
## 4 Minute Travel Time Compliance



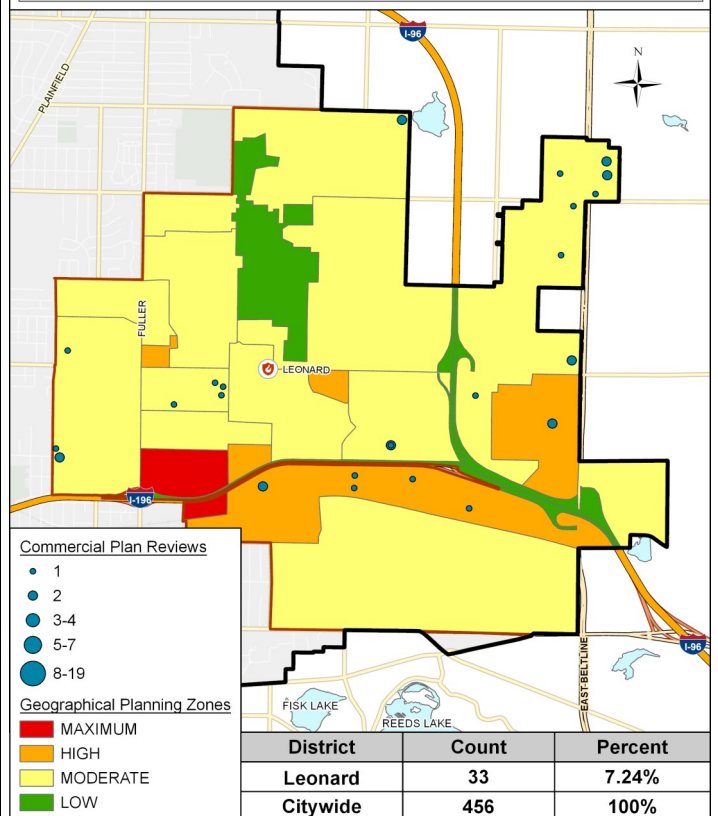
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



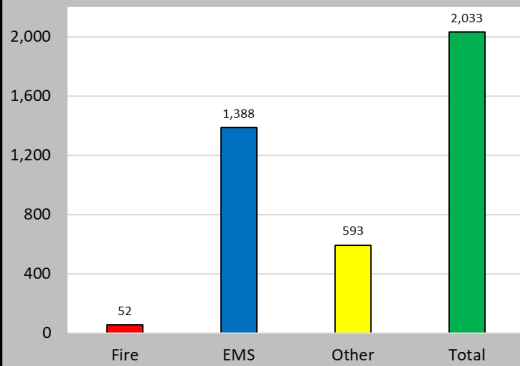
## Commercial Plan Reviews



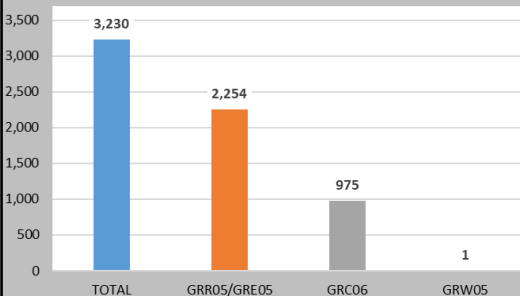


# MONROE AVENUE STATION

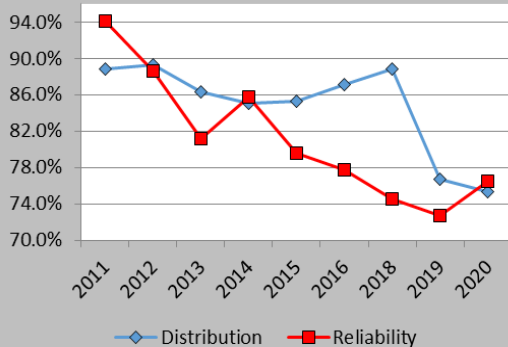
## 2020 Incidents in District



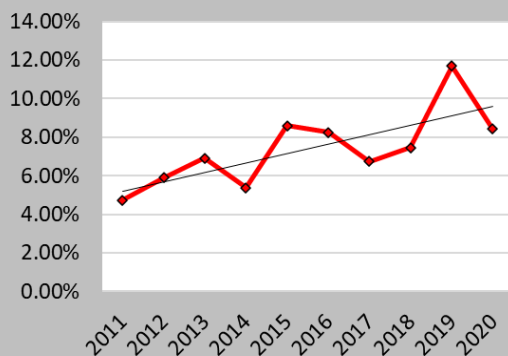
## 2020 Apparatus Responses



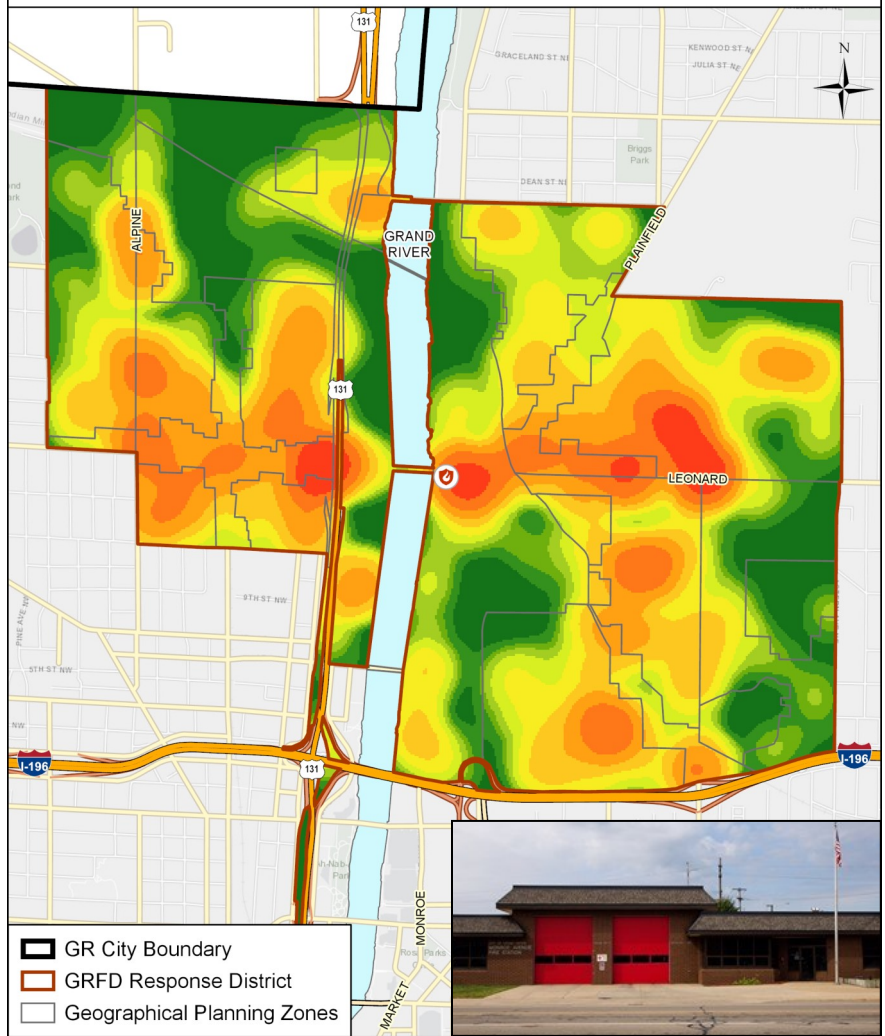
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



### Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	8	5	2	5	7	6	6	39
01:00-01:59	10	5	5	4	8	6	3	41
02:00-02:59	7	5	4	5	4	4	2	31
03:00-03:59	3	5	4	5	6	5	7	35
04:00-04:59	7	5	4	2	5	3	6	32
05:00-05:59	3	4	7	7	2	8	5	36
06:00-06:59	7	5	2	6	4	6	3	33
07:00-07:59	6	8	7	9	5	5	7	47
08:00-08:59	6	2	9	8	5	6	4	40
09:00-09:59	6	8	5	10	6	8	8	51
10:00-10:59	10	10	7	7	8	6	5	53
11:00-11:59	12	12	9	11	6	16	3	69
12:00-12:59	14	12	10	11	11	13	7	78
13:00-13:59	17	7	17	9	9	13	10	82
14:00-14:59	15	6	10	19	13	14	8	85
15:00-15:59	10	12	8	15	14	16	8	83
16:00-16:59	8	12	11	11	8	14	15	79
17:00-17:59	6	13	14	7	14	14	11	79
18:00-18:59	7	15	11	8	9	11	8	69
19:00-19:59	13	11	6	6	9	9	8	62
20:00-20:59	10	10	8	12	4	11	12	67
21:00-21:59	8	6	9	8	7	13	10	61
22:00-22:59	10	8	6	13	12	9	9	67
23:00-23:59	9	7	10	12	9	13	9	69
Total	212	193	185	210	185	229	174	1,388

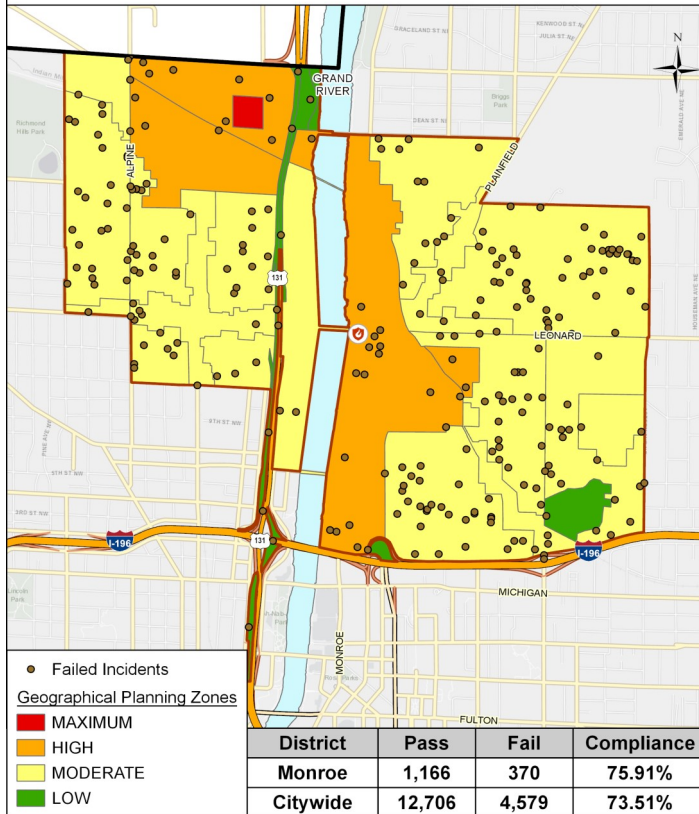
### Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	1	0	0	0	0	0	0	1
01:00-01:59	0	0	0	0	0	2	1	3
02:00-02:59	0	0	0	1	0	1	0	2
03:00-03:59	0	0	0	0	0	1	0	1
04:00-04:59	0	0	0	1	0	0	0	1
05:00-05:59	1	0	1	1	0	0	0	3
06:00-06:59	0	0	0	0	0	1	0	1
07:00-07:59	1	0	0	0	0	0	0	1
08:00-08:59	0	0	0	0	0	1	0	1
09:00-09:59	0	0	0	1	1	0	0	2
10:00-10:59	0	1	1	0	2	0	0	4
11:00-11:59	1	0	0	0	0	0	0	1
12:00-12:59	1	0	0	0	0	0	0	1
13:00-13:59	0	0	1	0	1	0	1	3
14:00-14:59	0	1	0	1	1	0	0	3
15:00-15:59	1	0	0	1	0	3	1	6
16:00-16:59	0	0	0	1	0	0	0	1
17:00-17:59	0	1	1	0	0	0	1	3
18:00-18:59	1	1	0	1	0	0	0	3
19:00-19:59	0	0	1	0	0	0	2	3
20:00-20:59	3	0	0	1	0	0	0	4
21:00-21:59	0	0	0	1	0	1	0	2
22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	0	0	0	0	1	0	1	2
Total	10	4	5	10	6	10	7	52

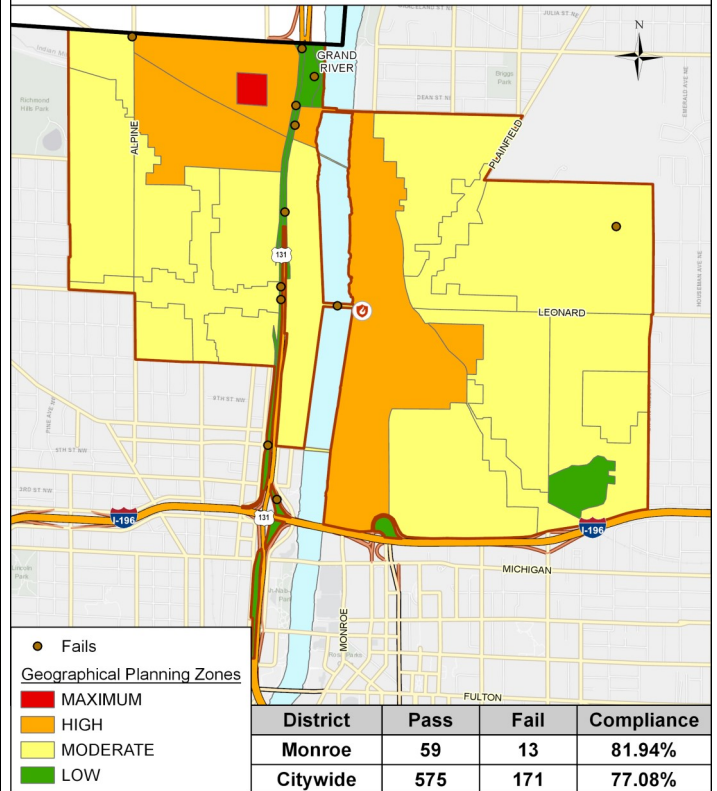


# MONROE AVENUE STATION

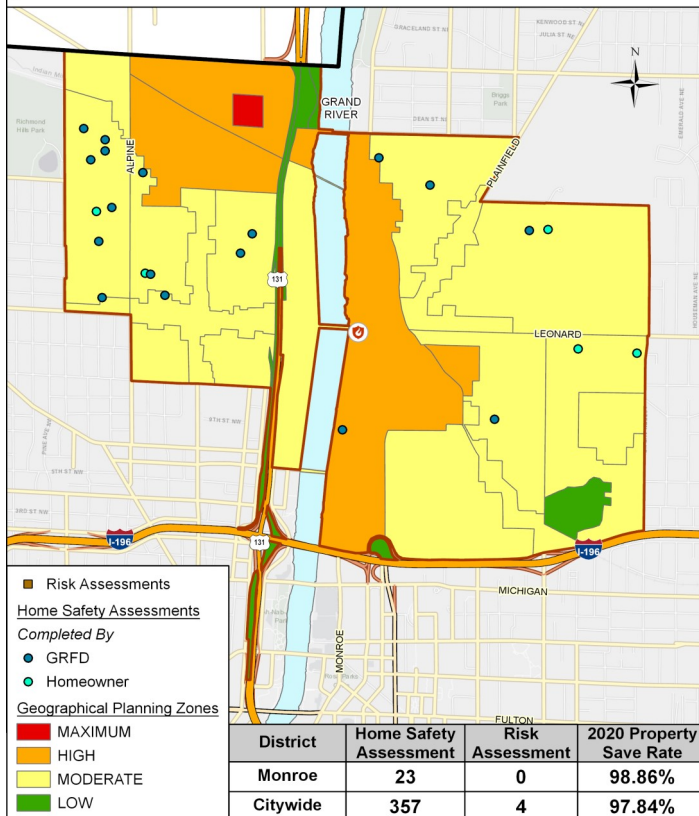
## 4 Minute Travel Time Compliance



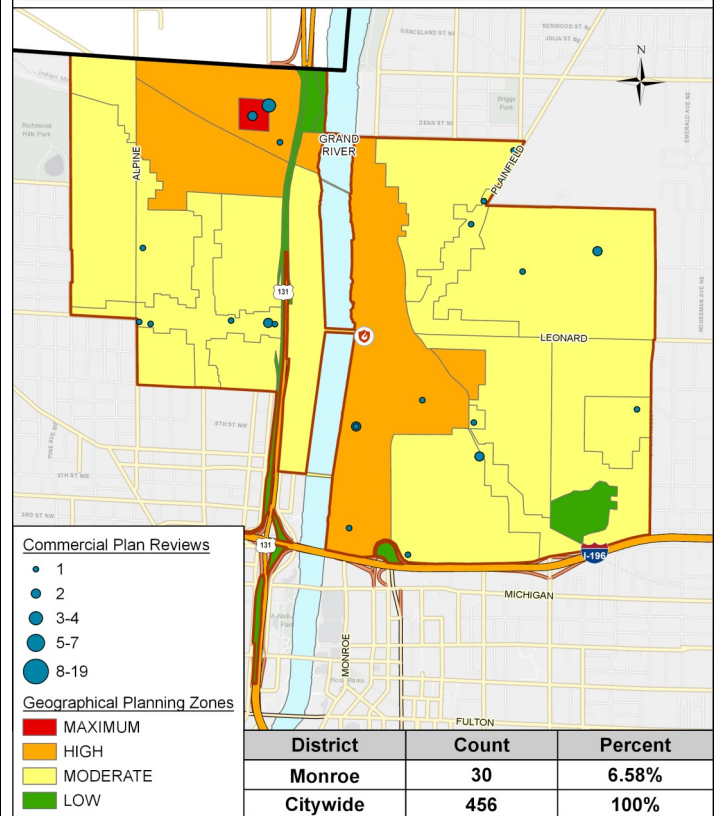
## Effective Response Force Compliance Multi-Company Alarms



## Community Risk Reduction Evaluation



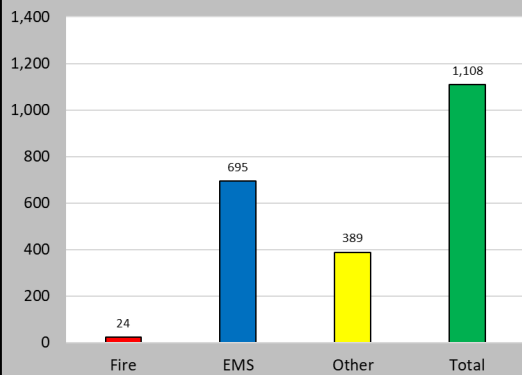
## Commercial Plan Reviews



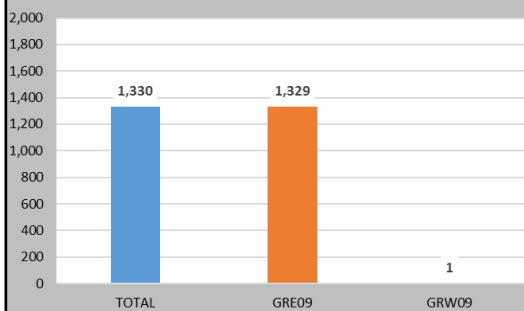


# PLAINFIELD AVENUE STATION

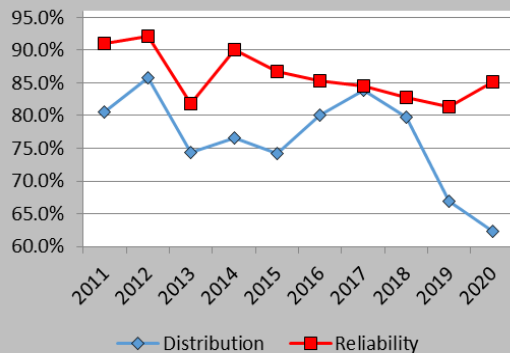
## 2020 Incidents in District



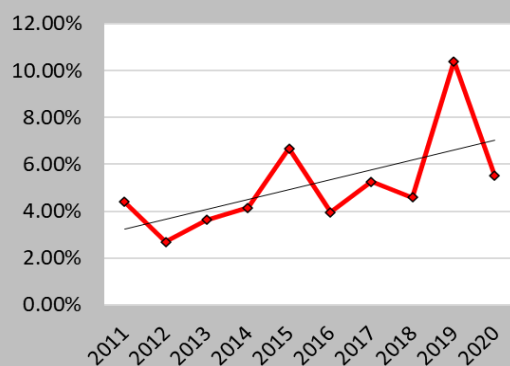
## 2020 Apparatus Responses



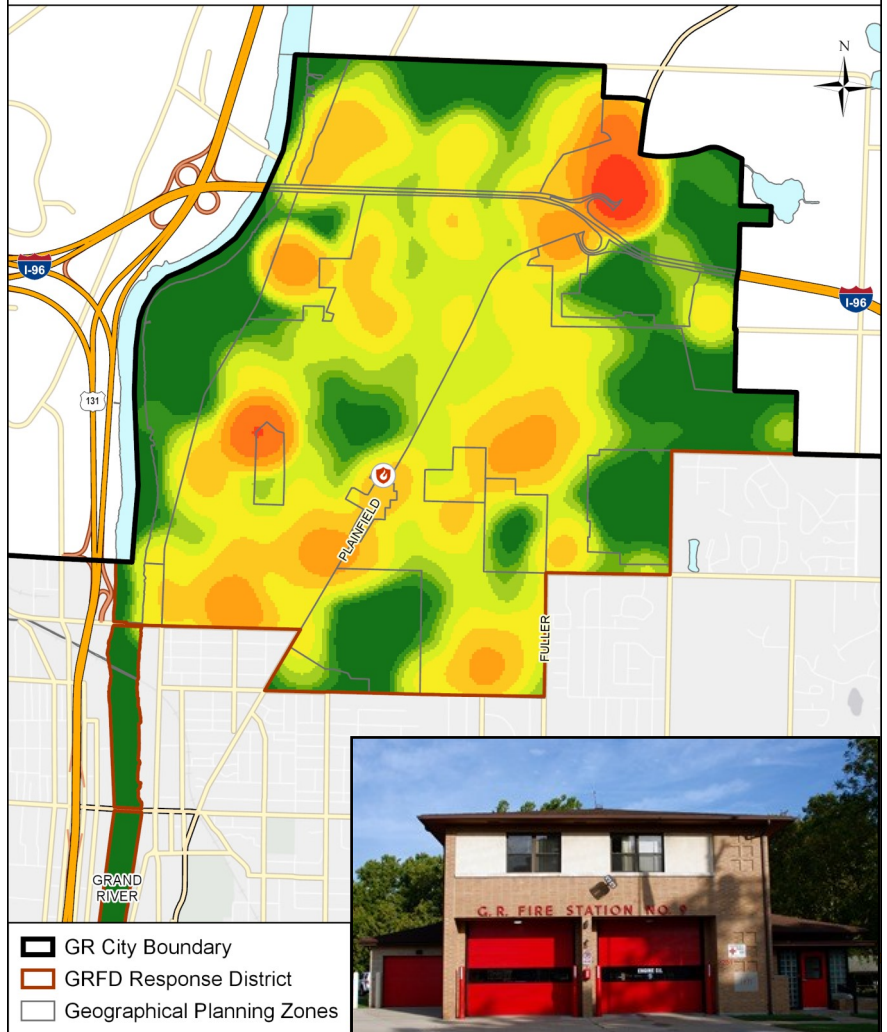
## Distribution & Reliability Compliance



## Simultaneous Calls



## 2020 Incident Hotspots



## Temporal Analysis - 2020 EMS

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	2	6	0	4	3	2	2	19
01:00-01:59	2	2	0	3	3	2	3	15
02:00-02:59	1	2	3	3	3	1	3	16
03:00-03:59	1	1	1	1	2	1	1	8
04:00-04:59	2	2	0	2	4	3	3	16
05:00-05:59	2	1	1	0	1	1	1	7
06:00-06:59	1	2	4	1	8	2	1	19
07:00-07:59	2	5	4	5	6	6	3	31
08:00-08:59	3	7	4	6	2	5	2	29
09:00-09:59	4	3	4	6	3	6	2	28
10:00-10:59	4	10	5	5	2	7	5	38
11:00-11:59	1	7	4	1	3	3	6	25
12:00-12:59	5	6	4	6	6	6	7	40
13:00-13:59	6	6	10	4	3	4	7	40
14:00-14:59	4	7	5	5	4	8	6	39
15:00-15:59	5	4	7	4	4	11	12	47
16:00-16:59	2	8	7	5	2	6	10	40
17:00-17:59	4	8	6	10	2	9	7	46
18:00-18:59	3	3	9	4	7	5	5	36
19:00-19:59	8	8	3	4	4	13	4	44
20:00-20:59	1	5	7	8	2	6	6	35
21:00-21:59	5	1	3	5	4	3	9	30
22:00-22:59	3	1	9	2	3	6	2	26
23:00-23:59	4	5	6	2	0	1	3	21
Total	75	110	106	96	88	118	102	695

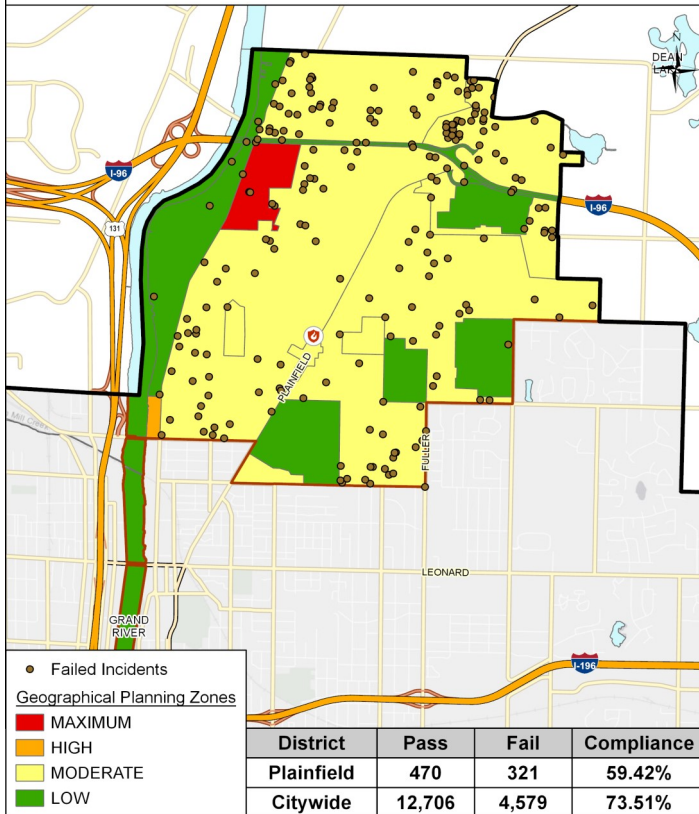
## Temporal Analysis - 2020 Fire

Hour	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
00:00-00:59	2	0	1	0	0	0	0	3
01:00-01:59	0	0	0	0	0	0	1	1
02:00-02:59	0	1	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	1	1
05:00-05:59	0	0	0	0	0	0	0	0
06:00-06:59	0	0	0	1	0	0	0	1
07:00-07:59	0	0	0	1	0	0	0	1
08:00-08:59	0	0	0	1	0	0	0	1
09:00-09:59	0	0	0	0	0	1	0	1
10:00-10:59	0	0	0	0	1	0	0	1
11:00-11:59	1	0	0	0	1	0	0	2
12:00-12:59	0	0	0	0	0	0	0	0
13:00-13:59	0	0	0	0	0	0	0	0
14:00-14:59	0	0	0	0	0	0	0	0
15:00-15:59	0	0	0	0	0	0	0	0
16:00-16:59	0	0	0	0	0	0	0	0
17:00-17:59	2	0	0	0	0	0	1	3
18:00-18:59	2	0	0	1	0	0	0	3
19:00-19:59	0	0	0	1	0	0	0	1
20:00-20:59	0	0	0	0	0	0	0	0
21:00-21:59	1	1	0	0	0	0	0	2
22:00-22:59	0	0	0	0	0	0	0	0
23:00-23:59	1	0	0	0	0	0	1	2
Total	9	2	1	5	2	1	4	24

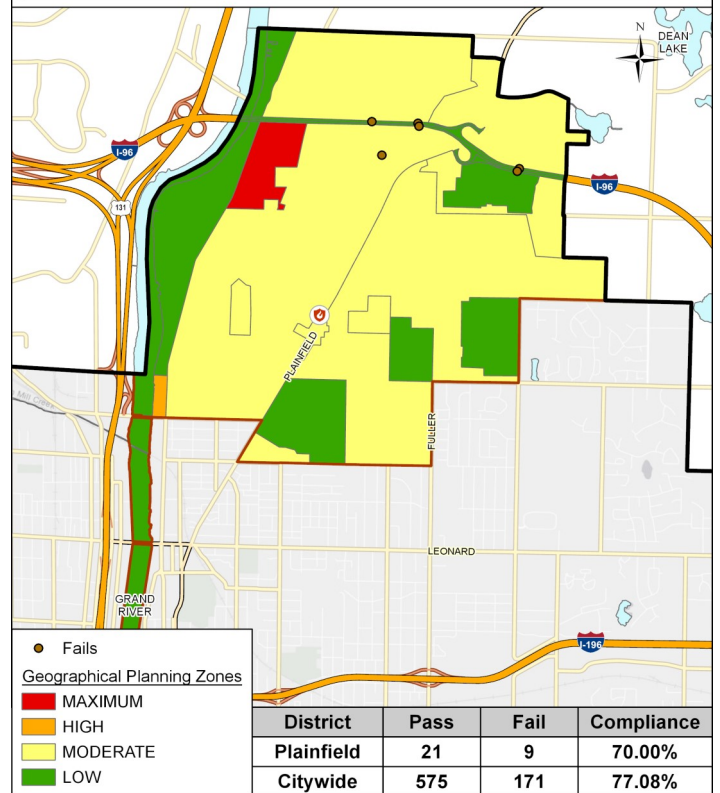


# PLAINFIELD AVENUE STATION

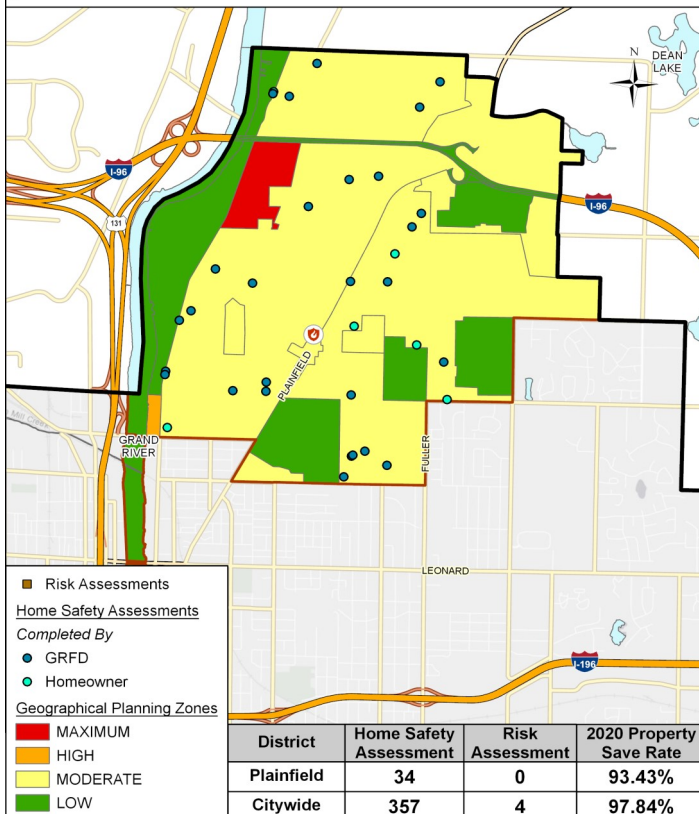
## 4 Minute Travel Time Compliance



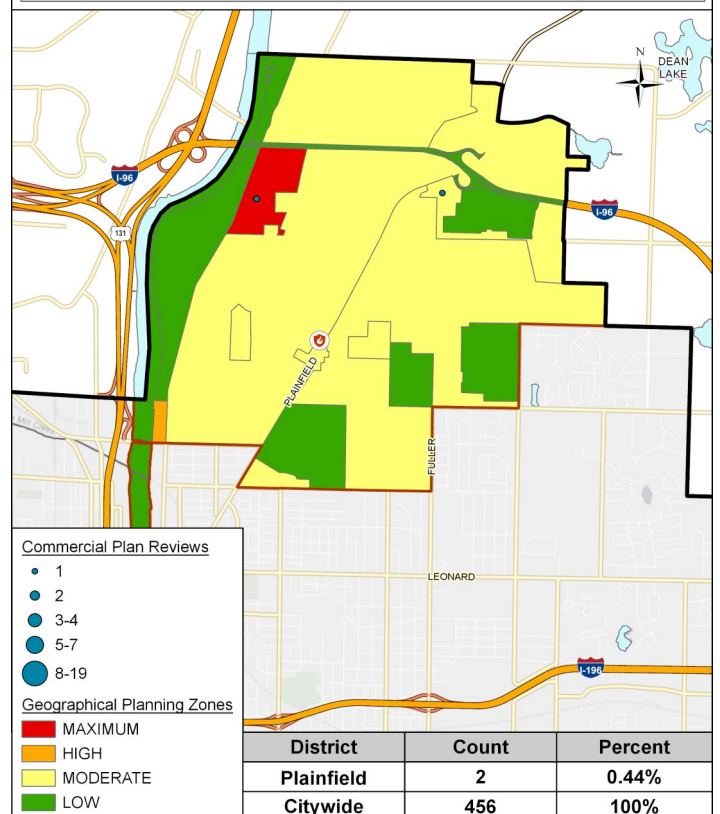
## Effective Response Force Compliance Multi-Company Alarms



## 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. Teams representing all areas of the department met during August and September to perform this analysis.

## Fire

- Civil unrest events in 2020 prompted a complete rewrite of SOG 901-01, with an emphasis on crew safety and the use of task forces for response.
- The critical tasking review team noted that three person crews on aerials do not work well for interior/exterior operations.
- The lack of a dedicated safety offices was also noted, but is being addressed by the assignment of a second Battalion chief for working fires.

## EMS

- COVID-19 forced major changes for responses to EMS incidents.
- There is increasing violence across the city.
- Decreases in ALS staffing impacted GRFD operations, leading to increased on scene times.
- There was a shift in responses for the homeless community that centered around bus stop usage in the Burton/Division area.

## Technical Rescue

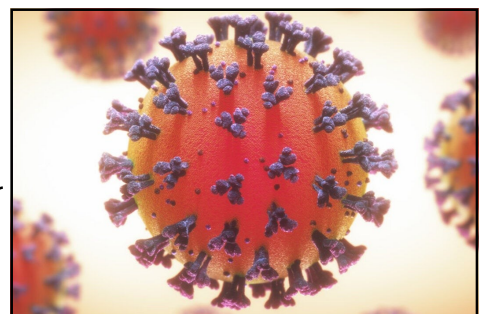
- COVID-19 slowed down training and equipment purchases.
- Water department confined space entries outside of the city need better notification so that crews are available to respond in neighboring jurisdictions.
- GRFD is coordinating with Risk Management to provide training to other city departments for confined space rescue and trench operations.

## Hazardous Materials

- Homemade explosives and precursors are being mistaken for drug lab materials.
- Working with MABAS to structure team as a FEMA type 1 hazmat resource.
- Haviland is now pelletizing tri-chlor, a new operation for them.
- Marijuana grow operations are using butane for extraction and are using oxygen deficient grow rooms in their facilities.
- Crude oil trains are now less frequent through the city.

## Domestic Preparedness/EOC

- COVID-19 was the major focus for emergency management activities in 2020.
- A lack of training for EOC personnel was noted as a deficiency.
- The Kent and Ottawa County Hazard Mitigation Plan is being reassessed with a focus on aligning with industry best practices for Threat and Hazard Identification and Risk Assessment (THIRA) process described by the Federal Emergency Management Administration (FEMA).









# RESPONSE METRICS DEFINITIONS

**Distribution:** The ability to get the first unit on scene within a benchmark time. Total response time is measured from when dispatch answers the call, until we report on scene.

For instance, for any fire incident our distribution benchmark statement is: For all fire incidents (low, moderate, high and maximum risk), the 90th percentile of total response time for the arrival of the first due unit, staffed with a minimum of three firefighters, shall be 7 minutes. The first due unit shall be capable of establishing command, sizing up the incident, utilize appropriate tactics in accordance with departmental standard operating guidelines, develop an initial action plan, extend an appropriate hose line and begin initial fire attack or rescue.

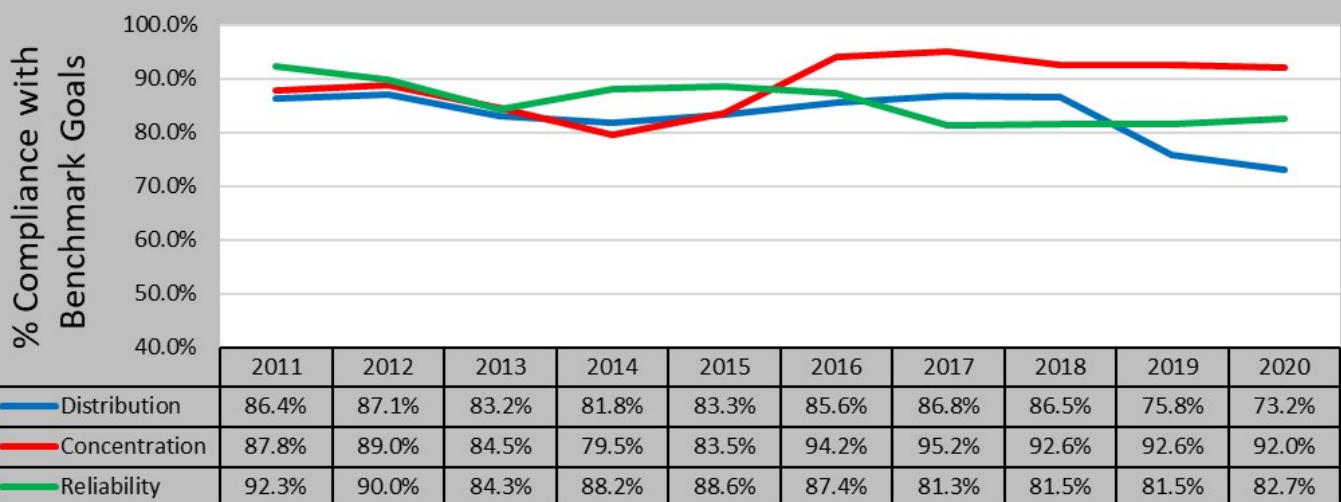
**Concentration:** The ability to assemble an effective response force within a benchmark time. This basically means we are able to get all of our crews on scene within a specified time.

For instance, for a moderate risk (1-2 family residential) fire incident our concentration benchmark statement is: "For moderate risk fires, the 90th percentile of total response time for the arrival of the effective response force, consisting of 19 personnel, shall be 11 minutes. The effective response force shall have the capability to establish command, provide an uninterrupted water supply, advance an attack line and backup line for fire control, establish a rapid intervention crew, complete forcible entry and ventilation, conduct primary and secondary searches, control utilities and perform salvage and overhaul operations. These critical tasks shall be done in a safe manner in accordance with department standard operating guidelines.

**Effective Response Force:** the number of personnel required to perform the required critical tasking that aligns with both the needs of the incident and departmental policies/standard operating guidelines.

**Reliability:** The percentage of time a unit is able to answer calls in their own district. When reliability gets too low, the department needs to review the deployment model to determine if another unit is needed in that district. Our reliability performance fell between 2016 and 2017. The use of Automatic Resource Location has changed the way we look at this metric. Our goal is to show reliability for a unit if they were available, even when another unit responded to the call because CAD saw that unit as having a quicker response time.

Critical Performance Measures 2011 - 2020





# 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 — Goal of 90% compliance.**

- Page 56 - **Citywide Distribution** decreased to **73.2%**. This gap continues to be driven by large single company districts on the edge of the city, combined with an increasing population/risk.
- Page 84 - **Plainfield Distribution** fell to **62.26%**, due to increased call volume at district boundaries.
- Page 77 - **Kalamazoo Distribution** fell to **56.57%**, also due to a large amount of calls at the southern and northern extremes of the district.

## **Concentration (Effective Response Force) — Goal of 90% compliance (measures all call types).**

Concentration compliance maps measure concentration for all call types. These are all outlying districts where it is more difficult to assemble effective response forces. All four of these districts saw decreases in compliance in 2020.

- Page 81 - **Leonard ERF** is at **34.48%**.
- Page 71 - **Covell ERF** is at **66.67%**.
- Page 85 - **Plainfield ERF** is at **70.00%**.
- Page 67 - **Burton ERF** is at **84.00%**.

## **Reliability — Goal of 90% compliance.**

- Page 72 - **Monroe Reliability** at **76.42%**. A slight improvement for 2020. Monroe's reliability is impacted by their responses as a second due engine on the north half of the city without a second unit in the station. Monroe also covers for Covell, Plainfield, and Leonard districts when they experience simultaneous alarms.
- Page 58 - **Chester Reliability** at **65.89%**. This can be attributed to changes on the CAD street speed layer, which increased the likelihood of other apparatus responding into Chester's district.

## **Simultaneous — Monitored for overall call volume in response districts.**

Most districts saw decreases in simultaneous responses compared to 2019. Fewer major storm events was the driving factor for the improvement in this metric.

- Page 76 - **Kalamazoo Station** continues to be the highest district for simultaneous calls, with a **10.26%** rate for 2020.
- Page 78 - **LaGrave Station** saw a decrease from **11.22** to **7.88%**.
- Page 70/84 - **Division Station** saw an increase from **9.38%** to **9.91%**. They were the only district to see an increase, a result of call volume migrating from LaGrave to the south side of the city.

## **Benchmark Performance Statements**

- Page 49 - **Low risk fire response** is over target by **1 minute and 39 seconds**.
- Page 51 - **Low risk EMS** is over target by **1 minute and 33 seconds**.
- Page 51 - **Moderate risk EMS** is over target by **2 minutes and 11 seconds**.
- Page 53 - **Low risk HazMat** is over target by **2 minutes and 39 seconds**.
- Page 54 - **Vehicle Extrication** is over target by **8 minutes and 25 seconds**.

**All other technical rescue 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**

