



Overview



The safety of the citizens of Herculaneum must be one of the top priorities of City Government as decisions are made regarding the allocation of City funds. Public safety in the City of Herculaneum is a multi-faceted area of City government that includes police protection, fire and rescue protection, emergency medical services and emergency management. The City of Herculaneum must give serious attention to the improvement and expansion of these services. The City of Herculaneum must also direct attention to the various aspects of public safety that support these services such as: the number, type and location of fire hydrants; the size of water mains; the number, type and location of storm warning sirens; the number, type and location of street lights; emergency operation centers; centralized dispatching; community emergency response teams, City maps and the City emergency plan.

Emergency Management

The City of Herculaneum is in a vulnerable location for the possibility of a major emergency incident occurring within the City boundaries. The potential for an emergency incident occurring in the City of Herculaneum is heightened by the City's close proximity to the Mississippi River, the existence of railroad lines in the City and the passage of two large federal highways through the City limits. Unknown types and quantities of hazardous materials are transported daily by transport trucks, railroad cars and river craft through the city limits of Herculaneum. In addition, the City of Herculaneum is home to the largest lead smelter in the United States, the Doe Run Lead Company. Numerous hazardous materials are used in the smelting process and are brought in by trucks through the city streets of Herculaneum. The Doe Run Company also manufactures other products including sulfuric acid which is shipped from the company site. The risk of a hazardous material spill and/or fire is real in the City of Herculaneum.



As with any city, the City of Herculaneum is also susceptible to the occurrence of a



natural disaster including severe storms, tornadoes, floods and earthquakes. The City of Herculaneum witnessed the effects of backwater flooding as the Mississippi River and Joachim Creek water levels raised above flood levels in 1973 and 1993. The flood waters caused the closing of several streets and a major highway for several weeks. Although no tornadoes have occurred in Herculaneum in recent years, other Jefferson County cities have been struck by tornadoes. The City of Herculaneum has been struck by severe wind storms and straight line winds in recent history. Situated in the New Madrid earthquake region, the City of Herculaneum is vulnerable in the event an earthquake does occur in the region. There is a genuine possibility of a natural disaster occurring in the City of Herculaneum.

In the event of a natural disaster or hazardous material spill, the City of Herculaneum has several special situations that must be considered. There are three school buildings, a large nursing facility and a large retirement home within the city boundaries of Herculaneum. In the event of an emergency incident, there may be a need to relocate elderly residents from the nursing and retirement facilities and relocate students from the schools.



Airports located in the City of Festus and the City of St. Louis places the City of Herculaneum at risk for the possibility of an emergency involving a downed aircraft.

As the City of Herculaneum continues to experience growth in size, residential and commercial development and in population, the potential for major emergency incidents also increases.

Emergency Preparedness Plan

In the early 1990s, the City adopted an emergency preparedness plan for the City of Herculaneum. The plan was divided into several annexes that included direction and control, damage assessment, law enforcement, fire and rescue, public works, reception & care and resources & supplies. The emergency preparedness plan was developed by a committee consisting of members of the fire department, police department and Board of Alderpersons. The plan is being revised and will be placed in all City-owned buildings and the Fire Department headquarters.

Recommendations:

- a) The Mayor and Board of Alderpersons should appoint an Emergency Preparedness Plan committee to review, revise and update the current Emergency Preparedness Plan that has been adopted by the City. The committee should include representatives of the City's law enforcement, fire protection agencies, the Joachim Ambulance District, the Dunklin R-5 Schools, the Doe Run Company, the nursing and retirement homes, City businesses, private citizens and the Board of Alderpersons.
- b) The Emergency Preparedness Plan should be periodically reviewed, updated and revised bi-annually when the Master Plan is reviewed. The timetable for implementation should also be updated at this time.
- c) Mock disaster drills should be conducted to test the effectiveness of the Emergency Management Plan.

Emergency Management Director

The adopted Emergency Preparedness Plan does not provide for the position of Emergency Management Director, but designates the Fire Chief as the Emergency Operations Director. The City of Herculaneum is serviced by two separate fire agencies, each with their own Fire Chief. In the event of a major emergency incident within the city limits of Herculaneum, there is the potential for confusion over which individual or agency functions as Emergency Management Director.

Recommendations:

- a) The Mayor and the Board of Alderperson should create an Office of Emergency Management and hire an individual to serve as Director of Emergency

Management.

Emergency Operations Center

The adopted Emergency Preparedness Plan designates the City Hall building to serve as the Emergency Operations Center in the event of a major emergency incident occurring in the City of Herculaneum. The Herculaneum Fire Department station is designated as the secondary Emergency Operations Center. At the present time, the City Hall building does not have the capabilities needed to operate as an Emergency Operations Center. In the event electrical service is interrupted at City Hall, direction and control from the building is extremely limited. The City Hall building has battery operated emergency lighting, but no electrical generator to supply radios and other operations equipment with electrical service.

The Herculaneum Fire Department building receives its electrical service from the Doe Run Company and will continue to have electrical service when other areas of the City are without service. The Fire Department building also has backup generator capabilities and is capable of supplying radios and other operations equipment. The Fire Department has a 12.5 KW generator permanently mounted on a department vehicle which can be used to provide electrical service to an Emergency Operations Center.



Due to the close proximity of the City Hall and Fire Department buildings, there is a potential that both buildings could be rendered useless in the event of some major emergency incident. The Fire Department is currently in the process of developing a mobile command vehicle that can be relocated to a different area of the City should an emergency occur in the eastern part of town.

Recommendations:

- a) A back up emergency generator should be installed at City Hall with the capacity to provide electrical service for the entire building.
- b) The City Hall building should have the necessary communications equipment and capabilities needed for an Emergency Operations Center.
- c) Accurate maps of the City of Herculaneum are necessary immediately showing location of City streets, natural gas lines, water lines, sewer lines and other information that may prove pertinent in the event of a major emergency incident.
- d) Adequate emergency medical supplies, blankets, pillows, etc. should be purchased and stored in City Hall.

Emergency Warning Sirens

The City of Herculaneum has an early storm warning system composed of three (3) warning sirens strategically placed within the City Limits. The present system includes a Vortex R4 non-voice siren located near the intersection of South Joachim Avenue and Commercial Boulevard (Highway 61-67), a Vortex R4 non-voice siren located at the south end of the City on South Scenic Drive and a WPS



2909 voice siren located at 385 North Joachim Avenue. The two Vortex sirens in the City warning siren system rotate, which cause the sound from the unit to get stronger and weaker as the siren rotates. Neither Vortex siren has the capability of giving a voice message. The WPS 2902 warning siren is omni-directional and gives 360 degree coverage with a uniform sound. In addition, the WPS 2902 siren has the capability of broadcasting different recorded warning messages. The Vortex warning sirens have a 5000 foot radius area of coverage and the WPS warning siren has a 4800 foot radius area of coverage. The coverage area of the South Joachim warning siren includes the historic sections of the City as well as the North Scenic Drive and Riverview Drive sections of the City. The coverage area of the South Scenic Drive warning siren includes South Scenic Drive, the Westchester subdivision, South Commercial Boulevard and the Prairies at Friedberg subdivision. The placement of the South Scenic Drive warning siren is positioned



on a sloping area of the City so that the warning siren is only a few feet above the street level of South Scenic Drive. This position seems to prevent some of the projected coverage area from hearing the warnings.

The City of Herculaneum early storm warning system is activated by the City of Pevely Police Dispatcher on duty. The early storm warning sirens are to be activated when a severe thunderstorm or tornado warning has been issued by the National Weather Service; specifically when a storm has been reported in an area east of Highway 21 and between Highway 110 and Highway 141. The North Joachim Avenue warning siren has four recorded messages to give residents early notification of an impending storm or hazardous situation.

The present early storm warning system will not provide coverage to the two new residential developments in the western section of the City. Additional warning sirens will need to be added to the present system to afford notification to all residents of Herculaneum.

Recommendations:

- a) The two rotating early warning sirens with no voice capabilities should be replaced with omni-directional voice warning sirens.
- b) The South Scenic Drive early warning siren should be moved to a more desirable location on South Scenic Drive to afford better coverage to the southern sections of the City.
- c) Additional early warning sirens should be purchased and installed to provide coverage to the new developments in the western sections of the City.
- d) An additional early warning siren should be purchased and installed in the Doe Run voluntary buyout zone, if new development of any kind occurs in the area.
- e) A review of the policies and guidelines for the activation of the early storm warning sirens should be conducted. Steps should be taken to ensure that the dispatchers responsible for the activation of the early warning sirens are adequately trained and informed.
- f) Herculaneum must be represented in emergency planning processes with Jefferson County on a regular basis.

Emergency Dispatching

In the early 1990s, the Cities of Herculaneum and Pevely joined together to establish a emergency 9-1-1 phone reporting system to serve both cities. All 9-1-1 emergency calls are directed to and handled by the Pevely Police Dispatcher at Pevely City Hall. Depending on the type of emergency, the emergency call is then directed to one of three dispatching agencies. All emergency requests for Herculaneum Police assistance are handled and dispatched by the Pevely Police Dispatcher. All emergency phone requests for fire and rescue services from the Herculaneum Fire Department or the Dunklin Fire Protection District are received by the Pevely Police Dispatcher and then transferred to the Jefferson County 9-1-1 Dispatch Center for dispatching.

All emergency phone requests for emergency medical services from the Joachim-Plattin Ambulance District are received by the Pevely Police Dispatcher and then transferred to the Festus Police Department for dispatch. Each individual emergency service agency pays dispatching fees to their respective dispatch center.

Although one centralized dispatch center to receive and dispatch all emergency responses in the City would be more efficient and cost effective, the City of Herculaneum has no power or authority to dictate what dispatch center is utilized by the fire protection agencies or ambulance districts.

Police Protection

The City of Herculaneum is experiencing rapid residential growth with an estimated population of 6000 by the year 2010. In order to keep pace with the demands for increased services the governmental body, residents, and community leaders are compelled to plan for the future.



The Herculaneum Police Department is a crucial component for positive community growth, providing a wide variety of services and protection. Police services must continue to grow with the community and continue to improve the quality of service.

The police department currently has a staff of fifteen personnel:

- ◆ Chief of Police
- ◆ Asst. Chief (Captain)
- ◆ Detective Sergeant
- ◆ Two Corporals (Shift Supervisors)
- ◆ Eight Patrol Officers
- ◆ Police Clerk
- ◆ One Reserve Officer (no compensation)
- ◆ One Reserve Officer Bailiff

The police department will handle approximately 3,000 assignments in FY2006 ranging from sexual assault, to burglary, to felony assault. Each year will bring an increase to the number of calls for service, even though the number of specific crimes may increase or decrease. The immediate need for an additional detective has been demonstrated. The workload for the department's detective has created a backlog, thus causing a delay in the preparation of cases for prosecution. The workload for the department police clerk has also grown as the number of personnel has increased; thereby increasing the amount of paperwork to be processed.

This has caused the clerk to focus on clerk duties, reducing the amount of time for secretarial duties. The need for a part-time clerk has been demonstrated by the use of part-time help during the summer when a college student has been provided to the police department by a grant to help with clerk duties.

In April 2004, City leaders began transitioning the police department into a more professional police force by adding new personnel that have been educated through various colleges and universities. The Chief and the Assistant Chief have attended the top two schools in the world for advanced command training.

Annual salary for a new officer is 29,500.00 with top pay on the salary matrix at 37,400.00. This salary matrix was established in 2004 as part of the transition to attract qualified personnel. The Herculaneum Board of Alderpersons proved by establishing a competitive salary matrix they were able to hire new leaders of the agency with a combined ninety years of police experience and an overall experience level for the agency of over 150 years.



Liability is a constant concern and must be at the top of the list when setting priorities other than keeping pace with salary and benefits. Training is the number one priority versus liability and must be funded above the current budget to continue to raise the level of professionalism of each officer.

The police department has received a grant from the Missouri Division of Highway Safety (MDHS) FY2005-06, wherein a portion of the money has been directed toward a project to start building a mobile digital video system for in-car video. The purpose of in-car video is to capture evidence on video and to record the actions of police officers. This system will help reduce the liability for the City and will add a needed defense mechanism for the officers and the City against frivolous lawsuits. With matching funds from MDHS the police department should be able to purchase two video systems per budget year and complete this project in FY2009. The police department continuously searches for grants to aid in financing projects and purchasing equipment.

The Dunklin R-5 school district has expressed future interest in both a School Resource Officer and a D.A.R.E. Officer. The need for both positions has been documented by student behavior and strong consideration should be given to financing this position. Combining both positions for one officer would be a financial strategy, but could diminish the impact of the SRO at the High School. This project should begin FY2006-07. A grant application has been written for this position.



Traffic safety is foremost on the minds of drivers and residents, especially in and around the Doe Run Truck Route, I-55 and Scenic Plaza at McNutt. Future growth will add more congestion and require additional officers for enforcement projects. Currently, the police department spends one to two hours per day Monday through Friday directing traffic in the late afternoon and early evening. The Missouri Department of Transportation has planned to install signal lights at I-55 in the Spring of 2006 and continues to work on other projects in that area that have been identified by the police department as a problem. Once the lights are installed, officers will be able to concentrate on other issues, such as, increasing patrol efforts during that time period.

In FY2004-05 the City authorized the police department to purchase a Traffic Safety Speed Trailer that is currently being utilized on city streets that have been identified as locations prone for speeding.

Fleet management is also a concern due to half of the fleet being comprised of patrol vehicles that are between five and seven years old; with high mileage. The City is currently reviewing a lease-purchase plan FY2005-06 to solve the current problem with a suggested future management plan to rotate the vehicles



at 49,000 miles before repair costs become excessive and a reasonable trade-in allowance still exists. This plan would result in the rotation of three 2003 Ford Crown Victoria in FY 2006-07, because each will have mileage over 50,000 before the new budget goes into effect. Once the fleet has been improved, vehicle rotation should take place every other year to maintain the fleet management plan.

Mobile Data Terminals (MDT's) installed in patrol cars and connected to the Records Management System (RMS) would reduce response times and increase visibility. Officers would be able to write reports while stationary in neighborhoods and around businesses, rather than being out of sight while inside the station. In addition, the Missouri Uniform Law Enforcement System (MULES) can be used by way of the MDT; allowing officers to conduct intelligence and record checks from the patrol car while engaged in patrol activities. This would add a degree of security to the information gathered by way of reducing to zero the amount of people hearing transmitted radio traffic, with only the investigating officer knowing sensitive information. Additionally, the police department has divided the City into three patrol sectors to increase neighborhood saturation, ensuring that each area is sufficiently protected. MDT's would enhance this initiative and allow officers to write reports in-car and download the reports into RMS at the end of the officer's shift. This project will be proposed in the future for FY2010.



As personnel are added to the department, the need for additional space will become crucial. The police department now occupies the basement of City Hall as of September 2005. This space is sufficient for personnel to function, but lacks storage space for equipment, evidence, lockers and records. Planning for additional space should begin as soon as possible FY2011. A building project of this magnitude commonly requires five years to completion. Jail facilities in the City of Herculaneum are non-existent. Currently the City of Pevely provides jail services to Herculaneum under contract.

The City is the recipient of a \$67,000.00 grant to build a hiking trail on Doe Run property located in the flood plain of the Joachim Creek. This is a wooded area west of the Joachim Avenue Bridge and will become a huge attraction requiring police patrol. Vehicles will be restricted from the trail, requiring officers to do foot patrol of the trail. In order to effectively patrol the trail and keep officers available to respond to calls for service without delay, a Police Bike Patrol Program must be established. This program should be implemented shortly after the trail has been built FY 2007. The bike patrol would benefit the entire City not just the hiking trail. Officers would haul a bike by vehicle to different neighborhoods and spend time on patrol until needed elsewhere.



The need for additional personnel in the future will be demonstrated by the demand for services. Currently, the population-to-officer ratio is 344 citizens to one officer. This is based on nine officers available for patrol services. This ratio is sufficient for patrol services at the moment, but doesn't account for the 60,000-plus vehicles that pass through the City every day, as reported by MoDOT. One injury accident on the Interstate can consume several officers for a long period of time. The traffic count for McNutt and Commercial Roads has increased significantly over the last year to nearly 20,000 cars per day and the traffic at McNutt Road and Scenic Plaza has jumped to nearly 10,000. These numbers change the population-to-officer ratio (based solely on the I-55 traffic volume) from 344 to more than 6666 citizens per officer during daytime hours when the traffic volume is at its peak. These numbers do not reflect the population increase regarding the Dunklin R-5 School District. Students, staff, and parents cause the population and traffic volume to increase, thus creating the need for police patrol at the school and on adjacent streets. Issues occur within the school from time to time, requiring officers to take enforcement action within the building, thereby reducing their amount of time for patrol.

Business growth will also increase the need for more personnel FY 2015. The community should expect to increase police personnel to twenty-five full-time officers and three full-time police clerks.

Recommendations:

- a) Facilities for the Herculaneum Police Department should be included in any plans for a new City Hall/Municipal Complex. The new facilities should include a space for offices, a City jail, dispatching room, evidence room, equipment storage, record keeping, personnel lockers, break room and general storage.
- b) Additional personnel should be hired as the City's population increases.
- c) Replacement programs should be implemented to maintain state of the art communications equipment, including mobile radios and hand-held radios.
- d) A fleet management program should be implemented to insure that police vehicles are rotated in a manner that reduces repair costs and allows for a reasonable trade-in value of department vehicles.
- e) Replacement programs for officer vests, patrol shotguns and other personnel protective equipment should be implemented.
- f) Programs should be implemented that provide for motorcycle patrol and bicycle patrol.
- g) The police department should assist to provide a D.A.R.E. officer and a School Resource Officer for the Dunklin R-5 School District.
- h) The police department should be equipped with an all-terrain 4-wheel-drive Gator for Patrol and Search in wooded areas and trails.
- i) Replacement of the computer system and updates to the software should be made within the Police Department.
- j) Additional funding should be provided for the training of all Police Department personnel.
- k) A mobile digital video system for in-car video should be added to all Police Department vehicles as funding becomes available.
- l) Mobile Data Terminals should be installed in patrol cars and connected to the Records Management System to reduce response times and increase visibility.

Emergency Medical Service

Emergency medical service in the City of Herculaneum is provided by the Joachim-Plattin Ambulance District. The ambulance district staffs three ambulance stations with full-time paramedics and two ambulances per station. Ambulance District stations are located in Festus (Station #1), Pevely (Station #2) and in the rural Festus area (Station #3). The City of Herculaneum is serviced primarily by Station #2. With the continued growth of the City to the west, the need for an ambulance district station inside the city limits of Herculaneum is in the immediate future.

On many emergency medical incidents in the City of Herculaneum, the Joachim-Plattin Ambulance District personnel receive emergency assistance from members of both the Herculaneum Fire Department and the Dunklin Fire Protection District. Each fire protection agency in the City of Herculaneum has personnel who have received emergency medical training, with each agency having several emergency medical technicians and/or paramedics.

Two air rescue helicopter services are also available to assist the emergency medical service providers in the City of Herculaneum. ARCH, based in St. Louis, and Air-Evac based in St. Clair and Farmington are available for air transport in emergency incidents.

Recommendations:

- a) The City of Herculaneum should assist the Joachim-Plattin Ambulance District in locating a station within the city limits of Herculaneum.
- b) All City employees should receive training in basic emergency medical procedures.
- c) Automatic external defibrillators (AEDs) should be purchased for each City owned building and AED training should be provided for all City employees. A plan should be implemented to purchase additional AEDs to be placed in City owned vehicles.

Fire Protection

Since the incorporation of the City of Herculaneum in 1972, fire protection has been a City service provided by outside agencies. Until the expansion of the City to the area west of Interstate 55, all fire protection services for the City were provided by the Herculaneum Fire Department, an all volunteer department, under contract with the City. In 1974, the Dunklin Fire Protection District was formed by a vote of the residents of the City of Pevely, the town of Horine and surrounding areas. District boundaries included areas to the west of the city limits of Herculaneum, but were not included in the existing city limits. As the City expanded west and annexed areas located in the Dunklin Fire Protection District, most new residential construction fell under the jurisdiction of the fire district. Residents of the Dunklin Fire Protection District must pay a property tax for their fire protection service.



ISO Classification

The Insurance Services Office (ISO) is an organization that prepares reports on local fire defenses. The insurance industry evaluates a community's risks. Once ISO has completed their assessment and accompanied report, they sell the information to insurance underwriters for use in rate setting. The system they use has ten different public fire protection classifications, which define the various levels of public fire protection. Property insurance premiums are sometimes based on the insurance classification rate and the type of occupancy asking for fire insurance. Notably, life safety issues are not considered in this evaluation system, and the fire department section of the evaluation does not include a review of public education activities or fire prevention.



The ISO report rates a city by ten classifications. A Class One rating is considered to be the best rating. The ISO publishes a document titled "Fire Protection Rating

Schedule” that provides a list of those features that have a significant influence on minimizing damage once a fire has started. One element that is evaluated includes the handling of fire alarm communications. Another element is a fire department’s portion of water supply that is set aside for fire fighting purposes.

Commonly, a City will have a different grading than the fire department, because the overall score is only determined after evaluating the city’s water system. The public fire protection class given to the city is based on the percentage of credits that the city earns in the evaluation process.

The City of Herculaneum received its last insurance evaluation in March of 2005. At that time, the “Receiving and Handling of Alarms” criteria received 7.81 points out of 10, rating the fire alarm as class 3. The “Water System” criteria received 31.26 points out of a possible 40 for a Class 3 rating. The Herculaneum Fire Department received 21.24 points out of a possible 50 for a Class 6 rating. The City was assessed a total of -7.31 points for this divergence. The overall credit for the City was 53.18 points out of a possible 100. The City of Herculaneum was given an overall Class 5 rating, a drop in classification of 2 classes.

The ISO report does not provide a list of detailed recommendations with specific actions that would improve the rating. However, a brief review of the points assessed seems to indicate that the needed improvements that would result in a change of classification are primarily in the Fire Department. The biggest needs of the fire Department as indicated by the ISO report is the need for a ladder company, reserve pumpers and a reserve ladder company. Other items of concern are the need for more personnel and the lack of training facilities.

Data for the Dunklin Fire Protection District is not available, but the ISO rating for the sections of Herculaneum protected by the Dunklin Fire District is also a Class 5.

Herculaneum Fire Department



The Herculaneum Fire Department was organized in 1951 by members of the now defunct Veterans of Foreign Wars Post 5168. Prior to the formation of the fire department, fire protection for the town of Herculaneum consisted of hose carts strategically placed around town and manned by volunteers from the St. Joe Lead Company and other town residents.

When a fire was reported in Herculaneum, the St. Joe siren was sounded a pre-determined number of times to indicate to the volunteers the area of town the fire was located in. Volunteers would respond to the nearest station and take the hose cart to the scene and fight the fire. After a disastrous Christmas Day 1947, when fire destroyed the Herculaneum High School, several groups discussed the need for an organized fire department. The formation of a fire department did not occur until the VFW members disbanded the post and used the remaining funds to purchase the department’s first fire truck. From the beginning, residents were required to purchase

a fire tag if they wanted fire protection from the fire department. The fire department continued to function as a fire tag supported fire department until 1972. After the City of Herculaneum was incorporated, the first Board of Aldermen elected to contract with the Herculaneum Fire Department for fire protection services. At this time, the City of Herculaneum still contracts with the Herculaneum Fire Department for fire protection in the historic sections of the City and along Interstate 55.

Fire Station

The Herculaneum Fire Department operates from one fire station located at 848 Broad Street in the historic section of the City. Built in 1970-1971, the fire station is located in a 2400 square foot metal building. Dedicated in March of 1971, the fire station originally housed two pumper apparatus, one emergency/equipment truck and a small jeep. The original building had three apparatus bays, one open meeting area and a basement area of approximately 600 square feet. When a new pumper was added to the department fleet in 1980, a fourth overhead door was added and the original open meeting area became a fourth apparatus bay. Since the building's original construction, an office area and small radio room have been added to the rear portion of the fourth bay and the basement area has been finished and now serves as the department meeting/training room. There has been no additional construction to increase the size of the building since 1971.



As the fire department has grown in the past thirty five (35) years, the fire station has become increasingly inadequate to house department equipment. Currently, the building houses two commercial fire apparatus, one rescue truck, two brush vehicles and a water rescue boat. One bay actually holds three different fire department vehicles. An additional heavy rescue truck is housed in the original firehouse next to the main fire station. The original fire station is in serious need of repair and should be demolished. The fire department also owns a twenty four (24) foot utility trailer that is in the process of being converted to a mobile command vehicle and also a technical rescue trailer. The trailer currently is parked in an unprotected area of the fire station parking lot. The present fire station lacks adequate heating/air conditioning, an exhaust removal system and adequate lighting. Training facilities at the current fire station are non-existent and there is no provision for the drying of fire hoses.



As previously stated, the fire station is located in the oldest and most eastern section of the City. Located directly across from the Doe Run Lead Company, the fire station is located in the voluntary buyout zone. At the time of this writing, most of the surrounding residences have been demolished and the population of the immediate surrounding area is below twenty five (25) residents. With the closure of the Joachim Avenue Bridge, access to southern and western sections, where most of the commercial development and residences are located, is severely hindered. Another aspect of a volunteer department that must be taken into consideration is the proximity of the



volunteers to the fire station. Currently, many of the volunteers live in the southern and western sections of the City. The volunteers living in these areas must travel through traffic congestion and other obstacles to reach the fire station and then in many instances travel back through the same areas with the fire equipment.

In summary, the current fire station is inadequate to house the fire apparatus owned by the fire department. The fire station is not located in a centralized area of the City for which the fire department is responsible for protecting. The fire station is no longer located in a heavily populated or commercially developed area. The infrastructure of the current fire station is severely inadequate and in some respects totally lacking. The Herculaneum Fire Department has outgrown the current fire station and for the department to be able to meet the needs of the future, a new facility must be built.

Fire Department Equipment

The Herculaneum Fire Department fire fighting/rescue apparatus consists of the following equipment:

- a) 1994 Pierce Arrow Rescue Pumper 1500 GPM
- b) 1989 American Eagle Pumper 1000GPM
- c) 1989 Light Rescue/EMS with air cascade
- d) 1993 Ford 4 X 4 Brush Truck
- e) 1954 Willys 4 X 4 Brush Truck (jeep)
- f) 1999 Water Rescue Boat
- g) 1966 GMC Heavy Duty/Technical Rescue
- h) Foam Unit on trailer
- i) Mobile Command/Technical Rescue Trailer



As a general rule of thumb, fire department pumpers that reach twenty-five years of age should be removed from front-line service and maintained as reserve pumpers. At the present time, the 1989 American Eagle is approaching reserve pumper status and will need to be replaced. The 1993 Ford brush truck is a standard one-ton pickup that was not manufactured for fire fighting use. The vehicle has had a water tank and pump added, and while it serves the basic functions for wild land fire fighting, it should be replaced. The fire department would like to purchase a midi-pumper that could replace the light rescue and the brush vehicle. The fire department fleet does not currently have a ladder truck or any reserve pumpers. During the recent 2005 ISO evaluation, the department was cited both for not having a ladder truck and for not having reserve pumpers.

The Herculaneum Fire Department apparatus fleet carries all NFPA required fire fighting equipment including ladders, fire hoses, self contained breathing apparatus, forcible entry equipment, generators, nozzles, adapters and other basic fire fighting tools.

The fire department also carries vehicle extrication and stabilization equipment, hydraulic rescue tools, air bags, a thermal imaging camera, ventilation fans, confined

space rescue equipment, fire fighting foam and foam appliances, portable lighting, rescue rope and gas detection equipment. Various types of emergency medical equipment are also carried by the fire department, including an automatic external defibrillator.

The Herculaneum Fire Department equipment also includes an eighteen (18) foot jon boat that is used for water rescues. The boat is equipped with a 60HP Yamaha outboard motor. The boat carries basic water rescue equipment including ropes, life jackets and lights. Other specialized water rescue equipment includes underwater cameras, underwater communications and four (4) complete sets of SCUBA gear with full face masks.

Plans are being developed for the conversion of the utility trailer into a mobile command unit that can be used on large scale incidents, or in the event of natural or man made disasters.

The fire department needs to make plans to purchase a ladder truck with an aerial device of no less than seventy-five feet. The fire department also needs to make plans to replace the 1989 American Eagle pumper in the near future and add the midi-pumper to the department fleet. Older replaced vehicles should be maintained as reserve apparatus in accordance with the ISO recommendations.

Personal Protective Equipment

The Herculaneum Fire Department issues full personal protective equipment (PPE) or turn-out bunker gear to all members. Each volunteer is issued PPE that includes a helmet, bunker coat, bunker pants, boots, nomex hoods, hand-held light and gloves. Additional PPE is issued for use in wild land fire fighting. Several of the volunteers enhance or add to their protective equipment by purchasing equipment with their own funds.



Each volunteer has a hand-held radio issued to them for use on the scene of an incident. In addition, the fire department has sufficient self-contained breathing apparatus (SCBA), so that each volunteer has a SCBA to use on the incident scene.

The fire department replaces the full personal protective equipment approximately every ten (10) years. The PPE currently in use is approaching the replacement date in the very near future. Boots, gloves, hoods, etc. are replaced on an as-needed basis.

The fire department also issues each volunteer a complete Class A uniform to be used for formal meetings, memorials and other special occasions. Class A uniforms are also replaced and purchased as needed.

Fire Department Staffing

The Herculaneum Fire Department is an all-volunteer fire department that currently has fifteen (15) volunteers on the active roster. None of the volunteer fire fighters receive any type of compensation for their service.

The administration of the fire department consists of a Fire Chief, an Assistant Chief and two Captains. At the present time, seven (7) of the volunteers have completed the Firefighter I & II programs and three (3) of the volunteers have completed Firefighter I (before the Firefighter II program was added). Ten (10) members have completed the Emergency Medical Technician (EMT) certification and one member has Paramedic certification. Four (4) members of the department are trained as underwater rescue divers and serve on the department's dive team. All members of the department receive certification in cardio-pulmonary resuscitation (CPR) and automatic external defibrillator (AED) training.

The major staffing inadequacy facing the fire department is the availability of adequate personnel to respond to incidents during certain times of the day. At the present time, manpower is at a minimum during the morning and afternoon time periods. As an all-volunteer department, no member is required to be "on-call" at specific times, or to stay at the fire station. When an incident is reported, the volunteers are alerted by a paging system and those volunteers who are available respond to the incident. At the present time, the Herculaneum Fire Department is receiving automatic mutual aid from the Dunklin Fire Protection District during the daytime hours.

The fire department is constantly taking steps to increase the number of volunteers who are available to respond to incidents. Dwindling population in the area served by the department, the lack of compensation for service, and the fact that individuals are too busy to volunteer are all reasons why the recruitment of new firefighters is a difficult task.

As a result of this lack of manpower, the time has come for the fire department to have one or possibly two (2) full-time firefighters to man the fire station during the daytime hours. While many do not feel the number of fire department incidents warrant full-time firefighters, one only has to imagine what happens when there is no one to respond. Individuals hired as full-time firefighters could assume several other functions including inspections, pre-plans, maintenance of building & apparatus and public relations training.

Other possible solutions to this staffing problem is the initiation of a program where volunteers receive a stipend for responding to calls and meetings, the training of City employees to serve as volunteers and the recruitment of volunteers from outside the City limits.

Fire Department Training



In the volunteer fire service, one of the most important aspects is that of making sure the volunteers are adequately trained. Although training is such an important part of any type of fire department, training in a volunteer fire department is also very difficult. Since many volunteers cannot always attend training sessions due to personal commitments, or the simple lack of dedication, some volunteers are better trained than others.

The Herculaneum Fire Department has always tried to do as much in-house training as possible. In-house training has included pump training, driver training, search & rescue training, hose evolutions, ladder training, vehicle extrication and other areas of training vital to a volunteer being properly trained. During the in-house trainings, different members of the department will lead their fellow firefighters in the training session.

Unfortunately, the availability of training facilities for the Herculaneum Fire Department is extremely inadequate. The department has a small meeting/training room in the fire station and a limited amount of audio-visual equipment. Many times the training facility is an abandoned building, an open field or the parking area of one of the schools. The recent ISO evaluation cited the lack of training facilities and the use of said facilities for the Herculaneum Fire Department.

Many members of the fire department attend various classes and demonstrations at regional fire schools or those sponsored by neighboring departments.

An effort should be made to construct a training facility in Herculaneum or in conjunction with other neighboring departments close to our department. In the past, attempts have been made to develop a county training facility, but the plans are never carried out. The construction of a training facility is an expensive proposition and probably something most small volunteer fire departments cannot fund individually. Perhaps the time has come for the various cities in Jefferson County to join with the county fire departments and junior college and build this training facility.

Calls for Service

The Herculaneum Fire Department responds to a variety of calls for service within the city limits of Herculaneum. Included in these calls for service are structural fires, vehicle fires, grass & vegetation fires, non-structure fires, check the building, emergency medical calls, vehicle accident responses, alarms sounding, fuel spills and leaks, wash downs, electrical wires and water rescues. The Herculaneum Fire Department also responds to numerous mutual aid assistance calls to the neighboring fire departments.



Motor vehicle accident and emergency medical responses account for the largest percentage of calls for service for the Herculaneum Fire Department. The numbers can be expected to increase dramatically in the coming years as more residential and commercial development occurs in the City. New development brings more residents, more visitors and more traffic to an area, which greatly increases the chances for fire department responses.

As new commercial developments locate in Herculaneum, the fire department is faced with the potential for new emergency scenarios that previously did not exist in the City. The addition of restaurants, multi-family dwellings, automobile dealerships, large "box" stores and light industrial facilities can easily tax the existing equipment and manpower available to the fire department. As new developments are allowed into the City, serious consideration must be given to the types of resources needed

by the fire department to respond to the new “breed” of emergency incidents in addition to what already exists.

Automatic & Mutual Agreements

In an effort to provide additional resources and personnel during an emergency event, many Jefferson County fire agencies have entered into automatic aid agreements.

The Herculaneum Fire Department currently has an automatic aid agreement with the Dunklin Fire Protection District for all fire department responses in the City of Herculaneum during the late morning and early afternoon time periods. The Dunklin Fire Protection District is automatically dispatched by Jefferson County 911 Dispatch to assist the Herculaneum Fire Department whenever a call for fire department response occurs.

As commercial development continues to occur in western and southern sections of the City, the Herculaneum Fire Department is investigating the possibility of establishing additional automatic aid agreements.

The Herculaneum Fire Department also operates under the provisions of the Jefferson County Mutual Aid Agreement. This mutual aid system is the mechanism for the deployment of additional apparatus and personnel when large-scale emergencies occur. Mutual aid is not the same as automatic aid, in that it must be requested by the Herculaneum Fire Department only after all department resources are exhausted. Mutual aid responses for the Herculaneum Fire Department are pre-determined and are stored in the Jefferson County 911 Dispatch Center computer database. All mutual aid provisions in Jefferson County are reciprocal among the various county fire agencies. The Herculaneum Fire Department regularly reviews all pre-planned mutual aid responses and makes necessary adjustments as needed.

Mutual aid assistance is also available to the Herculaneum Fire Department through the Missouri Statewide Mutual Aid System.

Preplanning

During the 2005 ISO evaluation, the fire department received twenty-three (23%) credit for training. To receive maximum credit, pre-planning inspections of each commercial, industrial, institutional and other similar type of buildings should be made twice a year by department members. Records of the inspections should include complete and up-to-date notes and sketches.

Due to the fact that the Herculaneum Fire Department is an all-volunteer department, it is very difficult for these pre-plan inspections to be made. The fire department has toured the school buildings, institutional buildings and the major commercial structures in the past, but there is a definite need to update. The biggest deterrent to these inspections being completed is scheduling. Without any full-time personnel, it is difficult to expect volunteers to give up their limited free time to make these inspections. While some inspections can be made on department meeting nights, this time is limited as well due to vehicle & building maintenance, training and other department duties that must be performed.

The pre-plan inspections could be completed by the fire department if there were full-time paid firefighters available. As part of their daily duties, the paid firefighters could conduct the inspections and then provide the other firefighters with their findings and sketches. The pre-plan inspections could be part of the job description for a City Fire Marshal, should the City elect to employ one.

Funding the Fire Department

The Herculaneum Fire Department is organized within the State of Missouri as a not-for-profit corporation. Ownership of the fire department belongs to the members of the fire department and is not governed by any city or tax-supported body.

Since 1972, the City of Herculaneum has elected to contract with the Herculaneum Fire Department to provide fire protection and rescue services to the City of Herculaneum (excluding the sections of the City located in the Dunklin Fire Protection District). Currently, the City and fire department are in the second year of an unprecedented three (3) year contract which pays the fire department an annual amount of one hundred ten thousand (\$110,00.00) annually. Prior to the current three-year agreement, the fire department operated on a yearly contract with the City.

The current contract between the Herculaneum Fire Department and the City of Herculaneum expires on June 30, 2007. At that time, the fire department and City will need to negotiate a new contract for fire services. To meet the needs for personnel and new equipment necessitated by the City’s continued and projected growth, the contract amount will need to be increased significantly in the future. Efforts should be made to increase the length of said contracts to allow for the planning of the City’s future fire protection.

Dunklin Fire Protection District



The Dunklin Fire Protection District was organized as a tax-supported fire protection district in 1974. The fire district was formed from two small volunteer fire departments – the Horine Fire Department and the Pevely Valley Fire Department. The Dunklin Fire Protection District had no jurisdiction inside the City of Herculaneum until new areas were annexed into the City. The Dunklin Fire Protection District provides fire protection services to the Prairies of Friedburg, the Providence and the Stonewater developments in the western part of the City. The City of Herculaneum does not have any administrative function with the Dunklin Fire Protection District.

The Dunklin Fire Protection District has its headquarters and only fire station located at 1987 Highway Z in Pevely, Missouri. The district has six paid full-time employees that include the Fire Chief, the Fire Marshal and four (4) firefighters. The fire station is staffed during the daytime hours by two firefighters and by one firefighter during the remainder of the day.



The Dunklin Fire Protection district firefighting apparatus consists of a 2000 Ferrara 75' Ladder Truck, a 1994 Saulsbury Pumper/Rescue, a 1989 Pierce Pumper, a 2002 Fouts Brothers Brush Truck and a foam trailer. All equipment is housed at the Highway Z fire station.

The Dunklin Fire Protection District responded to seven (7) calls for service in the Prairies of Friedburg subdivision located in the City of Herculaneum during 2005. The calls for service included emergency medical service, a smoke alarm sounding, a flue fire and motor vehicle accidents. Although there will be an increase in the number of calls for service as a result of the Providence and Stonewater developments, the number of calls responded to in Herculaneum by the Dunklin Fire Protection District will represent a small percentage of their overall call volume.

The Dunklin Fire Protection District fire station is located four (4) road miles away from the entrance of the Prairies of Friedburg subdivision. The fire district can respond to the area either by way of Interstate 55 or through the town of Horine. The district will be slightly closer to the entrance to the Providence subdivision by way of Interstate 55 and closer to Stonewater by way of Horine. Whenever the Dunklin Fire Protection District accesses their area by way of Interstate 55, their apparatus must pass through the area protected by the Herculaneum Fire Department. Plans call for an additional fire station to be built near the subdivision area if a tax increase is approved in the future. Previous attempts at a tax rate increase have been defeated numerous times. This tax was passed in August 2006.

Under ideal conditions, all areas within the incorporated city limits of Herculaneum should be under the jurisdiction of the Herculaneum Fire Department. The City of Herculaneum should investigate what legal steps can be taken to bring all areas of the City under the coverage of the Herculaneum Fire Department.

Recommendations:

- a) Funds should be made available for the construction of a larger and more centralized fire station for the Herculaneum Fire Department.
- b) Funds should be made available for the purchase of new fire apparatus including a ladder truck, a commercial pumper and a midi-pumper in accordance with the 2005 ISO evaluation. Older apparatus should be maintained as reserve apparatus.
- c) Funds should be made available for the employment of two paid firefighters to staff the fire station during times when volunteers are not available.
- d) Campaigns, programs, and/or policies should be implemented to provide additional volunteers for the Herculaneum Fire Department.
- e) The City of Herculaneum should create the position of Fire Marshal and employ an individual that could serve as a fire investigator, fire inspector and a full-time firefighter.
- f) Funds should be appropriated for the replacement of personal protective equipment (PPE) for the volunteer firefighters. Funds must also be made available for the purchase of new equipment and the replacement of outdated equipment.

- g) Funds should be appropriated for the construction of a training facility for firefighters either as a local project or as a joint city/county project.
- h) The City of Herculaneum should increase the amount of money budgeted to the Herculaneum Fire Department, so that personnel, equipment and other ISO requirements can be met. Contracts between the Herculaneum Fire Department and the City of Herculaneum should be negotiated for additional funding and number of years.

Fire Hydrants



An important part of fire protection in any city is the availability of fire hydrants to supply water to the fire protection agencies. Although the City of Herculaneum has fire hydrants strategically placed throughout the City, many areas of the City lack a sufficient number of fire hydrants which leaves many residences and buildings without close proximity to a fire hydrant. A general rule of thumb used by the Insurance Services Office (ISO) is that fire hydrants should be spaced not to exceed five hundred (500) feet between hydrants in residential areas and not to exceed three hundred (300) feet in commercial areas. Fire hydrants should be within two hundred fifty (250) feet of any building being protected.

In the City of Herculaneum’s fire hydrant system there are one-hundred-sixty-nine (169) fire hydrants and fourteen (14) flush hydrants. Thirty (30) of the one-hundred-sixty-nine (169) fire hydrants in the system are outdated and have two (2) 2½” Natural Standard Thread (NST) connections. The remaining one-hundred-thirty-nine (139) fire hydrants have two (2) 2½” NST outlet connections and one (1) 4½” NST steamer outlet connection. Fire hydrants that lack the 4½” steamer outlet connections greatly reduce the efficiency of the fire department apparatus and fire fighting efforts. The majority of the old, outdated fire hydrants are located in the historic sections of the City primarily east of Highway 61-67 and north of the Joachim Creek.

Modern fire department apparatus utilize 5” suction hoses and carry several hundred feet of 5” large diameter hose for supply lines. Most fire apparatus suction hoses and large diameter hose have 5” Storz quick connect couplings that are not capable of being connected to NST outlet connections without special NST to Storz adapters. The fire hydrants with the 4½” steamer outlet connections could be converted to 5” Storz connections by placing NST-to-Storz adapters on the fire hydrants.



The barrels of all fire hydrants should be painted a color of high visibility and should have a reflective band located underneath the bonnet. The National Fire Protection Association (NFPA) recommends that all fire hydrant barrels be painted CHROME YELLOW. While chrome yellow is a bit shocking at first, the color does fade to a fairly mild, but still visible color. Volume color codes tend to stand out fairly clearly on yellow hydrants. Another advantage of a chrome yellow color is that body damage,

leaks, etc. can be more easily detected by the fire department and water works personnel. Dark colored hydrants seem to have problems that remain unnoticed until someone closely inspects them.

Fire hydrants should be marked with some type of distinguishing marking or color to denote flow capability. This marking/color will assist the local fire departments and provide assistance to any mutual aid organization, if the marking/color system is uniform and understood throughout the mutual aid system.

NFPA 291 lists flow classifications and markings for city fire hydrants. The fire hydrants should be classified according to its rated flow, and hydrants that have a rated capacity of less than 20 psi should have rated pressure stenciled on the hydrant top in black paint. NFPA 291 recommends that all fire hydrant bonnets and outlet caps are color coded as follows:

- CLASS AA – Capacity of 1500 GPM – LIGHT BLUE
- CLASS A – Capacity of 1000-1499 GPM – GREEN
- CLASS B –Capacity of 500-999 GPM – ORANGE (YELLOW)
- CLASS C – Capacity less than 500 GPM – RED

The Class B color marking is listed as ORANGE, but the color could be indistinguishable between orange and red at night; and the color may be changed to YELLOW.

Fire hydrants in the City of Herculaneum presently do not adhere to the color-coding system recommended in NFPA 921. Fire hydrants are painted either yellow or red and the bonnet colors are color-coded according to water main size. Outlet caps on the fire hydrants are painted the same color of the fire hydrant barrel. Several attempts at color-coding the fire hydrants in the City of Herculaneum have been started in the past. Although each attempt began with serious intentions, the coding attempts have failed to be completed.

In order to make sure all fire hydrants in the City of Herculaneum are in working order, water works employees should conduct annual inspections of the fire hydrants. These annual inspections should be conducted in accordance with NFPA regulations and should include observing the fire hydrants for leaks, cracks in the barrel, worn threads, worn or missing gaskets, missing caps, damaged chains and other physical aspects of the fire hydrant. Annual testing should ensure that each fire hydrant operates in accordance with NFPA regulations by exercising the valves, lubricating valves and lubricating all outlet caps. The water works department should also test the fire hydrants for water flow, residual pressure and static pressure. The water works department should develop a record-keeping system of fire hydrant maintenance and testing in accordance with NFPA. The water works department should also establish an aggressive fire hydrant flushing program in the City.



As part of the City of Herculaneum’s fire hydrant care and maintenance program, Public Works employees should ensure that the City’s fire hydrants are not

obstructed by growth of vegetation, vehicles, fences, posts, trash, storage, or materials. A three (3) foot space should be maintained around the circumference of the fire hydrant. Fire hydrants in the City of Herculaneum should be installed in a manner ensuring that the center of the 4½" is not less than eighteen (18) inches above final grade. Many of the fire hydrants in the City of Herculaneum do not meet this regulation.

Fire hydrants that are subject to mechanical damage should be protected. The means of protection should be positioned in such a manner as to not impede connection to, or operation of the fire hydrant. In the City of Herculaneum several hydrants are protected by either railroad rail or round pipe with no uniformity in size or height. There are some fire hydrants in the City of Herculaneum where the protective barriers are positioned in such a manner that the connection to, and operation of the fire hydrant is impaired.

Recommendations:

- a) Additional fire hydrants need to be installed in the areas of the City that lack a sufficient number of fire hydrants.
- b) Outdated fire hydrants with two outlets need to be replaced with fire hydrants with three outlets, including a 4 ½" steamer outlet.
- c) A long-range plan should be implemented to fit all existing fire hydrants with 5" Storz adapters. All new fire hydrants installed in the City of Herculaneum will have the 5" Storz outlet as part of its construction. The first fire hydrants to be fitted with the 5" Storz adapters will be those located in the commercial and school areas.
- d) All fire hydrants in the City of Herculaneum will be painted and color-coded in accordance with NFPA guidelines.
- e) Annual inspections of all fire hydrants will be conducted and all inspections will be documented.
- f) Annual flow testing of all fire hydrants will be conducted and all flow tests will be documented.
- g) Monthly visual inspections of all fire hydrants will be conducted to ensure that fire hydrants are not obstructed and that a three (3) foot space is maintained at the base of all fire hydrants.
- h) Any fire hydrant not meeting the requirement of the 4 1/2" outlet being eighteen (18) inches above the final grade will be removed and re-installed.
- i) All existing barriers around fire hydrants subject to mechanical damage will be removed and replaced with uniform barriers of the same material and size.

Public Works Department



In the event of an emergency or hazardous incident in the City of Herculaneum, employees of the Public Works Department will be called upon to assist the first responders in the handling of the incident. The Public Works Department will be of valuable assistance in the traffic control, removal of debris, disconnecting utilities, providing electrical service, the relocation of citizens and other duties

as needed. For the Public Works Department to be able to assist with the handling of emergency incidents in the City, it is imperative that the department has the necessary equipment to perform their duties. In the event of an emergency incident in the City, communications between the first responder agencies and the public works department is imperative. During an emergency incident in the City, it is likely that outside agencies will respond to the City to assist local fire and police agencies. In order for the mitigation of the emergency incident to be handled in an efficient manner, it is important that all responding agencies and departments be trained according to the policies and procedures set forth in the National Incident Management System (NIMS). NIMS promotes development of cross-jurisdictional, state-wide and interstate regional mechanisms for coordinating response and obtaining assistance during a large-scale or complex incident. Compliance with the NIMS program is required by September 30, 2006.

Recommendations:

- a) Equipment needed for traffic control, debris removal, utilities service and other emergency duties should be purchased in sufficient quantities to allow the Public Works Department to perform their duties in times of emergencies.
- b) Mobile radios and hand held radios should be purchased for each Public Works Department vehicle with the necessary frequencies to allow for interagency communications.
- c) All Public Works Department employees should receive training in the National Incident Management System (NIMS) by September 30, 2006.

Street Lighting

Although part of the City's infrastructure, street lighting is an important part of overall public safety. Currently the City of Herculaneum street lighting program consists of a



total of 261 street lights unevenly distributed throughout the City. Many streets in the City lack sufficient numbers of street lights or a uniform spacing between street light locations. Based on information provided by Ameren UE, the lumen output of street lights in the City Herculaneum varies from 6800 lumens to 25,500 lumens. Two basic types of luminaries – open and closed – can be found in the City's street light program. Excluding the street lights located in the newer developments in the City of Herculaneum, existing street lights are located on wooden utility poles.

There are four basic types of lamps that can be utilized in city street light programs, including incandescent, mercury vapor, metal halide and high pressure sodium. Incandescent lamps produce light as a filament is heated by an electric current. Mercury vapor, metal halide and high pressure sodium lamps produce light by passing an electrical current through a gas or metallic vapor. The different types of lamps vary in the color rendition, energy efficiency, monthly cost and the average life in hours. Metal halide lamps and high pressure sodium lamps are very similar in energy efficiency but differ in color rendition and average life. The metal halide lamp produces a white light and is excellent for general area lighting, while the high pressure sodium lamp produces a golden cast light and is used for roadway and parking lot lighting. In the City of Herculaneum, the type of lamp used in the street lights varies from light to light and neighborhood to neighborhood.

A recent survey of Herculaneum residents indicated that the citizens would like to have more street lights for public safety and to make the City more inviting to visitors.

Recommendations:

- a) A study of the streets in the City of Herculaneum should be conducted to determine what streets require additional street lights.
- b) A plan should be developed that requires street lights to be installed at the ends of each street in the City of Herculaneum. Street lights should also be installed every 150-200 feet along the length of the street.
- c) A street lamp replacement program should be implemented to replace older fixtures with flat lens fixtures utilizing metal halide lamps.
- d) The City of Herculaneum should work with the utility companies and eventually bury all existing cables and wires. Stand alone light poles of a uniform design should be installed to replace the wooden utility poles.
- e) A comprehensive plan for street lighting should be implemented for all new residential and commercial developments.

Community Safety



In a recent survey of the citizens of Herculaneum, a topic that garnered a lot of attention was the need for emergency training for the general public. The citizens are concerned about the hazards they face in their community and what steps they can take to help mitigate a hazardous situation.

Until recently there has been little opportunity for the citizens to receive any type of training. During the past year, the Herculaneum Fire Department and the Missouri Water Patrol started a boating safety class for the general public. During 2006, the fire department will be scheduling a one-person cardio-pulmonary (CPR) class for the public in addition to the boating safety class. The fire department is also pursuing the formation of a Community Emergency Response Team (CERT). CERT is a Federal Emergency Management Agency (FEMA) program that educates citizens about the basics of fire suppression, disaster medical operations, light search and rescue, disaster psychology and team organization. CERT members provide immediate assistance to victims in their area, organize spontaneous volunteers without training and collect disaster intelligence that will assist professional responders with prioritization and allocation of resources when they arrive. CERT promotes a partnership between emergency management and response agencies and the people in the community that they serve. The fire department hopes to offer several CERT training classes, CPR classes and boating safety classes over the next several years.

The Herculaneum Police Department has instituted a program called “**Are You OK?**” in which the department officers check on the well-being of the older residents, or residents who are home-bound. In this program, the officer stops by the resident’s home during regular patrol and visits with them. The spirit of “Community” that this simple act exhibits is immeasurable.

At the present time, there are basic first aid classes, Neighborhood Watch programs, and gun-safety classes offered to the residents of the City.

Recommendations:

- a) The City should encourage and assist the public safety entities to sponsor emergency management and safety classes for the residents of the City.
- b) Neighborhood Watch programs should be instituted in the various neighborhoods of the City.
- c) The City should encourage and assist the public safety entities in sponsoring neighborhood or block “parties” to acquaint the citizens of the City with the public servants who protect them.
- d) The City should sponsor City informational meetings with outside agencies to acquaint citizens about possible hazardous conditions that could affect the City of Herculaneum.
- e) The City should work with Jefferson College and the Dunklin schools to offer classes in citizen safety.