# Madeira & Indian Hill Joint Fire District



**Annual Report** 

2017

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3 March 2018

Board of Trustees Madeira & Indian Hill Joint Fire District Mr. Robert Gehring, President

Dear Mr. Gehring,

With this letter I present to you the Annual Report for the Fire District for Calendar Year 2017. Key aspects of the effort of the members of the department to provide fire suppression / prevention, emergency medical and other related services to the citizens of Madeira and Indian Hill for 2017 are detailed herein. This past year was pivotal, in that during the year we occupied a new Indian Hill Station, completing an aggressive project to replace both of our stations in a period of 25 months. This could not have been done, had it not been for the generosity of Mr. and Mrs. Harold Thomas, to whom we are eternally grateful!

Run volumes for 2017 were higher than experienced in 2016, but not significantly different than a ten-year view. The ten-year experience of the department shows a cyclic nature of run volumes and the year 2017 is certainly within the experience curve.

Run volumes are only one indicator of department activity. Also important, and of significance in 2017 was the incidence of concurrent runs—higher than normal during the year. Our members participate in 35+ programs to support our emergency response and the effort produced very good results again in 2017.

I extend my gratitude to Captain Smith and the Officers and members of the department for their effort this past year. Our responsibility as public servants, to meet or exceed public expectations for a fire department, continues in the right direction! We continue to nurture a path of "quality improvement" that has truly become "continuous"—THANKS to All!!

I extend my sincere thanks to Dianne Donlan, the District Clerk, Sara Jacob, my Administrative Assistant and Dr. Phil Oblinger, our Medical Director for their support. To the members of the Board of Trustees, City Managers Tom Moeller and Dina Minneci and Officials of Madeira and Indian Hill, THANK YOU for your support and assistance.

Respectfully.

Stephen M. Ashbrock

Inhabbrook

Fire Chief

## 2017 MIHJFD Firefighters & EMS Personnel

### **Officers**

Stephen Ashbrock, Chief (Paramedic)	2000
Clarence Smith, Captain	1973
Francisco Caceres, Captain (Paramedic)	2001
John Lynch, Captain (Paramedic)	2011
Kevin Scheuerman, Lieutenant (Paramedic)	2002

#### Members

wempers	
Michael Benedic	1987
Doug Bingaman (Paramedic)	2007
Alex Brahm (Paramedic)	2017
Carrie Cayse (Paramedic)	1997
Brian Dapper (Paramedic)	2017
Jonathan Furbush (Paramedic)	2016
Jeff Glassmeyer (Paramedic)	2008
Dan Graham (Paramedic)	2010
Jordan Hall (Paramedic)	2012
Taylor Hester (Paramedic)	2015
Chris Higgins (Paramedic)	2006
Michael Hoying (Paramedic)	2012
Greg Lang (Paramedic)	1996
Matt Lebhar (Paramedic)	2014
Brandon Linne (Paramedic)	2014
Drew Marston	2005
Pat McCall (Paramedic)	2010
Sean Mesley (Paramedic)	2014
Joseph Meyer (Paramedic)	2017
Daniel Moeller (Paramedic)	2015
Dave Mohr	1980
Charlie Nurre (Paramedic)	2014
Luke Palmer (Paramedic)	2016
Dennis Parry	2002
Michael Posega (Paramedic)	2017
Toney Sanders (Paramedic)	2010
John Stager (Paramedic)	2006
Nick Stiens (Paramedic)	2015
Andrew Wickerham (Paramedic)	2014
Brian Willing (Paramedic)	1994
Ty Zimmerman (Paramedic)	2008
Dr. Phil Oblinger, Medical Advisor	1984

Total years of service with the Fire Department include:

Explorer, Junior Firefighter, Volunteer, Part time and Career time

# **Fire Department Administration**

#### Personnel

In 2017, multiple personnel changes were encountered by the department.

Firefighter-EMT Drew Foppe retired after over 40 years of service to the Joint Fire District. Drew's knowledge of the JFD and its development from a "fire company" to a joint fire district is significant and will be missed.

FF-P Casey Boyd resigned to transfer his full time employment from MIHJFD to the Cincinnati Fire Department. In the years 2016 and 2017, Cincinnati Fire Department hired 120 persons and took new employees from many area fire departments.

FF-P Matt Lebhar opted to transfer his full-time employment from MIHJFD back to Sycamore Township, for whom he had been a part-time employee before coming to MIHJFD.

Part-time employee Tyler Lang resigned to take a full-time FF-P position with the Colerain Twp Fire Department. The transition from part-time to full-time theme continued as Joe Hansen resigned to take a full-time position with Springdale Fire Department and John Myers took a full-time position with Norwood Fire Department.

Despite the need and desire to employ additional qualified part-time FF-Ps, we were only able to add employee Brian Dapper.

These transitions resulted in a lower than "normal" roster, especially in the last six months of the year. We issued mandatory overtime orders for full-time coverage and ran shorter than we would have liked as we conducted a hiring process for full-time FF-Paramedics and looked for part-time employees that meet department expectations and standards. The part-time employment pool, once rich with qualified applicants, is noticeably decreasing.

Our authorized strength per shift is a total of eight. Our goal is to staff with eight. We obtain such staffing with a combination of Career and part-time employees.

We had not replaced a department Captain as the station project continued. Once we were back to two stations, the addition/promotion of the Captain position, one for each station, was underway as the year ended.

#### Safety in the Department -- Personnel

The department takes safety in the workplace seriously. Both stations are designed for focused fitness activity. With the new stations, this capability will be enhanced.

We participate in WORKPLACE SAFETY programs with the Bureau of Worker's Compensation. We track workplace injuries.

During 2017, two workplace-related injury or illness incidents were encountered. A firefighter suffered a back injury, with loss of time, performing fire hydrant service duties. One firefighter sustained a sprained ankle in a trip on stairs. There was minimal lost time with this injury.

#### Safety in the Department -- Equipment

In 2017, we recorded six incidents of vehicle damage.

In April, an ENGINE scraped a tree on a narrow drive at night exiting support of an EMS run. This contact resulted in damage to compartment door requiring repair.

In June, an AMBULANCE scraped a trailer in exiting an incident.

In September, the locking support for the ENGINE CAB was inadvertently placed in the wrong location and pierced a hole in the truck cab.

In September, the AMBULANCE SCRAPED the ENGINE of a neighboring department exiting an EMS run scene.

In November, the ENGINE ran across a lawn driveway border on an incident response.

In November, the ENGINE scraped a tree limb on an incident response.

These six incidents are about an average of similar incidents over a long-term period. None involved injury and only one involved significant damage.

#### **Budget**

Overall spending for 2017 was 5.1% UNDER our operating budget. Salary and benefits savings were the most significant contributor with nearly a 9% savings. Income was essentially as anticipated. Several factors influenced these facts.

Temporary reduction in full-time personnel, one station operations and budgeted coverage for worker's compensation and health care cost increases were "plusses". From a long-term perspective, these savings do not represent a trend.

On the income side of the ledger, interest income, remains low. EMS user fees were more than anticipated, but, it should be noted that a glitch in transport billings in 2016 that reduced income for 2016, resulted in a temporary increase in EMS revenue for 2017 as the payments caught up. EMS user fee collections are always in proportion to run volume and always subject to collection/payment cycles of our principal payer—Medicare.

Our union career employees received a 3% increase in hourly rates of pay in 2017, to open the first year of the three-year term collective bargaining agreement. We increased our hourly rates for non-union employees to match.

Fuel costs were more stable and actually decreased for a period in 2017 and averaged just above \$2.25 per gallon.

Operating the JFD out of one station resulted in utility savings. Utility costs will be in flux and we are watching them closely to determine a new baseline of utility costs in the two new stations.

Capital purchases for 2017 included radio equipment, a payment on the lease-purchase agreement on the QUINT, computer equipment infrastructure and a replacement of the HVAC unit for the Chief's residence. We also replaced our 2003 Horton ambulance vehicle. This cost was not debited from the Capital Fund as it was completely covered by a private donation.

At the current demand for capital items, we are projecting that capital needs can be financed beyond the Year 2024 at the current funding rate.

#### **Training**

Effective training is a key element in the success of any fire department. In 2017, the employees of the joint district amassed nearly 1729 hours of Fire and EMS training during the year. This training hour total was a reduced number of hours as the department was engaged in the consolidation of operations from two to one new station, requiring staff attention to those logistics.

We continued to use Centrelearn, the online training and management system. The use of Centrelearn provides us the opportunity to increase the amount of training hours for the staff, taking advantage of the on-line and "always available" aspect of such a training system. We completed 678 hours of Centrelearn EMS and Fire training hours.

Our fire investigators participated in the annual Greater Cincinnati Regional Arson Fire Investigator Seminar, a two-day event held at Evendale, OH.

We partnered with the Montgomery Fire Department to provided 3 days of live burn training at the Cincinnati Fire Department training tower. 14 members participated in live fire operation training for a total of 38.50 hours of live fire training.

Our members also participated in ACLS classes and in the FDIC conference in Indianapolis.

Captain Francisco Caceres (Lieutenant then) successfully concluded all requirements of the Ohio Fire Executive program and was awarded his diploma at the OFE Graduation ceremonies on June 9, 2017.

We did not conduct essential skills exercises in 2017 to accommodate the move to the Indian Hill station. We started the re-structuring of the essential skills to adapt to the new layout and potential of the Indian Hill station. We will resume the skills in 2018.

We conducted in service training for the Arizona Vortex, a new tripod for confined space and rope rescue. We also trained on the Lucas device, our new CPR compression device.

Addressing the need for certified instructors, two employees began the course of instruction to become Ohio certified Fire/EMS instructors during 2017.

MIHJFD has been a leader in the development of a formal "after-action" review process. Whenever a significant fire occurs to which we respond, all units involved in the response, MIHJFD or neighboring, are sent a set of focused questions right after the incident to collect the comments of those responding. MIHJFD had only one such reviewed incident during 2017. This process has been very effective in increasing operational cooperation between and among our neighbors, on whom we rely regularly.

#### **EMS** Billing

In 2017, we completed our 12th full year of EMS billing. Begun in June of 2005, amounts collected were originally credited to the city in which the EMS run originated. By agreement between the two cities, beginning in 2015, EMS revenues derived from runs to the two cities are equally credited, 50/50.

EMS Billing Policy for the Fire District follows national trends and credits RESIDENTS of the DISTRICT for the taxes they pay, billing for insured-amounts only for these residents.

In 2017, we collected approximately \$230,000 in EMS revenues. This amount is approximately \$45,000 more than in the previous year. This full amount was used to reduce the contract costs to Madeira and Indian Hill as direct savings to the general funds of both cities. A software glitch went two months without detection in 2016, whereby billable amounts remained without processing. Receipts from this glitch were not lost, but deferred to collection in 2017 and resulted in the larger than normal EMS receipt realization.

In terms of city budgets for the JFD, EMS revenues represent a recoup of roughly 8% of costs for Fire and EMS services for each city.

#### **Community Outreach**

The Joint Fire District publishes a bi-annual newsletter that is mailed to every address in the Fire District---Commercial and Residential. We have been engaged in this activity for nearly 80 years.

The evolution of the newsletter has reflected improved technologies in computers, software packages for publishing etc. We have moved from one color to three color to multi-color. We are very aware that the newsletter draws attention because we receive telephone calls even before the current edition has been received at the station addresses. We utilize a contract printer/mailer and construct the layout ourselves, at a cost savings.

We utilize the newsletter to provide the schedule of our meetings, deliver stories of interest from a fire department point of view and to promote fire and life safety messages to our citizens.

The JFD maintains a website at MIHJFD.ORG. This website is maintained in house at no additional cost to the JFD. We surveyed the content of our website for its USEFULNESS, predicting questions about which you might go to the website for answers.

As a result, we added some additional information to the site content, but otherwise, feel that the site is simply laid out, easily navigable and contains the answers to the proverbial 'frequently asked question(s)'. We conducted an audit of our website against the websites of other fire department similarly situated. Through that process, we will be adding some additional information to the website.

We are aware that we had over 13,000 visits by about 8,600 unique visitors in 2017. They did not spend much time in the website and accessed it the most frequently by direct address connection.

We maintain a FACEBOOK page. We have developed a "censure" policy and posted it to the page to control the appropriateness of discourse. We post infrequently. Posted material is self-promoting and on occasion---a timely safety reminder or message. Our experience with the FACEBOOK page has only been positive.

# **Fire Department Operations**

Responses of the department are categorized under the major headings of "Fire" or "Emergency Medical Services", labeled "EMS".

Activity levels and a categorization of incident type under the major headings are included in this report in chart or graph format. The activity level of the department for the past ten years is presented in graph format.

Overall --- there was a increase in total run activity for the department in 2017. We made 1577 Fire and EMS runs in 2017, 513 Fire Runs and 1064 EMS Runs. (The combined total of Fire and EMS runs for the JFD in 2016 was 1532, 479 Fire Runs and 1053 EMS Runs.)

This variation is within the expected range of activity for the last decade. Over the years, the impact of various factors contributes to annual experience. Variations in the runs made to long-term care facilitates as well as the District in general, cyclic in nature over the years, is one identifiable factor. During 2016, Indian Hill implemented an updated version of the "direct to Ranger" alarms in the village. The technologies and new equipment of this system may well be reducing the incidence of FALSE alarms. As one other factor, 2017 was without a significant storm event, another generator of run volume. Alterations in the automatic response to our neighbors for fire runs, made after review of incident history and situation, have been an additional factor in number of fire responses.

A listing of the fire incidents where the loss was greater than \$1000 is included. The number of such incidents occurring each year remains relatively low, despite total run numbers. In 2017, the incidents with loss greater than \$1000 totaled 7. Four of these incidents were the relatively rare VEHICLE FIRE, one was to an auxiliary structure, one to a full-house generator and one to an outdoor gas grill structure.

#### **Standard of Cover**

This term is used to describe the usual or average daily staffing of a department, or to answer the question, "how many persons will be available to respond to the fire incident".

Since July 2006, we have been authorized to staff at eight per shift. At the same time, we added the services of a "part-time" class of employees and altered our rules and procedures for coverage by those employees formerly called "paid-on-call", now "Class III" employees. With all of these changes, it was our intent to strengthen on-duty staffing. Over the subsequent years, this has been achieved.

The significance of this background is that we schedule Class I (full-time) employees but provide for them paid-time-off that reduces their on-duty coverage. For Class II employees, we regularly schedule these employees for a 12 hour every-third-day, or a 24 hour every-sixth-day rotation. Our Class III employees work on an "availability" basis.

The staffing in 2017 showed increased variability. In 2016/2017, we lost three employees to the Cincinnati Fire Department. Cincinnati hired 80 new employees during the year and most of them came from suburban departments like MIHJFD. Hiring in neighboring departments also took its toll on our part-time ranks as we also lost five part-time employees to full-time departments in the area.

In 2017, we had the retirement of a long-tenured full-time employee. With the return to 2 station operations, short and variable staffing became a more glaring situation. As we engaged in a full-time hiring process and sought to replace part-time employees, the area-wide lack of qualified candidates contributed to staffing levels at MIHJFD that are not acceptable. The Personnel Committee and the city Safety Committees reviewed research and discussion guides with the JFD and as the year ends, a strategy to improve our situation in the staffing environment is under way.

#### **Average Turnout per incident**

We have used the capabilities of the Computer-Assisted Dispatch (CAD) system of the County Communication Center to automatically dispatch additional resources from our neighbors. Our neighbors are utilizing the same capability for the same reason, so you may have noted an increase in mutual aid received in recent years. Our orchestrated cooperation, coordination and collaboration with our neighbors serves as a "staff-multiplier" for all with rarely realized risk. See additional remarks under "Mutual Aid".

National Standards describe the "full first-alarm response" for a working structure fire as being composed of 15 on-scene firefighters, arriving within eight minutes of dispatch for structures 2,500 sq. ft. in size and less. At the present time, with full staff, we only deliver about 50% of this number from <u>on-duty MIHJFD staff</u>.

The capability of the CAD system and internal procedures are in place to address this shortcoming. Even though the firefighters needed to meet the national standard are coming from a farther distance, they are being dispatched at the same time we receive the run, thanks to the capabilities of the CAD and dispatch procedures.

National standards increase the first-alarm response to 24 on-scene firefighters within eight minutes of dispatch for structures in excess of 2500 sq. ft. This is a very common structure size in the JFD.

Our response to structure fires in 2017, showed a first-alarm response of an average of 20 firefighters to the involved incidents. This is a decrease in previous average that have ranged as high as 29. Since we rely on automatic response of neighbors, and they are experiencing the same staffing shortage conditions as we are, the drop is not an unexpected consequence.

#### **Concurrent Runs**

Concurrent or simultaneous runs are an important indicator of demand for service. Analysis of such data helps focus discussion on resources and procedures. We have been tracking simultaneous runs since 2000.

Concurrent runs can involve any combination of Fire and EMS-type runs.

Over many years, the incidence of concurrent runs has varied between 10 and 14 %. In 2017, we have experienced a higher than expected incidence of concurrent runs and our closest calculation indicate a 20% 2017 experience.

Indications are that concurrent runs to our nursing facilities is a major contributing factor. Concurrent run experience is a most important factor when staffing is lower and variable.

We maintain this section of our annual report, so as not to lose this very important aspect of our operations, planning and cooperation with our neighbors, by design.

#### Mutual / Automatic Aid

Madeira & Indian Hill Joint Fire District participates with all area fire departments in a mutual aid agreement. Our experience with mutual aid is presented in an accompanying graph in this report.

The 2017 experience shows a continuing trend in the importance of mutual aid for us and our neighbors with whom we exchange such services. This trend is clearly explainable by the effective implementation of the Computer-Assisted Dispatch (CAD) system of the Hamilton County Communications Center. The CAD facilitates automatic dispatch of neighboring companies for defined situations. This capability benefits Madeira & Indian Hill JFD as much as it causes our increased response to neighboring communities.

Analysis of our 2017 experience with mutual aid offers the following observations: our FIRE mutual aid activity primarily involves Deer Park-Silverton, Sycamore, Montgomery, Little Miami and Milford as a "new player". The balance between aid given and received is essentially as has been the past experience with minor variability. Overall, for Fire, we provided more mutual aid than we received in 2017.

For EMS, mutual aid given was higher than mutual aid received for the second year in a row. This is despite the incidence of concurrent runs. We often had sufficient staff and ambulance for a backup or "265" run---to our credit. Our predominant EMS mutual aid activity is with Sycamore Township, Montgomery and Deer Park-Silverton. We continue to monitor mutual aid, acknowledging the fact that we need to both give to and receive assistance from our neighbors.

#### **EMS Operations**

Response to EMS runs occupies a larger percentage of time and accounts for the greater number of emergency response incidents in all fire departments across the nation today. Madeira & Indian Hill Joint Fire District is no exception. In comparison to fire incident response—when often we find a "false" alarm" – in EMS responses, nearly 100% of the time, we are met with a sick or injured person.

For half of 2017, all responses were being made from the Madeira Station of the JFD (Station 65). This change in operations was necessitated by the construction of the new fire station in Indian Hill. This change resulted in a return toward "normal" average response times to areas in Madeira and a resultant increase in average response time to EMS runs in Indian Hill. As the year ended, normal response patterns were again observed.

The response of four persons, is the intended response level on all but prescribed EMS responses. Attention to patient care is not compromised by this level of response and logistical problems presented by the situation (moving furniture, moving the patient, taking care of worried family members, etc.) can be handled quickly by the crew of four.

The EMS first response in Indian Hill is made in a pick-up style truck to improve efficiency, effectiveness and economy, when staffing is full at both stations. This approach generates best efficiency in costs and response times.

An important element of our EMS operations is the review of our performance and documentation through routine run review strategies. "QA" for adherence to medical protocols for treatment, documentation of procedures and drug administration, monitoring response times, etc. are all hallmarks of a quality EMS

delivery system. A concentrated effort to conduct a QA review of ALL patient care reports has been formally in effect since 2012. Runs were evaluated for compliance to treatment protocols and for documentation of such. This approach far exceeds our requirements for QA under Academy of Medicine guidelines. As 2017 ended, automatic access to EMS run patient care reports for our Medical Director review and comment was in place.

In 2017, about 68% of our EMS runs result in a patient transport by EMS. The vast majority of our patients are transported to either Jewish (43%) or Bethesda North (36%). EMS run activity occurs around the clock, with a peak between 1000 and 1800 hrs, (51%).

Overall, the number of EMS runs in 2017 was up 11 runs.

#### **Medical Direction and Oversight**

Madeira and Indian Hill Joint Fire District's EMS operates under the auspices of our Medical Director, Phil Oblinger, MD, who is also a resident of the district. We utilize the medical treatment protocols of the Cincinnati Academy of Medicine.

The Academy of Medicine periodically visits those units for which it has granted permission to operate under the protocol for the county. We are such a unit and have been since our initial use of advanced life support (paramedic level) protocols in the early 1980's. We received our most recent Academy of Medicine approval on November 18, 2013. This site-visit assessment is made by an Academy of Medicine team every five years.

#### **Pre-Planning**

The District actively engages our environment by pre-planning approaches to emergencies and collecting pertinent data that may mitigate the impact should one occur. This has traditionally been done for years in commercial and industrial occupancies, where the interface with the occupant is initiated at the time of fire inspection. Recently, we have reached out to the owner/occupant of private residences, with positive response.

Originally done on paper and stored in our vehicles in binders, computers in our apparatus have moved our ability to update and make available these "pre-plans" with more efficiency. A few years ago we made advances in standardizing the format and information contained in these pre-plans through a software purchase and in 2015, we cleaned up some problems in inconsistent versions of pre-plans in the various reference sources. We now have information on over 200 occupancies in the JFD. '

Greatest value of this information comes with integration of its availability on a response vehicles' MDC. We continue efforts to make work an otherwise out of date data backbone in the county with varying degrees of success.

#### Water Supply Strategies

The Fire District continues to work with the water providers --- Indian Hill or Cincinnati to improve available fire flows whenever possible. Our initial goal has been to eliminate any fire flow situations that provide less than 500 gallons per minute available. After a formal review of water supply strategies---operations changes, hose laying policies, mutual aid, firefighting foam, etc. we are engaged in efforts to make changes to maximize all resources we can to improve our water for firefighting situations.

In 2010 important upgrades were made to the water system in Indian Hill. Large diameter water main was installed in Shawnee Run Road from Given to Drake. Larger diameter water main was installed in Drake road south from Shawnee Run Road to Summerhouse. Larger diameter water main was installed across Graves, west from Drake to Miami. Water main replacement occurred in Demar, Pamlico and Sanderson Place. The impact (in increased available fire flow) was evaluated with flow testing conducted in the Spring of 2011. There was improvement noted in many areas such that the incidence of "less than 500 gallons per minute" hydrants was reduced to but a handful in the JFD. This is a marked move toward a goal of having no hydrants with less than 500 gallons per minute available for firefighting. Fire Flow testing has become routine to monitor condition of the water system.

The district maintains over 1460 hydrants on a biannual basis. This is an increase in installed hydrants that occurred as a result of the water main work described above. Summer maintenance includes lubrication and functionality, while the fall maintenance focus is aimed at limiting freezing in the winter.

In 2017, we participated in flow testing with the Indian Hill Water Department and we have begun the arduous task of synchronizing hydrant data for exact match of addressing and the update of those hydrants that are regarded as PRIVATE HYDRANTS.

#### **Operations Charts and Graphs**

Additional information is contained in subsequent charts and graphs:

10 Year History: Fire Responses per year

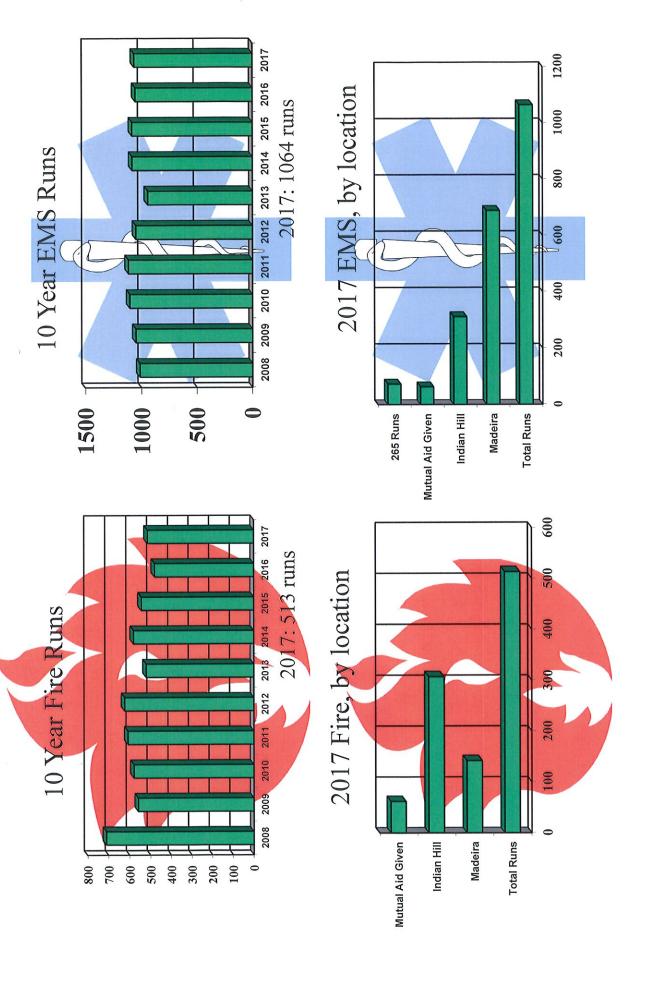
10 Year History: EMS responses per year

Fire Incident, by location, 2017 EMS Incident, by location, 2017

Mutual Aid Given and Received, by city, for FIRE incident

Mutual Aid Given and Received, by city, for EMS incident

# Madeira & Indian Hill Joint Fire District 2017 Fire and EMS Statistics



	Mutual Aid	
	2017 & (2016)	
Given	Department	Received
0 (2)	Amberly	0(0)
0(0)	Anderson Twp	1(0)
1 (6)	Blue Ash	0(0)
13 (15)	Deer Park-Silverton	9(6)
3(3)	Golf Manor	0(0)
3 (2)	Little Miami	2(0)
1(0)	Loveland Symmes	7(2)
1(3)	Mariemont	6(6)
0(1)	Miami Twp	0(0)
5(4)	( Milford	0(0)
4(14)	Montgomery	11(17)
0(0)	Sharonville	1(0)
30(26)	Sycamore Fownship	15(8)
1(0)	Terrace Park	0(0)

	Mutual Aid	
	2017 & (2016)	
Given 0 (0) 0 (0) 21 (18) 1 (0) 5 (8) 1 (1) 5 (9) 7 (12) 4 (3) 0 (0) 16 (17) 2 (1)	Department Anderson Township Blue Ash Deer Park Silverton JFD Golf Manor Little MiamiJ FD Loveland Symmes Mariemont Milford Montgomery Sharonville Sycamore Township Terrace Park	Received 1 (0) 0 (1) 7 (6) 0 (0) 2 (2) 5 (2) 10 (4) 1 (0) 15 (21) 2 (0) 8 (10) 0 (0)
	Includes AUTOMATIC	RESPONSE situations

Fire Losses Greater Than or Equal to \$1,000

Date 24 Feb 17 02 Mar 17 02 Jun 17 13 Jun 17 17 Aug 17 28 Aug 17 01 Dec 17	District IND MAD IND IND IND MAD IND	Alarm Time 1548 2104 1430 2230 1825 1348 0157	Situation Found Structure Vehicle Vehicle Vehicle Equipment Vehicle Equipment	Location 9500 Tail Trail 7240 Mardel Dr 1275 EB 51.3 mm 9100 Kugler Mill Rd 7855 Annesdale Dr 7059 Dawson Rd 9176 Old Indian Hill	Loss 12,000 \$5,500 \$4,500 \$32,000 \$5,000 \$3,100 \$4,000
			2	1	

# 2017 Hospital Transport Distribution



Destination	Count	
Jewish Hospital Kenwood	314	
Bethesda North	258	
The Christ Hospital	57	
The University Hospital	36	
Cincinnati Childrens Hospital	31	
Tri-Health Good Samaritan	14	
Mercy Hospital - Anderson	5	
UC Health Psychiatric	3	
VA Medical Center	3	
Deaconess Hospital	1	

722 of 1064 EMS runs resulted in transport

#### **Fire Prevention**

#### Inspections

Inspections are done by shift personnel throughout the year. The District has enjoyed very good cooperation by our corporate and business citizens in our inspection program.

Inspections are an important aspect of fire prevention and one of the effective ways that our personnel become familiar with the occupancies in our response district.

In 2017, nearly 100% of our 368 occupancies were inspected. Our goal is to inspect each "eligible" (non-single-family-residential occupancies) each year. Overall, there were 472 occupancy inspection activities for the department in 2017.

The most common violations found during our inspections are exit lights out, emergency lighting defects, extension cord abuse, storage issues and fire extinguishers out of test date.

#### Plan Review

Plan reviews are conducted by fire inspectors for any remodeling or new construction in commercial buildings. During plan reviews, means of egress, emergency lighting and general life safety issues are examined. Plan review activity in 2017 was slightly higher than in 2016, as an increase in building activity has been noticed in the JFD. Major projects included Indian Hill High School gym locker room remodel, the Leonard Athletic Center at Cincinnati Country day School and a senior's complex, The Traditions of Madeira on Camargo Road.

Such plan reviews are an important way in which the fire department assures compliance with fire codes in building projects. It is perhaps more importantly an opportunity for the fire department to provide input on discretionary features of buildings that improve access, evacuation etc.

#### **Tank Inspections**

The Fire District conducted (23) inspections involving combustible or flammable liquid storage tanks in 2017. The distribution of these inspections was as follows: eight underground oil, eight underground propane, two underground fuel, three above ground propane and two above ground heating oil installations or removals were inspected, and permits issued.

In general, home heating oil tanks are being removed. Trend is toward propane for home heating where natural gas is not an option in the Fire District.

These tank inspections are regulated by the "Ohio Fire Code" and the locally adopted "Southwest Ohio Fire Safety Council Unified Fire Code".

#### Public Education

Programs to improve fire and life safety awareness and knowledge for our citizens were held throughout the year at area nursing homes, schools, day care facilities and at "public" locations. Fire prevention and injury prevention have evolved to become intrinsic to the fire department mission.

We have continued to target public information relative to "access" for emergency response. We promote the use of 911 for emergency access – it is taught countrywide to all ages. We market and install the reflective address signs. We promote removing overhead obstructions and narrow gateways that prohibit access for fire trucks and ambulances. An increasing number of gated properties have installed FD access switches.

We conducted fire extinguisher classes for nursing home staff employees.

In 2017, we conducted <u>CPR / Automatic External Defibrillator (AED) classes</u> for citizens and employees working in the JFD. Included were groups from Madeira PD. There are 42 known AED's in the Joint Fire District and periodic training for sites with an AED is included in our CPR/AED effort.

We conducted numerous <u>fire house tours</u> for various community groups—often including focused safety information—especially for the school groups that visited. Thirty-three safety talk opportunities included neighborhood block parties, babysitter, library, Scout merit badge and citizenship activities, a Hospice Community activity and the Madeira Safety Camp, held each summer.

Our audiences included students, scout leaders, city employees, teachers, nursing home staff and employees of child care centers, industrial facilities and country clubs.

Neighborhood "<u>block parties</u>" have become a popular event in the area and the Fire Department frequently receives an invitation to attend. We take the opportunity to speak with residents about our operations, equipment and fire safety topics.

The inspection of <u>car safety seats for children</u> has become an issue in the child safety industry. Activity of this type is consistent with the department mission of injury prevention. The department has members trained in evaluation and inspection of child safety seat installations and provides consulting services and inspections for parents on an appointment basis.

In the year 2017, 149 such inspections were done—an increase in such activity compared with recent years. Seventy (70%) percent of the citizens for whom this service was done are residents of the Joint Fire District.

Since the inception of this program in 2000, over 2000 car seat "inspections" / installations have been done by MIHJFD personnel. We currently have six employees specifically trained for this community service and injury prevention activity. The program continues to provide the citizens of Madeira and Indian Hill with full support for child safety in the proper use, installation of, and education of car safety seats.

#### Madeira Citizens Academy

The department participated with all of the Madeira city departments in a "Citizens Academy" program held during the month of April 2017. The program is designed to familiarize citizens in the complexities and innuendo of local government.

We are also a regular participant in a community leader's forum that includes city, school and church officials and meets several times each year to discuss issues common to our various roles in the City of Madeira.

#### **Indian Hill Citizen Forum**

In the Spring, the department participated with all the Indian Hill departments in what has become an annual citizen forum, intended to facilitate a dialogue between citizens and local government. We also participate in the "Dialogue Group" forum of the village.

#### **New Station Open House**

With the opening of the new Indian Hill Station, the department held a public OPEN HOUSE with the July 4 festivities at Stephan Field. The event attracted much attention ----we were visited by between 400 and 500 interested citizens.

# **Logistics**

#### **Facilities**

By Mid-year 2017, the two year program of demolishing, reconstructing and reoccupying the JFD's two fire stations was completed. We had demolished the 1962 Madeira Station in May 2015 and had consolidated all operations to the Indian Hill Station. In late June 2016, we occupied a new station built on our existing lot in Madeira. By August, we had demolished the 1994 version of the Indian Hill Station and had consolidated all operations to Madeira. In July of 2017, we returned operations to a new Indian Hill Station.

This ambitious construction project was the one deficiency of the District's Capital Plan that otherwise was well poised to fund the JFD into the year 2020 and beyond at the funding level set in 2008. The funding for these stations has come from the generosity of the Thomas Family.

A special and continuing THANKS to Mr. and Mrs. Harold Thomas, whose significant donation has funded this project!

We are evaluating the strategic and financial impact on the future of a residency requirement for the Fire Chief and the provision of a residential structure to facilitate this requirement and expectation. The JFD Capital Committee is shepherding this review.

#### **Apparatus Maintenance Summary**

Management of the maintenance of the nine Fire Department vehicles is being accomplished by a team, on which each of the three department units has at least one member.

Though some of our repairs to our equipment are accomplished in house, increasing complexity of electrical control systems and inaccessibility of the serviceable components have begun to dictate referrals for service to authorized dealers.

Maintenance costs were increased in 2017 by 223%. Our Aerial/Quint was the most expensive to operate and repair in 2017. The Quint sustained a catastrophic failure in the electrical swivel component, the suspension, and master stream device leading to increased annual costs. Engine 2 also contributed to the increase with a collision repair, brake replacement, and a motorized cord reel repair. Squad one also contributed to increased costs with a turbo and fuel injector failure, transmission sensor and high pressure repair, 4 new tires, and a towing charge.

All vehicles received normal preventative maintenance (oil changes, chassis lubrication and inspections) according to established schedules.

All pumping apparatus was subjected to annual pump testing with positive results. In addition, all department ladders were inspected and tested in accordance with standards and state occupational requirements.

The following is a brief description of major and significant repairs for the past year, paraphrased from the complete maintenance report for each vehicle.

2017 Maintenance cost was \$63,580.52 (\$34,798.05 increase).

**E1 (2003 Boise)** Ladder testing, pump testing, NFPA Inspection, alternator repair, and routine maintenance.

**E2 (2013 Pierce)** Ladder testing, pump testing, collision repair (\$5,140.21), rotors and front brakes and motorized cord reel repair (\$4,821.03) primer rebuild, NFPA Inspection. (\$9,961.24)

**T1 (2009 Pierce)** Preventative maintenance, ladder testing, pump testing, Swivel Replacement (\$13,489.87). Towing, suspension repair, torsion bar (\$2,557.70). Front tires, master stream repair (\$3,710.26). \$19,757.83

**Squad 1 (2010 Ford)** Turbo actuator, fuel injector, towing charge from breakdown, transmission sensor, high pressure oil system repair, 4 rear tires, and routine oil changes. (\$5,492.41)

Squad 2 (2003 Ford) ABS module replaced, and routine oil changes.

Car 1 (2008 Dodge) Received a new radiator, oxygen sensor and routine oil changes.

Car 2 (2004 Ford) Routine oil changes.

Car 3 (2011 Chevy) Received 4 new tires, routine maintenance, and oil changes.

Car 4 (2008 Dodge) Rust repair and routine maintenance oil changes.

#### Computers/MIS

Many aspects of fire department work today involve computers and the software packages they run. The district street reference map, reporting requirements to the State of Ohio for Fire and EMS activities, monitoring of department performance, pre-planning information management, hydrant, hose and inventory records and many more aspects of operating a modern fire department require data entry and analysis, and hence, computers.

Our last upgrade of MIS system components was in 2013. The system has remained stable through 2017 and meets most needs of the department in a supportable manner. During the end of the year, we adjusted our Microsoft Office licensing to meet current trends in cloud based software "residency' versus on each individual computer for staff with an assigned cpu. Another change made was a transition to an internet based telephone system. Presently, we are using the internet system of Cincinnati Bell telephone, with leased handsets as we transition from one station to another and then back to two, in 2017.

Our Mobile Data Computers (MDC), mounted in emergency response vehicles permit transmission of incident data for emergency response and comes from the County Dispatch Center. We are already on second and third generation replacement of the original equipment. Though we have replaced the original Panasonic Toughbook CPUs with less expensive tablet style CPUs as MDCs, there is no clear direction on this important aspect of emergency response --- either in software or hardware components. The department remains active in advocating a direction, but most of the control of this matter lies with Hamilton County.

The direction that MIS seems to be going for us is to "the cloud". When our software is fully located together on the cloud server of our software vendor, we are hopeful that data integration will fully return to our benefit.

#### Fire Hydrants / Water Supply

There are over 1460 fire hydrants in the Fire District. One hundred seventy-six (176) of these are "private". All hydrants are visited twice each year by fire department employees and caps and valve nuts lubricated, brush cleared away and the hydrant pumped dry of water for winter. Hydrant servicing requires about 60 days of department activity each year.

We continue private hydrant marking and mapping to improve our working knowledge of the many private hydrants that are essential in the district. Private hydrants are now marked with identifying numbers and color-coded bands of reflectorized material indicating their available fire flow in gallons per minute. The rate of private hydrant installation has slowed since our "catch up" efforts of several years ago and in the face of slower development growth.

The department implemented the "long-lay" relay system marking plan in 2013, first for those residents of Cunningham on the private "Shillito Place", then the Peterloon Estate and several other location have since been so marked. This effort continues and is on-going, as we continue to implement this important aspect of our "water supply strategy".

#### **SCBA / Personal Protective Clothing**

Regular repair of firefighting personal protective equipment is scheduled and in keeping with safety recommendations, personnel are instructed to wash gear on a regular basis. Excluding the SCBA, a firefighting ensemble of PPE costs about \$3000 per set of coat, pants, helmet, gloves, boots, hood and flashlight. We have saved approximately \$130 dollars per set of gear by switching from Morning Pride to Lion. In doing so we are still maintaining maximum thermal protection but have gained more mobility and faster drying time from internal and external moisture elements resulting in faster donning and doffing times.

Testing of air produced for firefighter breathing air by our in-house compressor and storage system was accomplished and the air quality continues to exceed federal standards for purity. Tested quarterly, we are producing Grade E breathing air, the highest quality air defined in federal regulations. Annual fit testing of all employees utilizing irritant smoke and department SCBA mask was accomplished.

In 2017, All SCBA units have been service tested by a qualified outside contractor in our continuing program of annual inspection and certification of the performance of our SCBA units.

#### **Dispatch Costs**

In 2017, the rate per dispatch was again examined by the County dispatch during the year. The rate was reduced to \$15 per detail. We will continue to monitor the fairness of this system and its application to MIHJFD.

#### Health & Wellness Program

With the closing of 2017, the Fire District completed its thirteenth year of the Health and Wellness Program. The Health and Wellness Program is the product of much research and planning to improve the health and performance of Fire District employees.

We continue a trend of "logging" over 1000 hours of "organized" fitness hours in recent successive years. The hours actually spent in fitness activity is much greater. "Above average" is the overall fitness level of our personnel and the participation of a broader group of employees in fitness activities both on and off duty is a result of a marked change in department attitude and culture.

Units continued to build fitness into training scenarios using real scenarios from the Essential Skill Set (ESS) as the basis, integrating physical activity with actual tools, equipment and scenarios. This activity is being recorded as TRAINING rather than FITNESS. For this reason, the actual activities of the department that promote fitness are more than are being recorded as such for record-keeping purposes. Our goal remains the same---to achieve and maintain a fitness level commensurate with the essential job functions of the employee.

As we have moved into our new facilities, we have begun to revisit the various components of the ESS and adjust them to reflect the increased work capacity of the staff and the opportunities to demonstrate this afforded by the new facilities with training and fitness as elements of design.

We continue to explore a path for routine physical evaluation and annual respirator clearance reviews that is consistent. Changes in the operation of health care providers in our region has made our desired consistency in this area hard to achieve.

#### **Knox Box Program**

The Knox box program continues to be an ongoing success. Since implementation approximately 27 years ago the program has been extremely successful.

Currently there are five important aspects to the Knox Program they are as follows

Commercial installations

We have approximately 95 commercial Knox boxes in the district. The Knox box contains keys, alarm system information, and contact information. These boxes

are checked on an annual basis during fire inspections. In 2017 16 new commercial boxes were installed.

#### Residential loaned boxes

The District has a total of 22 residential Knox box loaners. Residential loaner boxes are intended for short term needs when the occupant may have special needs that may keep them from answering the door during an emergency. In 2017 20 boxes were on loan.

#### · Residential gate access key switches

In 2017, we added 1 residential gate access key switch to the district. It is required that all residence with gates be equipped with a Knox key switch override for Fire access. The Knox system allows for immediate access without a gate code.

#### Key secure retention system

This system retains the Knox key in the vehicles and keys can only be released by individual PIN numbers. Every sixty days an audit trail is run on all retention boxes for record keeping.

#### Medvaults

The Medvault system allows for the secure storing of dangerous drugs with a "more secure" and trackable system than had been the case in the past.

#### Address Signs

In an effort to improve response accuracy and speed, the MIHJFD instituted the manufacture and installation of green address signs over two decades ago. It is a program that has found much favor across the region. The reflective sign business is still running strong and is self sustaining from revenues generated from sales.

In 2017, 26 reflective signs were installed in the district. This number is down from 2016 where we installed 67. We did not have a "promotion" event during 2017.

We continue to do some repairs from snow removal or other damage that was not negligence from the homeowner. We do this at no cost to the resident but we still are breaking even in the program.

In 2017 the price of the signs from our supplier went up but the price of our post went down. As a result we flipped the prices. A green or blue sign now cost \$15

dollars vs \$10 previous, and a post is now \$10 vs \$15 before. That leaves the total for people getting the combo at \$25. We are seeing an increase in decorative metal mailbox/post combinations this is causing an increase in simple "post" sales as there is often not a good way to mount the existing signs to decorative combinations.

We also purchased shorter green signs for the streets off of Remington that are popping up and have single or double digit addresses. The typical sign did not look natural.

Favorably received and very effective, we see continuing this effort into the future.

Related to the value of address signs, the department has marked three fire hydrants as "tanker refill" sites for our water supply contingency pre-planning. Beginning in 2014, we marked "drop points" along private drives on Cunningham Road to cover that section of Cunningham that had previously been termed "Shillito Place", Shawnee Run and Hopewell Road. The drop points will assist in establishing a water supply by relay pumping.

#### **New Equipment**

The year 2017 saw arrival and use of several new pieces of equipment...

We added a Lucas 2 CPR device to our EMS equipment on both of our ambulances. The device has been used multiple times and has been effective in crew efficiency in the management of the patient in cardiac arrest.

We purchased a Vortex technical rescue kit for confined space and high-angle terrain access and patient removal.

We had researched and ordered a replacement set of "lifting" air bags. To match our current system controllers and fitting, the devices were manufactured in Sweden. We await their arrival.