DETERMINING AND MEETING THE NEEDS OF THOSE WE SERVE

EXECUTIVE DEVELOPMENT (R-123)

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Abstract

Fire Departments have traditionally measured success through statistical data that includes fire rates, losses, deaths and injuries and response times. Service providers who include Emergency Medical response also judge quality service through statistics linked to a specific standard of care. Statistical feedback, though helpful and necessary, tends to be elusive in gauging the public’s perception of satisfaction with the type and level of service provided. Connecting with the needs of the customer is the task of the fire service manager who must be willing to “repackage the organization and how we deliver service” to survive “in a rapidly changing future”. Livonia Fire & Rescue (LF&R) has long recognized the need to qualitatively measure its ability to meet customer’s needs and expectations. Such measures are in keeping with practices found in the private sector and more recently in Fire/EMS agencies. Such an enterprise requires a means of receiving feedback from the consumer for services rendered and evaluating such data. The problem is that there is no such evaluative method for soliciting customer feedback of services rendered for purposes of quality service review.

The purpose of this research project was to develop and implement a customer survey instrument to assess customer satisfaction as well as determining the public’s knowledge of the services provided by LF&R. Action and evaluative research methodologies were employed to answer the following questions:

1. What are the services that our customers value?
2. Who is the customer base?
3. Does the customer know and understand the capabilities and resources available from LF&R personnel and their department?
4. What kind and quality of services would the customer like to see LF&R provide in the future?

The procedures used to complete this research project included a literature review, focus groups and the design of a customer survey.
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INTRODUCTION

Fire Departments have traditionally measured the success of their service through statistical data that has included fire rates, fire losses, deaths and injuries and response times. Hatry, Blair, Fisk, Greiner, Hall, Schaenman (1992). Fire Service providers who include Emergency Medical response and or transport as an integral part of the provided services, also tend to judge quality of service through similar statistics linked to the standard of care for the level of licensure of its agency. Statistical feedback based upon industry standards, though helpful and necessary, tends to be elusive in gauging the public’s perception of satisfaction with the type and level of service provided. Making the connection with the needs of the customer is the task of the fire service manager who must be willing to “repackage the organization and how we deliver service” to survive “in a rapidly changing future” (Brunacini 1996, p. 99). Livonia Fire & Rescue (LF&R), as an organization, has long recognized the need to qualitatively measure whether it was meeting the customer’s needs and expectations. Such an undertaking is in keeping with practices found in the private sector by successful service providers and more recently in Fire/EMS agencies as demonstrated by Robin Paulsgrove and Alan Brunacini. Such an enterprise requires a means of receiving feedback from the consumer for services rendered and evaluating such data. The problem is that there is no such evaluative method for soliciting customer feedback for services rendered for purposes of quality service review.

The purpose of this research project is to develop and implement a customer survey instrument to assess customer satisfaction as well as determining the publics
knowledge of the services provided by LF&R. Action and evaluative research methodologies were employed to answer the following questions:

5. What are the services that our customers value?

6. Who is the customer base?

7. Does the customer know and understand the capabilities and resources available from LF&R personnel and their department?

8. What kind and quality of services would the customer like to see LF&R provide in the future?

The procedures used to complete this research project included a literature review, the use of focus groups in the design of a customer survey, and a method for accumulation and dissemination of the data for the purposes of quality improvement purposes.

**BACKGROUND AND SIGNIFICANCE**

LF&R was established as the Livonia Volunteer Fire Department in December of 1941. The primary role for this organization was to provide fire suppression for the 36 square mile rural township of Livonia, located in then rural Wayne County, 5 miles west of the City of Detroit. Its operations were conducted out of a home and service station located in the southeast quadrant of the community. In 1950, Livonia Township was chartered as a city and the Livonia Fire Department began a process toward the career department that it is today by hiring 15 full-time firefighters to supervise the volunteer firefighting force. As a result of the Hydramatic Transmission plant fire of 1953, the Fire Department expedited the transition from a combination career/volunteer firefighting force to an all-career department. Career personnel replaced the last of the volunteer
firefighting force through attrition in 1957. With an eye toward the growing community and its needs, LF&R personnel began to assume roles and responsibilities that had not been traditionally assigned to fire service professionals of their day. LF&R personnel have provided some form of emergency medical response almost from its inception. This ancillary service, begun to “keep firefighters busy”, has evolved to include 80% of the total emergency incidents that LF&R responded to in fiscal year 2000. Currently LF&R provides Advanced Life Support (ALS) transport to its customers and responded to over 6,500 medical runs in fiscal year 2000.

LF&R operates out of five strategically located fire stations with a fire engine pumper and ambulance operating out of each facility. Additionally, LF&R maintains a Heavy Rescue company that operates out of its center station, whose mission is to provide technical skills and equipment that are not included include by the engine or ambulance companies. Such skills include extrication, confined space, urban search, trench and hi-angle rescue. Currently, LF&R employs 95 personnel serving a population of 100,545 people in a 36 square mile area that includes a use group mix of everything from residential to heavy industrial. Departmental forces are broken down into three divisions, which include Fire Suppression, Fire Prevention and Administration. The current annual operating budget for the department is $9.2 million.

LF&R as an organization has always been a trendsetter in fire and emergency response at a regional level. It was one of the original fire service departments in the State of Michigan to respond as a first aid medical provider in the 1950’s. It was the first BLS provider in the State of Michigan to pilot the use of Automatic External Defibrillators and intermediate airways for patient care at such level. LF&R was the first
local fire department to place a Heavy Rescue company into operation, incorporating a
variety of technical skills and equipment onto one vehicle, enabling the Incident
Commander to have multiple resources at every significant emergency scene.

LF&R is well noted for its fire safety education programs at a national as well as
local level through the efforts of its fire safety education committee. Though the
department enjoys a level of respect by its peer departments as well as its citizens, as
demonstrated through many “thank you” cards and letters, it has not always spent much
in the way of time in asking the customer what they really want. (Brunacini 1996, p. 97)
Like many fire and emergency medical service providers, LF&R has accepted the
positive comments from an appreciative public but has not followed up by asking for
specific input or suggestions on how to improve the services that we provide. (Nelson
1998 p.3) By assuming that such accolades are evidence that we are meeting the
expectations of the customer, fire service professionals are subject to fall prey to the
belief that they know the customer and that the customers needs do not change. (Denton
1989 p.70)

This research project was undertaken satisfy the requirements of the applied
research project of the Executive Development (ED) course of the National Fire
Academy’s (NFA), Executive Fire Officer Program, (EFOP). The focus of this project
was addressed in part within Unit 10 of the ED course under the title of “Service
Quality/Marketing”. This unit of instruction introduced the student to the philosophy of
W. Edward Deming and its applicability of the quest for quality to the emergency service
organization. It is expected that the findings of this research will be beneficial to LF&R
as well as to others within the Fire/EMS community who seek to gauge customer satisfaction for the purpose of improving the over-all quality of service.

LITERATURE REVIEW

The need for quality

The idea of including quality or value as integral part of a product is not a contemporary notion. It was however previously equated with costs commensurate to the value of the product. (Albrecht, 1992) The Packard Motor Car Company relied for many years upon its reputation as a quality automobile manufacturer, but its inability to lower costs, while maintaining its quality, and expand its customer base ultimately led to its demise. The example of Packard Motor Car was just one of the many failures that would continue to plague the corporate American mindset for years and perpetuate the opinion that there was causal effect between quality and price. It was in post World War II Japan that W. Edwards Deming would forever change the way management and labor were able to achieve quality or value without an increase to cost through statistical process control, development of a “quality culture” amongst manufacturing employees and continuous incremental product improvement. (Brown, 1993, p 3)

The advent of the “Arab Oil Embargo” in 1973 saw a change in which the world viewed the value of the American made automobile and likewise other products built domestically. Large, fast and a big consumer of gasoline, these vehicles quickly fell out of favor to owners who began to turn to Japanese automobile manufacturers who were able to provide the one thing that the American automobile industry wasn’t; a fuel efficient car. Not only were the Japanese industry and its workers able to produce an efficient car, they delivered more value, quality and reliability for the dollar. (Peters,
Waterman 1982) This was the beginning of a realization by American consumers that quality was achievable without increased costs, but American industry and its managers would be much slower in recognizing the same. The American management philosophy that had derived profit from “standardization, production efficiency and cost control” was being left behind by the Japanese who had turned their efforts “toward quality” as the means of entering the marketplace (Albrecht 1992 p xi). The philosophy and teachings of W. Edwards Deming arrived to the land of his birth through the quality products developed by a foreign industry and its workers who more readily embraced it. This paradigm shift from quality control to quality assurance led to a loyal customer, not merely a satisfied one (Deming 1986 and Albrecht 1992).

Quality service

Service “now accounts for 60 percent of the gross national product and 70 percent of U.S. jobs” (Paulsgrove 1992, September). Whereas the product sector has more readily begun to factor quality into their product, those who sell service “are not aware that they have a product”, being service (Deming 1986 p 188) and henceforth are less inclined to see quality service as anything more than a satisfied customer. Quality is measured as “conformance to requirements” and is determined by the producer, provider (Deming 1986 p 167) or the consumer (Crosby 1984 p 60). Those who work in the product sector produce a tangible by-product that can be measured qualitatively. On the other hand, those who function in the service sector are often left to measure quality by subjective means. Karl Albrecht (1992, p 71) defines quality as “a measure of the extent to which a thing or experience meets a need, solves a problem, or adds value to someone”. Neither definitions of quality are inconsistent with the other, but each
requires some mechanism (feedback) for determining whether the product or service is meeting those needs and conforming to a predetermined set of criteria relative to that product or service. This is a critical first step in assuring that quality service is being delivered and that improvement is being measured. This “process of continuous improvement” requires “a definition of the result, performance quality and cost” (Drucker 1995, p 289). Unfortunately, as a rule, service companies do not readily document nonconformance to a standard of quality as does a product company (Crosby 1984 p 1).

**Quality in the fire service**

For many years, the fire service has had little or no competition at all for service, tax dollars or the support of the community (Deming 1986 p 6). Though the fire service has for the most part served their respective communities well, it has been the provider and not necessarily the customer who has traditionally defined service quality. Many will argue that it is the service provider who is in the best position to prescribe future service (Deming 1986 p 167). But given the ever-changing mission of the fire service, it is now becoming more obvious that “the customer must appear (for the first time) in both our organizational design and mentality right next to the fire company workers and their bosses” (Brunacini 1996 p 97). This paradigm shift toward quality service has occurred due in part to the redefinition of the fire service as well as the fact that such thinking just makes sense in today’s business climate (Albrecht 1992; Bruegman n.d.; Brunacini 1996 and Paulsgrove April 1992). The fire service provider is facing competition from a variety of sources in unprecedented ways today, which include private industry, other municipal departments and governmental regulation. Private-sector Fire and EMS providers have generally understood that to be competitive, they must provide what the
customer wants, make the service economically reasonable and seek out ways to better
know the customer as a means of anticipating future needs. Additionally, fire service
providers can no longer assume that the same levels of funding that were previously
allocated to fire departments will continue to exist, because they too, along with
numerous other “noble causes”, are “competing in the marketplace for limited municipal
dollars” (Paulsgrove 1992). Finally, ever changing technology with its associated costs,
liability and governmental regulation (Bruegman n.d.) draw upon the already limited
fiscal resources which adversely affect the existing level of services, at the same time that
the customer still expects a quality fire service response when they activate the 911
system.

**Measuring quality service**

The fire service has a long tradition of collecting data relative to fire loss, deaths,
injuries and response times (Hatry et al.1992) and called such efforts, measuring quality
service. Even with the inclusion of emergency medical response and transport, most of
the data gathered relative to service delivery is objective in nature and is usually linked
with the provider’s adherence to industry standards and/or protocols. The fire service
professional is “action-oriented” and tends to measure quality through objective standards
and readily assumes that if the numbers look good the customer will be well served
(Brunacini 1996). But this is only one aspect in the process of quality service, which
must include customer feedback (often subjective) if the provider is going to continue to
meet the needs and expectations of the consumer of such services (Bruegman n.d, Bross
1953, Shapiro 1998 and Paige 1990). “The use of customer research takes the pulse of
the consumers reactions and demand and seeks explanations for its findings” (Deming
1986 p 177) and is a means of receiving such feedback. This should be done with some immediacy to the event that prompted such service because the customers “reaction to what they call good service is usually immediate” (Deming 1986) as it is to bad service. Though the measurement of good (quality) service is the desired objective of any survey, “anything short of top ratings should be taken as dire warnings” (Hatry et al.1992) as a result of the citizens love of its firefighters.

On the subject of assessing service for quality Denton (1989) observes:

“It seems pointless to offer services unless there is a clear understanding of the customers needs. Some organizations “think” they understand their customers, others think their customers needs do not change, and some just hope potential customers need their services. All of these attitudes are extremely dangerous. Every firm needs to assess service provided to customers.”

**Literature Review Summary**

The literature review provided considerable insight into the historical roots of the “quality service” trend and its recent application in the production and service sectors. Slow in acceptance, quality service has quickly become the expectation of the consumer who will go elsewhere should it not be provided, and by industry who will not survive long without it. Quality service must be viewed in financial terms because it directly impacts the current and future customer base as well as the bottom line by seeking to ensure that the job is done correctly the first time, thus reducing the total cost.

A preliminary review of available literature included textbooks, periodicals and internet cited materials relative to the genesis and application of the quality service philosophy by various authors, (Albrecht 1992; Bross 1953; Crosby 1984; Deming 1986;
Denton 1989; Drucker 1995; O’Reilly 2000; Peters 1982; and Shapiro 1998), and were primarily written for the private sector businessman. The works of other authors (Bruegman n.d.; Brunacini 1996; Brown 1993; Hatry 1992; Paige 1990; Paulsgrove 1992; and Schenk 2001) are more oriented toward adapting the quality service philosophy and principles being utilized by the private sector and applying them into the fire service as well as other similar governmental entities.

Several authors, (Bruegman n.d.; Brunacini1996; Paige 1990; and Paulsgrove 1992) stress the need for the fire service manager to include the customer and worker into the decision making process by accepting feedback from each as a method to ensure that the needs of each are being met as well as improving the over-all quality of the services being provided. As one author (Schenk 2001) indicated “In today’s competitive world, it’s more important than ever for businesses and organization to document the performance and service level they provide to their customers”.

**Procedures**

This project employed evaluative research that included a review of the historical origins of LF&R, an understanding of the evolution of the quality service element into the fire service and the use of focus groups that included service providers and customers as a means of determining whether customer needs were being met and quality service assured. Through action research the author was able to use literary study and focus group data as a means of creating a survey instrument for use by fire service managers in Livonia’s Department of Fire and Rescue. This document will be used for the purpose of providing customer feedback to the provider as a part of a total quality service program.
Definition of terms

Customer: potential users of any services provided by Livonia Fire and Rescue. For the purpose of this research project, the user group initially examined was limited to resident taxpayers, in a specific target audience as well as fire service employees.

Focus Group: a small group of people who are asked open-ended questions for the purpose of stimulating thinking, eliciting inter-action and identifying consumer needs. For the purpose of this research project, the author had predetermined to limit the total number of the group to no more than ten people.

Literature Review

The literature search was initiated at the National Emergency Training Center’s (NETC) Learning Resource Center (LRC) during the month of January 2001 during the authors attendance in ED program at the National Fire Academy. Further searches were undertaken within the Livonia Public Library system, Detroit Public Library system, the Livonia Fire & Rescue library and through the Internet. The personal library collection of the author was also examined.

Assumptions and Limitations

The focus groups used for sampling data of services provided by Livonia Fire and Rescue were limited to select residents or employees (Appendix A) based upon availability and usage of the services. Employees were considered as a customer group as they were considered as internal customers of the service provided. The citizen focus group was limited to residents who fell into the fifty-five (55) and older age group because they constituted the largest user block of Livonia Fire & Rescue services. This information was determined through an analysis of monthly run information. The month
of January 2001 was selected for data analysis because it did not represent an extraordinary run volume month, and was not influenced by any weather related incidents, which might tend to skew any analysis. User information was further restricted to Emergency Medical Service (EMS) incidents, which constitute approximately 81% of the total run volume of LF&R, as well including the run report information such as personal and demographic information that is required for such a study. Though it was recognized that this age group was a restricted subset of the total population, it is likewise the most readily available and willing group to respond to questionnaires as has been evidenced by previous citywide, non-fire service surveys.

In the case of the citizen focus group, though not known beforehand, all of these respondents had some familiarity with the services provided by Fire and EMS personnel either directly or indirectly through personal usage or through a family member or friend. No attempt was made to include non-resident users of LF&R services for the purpose of the citizen focus group.

The employee focus group utilized Fire Service personnel that included all levels of providers from Firefighter/Paramedics to Battalion Chief and whose service years range from 6 months to 29 years. Employees included city resident taxpayers as well as non-residents.

The citizen focus group session was held in the beginning of July of 2001 in the Livonia Senior Center building located in the Civic Center area, with a group of citizen volunteers who agreed to participate in an evaluation of Livonia Fire & Rescue by word of mouth.
A second focus group session was comprised of members of Livonia Fire and Rescue who included a cross section of departmental personnel from Firefighter to Battalion Chief. There was no inter-mingling of provider and consumers in the focus groups as each was evaluated independently for the purposes of contrast and comparison of their responses to the given questions. The employee focus group was held at Livonia Fire Headquarters in early July 2001.

Probative questions utilized to stimulate inter-action during focus group interviews included those previously included as part of the initial research questions that were developed to resolve the problem and purpose statements of this paper and were utilized as a means of determining the specific end product instrument. These questions included, but were not limited to (a) what are the services that our customers value, (b) who is the customer base, (c) does the customer know and understand the capabilities and resources available from LF&R personnel and their department, and (d) what kind and quality of services would the customer like to see LF&R provide in the future?

Each round of questioning was begun with a different respondent to prevent one or two group members from dominating or influencing the direction of the answers. The method chosen for analyzing the findings of the focus groups was simple note taking. The use of audio or video recorders and transcripts were not chosen because it was felt that it might inhibit a free and frank exchange of ideas. It is assumed that all respondents were candid in their respective response to questions.

**Results**

In response to the specific research questions:

1. What are the services that our customers value?
The respondents from our citizen focus group were equally split in their response between fire and emergency medical services. Whereas all had some familiarity of using or knowing someone who had utilized the EMS component of LF&R, several were very vocal in their concerns regarding the dangers of fire and being trapped. The citizen focus group tended to regard fire and emergency medical response as equal partners in the services valued.

On the other hand, the employee focus group placed greater value in the EMS component of service, arguing that most of the incidents handled by LF&R are of this nature and that “we” have more likelihood of making a difference through “our” efforts as emergency medical responders. When pressed about the service rendered during fire operations, employee respondents shared an enthusiasm regarding the service and placed high personal value on providing it to residents but felt that the EMS component was quickly becoming the “best sell” amongst the citizens.

When pressed for what it is that gives value to the services that LF&R provides, the citizen focus group responses included “reputation”, “quickness”, “caring” and “professionalism”. Citizens were extremely quick to lavish praise upon the fire department and felt that they “have the best fire department” around. Several were quick to note examples of positive customer exchanges between members of the department that they had knowledge of. The employee focus group responses included “response time”, “training levels” and “commitment to doing a good job”. Employees were quick to point fingers at others within their organization as being the providers of value more than they were to accept credit for that value themselves. When asked if city officials played a factor in the success of LF&R, most comments were negative. Employees took
a very parochial view of their organization in context with the whole of the city. One employee noted: “we get things done in spite of city hall”.

When asked what took away from the value of service, citizen focus group members were initially hesitant to find any deficiencies or value limiting factors. Under further prodding one member told an anecdotal story about an occasion where she had personally observed a firefighter with a dirty and faded uniform shirt” at a rescue scene and felt that “he” did not exhibit a “professional image”. One member pointed to an example of a firefighter from another municipality who had been arrested in a morals charge as an example of an event that all firefighters a “black eye” on firefighters and one that certainly took away from the value of services being rendered.

The employee focus group member response on the other hand to the question elicited quick responses. Examples included, “old apparatus”, “heavy run volume”, reductions in manpower and “labor-management” (lack of a contract) problems as examples of things that took away from the value of service. Initial responses were all centered on issues that “rank and file” employees felt that they had little control over and all of which they were able to deflect blame onto other city officials. When asked specifically what things that they, “employees” did or did not do that took away from the value of service, they were quick to point out their own perceived deficiencies as opposed to those of others. One member indicated that he recognizes his lack of tact with some people during night runs when he feels that the incident is a “nonsense call”. Another member indicated that he is “reluctant to talk” at civilians when they try to strike up a conversation even though he knows that it presents a chance to make a friend for the department. One member admitted that he sometimes doesn’t “crack the drug box” and
push medications on some patients because his “door to hospital time is only a few minutes” and he doesn’t want to “go through the gymnastics of exchanging the box” even when he knows “that it can have a positive effect”. All admitted that these were things that took away from the value of the services that “we” provide.

2. Who is the customer base?

The citizen focus group pointed to “the people who live and work here in Livonia”, “not a whole lot different than we are”, mostly “white”, “who have good jobs or are retired”. Focus group members drew upon the examples of their respective neighborhoods which all tended to be middle/upper middle class economically and white. When asked, most members indicated that most workers in the city are likewise racially white. One member, a former Ford Motor Company worker however felt that a “larger number of black” non-resident “workers” were employed in the city beyond the numbers that the others “believed”. It was felt that most workers in the city were “probably well off” financially and not likely “big users” of LF&R services.

Employee focus members indicated that the “majority of our customers are seniors”, “living on a fixed income”, “who have health insurance” and who are “generally appreciative of our efforts”. Employee focus group members viewed the customer base as those who were the recipients of emergency medical services and not necessary the potential customers, whose over-all numbers far exceed the 55 and older age group. When asked about working non-residents employees, focus group members concurred that they too were a part of the customer base and further indicated that the “majority of the workers have health care insurance” and as a rule, are not abusers of the system.
3. Does the customer know and understand the capabilities and resources available from Livonia Fire-Rescue personnel and their department?

Citizen focus group members were asked to name the services that LF&R provides to its citizens. All respondents were quick to indicate that “fire fighting” was the principal service that we deliver. Several indicated that we also “respond with EMS” and “give them a hand” and only two indicated that departmental personnel “do both jobs”. One respondent inquired of the interviewer as to “why the fire engine goes on the EMS run”? None of the respondents indicated any awareness that LF&R was responsible for the handling of hazardous materials incidents, technical rescue, fire and life safety code enforcement or fire safety education programs. When these additional duties were detailed to the focus group members, they expressed surprise that LF&R assumed these functions.

Employee focus group members were quick to list the capabilities and resources available and each was of the belief that for the most part “most people know what we do”. When pressed as to why they, (citizens) would know, an employee indicated that, “we have doing these things for decades”. One pointed out that he “had made a career of tours pointing these things out to citizen visitors”. Another indicated that it would be “a shame to believe that we haven’t gotten out the message” as to what we do. The assumptions of the employees and the ignorance of the citizens stood in stark contrast with one another and indicated to the author how poorly the message had gotten out.

4. What kind and quality of services would the customer like to see Livonia Fire & Rescue provide in the future?
Citizen focus group response to the question was centered on educational opportunities. One member indicated, “it would be nice to have firefighters give a fire safety lectures to seniors”. Another indicated that a “class on what to do in an emergency” would be beneficial. When pressed to describe the specific type of emergency, the respondent indicated, “when someone is feeling faint or weak” as well as other medical emergencies. One member indicated familiarity with LF&R’s fire and smoke detector installation program and stated that they would “like to see more programs like that”. One member indicated that they would like to see a program where “firefighters come into your home and point out hazards”. It appeared to the interviewer that the citizen group members were looking to become familiar with service providers prior to needing them in an emergency.

An employee group member indicated that quality service “will improve with newer equipment and more manpower”. One member indicated that the use of “newer technology has and will enable departmental members to provide a better quality of service in the future. Another pointed toward using “advanced paramedic techniques including “Rapid Sequence Intubation” and 12-lead electro-cardiogram monitoring. Most employees expressed a desire to adopt new roles, techniques and responsibilities as a means of giving better service to the public as well as increasing their own value to that public.

Discussion

The results of this research indicated that the customer does wish to have his or her input into the services being provided by the community. This process of customer inclusion begins with first determining who the customer is and what services they value.
In this research, it was through the use of the focus group, with its limited participation, that the researcher was able to lay the foundation that led to the creation of a survey instrument that will allow input from a greater cross section of customers. This will enable the department to define who the customer is and determine what they value. It will also serve to establish a much needed communications nexus between the provider and consumer to address potential problems before they become unwieldy.

The result of this research also indicated that the customer of LF&R does indeed show a concern about the quality and value of the services being provided. This finding was in contrast to the determination of A. Keith Brown in his evaluation of the Silverthorne Fire Protection district. The citizen responders were enthusiastic in their support of LF&R and identified the department in terms of ownership: “their department”. Of the literature available, it is the overwhelming consensus of the authors that the customer must play a role in defining the services being offered and the measurement of the quality of those services. It is the belief of the researcher that it is precisely a sense of ownership that will continue to make the relationship that LF&R enjoys with its customers, a stronger one.

Though it is recognized that the fire service has traditionally determined the level and quality of service, with LF&R being no exception, it is becoming increasingly more important that fire service professionals include the customer in the center of decision making to ensure that their needs are being met now and in the future. (Brunacini 1998) “Fire Departments have relied on a “good guy” reputation to sell ideas to taxpayers and elected officials”. (Paige 1990). That reputation, though still enjoyed, is no longer enough. Given the changes that have led to tax limiting initiatives, technology and
competition, the fire service manager must become much more resourceful than ever if they intend to survive in such a climate. As private business has changed by including the customer into the decision making process, so to must the fire service be willing to adapt itself to meet the changing needs. (Paige 1990, Bross 1953, Brunacini 1996)

Focus group interviews have already indicated that LF&R is well esteemed by its customers and is on the right track toward providing quality service. It must not however be content to be sole determinant of what constitutes quality service. It must look to those to whom they serve or go the way of the Packard automobile – to the archives of history.

**Recommendations**

The use of the focus group was influential in determining the parameters for and the creation of a customer satisfaction survey for the purpose of feedback and quality assurance. Based upon the research, the following recommendations are made:

1. Through the use of the public focus group it was determined that the public's understanding of what we do continues to remain limited, in spite of an aggressive fire safety education program that champions the services that we provide. Though the public’s over-all perception of the services provided by LF&R is considered excellent, much of that belief was based upon a traditional respect for the fire service in general. It was determined that LF&R managers must continue to support and build upon existing fire and emergency medical educational programs as a means of better acquainting its citizens regarding the services that LF&R provides. In spite of LF&R’s thirty-six year history of being the sole provider as the Emergency Medical Services, many of its citizens continue to
believe that there is a distinction between Fire and EMS, especially as it applies to those who provide each. This is not beneficial.

2. As a result of identifying the fifty-five and older age group as the largest receiver of Livonia Fire & Rescue services, emphasis should be given to include programs on emergency medical awareness, (Stroke, Heart and Hypertension) as part of its citizen education outreach approach. Such programs often serve as a segue way for the provider to interface with the customer for purposes of edification and familiarization. These are the people who rarely forget to vote, often look for a cause to champion and will be LF&R’s greatest supporters during a time of economic cutbacks.

3. LF&R management should include a customer service program as a part of its over-all departmental training. Such training programs would parallel the service quality and marketing lessons derived through the Executive Development course (Brown, 1993). This would better enable personnel to learn to treat our citizens as customers; more effectively meet their needs and reduce likely misunderstandings between each.

4. Continuous customer feedback must be an on-going endeavor with any service provider if service quality is to be maintained and future changes are to be anticipated. The customer service survey (Appendix C) should be sent to every fifth recipient of Fire/EMS services, excluding known fatalities or false calls, within a reasonable time frame (usually seven days). Follow-up should occur immediately with those customers who indicate by name and phone number any specific complaints. Results of the surveys should be sent to the questionnaire
respondents with the results posted at the station levels as well as the City website. Focus groups allow a personal interface between the interviewer and the responder and should be conducted no less than twice a year. The use of the focus group allows the member to assume “ownership” within the organization and feel as if their concerns are being heard. It also allows the service provider the opportunity to hear what the user thinks about the service and better identify and provide for the future need of the consumer before the competition does.
References


## Appendix A – Focus Group Breakdown

### Employee Focus Group

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Gender</th>
<th>Title</th>
<th>Years of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>53 years old</td>
<td>Male</td>
<td>Battalion Chief</td>
<td>30</td>
</tr>
<tr>
<td>2</td>
<td>53-year-old</td>
<td>Male</td>
<td>Captain</td>
<td>26</td>
</tr>
<tr>
<td>3</td>
<td>40-year-old</td>
<td>Male</td>
<td>Engineer</td>
<td>15</td>
</tr>
<tr>
<td>4</td>
<td>46 years old</td>
<td>Male</td>
<td>Asst. Driver</td>
<td>13</td>
</tr>
<tr>
<td>5</td>
<td>25-year-old</td>
<td>Male</td>
<td>Firefighter/Medic</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>31-year-old</td>
<td>Female</td>
<td>Firefighter/Medic</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>32 years old</td>
<td>Male</td>
<td>Firefighter/Medic</td>
<td>6 months</td>
</tr>
<tr>
<td>8</td>
<td>34-year-old</td>
<td>Male</td>
<td>Firefighter/Medic</td>
<td>12</td>
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### Citizen Focus Group

<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>Gender</th>
<th>Title</th>
<th>Years of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>46 years old</td>
<td>Female</td>
<td>Homemaker</td>
<td>24</td>
</tr>
<tr>
<td>2</td>
<td>55-year-old</td>
<td>Male</td>
<td>Design Engineer</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>55-year-old</td>
<td>Female</td>
<td>Registered Nurse</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>61 years old</td>
<td>Male</td>
<td>Chemist</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>59-year-old</td>
<td>Female</td>
<td>Homemaker</td>
<td>50</td>
</tr>
<tr>
<td>6</td>
<td>83-year-old</td>
<td>Male</td>
<td>Retired</td>
<td>48</td>
</tr>
<tr>
<td>7</td>
<td>71 years old</td>
<td>Male</td>
<td>Retired</td>
<td>71</td>
</tr>
<tr>
<td>8</td>
<td>65-year-old</td>
<td>Female</td>
<td>Retired</td>
<td>54</td>
</tr>
<tr>
<td>9</td>
<td>74-year-old</td>
<td>Female</td>
<td>Homemaker</td>
<td>47</td>
</tr>
<tr>
<td>10</td>
<td>53-year-old</td>
<td>Female</td>
<td>Professional Secretary</td>
<td>42</td>
</tr>
</tbody>
</table>
Appendix B – January Run Summary (EMS)

January 2001 Age Breakdown

January Run Breakdown by Gender
Appendix C

Citizen Survey Instrument

And

Cover Letter
LIVONIA FIRE & RESCUE

CUSTOMER SURVEY

The Livonia Fire & Rescue Department is constantly seeking to better serve those to whom we have assisted in the past. As a part of our “Quality Improvement” program we seek feedback from the people who have utilized these services. Your assistance is requested, through the completion of the attached survey, as a means better addressing the future needs of this community.

Your participation in this survey is strictly VOLUNTARY and your answers are CONFIDENTIAL. Thank you for your assistance in helping to make your Livonia Fire & Rescue Department and its personnel better serve you and your neighbor.

Sincerely,

Alan W. Brandemihl Jr., Chief
Livonia Fire & Rescue

I.D. #_____________________; NOTE: The I.D. number is used only for the purpose of coordinating mailing. Returned survey numbers will assist us in checking you off our mailing list.
SECTION ONE: The following questions will judge your opinion of the service that was provided to you from Livonia Fire & Rescue.

1. In general, how satisfied were you with the service provided by Livonia Fire & Rescue? (Please circle one number)
   
   Very Dissatisfied  1  2  3  4  5  Very Satisfied

2. How satisfied were you with the time that was required for Livonia Fire & Rescue to respond to your request for help? (Please circle one number)

   Very Dissatisfied  1  2  3  4  5  Very Satisfied

3. How satisfied were you with the courtesy and professionalism extended to you and family members by Fire & Rescue personnel? (Please circle one number)

   Very Dissatisfied  1  2  3  4  5  Very Satisfied

4. How favorable were you with the uniform and appearance of Fire & Rescue personnel? (Please circle one number)

   Very unfavorable  1  2  3  4  5  Very favorable

SECTION TWO: These following questions ask you about the service(s) provided by Fire & Rescue personnel to you. Please circle or check all that apply for each item.

1. Livonia Fire & Rescue services were requested for:
   
   a. Emergency Medical Services
   b. Fire
   c. Non-Emergency Assistance
   d. Fire Safety Education Programs
   e. Fire or Life Safety Code issues

2. If your emergency request for help was FIRE related:
   
   (Circle appropriate response)
   
   a. Did Fire personnel assist you in securing your property?  Yes  No
   b. Did Fire personnel offer to secure overnight accommodations?  Yes  No
   c. Were all of your questions answered satisfactorily?  Yes  No

If your emergency request for help was EMERGENCY MEDICAL SERVICE related:

   (Circle appropriate response)
   
   a. Were personnel compassionate to the patient as well as the family?  Yes  No
   b. Were you satisfied that appropriate medical care was provided?  Yes  No
   c. Did 911 operators provide caller assistance until Fire/EMS arrived?  Yes  No
SECTION THREE: The following questions will assist this department in determining who the recipients are of our services and better enable this agency to meet their needs through public safety education programs. (Respond as appropriate)

1. Please indicate the year of your birth. _________ (1940 e.g.)

2. Gender MALE _________ FEMALE _________

3. Racial/Ethnic Background:
   Caucasian _________ Black/African American _________
   Asian _________ Hispanic/Latino _________
   Other _________

4. Please check the highest level of schooling that you have completed:
   Not a High School Graduate _________ Bachelor Degree _________
   High School Graduate _________ Some Graduate Work _________
   Some College (No degree) _________ Graduate Degree _________
   Associate _________ Other _________

5. Marital Status:
   Single, Never married _________ Married _________
   Divorced/Separated _________ Widowed _________

6. Homeowner _________ Renter _________

7. Type of Residence:
   Single Family Home _________ Apartment _________
   Duplex _________ Mobile Home _________
   Condominium _________ Other _________

8. How long have you lived in Livonia: _________ (years)

9. Size of Family: _________ # of Adults _________ # of Children

10. Economic Status: (Family income before taxes in 2000)
    Less than $9,999 _________ $30,000 - $49,999 _________
    $10,000 - $19,999 _________ $50,000 - $74,999 _________
    $20,000 - $29,999 _________ $75,000 and over _________

SECTION FOUR: Please indicate any concerns, needs or comments on the services provided that would enable our staff to better serve you.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Name: _____________________ (Optional) Phone #: _____________________ (Optional)