

**DEPARTMENT OF COMMUNITY AND
ECONOMIC DEVELOPMENT**

**GOVERNOR'S CENTER FOR LOCAL
GOVERNMENT SERVICES**

**Fire Department Operations:
Peer Assessment**

**TARENTUM BOROUGH,
ALLEGHENY COUNTY,
PENNSYLVANIA**

August 2004

ALLEN CLARK, PC
203 STEWART ST.,
SALINA, PA 15680

Table of Contents

Preface.....	2
About the Author.....	2
Historical Background.....	3
Introduction.....	3
Special Notes.....	6
Methodology.....	8
Findings.....	9
Recommendations.....	13
Summary.....	18
Conclusions.....	19
Appendix A (Apparatus List).....	20
Addendum (PLCB Letter)	

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

Preface

This report is based on the findings and recommendations of the author and does not necessarily reflect the policies and procedures of the Pennsylvania Department of Community and Economic Development. Where possible the author follows national standards and/or recognized and accepted methodology. Personal experience and education of the author are contributing factors in the final analysis.

About the Author

Mr. Allen Clark is a twenty-nine year veteran of the fire service with the Bell Township Fire Department with additional time in the Avonmore Fire Department and the National Forest Service. He spent over twenty of those years as a chief officer, eight as department chief, and has held every position in the Department. He is a Senior Field and Adjunct Instructor for the Pennsylvania State Fire Academy and Contract Instructor for the National Fire Academy. Allen is also an Adjunct Faculty member of the Westmoreland and Allegheny County Community Colleges. In addition to instruction and course development, he consults with the fire service and industry on safety, training and management issues. Mr. Clark is nationally certified as a Firefighter III, Fire Instructor III, Fire Officer I, and Hazmat Technician. His education includes an A.A.S. in Fire Science, a B.S. in Fire Administration, and a M.S. in Safety. He has been published numerous times in various trade journals.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

Historical Background

Tarentum Borough is located along the Allegheny River northeast of the City of Pittsburgh. The name was derived from the ancient Greek city Taranto. The center lies at approximately 40.60 degrees north by 79.76 degrees west in global positioning terms. It has a population of approximately 5,000 according to the 2000 U.S. Census and encompasses about 1.25 square miles. It is governed by a nine member council and a mayor. Mr. Jeff Thomas is employed as a professional Borough Manager.

Tarentum was first settled by a Felix Negley when in 1776 he built a log house and later a grist mill and carding mill. Much of the Borough occupies some of the holdings of Judge Henry Marie Brackenridge. The town was laid out in 1829 by a W. Martin who had been hired by Brackenridge. The Pennsylvania Main Line Canal ran through the town during its existence from 1830 to 1857 and boosted the economy. Tarentum became a borough in 1842. During the 1860s it emerged as an industrial center due to the glass, paper and petroleum trades. There have been many memorable events in the Borough; however, it was the Tarentum Fire of 1885 that led to the formation of the first fire department in 1886.

Introduction

Tarentum Borough is protected by three independent fire companies that constitute the Tarentum Fire Department. The Independent Pump and Hose Company organized as the first fire department was chartered in 1907 and took the name Eureka Hose Company. In 1879 the First Ward Fire Company was organized and was reorganized in 1913 as the Hiland No. 1 which was eventually changed to Highland Hose Company. In April 1906 a tragic fire swept through West Tarentum prompting the formation of the Summit Hose Company. In 1929 the three companies organized the Tarentum Fire Department. Although an active organization for sharing of information and solutions to issues, it has no authority over individual companies. Each still operate as would an independent volunteer fire department.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

On March 2, 2004, subsequent to having filed a letter of intent, a meeting was held with representation from Borough management, the fire companies, Mr. Michael Foreman - representative of the Pennsylvania Department of Community and Economic Development, and Mr. Allen Clark - Fire Peer Consultant. A scope of services and projected time-line was agreed on, and parameters of the evaluation was discussed. The agreed scope of services include:

- ▶ Facilities (current use and future needs).
- ▶ Equipment and Vehicles (current use and future configuration).
- ▶ Training (basic and advanced).
- ▶ Fire Service Delivery System (e.g. manning levels, recruitment and retention of volunteers, ISO rating, volume of calls, communication procedures as a ring-down public safety answering point, response time, adequacy of water system, and supply and hydrant system).
- ▶ Administration (e.g. volunteer policies and procedures, standard operating procedures, and record keeping and reporting).
- ▶ Annual Operating Budget (e.g. financial resources versus needs, spending levels, revenue generation and fundraising, budget management and controls).
- ▶ Capital needs (e.g. capital purchase, replacement/improvement program - immediate and future, cost,, type, schedule and funding).
- ▶ Mutual Aid Agreements (e.g. current and potential, formal agreement, and regional association of volunteer fire companies).

Officials of both the Borough and the fire companies are to be commended on their willingness and cooperation in open dialog in an effort to maintain and improve emergency services to the citizens of Tarentum. Acting in agreement to an open review by an independent, outside consultant is admirable. This spirit of cooperation runs contrary to many similar relationships where often an adversarial environment exists. The latter situation creates friction and an even widening gap between parties whose duty is to maximize services to the citizens they serve.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

In a recent statement from the Center for Rural Pennsylvania in cooperation with the Fire Services Institute recommended, "Local emergency service leaders, in conjunction with their local governments, should prepare plans for future apparatus purchases for at least the next ten years". Intrinsic to this statement is the implication that better planning and cooperation must exist in all emergency service provision issues. That is the desired eventuality to be derived from this study. Regardless if the call is for a skinned elbow or a bombed building, local services will be there at the time when the most lives can be saved and will remain there alone for a long period of time before the "experts" can arrive. It is apparent to the author that all parties involved here have considered that fact and are a step up in the preparation process.

Inflation, demand, and other economic factors can have drastic effects on ever rising costs of apparatus and equipment. It can be a very unpleasant surprise if they arise unexpectedly. Too often small, independent fire departments lack the assets to afford needed capital expenditures. To purchase less than presently needed or ones that much of their service life has been used up can cause a downward spiraling effect. To attempt to "get by" with costly repairs that constantly erode funds better spent for replacement exacerbates this problem. Those who do not devise a means to alleviate this problem are frequently left with a heavy debt load that not only curbs funds for future operations but remains in existence for the long term future. In addition to creating a continually diminishing level of service capabilities it may be severely discouraging to recruitment efforts, furthers an expanding crisis in retaining sufficient staffing to provide adequate service, and wastes resources of the future.

Regardless of the recent state and federal grant programs, fire protection remains a local responsibility. It is rare that the ordinary citizen understands the need for such a high and expensive level of response preparation; therefore, they must rely on the municipality and the fire department to determine that necessity. At times they need to be reminded of that fact and be assured they are getting the best they are willing to pay for. Obviously perfection does not exist in the human realm, but service levels can vary greatly. The people of the State of California suffered greatly at their own hand when they handcuffed governing officials and made proper protection an impossibility. It is inevitable that planning, purchasing, budgeting, and system design and delivery be a responsibility at the local level.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

Special Notes

It is beyond the confines of this evaluation to include capabilities and in-depth relations with surrounding communities including those with whom Mutual Aid Agreements exist. Often fire protection (especially suppression activities) extend past or conjoins other municipalities. This includes neighboring departments, their apparatus, personnel and equipment (APE). As such there must exist cooperation standardization to the maximum extent feasible so as to mutually benefit all participants. This report does not propose doing so whenever it would result in conflict within the community itself. Within these confines this study only presents an overview to the total protection available. Additionally, it may become obsolete in short term. The dynamics of people, data, systems, technology, and other related factors may radically alter the character in a very short time span.

The inclusion of mutual aid fire protection capabilities external to, but essential to the Borough of Tarentum, would have been far reaching and above the confines of these recommendations; however, they must be factored into decisions affecting the overall fire protection system. Existing capabilities of adjacent or nearby departments' APE should be weighed when decisions are contemplated. The tradition of the fire service in Pennsylvania is a long one beginning with Benjamin Franklin. No one community can exist in a vacuum, and the spirit of assisting others without regard for boundaries, political or physical, allows the level of services available at a relatively low cost to the citizens.

The author has not quoted a dollar amount for the costs of future purchases because of previously noted factors. Price fluctuations make a quotation almost void in the time it takes to write this report. Ultimately the decisions of those charged with making choices on purchases will have more effect on costs than can be currently contemplated. Present and future officials are admonished to take into consideration needs versus wants and availability of comparable equipment both in and adjoining the service area. Despite personal preferences and "traditional" items within each company, standardization and joint purchasing and utilization will not only result in cost savings but will simplify joint operations.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

Volumes of documentation and information arise from an evaluation of this magnitude and must be personally processed and analyzed. This author wishes to extend his gratitude for the cooperation from both the Borough and the three fire companies. This spirit diminished both the time and effort required for collection of sufficient data to base his findings and opinions. It is refreshing to find such a degree of cooperation that not only made this possible but speaks volumes of the sincerity of all parties to maximize efficiency and effectiveness.

There are nationally recognized standards and accepted practices, mostly from the National Fire Protection Association (NFPA), to be used for judging capabilities. The Insurance Services Office (ISO) assigns a class rating based on their own criteria for judging capabilities that will positively affect the desired outcome for their clients. Neither are to replace actual observations and experience; unfortunately, with the relative infrequency of responses that would be required for a significant statistical analysis, time did not permit direct observations of emergency operations. In some instances published data or research was the basis for comments or recommendations. In some events it became simply the years of practical experience and knowledge of the author used to come to a conclusion. In some instances the expertise of those in the study was a factor. Often there is no "right" method of accomplishing goals and objectives, but there are wrong ones. It may even be difficult to discern which of the "right" ones fit any given situation. In such cases options or solutions that have worked for the author were cited.

The author thanks and commends all who gathered information, took the time for interviews, and were otherwise involved in making this report possible. He realizes the difficulty and even reluctance to release information considered sensitive to a stranger; therefore, as stated, details not directly affecting the outcome will not be a part of the report. Some information has been generalized and may represent the cumulative system to the extent possible without jeopardizing the integrity of the assessment.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

Methodology

The author visited and held interviews with representatives of the Borough and each fire company as well as the Tarentum Fire Department officers. Chiefs Rich Heuser, Bill Hazlett, and Tim Firko with selected persons from their staffs provided valuable information and actual observations of their equipment and response area. Manager Jeff Thomas provided information on the operations of the Borough. These observances of the existing fire protection system, geographic and demographic features furnished practical data on which to base this study. All parties were presented a preliminary report for correction of technical information and allow for further input and opinions germane to the findings. Each meeting was very productive and produced much good information. A pleasant atmosphere and spirit of cooperation prevailed in all instances.

Much of the time involved data analysis and comparison to standards, research and experience. Follow-up requests and report compilation filled the remainder of the allotted time. The study was interesting particularly from the standpoint that it included three well established companies that have in place the mechanism that should be expanded to enhance operations and discover solutions to problems. Despite the fine jobs done by many and the exceptional condition of equipment given its age, the distinct probability exists that problems are on the near horizon. There is some room for improvement as in any situation. The future is of particular concern because of the age of much of the apparatus.

This report is intended to present methods and alternatives to be considered to maximize fire protection at a minimal cost to Tarentum in the future. It is the author's belief that all participants share this concern to the benefit of the citizens. Diverse operations, alternative methodology, strategies, and tactical applications permit numerous solutions that work to some degree or another. Each are situation specific, and it is incumbent on those who hold official positions to decide the ultimate means to achieve optimal results. The desire is present. Solutions may not be easily deciphered or attained, but concentrated efforts, compromise, and cooperation must prevail to secure exemplary results of this evaluation.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

Findings

☒ Fire protection in Tarentum is provided by three independent volunteer fire companies, Eureka, Highland and Summit Hose Companies, that form a fire association known as Tarentum Fire Department, made up of a board from the companies, that acts only in an advisory capacity. These are all volunteer units that are comprised of 76 members operating 11 vehicles and 3 boats out of 3 stations and 3 auxiliary buildings. Eureka's Station is located on Third Avenue, Highland's on Eighth Avenue and Summit's on West Seventh Avenue. The auxiliary building of each is located within one block of the station. Due to the small geographic area of the Borough all stations are within a three minute response time to any part of the municipality. The exception to this could occur if rail traffic is blocking one of the nearest access points to the affected section. An alternate route is available over an overpass unless the emergency involved rail traffic and that overpass. Fire suppression, public service, hazardous materials response, river rescue and recovery, and general public safety duties are performed by all companies. While not a part of the scope of services for this study, it must be mentioned that Eureka operates an ambulance service that is an adjunct to the Company and shares its name.

☒ The fire stations were built in three consecutive years starting in 1927. Each is masonry construction with a wide bay, basement area and second floor for use as office/meeting space. Due to their age and construction they are extremely energy inefficient and require constant upkeep. Both of these actualities are a drain on funds that could be put to better use. While ensured that they were structurally sound, the author had doubts. There is some sagging of structural reinforcements and misalignment of components. Dampness in the basement does not make for a good storage area.

☒ Personal protective equipment (PPE) is either new or of acceptable construction and configuration. Each company has a wide variety of tools and appliances necessary for varied operations. Two are equipped with thermal imaging cameras (TIC), all have positive pressure ventilation (PPV) fans, but none are capable of Class A foam (which eliminates the capability of compressed air foam systems - CAFS). The vehicles range from a

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

sedan for transport to an aerial ladder (NOTE: the aerial has been removed from service due to failed service testing). Each company has an engine with the newest being a 1991 KME at Highland. The other two are 27 years (Summit) and 34 years (Eureka) old. They appear to be well maintained and have had some updates. The fact that they are still in service speaks well of their upkeep. There is no written rule on apparatus age, but the accepted practice is to replace apparatus after 20 years of service. The aerial is an open cab model that is almost 40 years old. It should have been removed from service 20 years ago not only because of age but because open cab apparatus has not met safety standards for that long. (NOTE: see the apparatus list - Appendix A).

Almost all personnel are trained to basic levels. There are many trained to advanced levels and an extraordinary number that have various specialty training. At this point training is sufficiently addressed and it is presumed that will continue.

Staffing levels would be barely adequate according to ISO standards ($76/5 = 15$) for major incidents. This is now the factual case inasmuch as response seems to be a much higher percentage than their projections. Refer to the next fact (below) that has a prominent effect on staffing. One disturbing fact is the average age of personnel (approximately low to mid-forty). Most emergency response operations are extremely labor intensive. This is not meant to disparage the abilities of older persons, but age can be a large factor in capacities and risks of disease and injuries. Physical conditioning can have the same positive or negative effects; though the author did not evaluate all the personnel and has no opinion on their capabilities.

Fundamental to this report is the operation of the ambulance because most, if not all, medical personnel are cross-trained to function as firefighters. Since ambulance personnel are paid and on shifts within the station, it often has the effect of having a career firefighter contingency in place. The ambulance corps is a self-sufficient operation that not only does not represent a cost to the Borough but in fact helps offset other costs by providing some funding to the fire company. This is a great advantage for the ISO rating in that they base some of the rating on staffing and use a 5:1 ratio for formulation (5 volunteers equal to 1 full-time).

There is no formal recruitment and retention program in existence.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

The ISO rating is Class 4. The latest rating survey was done in 1990. The next is due within a year as they are usually conducted every 15 years. The breakdown in credits were: Receiving and handling alarms - 4.74% of a total possible 10%; Fire Department - 30.34% of a total possible 50%; and Water Supply - 30.98% of a total possible 40% with a divergence factor of -3.5% for a total of 62.72%. Ratings are based on an inverted percentage wherein 60-70% equals a Class 4. Another 7.28% would improve the rating to a Class 3. These ratings affect insurance premiums mostly in commercial occupancies that are not large enough to have their own separate rating. They do give some indication of capabilities, but they are not the only means of evaluation. Improvement is desirable only to the extent of their effect on those constituents. If a rating improvement can be attained without costly efforts it is admirable, but to do so just to have "bragging rights" may be counterproductive. With ever continuing upgrades in all three categories it may be possible that the next step has been attained or nearly so. This should be discussed with the ISO representative.

Call volume averages just over 100 with an exception of 225 for Eureka last year. It wasn't determined what effect the ambulance had on this figure.

Response times are mostly within the desirable three minute boundary.

Water supply as a part of the municipal system was at about 75% of ISO rating factors. Additionally two of the boats combine for another 1,375 gpm of available auxiliary supply. This is sufficient for the vast majority of needs, and some of the larger structures and close proximity will probably never have their needs met due to the overwhelming requirement for those types of situations.

Each company has written policies and procedures of their own. Some are much more detailed and some have omissions. One such policy for two of the companies deals with alcohol consumption and response/operation of apparatus because they have alcohol available to members in the station. It is the author's opinion that even under the best of controlled situations this could present a severe liability problem. A separate attachment to this report gives information from the PLCB that should be taken into consideration if alcohol is to remain in the stations. It is difficult enough sometimes to try to control this problem

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

should members be drinking elsewhere; however, it exacerbates the problem should an incident arise and evidence be presented to show it originated in the station.

All companies had sufficient records to evaluate, but they are not standardized Borough wide. Different accounting procedures appear to exist and made analysis more difficult. There appeared to be no discrepancies or misuse of funds, nor was there evidence of frivolity in use of funds. Reports are kept within the companies and not presented to the Borough.

The average annual (2000-2003) income for the three companies was \$243,000 with expenses of \$224,000. These amounts cannot be considered statistically significant because they rely on factors beyond the control of the companies; e.g. fund raising activities which fluctuate, income from service charges, donations, unscheduled maintenance or repairs, utility costs, etc. Included in these figures is the Borough allotment that goes directly to the companies.

The 2003 Borough budget for fire protection is listed as \$105,200. Of that amount \$50,000 is designated for a capital reserve for replacement of apparatus. The author neither requested nor was presented evidence of this amount being held in escrow and protected for the stated purpose. \$17,000 of the budget allotment is derived from Act 84 (Relief Association) funds and represent "pass-through" funds provided by the state insurance tax. Workman's compensation consumes another \$12,500. While this is an accepted expense to be charged to fire protection, it does not represent "usable" moneys for operations and is required by the state of all municipalities. Fuel and building repairs and maintenance absorbed another \$14,200. The remaining \$11,500 was divided among the three companies with Highland and Summit getting \$5,200 each and Eureka getting \$1,000. The formula for dispensation was not explained; however, Eureka is somewhat more financially independent due to income from their ambulance service.

In the same year the police department budget was \$591,873. No doubt much of this was consumed by salaries and benefits since the police department is not volunteer. The police chief's salary was \$54,105 and \$297,000 was spent for salaries for the other 6 patrol officers.

The cost of operating the dispatch center was \$227,910 with the department head earning \$33,800. These figures along with

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

those of the police are given for reference and may be used as a basis to estimate a cost of staffing a full time career fire department.

Companies are responsible for utility costs for the buildings they occupy despite the fact they are Borough owned and the companies provide an extremely low cost service to the Borough.

Of immediate concern is the replacement of the aerial. Without it fire suppression activities may be severely hampered, especially rescue and ventilation operations in structures over two stories in height. This would have been the top priority even if the truck had not been removed from service. Secondary considerations in capital needs is the replacement, reconfiguration, consolidation of stations. The energy inefficiency is a drain on the budget that could be better used for other improvements. Tertiary, yet somewhat pressing, is the need to arrange replacement of at least one of the 30 year old engines. They appear to be amazingly well preserved and operational, but that could drastically change in the short term.

The Borough is densely settled and little room exists for additional construction. There are plans to add up to 40 condominiums along the river-front. They will be a maximum of 3 stories in height and should present no problem. There is a Keystone Opportunity Zone (KOZ) in the northwest section that is currently undeveloped and provides tax rebates for development. This is an area that deserves attention due to the Pittsburgh Mills complex being constructed nearby.

Written Mutual Aid Agreements exist with 17 communities, 1 industry and 2 unidentifiable departments some over 15 miles away. This is a substantial network and very commendable. The average age of the signature blocks is 14 years.

Recommendations

For command and control, as well as unity of operations, the three independent companies should utilize the existing Tarentum Fire Department structure to consolidate administrative and

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

record keeping and reporting functions. The three companies could maintain some small degree of independence as they adapt to changes necessary to operate as a totally consolidated department. Apparatus is now identified with both the Tarentum Fire Department (TFD) name and their own Company name allowing part of the change to be effective in the short term. Total consolidation should take no more than five (5) years. The TFD organization now existing should be granted authority for decisions and arbitration of issues among the three immediately. Consolidation offers grant advantages because it has been identified as one desirable factor in awarding these grants. Eureka would maintain control of the ambulance corps until such time they could either be consolidated into the Department or completely separate. The former would have advantages of both providing a revenue source and staffing.

A Borough Fire Chief should be selected to have final authority in decisions and command. Each company chief would function as a subordinate chief within the command system and advisory staff in non-emergency operations.

A new building should be built on the property now owned by Eureka to house apparatus from both Eureka and Highland and function as the "downtown" station. The building should be large enough to supply adequate storage space for all of Highland's equipment, that of Eureka not currently housed in their adjacent building, and administrative offices. The secondary building owned by Summit should be renovated to house all of their equipment and administrative offices. Consideration should be given to additional space to house another ambulance here. The three buildings now owned by the Borough should be sold to offset some of the costs of this project. A suitable display area (museum) should be found for the Ahrens-Fox engine and any other antique equipment.

Current PPE should be used through its useful service life, but as replacement equipment is purchased it should conform to a TFD standard. Within an estimated five to eight years it should all be uniform.

Apparatus and equipment should be standardized as replaced. This will take approximately eight to ten years as necessity and budgeting allows replacements. Aerials should have a vertical reach minimum of 90 feet. Consideration of having a pump on the aerial would allow it to function as an engine thereby cutting

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

capability, completely enclosed riding area, and auxiliary lighting. One TFD engine should be CAFS equipped.

Minimum training levels should be established based on what is expected of the member. While it is desirable to have as many trained to the highest levels, it is not practical. Any member must have been trained to the level which they will perform. Anyone not meeting the minimum requirement must refrain from participation in that portion of the operation.

An effort should be made to increase staffing levels via a formal recruiting and retention program. It takes several years to properly train a firefighter, and the age levels indicate within that period of time there will be some attrition. There are no easy answers as to how to recruit or retain members in volunteer fire departments. The U. S. Fire Administration has some good reference materials. One book available through their on-line source is a result of several groups throughout the country meeting and offering solutions that have worked or ideas they could offer. The author was part of one such meeting that was very productive. Some type of incentive program might help, but usually recognition is the primary motivating factor. The significance of maintaining a volunteer force cannot be overemphasized. Due to the nature of the work more firefighters are required than police officers for total coverage. That fact in itself renders a savings of over one-half million dollars per year (assuming pay scales comparable to the police).

Mention was made of the ambulance personnel and them being cross-trained as firefighters. This is a tremendous advantage in several ways: 24/7 staffing levels, increased competency, incentive (a job), and decreased response times. It has the effect of having at least a part-time career department at no cost. This service will become ever more important with the opening of the Pittsburgh Mills facility since they will likely become the primary EMS responder. This situation must be carefully monitored and controlled to prevent overworking resources, expenses not reimbursed, and reduction of availability to the Borough due to calls there.

A Class 4 ISO rating is very good. If the rating is lowered due to the improvements since the previous survey so much the better. Nevertheless the author does not recommend large expenditures just for the sake of a lower rating. This is particularly true in Tarentum. Ratings better than Class 8 or 7

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

have very little effect on residential property, none on those with separate ratings, and sharply diminishing ones on the remainder. Without a covenant between the Borough and affected parties wherein those benefiting share a large percentage of the cost such efforts can be an ill-advised drain on funds.

Call volume is within a range that usually provides a good compromise between "burn-out" and "rust-out" yet is sufficient to generate the interest necessary to keep personnel around. A close monitoring of false alarms is critical. They breed an atmosphere of laxity and rapidly overburden resources. The problem does not appear to exist at present but should be resolved immediately should it arise. Too many calls can detract from personal time of members to a point they can no longer participate. This must also be monitored with the anticipated increase in call volume at the Pittsburgh Mills complex. The author is not counseling a dissolution or ignoring pleas for assistance; rather, ensuring it does not become both a personnel and fiscal problem.

Policies, procedures, accounting methodology, discipline, training, and operations should be standardized within the TFD. Personnel should be able to interface into any of the three companies with little or no expected change. Special operations germane to only one company would be the exception; yet, it would be advantageous for all personnel to have that training.

Dispensing, imbibing, and possession of alcohol should be prohibited in the stations. The liability is too great and eliminates one control point for preventing an impaired member from responding. (See Attachment A)

Actual usable operational funds are not reflected in the amount budgeted for fire protection. Act 84 funds are restricted to those allowed and listed by the Auditor General's Office. The utility costs for Borough owned buildings and paid for by the companies more than consume allocated funds; therefore, the money given to the companies actually represents a net loss. Some of this problem should be resolved when the recommended station changes are implemented via energy cost savings. These costs should be borne by the Borough in exchange for the services furnished by the companies. When the amount of equipment and apparatus necessary for proper fire protection is considered (the current 3 engines and an aerial is adequate), the costs (\$250,000 per engine and \$750,000 per aerial average), and a recommended 20 year replacement cycle a minimum of \$75,000 per year would be

required. This figure assumes a rotational starting point with
FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

some new apparatus. This is not the situation in the TFD. An initial capital investment of approximately \$1,000,000 will be required to get a starting point - \$600,000 - \$700,000 for the aerial and \$250,000 - \$400,000 for buildings. To account for inflation and increasing costs the capital reserve should be set at a minimum of \$90,000 annually. Revenue sources must be explored since this embodies a significant increase in both one-time and long-term budget allotments.

Requirement for reliance of funds to be provided by the TFD must be minimized as this is one area targeted and identified by many as a major drawback to recruitment and retention of personnel. The alternative may require hiring personnel to supplement loss of volunteers. Salaries are the largest budget item when considering a combination or career department - typically 80% - 90% of the overall budget.

The "Fourth Ward" situation requires constant monitoring. Since this is a tax rebate area, additional fire protection would not come from the development; therefore, solid building and fire prevention codes, automatic alarm and suppression systems, and education will be key to containing costs there. These must be applied uniformly and non-discriminately so they need to be formulated and adopted Borough wide. Initial application may be to new construction and renovation. They may be applied retroactively upon adoption and an amnesty period for upgrading. This should apply to any area regardless of the tax status.

Written Mutual Aid Agreements because of their age and subsequent changes to industries and communities should be reviewed and either renewed or rescinded. In doing so it should be ascertained that a mutual aid situation exists and not one that will overburden or deplete Borough resources. Particular attention should be focused on the Pittsburgh Mills complex. With no data to rely on it is hard to predict with any accuracy the increase in call volume that may be anticipated. It is known that current resources in Frazer Township are ill equipped to handle major incidents and/or increases in call volumes. It would be advisable to confer with officials from both the Township and Mills to address this situation.

All the companies are aware of and discussed the use of new technology and methodology even if not currently being used. In order to maximize the effectiveness and efficiency of personnel it is recommended that the companies investigate and train for the use of Class A foam, PPV and TIC. Those used in proper

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

combination are a powerful force in minimizing losses and manpower involvement. Some are very controversial and require very disciplined application but are well worth the time, costs, and efforts required to be able to use them to their advantage.

Summary

The fire protection in Tarentum Borough is well provided by the three independent companies of Eureka, Highland and Summit Hose Companies. They are partially funded from the municipal budget but must supplement this with donations and fund raising activities. Some planning for the future exists and a capital reserve fund has been established for replacement of equipment. The Class 4 ISO rating is commendable and shows preparedness and training by committed personnel. The status quo cannot be expected to be maintained into the long-term future and perhaps even the short-term. The average age of responders, time consuming fund raising, and age of apparatus forebodes problems on the horizon. To their credit both the municipality and the fire companies have shown concern enough to request an independent study to seek input on solutions to allay such problems. There are several matters that should improve the delivery of fire protection. Standardization and unity have proven to be foremost in improving those systems. Traditions and change can be major hurdles to overcome, but the author has found most of those contacted are receptive to improvement regardless of the required changes.

The official consolidation will take much cooperation. The working relationship exists and the organization exists. Finalizing those into a complete fire department should proceed smoothly. Adoption of new technology and methods will proceed with some caution, as well it should, until a comfort is established with them. Cooperation of the municipality and citizens will allow an improvement in an already good fire protection system.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

Conclusions

The three companies that comprise the Tarentum Fire Department are well organized and trained. Their professionalism is exemplary and would rank high among volunteer departments in Pennsylvania. Support from the Borough is about average for departments of this size. There appears to be a working relationship rather than adversarial one among all participants. The ability to keep much older equipment in service indicates an extraordinary maintenance program. All parties realize that nothing can remain in a state of dormancy due to the dynamics of the economic and demographic changes that affect the need for corresponding change in the fire protection system.

A positive step in direction toward improvements has been taken by requesting this evaluation. The author makes no claim to having all the answers, and he believes that some of the best solutions are those formulated by those most affected. It is his belief that consideration and implementation of some of the recommendations will make these improvements. Ultimately it is the responsibility of the Borough and the Department to cooperate, compromise, and decide the end results. This report only serves to provide guidelines toward that end. It is realized that some of the recommendations are quite costly. It probably has come as a shock to face this reality, but it will not improve without immediate attention and could worsen. Prognostication will not solve problems. Costs will rise and more repairs or replacements will be needed. To postpone the inevitable can only create a crisis later that will be a major shock and still require action.

The author sincerely wishes the Borough and the Department the best in coming to agreeable solutions. He feels there is a lot of potential in the situation and would like to see it come to fruition.

FIRE DEPARTMENT OPERATIONS PEER EVALUATION
Tarentum Borough, Allegheny County, Pennsylvania

**APPENDIX A
APPARATUS LIST**

Designation	Year	Manufacturer	Capacities-gpm/g	Notes
Truck 111	1965	Maxim	85' steel ladder	out of service
Salvage 115	1971	Chevrolet	Utility	special unit
Engine 112	1991	KME	1250/750	LDH, foam, PPV
Squad 114	2001	Ford	4WD	personnel
Boat 116	1970	unknown	12'	rescue
Snorkel 123	1969	Pierce	55' articulating	back-up
Engine 121	1970	ALF	2000/600	foam, PPV
Rescue 125	2000	Kenco/Peterbilt	Heavy rescue	veh/trench equip
Fire Boat 12			23' 1000 gpm	auxiliary water
Engine 131	1977	Seagraves	1500/750	R-1983/TIC, PPV
Squad 132	1986	Chevrolet	Van	personnel
Squad 133	2003	Dodge	P/U Utility	boat tow
Car 137	1992	Chevrolet	Transport	police vehicle
Boat 136	1989	Unknown	375gpm/5Kw	Rescue/lights

Key

LDH= large diameter hose
PPV= positive pressure ventilation fan
TIC= thermal imaging camera
R= refurbished