AN INTERNAL ENVIRONMENTAL SCANNING
PROGRAM FOR RICHLAND FIRE & EMERGENCY SERVICES

EXECUTIVE LEADERSHIP

BY: R. Grant Baynes
Richland Fire Department
Richland, Washington

An applied research project submitted to the National Fire Academy as part of the Executive Fire Officer Program

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Appendices Not Included. Please visit the Learning Resource Center on the Web at http://www.lrc.dhs.gov/ to learn how to obtain this report in its entirety through Interlibrary Loan.
CERTIFICATION STATEMENT

I hereby certify that this paper constitutes my own product, that where the language of others is set forth, quotation marks so indicate, and that appropriate credit is given where I have used the language, ideas, expressions, or writings of another.

Signed: ______________________________

ABSTRACT

Today’s fire service exists in a turbulent environment. Emerging trends, issues, and events impose significant threats and opportunities that an unprepared department can only react to. Conducting an organizational analysis enables fire service leaders to understand how the organization will adapt, what it will take to succeed in the future, and how it must change to be positioned for success. To do so effectively requires evaluation of capacities and resources, and understanding of the strengths and weaknesses that will influence its ability to adjust to change. The department can be positioned to maximize opportunities, minimize threats, and influence events.

The problem was that the Richland Fire and Emergency Services could not effectively strategically plan without an established process to evaluate the department’s strengths and weaknesses. The purpose of this research was to assess methods and programs for internal environmental scanning in order to systematically analyze the department. This study utilized an action method of research. The research questions were:

1. What is internal environmental scanning?
2. What quantitative and qualitative information needs to be assessed?
3. What are the benefits of an internal environmental scanning program to a fire department?
4. How do fire departments gather strategic intelligence from their members?
5. How can employee surveys be used effectively in an internal environmental scanning program?
The procedures involved an extensive literature review. Surveys were conducted to determine how the fire service gathers strategic intelligence and to test the use of a survey instrument. An Internal Environmental Scanning Program (IESP) was developed. The results showed that a fire department could expect to effectively use an IESP.

The implementation of the full IESP is recommended for the Richland Fire Department. Further it is recommended that the NFA include IESP design in its Change Management courses. As other departments implement, evaluate, and refine their programs an industry database of successful methods to strategically prepare for emerging trends, issues and events could be shared.
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INTRODUCTION

“So it is said that if you know others and yourself, you will not be imperiled in a hundred battles; if you do not know others, but do know yourself, you win one and lose one; if you do not know others and do not know yourself, you will be imperiled in every single battle.”

Sun Tzu: The Art of War

Acquisition of knowledge of the strategic environment is critical in order to formulate plans, policies, and strategies for an organization. An organization’s environment consists of the conditions, circumstances and influences which affect the organization’s ability to determine its strategic direction and develop strategic objectives (Garner and Calderon, 2004 p 5). A successful organization must be able to scan, analyze, and interact with its environment. To respond effectively in an ever changing, turbulent operating environment public sector organizations must understand their external and internal contexts so that they can link the two (Bryson, 1995. p 82). Strategy development is necessarily anticipatory requiring a future-oriented approach (Baynes, 2002. p 1). Each organization’s experience with strategic development reflects its distinct culture, environment, resources, structure, and management style. The rate and extent of change encountered by an organization is unique even when considering organizations in the same community or in the same industry (Baynes, 2002. p.1). The environment outside the organization should be explored to identify political, social, economic, and technological threats and opportunities to the future of the organization (Bryson, 1995. p.28). In broad terms, analysis of the internal environmental scan identifies the strengths and weaknesses within the organization. More specifically, it is an examination of an organization’s resources, present strategy, and performance (Bryson, 1995. p.29). Planning is an iterative activity, not static. Heifetz and Linsky (2002 p. 51-52) utilize the metaphor of a view of
a dance floor from a balcony to stress the value and importance of taking a “sky-cam” perspective of an organization to gain both a clearer view of reality and some perspective of the bigger picture. Environmental scanning is the formal programmatic approach to establish the habit of making the climb from the dance floor to the balcony and back. Each time returning with a new perspective of the strengths, weaknesses, opportunities, and threats the organization faces in order to be strategically positioned for the future. Strategic positioning places an organization in a mode to be responsive and adaptable to change while executing its mission and vision (Stiffler, personal communication, June 12, 2002).

Organizational analysis, or internal scanning, examines the organization’s core skills, competencies, and values. The degree the organization’s present structure and culture is compatible with present or potential strategies may be considered either strengths or weaknesses. Today’s fire service managers operate within a rapidly changing external environment. Decision-makers have less time than ever to analyze and respond to environmental changes. Traditionally strategic planning processes relied on historical data extrapolated to predict trends, issues, and events. The underlying assumption of such models is that any future change is in the direction, and at the rate, of present changes among a limited number of social, technological, economic, and political variables (Morrison, 1992). Today leaders need to understand the ever-changing external forces that impact their organization’s strategic planning and decision-making. Internal environmental scanning develops knowledge of the organization’s structural and cultural predisposition to handle strategic change. External environmental scanning serves as an early warning system by alerting decision-makers of potentially significant external developments while in their early stages. Internal environmental scanning is a means to determine the
organization’s structure and culture that may help or hinder the accomplishment of existing or new strategic goals and objectives (Bryson, 1995. p. 90).

The problem is that the Richland Fire and Emergency Services cannot effectively strategically plan without an established process to evaluate the department’s strengths and weaknesses. The purpose of this research is to assess methods and programs for internal environmental scanning in order to systematically analyze the department. This study utilizes an action method of research. The research questions are:

1. What is internal environmental scanning?
2. What quantitative and qualitative information needs to be assessed?
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4. How do fire departments gather strategic intelligence from their members?
5. How can employee surveys be used effectively in an internal environmental scanning program?

BACKGROUND AND SIGNIFICANCE

The City of Richland, Washington is located in the Columbia Basin. Richland shares boundaries with three other cities, Kennewick, Pasco, and West Richland. Richland also shares a common boundary with the Hanford Nuclear Reservation. Creation of the Hanford Nuclear Reservation displaced a number of farms along the Columbia River. Richland’s population swelled dramatically as thousands of workers were brought in to design and construct reactors producing plutonium during the Cold War years. Today the Hanford Nuclear Reservation is a massive federally funded clean up operation administered by the Department of Energy. The
economic health of the neighboring communities, particularly Richland, has traditionally been directly related to the status of projects on the reservation. Hanford has been a major influence on Richland over the years. The government town was protected by a private fire department run by General Electric. The Richland Fire Department was created in 1958 after Richland became a Charter city. Many of the firefighters transferred into the city department instead of staying with the department that protects the reservation (Frank Hall, personal communication 2004). Many aspects of the “federal” culture were carried into the fledgling department. Job demarcation and tight contractual work rules dominated worker’s attitudes and actions. The local economy has tended to follow a boom and bust cycle dependent on the activities at Hanford and is often out of sync with communities in the rest of the state. Richland Fire and Emergency Services has tended to adhere to some core programs, relying on controlling personnel costs in lean economic times and allowing recovery of wages during boom times. The almost $7,000,000 budgeted for 55 uniform staff and 2.75 civilian support staff (2005) represents 89 percent of the Department’s annual operating budget. The department became more accustomed to and adept at fighting for resources rather than ensuring maximum performance and efficiency in services to the community. Defensive patterns of behavior to protect contractual wages, benefits, and working conditions have become entrenched. Reactive behavior patterns in fire departments have historically had far less destructive consequences than they do for organizations in the private sector. Application of performance measures and benchmarks were seldom part of citizen’s expectations. The need for a fire department was considered self-evident and the department’s mere existence was enough to ensure the communities’ comfort level. Contemporary fire departments must be more attuned to the threats and opportunities in their community. In the past, failure to do so typically did not have the overt consequences seen when a private company
experiences a dramatic loss of market share through failure to heed trends in the market. General Motors lost 30% of its market share in the 60s during the energy crisis and the upsurge in popularity of Japanese made cars (Ashley and Morrison, 1996). While market share is rarely an issue for a fire department, it must compete with other departments in the city for budget share. Budget decisions and funding priorities established by elected public officials directly affects the department’s ability to meet strategic objectives. It is critical that Richland Fire and Emergency Services identify it’s strengths and weaknesses that may help or hinder the organization to accomplish its mission and fulfill mandates (Bryson, 1995. p.90).

The department has committed to making the transition to planned strategic positioning. The core values: Teamwork, Excellence and Integrity must be reflected in the behaviors exhibited by members. We expect to retool the work environment to foster initiative, leadership/followership, decision-making, accountability and execution. This requires a shift from a rules-based to a values-based organization. It is critical that there is a mechanism in place to evaluate the effectiveness and extent of the cultural shift.

This applied research paper is prepared to meet the National Fire Academy (NFA) Executive Fire Officer Program (EFOP) Executive Leadership Course Goal. “The Executive Fire Officer (EFO) will develop the ability to conceptualize and employ the key processes and interpersonal skills used by effective executive-level managers” (Executive Leadership – Student Manual, 2000. p.SM 1-3). In Unit Four, Managing Multiple Roles, Mintzberg discusses the ten roles of a manager. The Informational Role includes the task of monitoring and is applicable to this project (Executive Leadership – Student Manual, 2000. p.SM 4-3). The terminal objective of Unit 6, Succession/Replacement Planning, states that given experiences and models from
industry, the students will be able to develop an appreciation for workforce planning, development, and succession planning.

The significance of this research paper for the United States Fire Administration (USFA) is twofold. The applicability and efficacy of internal environmental scanning as a strategic positioning tool for fire departments will be evaluated. Secondly, a model program for internal environmental scanning in fire departments will improve their ability to strategically understand their organization. This will enhance fire departments’ delivery of life protecting services in their community. (Operational Objectives, USFA, 2004). Strategic intelligence gathered through the scanning process will enable fire departments to recognize organizational weaknesses and capitalize on strengths thereby contributing to the comprehensive risk reduction plan in the community.

LITERATURE REVIEW

The social, technological, economic, and political environment of public organizations has become increasingly uncertain in recent years (Hellriegel and Slocum, 1992. p.84). Bryson (1995. p.1) identifies three responses public organizations in a turbulent environment must make. First, public organizations must think more strategically. Secondly they must gain insights and translate them into effective strategies to cope with their changing world. Thirdly, they must establish a rational basis for adopting and implementing their strategies. In the mid 1960s private organizations were drawn out of their inward focus by the need to compete with others who had proven more competitive for market share by establishing a more global view of their environment (Cope, 1981). For most, traditional planning was done at regular intervals, usually on a five-year cycle. Each new edition of the business plan was based upon forecasted incremental change, usually by extrapolating out current trends (Bachtler and Brennan, 1995).
The move away from the reliance on historical data was studied by Aguilar (1967). He paid particular attention to how managers gathered information. He is credited with coining the term environmental scanning. He used it to describe the systematic collection of external information in order to (1) lessen the randomness of information flowing into the organization and (2) provide early warnings for managers of changing external conditions. Burton Clark (1987) sought to define environmental scanning. He reviewed six sources that contained statements that could be construed as definitions of environmental scanning (Clark, 1987. Table 1). He concluded that environmental scanning is a dynamic process that involves the identification, collection, assessment and monitoring of information. External factors are weighed to determine their potential to impact the organizations ability to meet its mission, goals and objectives. Future threats and opportunities are evaluated in order to develop appropriate responses as quickly as possible. Environmental scanning is the acquisition and use of information about events, trends and relationships in an organizations external environment, the knowledge of which would assist management in planning the organizations future course of action (Choo and Auster, 1993). Boucher (1988) believed that public sector organizations were some 15 years behind the private sector in the use of environmental scanning. Tertiary schools were amongst the first public sector organizations to develop environmental scanning programs (Baynes, 2002). Through a review of contemporary writings on the subject he found that the trend has spread to school districts, libraries, environmental groups, and incorporated cities. Bryson Strategic Planning for Public and Nonprofit Organizations (1995) identifies a ten step strategic planning process as follows:

1. Initiate and agree upon a strategic planning process.
2. Identify organizational mandates.
3. Clarify organizational mission and values.
4. Assess the organization’s external and internal environments to identify strengths, weaknesses, opportunities and threats.

5. Identify the strategic issues facing the organization.

6. Formulate strategies to manage these issues.

7. Review and adopt the strategic plan or plans.

8. Establish an effective organizational vision.

9. Develop an effective implementation process.

In effect, there are two elements to the environment of an organization – the external and the internal (Garner and Calderon, 2004. p.5). Bryson’s (1995) fourth step requires an assessment of the external environment to identify trends and events that may pose either a threat or an opportunity to the organization. External conditions tend to focus on the future, while internal conditions are about the present. Step 4 also requires the organization to make an introspective assessment. The relationship between an organization and its external environment depends on the internal strengths and weaknesses of the company. Hellriegel and Slocum (1992) believe that an internal assessment of strengths and weaknesses will identify the core competencies of the organization. The internal condition of the organization will determine how it is positioned to handle a specific trend, issue, or event (Abels, 2002). Internal environmental scanning considers the organization’s present structure and culture to determine whether an existing condition is a strength or weakness in relation to current and potential strategies. The internal scan should identify the company’s competitive position, human resource skills, technological capabilities, financial resources, management depth, and the values and backgrounds of its employees (Hellriegel and Slocum, 1992. p. 262). Together, the external and internal environmental scanning processes comprise the strategic intelligence gathering system.
of the organization (Ashley and Morrison, 1996). Effective strategy should link the inside and the outside to take advantage of strengths and opportunities at the same time eliminating or minimizing threats and weaknesses (Bryson, 1995).

The United States Fire Administration (USFA) has recognized the relationship between internal conditions of a fire department and its ability to manage a changing environment. The curriculum for the USFA course Managing in a Changing Environment was designed to provide executive fire officers with the knowledge, skills, and abilities required for change management (USFA, National Fire Academy, 1995). The third enabling objective in Module Two of Executive Skills Series: Managing and Leading Change reads; recognize internal forces and their relationship to change management (quality of services, morale and attrition, existing culture, history of change effectiveness) (USFA, National Fire Academy, 1997). An organizational analysis enables leaders to understand why the organization has succeeded in the past, what it will take to succeed in the future, and how it must change to be positioned for success in the future (Morrison and Wilson, 1996). They believe to do so effectively will require the organization to evaluate its capacities, resources, review future needs, and develop a list of the strengths and weaknesses that will influence its ability to adjust to change. Bryson (1995) describes the need to monitor its resources (inputs), its present strategy (process), and performance (outputs) (Bryson, 1995. p.29). He believes that most organizations have a wealth of quantifiable information such as salaries, physical plant, personnel, and other expenditures.

Many lack qualitative information about the culture of the organization and key performance data. Buckingham and Coffman (1999. p.32) of the Gallup Organization set out to devise a way to measure strong workplaces. Through analysis of data from 2,500 companies and opinion data from 105,000 employees they were able to demonstrate the link between employee
opinion and business performance. Employees in productive, profitable, work units with good retention and customer service responded more positively to Gallup’s twelve survey questions. However, even those with extensive data on the organization’s outputs can say little about the effects those outputs (outcomes) have on their customers. The principle reason for seeking to measure outcomes is to derive measures of allocative (sic) efficiency rather than technical efficiency (Smith, 1996. p.52). In recent years the fire service has placed far greater focus on output performance indicators that can be tied to quality of life outcomes for the community they serve (National Fire Protection Association, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments, (2001), NFPA 1710, Appendix A).

Like many public sector organizations, fire departments’ culture developed in a reliable, predictable direction, in an environment characterized by incremental change and improvement (Lynn, 2001). Bryson (1995 p.102) notes that an organizations culture can place severe limitations on its members ability to perform an effective analysis of its strengths and weaknesses. Schein (1992) defines organizational culture as the shared basic assumptions an organization has learned as it solved its problems of external adaptation and internal integration, which has worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to these problems. Established cultural norms, values, and behaviors are brought to bear on the opportunities and threats members of the organization encounter. Lynn (2001) noted the need to understand the role of organizational culture in relation to ineffective habits in succession planning by public sector organizations. Ingrained cultural elements such as absence of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results are impediments to a
functional organization (Lencioni, 2002). Historically, military and paramilitary organizations have fostered and encouraged the development of a strong organizational culture. Cannon and Cannon (2003) describe the importance of stories, rituals, and traditions between missions for members of the Navy SEALs to maintain a positive outlook and work ethic to do the mundane and routine. Fire department personnel often experience similar periods of calm and then life-threatening action. Abrashoff (2002) conducted a series of exit surveys of crew members leaving his ship USS Benfold, a guided missile destroyer, in an effort to understand what they felt was lacking from the service. The top reason was not being treated with respect and dignity. The second was, being prevented from making an impact on the organization. People desire to feel worthwhile and to make a contribution (Maxwell, 1993. p.116 and 121). The Lincoln Futures Program in New Zealand was premised on the assumption that the active involvement of the majority of stakeholders in the analysis and planning process would transform the organizational culture (Morrison, Sargison and Francis, 1997). While not everyone in an organization has the authority to make decisions, most have the talent and experience to generate ideas and perform analysis. Van Vuuren (2001) found no strong relationship between the hierarchical position in an organization and scanning activities. Internal environmental scanning provides an opportunity for people, who truly wish to show initiative, to be part of an organization in a proactive way (McGinty & Simpson, 1996). Environmental scanning is more of a learning process than a research process (American Society of Association Executives, 2002). Involvement of personnel throughout the organization has the added benefit of providing regular, structured face-to-face discussions on planning issues. Scanning increases communication among all staff and provides greater employee involvement in the decision making process at the Georgia Center for Continuing Education (McGinty & Simpson, 1996). Choo (2001) identifies four components of
environmental scanning: undirected viewing, directed viewing, enacting and searching. When an organization believes it can analyze and actively intrude into the environment to influence events and outcomes it scans by searching to collect an accurate set of facts about its environment. Searching is broader in scope and derives quantitative data to produce strategic intelligence such as forecasts, modeling, and trend analysis. The searching method of environmental scanning fosters proactive intervention by an organization in order to influence developments to their advantage when the environment is in a great state of flux. Both the level of analyzability and the level of intrusiveness can be raised. Searching brings staff closer to the important actors in their environment and creates channels to interact and communicate better internally and externally (Choo, 2001).

Heifetz and Linsky (2002) discuss the leader’s challenge to move people from repetition of their daily habits, tools, loyalties, and ways of thinking in order to affect change. The fire service has embraced technical changes but has proven less adept at adaptive change. That is, changing values, attitudes, and behaviors (Heifetz and Linsky, 2002. p.13). This compares to Bryson’s (1995) qualitative information. “Adaptive change requires people to question and redefine aspects of their identity, it also challenges their sense of identity” (Heifetz and Linsky, 2002. p.30). The challenge is to identify ways to gather qualitative data about an organization’s values, attitudes, and behaviors – its culture (Bachtler and Brennan, 1995. p.235). The organizational culture is very important during strategic planning. The culture affects how strategic issues are identified, analyzed, and prioritized (Bryson, 1995 p. 131) It is critical that fire service leaders find ways to measure cultural alignment, address critical issues, make strategic decisions, set organizational goals, and track progress (Riboldi and Maylett, 2004; Smeby, 2005. p.45).
Very little fire service-oriented academic literature is available to assist executive fire officers determine appropriate internal scanning methodologies, though they are urged to solicit opinions and aggressively collect information and ideas (Smeby, 2005. p.46). A number of formal methods exist, most of which are unstructured such as staff meetings and workplace encounters. The survey is a structured, formal method that has proven useful in many organizations. Mastzel (1998) states that employee surveys are a strategic management tool that provide managers with structured ways to get employee’s input.

Messana (2002) utilized a survey of renal care providers to determine the pervasive industry culture. Results were compared to findings from exit interviews for validation. Like Abrashoff (2002) Messana (2002) was concerned about the high attrition rate of his staff. Also like Abrashoff (2002) he found a sense of belonging and ability to impact the organization rated far higher than money and job security. It is important to attempt to gain insight into an organization’s culture from others besides those who are in the process of leaving. Morrel-Samuels (2002) describes the value of surveys to get to the truth in the workplace when they are carefully designed, administered, and analyzed. Surveys can be designed to assess organizational effectiveness, organizational culture, employee commitment, or topic-specific. Fralicx (2003) noted that the science of the employee survey has changed dramatically over the past decade. They have moved away from the traditional “me” issues of employee satisfaction with pay, benefits, security, and working conditions. Today, they measure employee and management perceptions of “we” issues such as; business strategy, operating efficiency, innovation, leadership, cross-group collaboration, career development, and employee commitment. He found that they allow the organization to link reliable information to organizational goals and objectives, such as employee retention, customer satisfaction, and performance.
A written survey instrument was utilized by Ostrom, Wilhelmsen, and Kaplan, (1993) to examine the safety culture at EG&G Idaho Inc. a Department of Energy contractor at the Idaho National Engineering Laboratory. The results were subjected to considerable analysis to validate findings. The survey instrument was found to be an effective tool to identify issues and open communications between management and staff, facilitating some technical changes and a number of adaptive/cultural changes.

In summary, the literature review is a significant component of this research project. It provides the definition of internal environmental scanning, the quantitative and qualitative information required in the scanning process, the strategic planning benefits that can be derived, and some insight into the use of staff surveys to gather strategic intelligence and affect the culture of an organization. Though the process of environmental scanning has been around for over 35 years it has only more recently become recognized as valuable to public sector organizations, including the fire service. It is evident that organizational analysis is more than a collection of quantitative data reports about resources and performance. The ability to truly develop and execute a strategic plan requires thorough examination of the existing organizational culture and a strategy to make that culture more amenable to change, particularly to accept and work through adaptive changes.

**PROCEDURES**

Dr. Burton A. Clark introduced me to the concept of environmental scanning during an interview at the National Fire Academy (NFA) in Emmitsburg, MD in 2002. Dr. Clark’s paper was part of a literature review undertaken to prepare my 2002 research paper on external environmental scanning (Baynes, 2002). The review process for this paper began at the NFA Learning Resource Center in March 2005 with a search of books, journals, and past Executive
Fire Officer Program students applied research projects. The review was completed through, personal and department reference material, electronic searches, and use of the library resources in the City of Richland, Washington.

The literature was evaluated to define internal environmental scanning and to determine what quantitative and qualitative information should be scanned. It was also reviewed to evaluate whether an internal environmental scanning program would be beneficial to a fire service organization and would be applicable to Richland Fire and Emergency Services. Authors who discussed the conceptual and technical elements of internal environmental scanning were reviewed in order to determine the methodology to be employed in the internal scanning portion of the Environmental Scanning Program. Internal environmental scanning programs have been widely incorporated in the strategic planning process in recent decades. Public sector and non-profit organizations have begun to embrace the importance of a scanning process that utilizes both the external and internal scan. Through the review of the literature it is not clear that fire service organizations have fully recognized the need to have the necessary strategic intelligence for planning. A survey of chief officers from throughout the country was conducted in order to get a sense of what formal processes fire service leaders use to gather internal strategic intelligence (See Appendix B). Richland Fire and Emergency Services Department chief officers have recognized the need for a more proactive, dynamic strategic planning process. The Richland Fire and Emergency Services Department are following the ten steps described by John M. Bryson in *Strategic Planning for Public and Nonprofit Organizations* (1995) for strategic planning.
Situational Analysis

In 2002 the City of Richland management set out to break the old Government-town rules based style of doing city business. The shift was toward a values-based model of government and service. After completing Bryson’s (1995) first two steps, city employees and leaders went through a facilitated process to identify three core values. They are Teamwork, Integrity, and Excellence. Richland Fire and Emergency Services produced its first customer-centered strategic plan in early 2004. In the process the department’s old mission statement was rewritten and is now “To protect and enhance the quality of life”.

Every two years the City conducts a City-employee survey. In 2003, 465 employees of the City of Richland responded to the survey. 44 members of the fire department took part in the survey. The survey sought responses to questions about: City efficiency, City values, customer orientation, communication, job satisfaction, personal growth opportunities, issues with co-workers and supervisors, pay and benefits, work environment, and management practices. They are also asked to evaluate the survey instrument itself. Finally they are asked two open ended questions: “what are the two or three most important actions that could be taken to improve the way the City operates?” and “other than salary, what is the single greatest need, concern, or problem in your department/division?” (City of Richland survey 2003. Available from the author at gbaynes@ci.richland.wa.us) 279 (60%) of the respondents said that they agreed or strongly agreed that they had seen changes at the city as a result of the 2001 survey. This was born out by significantly improved ratings in communications, pay and benefits, and internal customer service in the 2003 survey. The 2005 employee survey has been completed but the data has not been analyzed at the time of writing. Findings will be added as Appendix D if they are available before the time of submittal. Technical and staff issues have delayed results. In preparation for
this applied research paper I asked to have fifteen questions added to the 2005 survey that measure an element of culture or human capital – commitment. The questions were adapted from an internal environmental scanning survey developed by Phil Stiffler of AspireOn (2002) (Stiffler, personal communication, May 15, 2002). They were reviewed and approved by City senior management on June 13, 2005. They are:

1. I try to identify better ways to serve our citizens/customers.
2. I look for ways to improve my performance.
3. I am adaptable to change.
4. I hold myself accountable for my work performance.
5. I work with others to accomplish our work objectives.
6. I communicate effectively with others.
7. I manage my time honestly and effectively.
8. I take great care of the resources and equipment provided for my work.
9. I strive to be productive and efficient.
10. I ensure my effort contributes to the vision and mission of my department/division.
11. I feel a sense of belonging in my department.
12. I am proud to work for the City of Richland.
13. I take responsibility for being informed about city issues.
15. Others display confidence in my honesty and integrity.

In addition, three existing questions that measure the safety culture elements; safety effectiveness, training, and honesty will be reviewed and then compared to the department’s internal safety culture survey (Richland 2005 Employee Survey Question 29 g, h, and i. Survey
Finally three questions that seek opinion on; the value of the survey, confidence that the survey will affect change, and whether the respondent has noticed changes since the 2003 survey, will be reviewed (Richland 2005 Employee Survey Question 40a and b, and 41).

Environmental Scanning Program

A continuous environmental scanning system to create strategic intelligence requires effort and resources (Morrison, Simpson, & McGinty, 1986). Most large organizations have the financial resources to employ dedicated staff to their environmental scanning program. Small organizations must, most often, rely on existing staff to establish a scanning team (Baynes, 2002). Richland Fire and Emergency Services will have to heavily rely on our 57.75 staff members. The department is organized into five divisions: administration, medical, suppression, prevention, and training. A manager leads each division with specific functional area supervisory responsibilities in addition to their regular duties. The primary benefit of this organizational structure is the creation of an interdivisional matrix that broadens the perspective of members and shares the workload. This structure forms the basis of the external scanning focus (Baynes, 2002). The environmental scanning program is designed to have the Chief, with a predominantly external view, lead the external scanning portion while the Deputy Chief, with a greater inward focus, leads the internal part of the program.

This is the point Richland Fire and Emergency Services has reached in the establishment of an environmental scanning program. Progress on the external portion of the program has been limited since the change in administration in the department in 2003. The critical need for both the external and internal parts of the ESP is evident today as five local fire departments have begun to explore opportunities for more cooperative effort, including possible consolidation. The
development of a strategic plan to promote this effort will rely on highly refined strategic intelligence from the external and internal environment to be successful. The external scanning procedures will be consistent with the searching method of scanning described by Choo (2001) and as described by Baynes (2002). Internal scanning will be designed to carefully gather accurate, reliable quantitative data, including performance metrics (Bryson, 1995). This will be done, primarily, with reports generated from data in the Department’s records management system and the City’s records management system, Government E-Management Solutions (GEMS). The Fire and Emergency Services systems will be reviewed including:

- the Customer-Centered Strategic Plan,
- medical, fire, and special operations services,
- regional programs, initiatives, and activities,
- budget and financial planning,
- division programs, initiatives, and activities,
- system efficiencies,
- grant fund activity, and
- performance summaries and statistics.

The qualitative elements of organizational philosophy, core values, competencies, and culture (Bryson, 1995; Riboldi and Maylett, 2004; Smeby, 2005) will be assessed through formal processes such as; officer meetings, shift meetings, labor/management meetings, and surveys (Fralicx, 2003; Mastzel, 1998). Development of the survey instruments will be carried out by the Fire Chief, due to the vacancy in the Deputy Chief position, rather than delegated down (Fralicx, 2003). Design of the surveys will follow Morrel-Samuels’ (2002) five guidelines for content, format, language, measurement, and administration. Follow through and feedback will be
consistent with the ground rules established by Messana (2002). In addition to the survey of national and state chief officers on their formal and informal processes of gathering internal strategic intelligence (Appendix B) and the City-wide survey, an initial internal survey was used to assess the safety culture of the department (Appendix C). This survey was comprised of 20 questions derived from the Ostrom, Wilhemsen, and Kaplan (1993) safety survey in Idaho. The Department personnel were divided into two groups, each receiving a set of 10 questions. These surveys, along with the national survey utilized the electronic survey instrument provided on the surveymonkey.com website. A link to the survey was sent out via e-mail. All responses remain anonymous (Morrel-Samuels, 2002 p.118). The survey of fire department chief officers from around the nation was sent out using my established e-mail groups. Recipients were requested to send the link on to other chief officers to expand the number of potential responses. Only the first seventy two responses are collected due to time constraints (21 days). The first fifty five responses were received in the first week and then responses slowed dramatically.

Department members will establish a formal and frequent cycle of scanning in order to identify emerging trends and issues that may affect the department’s ability to fulfill its vision, mission, strategic goals and objectives. Does the trend or issue present a threat or opportunity? What is the probability that it will affect the department? Can the department influence the issue? Should the department try to influence the issue (Ashley and Morrison, 1996)? Is the department internally positioned to handle the threat or opportunity? Follow up analysis of the answers to these questions may be carried out by an individual, a standing Work Group, or an ad hoc group put together to evaluate a specific critical issue. A series of “what if” scenarios will be developed along the lines of the Developing Incident Situation Analysis (DISA) that the fire service uses for a major incident (Baynes, 2002) that links the external and internal environmental
assessments (Bryson, 1995). A brief is to be written on the trend or issue and this is to be posted to the electronic database housed on a department drive on the City network. The Battalion Chief supervising communications will manage the clearinghouse for the environmental scanning program database. Form e-mail notices will be sent to members to draw their attention to a scan brief that may be relevant to their functional area. The brief will form the basis of a task plan that is formulated into a specific institutional objective. The task plans and objectives will be incorporated into the annual rewrite of the Customer-Centered Strategic Plan (Current plan available electronically from tjohnson@ci.richland.wa.us) and the department annual report.

Limitations

Three limitations affected this research project. The time needed to complete this research, develop, implement, and evaluate the full internal scanning program of this project far exceeds the time allowed in the National Fire Academy Executive Fire Officer Program. Some of the procedures described are necessarily in the future tense. The Richland Fire and Emergency Services Department is still in the process of completing some prerequisite steps of the internal scanning program at the end of the allowed timeframe for the project.

With the potential to join neighboring fire agencies in a more cooperative, perhaps consolidated, effort the department has continued to operate without a deputy chief to limit the number of chief officers in the mix. The focus on this cooperative effort, the vacancy in the Deputy Chief position who should lead the internal scanning process, and some severe budget issues has limited the time available to bring the program on line.

The electronic survey tool used only allowed for 10 questions and 100 responses per survey. This limited the depth of questioning possible in the national survey. A full subscription
service will be funded in the 2007 budget that will enable the development of up to one hundred questions per survey.

**RESULTS**

1. **What is internal environmental scanning?**

   The concept of environmental scanning has been utilized for over three decades in the private sector and is now being used more and more by public and non-profit organizations of varying sizes from United Way of America, to school districts, to single colleges. Environmental scanning is a system designed to be an anticipatory tool in order to turn emerging trends into opportunities (Ashley and Morrison, 1996). The extensive literature review provides a definition of the process of internal environmental scanning, its outputs and potential outcomes. Environmental scanning is the acquisition and analysis of information about trends, events, issues, and relationships in an organizations environment (Choo, 2001). Bryson’s (1995) 10 step strategic planning process identifies the need for an organization to assess the external and internal environment to identify strengths, weaknesses, threats, and opportunities.

   Internal environmental scanning is an organizational analysis to identify core competencies (Hellreigel and Slocum, 1992). The organization’s internal condition will determine if it is positioned to deal with developing trends, issues, and events (Abels, 2002). An organizational analysis enables leaders to understand past successes and failures, what it will take to succeed in the future, and how to position the organization to be successful (Morrison and Wilson, 1996). Bryson (1995) describes the need for an organization to monitor its resources, strategy, and performance. This will consist of both quantitative and qualitative information.

   Wayne Gretsky once said “I skate to where I think the puck will be.” This is a great example of strategic positioning. Gretsky utilizes his strategic intelligence to determine where the puck
will be. He plays with a game plan (strategy) but he weighs a mass of other inputs as he moves across the ice. He evaluates his strengths and weaknesses along with those of his team, what he knows about the opposition players, the way the play is developing, and what he believes might happen next. His team, or organizational, analysis involves quantifiable information such as speed, strength, condition, team statistics, and time into the game. He must also consider qualities such as commitment, desire, mood, and spirit.

The fire department must also learn to skate to where the “puck” will be. Our environment is in constant change and trends, events, and issues are having a profound effect on the service we are able to deliver. A department that is able to analyze its environment, externally and internally, and is prepared to intrude into that environment to influence outcomes is better positioned to fulfill its vision and execute its goals.

2. **What quantitative and qualitative information needs to be assessed?**

Most modern fire agencies are able to derive considerable amounts of quantitative data from city/county databases and their own internal records management systems. Bryson (1995) believes most modern organizations have a wealth of quantifiable information such as salaries, equipment, personnel, and other expenses. Greater attention has been paid to performance standards since NFPA 1710. The standard is premised on fire agencies meeting key quantifiable performance measures in order to attain better outcomes for people, property, and the environment, such as post heart attack recovery and recovery of business operations.

Buckingham and Coffman (1999) established a relational link between high-performing employees and positive employee opinions. Opinions that are reflective of their values, attitudes, and behaviors (Heifetz and Linsky, 2002). These qualities define the predominant organizational culture. Organizational culture can place severe limitations on its members to perform an
effective analysis of its strengths and weaknesses (Bryson, 1995). Most formal methods of seeking strategic input from members place them in a face-to-face setting that may further limit candor. Employees are less resistive to making technical changes (Heifetz and Linsky, 2002) or facing the challenges of technical efficiencies (Smith, 1996) than they are of adaptive changes. Adaptive changes tend to take employees out of their zone of tolerance creating a sense of disequilibrium. The organizational culture has a profound effect on the size and level of the zone of tolerance to change. It is critical for leaders to learn the organization’s culture by using scanning methods that will derive “true” responses from employees (Buckingham and Coffman, 1999; Morrel-Samuels, 2002).

3. **What are the benefits of an internal environmental scanning program to a fire department?**

   The principal benefits of the program are described in the literature review and from commentary by those who have implemented an environmental scanning program. It is a mechanism to gather strategic intelligence to move from reactionary planning to anticipatory planning. Strategic plans and tasks can be aligned with real conditions and are likely to produce more positive outcomes. Traditional fire department business plans were cyclical and based largely on steady, incremental change extrapolated from current conditions (Bachtler and Brennan, 1995). In the 1990s the United States Fire Administration (USFA) recognized the new, more turbulent environment of fire agencies. Curriculum was developed to help executive officers deal with the internal conditions in relation to managing change (USFA, 1995 and 1997). Organizational analysis enables executive officers and staff to understand how the internal condition of the organization impacts its ability to position for future success (Morrison and Wilson, 1996).
A number of studies have shown that most employees have a desire to feel worthwhile and to make a contribution to the success of their organization (Maxwell, 1993). A comparison can be drawn between the armed forces and the fire service where members experience periods of relative calm and routine between periods of high risk and fast action (Abrashoff, 2002; Cannon and Cannon, 2003). Military and paramilitary organizations have very well developed organizational cultures. While these may impede adaptive change it is important to note that like civilian organizations members also expressed the importance of making an impact on their organization. An environmental scanning program provides an opportunity for people in the organization to show initiative and be directly involved in the future of the organization (McGinty & Simpson, 1996). They also believe that it improves communication within the organization, member’s critical thinking, and the powers of influence. Richland Fire and Emergency Services Department members identified communication of reasons for change as an issue in the 2003 staff survey. Participation in an internal environmental scanning process to solicit opinions, to collect information and ideas (Smoby, 2005), with follow-up and feedback opens up this communication. Members are encouraged to take an interest in their organization and to collectively make sense of, and prepare for, external developments (Choo, 2001).

4. How do fire departments gather strategic intelligence from their members?

Fire chiefs were surveyed to determine if they routinely use a formal process to gather strategic input from the department staff. If they consider they have a formal process they were asked to name the method(s) used. Particular interest was paid to the use of survey instruments and the perceived effectiveness of them. Even with an extensive e-mailing of the link and request to respond it took twenty one days to get seventy two responses. A little over forty percent (29) stated that they utilize a formal process to get members’ opinions. Sixty two percent
of the remaining sixty percent rely on informal processes. Those who consider that they have a formal process went on to identify staff and officer meetings as that process. Those who considered they have an informal process also stated meetings are their process. This lack of definition of “formal” skews the findings. The survey assumed a formal process to be a planned, deliberative process with a specific focal point in mind. Most appear to rely on face-to-face sessions. Only one stated that he uses suggestion forms. A series of questions were specific to the use and value of surveys as a formal scanning instrument. A little less than one-third of the responders use surveys to measure internal conditions. Almost half of them design their own surveys. Further follow-up with these officers would be helpful to determine how they design the surveys. The frequency of the surveying efforts vary from every month through as needed. Almost half conduct an annual survey and one respondent used a survey for one specific reason. Seventy seven percent of the surveys are anonymous. The importance of anonymity was discussed in the literature review (Morrel-Samuels, 2002). The respondents were relatively neutral about the value of surveys as a useful tool for collecting employee opinions. This is in contrast to the findings of Morrel-Samuels (2002). Morrel-Samuels (2002) also states that the value of a survey is often dependent on the quality of the design. It may also speak to the quality of the relationships that exist in their department. A history of distrust, uncertainty about why the survey is being conducted, or skepticism about seeing any follow through may lead to less than open, candid responses (Bryson, 1995). The same sentiments could be true for the chief officer reviewing the data. When asked how survey results are used, most stated they were to assist in planning and decision making. No one stated that they considered them to be useful for assessing attitude and culture within an organization. One respondent commented that due to their anonymity he/she felt surveys had been used to make unsubstantiated statements about other
people. The importance of anonymity to get to true feelings and opinions was addressed in the literature review (Morrel-Samuels, 2002). Survey feedback is communicated through a variety of means, but few have a structured approach. Most rely on distributing/posting the results without analysis.

5. **How can employee surveys be used effectively in an internal environmental scanning program?**

Fire service tradition and its long history have established a strong industrial culture. Bryson (1995) identified the severe limitation that an organization’s culture can have on its members’ ability to perform an effective analysis of its strengths and weaknesses. Established cultural norms, values, and behaviors are brought to bear on threats and opportunities the organization encounters. A negative or inflexible organization will lead to unsuccessful or inappropriate performance such as that described in Lynn’s (2001) analysis of succession planning in public sector organizations. Conversely, Buckingham and Coffman’s (1999) work with the Gallup Organization showed a direct relationship between employee’s positive responses to Gallup’s twelve survey questions and their productivity, profitability, retention rates and commitment to customer service. Surveys should be designed to measure employee perceptions of business strategy, operating efficiency, innovation, leadership, cross-group collaboration, career development, and employee commitment (Fralicx, 2003). This is a move away from the traditional “me” survey questions that were used to gauge employee satisfaction with pay, benefits and so on. In order to be effective it is critical that the survey design follows established, scholarly rules and principles (Morrel-Samuels, 2002). He lays out sixteen guidelines for superior design that are based on peer-reviewed research from education and the behavioral sciences. Commercially available subscription electronic survey instruments make sampling,
distribution, collection of responses, and analysis easier. They also assure respondents of their anonymity. Findings are in a ready format for communicating feedback to the organization and to conduct follow-up.

Review briefs notify members and work groups of results to examine as they work on projects and programs to execute the tasks identified in the Customer-Centered Strategic Plan.

The Richland Fire and Emergency Services Internal Environmental Scanning Program is attached in Appendix A.

**DISCUSSION**

The result of this research project is an Internal Environmental Scanning Program for Richland Fire and Emergency Services. Fire service publications stress the importance of undertaking strategic planning (Bachtler & Brennan, 1995). National Fire Academy courses have been developed to train executive fire officers to manage in today’s turbulent climate of rapid and sometimes erratic change (NFA, 1995). Organizations can position themselves to invent their own future through proactive, deliberative action plans developed after careful analysis of the threats and opportunities of the external environment and the strengths and weaknesses of the internal environment (Stiffler, personal communication, June 13, 2002). Environmental scanning must examine both the external and internal elements of the organizations environment (Garner and Calderon, 2004). Effective strategy should link the two in order to take advantage of strengths and opportunities while limiting the impact of threats and weaknesses (Bryson, 1995). This is a significant challenge for a small organization that cannot afford to staff specifically for the program (McGinty and Simpson, 1996) though the potential benefits make it worthwhile. Participation need not be based on rank or tenure (Van Vuuren, 2001) and it allows those who wish to show initiative to be part of planning the future of the organization (McGinty and
Simpson, 1996). Active engagement of the majority of the organization in the collection, analysis, and planning process can change the organizational culture (Morrison, Sargison and Francis, 1997). Environmental scanning becomes more of a learning process than simply a research process (American Society of Association Executives, 2002). Regular, structured face-to-face discussions are promoted with personnel over planning issues. Scanning increases communication between staff and provides greater employee involvement in the decision making (Choo, 2001).

This intimate level of engagement in the process helps to breakdown some of the traditional barriers to an effective organizational analysis (Bryson, 1995). Members of the organization want to feel that they can make a meaningful contribution (Maxwell, 1993) and feel a sense of belonging (Messana, 2002). It is critical that fire service leaders find ways to measure cultural alignment, address important issues, develop organizational goals and expectations, and make strategic decisions (Riboldi and Maylett, 2004). The internal scanning process enables the executive officer and the department to gather strategic intelligence, while meeting the needs of employees for involvement and value. At the same time creating an organizational condition conducive to adaptive changes that would otherwise result in “push back,” due to heightened levels of disequilibrium (Heifetz and Linsky, 2002). The department can demonstrate its commitment to its members and its dedication to meeting the community’s needs and expectations. Strategic planning in an ambiguous and unpredictable environment requires careful and deliberate positioning by organizations (Hellriegel and Slocum, 1992), particularly those that are dependent on public moneys for funding (Bryson, 1995). Action plans that are out of sync with the goals and objectives of the governing body, influential external and internal stakeholders, and the people they serve will quickly erode the department’s credibility (Stiffler,
personal communication, May 15, 2002). Failure to provide feedback and follow through after
analysis will impact the morale and willingness to participate within the organization.

The value of surveys as an instrument to collect honest input from within the organization
has been established through the work of Ostrum, Wilhemsen, and Kaplan, (1993) and Messana
(2002). Surveys of this quality can be produced, provided well-founded guidelines such as those
developed by Morrel-Samuels (2002) are followed.

The fire chief survey conducted for this research paper sought to determine if fire chiefs
routinely utilize formal processes to get strategic input from the department staff and how they
do, if they do. Seventy two chief officers responded to the survey. 40.3% (29) of them stated
that they utilize a formal process to get the members’ opinions. 61.7% of the remaining 59.7%
rely on informal processes such as conversations and general meetings. Of those who utilize
formal processes all consider officers meetings a source of strategic input. Almost three fourths
also consider shift meetings to be an opportunity to gain strategic intelligence. There appears to
be a heavy reliance on face-to-face sessions. Only one stated that they use suggestion forms. It is
doubtful that these can truly be considered formal processes. Surprisingly, 30.2% use surveys to
measure internal conditions. 7 out of the 16 (43.8%) design their own surveys. About half
conduct an annual survey; one respondent used a survey only for a specific reason. One
respondent surveys monthly. 76.5% of the surveys are anonymous (Morrel-Samuels, 2002).

When asked if they felt surveys were a useful tool for collecting employee opinions responses
were normally distributed around the center of the scale but with two responses of highly
effective and none highly ineffective. This is in contrast to the findings of the authors described
in the literature review. Morrel-Samuels (2002) states that the value of a survey is often
dependent on its quality. With almost half of the surveys designed by the chief officer it would
be useful to follow-up with an evaluation of their design of the survey instrument. It may also speak to the quality of the relationships that exists in the department. A history of distrust, uncertainty about why the survey is being conducted, or skepticism about seeing any follow through may lead to less than open, candid responses (Bryson, 1995). The same sentiments could be true for the analyst reviewing the data. It would seem that any annual effort would require a “broad brush” effect that attempts to catch all. The survey of strengths and weaknesses is often associated with the annual review of the strategic plan. The literature would suggest that strategic intelligence should be accumulating throughout the year to be ready for the review focus group to assimilate into the plan update. To the open ended question on how the survey results are used, most stated they were to assist in planning and decision making. No one considered them to be useful for assessing attitude and culture in an organization. One respondent commented that he/she felt the survey had been used to take “pot shots” in the past and that this was due to the anonymity the survey provides. The importance of anonymity was addressed in the literature (Morrel-Samuels, 2002) but it would appear that it could degrade the credibility of the survey in an organizational environment of distrust or conflict (Lencioni, 2002). Feedback is communicated through a variety of means, with few having a structured approach. It is apparent that most rely on simply distributing the results rather than an analysis with planned action items for follow through. Without an effort to apply this intelligence to the threats and opportunities that impact the organization the advantage of scanning the environment is limited (Bryson, 1995). The secondary benefit of active involvement of many staff members is also diminished or lost (Morrison, Sargison and Francis, 1997). They become a resource that is tapped and then notified of results but miss the opportunity to contribute further (American Society of Association Executives, 2002; Maxwell, 1993) and gain a sense of belonging (Messana, 2002).
The safety culture survey was conducted for two reasons. Firstly, to evaluate members’ responsiveness to this form of scanning. Secondly, to examine the safety culture within the department. Twenty questions were developed. Two sets of 10 questions were collated so that each set had a question that fell within each of the following headings: safety awareness, teamwork and pride, commitment, excellence, honesty, communications, leadership and supervision, training, procedural compliance, and safety effectiveness. Forty one responses were received (41 out of 54 with access to the survey for 14 days). Taking the survey was not mandatory. The responses indicate a high level of safety awareness, a strong sense of commitment and teamwork, honesty/integrity, and sound procedural knowledge. There is a belief that the safety issues are handled effectively and communicated well. Responses to the questions about excellence indicate that there is some ambivalence to striving to improve further. It is apparent that there is some concern about how supervisors handle safety matters 20% rate supervisor’s safety leadership as neutral or worse. Finally, a relatively small percentage of respondents (13%) feel that safety training omits real safety subjects of concern. Almost 1/3 feels that safety training is compromised for other pressing demands. The past three years of on-the-job injury reports were examined. This is not intended to be correlational research but rather to measure survey responses against actual experience to determine if any of the trends observed are indicative of a propensity for a particular form of injury. While there appears to be a high degree of confidence in the effectiveness of the department’s approach to safety, responses to questions related to an effort to improve further, attention by the leadership, and the prioritization of safety training, indicate that there is evidence of a direct focus on some specific safety issues. The department has a very low incidence of injuries and accidents “traditionally” associated with safety lapses. Proper protective equipment is being used effectively and correctly, and safety
procedures are being followed. However, there are a number of repeat injuries occurring during work that involves lifting, carrying, and moving objects of some weight. Sixty nine occupational injuries were reported from January 2003 until today. Twenty eight became workers compensation claims. Almost all workers compensation claims involved back, knees, or shoulders. The survey results indicate that the sense of comfort with the safety effort expended currently may have kept personnel looking only at traditional areas of safety, even though our experience indicates that there are frequently repeated procedures that compromise member’s health and physical condition (Lynn, 2001). It appears that there needs to be greater emphasis placed on the cause of these injuries in order to adapt the current safety culture in the organization. In this case Richland Fire and Emergency Services does most things well toward maintaining a strong safety culture but has failed to value striving to do better. With less complacency and contentedness, attention would be given to other elements of personnel well-being. The department safety culture is lacking drive to push on to higher levels of safety, supervisors are not fully engaged, and training is not given high enough priority. The benefits of refocusing on mitigating the personal and organizational costs of repetitive injuries are clear. Over 3,300 hours have been coded to Labor and Industry claims since January 2004 (Jane Gagnebin, City of Richland, Personal communication December 2, 2005). This must be conveyed to the members of the department and action taken to improve safety performance to reduce these injuries (Smeby, 2005).

Finally, the questions were added to the City-wide survey for two reasons. The survey has traditionally been more focused on City issues and other people. It will be interesting to see if employees are willing to be candid about their own responsibilities and performance with this
survey instrument. The responses from the City at large will be compared to those from the fire department to evaluate the degree of conformity with other City employee’s opinions.

The full benefit of the environmental scanning program to Richland Fire and Emergency Services is undetermined at this point but the experience of others indicates that it will not only be beneficial, but it is necessary, for effective strategic planning. As stated in the limitations it is expected that the full value of the program will take time to eventuate but that even in its infancy the program will enhance the sense of the direction and participation for department members (McGinty & Simpson, 1996). Members communication skills internally will improve as they share information (McGinty & Simpson, 1996; Van Vuuren, 2001) and develop the “what if” scenarios for analysis (Morrison, Sargison & Francis, 1997). As we refine our searching methods we will also take a more influential position in the external environment (Choo, 2001).

The members of Richland Fire and Emergency Services want to know where their organization is going and want to have a hand in building its future (Abrashoff, 2002). A formal, structured method of developing the information to build organizational strategic intelligence (Mastzel, 1998) has a twofold benefit. It identifies core competencies, resources, and employee values and background of the organizations members (Hellriegel and Slocum, 1992). Collectively, these are the strengths and weaknesses of the organization (Bryson, 1995). Secondly, involvement of the staff in the collection, review, analysis, and follow-up from the internal scan enhances their sense of contribution to the organization and can lead to a shift in organizational culture that makes it more adaptive to change (McGinty and Simpson, 1996).

**RECOMMENDATIONS**

Richland Fire and Emergency Services Department is positioned structurally and functionally for implementation of the environmental scanning program. Though the findings
from full implementation of the program would be beneficial at this time the program will have to be introduced slowly, due to the very reasons that it is needed now. Other large internal and external projects are underway and need to be completed to allow time for members to learn the program. Therefore it is recommended that implementation continue through 2006 and 2007. New organizational relationships with other fire agencies may change the final structure of the program. It is critical that clear lines of communication are established to ensure that each new element that is added is known and understood by all members.

The literature review revealed little specific methodology for internal scanning by small organizations like Richland Fire and Emergency Services. It does give sufficient technical foundation to support the establishment of an internal environmental scanning program by an organization of almost any size. The ultimate value of the program is derived from the commitment of members of the organization to fully participate in a well-defined process.

Executive Fire Officers need to consider the value of implementing both the external and internal elements of an environmental scanning program in their organization, even if they feel they have an established strategic planning process. The challenge to get the department’s members to participate in the creation of their future rather than simply reacting to events as they occur is compelling. The critical importance of anticipating and preparing for change is well recognized. A formal procedure to build strategic intelligence for planning and effectively influencing outcomes has not been practically described for fire departments. This paper is an effort to address this lack of process in our department. As fire service leaders develop their own version of an environmental scanning program and share their experiences, successes and failures, invaluable peer review will further refine the processes. It will enhance it as a critical
strategic planning tool that can also shift the cultural paradigm of a fire department to make it more adaptive to change.
REFERENCES


