



City of Taylorville Fire Department

2022

End of Year Report



2022 End of year report

Matthew Adermann

1/1/2022

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Taylorville Fire Department



From the Desk of Fire Chief Matthew Adermann



2022 Annual Report Message

On behalf of the officers and members of the Taylorville Fire Department, I am proud to present our annual report for 2022. This report will show the hard work, commitment, and desire our members have put in this past year. We will break down different areas to highlight the members efforts.

2022 showed no signs of slowing down for our department. Our members were challenged with increased demand for service resulting in our busiest year in the history of our department. In this report, we will look at statistics from the responses and compare our department to national averages. Coupled with more responses, increased training requirements, and a renewed focus on public education, our department has continued to meet and exceed the challenges thrown at them.

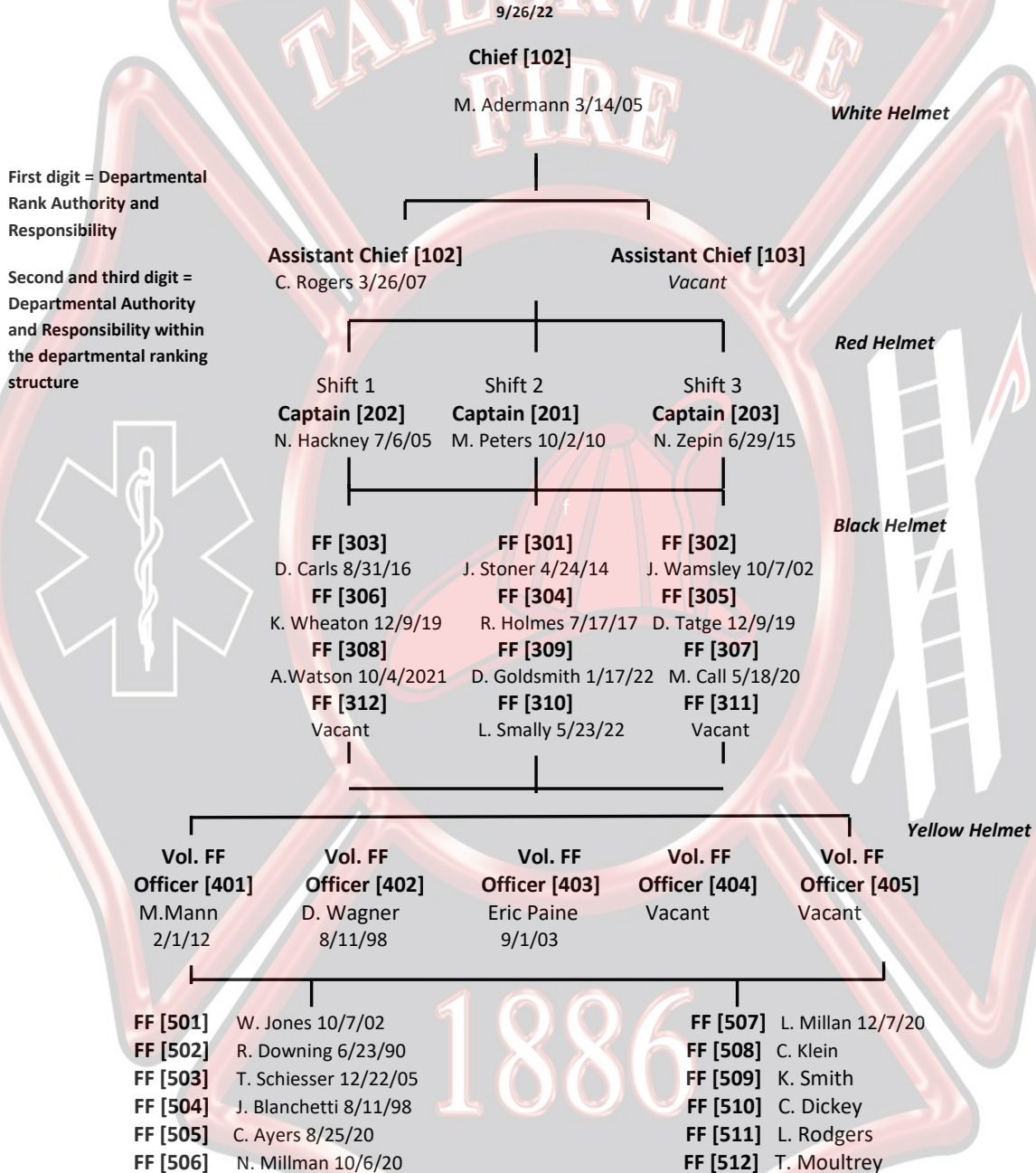
I would like to thank all members of the Taylorville Fire Department for their hard work and commitment during this last year. I would also like to personally thank Mayor Barry, Emergency Services Chair Bryant, our City Council members, the Taylorville Fire Protection District, Treasurer Miles, and City Clerk Lilly for their outstanding support.

Mission Statement:

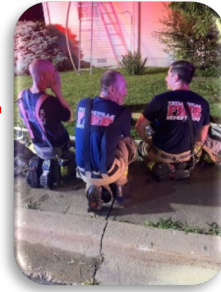
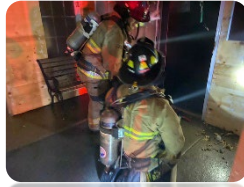
The purpose and mission of the Taylorville Fire Department is to reduce deaths, injuries, emotional distress, and property loss that may result from a wide range of community and individualized disasters. Our response goals of Life Safety, Incident Stabilization, and Environmental / Property Preservation will always be addressed prior to our return to the station. We will pursue our responsibilities through a tireless attention to public education, inspections, training, and the maintenance of our response physical resources.

Taylorville Fire Department

Organizational Structure Chart



Members



Career Staff

Currently we are in the process of hiring 2 new members. One will be to replace Drew Carls and the other is for the future replacement of FF Jon Wamsley. This will place 5 members on two shifts and leave a third shift with 4 members. In 2019, we had 5 members on each shift and went to 5,4,and 4 during 2020 due to fear of where the pandemic would drive our City finances. This coming fiscal year, I believe we need to move back to a 5 personnel per shift due to increased call volumes and less volunteer and off duty call back.

Career News:

- 2022 saw the retirement of Captain Ron Smith. Captain Smith was replaced by FF Dylan Goldsmith. Since coming on in January, Dylan has graduated the Fire Academy and completed his first semester of Paramedic training.
- Captain Smith retirement led to the promotion of Nick Zepin to Captain.
- Kobe Wheaton ensures our EMS supplies are up to date and well stocked.
- Captain Matt Peters handles all of our communication maintenance.
- Rich Holmes works during the spring, summer, and fall maintaining our outdoor weather sirens
- Matthew Phillips left the department in the Spring of 2022 and was replaced with FF Lucas Smalley. Smalley has graduated the Fire Academy and is working on passing his nursing boards so that he may function as a PHRN.
- In December of 2022, Drew Carls left the department for another opportunity. His replacement is pending.
- Marshall Call, Cody Rogers, and Lucas Smalley became certified in car seat inspections.
- The three latest hires of Drew Watson, Dylan Goldsmith, and Lucas Smally have proven to be a very welcome addition. The salary adjustment for new hires approved by council has also helped their morale and increases our chance of retention.
- Nick Hackney stepped down from Assistant Chief in the summer of 2022. He has since resumed his role as Captain on Shift 1. Nick is a well-respected, knowledgeable firefighter and has seamlessly transitioned back into to his previous role.
- Cody Rogers stepped back into his role as Assistant Chief. He has picked up where he left off and the transition between Nick and Cody has been seamless.
- Capt Zepin and A/C Rogers were honored by Firehouse magazine this year for efforts made at a house fire in December of 2021.



Volunteer Members:

Volunteer numbers are down across the country and we are not exempt. Asking someone to volunteer for anything in this day in age is next to impossible. These men and women do this for little compensation. We have a lot of room for improvement for some of our volunteer in the realm of training and attendance, however we have developed a plan to address these issues. In 2019, we had 8 volunteers, now in 2022 we now have a roster of 15 volunteers.

Volunteer News:

- Dave Wagner has come back on after a few years hiatus. Dave also serves on the district board.
- Newly added EMS only volunteers are Paramedic Kodi Smith and Paramedic Layla Rogers. Kodi will be attending Medical school next year, but wishes to stay and help when she can.
- Chance Dickey and Todd Moutrey have also joined the ranks of our volunteer force and we look forward to adding to the team.
- Luke Millan graduated his paramedic training in 2022.
- Colin Ayers completed his Basic Operations Fire Fighter Training in 2022.
- William “Willy” Jones celebrated his 20th year as a volunteer in 2022.



Managing a department with both volunteer and career staff is one of the most difficult things to do in the fire service. You must constantly balance the needs of two groups of people with varying degrees of availability, skills, and knowledge. We manage this well but it is still an area where we continue to learn and grow as a department.

Both volunteer and career staff step up and work well together.

Taylorville Fire Protection District

In 2022 the Taylorville Fire Protection District went through a change. Board President Dave Oldham stepped down as he moved out of state. Previous board member Dave Puccetti was selected to replace him.

Current members include:

- Dave Wagner – President
- Dave Puccetti – Secretary
- Ron Veradi – Treasurer
- With Rocci Romano as legal counsel

In 2022 the board signed a contract to purchase a new tanker apparatus at the cost of just over \$440,000. This unit will replace the city owned tanker which will be sold when the new unit arrives. With the addition of this unit, the district has purchased over 1.2 million dollars in apparatus since 2019.

District trustees are appointed by the Christian County Board. Trustees must attend annual trainings that include open meetings training, district administration, finance, and legal trainings. Our district is easy to work with and are committed to supporting their constituents in the way of providing adequate fire and emergency protection.

Grants

In 2022, TFD received over \$197,000 in grant support for the following grants.

- Hero Fund grant for ballistic vests - \$1,250.00
- TMH foundation grant for Grain Bin Rescue Equipment - \$15,000
- Grant for grain bin rescue training from the farm bureau - \$ 15,000
- AFG Air Pak grant that was awarded in fall of 2021 but received in 2022 - \$166,666.67

Grant writing has begun for the 2023 year.

Apparatus

Below is a condition of our current fleet. I broke them down into two categories, city owned and district owned.

National recommendations on apparatus are to place a unit into reserve status after 15 years and to retire it after 25. As long as we continue to maintain the apparatus, we should have no issue reaching those recommendations.

City Owned:

Truck 1 – 2013

Condition: Overall Good

This unit had an extensive repair to its lift cylinders in 2022. It has a few minor issues that we are awaiting repair on but it will not keep the truck out of service.

Anticipated Life – 20 years or 2033



Tanker – 2001

Overall Condition: Truck is good Pump is fair.

This unit will be replaced in the Fall of 2023?

It will then be sold by the City . Estimated value as it sits is approximately \$30,000

Anticipated Life: 1 year (for our use)



Squad 3 – 2006

Overall condition is good. We just replaced some components on the vehicle this year. It is being used more regularly than in years past. Brush Fires and Special events. We may upgrade some of its pump this next year but I do not anticipate a replacement anytime soon.





Marine 1 – 1986
Condition: Good
Used for dive recovery. Unit is old but has been maintained very well. Anticipated Life is unknown. As long as we upkeep it, it should last another 15-20 years.

District Owned:

Squad 1 – 2021
Condition is good but has a few warranty issues to fix.
Anticipated Life 11 years



Engine 2 – 2020
Condition: Overall Good with a few warranty issues.
Anticipated Life – 20 years



Marine 2 – 2018
Excellent condition
Anticipate 20 yrs life



Special Response Trailer – 2000
Good Condition No Issues.



Engine 1 – 2010
Condition: Fair
This engine was used extensively when it was purchased. Because of use and age, it has some upcoming repairs.
Anticipated Life is 8-10 more years.



Engine 3 – 2001

Condition: **Critical**

This engine has major frame rail deformation. A Pierce authorized repair group looked at it in the fall and stated it is only a matter of time. Most departments that have had this issue have removed these trucks from service. The cost of repair will not be worth the value of the truck. This unit must be replaced soon. Anticipated cost to replace new - \$500,000 to \$700,000.

Decent used apparatus are hard to come by. It is my opinion that if the city replaces this apparatus, we should try to find a used apparatus or a Demo apparatus.

Anticipated Life span is 1-2 years.



Car 1 – 2013

Car 1 is being replaced by the city. Its replacement should be here in March. F-1, and C-2 are in good condition. C-2 should last 8- 10 years and F-1 should last 15 more years.

Car 2 – 2020

F-1 – 2016



3-Ida-33 – 2016

Overall condition: Good.

Anticipated Life Span 14 years



Squad 2 – 2006

Overall condition is OK. We have been told the motor may be an issue in the future. I tried to find a replacement for this truck but was unsuccessful due to availability. It may be pushed to another budget year. Anticipated Life Span - Unknown



Fire Station

Overall condition of the fire station is good condition.

The roof leaking has been the biggest concern this year. We believe the issue has been addressed by re-sealing around all of the roof top HVAC units. Time will tell if the latest issue has been fixed. Still lingering are a few of the window leak issues. We are hoping that in the spring we can remedy this issue once and for all.

Projects at the fire station moving into 2023 are as follows:

- Station Solar Project should be completed in the fall of 2023.
- Window repairs
- Finish LED lighting project
- Repair to ventilation fans on apparatus floor
- Floor Refinishing
- Basement Wi Fi
 - Due to the construction of the building, internet does not work well in the basement. During severe weather, we have had residents leave the safety of the shelter to get “better reception”. We will see if this issue can be resolved with little financial burden.

The firehouse has also been utilized by the public on a regular basis. It is not uncommon for our building to be “reserved” almost weekly. Some of the uses for 2022 are as follows:

- Birthday Parties
- Bridal Showers
- County LEPC meetings
- Community CPR
- Severe Weather shelter
- Various Community Meetings

EOC

Our EOC has received a major upgrade with the addition of new smart technology. Learning from the tornado and the pandemic, we found that our communication could be upgraded. With the recent trend of increased virtual communication, TFD, like many others, were a little behind the times in respect to this. By partnering with the County EMA, our abilities in the EOC have greatly improved.



RUN STATISTICS

Since 2019, the same phrase has been echoed at the end of each year. 2022 ends with that same phrase, “this has been the busiest year in the 136-year history of the Taylorville Fire Department”.

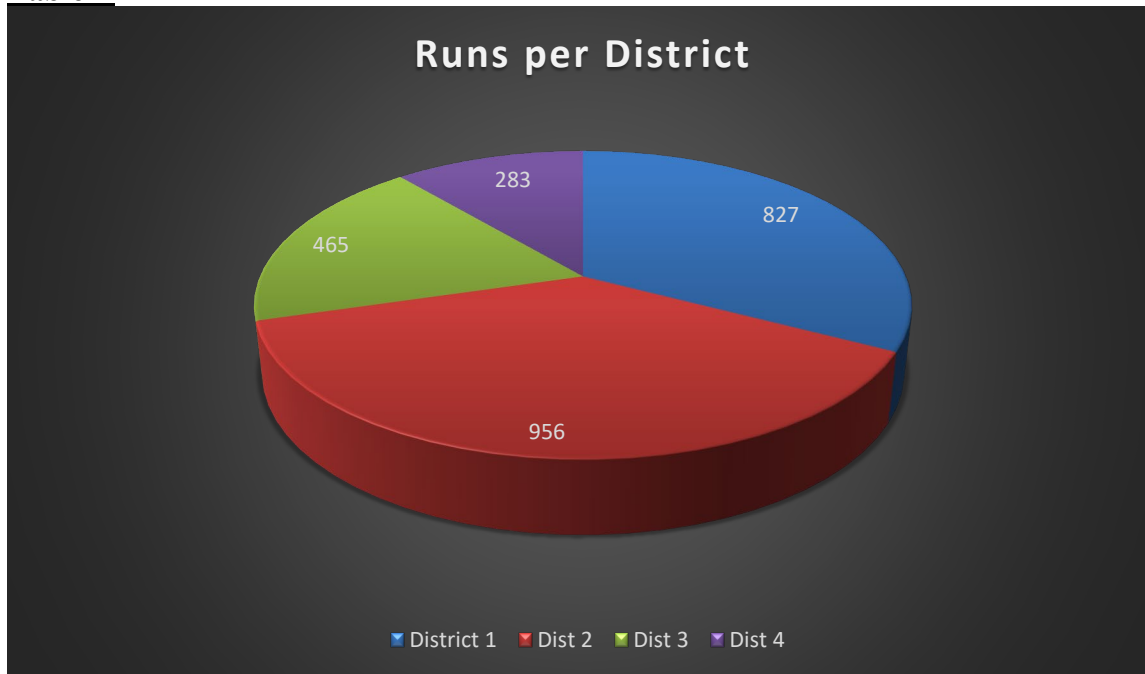
Table A

Call Types	Total		
(10) Fire, other	2	(56) Unauthorized burning	6
(11) Structure Fire	34	(60) Good intent call, other	2
(13) Mobile property (vehicle) fire	11	(61) Dispatched and canceled en route	38
(14) Natural vegetation fire	13	(62) Wrong location, no emergency found	1
(15) Outside rubbish fire	13	(63) Controlled burning	6
(16) Special outside fire	1	(65) Steam, other gas mistaken for smoke	12
(17) Cultivated vegetation, crop fire	1	(67) HazMat release investigation w/no HazMat	1
(22) Overpressure rupture from air or gas (no fire)	1	(70) False alarm and false call, other	1
(25) Excessive heat, scorch burns with no ignition	2	(71) Malicious, mischievous false alarm	1
(31) Medical assist	6	(73) System or detector malfunction	9
(32) Emergency medical service (EMS) incident	1,544	(74) Unintentional system/detector operation (no fire)	44
(34) Search for lost person	2	(90) Special type of incident, other	1
(35) Extrication, rescue	6	UNK	1
(36) Water or ice-related rescue	4	Total	2,231
(38) Rescue or EMS standby	7		
(40) Flammable gas or liquid condition, other	1		
(41) Combustible/flammable spills & leaks	37		
(42) Chemical release, reaction, or toxic condition	17		
(44) Electrical wiring/equipment problem	27		
(50) Service call, other	11		
(51) Person in distress	2		
(52) Water problem	1		
(53) Smoke, odor problem	2		
(54) Animal problem or rescue	3		
(55) Public service assistance	360		

Of the 2,231 alarms TFD handled in 2022, Over 20% came within 20 minutes of each other. We averaged 6.11 calls per shift and each call would range anywhere from 10 minutes to 4 hours in duration. The most alarms handled in a shift was 16 alarms which happened on two different occasions in 2022.

Our districts are broken down to mirror the 4 alderman wards. The following chart shows the breakdown of calls per district.

Table B



The busiest day of the week was Saturday and the busiest time of day was between the hours of 4 and 5 pm. The charts in *Table C and D* show these statistics matched up with the previous year. As you will see by the graphs, there is no real specific day of the week when we run more calls vs another.

Table C

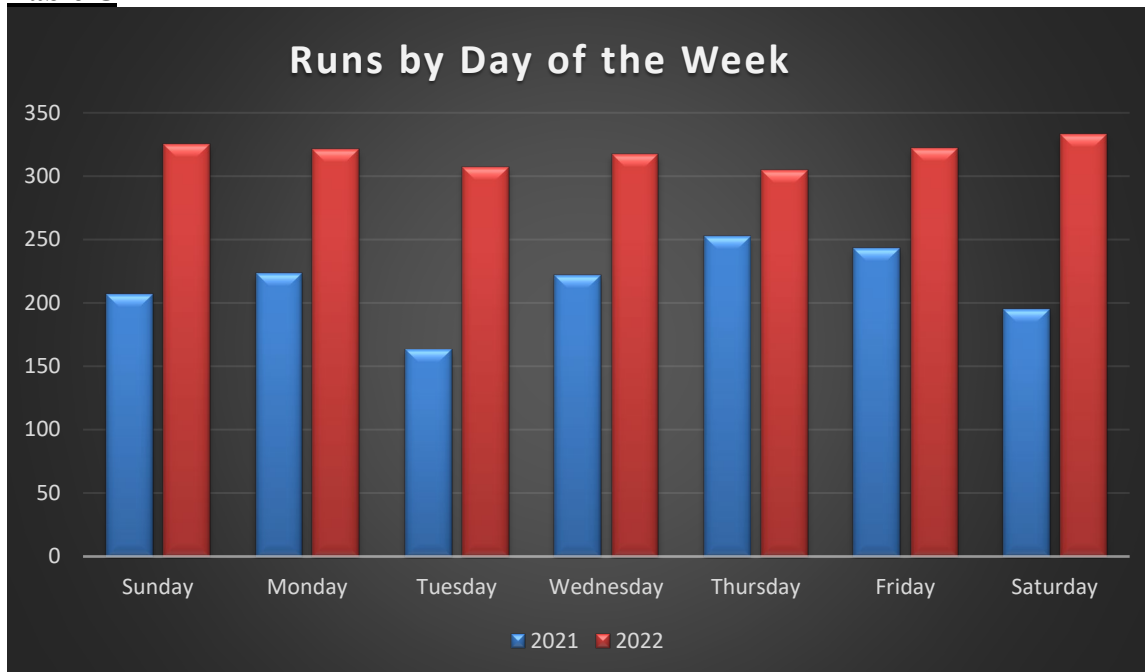
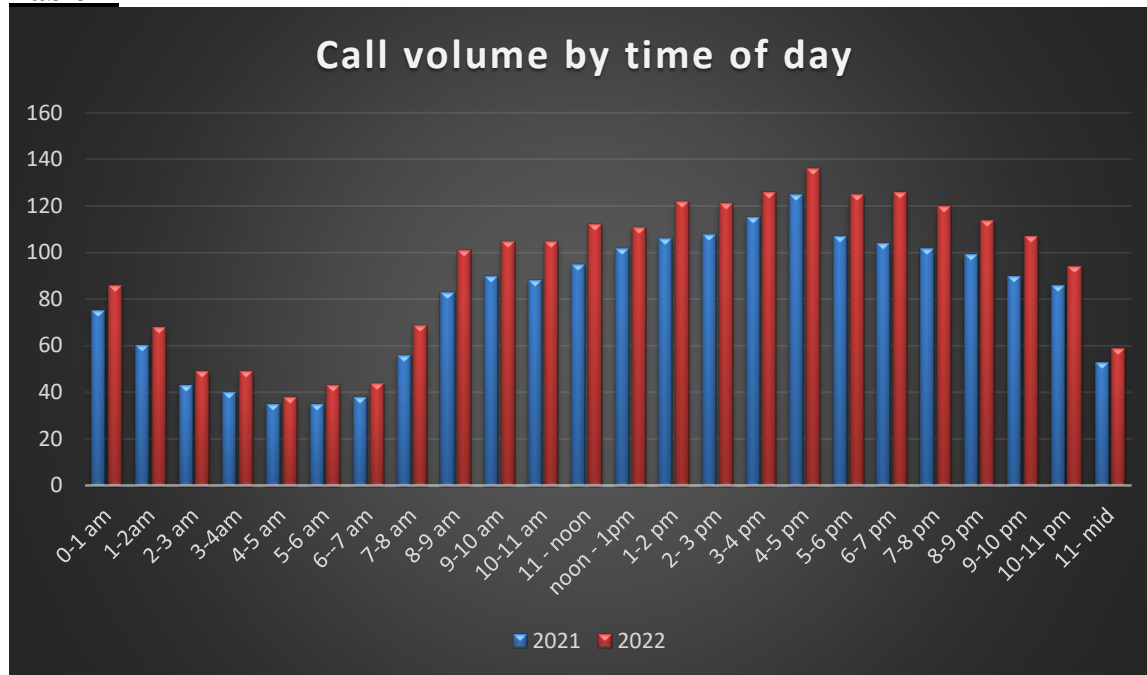


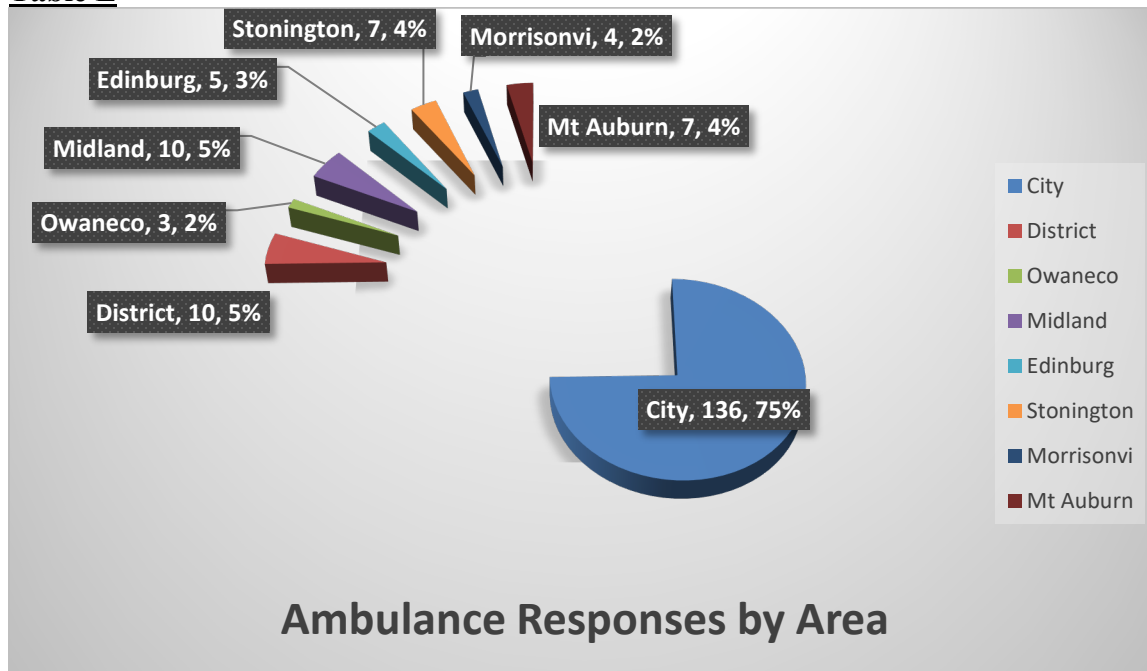
Table D



Ambulance Runs

Due to a number of issues with ambulance availability, we have seen another year with increased demand for service from our back up ambulance. Between the City, District, and outlying communities, 3-I-33 was requested for service 182 times.

Table E



Ambulance availability has become an issue countywide. The increase in 911 responses, inter facility transports, and patient hospital requests have caused our ambulance to be the only unit available multiple times this past year. In addition to this report, a preliminary ambulance report will also be provided to shed more light on this issue. Understand that it is an issue that we are keeping a very close eye on and have SOG's in place to lessen the effect of our time without an ambulance.

3-Ida-33 transported 131 patients in 2022. That is a 5% increase in the number of transports from the year prior. This resulted in **\$101,080.71** being billed for ambulance services. Currently, we have collected 45.27% of what has been billed. Revenue will continue to be collected well into 2023 and beyond.

Mutual Aid

Since 2020, TFD has seen a rise in mutual aid responses. Overall, we have seen an **81% increase** in mutual aid responses since 2020. These responses include fires, rescues, alarms, and with the majority coming from ambulance responses. In 2022, 49 of our total responses were mutual aid calls.



Because we have seen an increase in calls and the number of available personnel has dropped, we also rely on mutual aid to assist us on our responses. We used our mutual aid partners a total of 15 times during 2022.

Response Times

It is important to note the average response time of your fire department. The table below will show the NFPA national recommendations as it compares to TFD. We are actually under the national average when it comes to responses. That means We should have an apparatus on scene of an emergency within 6 minutes of a 911 call 90% of the time.

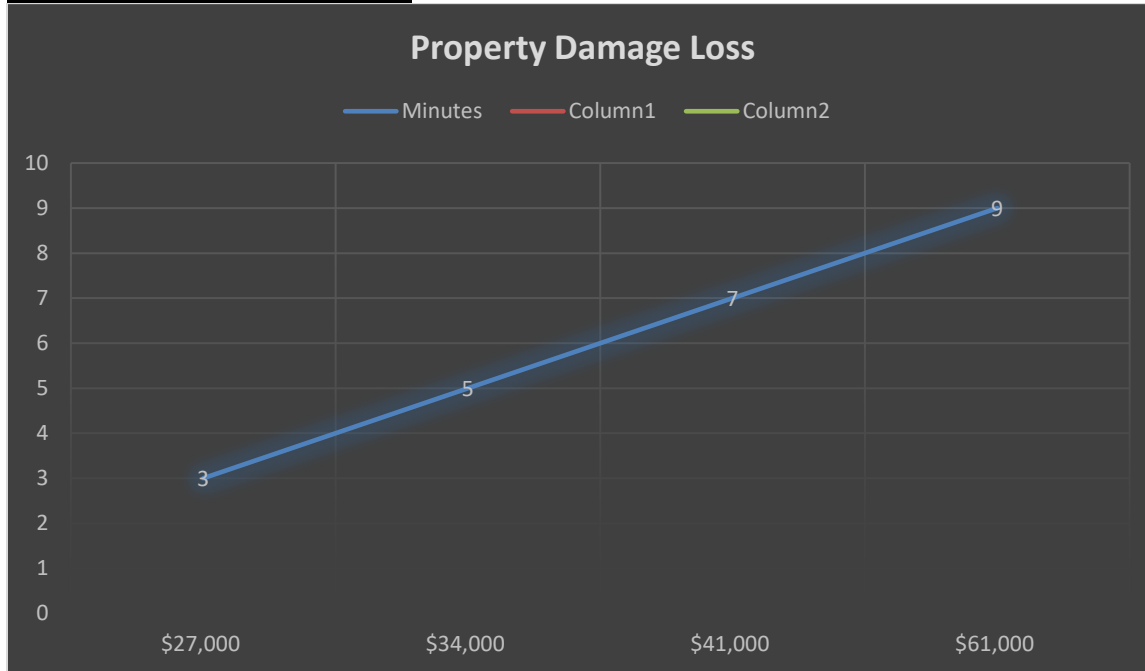
Turnout time is the amount of time from an alarm to crews leaving the station

Response time is the amount of time from the time leaving the station to arriving on the scene.

National Standard for Response Times		
	NFPA	TFD
Turnout Time	1 Minute	00:57
Response Time	4:00 minutes	3:58 minutes

Modern homes and modern furnishings exacerbate fires. Every 30 seconds a fire burns unchecked; it doubles in size. Every minute that goes by results in growing property damage. Table G compares the average property loss from a fire during the first 9 minutes.

Table G Based on 2018 prices



ESDA

Primarily this budget is used to maintain our outdoor warning sirens. We are still working on the issue with the “Boyd Dappert” siren. We have found a local vendor who will work on the siren and the street and lake department have added access to it this year. Work should take place early spring of 2023 weather permitting.

This past year saw the implementation of HYPER – REACH. Using mass communication drives our ability to quickly communicate emergency information to our community into the modern era. Like any new system, we have a few minor issues to work on with the system. I am confident that this service will be a vital tool in communicating information to our citizens for years to come.

Sign-up anytime at <http://hyper-reach.com/iltaylorvillesignup.html>

Firefighter Jeff Stoner is the Christian County EMA director. We work together on a regular basis to enhance our capabilities and plan for future emergency operations. EMA Director Stoner has proven to be a valuable asset to not only our county, but also to our department. Using county ARPA funds, he has provided us with much needed communication equipment and PPE.

TRAINING

TFD Training Statistics

- 287 hours of Live Fire/Facility training conducted
- Members attended 488hrs worth of outside courses in Fire and EMS disciplines
- 4592 of total training hours completed
- Firefighters averaged 275 hours per member

TFD Trainings through 2022

Grain bin training conducted at TFD

In the last 3 years TFD and the county departments have seen an increase in the grain bin entrapment calls. TFD was called for aid in every emergency that occurred. Two successful rescues were made thanks to our previous training in the area. We took it upon ourselves to raise the funds to bring a rescue operations class to TFD. Multiple departments across the county participated as to optimize our work while on a scene together.



Live Fire Training House

The Taylorville Fire Department was given an exceedingly rare opportunity to train in 2022. A local family donated an old



farmhouse for us to train in. This type of training is the most realistic training any department could ask for. TFD was able to perform all types of scenarios, that are rare in the field, this allowed us to better prepare our members to protect this community and others.

TFD Training Props

Multiple new training props were built into our training areas to allow a more realistic approach to training. Multiple props were built to provide challenges to the members to self-rescue if they are ever trapped in a building fire. Another was built to “trap” a down firefighter with real debris and obstacles to overcome in order to remove the firefighter from harm. We have made this a priority to best protect our members as the United States still averages over 100 firefighter line of duty deaths per year.

Training Vision for 2023

Training this year will have the primary focus of raising up leaders. Due to a high turnover rate, TFD is at the point where we are having to expect a lot more from our youngest members. There is no substitution for experience, however the problem remains, so we will train in a way as best of our abilities to help protect our community and our firefighters. TFD will also be hosting a VMO (extrication) class in March of 2023, where nearby departments will join us to bolster our young firefighters and our colleagues around us. Our number one goal every year is to give every member the skills and knowledge to overcome any problem they may encounter.

Respectfully Submitted

Assistant Chief Cody Rogers

Public Education

To: Chief Adermann

From: Nicholas Zepin

Date: January 9, 2023

2022 Public Education/ Fire Prevention Report

I am proud to report the fire prevention and public education activities completed by TFD members in 2022. Overall, members performed 126 hours of documented public interaction and education that directly reached hundreds of City of Taylorville residents and families. The messages were wide spread and ranged from CPR training, smoke alarm installations, fire extinguisher training, child safety seat installs, just to name a few.

2022 saw prevention activities and events return to their pre-covid like status. The best example of this came in October when area pre-schools and parents were able to come to the firehouse for fire prevention week. The kids learned and practiced stop, drop and roll, how and when to call 911 and of course got Sparky up from his year-long cat nap.

Our CPR program continues to be the go-to place in Christian County and others for CPR certification. 23 courses were held either at TFD or area businesses for their certification. In light of recent events, it is expected nationwide for CPR certification demand to increase. TFD will continue to promote and educate area citizens in this valuable life saving intervention.

The L3144 and TFD Angel Tree assisted with Christmas for 161 kids this year. As usual, it had a great reception and community involvement. We are fortunate to have the community support with a program of this magnitude.

I expect and plan 2023 to be a strong public education year. Aside from our annual events, there are plans to create a Christmas extravaganza that will be combine fire safety with the joys of Christmas. Other goals for 2023 include increased awareness of our smoke alarm program. With changing laws and recent fires in homes found to be without smoke alarms, it is critical that the public understand the importance of functioning alarms. Furthermore, TFD will be in the community more this year compared to previous, specifically involving more commercial pre-plans and building inspections. This allows firefighters to see specific layouts or hazards a building might possess that could change firefighting tactics in the event of an incident. . It also helps to see the big red truck in the community besides for emergencies.

Attached you will find a breakdown of all documented 2022 public education activities. As always, thank you for your continued support of all the Taylorville Fire Department's fire prevention program.

Nicholas Zepin

2022 Public Education Activities

- 22 Car Seats Installed
- 17 Smoke and Co alarms
- 1 Fire Extinguisher class
- 23 CPR classes Taught
- 10 Fire/ Tornado Drills
- 3 Tours
- 9 Special Events

ISO

In January of 2022, the City of Taylorville had an ISO audit. I am extremely happy to say that effective April of 2023, we will officially be a Class 3 Fire Department

The ISO looked at three different areas; dispatch center, water distribution, and the fire department. All three areas have improved since the 2017 audit. I believe it is important to thank the members of the fire department for their hard work in training, response, public education, record keeping, and maintenance. We could not have obtained this rating for the community without their hard work.

Additionally, Superintendent Brune and previous Superintendent Speagle along with their staff deserve a huge thank you for their efforts to continue to maintain and deliver excellent water service to the City of Taylorville.

Finally, we also have to thank our 911 center. Director Toberman, Previous Director Ehrat, and the 911 board made a very large impact on lowering our score. Their efforts to upgrade dispatch components help put us over the edge to receive our improved rating.

We will continue to work hard in the future to maintain this rating and aim to lower it even more in the years to come.



Economic Impact

Towards the end of 2022, TFD has started to look at the economic impact the fire department has on the community. Assistant Chief Rogers has worked diligently on this project and we now have the tools to show the economic impact a business has on our community. As a stakeholder in the community, TFD views the economic value a business brings in as another layer to our overall city that we aim to protect.

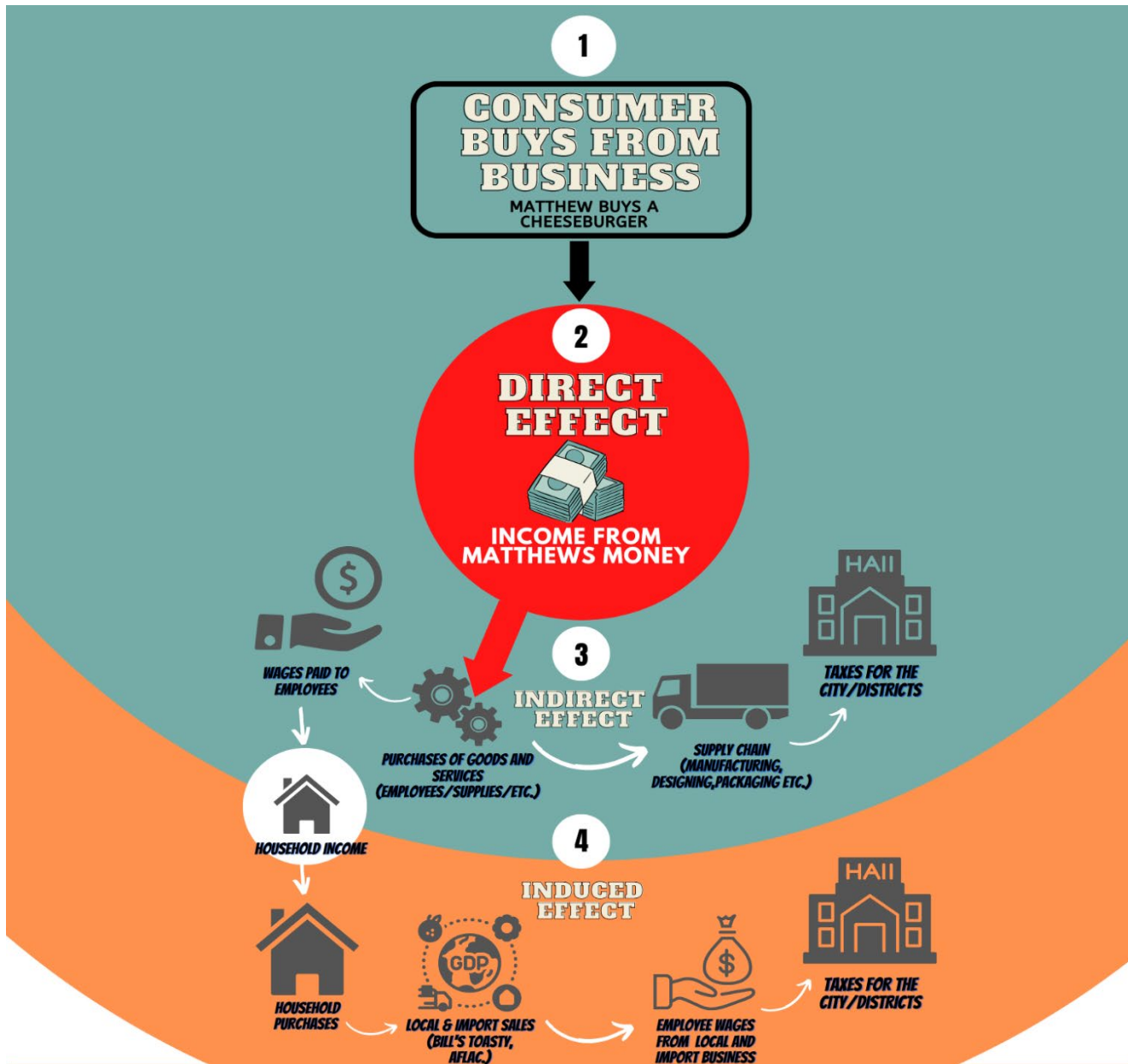
As an example to how a fire relates to the economic impact, a fire that occurred in 2022 is included below.

In 2022, TFD responded to a fire in the basement of a downtown restaurant. When we arrived, the fire was small and extinguished relatively quickly with little damage to the property. TFD was alerted quickly because the building had an alarm system that was installed as a direct effect of codes the City of Taylorville has adopted. The fire in the structure was quickly found by fire department members and extinguished. Without the early notification and the quick response from the fire department, the potential of losing one side of the square becomes very real. We can now show how devastating a loss like that can be in terms of the induced and indirect economic effects.

Key terms to know for the following graphic.

- **Direct effect** – Money spent to the business
- **Indirect effect** – money the business spends to operate
 - Including supplies, taxes and employee wages
- **Induced effect** – the money given to the workforce to make up their household income.
 - They then used this money to manage their own lifestyle. (purchase goods and services)

The following graphic will show the effect if only that one business was lost. Keep in mind that a fire on the square has the great protentional to travel to multiple buildings on either side of them.



Economic Indicators by Impact					
Impact ^	Employment	Labor Income	Value Added	Output	
1 - Direct	113.66	\$3,571,881.15	\$6,259,770.42	\$11,863,290.73	
2 - Indirect	13.30	\$516,516.23	\$846,203.43	\$2,136,213.54	
3 - Induced	11.46	\$445,836.28	\$919,595.49	\$1,695,187.78	
Totals	138.42	\$4,534,233.66	\$8,025,569.34	\$15,694,692.05	

Tax Results						
Impact ^	Sub County General	Sub County Special Districts	County	State	Federal	Total
1 - Direct	\$183,846.54	\$624,718.18	\$83,665.63	\$945,761.44	\$430,607.47	\$2,268,599.26
2 - Indirect	\$5,074.49	\$17,243.31	\$2,309.32	\$39,838.38	\$102,637.85	\$167,103.35
3 - Induced	\$13,199.64	\$44,852.94	\$6,006.95	\$76,747.32	\$78,618.53	\$219,425.37
Totals	\$202,120.67	\$686,814.43	\$91,981.89	\$1,062,347.14	\$611,863.85	\$2,655,127.98

TAYLORVILLE FIRE OPERATING BUDGET:

\$1,771,650.00

TAYLORVILLE FIRE INCOME :

-\$61,084.23

TAYLORVILLE FIRE TOTAL COST:

\$1,650,565.77

TOTAL SAVED RESTAURANT ALONE:

\$1,990,810.55

TOTAL SAVED FOR SQAURE:

\$15,694,692.05

RATE OF RETURN FOR THE CITY:

850.86%

*NOT INCLUDING
REAL ESTATE VALUE

*CURRENT BUDGET STATEMENT