Spring 3-1-2014

Fire Service Collaboration: A Case Study of Opportunity for Boring Fire District No. 59

Brian Stewart

Fire Service Collaboration:

A Case Study of Opportunity for Boring Fire District No. 59

Submitted by

Brian Stewart

for

EMPA 396 Graduate Research Project in Public Administration

Golden Gate University

San Francisco, CA

Faculty Advisors:

Dr. Joaquin Gonzalez III and

Dr. Mick McGee

March 1, 2014

Table of Contents

Abstract

The concept of collaborative services is well established in local governments throughout the United States. Academia has studied this mechanism for service provision extensively. However, there is limited research available on expanding already substantial cooperative services in the fire service. The purpose of this research is to answer the question: should the Board of Directors support a policy of operational consolidation with Clackamas Fire District No. 1? This research reviews the Boring/Clackamas Fire relationship and then uses a multiple method research design to approach the question. Through a dualistic approach incorporating a phenomenological study with Boring Fire and Clackamas Fire key informants and quantitative data collection from senior fire service officers throughout Oregon, this study concludes that Boring Fire should support a policy of operational consolidation. The paper concludes with an action plan for implementing the policy direction.

Oregon Fire Service Collaborative Efforts:

Conditions and Opportunities for Boring Fire District No. 59

Introduction

After the terrorist attacks of 9-11, the American public was enamored with the fire service but time, negative news coverage, and the great recession have returned the fire service to its stature as just another government agency or service. In the years following 2001, the fire service bolstered staffing, purchased apparatus and equipment, and expanded its scope of work towards homeland security concerns. However, the great recession did not spare the fire service from budget cuts across the United States. Fire protection districts that primarily operate on property tax revenue realized dramatic decreases in funding. Some agencies saw these decreases build year over year. Fire chiefs of municipal fire departments found that the stalwart support for protecting fire services at the sacrifice of other public services (e.g., parks and recreation) had diminished. The public was seeking a balanced approach to government. Fire chiefs saw service enhancements that took years to build quickly erode. Like other government units, fire service agencies are increasingly called upon to demonstrate efficiency with the resources taxpayers provide.

Interlocal agreements have been long-established as service delivery tools for local governments (Andrew 2007, Andrew & Hawkins 2013, Kwon and Feiock 2010, Wood 2008). Berman and Korosec (2005) found that 40% of jurisdictions with populations of more than 50,000 “frequently use coordinated, comprehensive plans, most commonly in public safety, traffic congestion, transit planning, and economic development.” Fire service agencies routinely rely on cooperation from neighboring and distant partners. Largely the degree to which an

agency may rely on others is dependent upon its financial resources as compared to its service demands. Aside from routine mutual/automatic aid assistance for additional resources on structure fires, medical calls, or to cover station response areas, agencies rely on other organizations in time of regional resource depletion (e.g., wildland fires, earthquakes) and for specialized resources (e.g., trench rescue team). Beyond the aforementioned response and mitigation cooperation, agencies frequently seek cooperative purchasing opportunities or intergovernmental agreements for various functions (e.g., bookkeeping, fleet maintenance services). While most fire service professionals would admit there is no "right way", they frequently seek to implement best practices and to ensure efficiency throughout their agencies' functions. Efficiency for fire service administrators requires standardization of equipment and practices. For smaller agencies, standardization with neighboring jurisdictions may be difficult to achieve, but is critical on scenes where multiple agencies are working together to mitigate a fire or rescue incident.

Skip Krueger and Michael McGuire (2005) contend that collaborative mechanisms can take many forms from "relatively simple joint service agreements for fire service to complex, ongoing interactions involving multiple implementation decision points and actual exchange of financial resources." Their statement articulates well the position in which Boring Fire is situated. Boring Fire maintains many service agreements of relative minor organizational impacts (e.g., mutual aid responses for structure fires) to the complex arrangement with Clackamas Fire District No. 1 (CFD) which encompasses multiple organizational functions and for which each agency provides financial resources for services received.

Currently Clackamas Fire District No.1 and Boring Fire District No. 59 (BFD) are in the third year of an intergovernmental agreement for cooperative and shared services. Unlike many

cooperative services that are limited in scope, CFD and BFD share a volunteer firefighter program (unique in Oregon). Sharing the volunteer firefighter program fixed immediate needs for each agency, but appears to have had unforeseen impacts on other organizational functions. Unlike administrative functions, such as accounts payable, volunteer services touches nearly all aspects of CFD's and BFD's operational, support, and administrative functions.

Having such a significant cooperative service between BFD and CFD has caused significant changes to BFD practices and some change to CFD practices. The greater impact of change to Boring Fire is likely a product of the difference in size (BFD – three stations, CFD - 17 stations; BFD $4M expense budget, CFD $40M expense budget, costs associated with change, and the degree to which certain programs and practices are established. Many improvements have been achieved for Boring Fire (e.g., enhanced firefighter wellness services), but efficiency gains are hard to determine, and some desired improvements have been unachievable (e.g., self-contained breathing apparatus replacement or upgrade). The inability to implement some changes is due to the sharing of volunteers and the need to maintain consistency in operations and safety equipment between the agencies and the differences between BFD and CFD in terms of equipment service life and replacement resources. Beyond capital and operational costs, managing multiple programs across the organizations has proved challenging. This would be without surprise to Krueger and McGuire (2005) who conclude that "administering policy interlocally is much different – and substantially more difficult – than traditional, agency-center, top-down management."

A year after the organizations agreed to conduct a financial study of the organizations (April 2012), the boards agreed on a scope of work for a cooperative services feasibility study. This process is nearly complete and the boards will have the consultant's recommendations to

consider. Many members have made comments related to frustration with the uncertainty of the current cooperative services and possible futures. However, it is unknown to the researcher what impacts this uncertainty has on the organizational stability. As an outsider to Boring Fire when hired as a division chief (now fire chief), the researcher entered an organization with members in various emotional states related to the cooperative services and possibility of merging into Clackamas Fire District No. 1. While close to the project, the researcher retains a large degree of authority and legitimacy as a researcher due to his joining the organization after the original agreement (and associated discussions and negotiations) was executed, his short tenure (1.5 years), his prior experiences with other organizations, cooperative services, and mergers, and in his personal interest in the research being more relevant to other organizations rather than his own.

The purpose of the study is to provide guidance to the Boring Fire District No. 59 Board of Directors on the District's strategic direction. Boring Fire has been operating under a significant interlocal agreement (IGA) with Clackamas Fire District No. 1 for thirty months. The IGA does not provide for defined performance measures nor does it specify desired long-term outcome (e.g., legal integration of the two districts). In its recently completed feasibility study between BFD and CFD, Emergency Services Consulting International (ESCI) opines that CFD personnel anticipate the furthering of collaborative efforts while executive BFD staff and BFD's BOD are less confident that consolidating agencies is nearly assured. Boring Fire's BOD has expressed one main concern is continuity of existing service levels with a preference toward service delivery enhancements. The researcher intends to bring public administration practitioners' perspective to address the problem by seeking executive staff as key informants and as survey respondents.

This project is undertaken at a time of discussion between the districts. In respect to the sensitivity of the topic among employees and volunteers and in appreciating the validity of responses as they may influence the outcome of those discussions, this study grounds itself in the history of the current collaborative relationship between BFD and CFD and then incorporates the literature review and the collective Oregon fire service experience into the discussion on strategic direction.

The main research question for this study is: should the Board of Directors support a policy of operational consolidation with Clackamas Fire District No. 1? This main research question was selected because Boring Fire recently completed a cooperative services study with Clackamas Fire and the communities, paid personnel, and volunteers are anticipating clear direction. For this study, an operational consolidation is defined as one agency providing for all administrative and operational processes and services for another agency. In this example, Boring Fire would contract with Clackamas Fire to manage Boring Fire District #59. This process retains Boring Fire District #59 as a taxing authority and would provide the opportunity for either entity to terminate the contract with appropriate notice. The additional research sub-questions that guided this study include: 1.What is Boring Fire's experience with Clackamas Fire under the Intergovernmental Agreement for Volunteer and Other Shared Services? 2. Does operational consolidation or legal integration positively impact an Oregon fire agency? 3. What is the experience of other agencies in Oregon regarding continued steps towards integration vs. reversing collaborative efforts? A multi-pronged approach to research was utilized to answer these questions.

Research began with a literature review to ground and guide the author in the project. Then a dualistic approach to primary data collection was utilized. Quantitative data was obtained

from a descriptive survey. A questionnaire was e-mailed to every county fire defense board chair in Oregon for distribution to their respective county's fire chiefs. Qualitative data was obtained through key informant interviews and personal observations.

The data is analyzed and interpreted to provide results, findings, conclusions, and recommendations. The present challenge of moving Boring Fire forward to provide the best service to our citizens requires a thorough examination of Boring Fire's current circumstances and present opportunities. This study answers the question of should the Board of Directors support a policy of operational consolidation with Clackamas Fire District No. 1.

Literature Review

This research project is positioned in unique space with no resources retrieved that address the organizational stability and flexibility associated with significant cooperative services between fire protection agencies. A review of the National Fire Academy's "First responder dissertations and theses" collection revealed thirty-three papers cataloged under the "interagency cooperation" topic heading. These dissertations and theses focused mainly on large scale incidents, explorations of the 9-11 incidents and responses, and homeland security concerns. Searching for relevant sources via Sage and ProQuest (with the assistance of Golden Gate University librarian Sarah Ross) provided many peer-reviewed and other current sources that related to intergovernmental agreements; especially associated with the considerations to implementation, development of contract measures, and purposes. Scant information was found pertaining to the limitations and organizational stability associated with significant cooperative services for fire protection agencies although "public safety" was found in the literature (Andrew and Hawkins 2012, Berman and Korosec 2005, Carr & LeRoux 2005, Zeemering and Delabbio 2013).

The research seeks to address the need for Boring Fire District No. 59's fire chief to provide strategic guidance to the board of directors. It attempts to answer a central question; that is, should the Board of Directors support a policy of operational consolidation with Clackamas Fire District No. 1?

The review of literature examined three areas:

1. Considerations and choices when entering interlocal agreements;
2. Factors affecting the success of interlocal agreements; and
3. Transaction costs and processes of interlocal agreements.

Considerations and choices when entering interlocal agreements

Entering interlocal agreements promotes the accountability of public entities for service quality and financial responsibility. The decision of governments to enter interlocal agreements was researched through the lenses of politics, financial, competition, and nonfiscal motivations. Kwon and Feiock (2010) inform that the "decision-making process is determined by demand-side factors and by information and agency costs that shape the potential efficiencies and service improvements from service cooperation." Rosenbaum (2006) suggests that government's engagement in collaborative services is based on "philosophical preference, to beliefs about managerial efficiency, to the impact of various political factors." There is no single template for interlocal collaboration applicable to the vast potential combinations of government services. Chen and Thurmaier (2009) suggest that an interlocal agreement can take many forms: handshake agreements to multi-layered contracts structured in compliance with statutory requirements; simple dyadic relationships to complex arrangements with multiple local governments and private and nonprofit organizations.

Politics

The consideration of politics at numerous levels is well documented in the literature. There are several aspects to the influence of politics and the ways to influence politics. One reason that politics play an important role in the decision making process is that "[i]nterlocal collaboration requires substantial incentives to overcome the difficulties and loss of policy autonomy associated with coordinated implementation in a more pluralistic policy environment." (Krueger & McGuire 2005). However, Zeemering (2008) offers that elected officials perceive that "a good cooperative agreement providing higher-quality public services at a lower cost might be responsive to citizen interests." In pursuing citizen interests there are several options

that provide mechanisms that facilitate the implementation of collaborative services between local governments. One such approach is offered by Edwin Benton (2013) and Zeemering and Delabbio (2013) when they contend that collaborative approaches to deal with regional issues may be presented from a bottom-up approach rather than a top-down approach. Relationships are instrumental in service collaboration and intergovernmental and intragovernmental communication and social networks are used to identify partnership opportunities (Benton 2013, Zeemering 2008). In the respect of scope of concern for elected officials, the literature speaks to the difference between single-member districts and at-large districts. Krueger and McGuire (2005) share that "single-member districts motivate politicians to focus on narrow interests" (Kettl 2002) and then offer that at-large districts create an "incentive structure" that causes politicians to focus on majority interests. The differences in political focus may parallel the differences of concern for elected officials of special districts of disparate size, such as Boring Fire and Clackamas Fire, in perspective of best resource allocation and sharing of financial responsibility and risk (Kwon & Feiock, 2010).

Whether during the conceptualization, incubation, development, or implementation phase of collaborative efforts, the roles of elected officials and administrators should be reviewed and applied appropriately. Krueger and McGuire found:

> [t]he administrative professional with less of an interest in a particular policy than with efficient implementation is well-suited to gather diverse opinions from a variety of stakeholders, assimilate that information, and provide useful policy recommendations to part-time, less knowledgeable (but ultimately more democratically accountable) policymakers." (2005)

Professional managers can make credible commitments block self-serving behaviors with established norms for professional conduct and greater stability in a career that is less affected by the results of any given election (Feiock, Jeong, & Kim 2003, Feiock & Kim 2000, Krueger & McGuire 2005).

Considerations such as those above can help mitigate the politics associated with interagency collaboration; however, "[o]fficials must explore any different preferences the participating governments have in how service is delivered, or what constitutes good service. If governments are unwilling or unable to adjust services to meet the needs of their contracting partners, perhaps an interlocal agreement is not the right mode of service delivery (Zeemering and Delabbio, 2013).

Financial

While differing in their approach to address financial underpinnings for collaboration, researchers agree that financial implications are a leading impetus (Burns & Yeaton 2008, Krueger & McGuire 2005, Perlman & Benton 2012). Another view of the same impetus is that governments most often indicate potential efficiencies and cost savings as interests in pursuing interlocal agreements. (Chen and Thurmaier 2008, Kwon and Feiock 2010, Zeemering 2008). Zeemering and Delabbio (2013) contend that savings may accrue from economies of scale, outsourcing to reduce production and transaction costs below internal provision costs, and through consolidation (reduction) of overhead staff. In certain circumstances governments that lack ample resources to adequately fund the programs seek out partners to share costs (Benton 2013, Kreuger & McGuire 2005, Kwon & Feiock 2010, Zeemering & Delabbio 2013). Beyond service delivery there are opportunities to reap financial benefits from collaborative services. While Zeemering and Delabbio find reducing administrative staff may serve to provide cost-

savings, that interest is in conflict with Krueger and McGuire's research finding of the desire to reap slack resources through collaboration (2005) which then can be leveraged in a government's desire to improve its competitive edge and its relative gains in a relationship.

Interlocal collaboration agreements presume economies in scale, size, and scope which distribute equipment replacement costs across multiple agencies and achieve purchasing discounts. These may result in efficiency gains in capital acquisition and improvements and other resources realizing greater efficiency and effectiveness. (Benton 2013, Kwon and Feiock 2010). Coincidentally, elected officials and administrative staff of BFD and CFD have expressed interest in cooperative services for the same reasons.

Competition

Krueger and McGuire's (2005) work on transaction costs in interlocal collaboration share that cities compete for residents and employers. Their work is focused on municipalities rather than special districts; however, certain concepts are still applicable to this literature review for fire protection district collaboration. As fire protection districts typically do not compete for residents or businesses (being reliant on other municipalities, counties, and regional economic development agencies to drive growth), the gains from collaboration focus on absolute rather than relative gains. One exception to this rule to which Krueger and McGuire's concepts of competition and relative gains are more applicable is Clackamas Fire's interest in access to future areas of growth (Kirchofer 2011). Here achieving more slack resources under a interlocal agreement may gain CFD a competitive advantage over Boring Fire and allow it to illustrate greater services and subsequently create a preference for annexation into Clackamas Fire. Research has identified that "[w]hen transaction costs are low and competition is low, we expect many transactions and deeper collaborative arrangements." (Krueger & McGuire, 2005)

Nonfiscal Motivations

Beyond the frequently cited cost and revenue benefits associated with interlocal collaboration, authors frequently noted other benefits and purposes behind interlocal collaboration. Ruggini suggests that in part the cost-benefits of collaboration may not accrue for several years due while awaiting right-sized staffing through attrition. This delay in realized savings suggests that governments would seek other benefits from collaboration. Zeemering and Delabbio (2013) suggest that "officials should consider other non-budgetary rationales for shared services."

Interlocal cooperative service agreements "spread financing responsibility and risk, broaden equipment replacement cost sharing and achieve volume purchasing discounts, and [result in] capital acquisition/improvements and certain other resources becoming more efficiently and effectively utilized due to economies in size, scale, and scope" (Holdsworth 2006). Benton (2013) argues that collaborative efforts present opportunities for efficiency gains as well as potential gains in service effectiveness and outcomes. Beyond the economies of scale, demands for collaboration are also generated by service effectiveness and efficiency issues such as the internalization of externalities, both positive and negative (Andrew 2007, Feiock 2007, Kwon and Feiock 2010). Ruggini (2008) concurs on the benefits of economies of scale and the emphasis on efficiency (e.g., reduced duplication, optimization of less frequently used equipment, increased flexibility) and effectiveness (e.g., uniformity, higher service levels). However, Ruggini is cautious and notes "potential" cost savings through collaborative service agreements. Stevens (2005) also advises that the public sector is interested in value-added activities. The most comprehensive review of nonfiscal motivations is provided by Zeemering and Delabbio (2013), wherein they share that other reasons to embrace cooperative services:

spurring innovation, improving decision-making, building on complementary strengths, and bolstering agencies through sharing and receiving knowledge and skills. As with Ruggini, the pair found that "counties seeking improved services rarely report saving money on shared service delivery", but those counties also report satisfaction with collaborative services that provide residents with more effective services (Zeemering & Delabbio, 2013). Reinforcing Zeemering and Delabbio's claim of improved decision-making, Krueger and McGuire (2005) attest that "interlocal collaboration represents more inclusive methods for deciding the details of producing and delivering public goods and services."

Factors affecting the success of interlocal agreements

The literature reveals that the presence or absence of several factors is predictive of the success of interlocal agreements. Kwon and Feiock (2010) observe that "even when local entities recognize the potential benefits to be gained from cooperation, they face a collective action problem in the design and implementation of collaborative agreements to institutionalize cooperation." But "[f]irst and foremost, you've got to have a trust relationship. At the end of the day, if the city thinks that the county is trying to take advantage of them financially, or is trying to usurp their power and authority, the relationship falls apart" (Zeemering & Delabbio, 2013). Available research frequently cites the importance of trust and relationships. Cooperation between governments can exist without trust, but it is more difficult (Cook, Hardin, & Levi 2005, Warm 2011, Zeemering & Delabbio, 2013). In "A County Manager's Guide to Shared Services in Local Government" Zeemering and Delabbio (2013) present three pre-conditions for successful implementation of cooperative services: "leadership; trust, reciprocity, and transparency; and clear goals and measurable results." Trust in relationships is critical as

> implementing policy collaboratively is vastly more complicated than implementing policy in a traditional bureaucratic setting. Collaboration is political in the sense that, because there is no formal hierarchy among the participants, decisions about the details of how implementation will proceed are made collectively. And collective choice is difficult. It requires discussion, information gathering, and compromise. (Krueger & McGuire, 2005)

Berman and Korosec (2005) concur with Krueger and McGuire's assessment, stating that "[t]he challenge of planning coordination is clearly about getting diverse jurisdictions and organizations on the same page regarding their purposes, goals, and strategies. The ability to gauge the success of collaborative efforts is partially determined by one's ability to measure the efforts. Performance measures are instrumental in determining value of government functions: in the market place, the price a consumer is willing to pay for a product is an important indicator of its value, that same mechanism is seldom available in government to determine value to the citizens (Stevens 2005).

But the implementation of performance measures also increases the costs associated with monitoring. "Transaction costs affect the propensity to enter into collaborative agreements. Low transaction costs allow for easier agreement when the underlying motivations exist to pursue such agreements." (Krueger & McGuire, 2005) By not committing to defined performance measures or outcomes and necessitating resources committed to monitoring those, Boring Fire and Clackamas Fire limited the transaction costs associated with monitoring the cooperative services agreement. While not intentional to the arrangement, this subsequently made it easier to the organizations to enter into the agreement. However, in "Assessing the Performance of Local Government"

(2005), Phillip Andrew Stevens considers the measurement of performance in the public sector with a focus on local government and establishes the importance of defined performance measures in successful independent and collaborative programs. The literature (Hilvert & Swindell 2013, Ruggini 2008, Zeemering & Delabbio) affirms Stevens' observation. One example is offered here: "Clear goals and measurable results: Specific goals for shared service projects can ensure success while confirming that the effort is worthwhile. Officials should regularly assess the services delivered through cooperation, as well as the quality of the working relationship." (Zeemering & Delabbio, 2013). In a more refined opinion, De Lancer Julnes (2006) suggests that program evaluation, not performance measurement systems, is better suited to guide government resource allocation and concludes that accountability is best met with cooperation between the two mechanisms.

Determining performance measures across multiple governments can be difficult. "The problem is that we tend to observe activities rather than the actual outputs. This has led to a concentration on processes (which can easily be counted) rather than the outputs the service was designed to provide." (Stevens 2005). The difficulty in measuring performance and attributing value to outcomes increases the complexity of determining service provision efficiency. Determining performance measures and the resource requirements needed to "be transparent in the process of developing costs for services" (Zeemering & Delabbio, 2013).

Transaction costs and processes of interlocal agreements

Blair and Janousek (2013) suggest that local governments often vary the manner in which they enter relationships, using a range of formality and specificity to the extent that over time

"[t]he findings suggest that, over time, the nature and use of interlocal cooperation mechanisms have shifted toward the more informal and general varieties."

There are ex ante and ex post costs associated with cooperative service agreements (Kreuger & McGuire 2005). In developing the framework for cooperative services, transaction costs must be evaluated to determine whether they are barriers to creating a successful interlocal agreement (Hawkins 2009, Kwon & Feiock 2010). If successful in entering an interlocal agreement, the agreement's conditions and assumptions should be regularly reviewed (Kreuger & McGuire 2005, Ruggini 2008, Zeemering & Delabbio 2013) to ensure continued relevance and applicability.

> With simple agreements, monitoring may be relatively simple and front-line administrative staff may be capable of handling this duty in addition to their regular functions. However, as agreements increase in complexity and number, the degree of sophistication required to monitor collaborative agreements increases. Thus cities that have more sophisticated mechanisms for monitoring contract compliance will be more likely to enter into collaborative transactions. (Krueger & McGuire, 2005)

Also to be considered are the risks associated with collaborative services. Carr and Hawkins (2013) found that U.S. scholars identified the degree to which agreements are restrictive or adaptive can reduce the risk from collaborative services.

The literature review revealed that there has been much academic research on cooperative services. The literature delves deeply into historical and current utilization of ILAs; the considerations for incubation, development, implementation, and management of agreements; and the transaction costs associated with ILAs. However, there is little academic research which

pertains to fire service organizations. Subsequently, this research is positioned to address the gap in fire service specific research.

Research Methodology

Research Design

The main research question for this study is: should the Board of Directors support a policy of operational consolidation with Clackamas Fire District No. 1? This main research question was selected because Boring Fire is in need of policy direction as it has operated significant cooperative services with Clackamas Fire since July 2011 and recently completed a study to seek out options for Boring Fire's future service delivery. The question is ideally situated to address the author's academic needs while the conclusion will be timely and its impact immediate. The sub-questions that guided the author in the research are: 1.What is Boring Fire's experience with Clackamas Fire under the Intergovernmental Agreement for Volunteer and Other Shared Services?; 2. Does operational consolidation or legal integration positively impact an Oregon fire agency?; and 3. What is the experience of other agencies in Oregon regarding continued steps towards integration vs. reversing collaborative efforts?

The researcher hypothesizes that an operational consolidation with Clackamas Fire improves Boring Fire's ability to serve its citizens. The hypothesis was derived from anecdotal evidence about the agencies' current collaborative services and the findings of Emergency Services Consulting International's "Opportunities for Collaborative Efforts Feasibility Study". The sub-hypotheses for this research are: 1. the existing interlocal agreement lacks fundamental elements found in successful agreements; 2. management of programs under the existing interlocal agreement is more challenging than if an agency managed the same programs independently; and 3. operational consolidation with Clackamas Fire is viable.

Overview of the Methodology

The research methodology focused initially on a review of relevant literature and government documents. An emphasis was placed on scholarly journal articles, fire service resources (e.g., Executive Fire Officer Program applied research projects), and industry-specific journals. Additional perspectives were gleaned from the researcher's experience as fire chief and chief executive officer for Boring Fire District No. 59 and key informants within Boring Fire and Clackamas Fire.

Based on information gathered from the literature review, the researcher devised a dualistic approach combining both qualitative and quantitative elements. To develop strategic guidance for the Boring Fire board of directors, the study sought to examine information specific to the Boring/Clackamas Fire experience and fire service administration practitioners' perceptions of collaborative services in Oregon. To obtain the information about the primary concern, the Boring/Clackamas Fire experience, the researcher performed a phenomenological study utilizing a carefully selected sample of participants. The researcher interviewed eight individuals currently or formerly associated with Boring Fire and/or Clackamas Fire.

The second component of the research, fire service practitioner's perceptions of collaborative services, the researcher utilized a quantitative approach to obtain input from outside of the Boring Fire and Clackamas Fire agencies. A descriptive survey was used to gather data and gauge opinions on what kind of agencies enter collaborative service agreements and perceptions on the outcomes and desirability of such agreements.

The researcher used inductive reasoning and drew inferences about the impacts not defining outcomes and end points of significant cooperative services would have on other Oregon fire protection agencies.

Methods of Achieving Internal and External Validity

The researcher articulates to the reader details about the process and the participants. This disclosure serves to focus the study's external validity and enhance its internal validity. The project's applicability to certain geographical areas, organizations of certain sizes or types, etc., this disclosure aids in validating the project for those that participated. Additionally, the researcher disclosed his position within Boring Fire District and subsequent proximity to the research topic.

Delimitations and limitations

The researcher refined the scope of the project by determining several delimitations and limitations. The researcher did not involve himself in any data unrelated to answering the above guiding questions. Literature concerning interstate or international collaboration was not reviewed as the relevance of interstate and international agreements to this study would be difficult to ascertain given the scope of the problem. This study did not pursue populations outside of Oregon as to reduce the variability in factors (e.g., economics, legislation, geography) that would influence respondents' experiences with collaborative services.

The limitations of the research are several-fold. Limitations include the timeframe of the study, the researcher's capacity for the project, and the number of agencies that have entered, or are considering entering, significant cooperative services. Due to time limitations associated with this study, it was decided to target only senior fire service practitioners to receive the descriptive survey on interlocal collaboration. Fire chiefs and other chief officers are the organizational leaders and senior managers in the fire service. Those individuals are responsible to instill the vision of the organization and provide leadership towards that vision. Therefore, their opinions regarding interlocal collaboration are critical in this study. The dualistic nature of the research

consisting of qualitative and quantitative methodologies, may lessen the findings applicability to as broad a spectrum of fire service agencies as a solely quantitative study may present.

Data Collection Plan Overview

This project utilizes a hybrid approach of qualitative and quantitative analysis. The qualitative data collection of the study consisted of key informant interviews and review of organizational documentation. The quantitative data collection was accomplished through the use of surveymonkey.com with a questionnaire delivered to most of the county fire defense board chiefs for distribution to their participating agencies.

Summary of Research Process

Key informants were selected based on their position as an elected official or chief officer for either Boring Fire or Clackamas Fire during the inception of the current collaborative services agreement or if they were currently involved in the collaborative services or policy decisions. The pool of individuals to be interviewed was further refined based on the degree of their involvement with the collaborative services. Some individuals were able to provide additional documentation concerning the development of the current collaborative services agreement or information compiled on the ongoing discussions about furthering the service agreement. The researcher originally intended to interview two key informants, the former fire chief of Boring Fire and a former deputy chief with Clackamas Fire that served as Boring Fire's operations chief for six months, but the researcher was unable to finalize a time for interviews with either.

Key informant interviews were unstructured due to disparate nature of the informant pool (i.e., elected officials versus professional administrators) and the familiarity of the researcher with the key informant's involvement. Notes were taken during interviews and during review of organizational documentation. While preferable to the researcher and validity-enhancing,

interviews were not recorded and transcribed. This was due to the time constraints of the study and the estimated time requirement to transcribe the interviews and incorporate the results into the study.

A link to an online questionnaire, via surveymonkey.com, was emailed to county fire defense board chiefs for completion and distribution to their fire defense board participating agency representatives. The list of fire defense board chairs was obtained from the Oregon Fire Chiefs Association website and reconciled with the Oregon State Fire Marshal website's roster of the same. Neither list provided email addresses for the chairs (agency name and phone numbers only) and the names listed on each roster were not consistent between rosters. The researcher identified email addresses through his personal contact list, fire agency websites, and phone calls to the agencies when necessary. The fire defense board of each of the following counties were sent the an introductory email with a link to the survey: Baker, Benton, Clackamas, Columbia, Crook, Curry, Harney, Hood River, Jackson, Josephine, Klamath, Lincoln, Linn, Marion, Multnomah, Tillamook, Umatilla (includes Gilliam and Morrow counties), Wasco, Washington, and Yamhill. The purpose of the study was included in the email as was the disclosure of the researcher's position as the fire chief of Boring Fire District No. 59 and that the study was undertaken as his master's degree capstone project.

The Interlocal Collaboration questionnaire was composed of twenty questions seeking responses to 53 inquiries. The first two questions describe the respondent's position and tenure. Questions three through eight gather information about the respondent's organization. The ninth question qualifies the respondent for the remainder of the survey if there was an affirmative reply to the consideration or implementation of collaborative services with another fire service agency. Respondents answering with "Strongly Agree" or "Agree" were offered the subsequent

questions; respondents answering “Neutral”, “Disagree”, or “Strongly Disagree” were finished with the survey.

Data Analysis

The multiple method approach to the research necessitates multiple methods for data analysis. The results of the key informant interviews and researcher observation are analyzed in a process typical of phenomenological studies (e.g., Creswell 2007, Leedy and Ormrod 2013). Under this process, the qualitative data were: 1) separated into relevant information, 2) segments of relevant information were grouped into “meaning units”, 3) identified divergent perspectives, and 4) a composite of the experience was constructed. The quantitative responses were collected in Surveymonkey and then the data was exported to Microsoft Excel (Home and Student 2010). The data were counted and percentages assigned to each single response data collection point. Data were evaluated using cross-tabulation and relevant results are discussed in the results and findings section.

The following results and findings are derived from the data collected through the multiple method research design. The multiple method approach utilized quantitative data utilizing surveymonkey.com to reach fire chiefs throughout Oregon and qualitative data sourced from key informants associated with Boring Fire and Clackamas Fire.

Results and Findings

A multiple method approach was used to allow for the combining of qualitative and quantitative data. This dualistic approach is intended to allow for a more holistic analysis of the research question than either method would afford independently. Following the separate data results are the significant findings resulting from amalgamating the qualitative and quantitative findings.

Qualitative Data Results

The key informants each have a unique perspective that contributes to this study. The interviews were semi-structured to enable the informants to develop and focus their thoughts as is important in phenomenological studies (Leedy and Ormrod 2013). The results and findings of the qualitative data collection is presented and discussed under the relevant research questions: considerations and choices when entering interlocal agreements; factors affecting the success of interlocal agreements; and, transaction costs and processes of interlocal agreements. The key informants were: Doug Branch, former BFD fire chief; Chris Olson, current BFD elected official; Les Otto, former BFD elected official; Jim Syring, current CFD chief officer; Don Trotter, current CFD elected official; Andy Welk, current BFD chief officer; and Scott Weninger, former chief officer for CFD and BFD. Included in the qualitative data results are the researcher's personal observations.

Considerations and choices when entering interlocal agreements

The results of the interviews and personal observations were consistent with the considerations and choices found in the literature review and focused on of politics, financial, and nonfiscal motivations. Boring Fire's current board of directors was largely determined by the politics of pursuing greater collaboration with Clackamas Fire. Three of the five directors

changed during the last election and the successful candidates were all supported by the employee's union. Former BFD director Les Otto shared that he knew someday Boring Fire would be part of a larger agency but that he preferred it be with partners more similar to Boring (i.e., Sandy and Estacada fire districts) than Clackamas Fire. To this end, he sought opportunities to slow down the process of merging with CFD in order to provide time for opportunities with other agencies to develop.

All key informants discussed a 2003 feasibility study that Boring Fire participated in with Sand Fire and Estacada Fire (both similarly sized to Boring Fire). This study was conducted, recommendations offered, and few of the recommendations were acted upon. Boring Fire approached Estacada Fire and Sandy Fire again in late 2012 and early 2013 and sought their participation in a feasibility study. Both declined which left only BFD and CFD participating in the study.

Director Trotter (personal communication, February 5, 2014) emphasized that opportunities for efficiency and effectiveness gains for each agency should be of primary concern for both agencies when considering greater collaboration. The feasibility study that ESCI completed opines that each agency, to differing degrees, would need to seek additional revenue in the forms of local option levies or bonds in order to sustain current service levels. Directors Trotter and Olson and former director Otto all shared a concern for increasing taxes and the need to find ways to limit any need for seeking additional revenue. Administrations for each district continue to analyze their budgets and programs to determine the impacts an operational consolidation would have on financial forecasts.

The chief officers for both organizations focused on nonfiscal motivations for collaboration. The impetus for the current collaborative services was an informal meeting

between CFD Deputy Chief Jim Syring and BFD Division Chief George Eisert regarding opportunities with the organizations' volunteer programs (personal communication; Branch, Syring, Welk, Weninger). Standardization of practices and equipment was universally supported as a desired outcome of the collaborative services, but individuals recognized that there remain circumstances unique to each agency that, until an operational consolidation or legal integration occurs, should not be standardized.

Factors affecting the success of interlocal agreements

Trust, relationship, and clearly defined outcomes are all important factors in the success of collaborative services (Cook, Hardin, & Levi 2005, Warm 2011, Zeemering & Delabbio, 2013). The key informant interviews confirmed that the local experience corresponds to the findings of the literature review. Chief Welk shared that the employees and volunteers were unable to trust the previous Boring Fire board of directors because it appeared that actions were inconsistent with prior actions or statements. This lack of trust was, in part, responsible for the union backing candidates for the board of directors in the May 2013 election. After interagency committee members, the researcher has observed comments questioning the relationship between the agencies and the inconsistencies perceived between meetings. Chief Syring suggests that the prolonged process to reach the completion of the feasibility study and unclear shared vision of BFD/CFD's future has caused factions to begin forming and states, "It's not healthy… I don't see that there is any way we can go on." This sentiment has been observed by the researcher across the levels of Boring and Clackamas Fire is strongly tied to the lack of trust and lack of shared vision.

Former CFD/BFD operations chief, Scott Weninger, was instructed by CFD to draft the interlocal agreement envisioned by Syring and Eisert (personal communication, February 26,

2014). During the interview, Chief Weninger stated that there were "probably lots of things" that he would redraft if given the opportunity but that, at the time, the language made sense to both parties. Chiefs Welk and Syring both noted that the lack of benchmarks and performance measures made evaluating the effectiveness of the ILA and any efficiency gains difficult. However, both also noted that additional services were listed that should be considered for future collaboration (several of which have been implemented). One outcome was identified by most informants and each indicated that it was known but not candidly discussed. That outcome is the eventual combining of both organizations into one. Otto knew it was a potential but "didn't want to think about it" and "push[ed] back" when CFD was moving too quickly with the idea of a conducting feasibility study (personal communication, February 27, 2014). Chiefs Welk, Branch, Weninger, and Syring all agreed that it was known but was not a prominent discussion point. But the chiefs did feel they shared that as a prospect and that the "future considerations" in the current ILA further point in that direction.

Transaction costs and processes of interlocal agreements

Oregon Revised Statute 190 provides for interlocal agreements between special districts and allows for the exchange of monetary and in-kind resources related to those interlocal agreements. Neither agency is authorized to receive a benefit greater than the cost. However, the complexities in determining the production or transaction costs leave opportunity for inequitable benefit. Chief Welk expects that if further engaging with CFD for services is not pursued that the costs for some of the services BFD currently receives would increase (personal communication, February 24, 2014). This is supported by an email the researcher received about current pricing of services. However, it is not that the organizations are not compliant with the state statute;

there is simply ample opportunity to apportion costs among a variety of factors (e.g., total budget, number of stations) that can significantly impact the cost for a service.

Boring Fire and Clackamas Fire conduct many logistical and administrative processes very differently and each of those processes has a different transaction cost. For example, Boring Fire chief officers question the applicability of CFD's supply delivery system to Boring Fire as BFD only has one staffed station and he has a difficult time justifying the expense of a delivery regularly truck going to a distant volunteer BFD station. These differences in process make continued collaborative efforts difficult but would be resolved if functioning as one agency under an operational consolidation interlocal agreement.

Survey Data Results

The quantitative data will be presented and discussed under the relevant research questions: considerations and choices when entering interlocal agreements; factors affecting the success of interlocal agreements; and, transaction costs and processes of interlocal agreements. This data will compare and contrast the qualitative results and identify trends, parallels, and contradictions between respondent's and their answers. The sample population consisted of 44 individuals that received an email invitation to participate. The emails were originally sent to twenty county fire defense board chairpersons for distribution to their participating agencies. The number of submissions equates to an average of 2.2 respondents per fire defense board; an average of two respondents per county (the Umatilla fire defense board includes Gilliam and Morrow counties). Following are tables and charts with the results of each survey question and associated findings.

Question 1: **What is your position?**		
Answer Options	**Response Percent**	**Response Count**
Fire Chief	68.2%	30
Assistant/Deputy Chief	15.9%	7
Battalion Chief	6.8%	3
Other (please specify)		
County Emergency Management	2.3%	1
Operations Chief	2.3%	1
Fire Marshal/Fire Administrator	2.3%	1
Captain/Duty Officer	2.3%	1

Table 1; N=44

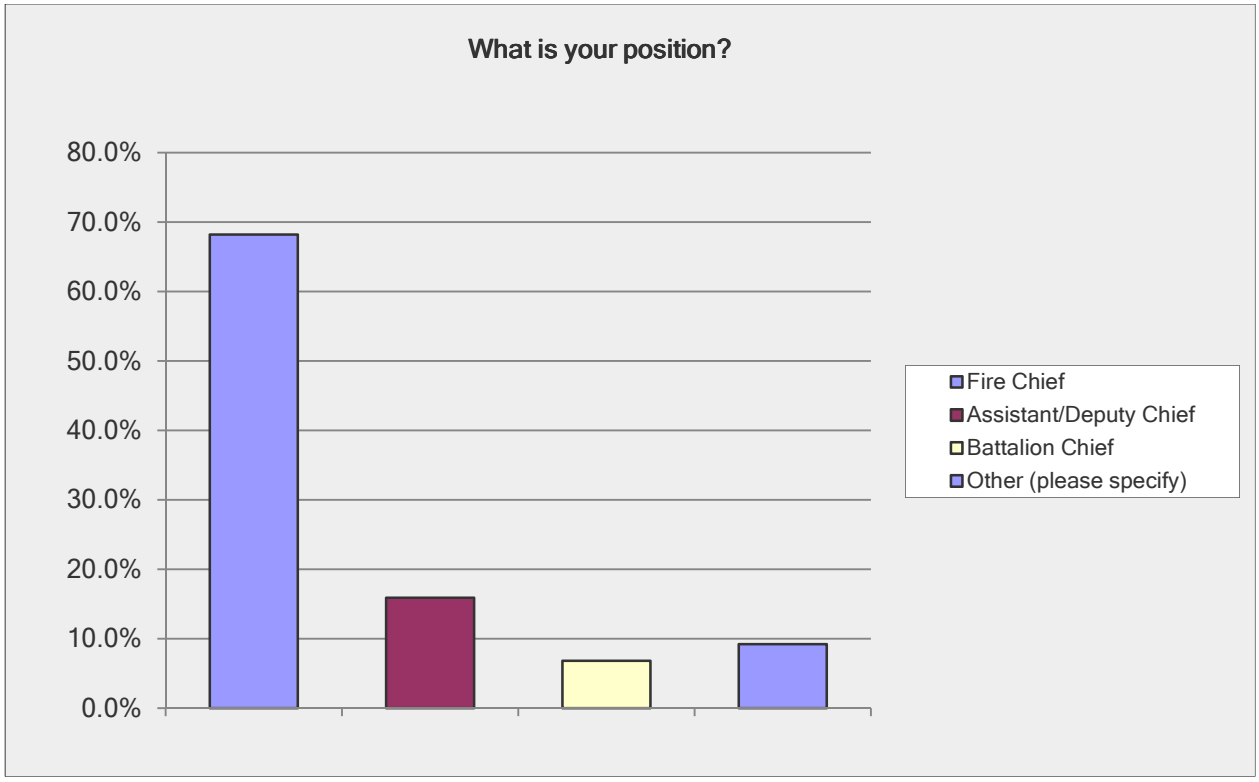

Figure 1; N=44

This survey was distributed to provide insight into cooperative service experiences and considerations from senior fire service administrators. Sixty-eight percent of the respondents hold the rank of fire chief and over 95% of the respondents are chief officers. The external validity of the study is strengthened with the correlation between the desired insight and the rank of respondents.

Question 2: **How long have you been in your current position?**		
Answer Options	**Response Percent**	**Response Count**
Less than three years	15.9%	7
3-5 years	18.2%	8
6-10 years	22.7%	10
11-15 years	13.6%	6
16 years or more	29.5%	13

Table 2; N=44

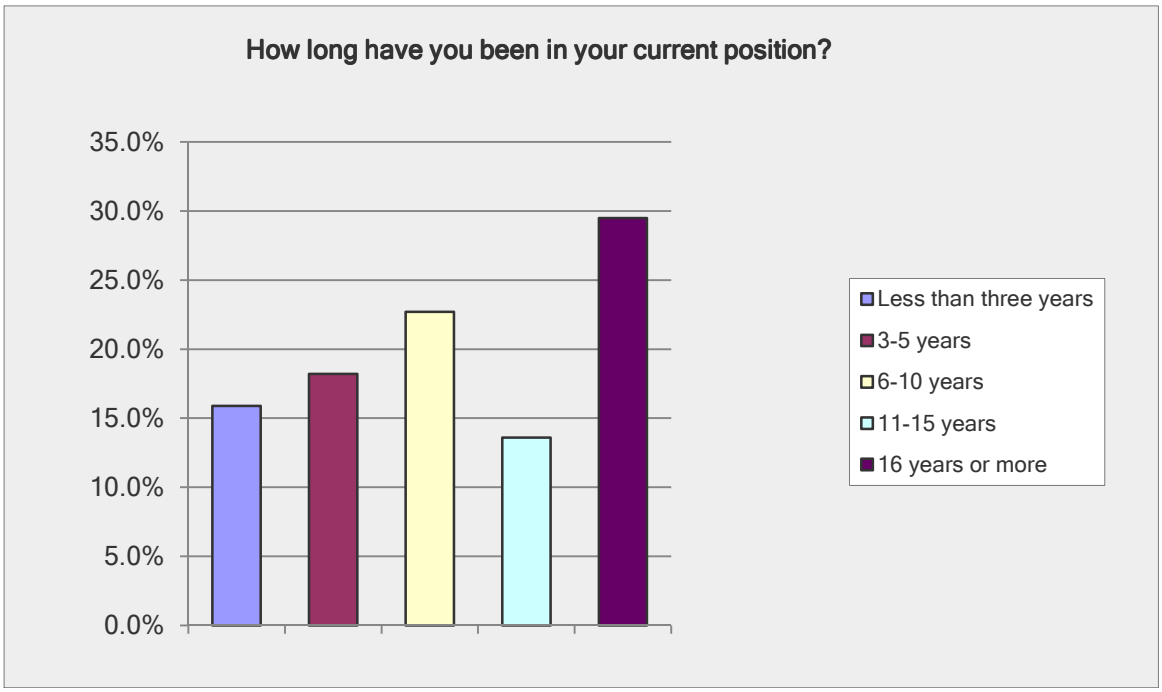

Figure 2; N=44

Seventy percent of respondents have held their current rank for at least six years. This tenure is significant to the study as the target population was senior fire officials. The preponderence of those with substantial time in rank adds to the external validity of the study.

Question 3: **Is your organization a fire department or fire district?**		
Answer Options	**Response Percent**	**Response Count**
Fire Department	21.4%	9
Fire District	78.6%	33
Fire Authority	0.0%	0

Table 3; N=42

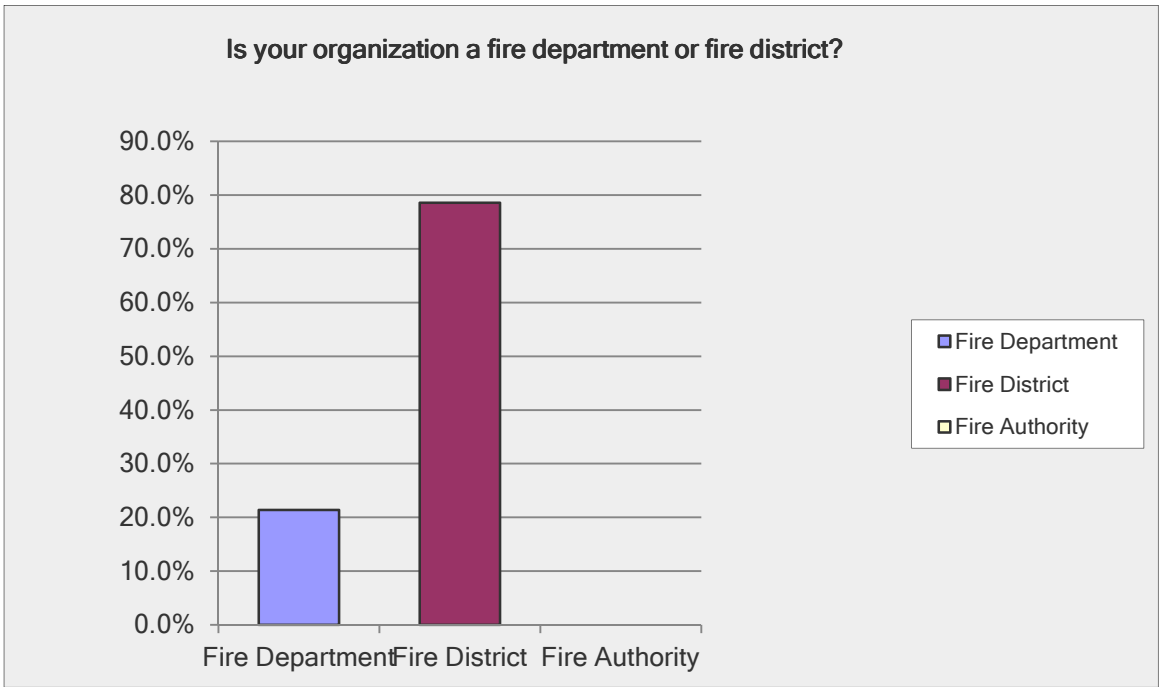

Figure 3; N=42

The nearly 80% of the surveys being completed by individuals from fire districts indicates there is strong external validity to the study. Both Boring Fire District and Clackamas Fire District are special districts and not departments under an incorporated municipality.

Question 4: **What is the staffing configuration of your agency?**

Answer Options	Response Percent	Response Count
Career	14.0%	6
Combination (primarily career)	2.3%	1
Combination (primarily volunteer)	60.5%	26
Combination (roughly equal career and volunteer)	14.0%	6
Volunteer	9.3%	4

Table 4; N=43

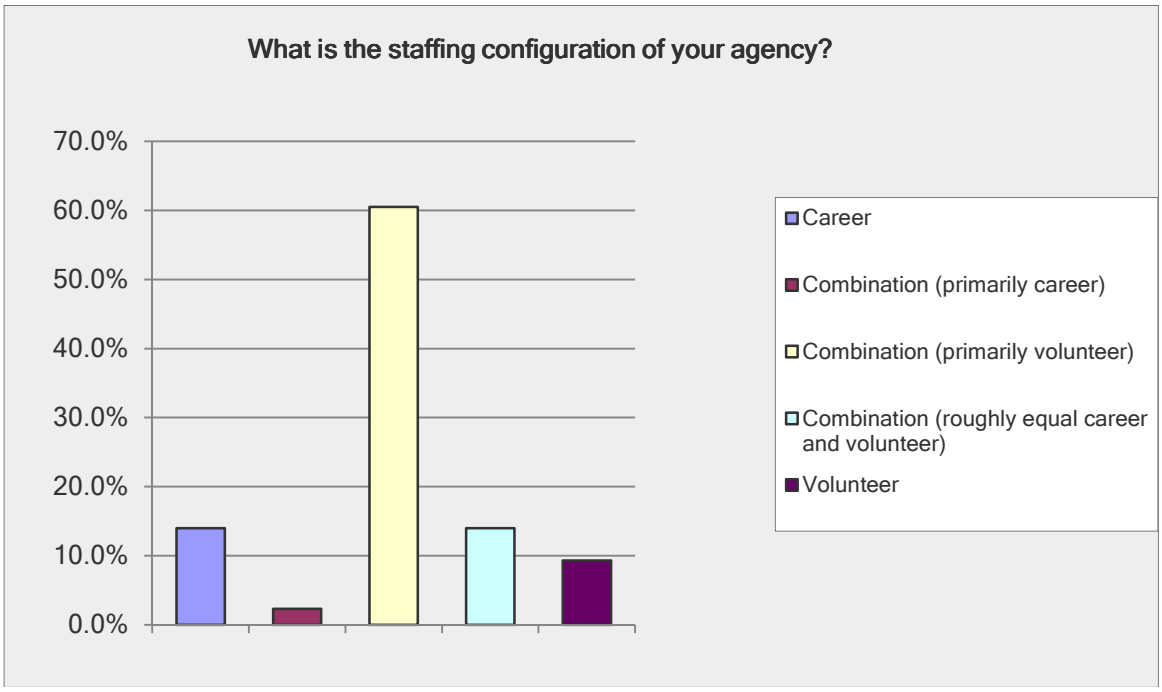

Figure 4; N=43

Boring Fire District No. 59 has seventeen career firefighters and approximately 100 volunteers. The external validity of this study is strengthened with more than 60% of the respondents working for primarily volunteer combination agencies.

Question 5: **How many line personnel (career or volunteer) does your agency have?**

Answer Options	Response Percent	Response Count
Less than 20	27.9%	12
21-40	32.6%	14
41-60	20.9%	9
61-80	14.0%	6
81-100	4.7%	2
100+	0.0%	0

Table 5; N=43

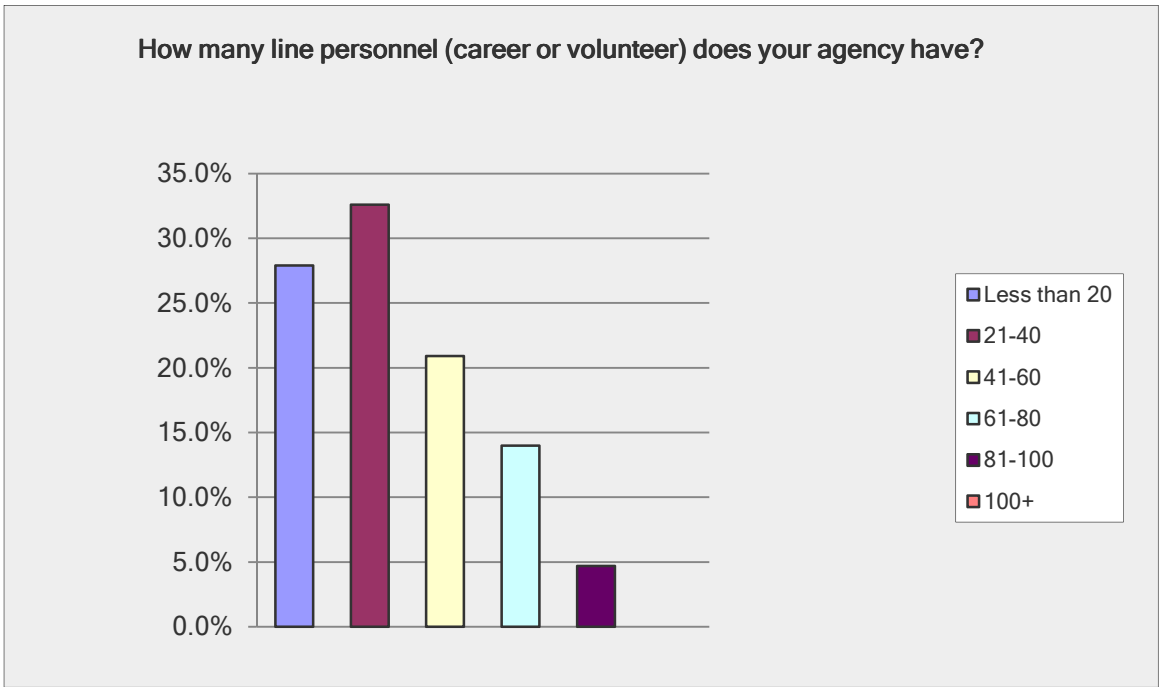

Figure 5; N=43

The staffing for agencies was skewed towards the lower numbers of personnel. The impact on the external validity of the study is uncertain. Boring Fire and Clackamas Fire are unique in the joint volunteer force. Without that collaborative effort in place, Boring Fire would likely have "41-60" line personnel rather the "100+" it currently has on the roster.

Question 6: **How many stations are in your jurisdiction?**

Answer Options	Response Percent	Response Count
0-3	65.1%	28
4-6	25.6%	11
7-9	9.3%	4
10-12	0.0%	0
13-15	0.0%	0
16+	0.0%	0

Table 6; N=43

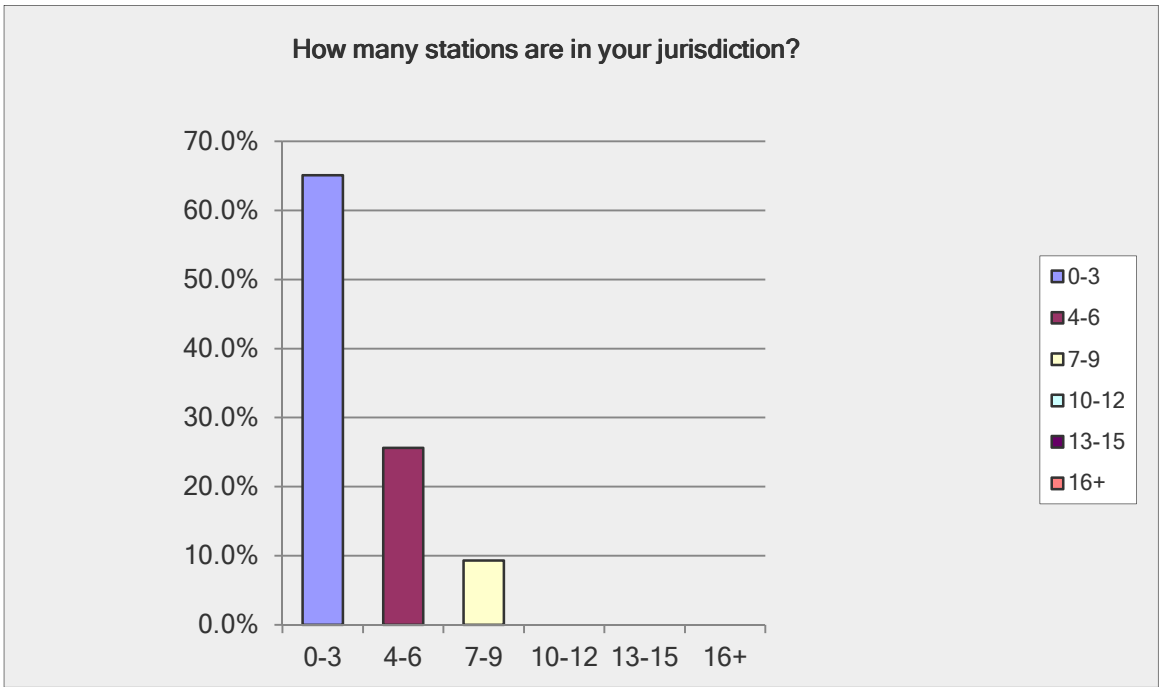

Figure 6; N=43

Boring Fire has three stations and its volunteers staff two additional stations for Clackamas Fire. This skewing of stations to the lower numbers is representative of the Oregon fire service. There are only four agencies in the state with more than ten fire stations. This strengthens the external validity of the study.

Question 7: **What is the square mileage of your jurisdiction?**

Answer Options	Response Percent	Response Count
0-9	7.0%	3
10-19	7.0%	3
20-29	9.3%	4
30-39	2.3%	1
40-49	9.3%	4
50-74	16.3%	7
75-99	11.6%	5
100-149	25.6%	11
150-199	2.3%	1
200+	9.3%	4

Table 7; N=43

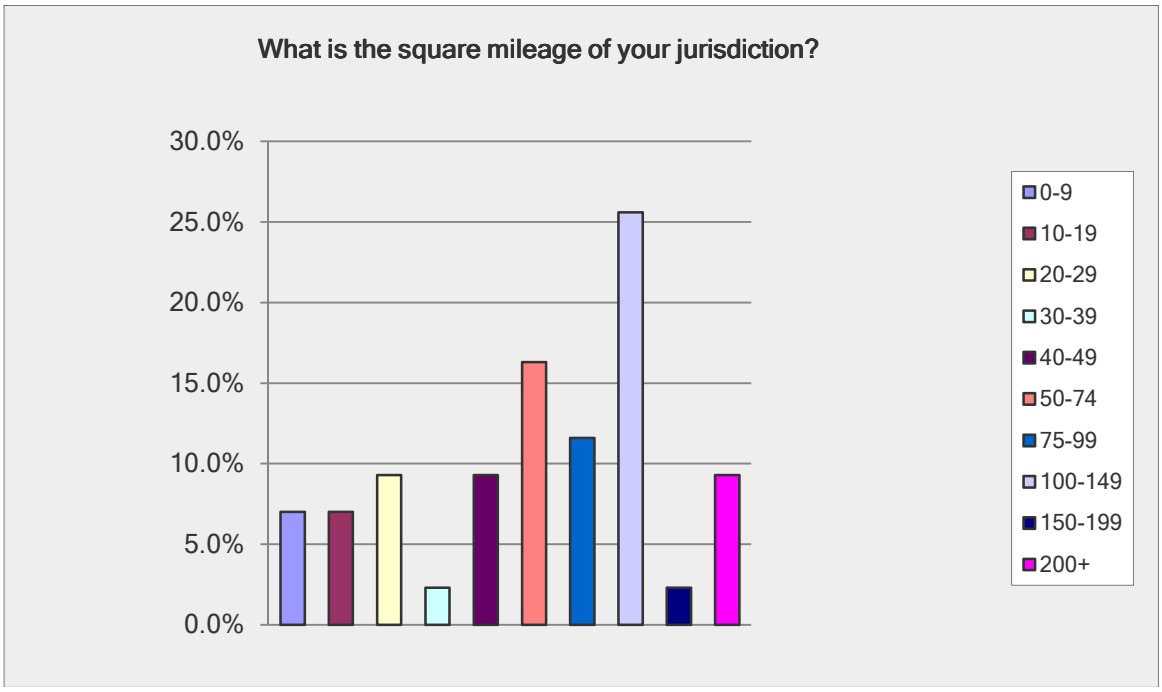

Figure 7; N=43

The square mileage of the jurisdictions had an inconsitent distribution pattern. Respondents served in geographically small agencies and large agencies. Each agency has its unique circumstance and the square mileage responses add or detract little to the external validity of the study.

Question 8: **What is the population in your jurisdiction?**

Answer Options	Response Percent	Response Count
Less than 5,000	25.6%	11
5,000-9,999	16.3%	7
10,000-19,999	16.3%	7
20,000-34,999	23.3%	10
35,000-49,999	4.7%	2
50,000-74,999	9.3%	4
75,000-99,999	0.0%	0
100,000-149,999	4.7%	2
150,000-199,999	0.0%	0
200,000+	0.0%	0

Table 8; N=43

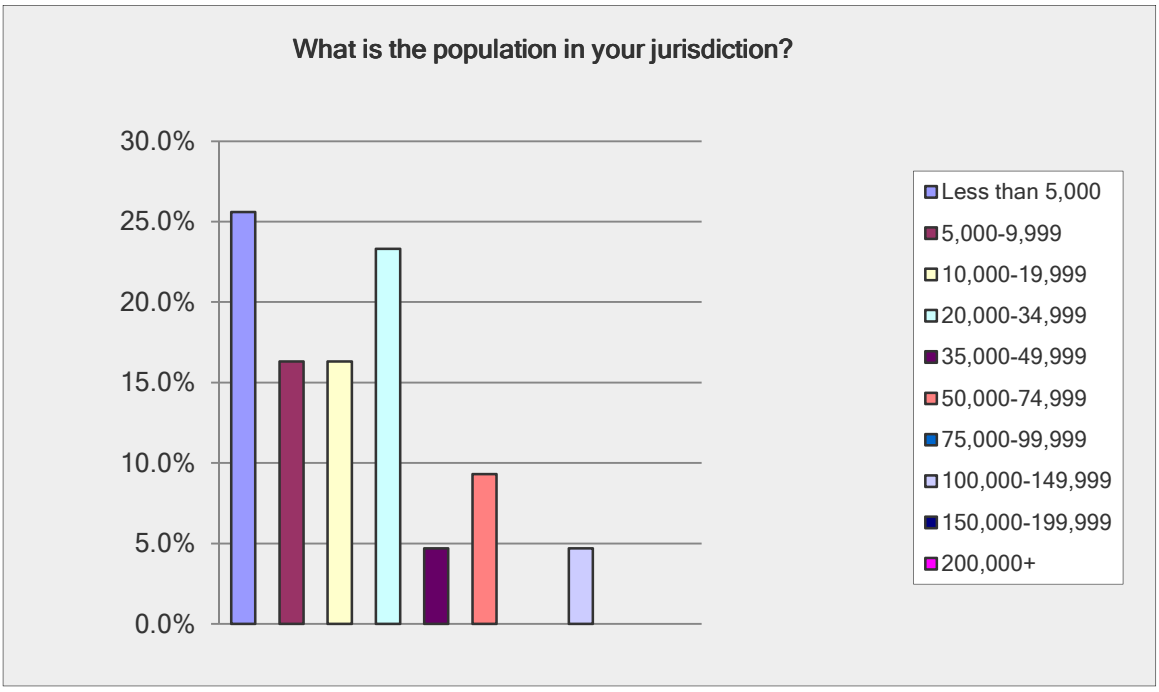

Figure 8; N=43

Population statistics are one factor that can be used to predict and compare service demands between agencies. The results of this question enhance the external validity of this study as Boring Fire has a population of 18,500.

Question 9: **Excluding typical mutual aid agreements, has your agency considered or implemented collaborative services with another fire service agency?**

Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Rating Average	Response Count
11	14	13	4	1	2.30	43

Table 9; N=43

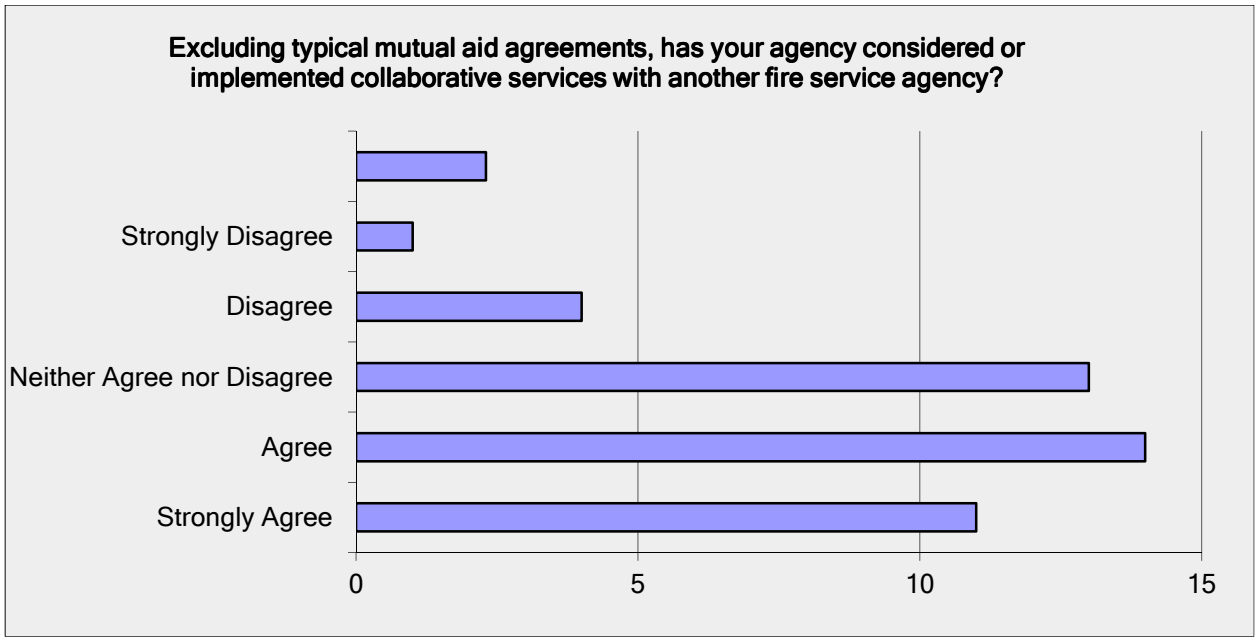

Figure 9; N=43

This question was the qualifier to continue on participating in the survey. As the study seeks senior fire officials' experiences with collaborative services, it was necessary to exclude those that did not participate in collaborative services. This removed nearly half of the respondents (n=18) but it provides for strong external validity with subsequent questions.

Question 10: **If you work for an agency that has already undergone a contract for service or legal integration, are you originally from the district providing services or the district receiving the majority of the shared services?**

Answer Options	Response Percent	Response Count
District providing services	81.3%	13
District receiving services	18.8%	3

Table 10; N=16

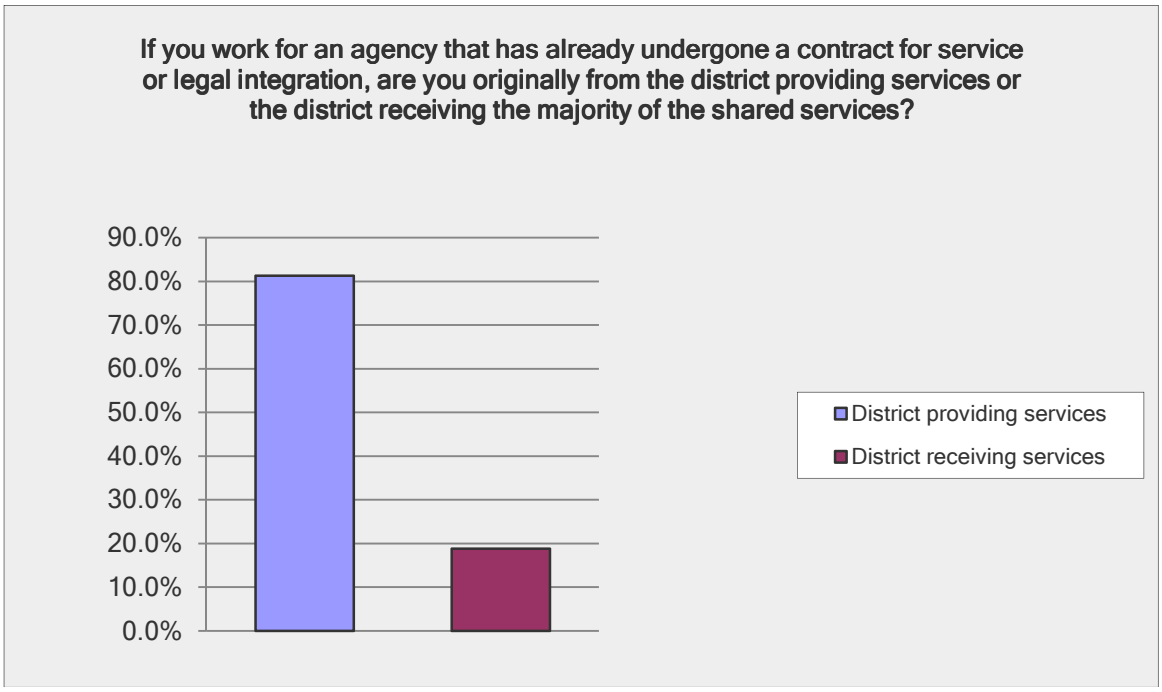

Figure 10; N=16

Agencies that participate in cooperative services must either provide services, receive services, or provide and receive services. Krueger and McGuire (2005) suggest that the degree to which an agency provides or receives services is indicative of the influence the agency has on the relationship. As this data reveals that a large majority of respondents provide the majority of services. While this reduces the external validity to the Oregon fire service as a whole, it imparts a stronger external validity to those organizations that provide the majority of cooperative services.

Question 11: **How long has your agency been operating under an agreement for services with another agency?**

Answer Options	Response Percent	Response Count
Less than 3 years	35.7%	5
3-5 years	14.3%	2
6-10 years	14.3%	2
11-15 years	0.0%	0
16 years or more	35.7%	5

Table 11; N=14

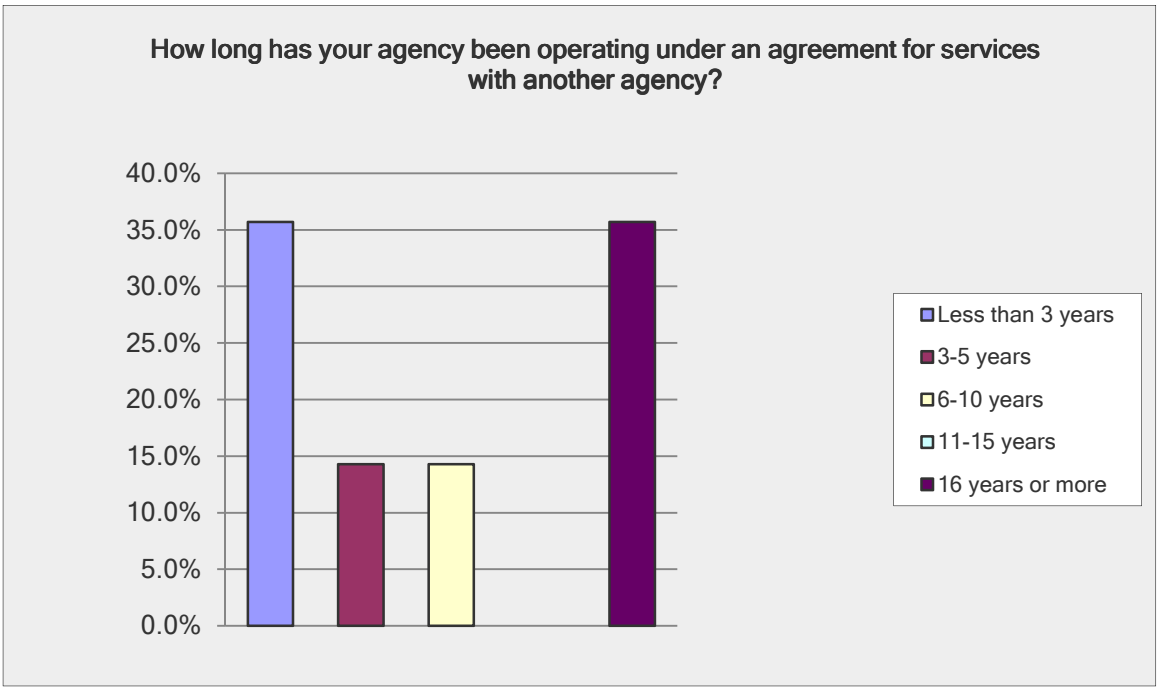

Figure 11; N=14

The results of this question suggest that many ILAs are relatively new (less than three years) while a comparable number of agencies have had long-standing (sixteen years or more) collaborative services. Boring Fire's most substantive agreement has been in place for less than three years. While not a prime influence on the extranal validity of the study, the disparate duration of the interlocal agreements likely is not a detractor either.

Question 12: **While developing an interlocal agreement for collaborated services, did your agency identify:**

Answer Options	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Response Count
Interests	4	8	2	0	0	14
Bench marks	1	8	4	0	0	13
Performance measures	1	7	6	0	0	14
Outcomes	2	10	2	0	0	14

Table 12; N=14

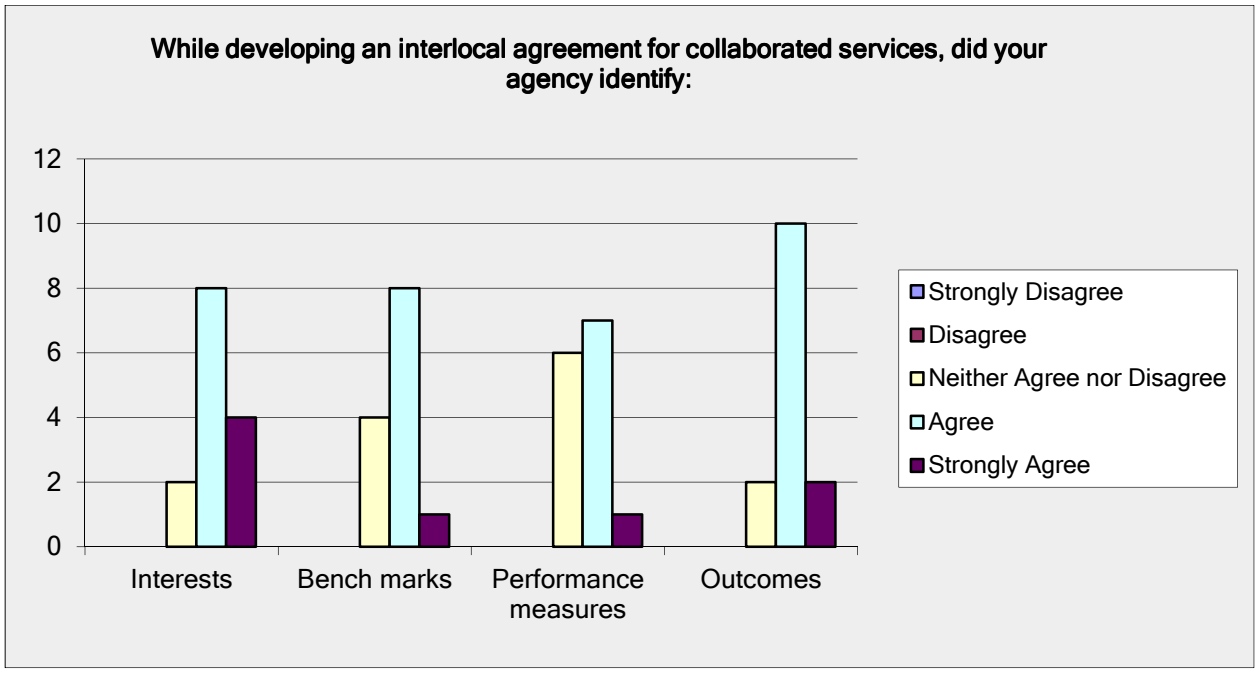

Figure 12; N=14

The frequent "Agree" responses align with the factors identified during the literature review as critical components for successful collaborative services. The experiences of the questionnaire respondents differs from that of the key informants and the author's personal observations. Several of the key informants (N=7) suggested that more time needed to be dedicated to identifying and developing the above considerations.

Question 13: **Your agency's interests were important to both agencies in developing collaborative services.**

Answer Options	Response Percent	Response Count
Strongly Agree	28.6%	4
Agree	50.0%	7
Neither Agree nor Disagree	21.4%	3
Disagree	0.0%	0
Strongly Disagree	0.0%	0

Table 13; N=14

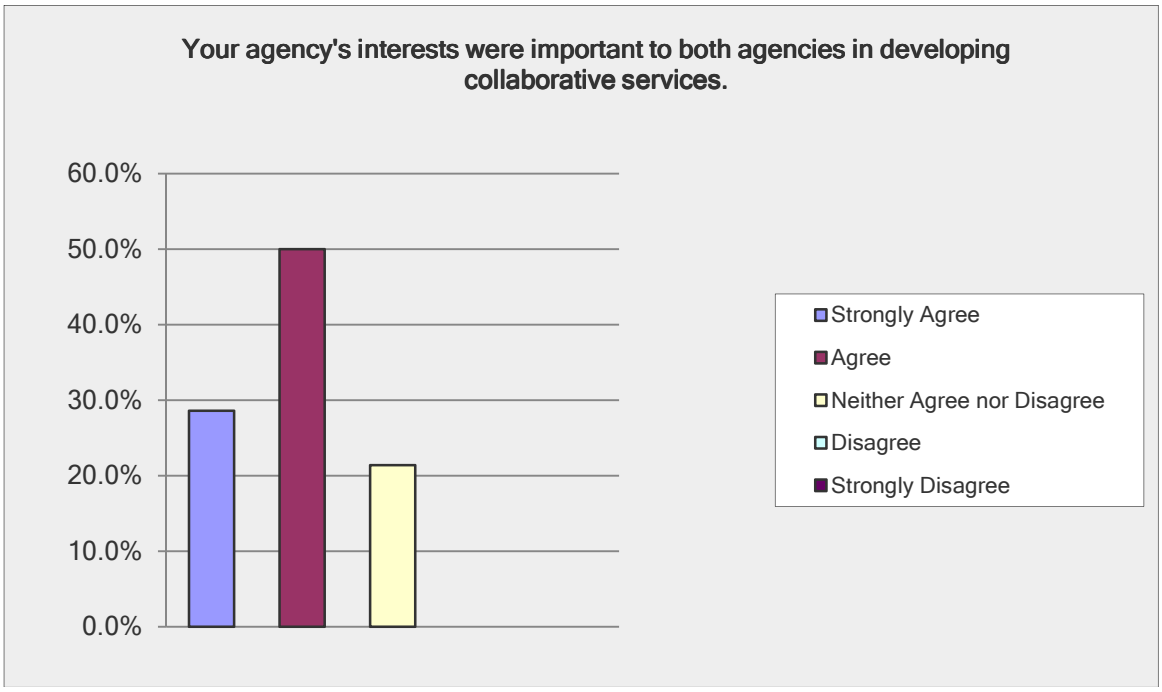

Figure 13; N=14

The respondents to this question coincide with the experiences of the key informants. Whereas key informants directly involved with the ILA development indicated strong agreement to this premise, individuals more distant to the energy and initial discussions, while not disagreeing, indicated less confidence that their agency's interests were important.

Question 14: **Identify each of the activities your agency collaborates with another agency to provide by indicating the extent to which each agency is primarily responsible for that activity.**

Answer Options	All in-house provision	Mostly in-house provision	Equal contribution	Mostly contracted out	All contracted out	Response Count
Fire Prevention	8	1	1	2	0	12
Logistics	7	2	3	0	0	12
Information Technology	4	3	4	2	0	13
Training	3	6	4	0	0	13
Facilities	6	3	3	0	0	12
Administrative services (e.g., finance, HR)	8	0	1	2	0	11
Administration/Overhead (e.g., sharing administrative chief officers)	10	0	0	2	0	12
Operations oversight (e.g., sharing battalion chief coverage)	8	2	0	1	0	11
Operations (e.g., volunteer or career firefighters working on apparatus regardless of agency)	6	3	2	1	0	12
Other (specify below)	1	0	1	0	0	2
Other (please specify)						3
Currently no agreement in place-all operations done in house						
Contracted out for fleet services						
Automatic aid for incidents at critical facilities						

Table 14; N=14

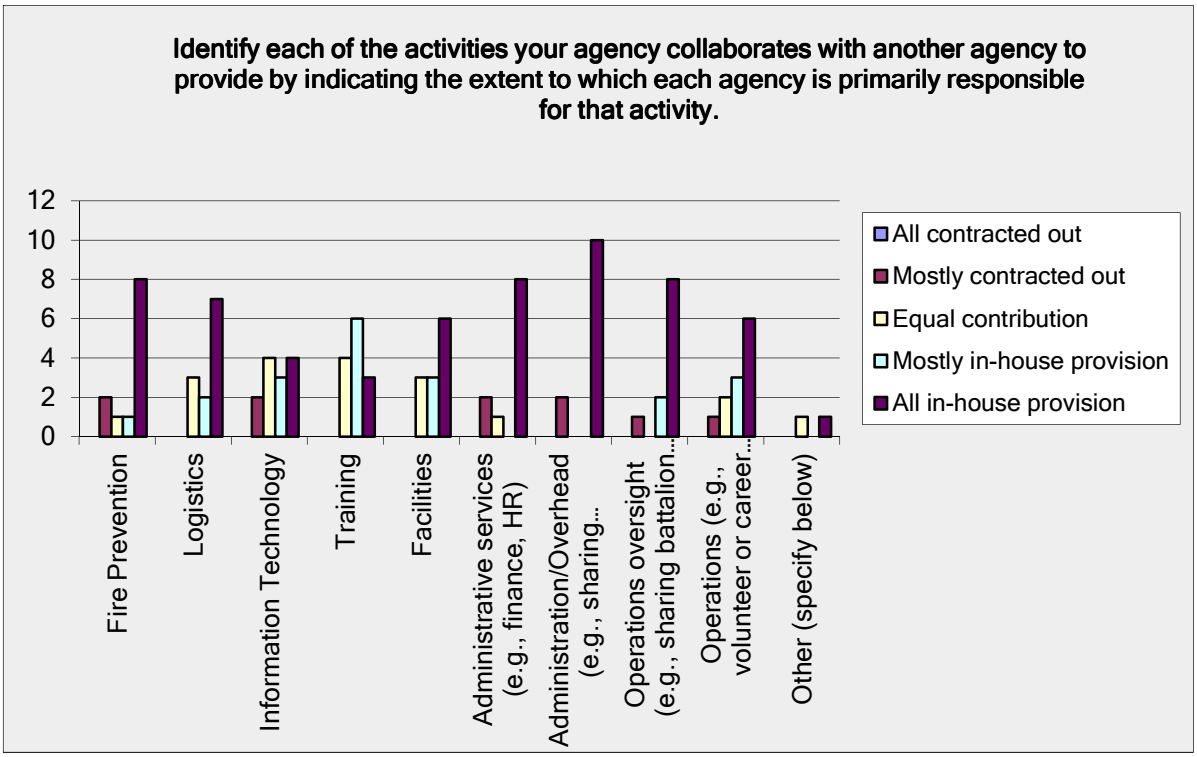

Figure 14; N=14

This question identified a range of options for collaborative services within the fire service. Respondents indicated what they participated in and how that service was provided. These results, with a majority of responses indicating “All in-house provision” or “Mostly in-house provision” aligns with the majority of respondents that indicated their agency provides most of the services.

Question 15: **Do personnel work at the other agency's facilities?**

Answer Options	Never	Rarely	Occasionally	Usually	Always	Response Count
Career firefighters	8	1	3	1	0	13
Volunteer firefighters	6	1	4	0	0	11
Administrative staff	10	1	0	0	0	11

Table 15; N=14

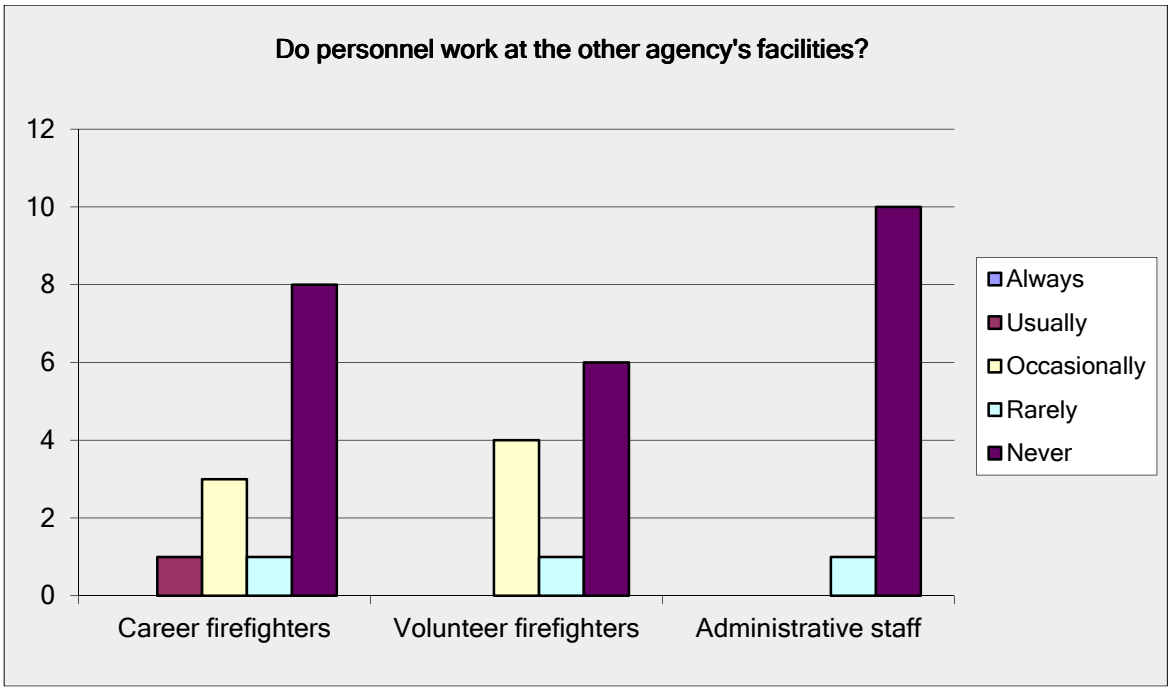

Figure 15; N=14

Career firefighters usually working at another agency's facility indicates a significant commitment to a relationship. It is rare that career firefighters work inside other agencies' facilities due to collective bargaining concerns. Boring Fire regularly staffs CFD's Pleasant Valley station and the volunteers staff two fire stations for Clackamas Fire. The difference between the BFD experience and the respondents indicates a deeper collaboration than some agencies experience.

Question 16: **How are the costs of service reconciled between agencies?**

Answer Options	Response Percent	Response Count
No exchange of in-kind services or remuneration	33.3%	4
All in-kind services	0.0%	0
Primarily in-kind services	8.3%	1
Approximately equal in-kind services and financial remuneration	8.3%	1
Primarily financial remuneration	8.3%	1
All financial remuneration	41.7%	5

Table 16; N=12

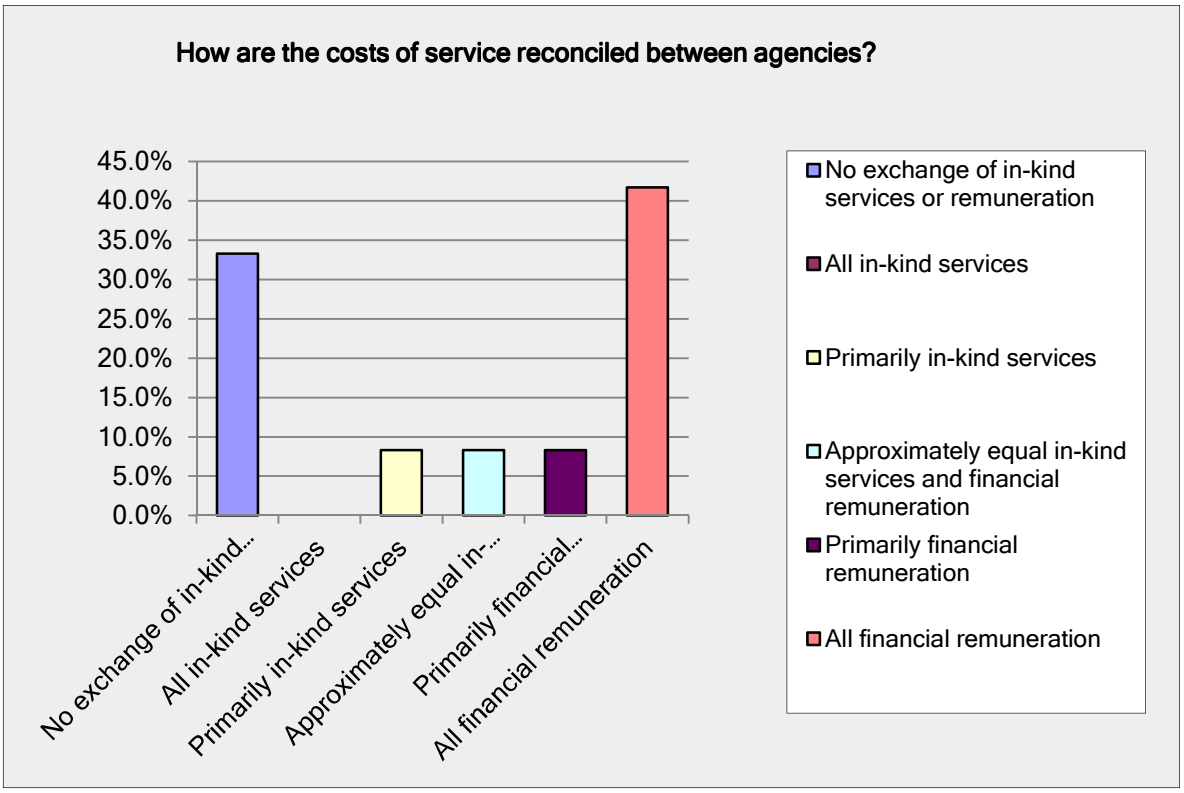

Figure 16; N=12

This question reveals that frequently agencies either do not account for transaction or production costs in collaborative services, or, that agencies tend to bill for service. The differentiation and impact of billing for service versus in-kind contribution may relate to the degree to which there is a partnership rather than a customer/provider relationship.

Question 17: **Did you agency have a sense of control in the relationship?**

Answer Options	Response Percent	Response Count
Strongly Agree	23.1%	3
Agree	61.5%	8
Neither Agree nor Disagree	15.4%	2
Disagree	0.0%	0
Strongly Disagree	0.0%	0

Table 17; N=13

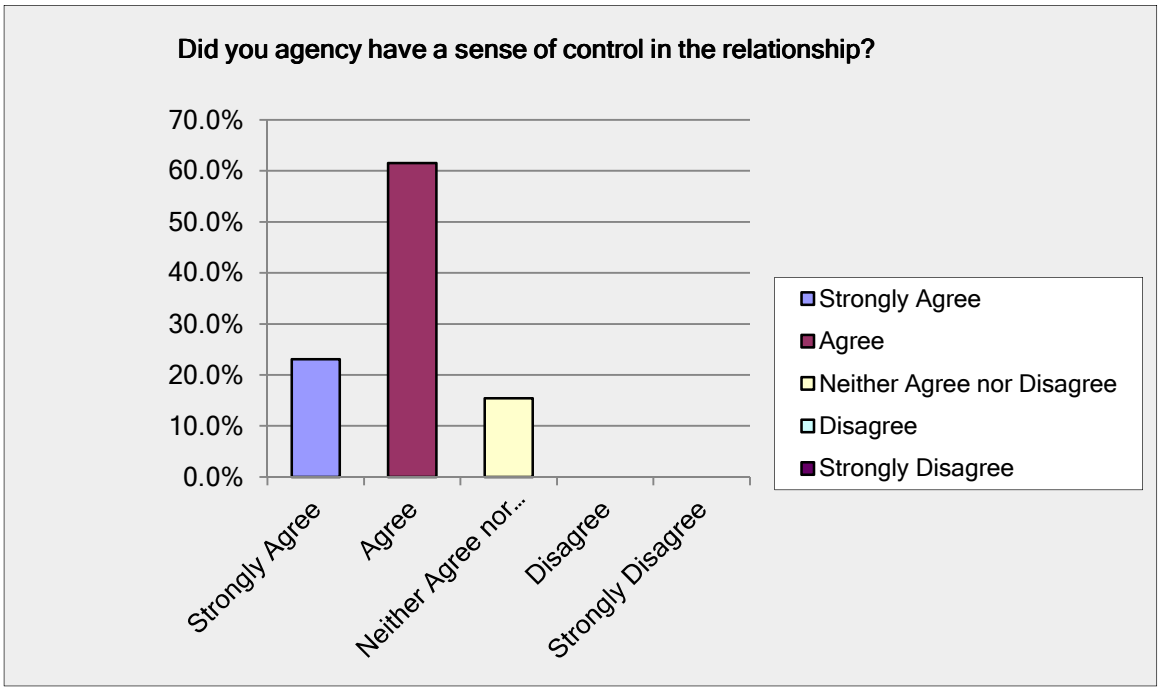

Figure 17; N=13

During a key informant interview, this question was asked and was interpreted differently than intended. The question was written to indicate whether or not their was a sense of self-determination in the relationship rather than being the driver and influencing another agency to capitulate to one's own interests. There this question's validity is in question and the responses provide less value to the study.

Question 18: **Have collaborative services resulted in?**

Answer Options	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Response Count
Additional Firefighters	1	4	3	2	1	11
Improvement in response performance	1	7	2	1	1	12
Additional Fire Prevention personnel	1	2	5	2	1	11
Increased expertise	0	5	6	0	0	11
Decreased cost	1	1	6	2	0	10
Desired outcomes	2	9	2	0	0	13
Improved service delivery	3	6	4	0	0	13
Reduced community risk	3	7	2	0	0	12

Table 18; N=13

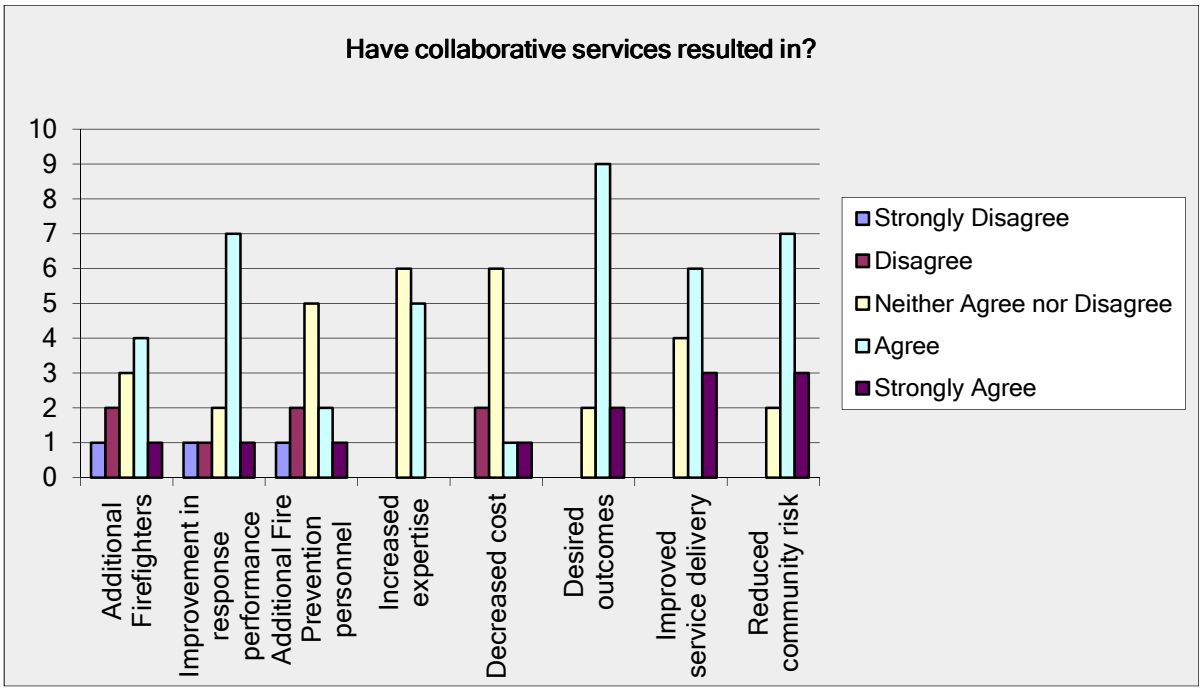

Figure 18; N=13

This is an imporant question and the respondents were asked to identify what changed with the implementation of collaborative services. Some of the key findings are that response performance, outcomes, serivce delivery, and reducing community risk typically realized gains from collaborative serivces.

Question 19: **Do you have interest or intent to:**

Answer Options	Strongly Agree	Agree	Neither Agree nor Disagree	Disagree	Strongly Disagree	Response Count
Renew existing agreement	4	6	2	0	0	12
Terminate existing agreement	0	0	3	5	3	11
Expand existing agreement (e.g., operational consolidation)	1	5	6	0	0	12
Pursue legal integration (e.g., merger, consolidation, annexation)	3	3	4	2	0	12

Table 19; N=13

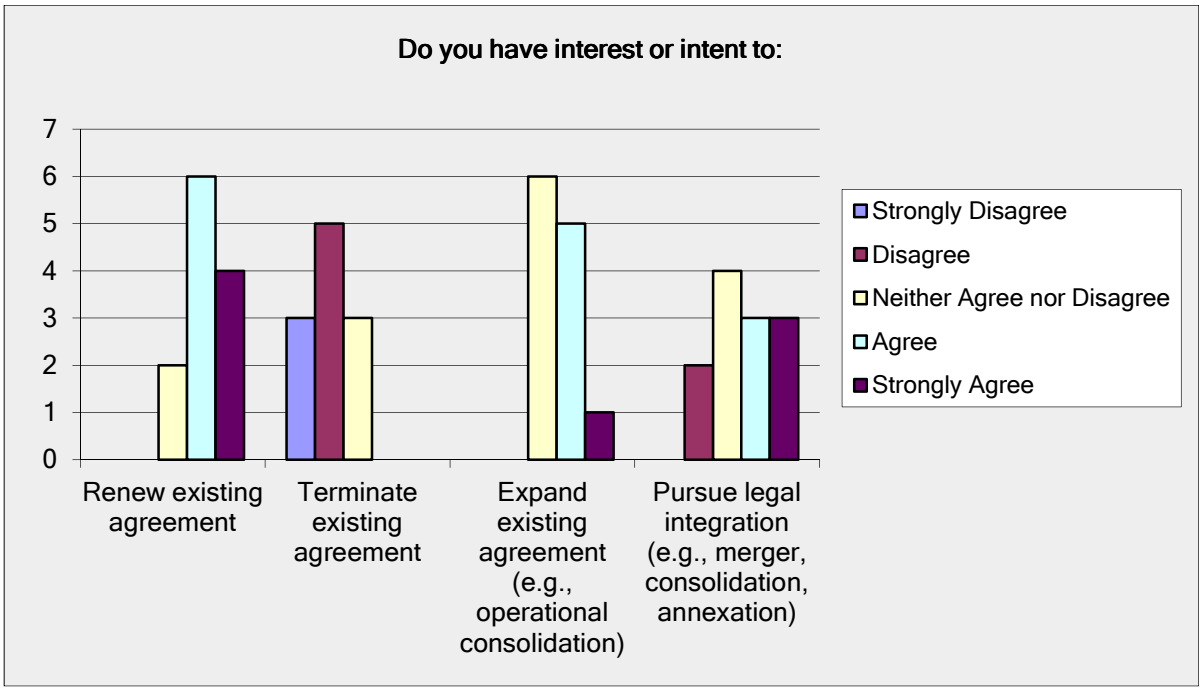

Figure 19; N=13

This question directly answers sub-question number three. The majority of respondents were interested in renewing or expanding the existing agreement and several indicated a desire to pursue legal integration. None indicated any desire to terminate the existing agreement. These results align with the literature review.

Question 20: **How important are the following considerations in deciding whether to renew, terminate, or expand an existing agreement?**

Answer Options	Extremely important	Moderately important	Neutral	Low importance	Not at all important	Response Count
Cost-savings	4	5	4	0	0	13
Utilization of slack resources (unused capacity)	2	5	5	0	1	13
Creation of slack resources	1	1	9	1	1	13
Revenue generation	2	4	5	2	0	13
Program preservation or implementation	2	9	2	0	0	13
Political environment	3	5	5	0	0	13
Cultural compatibility	4	5	4	0	0	13
Contract performance	3	6	3	1	0	13
Achieving desired outcomes	8	4	1	0	0	13
Ease of contract monitoring	1	9	3	0	0	13

Table 20; N=13

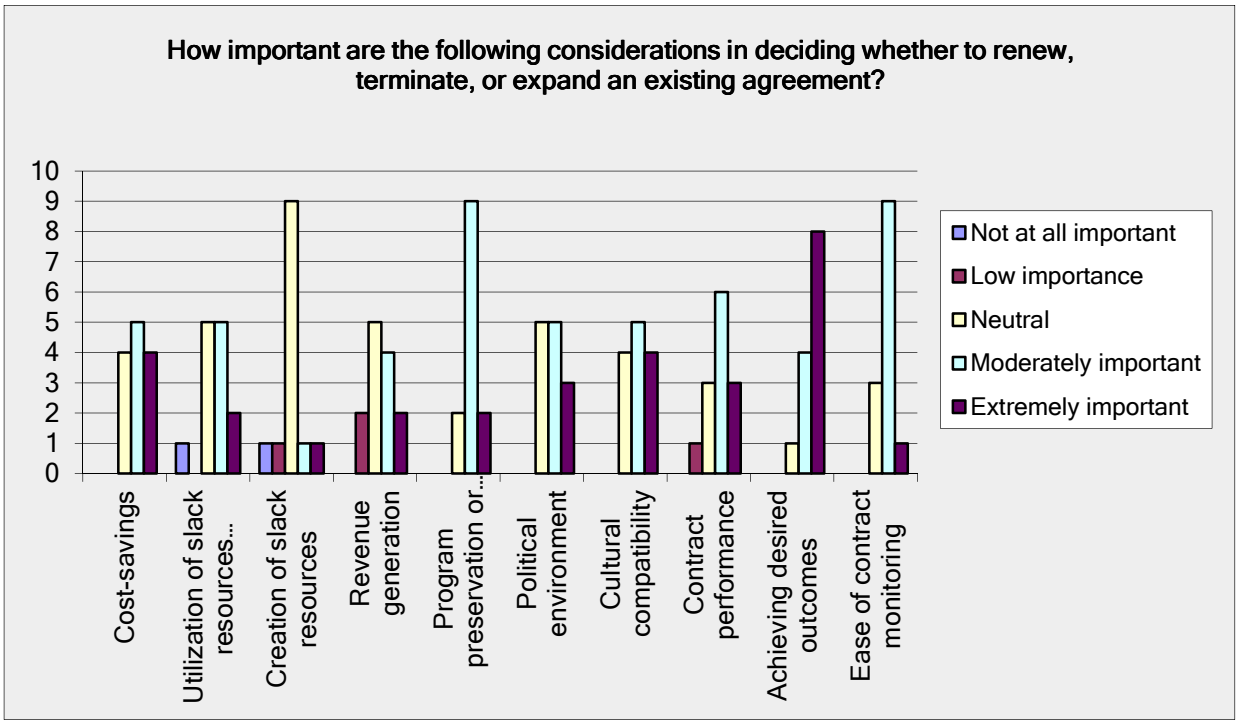

Figure 20; N=13

This is a second question concerning the desire to renew or terminate an agreement. This was subsequent to the general opinion question and intended to allow respondents to give an impromptu response to the prior question. The primary responses to note from Question 20 are the importance for "Program preservation or implementation" and "Achieving desired outcomes". Both of these factors are key drivers for ILA success (Zeemering & Delabbio 2013).

Significant Findings

Respondents indicated neutral to positive impacts of collaborative services in both the qualitative and quantitative studies. Those agencies reporting significant collaborative services were varied in their demographics and no agency characteristic was a predictor of agencies entering ILAs for significant cooperative services nor their experience under the same. Eighty-three percent of survey respondents indicate a desire to renew existing agreements. However, the chief officers and elected officials interviewed believe there needs to be significant modifications to the current BFD/CFD interlocal agreement. The elected officials suggest that if there are

efficiencies to be gained and service enhancements, that an operational consolidation is appropriate. The chief officers, perhaps due to their greater technical knowledge about industry response and service levels, are more definitive in stating that operational consolidation should be pursued. Politics are an important factor in determining the course of an organization; however, the study found that with an objective process and discussions based on facts, elected officials concerns transition from whether to implement collaborative services to how those services should be implemented. Cross-tabulation of the survey results reveal that when fire chiefs invested time in developing outcomes for an ILA and perceived achievement of those outcomes that there was a correlating interest level in expanding the interlocal agreement. Boring Fire and Clackamas Fire key informants believe that many positive gains have been made from the collaborative services, but that the degree to which we share services is now becoming burdensome to manage. Moving forward with an operational consolidation ILA is the preferred next step for most key informants.

However, as noted under data collection, BFD and CFD could enhance their relationship and work on building trust between elected officials, senior staff, and internal and external stakeholders. The data revealed that cost-savings while a prime impetus for collaborative services, is frequently not realized in fire service organizations. Elected and appointed officials need to be careful about over selling the benefits of collaborative services (Ruggini 2008).

The results and findings were achieved through analyzing qualitative and quantitative data. The phenomenological focus of this case study provided an intimate view of Boring Fire's present situation. The quantitative data provided for the validating the literature review findings applicability to the Oregon fire service and assists in providing future transferability of the BFD experience to other Oregon fire service organizations. However, the sample size for agencies

with significant cooperative service experience is small (N=14) and therefore is limiting in its external validity. The limited sample size also reduces the reliability of any cross tabulation findings. Notwithstanding the quantitative sample size, the contextualizing of the literature review, quantitative results, and qualitative results, the findings lead to lead to conclusions applicable to Boring Fire and other fire agencies and specific recommendations for Boring Fire's Board of Directors.

Conclusions and Recommendations

This study has provided the researcher with the background, results, and findings necessary for Boring Fire's fire chief to provide strategic guidance to the board of directors. The literature review and phenomenological and quantitative research were compared and contrasted seeking similarities, disparities, and significant findings related to the research question: should the Board of Directors support a policy of operational consolidation with Clackamas Fire District No. 1? Being the fire chief of Boring Fire, the researcher had the opportunity to then enhance the study by comparing and contrasting those arguments supporting or challenging the hypothesis that operational consolidation with Clackamas Fire improves Boring Fire's ability to serve its citizens.

The study proves the hypothesis to be true. Through an interlocal agreement for operational consolidation, Boring Fire is able to better fulfill its mission. Determining that all, not just one or two, of the three sub-hypotheses reinforces the validity of the main hypothesis. The literature review and key informants overarching concurrence that (sub-hypothesis 1) the existing interlocal agreement lacks fundamental elements found in successful agreements suggests that the current "Intergovernmental Agreement for Volunteer and Other Shared Services" demonstrates limited success and is not sustainable. Sub-hypothesis 2, management of programs under the existing interlocal agreement is more challenging than if an agency managed the same programs independently, was confirmed through the same literature review and qualitative and quantitative research. Operational consolidation with Clackamas Fire is viable (sub-hypothesis 3) as was determined during this study.

Based on the above conclusions, the researcher recommends that Boring Fire's Board of Directors support a policy of operational consolidation with Clackamas Fire District No. 1. The

researcher recommends this position because the status-quo relationship has proven to not be sustainable and operational consolidation will better meet the public demands of greater service and improved stewardship for the resources provided to government. Hence, the researcher provides to the board of directors a call to action.

Of the resources found in the literature review, Zeemering and Delabbio (2013) provide a succinct list of fundamentals necessary for successful interlocal relationships: leadership; trust, reciprocity, and transparency; and clear goals and measurable results. The results of this study support Zeemering's and Delabbio's platform. The board of directors needs to: 1. lead or support the fire chief in developing an interlocal agreement for operational consolidation; 2. actively pursue enhancing existing trust, balance interests and contributions in the relationship, and ensure openness and accountability of information; and 3. ensure that the contract is developed to include clear goals and measurable results. With the degree to which the organizations are already integrated, developing and implementing an operational consolidation ILA should be achievable within the next several months.

As there are natural breaks in the year to implement new processes and programs, the researcher recommends that the board of directors seek to sign the ILA by July 1, 2014 with an implementation date of no later than January 1, 2015. This provides the opportunity for each agency to develop the ILA while allowing time for other processes (e.g., annual budgeting, accreditation) to be successful. The January start date also provides ample time for each agency to develop and adopt supplemental budgets for the mid-fiscal year change. The development of the ILA is largely a first step in the new relationship.

The newly expanded relationship will need to be implemented in a manner that provides for its short-term and long-term success. The board of directors must ensure that the fire chief

jointly develops a plan for implementation with the Clackamas Fire District No. 1 fire chief. The board should regularly review the implementation plan as to provide oversight for the change. After beginning the operational consolidation, the boards of directors (BFD and CFD) must ensure that there is ongoing dialogue between the boards and between Clackamas Fire's staff and the Boring Fire board of directors. This will help assure that the ILA does not languish, but that regular involvement will aid in determining the agreement's success, developing alterations to the ILA, and provide opportunity to adjust the ILA due to environmental factors such as technological changes and economic conditions.

Boring Fire should adopt and pursue the following goals:

1) Enhance relationship with CFD1:
    a. Hold joint (BFD/CFD) board meetings bi-monthly (starting April 1) until contract implementation; semi-annually thereafter for the term of the ILA.
    b. Each of BFD's directors should informally meet and socialize with each of the CFD directors at least once prior to June 1, 2014.
    c. The BFD Fire Chief should facilitate at least two off-work events for senior staff to socialize prior to June 1, 2014.
2) Inform and include the community:
    a. In April 2015, conduct a public outreach campaign with the fire chief and a director meeting with at least seven community groups in Boring, Damascus, and Eagle Creek.
3) Enter Interlocal Agreement:

   a. By June 17, 2014, the BFD Board of Directors should adopt an ILA that includes clear goals and defined outcomes with an implementation date of January 1, 2015.

4) Ensure appropriate ILA oversight:

   a. Semi-annually (Mar/Oct), hold a joint (BFD/CFD) board meeting and ensure the ILA's continued relevance and applicability; receive reports on performance measures, effectiveness, and efficiency; and discuss the future of the BFD/CFD relationship

Scholars in the field of public administration have long recognized the importance of interlocal agreements in the delivery of public services (Andrew & Hawkins 2012, Chen & Thurmaier 2009, Zeemering 2008). Bringing the experience of academia in collaborative services, Oregon fire service practitioners' perspective, and the BFD/CFD experience begins to fill a void in the literature and provides the foundation for strategic guidance to Boring Fire. It is beneficial to note that there is no one administrative and operational model that is applicable to every fire service organization. However, Boring Fire has the opportunity to pursue a model of operational consolidation with Clackamas Fire. The experiences of the current relationship, efficiency gains, and anticipated service enhancements make an ILA for operational consolidation the best option for Boring Fire. Development and management of the BFD/CFD relationship and of the ILA will be critical to the success of the cooperative services and to the benefit of the community.

References

Andrew, S. A. & Hawkins, C. V. (2013). Regional cooperation and multilateral agreements in the provision of public safety. *The American Review of Public Administration*, 43: 460, doi: 10.1177/02765074012447676

Andrew, S. (2007). *Contract networks in emergency management: Institutional collective action framework*. Paper presented at the Workshop on Networks and Coordination of Fragmented Authority, February 16-17, Wakulla Spring, FL. Abstract retrieved from http://dmc.fsu.edu/papers/Workshop%20abstracts.doc

Benton, J. E. (2013). Local Government Collaboration: Considerations, Issues, and Prospects. *State and Local Government Review*. doi: 10.1177/0160323X13515683

Berman, E. M. & Korosec, R. L. (2005). Planning to coordinate and coordinating to plan: Evidence from local governments. *The American Review of Public Administration*, 35: 380, doi: 10.1177/0275074005280308

Blair, R. & Janousek, C. L. (2013). Collaborative mechanisms in interlocal cooperation: A longitudinal examination. *State and Local Government Review*, doi: 10.1177/016023X13511647

Burns, T. J. & Yeaton, K. G. (2008). *Success factors for implementing shared services in government*. Washington, DC: IBM Center for The Business of Government.

Carr, J. B. & Hawkins, C. V. (2013). The costs of cooperation: What the research tells us about managing the risks of service collaborations in the U.S. *State and Local Government Review*, 45: 224, doi: 10.1177/0160323X1350893

Carr, J. B. & LeRoux, K. (2005). "Which Local Governments Cooperate on Public Safety?: Lessons from Michigan". *Working Group on Interlocal Services Cooperation*. Paper 4. http://digitalcommons.wayne.edu/interlocal_coop/4

Chen, Y. & Thurmaier, K. (2009). Interlocal agreements as collations: An empirical investigations of impetuses, norms, and successes. *The American Review of Public Administration,* 39(5), 536-52, doi: 10.1177/0275074008324566

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches (2nd ed.)*. Thousand Oaks, CA: Sage.

De Lancer-Julnes, P. (2006). Performance measurement: An effective tool for government accountability? The debate goes on. *Evaluation*, 12: 219, doi: 10.1177/1356389006066973

Feiock, R. C. (2007). Rational choice and regional governance. *Journal of Urban Affairs*, 29(1): 47-63. Retrieved from http://vu6nt9nu4a.search.serialssolutions.com/?ctx_ver=Z39.88-2004&ctx_enc=info%3Aofi%2Fenc%3AUTF-8&rfr_id=info:sid/summon.serialssolutions.com&rft_val_fmt=info:ofi/fmt:kev:mtx:journal&rft.genre=article&rft.atitle=RATIONAL+CHOICE+AND+REGIONAL+GOVERNANCE&rft.jtitle=Journal+of+Urban+Affairs&rft.au=Richard+C+Feiock&rft.date=2007&rft.pub=Blackwell+Publishing+Ltd&rft.issn=0735-2166&rft.volume=29&rft.issue=1&rft.spage=47&rft.externalDocID=1215117131&paramdict=en-US

Feiock, R. C., Jeong, M. G., & Kim, J. (2003). Credible commitment and council-manager government: Implications for policy instrument choices. *Public Administration Review*, 63 (5), 616-625

Feiock, R. C. & Kim, J. (2000). Form of government, administrative organization, and local economic development policy. *Journal of Public Administration Research and Theory*, 11(1): 29-50

Hawkins, C. V. (2009). Prospects for and barriers to local government ventures. *State and Local Government Review*, 41: 108, doi: 10.1177/0160323X0904100204

Hilvert, C. & Swindell, D. (2013). Collaborative service delivery: What every local government manager should know. *State and Local Government Review*, 45: 240, doi: 10.1177/0160323X13513908

Holdsworth, Art, "The Business Case for Interlocal Cooperation" (2006). *Working Group on Interlocal Cooperation*. Paper 23. http://digitalcommons.wayne.edu/interlocal_coop/23

Kettl, D. F. (2002). *The transformation of governance: Public administration for the twenty-first century America.* Retrieved from http://0-site.ebrary.com.library.ggu.edu/lib/gguu/docDetail.action?docID=10021560

Kirchofer, E. (2011). Shared services presentation (video). *Clackamas Fire District No. 1*.

Krueger, S. & McGuire, M. (2005). "A transaction costs explanation of interlocal government collaboration" *Working Group on Interlocal Services Cooperation*. Paper 21.Retrieved from http://digitalcommons.wayne.edu/interlocal_coop/21

Kwon, S. & Feiock, R. C. (2010). Overcoming the barriers to cooperation: Intergovernmental service agreements. *Public Administration Review*, November/December 2010; 70, 6, 876

Leedy, Paul D. and Jeanne Ellis Ormrod. 2013. *Practical research: Planning and design* (10th ed.). Upper Saddle River, NJ: Pearson Education , Inc.

Perlman, B. & Benton, J. E. (2012). Going it alone: No survey data on economic recovery strategies in local government. *State and Local Government Review*, 44: 5S-16S.

Rosenbaum, A. (2006). Cooperative service delivery: the dynamic of public sector-private sector-civil society collaboration. *International Review of Administrative Sciences*, 72: 43, doi: 10.1177/0020852306061615

Ruggini, J. 2008. Setting the stage for intergovernmental cooperation. *Government Finance Review*, Feb 2008, 24(1), 55

Stevens, P. A. (2005). Assessing the performance of local government. *National Institute Economic Review*, 193: 90, doi: 10.1177/0027950105058565

Warm, D. (2011). Local government collaboration for a new decade: Risk, trust, and effectiveness. *State and Local Government Review*, 43: 60, doi: 10.1177/0160323X11400436

Wood, C. (2008). The nature of metropolitan governance in urban America: A study of cooperation and conflict in the Kansas City region. *Administration & Society*, 40(5): 483-501

Zeemering, E. & Delabbio, D. (2013). *A county manager's guide to shared services in local government*. Washington, DC: IBM Center for The Business of Government.

Zeemering, E. S. (2008). Governing interlocal cooperation: City council interests and the implications for public management. *Public Administration Review*, 68(4): 731-41

APPENDIX

APPENDIX:

Quantitative Data Questionnaire

#	Inquiry	Response or Multi-Part Inquiry	Response for Multi-Part Inquiries
1	What is your position?	Fire Chief Assistant/Deputy Chief Battalion Chief Other (please specify)	
2	How long have you been in your current position?	Less than three years 3-5 years 6-10 years 11-15 years 16 years or more	
3	Is your organization a fire department or fire district?	Fire Department Fire District Fire Authority	
4	What is the staffing configuration of your agency?	Career Combination (primarily career) Combination (primarily volunteer) Combination (roughly equal career and volunteer) Volunteer	
5	How many line personnel (career or volunteer) does your agency have?	Less than 20 21-40 41-60 61-80 81-100 100+	
6	How many stations are in your jurisdiction?	0-3 4-6 7-9 10-12 13-15 16+	
7	What is the square mileage of your jurisdiction?	0-9 10-19 20-29 30-39 40-49 50-74 75-99 100-149 150-199 200+	
8	What is the population in your jurisdiction?	Less than 5,000 5,000-9,999 10,000-19,999 20,000-34,999	

		35,000-49,999 50,000-74,999 75,000-99,999 100,000-149,999 150,000-199,999 200,000+	
9	Excluding typical mutual aid agreements, has your agency considered or implemented collaborative services with another fire service agency?	Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree	
10	If you work for an agency that has already undergone a contract for service or legal integration, are you originally from the district providing services or the district receiving the majority of the shared services?	District providing services District receiving services	
11	How long has your agency been operating under an agreement for services with another agency?	Less than 3 years 3-5 years 6-10 years 11-15 years 16 years or more	
12	While developing an interlocal agreement for collaborated services, did your agency identify:	Interests Bench marks Performance measures Outcomes	Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree
13	Your agency's interests were important to both agencies in developing collaborative services.	Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree	Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree
14	Identify each of the activities your agency collaborates with another agency to provide by indicating the extent to which each agency is primarily responsible for that activity.	Fire Prevention Logistics Information Technology Training Facilities Administrative services (e.g., fina HR) Administration/Overhead (e.g., sharing administrative chief officers) Operations oversight (e.g., sharing battalion chief coverage)	All in-house provision Mostly in-house provision Equal contribution Mostly contracted out All contracted out

		Operations (e.g., volunteer or career firefighters working on apparatus regardless of agency) Other (specify below)	
15	Do personnel work at the other agency's facilities?	Career firefighters Volunteer firefighters Administrative staff	Never Rarely Occasionally Usually Always
16	How are the costs of service reconciled between agencies?	No exchange of in-kind services or remuneration All in-kind services Primarily in-kind services Approximately equal in-kind services and financial remuneration Primarily financial remuneration All financial remuneration	
17	Did you agency have a sense of control in the relationship?	Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree	
18	Have collaborative services resulted in?	Additional Firefighters Improvement in response perform Additional Fire Prevention person Increased expertise Decreased cost Desired outcomes Improved service delivery Reduced community risk	Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree
19	Do you have interest or intent to:	Renew existing agreement Terminate existing agreement Expand existing agreement (e.g., operational consolidation) Pursue legal integration (e.g., merger, consolidation, annexation)	Strongly Agree Agree Neither Agree nor Disagree Disagree Strongly Disagree
20	How important are the following considerations in deciding whether to renew, terminate, or expand an existing agreement?	Cost-savings Utilization of slack resources (unu capacity) Creation of slack resources Revenue generation Program preservation or implementation Political environment Cultural compatibility Contract performance Achieving desired outcomes Ease of contract monitoring	Extremely important Moderately important Neutral Low importance Not at all important