

April 2, 2024



RE: Orange Village Fire Department
Cost Benefit Analysis

Orange Village

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The following information outlines the current staffing and response model of the Orange Village Fire Department. It includes an explanation of daily staffing; a basic overview of personnel and apparatus staging and response; data pertaining to EMS and fire response, mutual aid response; ISO implications; and future growth of the Department. The information is intended to supplement ongoing discussions related to addressing the future needs of the Department and the Village.

RESPONSE COVERAGE

Daily staffing includes five (5) personnel from 0700-1900 and three (3) personnel from 1900-0700. While active efforts continue to recruit new and retain current members to maintain adequate daily staffing, the fire service in general has experienced a decrease in people entering the workforce. Therefore, there are occasions where the daily staffing will drop below five (5) personnel. Coverage at night is routinely at full strength.

The Village is divided into two (2) response zones, primarily for EMS response. Zone 1 contains the south portion of the Village, from Miles Road extending up to Harvard Road and includes all of Lander to the Pepper Pike border, Landerwood Glen, 30000 Chagrin and Beechmont Country Club. Zone 2 contains the north portion of the Village from Harvard Road to the northern and western borders. Historically, 74% of calls occur in Zone 2. A typical EMS response includes the rescue squad with two (2) personnel from its respective zone as well as a third member (typically the officer in charge) in a "chase car" from the Lander station. This person returns to the Lander station if not needed for transport. When fully staffed, both stations respond to all other requests for service such as fire calls and emergencies on I-271 northbound. Theoretically, the FD can handle two (2) EMS calls at once during daytime hours.

Currently, the Pinecrest station is staffed only when five (5) personnel are on duty. For example, if an employee calls off sick and no one is available to fill the shift, the Pinecrest station is closed for the day. All available personnel are therefore stationed at Lander Road. Staffing each station with only two (2) personnel vastly changes the response model and greatly reduces the overall flexibility of the FD's ability to handle multiple calls for service. Another downside to the "2 & 2" model is the reduction in firefighters stepping off the apparatus on a fire call "ready to work", meaning there is a delay while firefighters don their breathing apparatus and assemble necessary tools. Whereas four (4) firefighters stationed together increases the capabilities of the crew as initial assignments are communicated en-route to an emergency. This prepares the crew for cohesive and effective operation on arrival. Obviously, this scenario assumes there are no other active calls for service. It is not practical to assume a department of our size, no matter the number of stations, can predict or plan for every feasible scenario. Staffing both stations with two (2) personnel each decreases effectiveness and efficiency. When the FD is not at full daily staffing and the Pinecrest station is closed, all response occurs from the Lander Road station. In 2023, the Pinecrest station was closed for at least some portion of the day, if not all day, 139 times. During these periods of lower daily staffing, all responses originated from the Lander Road station. To reiterate, 74% of calls for service occurred in Zone 2, or the northern portion of the Village. Response times to Zone 2 are obviously longer.

EMS

EMS accounts for 70% of our overall annual call volume. It is typical of suburban fire departments to respond to a significantly higher percentage of requests for medical emergencies than fire related incidents. The FD's EMS transports are primarily to Ahuja Hospital. Transports between 2020 and 2023

included nearly 83% to Ahuja, 13 % to Hillcrest, 2% to SouthPointe and the remaining 2% between other area facilities. As stated earlier, 74% of all calls are generated from Zone 2. Overall, response times should decrease as most calls for service would be geographically closer to a relocated station.

MUTUAL AID

Another suboptimal aspect of the current two (2) station response model occurs when the FD is requested for mutual aid. During the day, when the FD responds to mutual aid in a neighboring community, depending on the resource requested and duration the resource will be out of the Village, remaining resources may have to be repositioned. For example, when the FD responds to mutual aid from the Lander station and will be required on scene for a fire, or will be transporting an EMS patient, the personnel at Pinecrest are relocated to the Lander station to be available to respond with reserve fire apparatus. Furthermore, the “2&2” model of staffing also does not allow an adequate response on a fire apparatus. The alternative is to have all on duty personnel respond, thus leaving the Village without a first responder unit.

Many adjacent and surrounding communities, which are larger in both land size and population, operate from one fire station model. In fact, Warrensville Heights has been discussing the consolidation of their two stations into a single station model to improve the same efficiencies discussed here.

ISO RATING

Relocating the station also has implications relating to the Village’s ISO rating. One main criteria ISO uses in the rating of a department is the travel distance of fire apparatus to commercial properties: 1.5 miles for an engine and 2.5 miles for a ladder/service company. ISO does not recognize the Pinecrest station as it is only staffed with an ambulance. Currently, 93% of the commercial buildings in Orange are **further** than 1.5 miles from the Lander Road station. A station located at the proposed Harvard/Brainard site would improve that percentage to 93% **within** a travel distance of 1.5 miles or less.

To maintain both stations and maximize ISO credit would require adding a fire engine at the Pinecrest station and implementing around the clock staffing, which would include the addition of extra personnel at night. Even the addition of extra personnel may not meet the manpower requirements to realize maximum credit from ISO. This would also require maintaining a third reserve fire truck.

THE FUTURE

As we look toward the potential for future development, the majority of the high-hazard, high-frequency requests for service will occur in the north end of the Village. The potential population increase of 40 to 50% through the end of this decade will directly correlate to an increase in the FD’s call volume. The current 74% of response to what is currently identified as Zone 2 will undoubtedly increase to at least 85%, simply by the increased density and type of development being planned.

Additional consideration should be given to the potential of expanding our staff to include some full-time firefighters and a fourth firefighter at night. As the department run volume increases, so will the run volume at night. Approximately 30% of calls occur between 1900-0700 hours. This includes mutual aid responses with all three on-duty members responding. The night time operations of the FD will be impacted by all of the development discussed earlier. As also previously mentioned, splitting the crew into the “2&2” model creates far more inefficiencies than benefits it would provide.

There may also be a future opportunity to partner with the Village of Woodmere. Orange has a decades-long history of providing mutual aid when Woodmere has not had the resources (both manpower and apparatus) to maintain adequate service to their residents. Most recently, Orange has been providing support for over two years. While not currently being discussed, the potential for a more permanent, contractual agreement between the two communities for Orange to provide fire and EMS service should be acknowledged.

SUMMARY

Relocating and consolidating into a single station located at the southwest corner of Harvard and Brainard Road, while not in the geographical center of the Village, would be situated in what is

considered to be the population center of the Village now, and for the foreseeable future. The benefits of the proposed location include:

- Shorter overall response time averages - as currently 74% of all service requests are in Zone 2.
- Faster response to I-271.
- Better highway access - provides quicker access to Harvard Road interchange
- Centralization of available personnel and apparatus
- More efficient deployment of human resources
- Flexibility deploying apparatus
- Eliminate need to reposition staff and equipment
- Faster return to quarters after EMS transports

Ultimately, a single-station model is more efficient when manpower is at full levels as well as having more advantages when manpower drops. Relocation centralizes available personnel and allows for a better deployment of apparatus and personnel.

Submitted,
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