ASSESSMENT OF UNIFYING EMS/FIRE OPERATIONS AND EVALUATION OF OFFICERS' LEADERSHIP PRACTICES IN THE CLAYTON COUNTY, GEORGIA FIRE DEPARTMENT

Executive Development

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ABSTRACT

The problem is the Clayton County Fire Department has integrated EMS/fire shift operations, but has not assessed how EMS personnel viewed the unification and how EMS personnel view their fire suppression officers' leadership practices. The research purpose was to develop recommendations to improve the department's unification of EMS/fire line operations, improve officers' leadership practices supervising EMS personnel, and expand the knowledge for unifying fire/EMS shift operations.

Three research questions were posed: 1) How do EMS personnel view the unified chain of command directive as improving the delivery of emergency medical services? 2) How do EMS personnel perceive the leadership practices of their supervising fire suppression officers? 3) What recommendations do EMS personnel have for improving the unification of the chain of command and improving the perceived leadership practices of their supervising fire suppression officers?

The evaluative research method and procedures employed for this study included a three-part questionnaire: 1) personal characteristics; 2) unifying EMS and fire suppression operations; and 3) the Leadership Practices Inventory: Observer. Furthermore, a literature review and interviews were also completed. The Clayton County fire chief authorized the questionnaire's distribution to permanently assigned EMS personnel (N = 59).

Results concluded the integration of EMS/fire operations enjoyed widespread support from EMS personnel. Respondents were dissatisfied with the previous operational separations and strongly preferred unified fire/EMS operations. However, EMS personnel found fire officers generally possess low levels of leadership practices.

Recommendations offered for improving both EMS/fire operations unification and the leadership practices of officers supervising EMS personnel originated from the respondents' narrative comments/suggestions: Revise lieutenants' job description, lieutenants should ride with EMS units, lieutenants should become at least EMT certified and preferably paramedic certified, adopt incentive pay for EMT/paramedic/college, expand EMS presence for lieutenants, increase the fire suppression responsibilities of EMS shift captains, and increase EMS training for battalion chiefs and shift captains.

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INTRODUCTION

On March 18, 2002 Clayton County (GA) Fire Chief Alex S. Cohilas (2002) issued Command Directive 03-04-59 regarding "departmental reorganization" (Appendix A). This directive effectively abolished the department's almost 20-year history of operating two separate chains of command for shift operations: fire suppression and emergency medical services. The Chief's intention was to "accomplish the department's goal of a unified chain of command" for all line operations (Cohilas, 2002, p. 1).

The problem is that the Clayton County Fire Department has not assessed how EMS personnel viewed this unified chain of command and how EMS personnel perceive the leadership practices of their "new" fire suppression supervisors created under the unified chain of command policy directive. In some cases, these fire suppression officers (lieutenants) are not paramedics or emergency medical technicians. This is a potential problem for the Clayton County Fire Department because numerous researchers have discussed the challenges of integrating fire/EMS operations (Greiff, 1999; Page, 1988; Sachs, 1999; United States Fire Administration, 1997).

The purpose of the research is as follows: (1) Develop recommendations for improving the department's efforts to unifying the chain of command and improve the perceived leadership practices of fire suppression officers who supervise EMS personnel. (2) Expand the body of knowledge to enable other departments to unify their EMS and fire suppression operations.

This research project will use an evaluative methodology to assess the department's EMS personnel's responses to the research questions. Recommendations for improving the unification process and leadership practices of lieutenants will be developed. A literature review, questionnaires, and personal interviews will be used to answer the following research questions:

1) How do EMS personnel view the unified chain of command directive as improving the delivery of emergency medical services?

2) How do EMS personnel perceive the leadership practices of their supervising fire suppression officers?

3) What recommendations do EMS personnel have for improving the unification of the chain of command and improving the perceived leadership practices of their supervising fire suppression officers?

BACKGROUND AND SIGNIFICANCE

The Clayton County Fire Department was established in 1967 through a voter referendum to provide comprehensive fire suppression, fire safety education, fire inspection, hazardous materials first responder, and emergency medical service transport. The department was an early adopter of the EMS trend occurring throughout the United

States in the early 1970's, and currently staffs eight (8) advanced life support transport ambulances each 24-hour shift (Bolton, 2002). Captain Bill Bolton was one of the department's charter EMS employees and appointed as one of the three original EMS lieutenants. His familiarly with the department's EMS history and challenges was invaluable for completing this background section.

Initially, EMS operations were implemented using a unified chain of command with firefighters interested in EMS being sponsored through training programs to obtain EMT and paramedic certifications. Each EMS ambulance was staffed with a supervisor (sergeant/paramedic) and two firefighters (EMT or paramedic). Each shift had an EMS lieutenant (paramedic) who was primarily responsible for coordinating the overall medical aspects of shift operations and resolving patient complaints/issues (Bolton, 2002).

Firefighters assigned to the EMS division were cross-trained as both medics and firefighters. Furthermore, they were eligible to take promotional examinations for both fire suppression and emergency medical service positions. However, for budgetary reasons, firefighters assigned to EMS operations were paid from the county's general fund, and fire suppression operations were funded from a special fire district tax (Bolton, 2002).

EMS lieutenants' evaluations were completed by the department's deputy chief of EMS (staff officer). Fire lieutenants (station officers) were the supervisors of all personnel assigned to their respective stations, and thus completed all their annual performance evaluations. Battalion chiefs supervised all shift operations for both suppression and EMS personnel, except for EMS lieutenants (Bolton, 2002).

While the system generally worked well, there was some frustration by EMS personnel that fire lieutenants and battalion chiefs lacked sufficient expertise or interest to function as reliable EMS supervisors, especially during mass casualty/triage incidents. The EMS shift lieutenants were constrained from serving in this role since they were assigned to an EMS unit themselves and had responsibility for patient care/transport. Eventually, battalion chiefs began to acknowledge their limitations as EMS shift supervisors when several well-publicized patient lawsuits in the early 1990's questioned their EMS-related decisions (Bolton, 2002).

The firefighters' fraternal organization completed a comprehensive study concluding that the department's model for supervising EMS operations was flawed. One of the study's major recommendations was to remove EMS shift lieutenants from patient care duties and place them in a staff vehicle to serve as functioning EMS shift supervisors. This recommendation received widespread employee support especially from the battalion chiefs who were emotionally and professionally drained from addressing EMS issues (Bolton, 2002).

Eventually, through a gradual process, EMS lieutenants assumed responsibility for all EMS personnel's annual performance evaluations, staffing and vacation schedules,

training assignments, and disciplinary issues. Fire lieutenants and battalion chiefs eventually had little direct voice or vote in how EMS shift operations were performed. The EMS shift supervisors were reclassified in 1996 to EMS captains in recognition of their expanded job responsibilities. While they are classified as captains, they are in the same pay grade as the battalion chiefs (Bolton, 2002).

As a result of numerous administrative and legal issues over many years, the EMS division was totally separate from the fire suppression division. Each division had a deputy chief (staff position) who reported directly to the department's single assistant chief (second-in-command). The deputy chiefs of suppression and EMS in turn supervised their respective shift supervisors: fire shift supervisors were battalion chiefs and EMS shift supervisors were EMS captains. For the most part, conflicts and issues were resolved well by the shift supervisors. However, there was considerable role casting with personnel being labeled as being "suppression only" or "EMS only" (Bolton, 2002).

EMS personnel, while in the fire department rank structure as firefighters and sergeants, had tremendous autonomy because many fire station officers (lieutenants) felt they had limited influence and responsibility over EMS operations. One example was that station officers did not complete performance evaluations over EMS personnel permanently assigned to their stations; these evaluations were completed by the EMS captains limiting the fire lieutenants' contributions and comments on the evaluations. Additional barriers for fire lieutenants' supervision of EMS personnel was all disciplinary actions, station assignments, and complaints against EMS personnel where resolved by EMS captains (Bolton, 2002).

The Command Directive of March 18, 2002 created a unified chain of command with no distinction between EMS and suppression assignment. Furthermore, station lieutenants were given the responsibility for completing performance evaluations of all personnel assigned to their respective stations. EMS captains were given review approval for EMS employees' "medical duties." EMS captains now reported to their respective battalion chiefs.

The problem is that the Clayton County Fire Department has not assessed how EMS personnel viewed this unified chain of command and how EMS personnel perceive the leadership practices of their "new" fire suppression supervisors created under the unified chain of command policy directive. This is a current and specific issue/problem confronting the Clayton County Fire Department. This applied research project seeks to assess the approach utilized for unifying fire suppression and EMS personnel in a large suburban fire department, and to assess the leadership practices of fire suppression officers as reported by their subordinate EMS personnel. The expectation is that this research will be useful to other fire departments providing EMS transport services.

Fire service-based EMS operations has been a topic of profound and continual discussion in academic and professional periodicals for years. Scores of recent Executive Fire Officer (EFO) applied research projects have explored some aspect of fire service-based emergency medical service operations (Blackwell, 2001; Bomar, 2001; Brandvold,

2001; Brown, 2001; Caratachea, 2001; Carlisle, 2001; Carver, 2001; Golden, 2001; Laird, 2001; Lamb, 2001; Lindstrom, 2001; Love, 2001; Lupo, 2001; Mattern, 2001; Riley, 2001; Rynning, 2002; Walters 2001; Bomar, 2002; Issacson, 2002; Maiero, 2002; Smerz, 2002; Sparks, 2002; Spicer, 2002; and Stickle, 2002). However, few EFO applied research projects have researched unifying EMS and fire suppression operations, and none explored EMS subordinates' perceptions of their supervising fire suppression officers' leadership practices. Consequently, this applied research project expands the body of knowledge regarding fire service-based EMS operations, and is relevant to the United States Fire Administration's operational objective to "appropriately respond in a timely manner to emergent issues" (USFA, 2002).

This applied research project was conducted as a course requirement for the Executive Development class at the National Fire Academy. The project relates to the course content in the following topic areas — Unit 1: Working As a Team; Unit 4: Managing Creativity; Unit 5: Following and Leading; Unit 6: Labor Relations; Unit 7: Organizational Culture; and Unit 10: Service Quality/Marketing.

This Executive Fire Officer applied research project also addresses EMS issues identified by the United States Department of Transportation's National Highway Traffic Safety Administration (NHTSA) in its report *Emergency Medical Services: Agenda for the Future* (1996): "Research involves pursuit of the truth. In EMS, its purpose is to determine the efficacy, effectiveness, and efficiency of emergency medical care. Ultimately, it is an effort to improve care and allocation of resources" (p. 13).

Finally, the NHTSA report (1996) identifies the "lack of education and appreciation by EMS personnel regarding the importance of EMS research" as one of the five major impediments to quality EMS research (p. 13). The expectation is that this applied research project will provide feedback on unifying and supervising fire service-based emergency medical service operations. The outcome will be consistent with the *Agenda's* "14 EMS attributes and proposes continued development of them, enabling all of us to strive for a vision that emphasizes a critical role for EMS in caring for our nation's health" (p. i).

LITERATURE REVIEW

The literature review was initiated at the National Emergency Training Center's Learning Resource Center (LRC) in July 2002 and continued for several months. Additional literature reviews were conducted at the Georgia Public Safety Training Center (GPSTC), Georgia State University (GA), Nova Southeastern University (FL), University of Maryland (MD), International Association of Fire Fighters, International Association of Fire Chiefs, and through various Internet search engines from August to October 2002.

Four distinct literature review topics were examined for this applied research project: Fire service-based EMS implementation issues, fire service-based EMS acceptance issues, fire service-based EMS integration challenges, and leadership theories/

applications relevant to the fire service. The literature review was quite useful in identifying current relevant sources for ensuring the topics were sufficiently comprehensive.

Fire Service-Based EMS Implementation Issues

For thousands of years, community leaders have struggled with the best model for treating and transporting the ill and injured to places of definitive medical care. While early models for emergency medical service delivery were crude and lacking of standards and consistency, it was obvious that some form of organization structure was mandatory. However, as technology, medical training advancements, informed consumers, and pioneering models for EMS delivery were piloted, citizens recognized and sought improvements in emergency medical service through the use of rapid scene response, skilled personnel, and then transport to hospitals in specifically designed ambulances.

While the earliest model for transporting the sick and injured to the hospital utilized funeral home hearses and untrained attendants, the 1960s saw this service model challenged. The United States Fire Administration (1997) writes:

> In the early 1960s, few people expected that highly trained paramedical personnel would be available around the clock to answer calls for medical assistance swiftly. Individuals generally needed to get to the hospital on their own. When a person was unlucky enough to need extrication from an entrapment or to require first aid for an injury, they could not expect uniform competence or treatment from the people who came to their aid (p. 2).

The catalyst for developing a professional model for EMS transport was a report prepared by the National Academy of Sciences (1966) entitled *Accidental Death and Disability: The Neglected Disease of Modern Society*. This report criticized the complete lack of standards and policies for providing reasonable treatment and transportation for medical emergencies. The report awakened a sleeping society to the ignored realities of being injured or taken ill in the United States. Through a variety of legislative and funding initiatives, today's model for delivering emergency medical services was developed.

Sachs, (1999) while discussing the effectiveness of the fire service in providing EMS writes, "the National Commission of Fire Prevention and Control, in its 1973 study *American Burning*, recommended that 'fire departments lacking emergency ambulance, paramedical, and rescue services consider providing them, especially if they are located in communities where these services are not adequately provided by other agencies'" (p. 118).

Initial efforts to implement community-based EMS services followed many innovative approaches, but eventually there were three primary delivery models: Private ambulance companies, community supported public EMS agencies, and fire service-based EMS. Bruno (1997) reports: 45 % of EMS in the United States is provided by

career fire departments, 28 % by private ambulance services, 17 % by volunteer fire departments, and 9 % by third service agencies such as health departments or hospitals. While initially many fire chiefs were reluctant to expand their departments' mission to extend beyond fires, eventually political and citizen pressures caused a gradual acknowledgement that EMS might have a legitimate fire service role.

The justification for firefighters to intervene in medical emergencies is just as recognized today as when the concept was first introduced. Brawner (1999) writes, "the skills and attitudes of firefighters, along with strategically located fire stations are . . . reasons that the fire service is a good choice to provide this (EMS) service" (p. 17). Additionally, Cole (1997) suggests the competitive advantages from fire departments providing EMS include high degree of citizen trust, lower total operating costs from employing multiple role firefighter/paramedics, and the ability of dual-trained personnel to engage in non-emergency activities such as fire prevention and community education. The United States Fire Administration (1997) writes, "although the fire service was one of the earliest providers of emergency care (in some places, even prior to 1966), in recent years it has developed a renewed and stronger interest in EMS" (p. 3).

Many experts express strong support for the many community benefits associated with firefighters performing emergency medical services. Page (1988) suggests, "productivity increases when cross-trained employees are able to perform two essential public safety tasks (fire protection and emergency medical services). Furthermore, the structure and stability of the fire department and the paramilitary discipline and training of firefighters are compatible with EMS responsibilities" (p. 347). The Unites States Fire Administration proposes, "it could be debated that the 'production capacity' of an individual firefighter might be increased by having that firefighter capable of responding to a wider variety of requests for assistance. Adding EMS to the array of services offered by a fire department allows it to meet its community's needs more efficiently and effectively" (p. 3).

Fire Service-Based EMS Acceptance Issues

While many firefighters embrace the expansion into medicine, there remains some resistance and rejection of fire personnel assigned to EMS duties. Bodane (1999) writes "the EMS role is sometimes viewed as a 'stepchild' to the fire service. There remain firefighters who believe that EMS is a temporary assignment taken on by an organization whose job it is to fight fires" (p. 13). Additional research support is offered by Greiff (1999) stating, "fire service participation in EMS is a growing trend across the country. This trend has created two camps: those in favor of such services and those opposed to them" (p. 43).

The tendency of some fire suppression personnel to resist or reject EMS duties is really not difficult to comprehend. In many fire departments, assignment to EMS apparatus is more voluntary than mandatory. While many departments require emergency medical technician certification as part of the initial recruit training, obtaining paramedic certification as a prerequisite for promotional advancement is not mandated. Page (1988)

writes, “fire departments have not always been willing to assume this new and greater responsibility (EMS). However, in a number of communities fire officials resisted efforts to utilize their personnel and resources for EMS” (p. 351).

Dothan (AL) Fire Chief Dennis Rubin (1997) suggests his fire department possessed some role conflict between fire suppression and EMS personnel, and that the department became more unified after introducing the paramedic engine concept. Over the years, two classes of employees had developed: fire medics and suppression personnel. By cross-training all members, the department unified. Rubin (1997), while discussing paramedic fire engines, comments, “The real savings come from the proper utilization of personnel. By letting capable, willing paramedics participate in fire duty and the reverse for firefighters answering medical alarms, the city saves a small fortune” (p. 72).

Chief Rubin’s paramedic engine initiative success is consistent with the literature review findings of another fire-based EMS expert. Page (1988) writes:

> Many jurisdictions have utilized the dual-role concept successfully; under this profile, advanced life support services can be implemented with minimal increase in total personnel. There have been no reports that either function has been compromised by using the same personnel in both roles. However, the willingness of individuals to serve in both capacities seems to depend on such factors as the history and tradition of the organization, the quality and style of the department’s management, and the relative work load of the department. . . . All personnel, including the paramedics, are supervised by fire company officers. This supervision never extends to medical judgement, however, as they are the responsibility of the medical control hospital and its authorized staff (p. 357).

The operational issues of the fire service are also dependent upon the fiscal resources provided by their respective county commissions and city councils. The United States’ post 9-11 economy poses real challenges for many fire departments to receive sufficient funding for present and proposed service initiatives. The United States Fire Administration (1997) suggests, “when fire departments use multiple-role responders, they are helping to minimize the duplication of training, equipment, and overhead/ administrative service required. This means that it becomes easier to justify funding for the fire department” (p. 3).

Fire Service-Based EMS Integration Challenges

While tremendous progress has been made in many fire departments regarding the implementation and acceptance of EMS operations, there is still significant advancements to be achieved. Sachs (1999) asks and answers the following question regarding fire service-based EMS integration challenges:

> Why, then, is there still a question about what EMS means to the fire service? Perhaps it’s the fault of certain stodgy chiefs who feel that the job of the fire

> service is strictly to put the wet stuff on the red stuff and that it's someone else's responsibility to deal with patients. . . . Overall, if a department isn't willing to make patient care a top priority, then staying out of the EMS business altogether is probably the best decision it can make (p. 12).

The United States Fire Administration (1997) offers some comments, challenges, and strategies for implementing EMS into the fire service:

> Before committing to implement EMS in a fire department, the local elected officials, the fire chief, and members of that department need to recognize some realities. First, establishing EMS within a fire department is a process that will require the full participation of all the system's stakeholders. This means the implementation may be quite lengthy. One does not simply announce that, beginning on a certain date, the department will provide EMS. A lot of preparation and organization must be done before the first EMS call is answered. Second, taking on EMS responsibilities means adding a substantial amount of work for the agency and for the individuals who will be responding to the EMS calls. Finally, providing EMS requires that both the agency and the responders have an "EMS mindset" (p. 4).

Fire chiefs are the real determinate in whether their respective subordinate fire officers and firefighters accept, tolerate, or resist EMS integration. Consequently, active and not passive leadership is demanded when pursuing a change agenda. Page (1988) advocates, "In nearly every fire department there will be personnel who strongly believe that a fire department's role should be limited to fire protection. Unless there is strong and consistent evidence of top level policy to the contrary, pockets of resistance and interference will surface to produce problems that could have been prevented" (p. 376). Horewitz (1999) suggests, "the need for the fire service to be the catalyst for change to bring the fire service and health communities together" (p. 26).

Integrating fire-based emergency medical service operations offers fire departments and communities many opportunities and challenges. One critical aspect of integration involves operational responsibility and authority regardless of specialization. The United States Fire Administration (1997) suggests:

> It is important that fire and EMS managers of equal responsibility and accountability have equal authority. Without equal authority it will be vastly more difficult to gain respect from the organization. While the authority and responsibility should be equal between EMS and fire managers, recognition of technical knowledge is important. Managers without technical training should not be expected to supervise personnel performing technical duties. EMS managers should not be expected to supervise fire incidents, and fire managers should not supervise EMS incidents — unless such managers are appropriately cross-trained (p. 90).

If reluctant or resisting fire suppression-only advocates think the fire service is EMS oriented now, they have not seen anything yet. The potential and likelihood for significantly expanded EMS roles is on the horizon. As fire prevention and building code initiatives of the last 20 years result in fewer structural fires, EMS and terrorism threats will demand more medical and mass casualty capabilities. Sachs (1999) forecasts "some of the issues that will be facing fire service EMS in the future include improvements in technology, increased demand for services, competition for transport services, changing demographics, increased research in EMS, consolidation of EMS services, and the need to market the services that a department provides" (p. 106).

The United States Fire Administration (1997) writes:

> It is important [for fire departments] to decide early on whether command will be separated or integrated. Separated command implies two command structures which do not have any cross-over responsibilities (i.e., they are 'parallel'). Integrated command implies that supervisors who are primarily in charge of one type of unit (e.g., an EMS unit) can have command authority over other types of personnel and resources (e.g., fire suppression or technical rescue resources). It is important to stress that integrated command really requires that fire service commanders have formal EMS training (p. 90).

Perhaps the strongest statement justifying the full integration of EMS into the fire service as an equivalent mission to fire suppression duties is one by Ludwig. Ludwig (1999) advocates, "The ever-increasing role fire departments have taken on with respect to providing EMS should be a clear sign that EMS should not be segregated, but integrated into the department. EMS being delivered by a fire department increases its visibility to the public. This visibility and increased productivity certainly provide momentum for strong community support" (p. 32).

The International Association of Fire Chiefs (IAFC) itself struggles with defining the best tactics and strategies for integrating fire service-based EMS. IAFC Staff (1999) asks several questions regarding the process:

> What's the level of commitment to EMS in your department? Does your department fully embrace EMS with a dedicated EMS chief and cross-trained personnel who have dual roles? This is a good level of commitment to one of the fire service's critical missions, but is it truly the best measure of the integration of EMS within the fire service? (p. 28).

The answers offered by the International Association of Fire Chiefs should be strongly considered by fire chiefs seeking to define or refine the scope of duties for all officers. IAFC Staff (1999) proposes, "While having a separate EMS command appears to be placing proper focus on EMS, it may actually place tensions on the fire-EMS bond. A fire department, even one with cross-trained/dual-role personnel, won't achieve full integration of EMS until all personnel and their leaders maintain daily EMS responsibilities that are equivalent to their other duties" (p. 28).

The role of fire suppression officers tasked with leading and motivating EMS operations and personnel are enormous. Many officers would either reluctantly or readily acknowledge professional inadequacy for expanded EMS responsibilities. Carter and Rausch (1999) advocate:

> An important challenge for the officer in charge if a company with EMS responsibilities is to maintain full competence in both fire suppression and EMT (or possibly even the higher paramedic) knowledge and skills. These challenges include the following: Budgeting issues; private- and public-sector service delivery controversies; mandatory continuing training requirements; possible morale issues related to an increased work load; labor relations issues, including salary differentials, work schedules, and outside training; and infection control issues (p. 450).

An important aspect for the full integration of fire service-based EMS involves emphasizing the role of discipline and support for the fire department command structure to accomplish mission objectives. Avillo (2001), while discussing training for probationary firefighters, suggests, "make recruits understand that the fire department is a quasi-military organization that follows a definite hierarchy. Explaining the hierarchy, as well as the principle of the superior-subordinate relationship, will help recruits to understand their place in the organization" (p. 40). These same statements warrant explanation and discussion during subsequent career development programs for officers at all command levels.

Cody (1999) established three benefits from streamlining EMS shift supervision:

1. Legitimizes the EMS officer's position within the operational chain of command for the purpose of evaluation, training, and remediation of performance deficiencies.
2. Allows the EMS officer to implement the policies, practices, and procedures of the department under the authority of the administrative Battalion Commander.
3. Simplifies the medical risk management function and improves the investigation of EMS service complaints by having all members of the investigation team within the same bureau (p. 23).

Sachs (1999) urges, "because EMS means so much to the fire service, individual firefighters and chief fire officers need to make EMS work in their departments, and fire chiefs need to make EMS work in their communities. Local employee groups need to work together with their departments" (p. 120). Additionally, Sachs (1999) writes, "although the emergency incident responsibilities of fire and EMS supervisors differ somewhat, there are strong similarities in overall mission priorities, levels of accountability, and the methods of command. Furthermore, fire and EMS supervisors share common nonemergency responsibilities — personnel matters, fleet maintenance, station duties" (p. 128).

Leadership Theories and Applications

Magnusen (1995) suggests theories attempting to explain leadership attributes have been in constant refinement for years. Leadership continues to generate intense interest with fire service officers who seek to improve the quality of emergency service delivery. Sergent (2002) defines "the essence of leadership as the ability to create vision, to instill in people a 'fire in the belly' and a desire to do great things" (p. 48). Bennis and Nanus (1985) suggest leadership is the most studied and least understood topic of any in the social sciences. This literature review section will summarize leadership theory evolution by reviewing the trait, behavioral styles, situational, and transformational theories.

Throughout much of history, the most widely accepted belief was that leaders were born and not developed. Leaders such as Julius Caesar, Joan of Arc, Abraham Lincoln, and Fredrick Douglass were viewed as possessing an inborn ability to lead. This ability was commonly referred to as the "great-man approach to leadership" and eventually as the trait theory of leadership (Cawthon, 1996).

As the acceptance of trait theory increased, literally hundreds of specific leadership traits were offered as predictors of successful leadership ability. Few studies reached consensus on the most important traits of a leader. One difficulty with trait theory was whether leaders had intuitive good communication skills or if they developed communication expertise as a byproduct of their leadership situations.

Behavioral styles leadership theories developed as a direct result of World War II. Military leaders, working in cooperation with researchers, sought to identify patterns of leadership behaviors rather than leadership traits. Lewin, et al. (1939) conclude followers have a strong preference for managers employing a democratic leadership style versus authoritarian or laissez-faire styles. The three Classic Styles of Leadership are summarized in Table 1.

Table 1: Lewin's (1939) Three Classic Styles of Leadership and updated by Kreitner (1998).

	Authoritarian	Democratic	Laissez-Faire
Nature	Leader retains all authority and responsibility	Leader delegates a great deal of authority while retaining ultimate responsibility	Leader grants responsibility and authority to group
	Leaders assign people to clearly defined task	Work is divided and assigned on the basis of participatory decision making	Group members are told to work things out themselves and do the best they can

	Primarily a downward flow of communication	Active two-way flow of upward and downward communication	Primarily horizontal communication among peers
Primary Strength	Stresses prompt, orderly, and predictable performance	Enhances personal commitment through participation	Permits self-starters to do things as they see fit without leader interference
Primary weakness	Approach tends to stifle individual initiative	Democratic process is time-consuming	Group may drift aimlessly in the absence of direction from leader

Situational Theory proposes that while leadership skills are important – the situation is another critical element ignored in many leadership models. Situational theorists do not accept there is one best leadership style for every situation but rather suggest flexibility in the applied leadership approach consistent with the situation offers more advantages. Two commonly accepted situational leadership approaches are Fiedler's Contingency and Path-Goal theories.

Fielder (1977) proposes leaders fundamentally employ one type of approach: (1) task-motivation or a concern of production, or (2) relationship motivation or concern for people. Both approaches are sometimes necessary for emergency operations. One important tenant of Fiedler's Contingency Theory is leaders' personality and leadership styles are fixed. Consequently, leaders have either a task or relationship preference but not both, and changing their motivational orientation is quite difficult.

Holman (2002) implies that some interest in task-motivation is a critical skill for officers. He asserts,

> Focus, the foundation of a team, consists of creating and communicating a vision and setting team goals. The company officer can use these two elements to provide and maintain a focus for the team. Remember, the number one cause of team burnout and team ineffectiveness is lack of focus. If the company officer fails to establish this focus, the team members must establish their own focus, which will be centered on themselves, and not on the needs of the fire company. When this occurs, the team concept breaks down and fragments. This is how the "What's in it for me?" attitudes develop, which are counterproductive to the team approach (p. 71).

Stogdill's (1948) meta-analysis of contingency research found that task-motivation leaders are more effective dealing with situations where they possess either very limited control or total control over situational variables. An illustration would be serving as incident commander for an emergency operation. Relationship-motivation results for leaders are generally improved over task-motivation in moderately favorable

situations. The rationale is that followers possess the technical and judgement expertise but desire monitoring and support from their leaders to resolve the situation.

House's (1971) Path-goal is another situational leadership theory addressed in this research. It is viewed as a situational theory given the belief that effective leadership behaviors depend upon subordinates' personalities and the situations being addressed. House and Mitchell (1974) suggest leaders can increase employee's motivation by addressing three specific areas: clarify subordinates' perception of work goals, link rewards with obtaining the established goals, and explain the relationship between organizational goals and individual rewards. Practically, these objectives can be summarized as leaders should help subordinates achieve their goals by providing direction, support, and encouragement.

Buckman (2002) acknowledges firefighters respond to path-goal efforts. "They see their work as making a significant difference and believe in what they are trying to accomplish. Usually, they see themselves helping the organization in some way. They get satisfaction from situations they have handled well and are proud of their creative innovations and ideas" (p. 68).

Sergent (2002) challenges fire service leaders:

> Leadership is an art with which the fire service is rapidly losing touch. The fact is, we can turn around the trend of creating manager/politicians and begin once again to develop a leadership tradition. To accomplish this, we must embrace the necessary changes in approach, culture, and personal strategy so important in creating and employing leadership (p. 58).

The quality of leadership within any organization is a critical component for achieving organizational success. Frazeur (2002) writes, "fire departments operate most effectively when the organization and its operations are marked by stability, continuity, and consistency. This holds true at the fire station level as well as the organizational level. . . . Rapid fluctuations in a fire department's management, mission, and structure leads to reductions in morale and, ultimately, public value" (p. 92).

Kelley (1992) suggests subordinates become dissatisfied with the quality of their supervisors' leadership practices, and offers the following research conclusions:

1. Forty % of supervisors have questionable abilities to lead.
2. Subordinates view only one in seven supervisors as potential leadership role models.
3. Fewer than fifty % of supervisors are able to instill trust in their subordinates.
4. Nearly forty % of supervisors have "ego" problems, are threatened by talented subordinates, have a need to act superior, and do not share credit (p. 201).

During the literature review, Jim Kouzes and Barry Posner 's (1988, 1997) leadership research was frequently referenced by other leadership experts. Furthermore,

Lowe (2000) utilized Kouzes and Posner's Leadership Practices Inventory in his doctoral dissertation entitled *An examination of the relationship between organizational commitment and leadership practices in the fire service*. Consequently, Kouzes and Posner's research was reviewed for its application to this applied research project.

Kouzes and Posner (1988) sought to identify the leaders' practices when they were at their "personal best" at leading and not managing. Furthermore, Kouzes and Posner suggest leadership is simply a set of behaviors that can be learned and applied by supervisors and managers at all hierarchical levels and all levels of seniority, experience, and education. Their research proposed the process of extraordinary achievements through ordinary people to originate from following the five leadership practices each containing two commitments: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart.

From their initial research, Kouzes and Posner (1988b) developed the Leadership Practices Inventory-Observer (LPI-O) through numerous qualitative and quantitative research methods and research extending over 20 years. Their in-depth leadership interviews and case studies of personal-best leadership experiences generated the conceptual framework of the following five leadership practices:

Challenging the Process: (1) search out challenging opportunities to change, grow, innovate, and improve; and (2) experiment, take risks, and learn from the accompanying mistakes. Most applicable to this research project is that Kouzes and Posner's research found that most of their subjects talked about extraordinary leadership during times of revolution and not continuation. Additionally, for organizations to achieve a climate of sustained competitive advantage, individuals must adopt experimentation with analyzed risk-taking (Kouzes & Posner, 1988).

Inspiring a Shared Vision: (1) envision an uplifting and ennobling future; and (2) enlist others in a common vision by appealing to their values, interests hopes, and dreams. Kouzes and Posner found leaders are not satisfied just continuing to produce and/or service the same constituencies, customers and programs. They want to be innovative in developing new products and services, and reaching new markets, customers, and territories. Furthermore, leaders strive to involve and excite others to willingly join a collaborative effort to achieve uniqueness and not complacency (Kouzes & Posner, 1988).

Enabling Others to Act: (1) foster collaboration by promoting cooperative goals and building trust; and (2) strengthen people by giving power away, providing choice, developing competence, assigning critical tasks, and offering visible support. Kouzes and Posner suggest leaders accomplish extraordinary events by ensuring all divisions, work units, and internal and external interests are involved in the process of developing cooperative goals. Leaders understand people who feel strong, capable, and competent, and who possess the prerequisite qualifications to accomplish assignments with limited instructions and little or no supervision/control measures (Kouzes & Posner, 1988).

Modeling the Way: (1) set the example by behaving in ways that are consistent with shared values; and (2) achieve small wins that promote consistent progress and build commitment. Kouzes and Posner suggest leaders must demonstrate to subordinates that there is congruency between the leaders' words and their deeds. Additionally, extraordinary leaders understand the importance of implementing change and achieving results with slow, steady, and consistent progress (Kouzes & Posner, 1988).

Encouraging the Heart: (1) recognize individual contributions to the success of every project; and (2) celebrate team accomplishments regularly. Kouzes and Posner acknowledge celebration and recognition should be meaningful, individualized, and reflect the achievement of success or success contributions. Furthermore, leaders understand the objective is to get employees involved in the hard work required to achieve objectives, letting them plan the celebration, and then letting them celebrate (Kouzes & Posner, 1988).

Summary

The literature review findings and observations were critical to this applied research project. The fire service-based EMS implementation issues, fire service-based EMS acceptance issues, fire service-based EMS integration challenges, and leadership theories/applications relevant to the fire service were useful in developing the unifying EMS and fire suppression operations questionnaire. Additionally, Kouzes and Posner's (1988b) Leadership Practices Inventory – Observer Questionnaire was identified as a validated methodology for assessing the leadership practices of fire suppression officers.

PROCEDURES

Structured and Unstructured Interviews

Discussions were conducted with the following senior staff of the Clayton County Fire Department: Chief Alex Cohilas, Assistant Chief Mark Trimble, Deputy Chief Jeff Hood, Deputy Chief Carmelita Ferrone, Battalion Chief Earl Watson, and Captain Bill Bolton. Furthermore, structured and unstructured interviews were conducted with company officers, sergeants, and firefighters, and provided valuable insight into the department's unification process. Additionally, the interviews identified many antecedents and consequences affecting the perceptions and realities of EMS personnel regarding unification and leadership practices of company officers.

Questionnaire

The study is cross-sectional in nature given that only one variable observation was collected per respondent during the three-week data collection period. The survey questionnaire utilized for this research consisted of three parts (Appendix B): 1) personal characteristic questionnaire; 2) unifying EMS and fire suppression operations; and 3) Leadership Practices Inventory: Observer (LPI-O) developed by James M. Kouzes and Barry Z. Posner (1988).

Personal Characteristics Questionnaire

The personal characteristics questionnaire was developed by the researcher to summarize the population's demographic profile and make analytical comparisons based on the personal characteristics of rank, seniority, gender, age, and education. It was expected there would be some response differences among the various demographic attributes of the respondents. However, the relatively small population might minimize any demographic distinctions.

Unifying EMS and Fire Suppression Operations Questionnaire

The unifying EMS and fire suppression operations questionnaire was developed by the researcher to qualitatively and quantitatively assess how EMS personnel view the unified chain of command directive as improving the delivery of emergency medical services. It consisted of 14 questions. Twelve of the questions utilized a 4-point Likert scale requiring respondents to select either a favorable or unfavorable response for each question, and two questions offered respondents an opportunity to make suggestions for integration and leadership improvements. All questions provided respondents with a place to provide remarks.

Leadership Practices Inventory-Observer Questionnaire

The Leadership Practices Inventory: Observer (LPI-O) developed by James M. Kouzes and Barry Z. Posner (1988) consists of 30 statements describing various leadership behaviors. The LPI-O has been extensively validated and found to be a reliable measure for leadership practices, as well as organizational effectiveness, job satisfaction, and organizational commitment (Bennington, 2000; Endress, 2000; Lowe, 2000; Man, 2000; McNesse et al., 2000; Oliver, 2001; Pugh, 2000; Strack, 2001; Taylor, 2001; Tsend, 2000). Furthermore, Huber et al. (2000), in an assessment of 18 different leadership instruments, found the LPI to be the only instrument receiving the top score in psychometric soundness and ease of use. Written permission to use the LPI-O instrument was obtained from Dr. Barry Posner of Kouzes Posner International (Appendix C).

The Leadership Practice Inventory has been administered in thousands of organizational and disciplinary settings. Kouzes and Posner (1997) report from their personal archive of 350,000 LPI-O responses the following observations: Enabling Others to Act is the leadership practice most frequently used by leaders. This is closely followed by Modeling the Way; with Encouraging the Heart and Challenging the Process possessing similar scores for third place. Inspiring a Shared Vision was found to be the least frequently utilized leadership practice. Table 2 contains a summary of Kouzes and Posner's (1997) research findings:

Table 2: LPI-Observer Means and Standard Deviations

Leadership Practice	**Mean**	**Std. Deviation**
Enabling Others to Act	47.8	8.4
Modeling the Way	47.5	8.5
Encouraging the Heart	44.9	10.2
Challenging the Process	44.4	9.1
Inspiring a Shared Vision	42.0	10.6

The LPI-Observer contains 30 behavioral statements with six statements for each of the five leadership practices. The instrument uses a 10-point Likert scale for respondents to designate how often their leader uses a behavior: 1 = Almost never, 2 = Rarely, 3 = Seldom, 4 = Once in a While, 5 = Occasionally, 6 = Sometimes, 7 = Fairly Often, 8 = Usually, 9 = Very Frequently, and 10 = Almost Always. Table 3 displays the distribution of questions correlated to the five leadership practice scales (Kouzes & Posner, 1997).

Table 3: Leadership Practices' Scale

Leadership Practices	Corresponding Questions
Challenging the Process	1, 6, 11, 16, 21, and 26
Inspiring a Shared Vision	2, 7, 12, 17, 22, and 27
Enabling Others to Act	3, 8, 13, 18, 23, and 28
Modeling the Way	4, 9, 14, 19, 24, and 29
Encouraging the Heart	5, 10, 15, 20, 25, and 30

Questionnaire Procedures

The researcher submitted a written request to the fire chief seeking permission to administer the questionnaire. This request resulted in a meeting with the fire chief to discuss in greater detail the research objectives, and resulted in adding several more questions to the questionnaire. The fire chief gave written approval for the questionnaire's distribution (Appendix D).

All firefighters and sergeants permanently assigned to field operations (N = 59) with the department's Emergency Medical Services Division were identified as a purposive population frame to be sampled. At the time of the study, two employees were military reservists deployed to Afghanistan, one employee was on long-term disability leave, and two employees were on extended vacation leaves. Of the remaining 54 employees, all were approached and agreed to participate in the study. All 54 employees completed useable survey responses (response rate is 100 %), effectively representing a census of the designated population frame.

The researcher personally administered the survey questionnaire to all available firefighters and sergeants permanently assigned to EMS units (N = 54). Upon arrival at the respective fire stations, the senior officer was informed of the reason for the

researcher's visit and provided a copy of the chief's permission letter. Respondents were given an explanation of why the questionnaire was being distributed, informed of the research objectives, told the questionnaire was voluntary and anonymous, told they had as much time as needed to complete the questionnaire, and that they could make as many statements/recommendations as they wanted.

After respondents completed their questionnaires, they were thanked for their participation. Upon completion, the surveys were collected and placed in an envelope. The data were only reviewed once the collection process had terminated. Additionally, respondents were informed that copies of the applied research project would be made available upon final grading by the NFA evaluator.

Assumptions and Limitations

This research project and questionnaire had several assumptions and limitations. One assumption was that all respondents would understand and honestly answer the questionnaire based upon their own beliefs and experiences, and not on their shared or collaborative group experiences. Additionally, Part II of the questionnaire (unifying EMS and fire suppression operations) was assumed to be valid and reliable in terms of assessing the actual expressions of the respondents.

One limitation of the research was no attempt was made to assess the perceptions and responses of fire suppression personnel also affected by Command Directive 03-04-59 regarding "departmental reorganization." Additionally, while structured and unstructured interviews were conducted with a small sample of company officers to solicit some feedback regarding their leadership practices, the process was far less formal than the assessment methods offered EMS personnel.

Definition of Terms

Battalion: A subdivision of the department containing a number of companies

Battalion Chief: A uniformed chief officer commanding a battalion who is subordinate in rank to a Deputy Chief.

Captain: A uniformed line officer who is a paramedic and is responsible for all emergency medical service and rescue operations for a 24-hour shift, and is subordinate to the battalion chiefs on his/her respective shift.

Company: Members assigned to a fire station staffed with various fire suppression and EMS equipment commanded by a company officer.

Company Officer: Officer in command of a company who holds the rank of lieutenant.

Emergency Medical Services: A comprehensive, coordinated arrangement of health and safety resources that serves to provide timely and effective care to victims of sudden illness and injury.

Lieutenant: Officer in command of a company of firefighters and paramedics assigned to a fire station.

RESULTS

This applied research project sought to assess the perceptions and responses of the available firefighters and sergeants permanently assigned to field operations (N = 54) with the department's Emergency Medical Service Division. The survey questionnaire utilized for this research consisted of three parts (Appendix B): 1) personal characteristic questionnaire; 2) unifying EMS and fire suppression operations; and 3) Leadership Practices Inventory: Observer (LPI-O) developed by James M. Kouzes and Barry Z. Posner (1988). A literature review, questionnaires, and personal interviews will be used to answer the following research questions:

1) How do EMS personnel view the unified chain of command directive as improving the delivery of emergency medical services?

2) How do EMS personnel perceive the leadership practices of their supervising fire suppression officers?

3) What recommendations do EMS personnel have for improving the unification of the chain of command and improving the perceived leadership practices of their supervising fire suppression officers?

Personal Characteristic Questionnaire Results

The personal characteristic questionnaire was administered to assess the demographic profile of the department's Emergency Medical Service personnel with respect to rank, tenure, gender, age, and educational level.

The department's EMS personnel were classified into only two positions: firefighter and sergeant. These are the only rank structure positions assigned to shift emergency medical service field operations, except for the managerial position of EMS captain. The sample consisted of employees representing all of the listed categories, with 63 % (N = 34) being firefighters and 37 % (N = 20) being sergeants.

The department's EMS personnel were classified into five tenure categories: 0-5 years, 6-10 years, 11-15 years, 16-20 years, and 20 years and over. The sample consisted of employees representing all of the listed categories, with 37 % (N = 20) 0-5 years, 24 % (N = 13) 6-10 years, 15 % (N = 8) 11-15 years, 11 % (N = 6) 16-20 years, and 13 % (N= 7) 20 years and over.

The department's EMS personnel were classified into gender categories: The sample consisted of employees representing all of the listed categories, with 98 % (N = 53) being male and 2 % (N = 1) being female. Consequently, none of the research questions where evaluated based upon gender as a demographic characteristic for two reasons: (1) the sample of female respondents was small and (2) the single female respondent's survey responses had to kept confidential like other respondents.

The department's EMS personnel were classified into five age categories: 18-24 years, 25-34 years, 35-44 years, 45-54 years, and 55 years and over. The sample consisted of employees representing four of the five listed categories, with 3.7 % (N = 2) 18-24 years, 37 % (N = 20) 25-34 years, 43.6 % (N = 23) 35-44 years, 16.7 % (N = 9) 45-54 years, and 0.0 % (N = 0) 55 years and over.

The department's EMS personnel were classified into five educational categories: high school/GED, some college, associates degree, bachelors degree, and graduate degree. The sample consisted of employees representing all of the listed categories, with 35 % (N = 19) high school/GED, 44.4 % (N = 24) some college, 7.4 % (N = 4) associates degree, 11 % (N = 6) bachelors degree, and 1.9 % (N = 1) graduate degree. For the purposes of data processing, the single graduate-level respondent's survey responses were calculated with the bachelors' responses for two reasons: (1) the sample of graduate-level respondents was small, and (2) the need to keep confidential the single graduate-level respondent's survey responses.

The personal characteristic summary tables can be found in Appendix E.

Answers to Research Questions

Research Question 1: How do EMS personnel view the unified chain of command directive as improving the delivery of emergency medical services?

The survey results indicate that the respondents possess strong support for the department's unification efforts. Firefighters and sergeants found the divided operational model to be ineffective for meeting the community's emergency medical service needs. Additionally, the respondents found the department's unification efforts to have been successful. There was consensus that promotional opportunities for EMS personnel are improved in a unified department. From a community perspective, there is strong consensus that the department's ability to serve and protect the county's citizens under the unification of EMS and fire suppression operations is significantly improved.

The respondents identified several areas for improvement: Training for implementing the increased demands of unified EMS and fire suppression operations was rated as slightly less than average. While the researcher's conclusion is that the quality and quantity of EMS training has been improved, the respondents' qualitative comments and suggestions reveal that more EMS training still is needed. Additionally, despite the department's increased emphasis on improving internal communication, the respondents

rated the departmental communication regarding unifying EMS and fire suppression operations as slightly less than adequate.

An additional area of improvement needed is for fire suppression lieutenants to properly evaluate EMS personnel's performance in order to complete their annual performance evaluations. Respondents rated fire suppression lieutenants' ability in this area as approaching inadequate. Furthermore, respondents found fire suppression lieutenants' abilities in functioning as the relief EMS Shift Captain as slightly less than adequate. The specific responses and results for the unifying EMS and fire suppression operations questionnaire is as follows.

Analysis of Unifying EMS and Fire Suppression Operations Questions

1. The department's previous model for having two separate EMS and fire suppression commands was (Very Effective = 1; Effective = 2; Ineffective = 3; and Very Ineffective = 4).

Sergeants' responses established a mean of 3.1 (Ineffective) and firefighters' responses established a mean of 3.0 (Ineffective). The standard deviations were 1.0 and 0.7 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 3.1 (Ineffective) for 0-5 years, 3.5 (midpoint Ineffective/Very Ineffective) for 6-10 years, 3.1 (Ineffective) for 11-15 years, 3.1 (Ineffective) for 16-20 years, and 3.5 (midpoint Ineffective/Very Ineffective) for 20 years and over. Standard deviation responses were 0.7, 0.5, 0.6, 0.7, and 0.5 respectively.

Respondents' classified by age offered the following demographic mean responses: 3.5 (midpoint Ineffective/Very Ineffective) 18-24 years, 3.3 (Ineffective) 25-34 years, 3.0 (Ineffective) 35-44 years, 2.3 (Effective) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.7, 0.8, 0.6, 0.7, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 3.0 (Ineffective) high school/GED, 2.9 (Ineffective) some college, 3.0 (Ineffective) associates degree, and 3.6 (midpoint Very Ineffective/Ineffective) bachelors/graduate degree. Standard deviation responses were 0.7, 0.9, 0.0, and 0.5 respectively.

2. The unification of EMS and fire suppression operations has been (Very Successful = 1; Successful = 2; Unsuccessful = 3; and Very Unsuccessful = 4).

Sergeants' responses established a mean of 2.0 (Successful) and firefighters' responses established a mean of 2.1 (Successful). The standard deviations were 0.6 and 0.8 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 1.9 (Successful) for 0-5 years, 1.8 (Successful) for 6-10 years, 1.9 (Successful) for 11-15 years, 2.2 (Successful) for 16-20 years, and 2.0 (Successful) for 20 years and over. Standard deviation responses were 0.8, 0.8, 0.8, 0.8, and 0.0 respectively.

Respondents' classified by age offered the following demographic mean responses: 2.0 (Successful) 18-24 years, 2.4 (midpoint Successful/Unsuccessful) 25-34 years, 1.8 (Successful) 35-44 years, 2.1 (Successful) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 1.4, 0.7, 0.8, 0.6, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 2.1 (Successful) high school/GED, 2.1 (Successful) some college, 2.0 (Successful) associates degree, and 2.1 (Successful) bachelors/graduate degree. Standard deviation responses were 0.6, 0.8, 0.8, and 0.7 respectively.

3. Overall, company officers (lieutenants), captains, and battalion chiefs' response to unifying EMS and fire suppression operations has been (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Sergeants' responses established a mean of 2.2 (Acceptance) and firefighters' responses established a mean of 2.3 (Acceptance). The standard deviations were 0.7 and 0.6 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 2.4 (midpoint Acceptance/Resistance) for 0-5 years, 2.2 (Acceptance) for 6-10 years, 2.3 (Acceptance) for 11-15 years, 2.2 (Acceptance) for 16-20 years, and 2.0 (Acceptance) for 20 years and over. Standard deviation responses were 0.5, 0.8, 0.5, 0.8, and 0.6 respectively.

Respondents' classified by age offered the following demographic mean responses: 2.0 (Acceptance) 18-24 years, 2.5 (midpoint Acceptance/Resistance) 25-34 years, 2.1 (Acceptance) 35-44 years, 2.1 (Acceptance) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.0, 0.6, 0.6, 0.6, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 2.2 (Acceptance) high school/GED, 2.2 (Acceptance) some college, 2.3 (Acceptance) associates degree, and 2.6 (midpoint Resistance/Acceptance) bachelors/graduate degree. Standard deviation responses were 0.8, 0.5, 0.5, and 0.5 respectively.

4. Overall, firefighters and sergeants' response to unifying EMS and fire suppression operations (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Sergeants' responses established a mean of 2.1 (Acceptance) and firefighters' responses established a mean of 2.0 (Acceptance). The standard deviations were 0.6 and 0.6 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 2.1 (Acceptance) for 0-5 years, 1.9 (Acceptance) for 6-10 years, 2.3 (Acceptance) for 11-15 years, 2.2 (Acceptance) for 16-20 years, and 2.1 (Acceptance) for 20 years and over. Standard deviation responses were 0.6, 0.9, 0.6, 0.4, and 0.4 respectively.

Respondents' classified by age offered the following demographic mean responses: 2.5 (midpoint Acceptance/Resistance) 18-24 years, 2.1 (Acceptance) 25-34 years, 2.0 (Acceptance) 35-44 years, 2.0 (Acceptance) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.7, 0.7, 0.6, 0.5, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 2.2 (Acceptance) high school/GED, 2.0 (Acceptance) some college, 2.0 (Acceptance) associates degree, and 1.9 (Acceptance) bachelors/graduate degree. Standard deviation responses were 0.8, 0.6, 0.0, and 0.4 respectively.

5. Overall, my personal response to unifying EMS and fire suppression operations has been (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Sergeants' responses established a mean of 1.6 (Strong Acceptance) and firefighters' responses established a mean of 1.4 (Strong Acceptance). The standard deviations were 0.6 and 0.6.

Respondents' classified by years of service offered the following demographic mean responses: 1.4 (midpoint Strong Acceptance/Acceptance) for 0-5 years, 1.2 (Strong Acceptance) for 6-10 years, 1.5 (midpoint Strong Acceptance/Acceptance) for 11-15 years, 1.7 (Acceptance) for 16-20 years, and 2.0 (Acceptance) for 20 years and over. Standard deviation responses were 0.6, 0.4, 0.5, 0.8, and 0.0 respectively.

Respondents' classified by age offered the following demographic mean responses: 1.5 (midpoint Strong Acceptance/Acceptance) 18-24 years, 1.2 (Strong Acceptance) 25-34 years, 1.5 (midpoint Strong Acceptance/Acceptance) 35-44 years, 1.9 (Acceptance) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.7, 0.5, 0.5, 0.6, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 1.6 (midpoint Acceptance/Strong Acceptance) high school/GED, 1.4 (midpoint Strong Acceptance/Acceptance) some college, 1.5 (midpoint Strong Acceptance/Acceptance) associates degree, and 1.3 (Strong Acceptance) bachelors/ graduate degree. Standard deviation responses were 0.6, 0.6, 0.6, and 0.5 respectively.

6. With unifying EMS and fire suppression operations, promotional and job assignment opportunities for EMS personnel are (Significantly Improved = 1; Improved = 2; Diminished = 3; and Significantly Diminished = 4).

Sergeants' responses established a mean of 2.3 (Improved) and firefighters' responses established a mean of 2.1 (Improved). The standard deviations were 0.9 and 0.7 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 1.9 (Improved) for 0-5 years, 1.7 (Improved) for 6-10 years, 2.9 (Diminished) for 11-15 years, 2.5 (midpoint Improved/Diminished) for 16-20 years, and 2.6 (midpoint Diminished/Improved) for 20 years and over. Standard deviation responses were 0.6, 0.8, 0.8, 0.8, and 0.5 respectively.

Respondents' classified by age offered the following demographic mean responses: 2.5 (midpoint Improved/Diminished) 18-24 years, 1.8 (Improved) 25-34 years, 2.3 (Improved) 35-44 years, 2.7 (Diminished) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.7, 0.7, 0.8, 0.7, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 2.2 (Improved) high school/GED, 2.2 (Improved) some college, 2.8 (Diminished) associates degree, and 1.7 (Improved) bachelors/graduate degree. Standard deviation responses were 0.8, 0.9, 0.5, and 0.5 respectively.

7. The department's ability to "serve and protect" the county's citizens under the unification of EMS and fire suppression operations is (Significantly Improved = 1; Improved = 2; Diminished = 3; and Significantly Diminished = 4).

Sergeants' responses established a mean of 1.8 (Significantly Improved) and firefighters' responses established a mean of 1.6 (Significantly Improved). The standard deviations were 0.6 and 0.5 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 1.8 (Improved) for 0-5 years, 1.5 (midpoint Significantly Improved/ Improved) for 6-10 years, 1.4 (midpoint Significantly Improved/Improved) for 11-15 years, 1.8 (Improved) for 16-20 years, and 2.1 (Improved) for 20 years and over. Standard deviation responses were 0.6, 0.5, 0.5, 0.8, and 0.4 respectively.

Respondents' classified by age offered the following demographic mean responses: 2.0 (Improved) 18-24 years, 1.6 (midpoint Improved/ Significantly Improved) 25-34 years, 1.6 (midpoint Improved/Significantly Improved) 35-44 years, 2.1 (Improved) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 1.4, 0.5, 0.6, 0.3, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 1.7 (Improved) high school/GED, 1.7 (Improved) some college, 2.0 (Improved) associates degree, and 1.4 (midpoint Significantly Improved/Improved) bachelors/graduate degree. Standard deviation responses were 0.6, 0.6, 0.8, and 0.5 respectively.

8. Training for implementing the increased demands of unified EMS and fire suppression operations has been (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Sergeants' responses established a mean of 2.3 (Adequate) and firefighters' responses established a mean of 2.4 (Adequate). The standard deviations were 0.6 and 0.7 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 2.4 (midpoint Adequate/Inadequate) for 0-5 years, 2.1 (Adequate) for 6-10 years, 2.5 (midpoint Adequate/Inadequate) for 11-15 years, 2.2 (Adequate) for 16-20 years, and 2.7 (Inadequate) for 20 years and over. Standard deviation responses were 0.6, 0.8, 0.5, 0.4, and 0.5 respectively.

Respondents' classified by age offered the following demographic mean responses: 2.0 (Adequate) 18-24 years, 2.4 (midpoint Adequate/Inadequate) 25-34 years, 2.3 (Adequate) 35-44 years, 2.6 (midpoint Inadequate/Adequate) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.0, 0.7, 0.6, 0.5, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 2.4 (midpoint Adequate/Inadequate) high school/GED, 2.4 (midpoint Adequate/Inadequate) some college, 2.3 (Adequate) associates degree, and 2.3 (Adequate) bachelors/graduate degree. Standard deviation responses were 0.6, 0.7, 0.5, and 0.5 respectively.

9. Departmental communication regarding unifying EMS and fire suppression operations has been (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Sergeants' responses established a mean of 2.2 (Adequate) and firefighters' responses established a mean of 2.3 (Adequate). The standard deviations were 0.7 and 0.7 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 2.5 (midpoint Adequate/Inadequate) for 0-5 years, 2.0 (Adequate) for 6-10 years, 2.4 (midpoint Adequate/Inadequate) for 11-15 years, 2.2 (Adequate) for 16-20 years, and 2.3 (Adequate) for 20 years and over. Standard deviation responses were 0.7, 0.8, 0.7, 0.4, and 0.5 respectively.

Respondents' classified by age offered the following demographic mean responses: 2.5 (midpoint Adequate/Inadequate) 18-24 years, 2.5 (midpoint Adequate/Inadequate) 25-34 years, 2.0 (Adequate) 35-44 years, 2.4 (midpoint Adequate/Inadequate) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.7, 0.8, 0.7, 0.5, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 2.1 (Adequate) high school/GED, 2.3 (Adequate) some college, 2.3 (Adequate) associates degree, and 2.6 (midpoint Adequate/Inadequate) bachelors/ graduate degree. Standard deviation responses were 0.7, 0.6, 0.5, and 1.0 respectively.

10. My personal projection is that in 2007 the department's unification of EMS and fire suppression operations will have the following outcome (Much Stronger Department = 1; Stronger Department = 2; Weaker Department = 3; and Much Weaker Department = 4).

Sergeants' responses established a mean of 1.7 (Stronger Department) and firefighters' responses established a mean of 1.5 (Midpoint Much Stronger/Stronger Department). The standard deviations were 0.7 and 0.7.

Respondents' classified by years of service offered the following demographic mean responses: 1.6 (midpoint Stronger/Much Stronger Department) for 0-5 years, 1.2 (Much Stronger Department) for 6-10 years, 1.6 (midpoint Stronger/ Much Stronger Department) for 11-15 years, 1.8 (Stronger Department) for 16-20 years, and 2.0 (Stronger Department) for 20 years and over. Standard deviation responses were 0.6, 0.4, 0.5, 0.8, and 0.6 respectively.

Respondents' classified by age offered the following demographic mean responses: 1.5 (midpoint Much Stronger/Stronger Department) 18-24 years, 1.5 (midpoint Much Stronger/Stronger Department) 25-34 years, 1.6 (midpoint Much Stronger/Stronger Department) 35-44 years, 1.9 (Stronger Department) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.7, 0.6, 0.6, 0.6, and 0.0 respectively.

Respondents' classified by education offered the following demographic mean responses: 1.7 (Stronger) high school/GED, 1.5 (midpoint Much Stronger/Stronger Department) some college, 1.8 (Stronger) associates degree, and 1.6 (midpoint Stronger/Much Stronger Department) bachelors/graduate degree. Standard deviation responses were 0.7, 0.6, 0.5, and 0.5 respectively.

11. Overall, fire suppression lieutenants' abilities to properly evaluate EMS personnel's performance and complete their annual performance evaluations is (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Sergeants' responses established a mean of 2.7 (approaching Inadequate) and firefighters' responses established a mean of 2.6 (approaching Inadequate). The standard deviations were 0.8 and 0.9.

Respondents' classified by years of service offered the following demographic mean responses: 2.8 (Inadequate) for 0-5 years, 2.6 (midpoint Inadequate/Adequate) for 6-10 years, 2.4 (midpoint Adequate/Inadequate) for 11-15 years, 2.5 (midpoint Adequate/Inadequate) for 16-20 years, and 2.7 (Inadequate) for 20 years and over. Standard deviation responses were 0.9, 0.9, 0.9, 1.0, and 0.5 respectively.

Respondents' classified by age offered the following demographic mean responses: 3.5 (midpoint Inadequate/Very Inadequate) 18-24 years, 2.7 (Inadequate) 25-34 years, 2.5 (midpoint Adequate/Inadequate) 35-44 years, 2.7 (Inadequate) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.7, 1.0, 0.7, and 0.9 respectively.

Respondents' classified by education offered the following demographic mean responses: 2.5 (Midpoint Adequate/Inadequate) high school/GED, 2.7 (Inadequate) some college, 2.8 (Inadequate) associates degree, and 2.7 (Inadequate) bachelors/graduate degree. Standard deviation responses were 0.9, 0.9, 1.0, and 0.8 respectively.

12. Overall, paramedic fire suppression lieutenants' abilities to function as the relief EMS Shift Captain is (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Sergeants' responses established a mean of 2.3 (Adequate) and firefighters' responses established a mean of 2.2 (Adequate). The standard deviations were 0.9 and 0.8 respectively.

Respondents' classified by years of service offered the following demographic mean responses: 2.3 (Adequate) for 0-5 years, 1.8 (Adequate) for 6-10 years, 2.5 (midpoint Adequate/Inadequate) for 11-15 years, 2.2 (Adequate) for 16-20 years, and 2.7 (Inadequate) for 20 years and over. Standard deviation responses were 0.9, 0.7, 0.8, 0.8, and 0.8 respectively.

Respondents' classified by age offered the following demographic mean responses: 3.0 (Inadequate) 18-24 years, 2.2 (Adequate) 25-34 years, 2.1 (Adequate) 35-44 years, 2.7 (Inadequate) 45-54 years, and no respondents 55 years and over. Standard deviation responses were 0.0, 0.8, 0.8, and 0.7 respectively.

Respondents' classified by education offered the following demographic mean responses: 2.3 (Adequate) high school/GED, 2.2 (Adequate) some college, 2.8 (Inadequate) associates degree, and 2.1 (Adequate) bachelors/graduate degree. Standard deviation responses were 0.9, 0.7, 1.0, and 0.9 respectively.

The unifying EMS and fire suppression operations tables can be found in Appendix F and respondents' narrative suggestions and comments can be found in Appendix G.

Leadership Practices Inventory

Kouzes and Posner (1988b) developed the Leadership Practices Inventory-Observer (LPI-O) through numerous qualitative and quantitative research methods and research extending over 20 years. Their in-depth leadership interviews and case studies of personal-best leadership experiences generated the conceptual framework of the following five leadership practices: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. The LPI thirty behavior-based statements are divided into six statements for each of the five leadership practices.

Kouzes and Posner (1997) possess a database of thousands of leadership observers accumulated since 1986. Percentile rankings were established by the percentage of those leaders who have scored at or below a given number. For instance, respondents scoring in the 70th percentile for Modeling the Way would have scored higher than 70 % of all leaders in the LPI database. These respondents have be in the top 30 % for Modeling the Way as perceived by their subordinates.

Kouzes and Posner (1997) established the percentile ranking as benchmarking numbers. High scores are at the 70th percentile or above; moderate scores are between 69 and 31 %; and low scores are at the 30th percentile or below. The possible range of scores was from 6 to 60. Kouzes and Posner (1997) established the percentile ranking as benchmarking numbers. Gender was excluded as a demographic characteristic when evaluating study results for two reasons: (1) small sample of female respondents (N = 1), and (2) inability to keep confidential the single female respondent's survey responses.

Research Question 2: How do EMS personnel perceive the leadership practices of their supervising fire suppression officers?

The Leadership Practices Inventory found respondents' perceive the leadership practices of their supervising fire suppression officers as being in the low range as established by Kouzes and Posner (1997). Regardless of demographic characteristics, respondents generally found their lieutenants possessed low levels of leadership practices in all of the five categories of Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. The specific responses and results for the Leadership Practice Inventory follows.

Challenging the Process

Overall, the 54 respondents' questionnaires provided a mean of 34.4 (low range at the 10th percentile ranking) for Challenging the Process. As a comparison, Kouzes and Posner's (1997) mean score from their database is 44.4 (medium range at the 48th

percentile ranking). The percentile rankings established by Kouzes and Posner (1997) suggests the department's fire suppression lieutenants' exhibit 38 % less Challenging the Process leadership practices than "average" leaders. The range of responses varied widely (10 to 56) concluding that some fire suppression lieutenants scored in 96th percentile (high) ranking of leadership practices.

Applying respondents' demographic characteristics to Challenging the Process offers the following information: Sergeants' responses established a mean of 33 (low range at the 6th percentile ranking) and firefighters' responses established a slightly higher rating with a mean of 35.5 (low range at the 12th percentile ranking).

Respondents' classified by years of service offered the following demographic mean responses for Challenging the Process: 31 (low range at the 5th percentile ranking) for 0-5 years, 42.2 (medium range at the 37th percentile ranking) for 6-10 years, 30.9 (low range at the 5th percentile ranking) for 11-15 years, 38.1 (low range at the 19th percentile ranking) for 16-20 years, and 31.7 (low range at the 5th percentile ranking) for 20 years and over.

Respondents' classified by age offered the following demographic mean responses for Challenging the Process: 31 (low range at the 6th percentile ranking) for 18-24 years, 26.2 (low range at the 1 percentile ranking) for 25-34 years, 36.1 (low range at the 15th percentile ranking) for 35-44 years, 38.4 (low range at the 19th percentile ranking) for 5-54 years, and no respondents 55 years and over.

Respondents' classified by education offered the following demographic mean responses for Challenging the Process: 33.9 (low range at the 8th percentile ranking) high school/GED, 39.1 (low range at the 26th percentile ranking) some college, 25.7 (low range at the 1 percentile ranking) associates degree, and 25.8 (low range at the 1 percentile ranking) bachelors/graduate degree.

Inspiring a Shared Vision

Overall, the 54 respondents' questionnaires provided a mean of 34.4 (low range at the 18th percentile ranking) for Inspiring a Shared Vision. As a comparison, Kouzes and Posner's (1997) mean score from their database is 42.0 (medium range at the 46th percentile ranking). The percentile rankings established by Kouzes and Posner (1997) suggests the department's fire suppression lieutenants' exhibit 28 % less Inspiring a Shared Vision leadership practices than "average" leaders. The range of responses varied widely (7 to 58) concluding that some fire suppression lieutenants scored in the 99th percentile (high) ranking for leadership practices.

Applying respondents' demographic characteristics to Inspiring a Shared Vision offers the following information: Sergeants' responses established a mean of 31.9 (low range at the 6th percentile ranking), and firefighters' responses established a mean of 35.9 (low range at the 25th percentile ranking).

Respondents' classified by years of service offered the following demographic mean responses for Inspiring a Shared Vision: 32.8 (low range at the 17th percentile ranking) for 0-5 years, 40.1 (medium range at the 35th percentile ranking) for 6-10 years, 29.9 (low range at the 8th percentile ranking) for 11-15 years, 40.2 (medium range at the 35th percentile ranking) for 16-20 years, and 29 (low range at the 7th percentile ranking) for 20 years and over.

Respondents' classified by age offered the following demographic mean responses for Inspiring a Shared Vision: 33.5 (low range at the 17th percentile ranking) for 18-24 years, 31.8 (low range at the 15th percentile ranking) for 25-34 years, 36.1 (low range at the 24th percentile ranking) for 35-44 years, 36.1 (low range at the 24th percentile ranking) for 45-54 years, and no respondents 55 years and over.

Respondents' classified by education offered the following demographic mean responses for Inspiring a Shared Vision: 34.4 (low range at the 18th percentile ranking) for high school/GED, 38.5 (medium range at the 34th percentile ranking) for some college, 23.7 (low range at the 2nd percentile ranking) for associates degree, and 26.6 (low range at the 6th percentile ranking) for bachelors/graduate degree.

Enabling Others to Act

Overall, the 54 respondents' questionnaires provided a mean of 43.2 (low range at the 17th percentile ranking) for Enabling Others to Act. As a comparison, Kouzes and Posner's (1997) mean score from their database is 47.8 (medium range at the 34th percentile ranking). The percentile rankings established by Kouzes and Posner (1997) suggests the department's fire suppression lieutenants' exhibit 17 % less Enabling Others to Act leadership practices than "average" leaders. The range of responses varied widely (22 to 60) concluding that some fire suppression lieutenants scored in the 100th percentile ranking.

Applying respondents' demographic characteristics to Enabling Others to Act offers the following information: Sergeants' responses established a mean of 42.4 (low range at the 12th percentile ranking), and firefighters' responses established a mean of 43.8 (low range at the 16th percentile ranking).

Respondents' classified by years of service offered the following demographic mean responses for Enabling Others to Act: 41.8 (low range at the 10th percentile ranking) for 0-5 years, 45.6 (low range at the 27th percentile ranking) for 6-10 years, 31.8 (low range at the 10th percentile ranking) for 11-15 years, 46 (low range at the 27th percentile ranking) for 16-20 years, and 42.8 (low range at the 12th percentile ranking) for 20 years and over.

Respondents' classified by age offered the following demographic mean responses for Enabling Others to Act: 40 (low range at the 8th percentile ranking) for 18-24 years, 41.8 (low range at the 11th percentile ranking) for 25-34 years, 43.3 (low range

at the 15th percentile ranking) for 35-44 years, 46.9 (medium range at the 35th percentile ranking) for 45-54 years, and no respondents 55 years and over.

Respondents' classified by education offered the following demographic mean responses for Enabling Others to Act: 42.6 (low range at the 10th percentile ranking) high school/GED, 45.1 (low range at the 22nd percentile ranking) some college, 41.7 (low range at the 10th percentile ranking) associates degree, and 39.5 (low range at the 7th percentile ranking) bachelors/graduate degree.

Modeling the Way

Overall, the 54 respondents' questionnaires provided a mean of 41.5 (low range at the 18th percentile ranking) for Modeling the Way. As a comparison, Kouzes and Posner's (1997) mean score from their database is 47.5 (medium range at the 47th percentile ranking). The percentile rankings established by Kouzes and Posner (1997) suggests the department's fire suppression lieutenants' exhibit 29 % less Modeling the Way leadership practices than "average" leaders. The range of responses varied widely (13 to 60) concluding that some fire suppression lieutenants scored in the 100th percentile (high) ranking for leadership practices.

Applying respondents' demographic characteristics to Modeling the Way offers the following information: Sergeants' responses established a mean of 39.9 (low range at the 13th percentile ranking), and firefighters' responses established a mean of 42.6 (low range at the 19th percentile ranking).

Respondents' classified by years of service offered the following demographic mean responses for Modeling the Way: 39.1 (low range at the 11th percentile ranking) for 0-5 years, 45 (medium range at the 34th percentile ranking) for 6-10 years, 40.1 (low range at the 13th percentile ranking) for 11-15 years, 45.5 (medium range at the 38th percentile ranking) for 16-20 years, and 40.5 (low range at the 13th percentile ranking) for 20 years and over.

Respondents' classified by age offered the following demographic mean responses for Modeling the Way: 40 (low range at the 15th percentile ranking) for 18-24 years, 38.4 (low range at the 8th percentile ranking) for 25-34 years, 43.5 (low range at the 15th percentile ranking) for 35-44 years, 43.9 (low range at the 17th percentile ranking) for 45-54 years, and no respondents 55 years and over.

Respondents' classified by education offered the following demographic mean responses for Modeling the Way: 41.2 (low range at the 17th percentile ranking) for high school/GED, 44.4 (low range at the 29th percentile ranking) for some college, 39.7 (low range at the 14th percentile ranking) for associates degree, and 33.5 (low range at the 1 percentile ranking) for bachelors/graduate degree.

Encouraging the Heart

Overall, the 54 respondents' questionnaires provided a mean of 39.1 (low range at the 17th percentile ranking) for Encouraging the Heart. As a comparison, Kouzes and Posner's (1997) mean score from their database is 44.9 (medium range at the 43rd percentile ranking). The percentile rankings established by Kouzes and Posner (1997) suggests the department's fire suppression lieutenants' exhibit 26 % less Encouraging the Heart leadership practices than "average" leaders. The range of responses varied widely (18 to 60) concluding that some fire suppression lieutenants scored in the 100th percentile ranking.

Applying respondents' demographic characteristics to Encouraging the Heart offers the following information: Sergeants' responses established a mean of 38.3 (low range at the 15th percentile ranking), and firefighters' responses established a mean of 39.7 (low range at the 21st percentile ranking).

Respondents' classified by years of service offered the following demographic mean responses for Encouraging the Heart: 35.5 (low range at the 10th percentile ranking) for 0-5 years, 43.3 (medium range at the 34th percentile ranking) for 6-10 years, 30.9 (low range at the 5th percentile ranking) for 11-15 years, 39.7 (low range at the 22nd percentile ranking) for 16-20 years, and 38.1 (low range at the 16th percentile ranking) for 20 years and over.

Respondents' classified by age offered the following demographic mean responses for Encouraging the Heart: 30 (low range at the 5th percentile ranking) for 18-24 years, 38.2 (low range at the 16th percentile ranking) for 25-34 years, 39.3 (low range at the 18th percentile ranking) for 35-44 years, 43 (medium range at the 33rd percentile ranking) for 45-54 years, and no respondents 55 years and over.

Respondents' classified by education offered the following demographic mean responses for Encouraging the Heart: 36.6 (low range at the 11th percentile ranking) for high school/GED, 41.7 (low range at the 27th percentile ranking) for some college, 38.2 (low range at the 15th percentile ranking) for associates degree, and 38 (low range at the 15th percentile ranking) for bachelors/graduate degree.

The Leadership Practice Inventory tables can be found in Appendix H.

Research Question 3: What recommendations do EMS personnel have for improving the unification of the chain of command and improving the perceived leadership practices of their supervising fire suppression officers?

Respondents were very generous offering many constructive comments and suggestions in their surveys. Respondents' complete and uncensored comments and suggestions can be found in Appendix G. Consequently, their recommendations will be discussed in the recommendation section of this applied research project.

DISCUSSION

The discussion of the research result findings will address the study's three research questions:

Research Question 1: How do EMS personnel view the unified chain of command directive as improving the delivery of emergency medical services?

This researcher is pleased with the research results regarding how EMS personnel view the unified chain of command directive as improving the delivery of emergency medical services with the Clayton County Fire Department. Fire Chief Cohilas and his senior staff officers can take great pride in having achieved remarkable progress in the eight months since Command Directive 03-04-59 was issued. While many issues and areas of improvement identified by the 54 respondents in this study remain, many of the respondents' suggestions and recommendations are a work in progress. These include officer candidate school, hiring additional EMS instructors, and pay incentives for EMT/paramedic certification.

The study, however, does identify only marginal acceptance of the integration efforts at the middle management levels of lieutenants, captains, and battalion chiefs. Dr. Barry Barnes, a professor of organizational behavior after reviewing the research results comments (2002), "It's apparent the middle of the lake is frozen." Dr. Barnes explained upper management understands the critical need for integrating the divisions, rank-and-file employees support the change based upon their personal experiences and frustrations with two divisions, but middle managers are concerned they lack the prerequisite skills for the new operational model.

The National Fire Academy's *Strategic Management of Change Course Student Manual* (n.d.) suggests:

> Real transformation in an organization takes time, and change efforts risk losing momentum if there are no visible short-term goals to meet and celebrate. In successful transformation, managers pursue ways to obtain clear performance improvements, establish goals, achieve the objectives, and reward individuals. Committing to produce short-term wins helps keep the urgency level up and forces detailed analytical thinking that can clarify visions (p. 4.12).

Further research support for improving the department's integration process is offered by Sachs (1999) who discusses the importance of changing the traditionally accepted, but operationally vague and inadequate term of "fire department":

> Departments that have embraced EMS . . . find that they are actually EMS providers that occasionally respond to fires. More and more are changing the way they describe themselves: 'fire and EMS department,' "EMS and fire department," "fire and paramedic services," or "emergency services." Such

organizations are leaving tradition and turf protection behind, and are instead providing the protection of life and property as today's "fire" department should (p.13).

Brown (2001) conducted an Executive Fire Officer applied research project entitled *Toward the Goal of Increasing the Fort Wayne Fire Department's Response Role in EMS - Leading the Change.* Many of Brown's research results and recommendations are relevant to this study:

- Ninety-two % of firefighters and officers believe the department should operate an advanced life support system.
- Sixty-two % of firefighters and 69 % of officers were willing to change their working conditions to enhance ALS service delivery.
- Fifty-five % of firefighters but only 28 % of officers were interested in attending paramedic school.
- Seventy-seven % of firefighters and 75 % of officers support the department operating an ambulance service.
- Forty-seven % of firefighters and 58 % of officers would be willing to change their working conditions to enhance ambulance transport services.

Research Question 2: How do EMS personnel perceive the leadership practices of their supervising fire suppression officers?

This researcher was surprised by the study's findings on how EMS personnel perceive the leadership practices of their supervising fire suppression officers. The Leadership Practices Inventory Challenging-Observer (LPI-O) categorizes five dimensions: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. The cumulative ratings by 54 EMS personnel showed their supervising fire supervisor officers possessed low levels of applied leadership practice behaviors in all five leadership categories.

The research findings identify a huge gap between where fire lieutenants are as leaders of EMS personnel and where these fire lieutenants need to be. Analysis of the data establishes high standard deviations for each of the leadership dimensions suggesting the department possesses some excellent fire suppression officers, many average officers, but also officers who need to improve the quality of their leadership behaviors.

The researcher is not sure the officers of the department have had sufficient time to resolve the integration issues before being assessed by this questionnaire. Also, fire suppression lieutenants have had the primary responsibility for implementing the integration process into the department's operations and culture. Page (1988) suggests, "A new generation of fire service managers can be expected to emerge as dual-role personnel rise through the ranks with broadened expectations and abundant practical experience in service delivery. Properly managed, the merger of EMS with traditional fire service responsibilities can contribute to a healthy future for tomorrow's fire

departments" (p. 378). The lieutenants studied in this research are just not this far into the transition process.

The research findings also suggest there is still resistance to the integration process by the department's lieutenants, captains, and battalion chiefs. Grieff (1999), writes "some veteran firefighters who entered the fire service to fight fires, not treat patients, are opposed to becoming EMS providers" (p. 47). Resistance is a predictable aspect of the change process and requires patience and not punishment to address. Scott and Jaffe (1995) suggests fire lieutenants will resist the integration process for many reasons including, "their security is threatened; the change threatens their sense of competence; they fear they will fail at new task; and they are comfortable with the status quo" (p. 57).

Research Question 3: What recommendations do EMS personnel have for improving the unification of the chain of command and improving the perceived leadership practices of their supervising fire suppression officers?

The respondents in this applied research project offered literally scores of recommendations and suggestions for improving both the unification of the chain of command and the perceived leadership practices of their supervising fire suppression officers. A review of the respondents' thoughtful comments provides a wealth of information of tremendous value to the department's integration efforts. The respondents' complete and unedited comments are found in Appendix G.

While this researcher acknowledges the length of Appendix G, respondents were informed that their comments and suggestions would be incorporated into this applied research report. Some respondents were adamant their comments and suggestions reach the fire chief and senior staff officers. Appendix G fulfills this researcher's pledge to the respondents. In a few instances, respondents named specific officers in their comments, and these officers' names were deleted to ensure their privacy. The respondents' recommendations will be incorporated into the recommendation section of this applied research project.

Organizational Implications of Results

The study revealed several organizational implications for officers' leadership practices. As first-level supervisors, lieutenants possess enormous power to either support, passively resist, or aggressively resist the department's unification efforts. EMS personnel perceive lieutenants have a preference for remaining fire service leaders but not emergency medical services leaders. As time progresses, it will become more difficult to change officers' willingness and ability to develop new skills. Mack (2001) suggests, "Having a common vision of what you're trying to accomplish is what drives a team to excel. But don't expect every team member to put aside his or her own personal goals and work selflessly for the common good. That's just not realistic" (p. 3).

The findings and comments offered by Gordon Sachs, an emergency services educator, writer, and consultant with over 20 years of fire service-based EMS experience is relevant to this study's findings (1999):

> The biggest challenge that EMS in the fire service has faced is that of acceptance. Almost a moot point now, there was a time when many firefighters and chief officers wanted nothing to do with EMS, since it was unfamiliar territory and they joined the department to fight fires. Often their negativity arose out of a lack of understanding about EMS, insecurity about learning the necessary skills, and other such attitudes (p. 105).

Nevertheless, the department's officers in this study need to acknowledge that their resistance to the integration process is generally perceived poorly by many EMS personnel. While officers at the end of their respective careers will probably just dismiss the comments of their subordinates, officers with longer career plans or promotional interest should acknowledge the department has shifted course. Coleman and Rausch (1999, p. 444) advocate, "fire officers need to be aware of those areas that are relevant to their departments now and in the foreseeable future." Clearly, the department's integrated operations should place emergency medical/ paramedic services at the top of an officer's list of career development efforts.

The demands of being an officer in an integrated fire/EMS agency will be enormous. The image of firefighters lounging around the station waiting for an occasional fire call has vanished. The frequency and complexity of contemporary fire officer training and professional development will be immense. Coleman and Rausch (1999) predict, "An important challenge for the (fire) officer in charge of a company with EMS responsibilities is to maintain full competence in both fire suppression and EMT (or possibly even the higher paramedic) knowledge and skills" (p. 449).

Bruegman (2002) offers a challenge applicable to fire suppression officers seeking to survive and thrive in a fire service-based EMS environment:

> The paradox of leadership today is about tapping into the leadership potential throughout our organizations and bringing it into reality. It takes courage, self-control, fairness, commitment, understanding, and willingness to walk the walk and cooperate effectively with others. Throughout all of those characteristics, organizational trust in your relationships with the individuals you are charged to lead will dictate how successful you'll be in the future" (p. 46).

RECOMMENDATIONS

Organizational implications of the study results for unifying EMS and fire suppression operations are offered in this recommendation section. However, Ashby (1999) suggests initial acceptance and enthusiasm will be high, but eventually personnel's tolerance and willingness will diminish. Consequently, specific efforts should

be undertaken to address the areas of improvement noted by the survey results and discuss the study's recommendations from a practical implementation perspective.

Recommendation 1: Revise fire lieutenant's job description. The department's unification command directive demonstrates a commitment to change its mission and vision. While it is one thing to write the directive, subordinate officers will ultimately bear the professional responsibility to implement the spirit and intent of the directive. Engaging a focus group of lieutenants to revise their job description to reflect their increased EMS role and presence is a critical first step for addressing the issues identified in this study. While the administration could take the responsibility to revise the job description, empowering lieutenants to undertake the task will increase their acceptance and compliance of the final product. Sachs (1999) writes:

> To make EMS work better in fire departments, chief fire officers need to practice team building. They must build on the teamwork both within and without the organization. They must realize that the employees may have the best ideas collectively on how to reach a given goal. The collective minds of a group of dedicated firefighters are much stronger than that of any one chief fire officer (p. 120).

The study results support this recommendation. EMS personnel concluded their supervisors only have minimal acceptance for the integration of EMS/fire operations. Additionally, lieutenants were rated by the Leadership Practices Inventory-Observer as possessing low levels of the leadership practice of Challenging the Process. Revising job descriptions to emphasize an expanded EMS role will reinforce the department's commitment to the change process.

Recommendation 2: Fire lieutenants should ride EMS units. It is recommended the department restructure the evaluation criteria whereby lieutenants are provided specific goals for riding EMS units. Even non-EMT lieutenants can ride in an observer role when staffing levels permit. The respondents' comments indicated a strong advocacy that fire lieutenants have dual-roles in this integrated fire/EMS department and should have more involvement with EMS duties. From the EMS personnel's comments regarding this lack of interest/ridership in EMS, this researcher's intuition and experience suggests the lieutenant's dedicated fire suppression position was a significant factor in how the respondents completed their Leadership Practice Inventory – Observer questionnaire.

Grieff (1999) quotes John Garnecki, past chief of the North Plainfield, NJ Fire Department, "Cross-trained/dual-role FF/EMTs bring many proficiencies to the table, utilizing the skills they have learned as firefighters to be better EMTs. Having dual-role FF/EMTs allows for larger staffing and more hands at larger incidents" (p. 48). The respondents' suggestions support this statement in that they expect their immediate supervisors to have more interest and expertise in EMS operations. Further research support is offered by Coleman and Rausch (1999, p. 449) stating the IAFF and IAFC "have developed working member interest sections and committees to strengthen the

ability of fire service EMS to maintain a strong and justified presence in the emergency medical field."

Sachs (1995) forewarns, "There have always been challenges to fire service EMS, and the future holds more of these than ever before. To avoid being discouraged, however, it is important to point out that past challenges have been overcome by those with a vision of making EMS an integral part of the fire service" (p.898). Further support for the challenges facing fire-based EMS operations is offered by Page (1988), "Once again, planning is an essential ingredient. If used before implementation of the EMS service and on a continuous basis after implementation, planning can identify potential conflicts within the agency and strategies can be effected to minimize or prevent such conflicts" (p. 376).

The study results support this recommendation. EMS personnel found their fire lieutenants to be inadequate in their ability to properly evaluate them and complete their annual performance evaluations. Additionally, lieutenants were rated by the Leadership Practices Inventory-Observer as possessing low levels of the leadership practices of Modeling the Way and Inspiring a Shared Vision. This researcher proposes more interactions between fire lieutenants and EMS personnel in EMS environments as an improvement worth undertaking.

Recommendation 3: Fire lieutenants should become at least EMT certified and preferably paramedic certified. It is recommended the department revise the promotional criteria to require aspirants for lieutenant promotion examination to be EMT certified by 2006. Additionally, it is recommended the lieutenant promotion criteria mandate paramedic certification by 2010. This researcher acknowledges this will be a long-range process for the department. However, the department has already made progress toward implementing this recommendation prior to this study's initiation. The department's EMS academy dormant for over 10 years has been resurrected by the following actions: basic EMT courses being taught internally, contract instructors recruited, additional EMS training instructor positions recreated and filled, and enforcement of department's policy that firefighters must become certified emergency medical technicians within two years of employment.

The department is communicating to its employees that EMS is a critical component for delivering quality emergency services to the community. While in the past this mission was implied, it is now quite explicit. Page (1988) cautions, "where the department's administrators fail to communicate the importance of the EMS component, disregard and contempt are likely to filter down through the ranks. In such instances, the EMS personnel tend to feel rejected by their department and an imbalance of loyalties is a common result" (p. 374). The researcher is pleased with the fire chief's promises and pledges being made in reference to enhancing the delivery of EMS operations.

Another outcome and advantage from this recommendation is offered by Page (1988): "The national experience suggests that the majority of fire departments involved in EMS have succeeded in mastering appropriate direction of the operational aspects of

the program. As more firefighter/paramedics rise through the promotional ranks, it is likely that their supervisory and management techniques will reflect their background and experience in both aspects of their department's mission" (p.374). Consequently, there are numerous long-term strategic benefits from possessing more paramedic officers with exposure to fire-based EMS operations. The United States Fire Administration (1997) writes, "it is safe to say . . . that EMS supervisors ought to have the level of medical certification required to provide the highest level of care to be administered under the EMS system" (p. 91).

The study results support this recommendation. EMS personnel found their fire lieutenants to be inadequate in their ability to properly evaluate them and complete their annual performance evaluations. Additionally, lieutenants were rated by the Leadership Practices Inventory-Observer as possessing low levels of the leadership practices of Challenging the Process, Modeling the Way, and Inspiring a Shared Vision. This researcher advocates the department possessing more officers with EMT/paramedic certifications will strengthen the quality and quantity of delivering emergency services.

Recommendation 4: Adopt incentive pay for EMT/paramedic/college. The department owes a responsibility to its current and future officers to provide them with the incentives and resources for acquiring professional development resources. Offering incentive pay for paramedic/EMT certifications and college degrees are just one aspect of a comprehensive performance and reward package. Coleman and Rausch (1999) acknowledge, "Career development is a personnel function that often does not receive the attention it deserves" (p. 353).

The 21st century is going to place enormous challenges and opportunities for fire service officers. Creating incentives for increased professional and educational development is one of many strategies for developing professional officers. Tuition reimbursement is not a benefit presently offered by Clayton County, and while this researcher advocates its consideration, incentive pay should also be explored.

The study results support this recommendation: The respondents' Personal Demographic Questionnaire results determined over 52 % possess some college or associate degrees. Consequently, it is likely that employees with some college experience would be receptive to returning to school if incentives were offered. This researcher advocates an educated workforce will be an important asset for achieving the department's mission and vision objectives.

Recommendation 5: Expanded EMS presence for fire lieutenants. The department organizational chart contains the position of EMS lieutenant/assistant EMS shift supervisor. These three positions have never been staffed. It is recommended the department announce its intention to fill these positions under the authority the fire chief possesses for appointing personnel to "temporary assigned duty" (TAD). IAFC Staff (1999) writes:

> If you do have designated EMS officers, how many are there? Compare that number to how many other supervisors are available and positioned to respond to calls without an EMS focus. Are there more EMS officers? After all, the majority of your department's calls likely involve EMS. More service interactions are conducted with customers/taxpayers/voters through EMS than any other type of incident (p. 28).

Personnel who meet the position's eligibility requirements, including fire lieutenants, should be encouraged to apply. If a fire lieutenant receives a TAD appointment, the department should consider some type of hybrid appointment, traditional fire suppression lieutenant assignment to an ALS engine and also the primary relief for the EMS shift captain. Stallings (2000) writes:

> Many of the EMS implementation and management difficulties experienced by fire departments relates to a lack of relevant background on the part of fire department administrators. The situation is analogous to that of fire protection services that are organized and managed by a physician who has no background in fire fighting (p. 17).

Support for this recommendation is offered by the United States Fire Administration (1997) that writes:

> The best way to effect the conversion to the "EMS mindset" is to instill the new paradigm from the top as a corporate value. The savvy chief fire executive will attempt to relate this new mission concept back to the traditional mission of the fire service — 'protection of life and preservation of property.' If EMS can be seen as an extension of this, then it will be easier for firefighters to accommodate the additional personal contact that good EMS delivery implies (p. 6).

Regardless of who is eventually appointed to these three EMS shift lieutenant positions, the department should make a commitment to develop their expertise. Ensuring the training of these employees is well publicized and of high status should be considered. Specifically, it is recommended shift supervisors attend the National Fire Academy's *Management of EMS* course. The United States Fire Administration (1997) proposes:

> Being a good EMS provider does not necessarily mean a person will be a good EMS supervisor. Specific management skills are required in order to be successful, and these skills can be learned. The National Fire Academy offers a two-week course entitled *Management of EMS*, which is ideally suited for teaching the necessary skills to newly appointed EMS managers. Departments considering implementing EMS should consider sending some personnel through this course prior to the start-up date for EMS delivery (p. 90).

The study results support this recommendation: EMS personnel found their fire lieutenants to be inadequate in their ability to properly evaluate their job performance and

complete their annual performance evaluations. Additionally, lieutenants were rated by the Leadership Practices Inventory-Observer as possessing low levels of the leadership practices of Challenging the Process, Modeling the Way, and Inspiring a Shared Vision. This researcher advocates that departments possessing fire suppression officers with an expanded EMS presence will strengthen the quality and quantity of delivering emergency services.

Recommendation 6: Increase the fire suppression responsibilities of EMS shift captains. The present shift staffing of the department is generally as follows. Shift fire captains serve as the primary relief for the shift's two battalion chiefs, EMS shift captains are the alternative relief. It is proposed fire shift captains be the primary relief for Battalion Two, and EMS shift captains be the primary relief for Battalion One. This demonstrates the equivalency of the department's two shift captain (EMS and Fire) positions. By the unintentional policy of offering the fire captain higher status to serve as the primary relief for both battalion chiefs, this researcher suggests a subtle message is being conveyed reinforcing the traditional labeling of personnel as "suppression" or "EMS."

Another benefit of this recommendation is putting more responsibility on the EMS shift captains to develop their fire incident command competencies. The United States Fire Administration (1997) writes, "Criteria should be established that clearly define training, experience, prerequisites and supervisor responsibilities. The standards should fully explain the department's career advancement ladder. . . . Publishing and disseminating the requirements for supervisors increases their credibility and provides a guide for those wishing to strengthen their skills and pursue their careers" (p. 91). At the same time the department is asking fire personnel to be better EMS providers, its EMS personnel should be developed as better firefighters.

The study results support this recommendation. While positions above lieutenant were not the focus of the applied research project, inferences can be made from the respondents' overall responses. Overall, personnel evaluated with the Leadership Practices Inventory-Observer possess low levels of all five leadership practices: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. This researcher advocates making a commitment to increase the perceived leadership practices of shift supervisors strengthens the quality and quantity of delivering emergency services in an integrated fire department.

Recommendation 7: Expand EMS management training for battalion chiefs and shift captains. Concurrently, with the department's commitment to developing relief EMS shift supervisors, efforts should be devoted to enhancing the commitment, compassion, and competencies of incumbent battalion chief and shift captains. The National Fire Academy's *2003 Catalog of Activities* (2002) *Management of Emergency Medical Services*' course description establishes the relevance to the expanded EMS demands upon battalion chiefs and shift captains:

> This course focuses on current and newly emerging management practices as they relate to Emergency Medical Services (EMS) in the fire service. This interactive and fast-moving course will enable participants to deal more effectively with day-to-day management issues that supervisory-level managers are likely to encounter. Personnel, resource management, and quality improvements are some of the major components of this course. Upon completion of this course, the students will be able to enhance the quality and overall effectiveness of their EMS operations through the use of management techniques. Student Selection Criteria: Individuals with management responsibility for part of an EMS delivery system, e.g., a fire department, a hospital, or a public EMS agency (p. 32).

The data results support this recommendation: While positions above lieutenant were not the focus of the applied research project, inferences can be made from the respondents' overall responses. Overall, personnel evaluated with the Leadership Practices Inventory-Observer possess low levels of all five leadership practices: Challenging the Process, Inspiring a Shared Vision, Enabling Others to Act, Modeling the Way, and Encouraging the Heart. This researcher advocates making a commitment to increase the perceived leadership practices of shift supervisors strengthens the quality and quantity of delivering emergency services in an integrated fire department.

Recommendation 8: Suggestions offered to readers/future researchers. While this applied research project expands the body of knowledge relevant to integrating fire/EMS operations and assesses the leadership practices of fire officers supervising EMS personnel, additional research is justified by this dynamic and complex topic. Future EFO participants from departments facing similar fire-based EMS integration issues are encouraged to replicate this study for the purposes of making comparisons and contracts with this study's findings. This researcher is confident the numerous issues identified and discussed in this study offer the studied organization and future researchers insights into resolving integration conflicts in EMS/fire organizations.

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Appendix A

Clayton County Fire Department

Command Directive

Directive No. 03-04-59 March 18, 2002

DEPARTMENTAL REORGANIZATION

In order to accomplish the Department's goal of a unified chain of command, the following Departmental changes are effective March 18, 2002:

- All EMS Shift personnel are placed under the direction of the Deputy Chief of Operations.
- EMS Sergeants will no longer perform evaluations on Firefighters assigned to EMS Units.
- Station Lieutenants will perform evaluations of all employees housed at their respective stations including EMS Sergeants and firefighters.
- Evaluations performed on EMS personnel by Station Lieutenants will be reviewed by the EMS Captains before forwarding to the respective Battalion Chief for review.
- EMS Captains will be evaluated by Battalion One and Fire Captains will be evaluated by Battalion Two.
- All Shift supervisors are required to be proficient in Incident Command and knowledgeable regarding various departmental policies concerning emergency medical services such as helicopter transport protocol and the drug handling policy.

Alex S. Cohilas, Fire Chief

DISTRIBUTION
Assistant Chief Trimble
Deputy Chiefs: Hood/ Scarbrough/ Bowen/ Ferrone
Battalion Chiefs
Stations
Headquarters Staff

Appendix B
Unification of EMS and Fire Suppression Operations Questionnaire

I. PERSONAL CHARACTERISTICS QUESTIONNAIRE

Please answer ALL questions. All responses are anonymous.

1. Position in the Department: (Circle only one)

Sergeant	Firefighter

2. Years of Service in <u>this</u> Department: (Circle one).

0-5 years	6-10 years	11-15 years
16-20 years	20 years and over	

3. Gender: (Circle one)

Female	Male

4. Age Group: (Circle one)

18-24 years	25-34 years	35-44 years
45-54 years	55 years and over	

5. Highest Education Completed: (Circle one)

High School/GED	Some College	Associate Degree
Bachelor Degree	Graduate Degree	

II. UNIFYING EMS AND FIRE SUPPRESSION OPERATIONS QUESTIONNAIRE

Circle your response

1. The department's previous model for having two separate EMS and fire suppression commands was

Very Effective Effective Ineffective Very Ineffective

REMARKS:

2. The unification of EMS and fire suppression operations has been

Very Successful Successful Unsuccessful Very Unsuccessful

REMARKS:

3. Overall, company officers (lieutenants), captains, and battalion chiefs' response to unifying EMS and fire suppression operations has been

Strong Acceptance Acceptance Resistance Strong Resistance

REMARKS:

4. Overall, firefighters and sergeants' response to unifying EMS and fire suppression operations

Strong Acceptance Acceptance Resistance Strong Resistance

REMARKS:

5. Overall, my personal response to unifying EMS and fire suppression operations has been

Strong Acceptance Acceptance Resistance Strong Resistance

REMARKS:

6. With unifying EMS and fire suppression operations, promotional and job assignment opportunities for EMS personnel are

Significantly Improved	Improved	Diminished	Significantly Diminished

REMARKS:

7. The department's ability to "serve and protect" the county's citizens under the unification of EMS and fire suppression operations is

Significantly Improved	Improved	Diminished	Significantly Diminished

REMARKS:

8. Training for implementing the increased demands of unified EMS and fire suppression operations has been

Very Adequate	Adequate	Inadequate	Very Inadequate

REMARKS:

9. Departmental communication regarding unifying EMS and fire suppression operations has been

Very Adequate	Adequate	Inadequate	Very Inadequate

REMARKS:

10. My personal projection is that in 2007 the department's unification of EMS and fire suppression operations will have the following outcome

Much Stronger Department	Stronger Department	Weaker Department	Much Weaker Department

REMARKS:

11. Overall, fire suppression lieutenants' abilities to properly evaluate EMS personnel's performance and complete their annual performance evaluations is

Very Adequate Adequate Inadequate Very Inadequate

REMARKS:

12. Overall, paramedic fire suppression lieutenants' abilities to function as the relief EMS Shift Captain is

Very Adequate Adequate Inadequate Very Inadequate

REMARKS:

13. Two recommendations for improving the unification of EMS and fire suppression operations are as follows:

    1.

    2.

14. Two recommendations for improving the leadership practices of my supervising fire suppression company officer for EMS personnel are as follows:

    1.

    2.

III. LEADERSHIP PRACTICES INVENTORY: OBSERVER

On the next three pages are thirty statements describing various leadership behaviors. Please read each statement carefully. Then look at the rating scale and decide how frequently your company officer (lieutenant) engages in the behavior.

In selecting each response, please be realistic about the extent to which the company officer actually engages in the behavior. Do not answer in terms of how you would like to see this person behave or in terms of how you think he or she should behave. Answer in terms of how the company officer typically behaves — on most days, on most projects, and with most people.

To what extent does this person typically engage in the following behaviors?
Choose the number that best applies to each statement and record it in the blank to the left of the statement.

1	2	3	4	5	6	7	8	9	10
Almost Never	Rarely	Seldom	Once In a While	Occasionally	Sometimes	Fairly Often	Usually	Very Frequently	Almost Always

_____ 1. Seeks out challenging opportunities that test his or her own skills and abilities.

_____ 2. Talks about future trends that will influence how our work gets done.

_____ 3. Develops cooperative relationships among the people he or she works with.

_____ 4. Sets a personal example of what he or she expects from others.

_____ 5. Praises people for a job well done.

_____ 6. Challenges people to try out new and innovative approaches to their work.

_____ 7. Describes a compelling image of what out future could be like.

_____ 8. Actively listens to diverse points of view.

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1	2	3	4	5	6	7	8	9	10
Almost Never	Rarely	Seldom	Once In a While	Occasionally	Sometimes	Fairly Often	Usually	Very Frequently	Almost Always

_____ 9. Spends time and energy on making certain that the people he or she works with adhere to the principles and standards that have been agreed on.

_____ 10. Makes a point to let people know about his or her confidence in their abilities.

_____ 11. Searches outside the formal boundaries of his or her organization for innovative ways to improve what we do.

_____ 12. Appeals to others to share an exciting dream of the future.

_____ 13. Treats others with dignity and respect.

_____ 14. Follows through on the promises and commitments that he or she makes.

_____ 15. Makes sure that people are creatively rewarded for their contributions to the success of the projects.

_____ 16. Asks “What can we learn?” when things do not go as expected.

_____ 17. Shows others how their long-term interests can be realized by enlisting in a common vision.

_____ 18. Supports the decisions that people make on their own.

_____ 19. Is clear about his or her philosophy of leadership.

_____ 20. Publicly recognizes people who exemplify commitment to shared values.

_____ 21. Experiments and takes risks even when there is a chance of failure.

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1	2	3	4	5	6	7	8	9	10
Almost Never	Rarely	Seldom	Once In a While	Occasionally	Sometimes	Fairly Often	Usually	Very Frequently	Almost Always

_____ 22. Is contagiously enthusiastic and positive about future possibilities.

_____ 23. Gives people a great deal of freedom and choice in deciding how to do their work.

_____ 24. Makes certain that we set achievable goals, make concrete plans, and establish measurable milestones for the projects and programs that we work on.

_____ 25. Finds ways to celebrate accomplishments.

_____ 26. Takes the initiative to overcome obstacles even when outcomes are uncertain.

_____ 27. Speaks with genuine conviction about the higher meaning and purpose of our work.

_____ 28. Ensures that people grow in their jobs by learning new skills and developing themselves.

_____ 29. Makes progress toward goals one step at a time.

_____ 30. Gives the members of the team lots of appreciation and support for their contributions.

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Appendix C

KOUZES POSNER INTERNATIONAL
15419 Banyan Lane
Monte Sereno, California 95030
Phone/FAX: (408) 354-9170

July 19, 2002

Mr. Bill Lowe
130 Hanover Circle
Fayetteville, Georgia 30214

Dear Bill:

Thank you for your letter (13 July) requesting permission to use the Leadership Practices Inventory (LPI) in your applied research project (ARP). We are willing to allow you to reproduce the instrument as outlined in your letter, at no charge, with the following understandings:

(1) That the LPI is used only for research purposes and is not sold or used in conjunction with any compensated management development activities;

(2) That copyright of the LPI, or any derivation of the instrument, is retained by Kouzes Posner International, and that the following copyright statement be included on all copies of the instrument: "Copyright © 1997 James M. Kouzes and Barry Z. Posner. All rights reserved. Used with permission.";

(3) That one (1) copy of your applied research project (ARP) and one (1) copy of **all** papers, reports, articles, and the like which make use of the LPI data be sent promptly to our attention; and,

(4) That you agree to allow us to include an abstract of your research and any other published papers utilizing the LPI on our various websites.

If the terms outlined above are acceptable, would you indicate so by signing one (1) copy of this letter and returning it to us. Best wishes for every success with your dissertation.

Cordially,

Barry Z. Posner, Ph.D.
Managing Partner

I understand and agree to abide by these conditions:

(Signed) _____ Date: 8-2-02

Appendix D

APPROVED

TO: Fire Chief Alex Cohilas

FROM: Captain Bill Lowe

DATE: 27 August 02

SUBJECT: National Fire Academy Applied Research Project Questionnaire

I am requesting permission to distribute an anonymous questionnaire to the department's EMS sergeants and firefighters. As you are aware, I am completing an Applied Research Project (ARP) that is a mandatory post-course outcome from attending the National Fire Academy's Executive Fire Officer (EFO) Program. Collecting primary data on a specific issue within my own department is critical to satisfy the ARP guidelines.

On March 18, 2002 you issued Command Directive 03-04-59 regarding "departmental reorganization." This directive effectively abolished the department's almost thirty-year history of operating two separate chains of command for shift operations: fire suppression and emergency medical services. The directive's intention was to "accomplish the department's goal of a unified chain of command" for all line operations.

The issue is that the department has not formally assessed how EMS personnel viewed this unified chain of command and how EMS personnel perceive the leadership skills of their "new" fire suppression supervisors created under the unified chain of command policy directive. Consequently, this applied research project seeks information previously unavailable regarding perceived leadership practices and unifying fire service-based EMS operations.

The objective of this applied research project is to learn more about unifying fire department operations and leadership practices. My extensive literature review found no similar studies conducted on unifying EMS and fire suppression operations and the leadership practices of fire suppression officers as perceived by their EMS subordinates.

The following research questions will be addressed by this applied research project:

1) How do EMS personnel view the unified chain of command directive as improving the delivery of emergency medical services?
2) How do EMS personnel perceive the leadership practices of their supervising fire suppression officers?
3) What recommendations do EMS personnel have for improving the unification of the chain of command and improving the perceived leadership practices of their supervising fire suppression officers?

The questionnaire will take approximately 20 minutes to complete and contains three sections (attached):

I. Personal Characteristics Questionnaire
II. Unification of EMS and Fire Suppression Operations Questionnaire
III. Leadership Practices Inventory-Observer

Appendix E
Personal Characteristic Questionnaire Results

Percentage of Respondents Based on Rank

Sergeant	37 %
Firefighter	63 %

Percentage of Respondents Based on Tenure

0-5 years	37 %
6-10 years	24 %
11-15 years	15 %
16-20 years	11 %
20 years and over	13 %

Table 3-3: Percentage of Respondents Based on Gender

Male	98 %
Female	2 %

Table 3-4: Percentage of Respondents Based on Age

18-24 years	3.7 %
25-34 years	37 %
35-44 years	43.6 %
45-54 years	16.7 %
55 years and over	0 %

Table 3-5: Percentage of Respondents Based on Education

High school/GED	35 %
Some college	44.4 %
Associates degree	7.4 %
Bachelors degree	11 %
Graduate degree	1.9 %

Appendix F
Unifying EMS and Fire Suppression Operations Questionnaire

1. The department's previous model for having two separate EMS and fire suppression commands was (Very Effective = 1; Effective = 2; Ineffective = 3; and Very Ineffective = 4).

Respondents' Mean Based on Rank

Sergeant	3.1
Firefighter	3.0

Respondents' Mean Based on Tenure

0-5 years	3.1
6-10 years	3.5
11-15 years	3.1
16-20 years	3.1
20 years and over	3.5

Respondents' Mean Based on Age

18-24 years	3.5
25-34 years	3.3
35-44 years	3.0
45-54 years	2.3

Respondents' Mean Based on Education

High school/GED	3.0
Some college	2.9
Associates degree	3.0
Bachelors/Graduate degrees	3.6

2. The unification of EMS and fire suppression operations has been (Very Successful = 1; Successful = 2; Unsuccessful = 3; and Very Unsuccessful = 4).

Respondents' Mean Based on Rank

Sergeant	2.0
Firefighter	2.1

Respondents' Mean Based on Tenure

0-5 years	1.9
6-10 years	1.8
11-15 years	1.9
16-20 years	2.2
20 years and over	2.0

Respondents' Mean Based on Age

18-24 years	2.0
25-34 years	2.4
35-44 years	1.8
45-54 years	2.1

Respondents' Mean Based on Education

High school/GED	2.1
Some college	2.1
Associates degree	2.0
Bachelors/Graduate degrees	2.1

3. Overall, company officers (lieutenants), captains, and battalion chiefs' response to unifying EMS and fire suppression operations has been (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Respondents' Mean Based on Rank

Sergeant	2.2
Firefighter	2.3

Respondents' Mean Based on Tenure

0-5 years	2.4
6-10 years	2.2
11-15 years	2.3
16-20 years	2.2
20 years and over	2.0

Respondents' Mean Based on Age

18-24 years	2.0
25-34 years	2.5
35-44 years	2.1
45-54 years	2.1

Respondents' Mean Based on Education

High school/GED	2.2
Some college	2.2
Associates degree	2.3
Bachelors/Graduate degrees	2.6

4. Overall, firefighters and sergeants' response to unifying EMS and fire suppression operations (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Respondents' Mean Based on Rank

Sergeant	2.1
Firefighter	2.0

Respondents' Mean Based on Tenure

0-5 years	2.1
6-10 years	1.9
11-15 years	2.3
16-20 years	2.2
20 years and over	2.1

Respondents' Mean Based on Age

18-24 years	2.5
25-34 years	2.1
35-44 years	2.0
45-54 years	2.0

Respondents' Mean Based on Education

High school/GED	2.2
Some college	2.0
Associates degree	2.0
Bachelors/Graduate degrees	1.9

5. Overall, my personal response to unifying EMS and fire suppression operations has been (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Respondents' Mean Based on Rank

Sergeant	1.6
Firefighter	1.4

Respondents' Mean Based on Tenure

0-5 years	1.4
6-10 years	1.2
11-15 years	1.5
16-20 years	1.7
20 years and over	2.0

Respondents' Mean Based on Age

18-24 years	1.5
25-34 years	1.2
35-44 years	1.5
45-54 years	1.9

Respondents' Mean Based on Education

High school/GED	1.6
Some college	1.4
Associates degree	1.5
Bachelors/Graduate degrees	1.3

6. With unifying EMS and fire suppression operations, promotional and job assignment opportunities for EMS personnel are (Significantly Improved = 1; Improved = 2; Diminished = 3; and Significantly Diminished = 4).

Respondents' Mean Based on Rank

Sergeant	2.3
Firefighter	2.1

Respondents' Mean Based on Tenure

0-5 years	1.9
6-10 years	1.7
11-15 years	2.9
16-20 years	2.5
20 years and over	2.6

Respondents' Mean Based on Age

18-24 years	2.5
25-34 years	1.8
35-44 years	2.3
45-54 years	2.7

Respondents' Mean Based on Education

High school/GED	2.2
Some college	2.2
Associates degree	2.8
Bachelors/Graduate degrees	1.7

7. The department's ability to "serve and protect" the county's citizens under the unification of EMS and fire suppression operations is (Significantly Improved = 1; Improved = 2; Diminished = 3; and Significantly Diminished = 4).

Respondents' Mean Based on Rank

Sergeant	1.8
Firefighter	1.6

Respondents' Mean Based on Tenure

0-5 years	1.8
6-10 years	1.5
11-15 years	1.4
16-20 years	1.8
20 years and over	2.1

Respondents' Mean Based on Age

18-24 years	2.0
25-34 years	1.6
35-44 years	1.6
45-54 years	2.1

Respondents' Mean Based on Education

High school/GED	1.7
Some college	1.7
Associates degree	2.0
Bachelors/Graduate degrees	1.4

8. Training for implementing the increased demands of unified EMS and fire suppression operations has been (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Respondents' Mean Based on Rank

Sergeant	2.3
Firefighter	2.4

Respondents' Mean Based on Tenure

0-5 years	2.4
6-10 years	2.1
11-15 years	2.5
16-20 years	2.2
20 years and over	2.7

Respondents' Mean Based on Age

18-24 years	2.0
25-34 years	2.4
35-44 years	2.3
45-54 years	2.6

Respondents' Mean Based on Education

High school/GED	2.4
Some college	2.4
Associates degree	2.3
Bachelors/Graduate degrees	2.3

9. Departmental communication regarding unifying EMS and fire suppression operations has been (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Respondents' Mean Based on Rank

Sergeant	2.2
Firefighter	2.3

Respondents' Mean Based on Tenure

0-5 years	2.5
6-10 years	2.0
11-15 years	2.4
16-20 years	2.2
20 years and over	2.3

Respondents' Mean Based on Age

18-24 years	2.5
25-34 years	2.5
35-44 years	2.0
45-54 years	2.4

Respondents' Mean Based on Education

High school/GED	2.1
Some college	2.3
Associates degree	2.3
Bachelors/Graduate degrees	2.6

10. My personal projection is that in 2007 the department's unification of EMS and fire suppression operations will have the following outcome (Much Stronger Department = 1; Stronger Department = 2; Weaker Department = 3; and Much Weaker Department = 4).

Respondents' Mean Based on Rank

Sergeant	1.7
Firefighter	1.5

Respondents' Mean Based on Tenure

0-5 years	1.6
6-10 years	1.2
11-15 years	1.6
16-20 years	1.8
20 years and over	2.0

Respondents' Mean Based on Age

18-24 years	1.5
25-34 years	1.5
35-44 years	1.6
45-54 years	1.9

Respondents' Mean Based on Education

High school/GED	1.7
Some college	1.5
Associates degree	1.8
Bachelors/Graduate degrees	1.6

11. Overall, fire suppression lieutenants' abilities to properly evaluate EMS personnel's performance and complete their annual performance evaluations is (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Respondents' Mean Based on Rank

Sergeant	2.7
Firefighter	2.6

Respondents' Mean Based on Tenure

0-5 years	2.8
6-10 years	2.6
11-15 years	2.4
16-20 years	2.5
20 years and over	2.7

Respondents' Mean Based on Age

18-24 years	3.5
25-34 years	2.7
35-44 years	2.5
45-54 years	2.7

Respondents' Mean Based on Education

High school/GED	2.5
Some college	2.7
Associates degree	2.8
Bachelors/Graduate degrees	2.7

12. Overall, paramedic fire suppression lieutenants' abilities to function as the relief EMS Shift Captain is (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Respondents' Mean Based on Rank

Sergeant	2.3
Firefighter	2.2

Respondents' Mean Based on Tenure

0-5 years	2.3
6-10 years	1.8
11-15 years	2.5
16-20 years	2.2
20 years and over	2.7

Respondents' Mean Based on Age

18-24 years	3.0
25-34 years	2.2
35-44 years	2.1
45-54 years	2.7

Respondents' Mean Based on Education

High school/GED	2.3
Some college	2.2
Associates degree	2.8
Bachelors/Graduate degrees	2.1

Appendix G
Respondents' Survey Statements

Note: While this researcher acknowledges the length of this appendix section, respondents were informed their comments and suggestions would be incorporated into this applied research report. Some respondents were adamant their comments and suggestions reach the fire chief and senior staff officers.

II. UNIFYING EMS AND FIRE SUPPRESSION OPERATIONS QUESTIONNAIRE

1. The department's previous model for having two separate EMS and fire suppression commands was (Very Effective = 1; Effective = 2; Ineffective = 3; and Very Ineffective = 4).

Respondents' comments and suggestions:
Respondent # 10: "(Ineffective) There shouldn't be any separation of dept. anyone qualified should rotate on all units for more productive personnel."
Respondent # 14: "(Ineffective) Morale for crews, especially on EMS was low. It was never exactly clear to line personnel who their immediate supervisor was: EMS sergeant, [fire] lieutenant, or EMS captain."
Respondent # 16: "(Ineffective) The previous model was ineffective in utilizing the skills and resources of all of the dept. personnel, and resulted in a negative impact on morale."
Respondent # 20: "(Ineffective) Too many variables, not sure who to respond to."
Respondent # 28: "(Very ineffective) Too many chiefs not enough indians."
Respondent # 30: "(Ineffective) Left huge gaps in the operational capacity of the individual companies due to limited resources."
Respondent # 31: "(Ineffective) It was ineffective as far as both services being divided and being treated different."
Respondent # 32: "(Effective) Never considered to be separate department."
Respondent # 33: "(Very Ineffective) We were so separate the animosity around the station was terrible."
Respondent # 34: "(Ineffective) EMS and fire were so far apart, the department was divided."
Respondent # 47: "(Very Ineffective) Absolutely a joke!"
Respondent # 49: "(Very Ineffective) The previous administration on EMS was very biased and unfair to the employee. Their methods of discipline was by intimidation and without thought."
Respondent # 53: "(Very Ineffective) At the time leadership could be faulted for the very ineffective operation. Inadequate training, lack of empathy for relief of those [medics] working on the trucks [ambulances], and lack of understanding by administration were just a few of the problems then."

2. The unification of EMS and fire suppression operations has been (Very Successful = 1; Successful = 2; Unsuccessful = 3; and Very Unsuccessful = 4).

Respondents' comments and suggestions:
Respondent # 2: "(Unsuccessful) Personnel placed on med. Units with no experience"
Respondent # 9: "(Unsuccessful) I have seen nothing to show that it has taken place."
Respondent # 10: "(Very Successful) It is successful to a point. A rotation of personnel needs to be in place – so each individual will be fully training on all units."
Respondent # 11: "(Very Unsuccessful) What unification has taken place?"
Respondent # 14: "(Successful) There has been marked improvement over the last year with operations, but as with anything there are always things to improve upon."
Respondent #16: "(Successful) To date, the unification process has been moderately successful. The process has been hindered by the failure to establish a regular rotation of personnel between engine and ambulance assignments."
Respondent # 17: "(Very Unsuccessful) Less burnout."
Respondent # 20: "(Very Successful) One chain of command more ability to get time off with combining of vacation lists [used to be two vacation lists: EMS and fire suppression]."
Respondent # 22: "(Successful) But has some persons not willing to change."
Respondent # 27: "(Unsuccessful) We [EMS personnel] are still treated as separate for the most part."
Respondent # 28: "(Successful) There is still some rough areas to be worked out."
Respondent # 29: "(Unsuccessful) Too much 'old school' thinking, conflicting ideas on what everyone's role should be."
Respondent # 30: "(Successful) As a whole the department is slowly becoming more fluid in it's ability to perform multiple (EMS and suppression) tasks."
Respondent # 31: "(Successful) With regards to being able to ride the engine or med truck."
Respondent # 33: "(Unsuccessful) We have changed the rank structure but have not progressed to swapping assignments. The pay issue also needs to be resolved [pay incentive for permanent assignment to EMS]."
Respondent # 34: "(Successful) Successful to a point, EMS sergeants are still stuck in their current billet."
Respondent # 36: "(Successful) Too early to tell."
Respondent # 38: "(Very Successful) This unification has bonded fire and EMS closer together and allowed easier supervision of each station."
Respondent # 47: "(Very Successful) Allows more versatility."
Respondent # 50: "(Unsuccessful) I believe great strides have been made and appreciated but still overall unsuccessful."
Respondent # 53: "(Unsuccessful) Not much has changed. Very little relief for the medics and EMD [emergency medical dispatch] seems to have withered and the individuals [EMS personnel] have fallen back to being dispatched on calls [that] quints and engines can handle. It seems as though fire suppression captains and chiefs are in charge and trying to protect fire suppression units."

3. Overall, <u>company officers (lieutenants), captains, and battalion chiefs'</u> response to unifying EMS and fire suppression operations has been (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Respondents' comments and suggestions:

Respondent # 7: "(Resistance) The perception has been that of resistance mainly because many of those voices are the 'loudest' ones. However, the response is just about split down the middle."

Respondent # 9: "(Acceptance) Most agree to the unification, but know nothing about EMS."

Respondent # 10: "(Acceptance) Lt. [deleted] has no complaints on unification as long as the job is done accurately."

Respondent # 14: "(Acceptance) I have personally heard positive from both battalion chief on my shifts and from most of the lieutenants and EMS captains."

Respondent # 15: "(Resistance) Fire line personnel unwilling to take on additional responsibilities."

Respondent # 16: "(Resistance) This remark is not meant to be disparaging to the lieutenants at my station. However, because they do not have an EMS background, I do not feel they have made as much of effort to completely integrate the company into a seamless fire/EMS operation as they could."

Respondent # 20: "(Acceptance) Some officers still treat EMS as red-headed step-children. Not given respect for our rank to cross over to fire-related duties i.e., being utilized as a relief driver [for suppression apparatus]."

Respondent # 22: "(Acceptance) Some officers not wanting to take the responsibility of the call."

Respondent # 23: "(Resistance) Older fire lieutenants seem to be more resistant. As well as employees who have ridden fire line their whole career."

Respondent # 27: "(Resistance) Many officers resent having to run EMS calls and don't want to swap personnel on the engine and ambulance."

Respondent # 28: "(Acceptance) The acceptance has been there with some reservation."

Respondent # 29: "(Acceptance) Some exceptions, but overall a grudging acceptance."

Respondent # 30: "(Acceptance) Slowly and sometimes grudgingly accept."

Respondent # 31: "(Acceptance) Some acceptance from some, others still trying to fight the system."

Respondent # 33: "(Resistance) The old guys are not open to change."

Respondent # 34: "(Acceptance) It has acceptance, but just by the fire chief saying we're one department, but it is still split on line and behind the chief's back."

Respondent # 47: "(Acceptance) Slowly but surely."

Respondent # 50: "(Strong Resistance) I feel bastardized each day by most stations."

4. Overall, <u>firefighters and sergeants'</u> response to unifying EMS and fire suppression operations (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Respondents' comments and suggestions:

Respondent # 7: "(Acceptance) Again, this is a close category. Depends on who you talk to – a fire side EMT or Sgt. will elicit a more negative response versus an EMS-side EMT/medic/Sgt."

Respondent # 9: "(Acceptance) Basically no difference from before."

Respondent # 10: "(Resistance) There are many paramedics on the fire line that oppose to ride on EMS. Although they wanted to obtain their paramedic certification."
Respondent # 14: "(Acceptance) While most have accepted the unification and are glad to see it happen, there are some, notably personnel who have been with the department awhile, that are resistant to the change."
Respondent # 16: "(Strong Acceptance) I believe that among those personnel with less than five years service, acceptance has been strong. I believe among those with more than five years service, there is a mix between resistance and acceptance."
Respondent # 20: "(Acceptance) A great deal of firefighter/EMTs are not happy with having to ride EMS as much as they do now."
Respondent # 21: "(Resistance) Older guys don't like it. Some lieutenants I have worked with hate it."
Respondent # 28: "(Acceptance) There is less reservation and more disgust at this level."
Respondent # 33: "(Acceptance) The younger guys like change and progression but are disappointed with the slow changing process.
Respondent # 42: "(Strong Acceptance) I feel that we have had a better response from EMS personnel than from fire personnel predominately because of fear."
Respondent # 47: "(Acceptance) Integration creates a better work environment."
Respondent # 53: "(Acceptance) However, some feel like if they are responding to or out of service on a call that is B.S., a fire might break out and they may miss it."

5. Overall, <u>my personal</u> response to unifying EMS and fire suppression operations has been (Strong Acceptance = 1; Acceptance = 2; Resistance = 3; and Strong Resistance = 4).

Respondents' comments and suggestions:
Respondent # 9: "(Acceptance) I would love for it to happen."
Respondent # 10: "(Acceptance) Again, a rotation would be helpful for training on all areas of the dept. not just EMS or fire line."
Respondent # 14: "(Strong Acceptance) This has given everyone a chance to increase their skill/knowledge in both fire and EMS. Also, it helps people who have not had many chances to train for fire suppression or EMS to become more competent and comfortable with both fire suppression and EMS."
Respondent # 16: "(Strong Acceptance) I am extremely happy that the integration efforts are under way. Had things continued under the old model, I would have considered seeking employment with another dept."
Respondent # 20: "(Strong Acceptance) I like the simplicity of rank structure, you know who you are responsible to report to."
Respondent # 23: "(Strong Acceptance) Tired of hearing 'it's not my job.' Finally it's everybody's job."
Respondent # 28: "(Acceptance) I still feel that there are separate standards."
Respondent # 30: "(Strong Acceptance) I believe that this will only strengthen our department by making us a well rounded group."
Respondent # 31: "(Acceptance) I feel more needs to be done to let people have more of a break off the med truck. Not just 1 or 2 shifts per month or so."

Respondent # 33: "(Strong Acceptance) We should be responsible for every position in the fire station (i.e., driver, firefighter, EMT/paramedic)."
Respondent # 34: "(Acceptance) I accept it, due to the fact we run more calls together and fire has more of an understanding of the job and EMS."
Respondent # 47: "(Strong Acceptance) I like it!"
Respondent # 50: "(Strong Acceptance) I have always tried to be equal for EMS and fire line. This new model has been a breath of fresh air for me. I became a paramedic after riding fire line. I tried to better myself for the sake of others and my family. I did not expect to be punished."
Respondent # 53: "(Acceptance) Acceptance sure, but I don't see a lot of fire suppression sergeants and lieutenants wanting to get off their apparatus and trading places with their medics on EMS. There is still that separation that 'you're getting paid [EMS incentive pay] for EMS and besides you are too busy." Administration needs to straighten that out."

6. With unifying EMS and fire suppression operations, promotional and job assignment opportunities for EMS personnel are (Significantly Improved = 1; Improved = 2; Diminished = 3; and Significantly Diminished = 4).

Respondents' comments and suggestions:
Respondent # 2: "(Improved) I've been unable to train on other units."
Respondent # 9: "(Diminished) EMS jobs are dissolved for the most part. It would be hard to get promoted and be competent on fire side when we never see a fire truck."
Respondent # 10: "(Diminished) At this time I haven't seen any promotional appointments on the EMS line."
Respondent # 16: "(Significantly Improved) Because personnel now have an opportunity to develop all of their skills, EMS personnel now will be better prepared to become officers."
Respondent # 20: "(Diminished) No real change in opportunity for promotion."
Respondent # 23: "(Diminished) EMS sergeants have a glass ceiling."
Respondent # 28: "(Improved) They're really the same."
Respondent # 47: "(Improved) More opportunity."
Respondent # 48: "(Improved) Maybe promotions, got zero assignment improvements."
Respondent # 50: "(Significantly Improved) I now feel that I have a future with this department."
Respondent # 53: "(Improved) Improved yes, but what good does it do to take a test possibly to do well and not be picked by the chief [due to] banding [promotional]."

7. The department's ability to "serve and protect" the county's citizens under the unification of EMS and fire suppression operations is (Significantly Improved = 1; Improved = 2; Diminished = 3; and Significantly Diminished = 4).

Respondents' comments and suggestions:

Respondent # 7: "(Significantly Improved) Fire line will become better pt care providers. EMS side will become better firefighters therefore protecting more property, etc."

Respondent # 9: "(Diminished) Med trucks still respond on BLS calls that engines should handle. Why do engines go out with med trucks before 1900, but the trucks seem to go on less calls at night?"

Respondent # 10: "(Significantly Improved) ALS engines have proven that quick care of the citizens have improved. When a unit is away on a call the ALS engines are able to give complete care for patients on delayed [EMS] responses."

Respondent # 16: "(Significantly Improved) The integration will improve everyone's overall skills and therefore create more assets within the dept. and more efficient use of resources."

Respondent # 20: "(Significantly Improved) With new dispatch system, it has allowed the closest unit to respond and to lift the burden on EMS units to not have to respond to minor emergencies."

Respondent # 27: "(Improved) Brings ALS personnel and equipment on scene quicker especially when it is busy and all medic trucks are out."

Respondent # 30: "(Improved) Slightly. But is diminished in some aspects due to reluctance of older more comfortable firefighters."

Respondent # 31: "(Improved) This has improved, but there are certain instances that happen on a continuous basis that hampers the system's operation."

Respondent # 33: "(Improved) But not effectively. The dispatch system needs to be worked out and appropriate equipment sent to calls."

Respondent # 47: "(Significantly Improved) ALS Engines? Who would have thought?"

Respondent # 48: "(Significantly Improved) At least, it should be – but not yet due to poor implementation."

8. Training for implementing the increased demands of unified EMS and fire suppression operations has been (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Respondents' comments and suggestions:

Respondent # 7: "(Adequate) More PCR [patient care reports] training, ICS for everyone (not just OCS [officer candidate school] students. The training is coming along but far too slow."

Respondent # 10: "(Inadequate) Training still not up to par."

Respondent # 14: "(Adequate) There is always room for improvement and more training."

Respondent # 16: "(Adequate) The level of EMS training has increased dramatically because of Chief Cohilas' commitment to EMS. However, a personnel rotation policy still needs to be implemented."

Respondent # 20: "(Adequate) Need more field training supported by training dept. Not just individual training at station level."

Respondent # 23: "(Adequate) Getting better."

Respondent # 28: "(Inadequate) What training?"

Respondent # 29: "(Adequate) Too many employees have gone too long without utilizing skills."
Respondent # 31: "(Adequate) I would say at this point adequate at best. But when there are line lieutenant/paramedics that have the same training keep putting non-emergency calls on the med trucks, their response is they are not comfortable with the situation makes me wonder."
Respondent # 34: "(Adequate) But really what training?"
Respondent # 38: "(Inadequate) Minimal in that station officers are the only source of information. Additional in-services or updates or handouts on changes could be implemented."
Respondent # 47: "(Adequate) Would like to see more EMS."
Respondent # 50: "(Inadequate) Our training has greatly improved. Yet, I feel that little has been done concerning fire line 'in-house' training."
Respondent # 53: "(Inadequate "as usual") Sending out copied modules from magazines are not the answer to training EMS/fire suppression personnel. Most medics need or prefer hands on training. Maybe paying people with money or comp time to come off-duty to sit in class and participate with hands on training might help."

9. Departmental communication regarding unifying EMS and fire suppression operations has been (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Respondents' comments and suggestions:
Respondent # 7: "(Inadequate) Goals, timelines need to be expressed."
Respondent # 9: "(Inadequate) EMS doesn't know what fire is doing. Fire doesn't know what EMS is doing."
Respondent # 10: "(Inadequate) Slight talk about unification."
Respondent # 17: "(Inadequate) Who determines an engine versus med call? [dispatch protocols]."
Respondent # 20: "(Adequate) Good communication."
Respondent # 28: "(Inadequate) There are still a lot of questions to be resolved."
Respondent # 30: "(Adequate) Some increased communication regarding patient transport in non-emergency or 'sick' patients should be addressed."
Respondent # 33: "(Inadequate) There are several different views depending on who you talk to."
Respondent # 38: "(Adequate) Communication has been through station lieutenant primarily but this is first questionnaire since implementation."
Respondent # 47: "(Very Adequate) Like an open book."
Respondent # 50: "(Inadequate) I believe more communication from the office would help motivate lieutenants and sergeants."
Respondent # 53: "(Inadequate) Command directives seem to be the only way the chief wants to communicate and most people choose to poke fun of the paperwork and see who got fired recently. Try a newsletter that's friendly and positive."

10. My personal projection is that in 2007 the department's unification of EMS and fire suppression operations will have the following outcome (Much Stronger Department = 1; Stronger Department = 2; Weaker Department = 3; and Much Weaker Department = 4).

Respondents' comments and suggestions:
Respondent # 2: "(Stronger Department) Based on training."
Respondent # 10: "(Stronger Department) It needs to be sooner."
Respondent # 11: "(No response) No way I can answer this."
Respondent # 13: "(Weaker Department) Too many variables. Depends on management direction."
Respondent # 14: "(Much Stronger Department) This department has gotten much stronger in the past year with the unification. Morale and training is ten fold of what it was 2 years ago. The department can only get stronger over the next few years."
Respondent # 16: "(Much Stronger Department) Without doubt, integration will have a positive impact."
Respondent # 20: "(Much Stronger Department) If all units become ALS and with the addition of EMS units."
Respondent # 23: "(Stronger Department) The hiring of young intelligent employees will make a much stronger department. The hiring of young bodies to fill positions will make us a weaker department."
Respondent # 28: "(Stronger Department) Changes take time."
Respondent # 30: "(Much stronger department) I would hope complete ability to 'rotate' from one piece of equipment to another would be in place."
Respondent # 31: "(Stronger Department) If things continue to progress it will be a stronger department once people realize why the system was combined and that we all are expected to do the job."
Respondent # 33: "(Stronger Department) The younger guys will have made it to prominent positions in order to fix the problems."
Respondent # 47: "(Much Stronger Department) We will be the standard for other departments to look at."

11. Overall, fire suppression lieutenants' abilities to properly evaluate EMS personnel's performance and complete their annual performance evaluations is (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Respondents' comments and suggestions:
Respondent # 7: "(Adequate) Evaluation can only truly be done of station duties, extra assignments, training is witnessed by Lt. EMS performance / pt care difficult to assess since they aren't on all calls with us."
Respondent # 8: "(Inadequate) The only Lieutenants that can evaluate EMS are the ones with EMS experience."
Respondent # 9: "(Very Inadequate) How can EMTs/first responders evaluate those who they can't perform the duties of. I'm a FF/EMT, I don't/can't evaluate Lts."
Respondent # 10: "(Inadequate) They need to be educated more for better evaluations."

Respondents # 14: "(Adequate) The only way to properly evaluate personnel is to actually run calls with them along with the normal duties around the station."
Respondent # 16: "(Adequate) Because my two lieutenants do not have EMS backgrounds, their ability to evaluate my EMS skills are performance will have limitations."
Respondent # 17: "(Very Inadequate) Most are not adequate in EMS skills."
Respondent # 20: "(Adequate) I feel they have a better understanding of what we do daily, where before the EMS captain was unable to follow our activities daily."
Respondent # 22: "(Inadequate) Due to their not riding with [EMS] personnel."
Respondent # 23: "(Adequate) At this station, but for stations with lieutenants without any EMS background, personnel biases may limit this."
Respondent # 27: "(Inadequate) It is hard for station officers to evaluate you when they are not around you most of the time."
Respondent # 28: "(Inadequate) The lieutenant sees us work more often than the EMS captain but there are still large periods that go unnoticed."
Respondent # 29: "(Inadequate) Not enough willingness to learn more about EMS from lieutenants."
Respondent # 30: "(Very Adequate) Most use EMS sergeants as resources and in this way it is very thorough."
Respondent # 33: "(Very Inadequate) They do not have any idea what our job entails and how hard we work. They don't care."
Respondent # 38: "(Adequate) With the EMS sergeant's assistance."
Respondent # 41: "(Inadequate) They don't run all the calls with us."
Respondent # 47: "(Inadequate) Unless your fire lieutenant has prior EMS experience, your evaluation is substandard."
Respondent # 49: "(Very Inadequate) Fire lieutenants should be paramedics. How can a fire lieutenant evaluate an EMS sergeant if he is not on calls with them. The EMS captains should do the evaluations on the EMS personnel. If a lieutenant is a first responder how does he know if the standard is being met."
Respondent # 50: "(Very Inadequate) I feel you must be able to do the job to properly evaluate the job."
Respondent # 53: "(Inadequate) When these officers sit in the station and don't observe medics or their personnel on actual calls on what basis do they make their evaluations?

12. Overall, paramedic fire suppression lieutenants' abilities to function as the relief EMS Shift Captain is (Very Adequate = 1; Adequate = 2; Inadequate = 3; and Very Inadequate = 4).

Respondents' comments and suggestions:
Respondent # 9: "(Inadequate) I never see them on any calls."
Respondent # 10: "(Inadequate) They're not interested."
Respondent # 20: "(Very Inadequate) Most have been far removed from being on EMS units and not up on current issues."
Respondent # 21: "(Very Adequate) On our shift there have not been any fire lieutenants in Car 18 [EMS captain] only Sergeant [deleted]."

Respondent # 27: "(Very Inadequate) Most are not up to date on current protocols and tend to favor fire line, continuing to do things the old way."
Respondent # 30: "(Adequate) In certain instances. Other instances/individuals tend to be over cautious with EMS calls."
Respondent # 33: "(Very Inadequate) Their skills are poor and they favor the traditional fire line guys."
Respondent # 34: "(Inadequate) EMS sergeants should be able to be the relief supervisor [EMS captain], due to their experience in the EMS field and being able to handle the call volume and provide ACLS help on scenes."
Respondent # 47: "(Very Adequate) Ideal."
Respondent # 48: "(Adequate) Anyone can be EMS shift captain – any paramedic."
Respondent # 53: "(Adequate) When they fill the position most of the time it is relinquished back to EMS sergeants."

13. Two recommendations for improving the unification of EMS and fire suppression operations are as follows:

Respondents' comments and suggestions:
Respondent # 1: "Let those with experience handle the duties e.g., EMS Capt./Sgt. EMS Relief."
Respondent # 2: "Field training program for EMTs and paramedics before riding 2nd on unit. Training for EMS personnel on fire units."
Respondent # 3: "Have stronger supervision from chief officers. Keep communications open (let line personnel know what is going on)."
Respondent # 4: "Equal pay for certification. Better rotation practice for med unit to the engine."
Respondent # 5: "Making move between transport and non-transport more even among everyone. Have dispatch more aware of changes and proper response."
Respondent # 7: "Communication. Open communication/discussion. Field all questions, suggestions, comments, and act appropriately. Far too much complaining without solutions being offered by all personnel. Solutions that are expressed often appear to fall on deaf ears."
Respondent # 8: "Training – equal for both. Time swap – fire to EMS and EMS to fire."
Respondent # 9: "Allow fire Lts. to swap available personnel when available. Pay for the patch not the truck."
Respondent # 10: "Personnel rotation on fire and EMS. Better training from training dept."
Respondent # 11: "Write and implement a consistent protocol that not only creates ALS engines but also interchanging of personnel."
Respondent # 12: "Better communication. Having fire line ride [on EMS]."
Respondent # 13: "More interaction between the two [EMS and fire]. 1. Cross-training between personnel and units. 2. EMS training on fire line."
Respondent # 14: "Rotating crews between the engines and med units more often. Continuing training for all personnel. Getting all personnel EMT and paramedic certified."

Respondent #15: “Monthly rotation from fire to EMS unit for all personnel! Parody in advancement.”

Respondent # 16: “Establish a regular rotation policy for company personnel between engine and ambulance assignments. Both encourage and expect engine crews to handle BLS level calls without on-scene assistance from ambulance crews.”

Respondent # 17: “Increase rotation of EMS personnel to fire line. Increase training of fire line to EMS.”

Respondent # 18: “The ability to swap back and forth from engine to med unit. Greater cross training between units so that everyone is able to adequately do either job.”

Respondent # 19: “More fire training for EMS personnel in suppression roles who have never been on suppression units. Better EMS training for suppression personnel moving to EMS improving their proficiency.”

Respondent # 20: “More opportunity for both firefighters and sergeants to swap back and forth on engine. More cross training.”

Respondent # 21: “Fire-side EMTs and medics – most seem rusty in their skills and some just don’t want to do it. Give some refresher courses. More hands on training.”

Respondent # 22: “Having the paramedic/lieutenants ride with the medic units. Having the EMS sergeants ride in the lieutenant positions if they are able to.”

Respondent # 23: Training new recruits to be EMTs prior to fire suppression rookie class. The pass/fail rate is higher for fire rookie class. If they can pass EMT school, they can pass fire rookie class. Cross training in the field: i.e., 8 shifts on fire/EMS 2 shifts fire/EMS [?].

Respondent # 24: “All personnel being EMT and paramedics. Firefighters need to take turns riding the ambulance and engines. That way they learn both jobs.”

Respondent # 25: “Training module in progress thru Quality Assurance team will help with remedial education for engine crews.”

Respondent # 26: “More EMS training.”

Respondent # 27: “Swap personnel between the engine and ambulance. Discontinue the pay difference and pay you for your certification [level].”

Respondent # 28: “Have some TAD [temporary assigned duty] positions come from EMS, to date no person has received that, with the exception of Medic Five, this time a TAD from EMS. Fire positions are always filled with fire personnel. Clarify the dispatch system. The new rules don’t allow corrections to be made. This practice is both harmful to crews and citizens.”

Respondent # 29: “Ramifications for not following through and operating efficiently on calls due to lack of knowledge and experience. More thorough rotation at station level between fire and EMS assignments.”

Respondent # 30: “More rotations of EMS and fire crews to refamiliarize older and in some instances initially familiarize paramedics and EMTs with EMS and transport operations. Continuing education and reaffirmation of EMS procedures and practices.”

Respondent # 31: “Rotate personnel on a more regular basis from engine to med truck. Make people as lieutenant/paramedics understand that the system we have is already overloaded. By our own personnel abusing the system i.e., calling for a med truck on every EMS call is not helping the system.”

Respondent # 32: “For all to understand that we are a public service. Not just fire suppression and/or EMS department. Be assigned to both from time to time.”

Respondent # 33: “Everybody be responsible for their actions and become diverse in learning all of the job duties. Everybody should be paid for their certifications.”

Respondent # 34: “Allow EMS sergeants to function in the role of fire suppression lieutenant as a TAD [temporary assigned duty]. Since most have completed OCS [officer candidate school] class with high marks and are able to take the next lieutenant’s test.”

Respondent # 36: “No recommendation.”

Respondent # 37: “Streamlining the EMD [emergency medical dispatch] responses still a work in progress. Provide more detailed EMD models to the line personnel.”

Respondent # 38: “As mentioned earlier, handouts on progress and changes and improvements as this new policy progresses. Add a section to evaluations where EMS sergeants can make a comment of his subordinates’ [EMS firefighters] progression.”

Respondent # 39: “More company training. Rotate more in station each shift.”

Respondent # 40: “All engine companies to be ACLS. Fire line needs to spend more time on EMS.”

Respondent # 41: “More cross over of EMS sergeants and fire line sergeants. Letting EMS personnel attend more fire classes at the academy (letting us off).”

Respondent # 42: “Give the EMS sergeants frequent opportunity to ride a piece of fire apparatus to evaluate their skill level, knowledge, and confidence on that piece of equipment.”

Respondent # 43: “Have fire suppression paramedics ride EMS units more often to improve medical skills i.e., I.V. starts, rhythm interpretations. Have EMS paramedics ride fire units more often to improve fire fighting skills”

Respondent # 44: “Fire suppression personnel need more training/experience with EMS.”

Respondent # 45: “Rotate firefighters with engine crew more.”

Respondent # 46: “Have EMS lieutenants’ [approved but unfilled assistant EMS shift supervisors’ billet] position open to oversee EMS shift. Possibility two lieutenants to ride in cars to handle irresponsible use of 911 calls and assist with shift captains.”

Respondent # 47: “Allow EMS captains to evaluate their subordinates. Mandatory ride time for certifications. Otherwords, paramedics, EMTs, firefighters switch apparatus regularly.”

Respondent # 48: “Rotation of personnel from EMS to fire. Training for fire personnel to work EMS and really have dispatching work to stop ALS units going to BLS calls.”

Respondent # 49: “Allow the EMS personnel to rotate constantly on the engines. Enforce the paramedics that ride on the ALS engines ride on EMS.”

Respondent # 50: “Motivational speaking to all personnel to show the need for EMS to all citizens. I believe that all current officers need to take the new OCS [officer candidate school].”

Respondent # 51: “More training. Rotation of personnel from EMS to fire.”

Respondent # 52: “Utilization of training levels, if they have the training swap their assignments as often as possible. Ability to gain training on the job such as riding on the other units to gain experience.”

Respondent # 53: “Improve EMS [emergency medical dispatch] so that ALS fire suppression units take some of the load off of med units. Have a rotational system that allows medics to spend more shifts in a month riding fire suppression units. Most shift officers right now do not feel comfortable allowing lieutenants to swap with EMS sergeants for relief or to allow complete rotation of all medics at any station. Also stop coddling rookie EMTs, put them on the ambulances more often.”

14. Two recommendations for improving the leadership practices of my supervising fire suppression company officer for EMS personnel are as follows:

Respondents’ comments and suggestions:

Respondent # 1: “More field supervisors to handle the load.

Respondent # 2: “Ride with paramedics and EMTs on units. Be more active in EMS with training.”

Respondent # 3: “Training. Training.”

Respondent # 4: “More hands on by the supervisor on the EMS calls to get a feel for what they actually do. Have Lts. attend class for certification levels at least at EMT-I.”

Respondent # 5: “More aware of differences in transport pt. Need to be same level of training.”

Respondent # 6: “Acknowledge that everyone is training at the minimum standards per \ CCFD and that EMS is capable to do the same job.”

Respondent # 7: “Don’t know. He’s on his way out the retirement door and often conducts himself accordingly. Not so much in a lazy way but more of being ‘set in his ways.’”

Respondent # 8: “Make them ride med units. Training in EMS.”

Respondent # 9: “Sgt.’s must be EMT. Lt’s must be paramedics.”

Respondent # 10: “Train the Lts. on EMS protocols.”

Respondent # 11: “Mandate Lts. and above minimum requirement as EMT-P. Minimum hours (20 shifts per year) on med truck.”

Respondent # 12: “Needs to ride with the person being evaluated. Being involved in EMS.”

Respondent # 13: “Needs to ride on EMS units. Needs same constant training and skills.”

Respondent # 14: “In order to lead, all officers need to be familiar with both fire and EMS. They need to be knowledgeable and competent in all areas of both fire and EMS. Officers need to start riding the med units more often.”

Respondent # 15: “Not my department.”

Respondent # 16: “Require fire lieutenants regardless of certification level to participate in EMS training, and providing on-scene patient care at the level of their training (i.e., no ‘supervising’ while tailboard personnel perform patient care and write PCR [patient care report]).”

Respondent # 17: “They should have the same level of training if they are evaluating my ability.”

Respondent # 18: “Should ride EMS some to keep familiar with day to day operations of EMS. More willingness and cooperation from his supervisor to be able to train EMS personnel better on the engine.”

Respondent # 21: “I’m sure you know which fireside lieutenants that are medics that have a negative attitude toward EMS related calls. Their negative attitudes reflect on us when we assume patient care. I’m sorry I can’t offer a suggestion to fix this. Make all sergeants and lieutenants at least EMTs.”

Respondent # 22: “Riding with EMS personnel. Letting EMS personnel swap with fire line personnel.”

Respondent # 23: “No recommendations at this time.”

Respondent # 24: “Have EMS personnel work on engines with company officer.”

Respondent # 26; “Lieutenants should ride EMS also.”

Respondent # 27: “Have them ride with us periodically so they can honestly evaluate us. Incorporate more in-house training for fire line personnel.”

Respondent # 28: “Assume command early and make calm rational decisions. Don’t assume that EMS crews are unwilling to perform fire suppression. Understand that EMS crews run more calls and don’t get as much sleep at night. If the crew runs a refusal call together and the med unit is dispatched to another call help out with the computer reports and refusals. We need to work as a team not as two groups.”

Respondent # 29: “Become involved. Learn about EMS operations, no matter if one is a paramedic or first responder. Be fair to everyone. Allow equal time to experience fire as well as EMS operations.”

Respondent # 30: “Becoming familiar with EMS practices. Fairness in rotation with emphasis given to lessening frustrations on ’burn out’ by giving crews time and training on suppression equipment.”

Respondent # 31: “Be fair to all personnel. Understand the system we have. It might not be perfect, but right now it’s all we have to work with.”

Respondent # 32: “Be assigned to both from time to time. Update classes.”

Respondent # 33: “Be open to training for EMS duties. Education towards EMS.”

Respondent # 34: “Try to learn and understand their job and function on the scene instead of them just seeing us go on sick calls. Allow them [EMS sergeant] to be part of evaluating their [EMS firefighters] partners.”

Respondent # 36: “No recommendation.”

Respondent # 38: “That he or she attend EMS meetings in order to keep up with current ongoing improvements and changes in EMS. Inquire to EMS what they are doing to continue to educate regularly.”

Respondent # 39: “Giving each firefighter a day at the lieutenant’s seat with lieutenant’s aid.”

Respondent # 40: “Able to understand increase in stress of EMS. Needs to be more knowledgeable of EMS potential.

Respondent # 41: “More working relations together on EMS. More EMS training for fire officers.”

Respondent # 42: “Have the company officer ride a med truck frequently to maintain his/her skills.”

Respondent # 43: “Help teach a small class on an EMS topic. Ride second or third more often on EMS unit.”

Respondent # 44: “My company officer had many years of EMS experience, therefore, he is well equipped to lead his EMS personnel.”

Respondent # 46: “Be able to evaluate EMS sergeants appropriately. Not to become overly anxious in treatment for patient that doesn’t need certain treatment.”

Respondent # 47: “Understand EMS. Take an interest, take your blinders off. Learn more about profession.”

Respondent # 48: “Mandatory EMS ride-time. Mandatory paramedic skills for all incoming lieutenants (must be a medic to become lieutenant. Of course, there would have to be a grandfather clause.)”

Respondent # 49: “Be consistent with all of his personnel. Ride the med truck more often.”

Respondent # 50: “Same recommendation listed above [#13].”

Respondent # 51: “Participating in EMS training. Occasionally ride EMS vehicle.”

Respondent # 52: “To be placed on the fire units in training with the fire lieutenants. To be utilized in the fire lieutenants’ job duties and responsibilities.”

Respondent # 53: “Make him a paramedic and have him/her respond on more med calls rather than hold out for the occasional fire.”

Appendix H
Leadership Practices Inventory Results

Challenging the Process

Respondents' Mean; and LPI Means and Leadership Ratings Based on Rank

Rank	Respondents' Mean	LPI Mean	LPI Leadership Rating
Sergeant	33	44.4	Low
Firefighter	35.5		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Tenure

Tenure	Respondents' Mean	LPI Mean	LPI Leadership Rating
0-5 years	31	44.4	Low
6-10 years	42.2		Medium
11-15 years	30.9		Low
16-20 years	38.1		Low
> 20 years	31.7		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Age

Age	Respondents' Mean	LPI Mean	LPI Leadership Rating
18-24 years	31	44.4	Low
25-34 years	26.2		Low
35-44 years	36.1		Low
45-54 years	38.4		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Education

Education	Respondents' Mean	LPI Mean	LPI Leadership Rating
High school/GED	33.9	44.4	Low
Some college	39.1		Low
Associates degree	25.7		Low
Bachelors/Graduate	25.8		Low

Inspiring a Shared Vision

Respondents' Mean; and LPI Means and Leadership Ratings Based on Rank

Rank	Respondents' Mean	LPI Mean	LPI Leadership Rating
Sergeant	31.9	42.0	Low
Firefighter	35.9		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Tenure

Tenure	Respondents' Mean	LPI Mean	LPI Leadership Rating
0-5 years	32.8	42.0	Low
6-10 years	40.1		Medium
11-15 years	29.9		Low
16-20 years	40.2		Medium
> 20 years	29		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Age

Age	Respondents' Mean	LPI Mean	LPI Leadership Rating
18-24 years	33.5	42.0	Low
25-34 years	31.8		Low
35-44 years	36.1		Low
45-54 years	36.1		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Education

Education	Respondents' Mean	LPI Mean	LPI Leadership Rating
High school/GED	34.4	42.0	Low
Some college	38.5		Medium
Associates degree	23.7		Low
Bachelors/Graduate	26.6		Low

Enabling Others to Act

Respondents' Mean; and LPI Means and Leadership Ratings Based on Rank

Rank	Respondents' Mean	LPI Mean	LPI Leadership Rating
Sergeant	42.4	47.8	Low
Firefighter	43.8		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Tenure

Tenure	Respondents' Mean	LPI Mean	LPI Leadership Rating
0-5 years	41.8	47.8	Low
6-10 years	45.6		Low
11-15 years	31.8		Low
16-20 years	46		Low
> 20 years	42.8		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Age

Age	Respondents' Mean	LPI Mean	LPI Leadership Rating
18-24 years	40	47.8	Low
25-34 years	41.8		Low
35-44 years	43.3		Low
45-54 years	46.9		Medium

Respondents' Mean; and LPI Means and Leadership Ratings Based on Education

Education	Respondents' Mean	LPI Mean	LPI Leadership Rating
High school/GED	42.6	47.8	Low
Some college	45.1		Low
Associates degree	41.7		Low
Bachelors/Graduate	39.5		Low

Modeling the Way

Respondents' Mean; and LPI Means and Leadership Ratings Based on Rank

Rank	Respondents' Mean	LPI Mean	LPI Leadership Rating
Sergeant	39.9	47.5	Low
Firefighter	42.6		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Tenure

Tenure	Respondents' Mean	LPI Mean	LPI Leadership Rating
0-5 years	39.1	47.5	Low
6-10 years	45		medium
11-15 years	40.1		Low
16-20 years	45.5		Medium
> 20 years	40.5		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Age

Age	Respondents' Mean	LPI Mean	LPI Leadership Rating
18-24 years	40	47.5	Low
25-34 years	38.4		Low
35-44 years	43.5		Low
45-54 years	43.9		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Education

Education	Respondents' Mean	LPI Mean	LPI Leadership Rating
High school/GED	41.2	47.5	Low
Some college	44.4		Low
Associates degree	39.7		Low
Bachelors/Graduate	33.5		Low

Encouraging the Heart

Respondents' Mean; and LPI Means and Leadership Ratings Based on Rank

Rank	Respondents' Mean	LPI Mean	LPI Leadership Rating
Sergeant	38.3	44.9	Low
Firefighter	39.7		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Tenure

Tenure	Respondents' Mean	LPI Mean	LPI Leadership Rating
0-5 years	35.5	44.9	Low
6-10 years	43.3		medium
11-15 years	30.9		Low
16-20 years	39.7		Low
> 20 years	38.1		Low

Respondents' Mean; and LPI Means and Leadership Ratings Based on Age

Age	Respondents' Mean	LPI Mean	LPI Leadership Rating
18-24 years	30	44.9	Low
25-34 years	38.2		Low
35-44 years	39.3		Low
45-54 years	43		Medium

Respondents' Mean; and LPI Means and Leadership Ratings Based on Education

Education	Respondents' Mean	LPI Mean	LPI Leadership Rating
High school/GED	36.6	44.9	Low
Some college	41.7		Low
Associates degree	38.2		Low
Bachelors/Graduate	38		Low