Arlington Fire Department
Island Co. Fire District #1
North County Regional Fire Authority
Snohomish Co. Fire District #15
Snohomish Co. Fire District #19
Snohomish Co. Fire District #21
Snohomish Co. Fire District #24

Washington

Opportunities for Collaborative Efforts Feasibility Study

September 2013

Emergency Services Consulting International

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Arlington Region, Washington

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September 2013

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Acknowledgements

Emergency Services Consulting International (ESCI) would like to acknowledge that without the ready assistance and support of the fire chiefs and the staffs of the Arlington Fire Department (AFD), Island County Fire District #1 (Camano Island Fire & Rescue or CIF&R), Snohomish County Fire District #15 (FD #15 or Snohomish #15), Snohomish County Fire District #19 (FD #19 or Snohomish #19), Snohomish County Fire District #21 (FD #21 or Snohomish #21), Snohomish County Fire District #24 (FD #24 or Snohomish #24), and North County Regional Fire Authority (NCRFA), this project could not have been completed. Each fire chief was available to the project team in advance of the first day of site work and continuously throughout the project life. The fire chiefs communicated with each other and respected the designated point person on behalf of the seven agencies, Chief Bruce Stedman. In short, this report reflects the efforts of a professional and committed group of organizations which invests themselves in the quest for improvement.

Arlington Fire Department
Bruce Stedman, Fire Chief

Camano Island Fire & Rescue
Mike Ganz, Fire Chief

Snohomish County Fire District #15
Teri Dodge, Fire Chief

Snohomish County Fire District #19
Keith Strotz, Fire Chief

Snohomish County Fire District #21
Rick Isler, Fire Chief

Snohomish County Fire District #24
Dennis Fenstermaker, Fire Chief

North County Regional Fire Authority
Dale Fulfs, Fire Chief

**The men and women of each fire agency
who daily serve their communities with distinction**

Executive Summary

Emergency Services Consulting International (ESCI) was engaged by the Arlington Fire Department (AFD), Island County Fire District #1 (Camano Island Fire & Rescue or CIF&R), Snohomish County Fire District #15 (FD #15 or Snohomish #15), Snohomish County Fire District #19 (FD #19 or Snohomish #19), Snohomish County Fire District #21 (FD #21 or Snohomish #21), Snohomish County Fire District #24 (FD #24 or Snohomish #24), and North County Regional Fire Authority (NCRFA) to conduct a feasibility study regarding opportunities for collaboration between and among the participating fire service agencies. This report is the culmination of that evaluation.

ESCI thanks the participating citizens, members, staff, and policy-makers of all seven agencies for their outstanding cooperation in the preparation of this report. All involved were candid in their comments and provided valuable information, perspective and data to the ESCI team. The results of these interviews were used to identify the Strengths, Weaknesses, Opportunities, and Challenges (SWOC Analysis) for each agency as well as the critical issues facing each agency.

The purpose of the study was to:

A. Assess the current fiscal, service level, and infrastructure conditions of each participating agency; recommend improvements to their existing processes independently; and forecast each agency's fiscal future for the next five years.
B. Identify partnership opportunities available to the agencies to increase efficiency or eliminate duplication.
C. Analyze the most feasible integration options, recommending those with the greatest opportunity for success.

The approach taken by the ESCI project team in developing this study was to first evaluate each agency as it operates today autonomously (referred to as **current conditions** in the report), and identify areas where process improvement can be recommended. These individual recommendations are listed in the appropriate sections, but are also compiled by agency in Appendix B of this report for the convenience of each agency. The project team then compared each agency to the other agencies participating in the study to find duplication and opportunities for greater collaboration, up to and including full integration of agencies. From this comparison, the project team identified **operational goals** where closer collaboration can be implemented at the fire chief level (with appropriate legal agreements approved by the policy-makers) and where **governance or policy strategies** require policy-maker deliberation and action to

implement. Finally, the project team provided guidance on implementation of those goals and strategies.

In recent years cooperative service and the consolidation of fire departments and emergency medical systems has become a viable option in trying to ensure efficiencies are being captured and innovation and technologies are being utilized. Typically, the motivation to look at doing more with neighboring jurisdictions is considered for a number of reasons, including the desire to maintain or enhance current services or service levels, reducing or eliminating future costs, or the elimination of duplication. ESCI has been involved in many successful functional, operational, and legal consolidations. However, we do caution clients that consolidation for the sole purpose of saving money has risk.

In most cases there are long-term costs savings through regional cooperative effort, but not all consolidations ultimately result in saving money. Analysis has to be done to determine what the potential is for cost reductions as well as efficiencies that can be gained that will maintain or enhance services to the public. In today's economy the expectation is that the fire service will do more with less and deliver service in a conservative manner, particularly as it relates to the long-term financial sustainability of programs and services.

This report contains the following sections: SWOC (**S**trengths, **W**eaknesses, **O**pportunities and **C**hallenges) Analysis; Current Conditions (including the fiscal analyses); Future Opportunities for Collaboration; Operational Goals; Governance Strategies; Implementation Guidance; Findings; and Recommendations. An additional component, "So, Now What?" describes a process ESCI would recommend the agencies use in considering next steps related to the strategies contained in this report.

KEY FINDINGS

All seven fire agencies have already demonstrated their ability to collaborate on various initiatives. They have also discovered numerous challenges they each face but have in common with each other. A combined and concerted effort to respond to these challenges is in their collective best interests which, we presume, led to the initiation of this study. All seven agencies are committed to the service they provide to their customers and citizens. In brief, ESCI finds:

> **Finding #1:** All of the fire departments and districts are interdependent. As stand-alone fire departments/districts, each agency would be challenged to effectively combat a significant incident without each other's assistance.

Finding #2: The communities being served are proud of and in some cases fiercely protective of their fire agencies.

Finding #3: Interviews with residents of the communities about service levels indicated that expectations are generally being met, with some concern expressed by business interests that more needs to be done in Arlington.

Finding #4: Gaps exist in each organization. They range from needing a reliable records management system to provide solid data in order to make good management decisions (Snohomish #15, #21, and #24) to staffing shortages for emergency operations (all agencies).

Finding #5: Other agencies not involved in this study should be considered in partnership discussions (Snohomish #25 -- Oso and Snohomish #12 -- Marysville), Governance options for Snohomish #24 have been severely curtailed by isolation from the other participating agencies as a result of physical separation from the other agencies.

Finding #6: Organizational culture is strongly rooted in each agency, and is one of the most difficult aspects to overcome as barriers to implementing integration strategies.

Finding #7: Policymakers should adopt a plan, similar to the one outlined in this report, to evaluate each of the recommendations contained herein, aligning the processes, services, and operations of the agencies where possible.

Finding #8: Opportunities to reduce duplication and/or increase efficiency exist in the areas of standardized specifications for fire equipment, the creation of a single fire training division, pooling volunteer services, cooperating in the staffing of Peak Activity Units (PAUs), and sharing of other resources and unified programs.

Finding #9: AFD, Snohomish #19, and Snohomish #21 formation of a Regional Fire Authority is feasible. If pursued incrementally, it should start with shared management services. An agreement would result in eliminated duplication and increased efficiency at the administrative level. Some cost savings can be realized, though such savings are limited.

Finding #10: An RFA formation between CIF&R and NCRFA is not fiscally viable. An effort to align fire levy rates between the two agencies and move toward a sustainable revenue model over time may facilitate future consideration of this option.

Finding #11: An RFA formation between Snohomish #15 and the Tulalip Tribe would require annexation of the DNR protected land and include Snohomish #12 in the formation (or Snohomish #12 de-annexing the tribal land it currently serves, ceding it to the RFA). These complications make this strategy unfeasible. Snohomish #15 policy-makers should be cognizant of any changing circumstances, renewing this potential for a change in governance in the future.

Finding #12: An RFA formation between NCRFA, Snohomish #19, and Snohomish #15 is not fiscally viable. An effort to align fire levy rates between the three agencies and move toward a sustainable revenue model over time may facilitate future consideration of this option.

RECOMMENDATIONS

Given the analysis in this study and the findings above, ESCI recommends:

The agencies should implement the following operational goals:

- **Regional Training Consolidation**
- **Regional Logistics Consolidation**
- **Combine Volunteer Services Regionally**
- **Implement Peak Activity Units Regionally**

The agencies should implement the following governance (policy) strategies:

- **Strategy 1 (AFD, Snohomish #19, Snohomish #21 RFA)**

The agencies should monitor conditions for future opportunity to implement:

- **Strategy 2 (NCRFA, CIF&R RFA)**
- **Strategy 3 (Snohomish #15, Tulalip Tribe RFA)**
- **Strategy 4 (NCRFA annex Snohomish #15, Snohomish #19)**
- **Snohomish #24 and #25 (Oso) should explore a potential partnership (Oso is not a party to this study)**

NEXT STEPS

ESCI suggests the following next steps to continue the collaboration and consolidation work:

1. Consider acquiring a neutral third party to guide the partnership and integration discussions initially. This provides objectivity and avoids self-interest getting in the way of what may be a better regional approach.
2. Convene a meeting of the combined elected officials and establish a shared vision for the effort moving forward.
3. Invite external stakeholders into the process to advise the policymakers from a community perspective.
4. Establish the various working groups referenced in Figure 222 and the workgroup descriptions which follow it. Once the working groups are established, they will set their meeting schedules and begin their various responsibilities and assignments.
5. Establish a regularly scheduled briefing process from the chairs of each working group to the Joint Implementation Committee (JIC) and from the JIC to the policymakers.
6. Establish a communication strategy to keep internal members informed or act as a clearing house for rumors. Establish a communication strategy to keep the communities and media informed when key milestones have been achieved or a change in direction has occurred. Communication should be positive, transparent, timely, and coordinated.
7. Celebrate successes publicly and build momentum.

Strengths, Weaknesses, Opportunities, and Challenges (SWOC)

The study takes into account the many shared issues that face the seven fire agencies and how such matters affect the effort to construct a model for efficient service. A SWOC Analysis was performed, identifying the strengths, weaknesses, opportunities and challenges facing the organizations. Further, critical issues were listed from the perspective of the leadership of the agencies.

Organizational Strengths

It is important for any organization to identify its strengths in order to ensure that effort and result are aligned with organizational mission and purpose. Identification of organizational strengths leads to the channeling of efforts toward community needs that match those strengths. Programs that do not match organizational strengths or the primary function of the business should be evaluated for the rate of return on staff time. In the course of ESCI's stakeholder interviews, the strengths of Arlington Fire Department (AFD), Camano Island Fire & Rescue (CIF&R), Snohomish County Fire District #15 (Snohomish #15), Snohomish County Fire District #19 (Snohomish #19), Snohomish County Fire District #21 (Snohomish #21), Snohomish County Fire District #24 (Snohomish #24), and North County Regional Fire Authority (NCRFA) are paraphrases of those interviewed.

Strengths						
AFD	**CIF&R**	**FD #15**	**FD #19**	**FD #21**	**FD #24**	**NCRFA**
Well organized, professional, high standards, good working relationships, community commitment, accountability	EMS system, training; strong community; board consensus, good facilities, finances stable, solid command staff, constructive bargaining sessions, volunteer involvement	SCFD #15 did not participate in a SWOC Analysis	Our people, good leadership, our community, training, problem solvers, equipment, positive attitude & commitment, solid financial position, strong alignment between board and officers.	Solid workforce of capable and dedicated volunteers, core leadership, service ethic, financially stable, good apparatus and facility	Focus on taking care of people, good officers and fire chief; community involvement, good interagency relationships (Sheriff)	Good leadership and management, financially stable, good people, well trained, good facilities and equipment, community focus, many opportunities

Organizational Weaknesses

Performance or lack of performance within an organization depends greatly on the identification of weaknesses and how they are confronted. While it is not unusual for these issues to be at the heart of the organization's overall problems, it is unusual for organizations to be able to identify and deal with these issues effectively on their own.

For any organization to either begin or continue to move progressively forward, it must not only be able to identify its strengths but also those areas where it does not function well. These areas of needed enhancements are not the same as challenges, but rather those day-to-day issues and concerns that may slow or inhibit progress. ESCI asked stakeholders to list organizational weaknesses in their respective organizations. They are listed below as reported by the interviewees.

Weaknesses						
AFD	**CIF&R**	**FD #15**	**FD #19**	**FD #21**	**FD #24**	**NCRFA**
Managing expenses, live within budget, understaffed, no funding for equipment replacement, priorities not aligned, labor relations and politics, lack of strategic plan, reluctance to consider alternative service models	Distance to local hospitals lead to EMS out of service times, relationship with NCFRA, impacts of regulations, reduced tax revenues, labor relations & politics, mutual aid using multiple communications centers	SCFD #15 did not participate in a SWOC Analysis	Heavily reliant on fire chief, low incident volume is disincentive, limited funding, two-person staffing	Inadequate service delivery to south area of district, station size; interpersonal communication issues, lacking "respect" for leadership, resistance to change, inbred culture, volunteer turnover, training, lack of consistent accountability	Limited funding, lack of volunteers, commissioners don't always understand policy role, interpersonal communications are poor or non-existent, inadequate equipment, isolated community	Growing pains with finding a fire chief and developing leadership; lack of public awareness about fire authority structure, labor relations and politics, history is sometimes an impediment to problem solving

Opportunities

The opportunities for an organization depend on the identification of strengths and how they are built upon and in what way weaknesses are diminished. The focus of opportunities is not solely on existing service but on expanding and developing new possibilities both inside and beyond the traditional boundaries of business as usual.

Opportunities						
AFD	**CIF&R**	**FD #15**	**FD #19**	**FD #21**	**FD #24**	**NCRFA**
Collaboration creates opportunities to eliminate redundancies and increase training, solve common problems, manage administrative costs, improved culture, stable funding	Closer relationship with community, make best use of limited funding, regionalized training, maintenance, and response services, stable funding	SCFD #15 did not participate in a SWOC Analysis	Opportunities to partner with other fire departments, regionalize training and maintenance	Opportunity to make service "seamless," solidify our "community," gain better return on investments, daytime coverage, coverage for south area	RFA has good and bad; better outcomes with more involved, community is growing, good relationships with local tribes, regional grant applications, shared (improved) administrative services	Become better with a good foundation, stronger management, broader experience, improved water supply systems, push the "reset" button and start fresh

Challenges

To gain full benefit of any opportunity, the challenges to the organization, with their new risks and threats, must also be identified. By recognizing potential challenges, an organization can greatly reduce the potential for future setbacks.

As with opportunities and the context in which the questions were posed to the interviewees, responses tended to be applicable to the seven organizations. In some instances the challenges may affect the outcome of cooperative efforts with and between any or all of the participating agencies.

Challenges						
AFD	**CIF&R**	**FD #15**	**FD #19**	**FD #21**	**FD #24**	**NCRFA**
Living within our resources, embrace change, loss of control, loss of community, increased cost, increasing pressure on EMS system, continuing growth, aging equipment	State regulations, adequate staffing, developing capable leadership, budget and funding, geography (long narrow island)	SCFD #15 did not participate in a SWOC Analysis	Unclear future, sustainability, all participating agencies overcoming our collective history with each other, loss of control and identity if merger, unstable assessed values	Territorial attitudes, geographical challenges, including the volunteer component, annexation, loss of control	Finding qualified and capable volunteers, funding, communicating among ourselves and within the community	Growth, requirements & restrictions of laws and codes, quality leadership, uniform code enforcement, fiscal challenges

After discussing core services, organizational strengths and weaknesses, and the opportunities and challenges posed by the current environment, ESCI asked stakeholders to identify the critical issues they perceive each fire agency is facing. The following reflect the critical issues that the respondents felt pose the greatest risk for each agency separately, which have a bearing upon the potential success of ANY cooperative service delivery initiatives.

Critical Issues						
AFD	**CIF&R**	**FD #15**	**FD #19**	**FD #21**	**FD #24**	**NCRFA**
Funding, staffing, equipment, training	Funding, unfunded liabilities, apparatus replacement, officer development, transport distance	SCFD #15 did not participate in a SWOC Analysis	Funding, volunteer staffing, annexation	Persuading the public, funding, volunteer staffing, apparatus replacement, south side coverage, lack of facility space	Budget, volunteers, apparatus, policies and procedures	Capable leadership and management, funding, apparatus, healthcare system

Evaluation of Current Conditions

Organization Overview

The feasibility study involves the Arlington Fire Department (AFD), Camano Island Fire & Rescue (CIF&R), Snohomish County Fire District #15 (Snohomish #15), Snohomish County Fire District #19 (Snohomish #19), Snohomish County Fire District #21 (Snohomish #21), Snohomish County Fire District #24 (Snohomish #24), and North County Regional Fire Authority (NCRFA) collectively referred to as the Arlington Regional study area or Arlington Regional study agencies.

Data provided by the participating fire agencies was combined with information collected in the course of ESCI's field work and used to develop an overview of the seven organizations. The purpose of the following organizational overview is two-fold. First, it verifies the accuracy of the baseline information and ESCI's understanding of each agency's composition—the foundation from which the feasibility analysis is developed. Second, the overview serves as a reference for the reader who may not be familiar with the details of each agency's operations.

Figure 1: Survey Table - Organization Overview

Survey Components	Observations -- Organization Overview						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
1. Responsibilities & Lines of Authority							
A. Governing body	Municipal – strong mayor	Fire District Board of Commissioners (5)	Fire District Board of Commissioners (3)	Fire District Board of Commissioners (3)	Fire District Board of Commissioners (3)	Fire District Board of Commissioners (5)	RFA Governing Board
i) head of governing body	Barbara Tolbert, Mayor	Pat Metz, Chair	Bill Dobler, Chairman	Kevin Buhr, Chairman	Jim Strago, Chairman	Dennis Vincent, Chairman	Jack Stedman, Chair
ii) key employee of governing body	City Administrator Allen Johnson	Chief Mike Ganz	Chief Teri Dodge	Chief Keith Strotz	Chief Rick Isler	Chief Dennis Fenstermaker	Chief Dale Fulfs, Board Secretary

Survey Components	Observations -- Organization Overview						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
iii) meetings	Mondays at 7 p.m.	2nd & 4th Monday at 7 p.m.	2nd Wednesday monthly	2nd Thursday of every month 7 p.m.	2nd & 4th Thursday of month at 6:30 p.m.	1st Monday at 7 p.m.	2nd and 4th Wednesday at 6 p.m.
B. Elected official authority defined	Yes, by position description	Yes, by statute	Yes, by statute	Yes, by statute	Yes, by statute	Yes, by statute	Commissioner Handbook
C. Fire chief position	Bruce Stedman	Mike Ganz	Teri Dodge	Keith Strotz	Rick Isler	Dennis Fenstermaker	Dale Fulfs
i) hired by contract	Yes	Yes	Working on a contract	Yes	Yes	Yes	Yes
ii) term of contract	Open ended	Open ended	Currently undefined	Two years	Two years	Open-ended	Open ended
iii) periodic performance evaluation	Yes, annually	Yes, annually	Working on this	Not regularly	No	No	Not consistently
D. Fire chief/authority defined	Yes – city policy	Yes – job description	Working on this	Yes -- policy	Yes, by contract and policy	In the contract (lost contract)	Not clearly – covered in the contract
E. Policy and administrative roles defined	Yes	Yes	No	Yes	No	Yes, for the most part	Yes
2. Attributes of Successful Organizations							
A. Rules and regulations maintained	Lexipol is developing them now	Yes, Lexipol is updating them now	Incomplete; some exist	Yes	Yes	Yes	Yes
i) process for revision provided	Continuous update is part of subscription	Continuous update is part of subscription	Not consistently	Yes – issues based changes	At the direction of the board	Yes – new set of policies and procedures	Review as close to annually as possible
B. Legal counsel maintained	Yes – city attorney	Yes – Richard Davis	No	Yes – Foster & Pepper	Yes, Brian Snure, accessible by the fire chief by permission from the board	Yes – not a retainer, but regular use attorney	Yes – Richard Davis

Survey Components	Observations -- Organization Overview						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
i) consultation available	Yes	Yes	As needed	Yes	Yes, for the board, by permission for the chief	Yes	Yes
ii) labor counsel	WCIA	Yes	No	Yes	N/A	Yes	Yes
C. Financial controls maintained	Yes	Yes	Yes	Yes	Chief unable to describe process	Yes	Yes
D. Governing body minutes maintained	Yes – posted on website	Yes – website and by request	Yes -- signed by Board and maintained in hard copy under lock and key	Yes – hung at post office, FS, and about to be posted on website	Yes – posted on bulletin board or can be requested through district secretary	Yes – posted in meeting room	Yes – hard copies
3. Organizational Structure							
A. Structure type	Typical hierarchy	Typical hierarchy	Typical hierarchy; no organizational chart; – in flux currently	Typical hierarchy	Typical hierarchy (duty crew leaders versus officers)	Typical hierarchy	Typical hierarchy
B. Descriptions of all jobs maintained	Yes	Yes – currently being revised	No; some basic on responder duties; not administrative	Yes	Yes	Yes	Currently being revised
i) job descriptions updated	Periodically	Periodically	N/A	Periodically	Periodically (5 years)	Current and updated periodically	Periodically
C. Employment agreements	Fire Chief, Union contract – captain or lower	Yes – A/Cs and Finance Manager	None	Yes – just for the fire chief	Yes – just for the fire chief	No	All admin staff are under contract – all individual
4. Chain of Command							
A. Unity of command	Yes	Yes	In flux –new leadership in place	Yes	Yes	Yes	Yes

Survey Components	Observations -- Organization Overview						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Span of control	Less than 1:6	1:5	In flux –new leadership in place	Below 1:5, Varies on incidents	Less than 1:6	1:8 Too many subordinates reporting to chief – all volunteer group	1:5
C. Hiring/Firing authority	Mayor only	Fire Chief with coordination of board	Uncertain; Fire Chief recommends to the Board for approval. Not clearly defined	Fire Chief	Chief hires (using membership board), termination by fire chief after consultation with the board	Board terminates employees, fire chief terminates volunteers	Fire Chief
5. Formation and History							
A. Organization formed	1905	1945 (separate fire districts – combined into one island wide district in 1992)	1955	1960	1960	1940's as a town fire department, converted to a fire district afterward (dates uncertain)	2008
B. History maintained	Yes	Yes	No	Yes	Not formally	No	Yes
i) Individual or group responsible	Not formally assigned	Small group and auxiliary group -- informal	N/A	Fire Chief	N/A (assign the position as an officer of the vol. assn..?)	N/A	Volunteer Association
6. General Description of Agency							
A. Agency type	Municipal Fire Department	Fire District	Fire District	Fire District	Fire District	Fire District	Fire Authority

Survey Components	Observations -- Organization Overview						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Area, square miles	9.3 and some of District #21 for fire, 210 for EMS	39.9	15.2 plus a DNR area served for EMS only	20.7	70.1	30.3	102.7
C. Headquarters	Station 47 (6231 188th St NE)	Headquarters/ admin office (811 N. Sunrise Blvd)	7812 Waterworks Road, Tulalip	Station 94 (2720 212 St NW, Stanwood)	Station 49 (12131 228th St NE, Arlington)	Station 39 (1115 Seemann St, Darrington)	Station 97 (19727 Marine Dr, Stanwood
D. Number of fire stations	3	5	1	2	1	2	5
E. Other facilities	0	2 (plus undeveloped property for a future station)	0	1	0	0	0
F. Emergency vehicles							
i) engine	1	5	1	2	2	3	4
ii) engine, reserve	1	2	1	0	0	2	1
iii) ladder truck	1	0	0	0	0	0	1
iv) ambulance	2 ALS, 1 BLS	3	Utility rescue has ambulance configuration and capability; not listed as such	2 BLS	0	4	5
v) ambulance, reserve	1	2	0	1 BLS	0	0	3
vi) command	3	5	3	1	1	1	4
vii) boat	1 (Zodiac)	3	0	2 (10' ridged hull, inflatable & hovercraft)	1 hovercraft	3 inflatable rafts	1 (21' Silver Streak – aluminum hull)
G. Tenders	0	4	1	1 + 1 loaned from #21	1	1	3
H. Rescue	0	1	1	0	1 (Heavy Rescue)	2	0

Survey Components	Observations -- Organization Overview						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
I. Support Vehicle	2	4	0	2 (training vehicle and pick-up with air trailer)	1	1	2 brush 4 utility vehicles, 1 gator, 2 trailers
J. WSRB rating	5	6/7	6/10	8 with tender credit	8A	7/8	6/8
i) date of most recent rating	2007	2011	2010	2010	Currently being re-rated	2009	2010
K. Total fire department personnel, uniformed and civilian	63	75	22	31	36	28	79
i) administrative and support personnel, full-time	4	7	1	1	2	0	2
ii) administrative and support personnel, volunteer	4 (chaplains)	0	0	0	0	0	0
iii) administrative and support personnel, part time	0	2 (0.2 and 0.35 positions)	4 hours monthly (Secretary)	1	1	1	0
iv) operational personnel, full time	27	21	1.0 FTE Firefighter – in flux with new leadership	0	0	0	25
v) operational personnel, part time	Currently at 26 – stipend paid – pull shift, not community volunteers	6	24	28	0	0	40

Survey Components	Observations -- Organization Overview						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
vi) operational personnel, volunteer	(included in above number – all receive activity stipends)	32	included in above number all receive point based stipends	(included in above number – all receive activity stipends)	33	26	12
7. Demographics							
A. Population, 2010	17,926	15,661	4,622	3,142	7,800	4,000	21,358
urban (≥1000) suburb (500-1000) rural (≤500) sq. mi.	U -- 47.9% S -- 4.0% R – 48.1%	U – 6.7% S -- 9.8% R – 83.5%	U – 6.1% S -- 3.3% R – 90.6%	U – 1.1% S -- 3.1% R – 95.9%	U -- 0.5% S -- 2.4% R – 97.1%	U – 1.2% S -- 1.0% R – 97.8%	U -- 2.7% S -- 3.1% R – 94.1%
B. Total residential units, 2010	6,929	Unavailable	2,315	Unavailable	Unavailable	Unavailable	Unavailable
C. Businesses, 2010	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable	Unavailable
8. Alarms							
A. Fire, 2012	295	35	27	63	Approximately 87	26	170
i) value of property exposed to fire, 2012	Unavailable	$1,776,500	Unavailable	Unavailable	Unavailable	Unavailable	$2,118,050
ii) value of property lost to fire, 2012	Unavailable	$1,257,000 (70.8%)	Unavailable	Unavailable	Unavailable	Unavailable	$538,050 (25.4%)
B. Rupture or explosion	0	1	2	0	Unavailable	0	2
C. EMS/rescue	3,800	1,305	599	354	Approximately 294	379	3,421
D. Number of EMS transports	848 ALS 1288 BLS 2136 Total	525 ALS 401 BLS 926 Total Camano Transports Only	0	144 BLS	Unavailable	Undetermined	Undetermined
E. Hazardous condition	0	27	10	12	Unavailable	25	89

Survey Components	Observations -- Organization Overview						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
F. Service call	Unreported	235	34	14	Unavailable	12	332
G. Good intent call	Unreported	66	2	206	Unavailable	37	802
H. False call	Unreported	75	13	16	Unavailable	3	123
I. Severe weather	Unreported	13	0	0	Unavailable	0	6
J. Other	Unreported	7	0	0	Approximately 61	6	9
K. Total	4,095	1,764	687	665	442	488	4,954

Organization Overview Assessment

Discussion: The combined service area is over 280 square miles and home to more than 75,000 residents. It is served by 19 fire stations, 21 front line fire engines, 17 front line ambulances, and various water rescue platforms, water tenders, and ancillary support vehicles. The area spans most of the northern portion of Snohomish County and the eastern portion of Island County. It is predominantly rural, with significant pockets of urban and suburban areas. The city of Arlington contains the largest and highest urban density, with North County Regional Fire Authority containing the largest and highest suburban densities.

The seven agencies participating in this study are each providing services which meet the constituent expectations, at least to the extent the constituents interviewed reflect the attitudes and perspectives of the broader communities. The agencies consist of a city fire department, five fire districts, and a regional fire authority. They each have traditional fire department hierarchies with typical infrastructures in place.

The agencies each have strong, often divergent cultures and history (both good and bad) with many of their neighbors. These histories may become significant obstacles to greater cooperation and partnerships if they cannot be overcome. The cultures are necessarily strong to build cohesion and ownership within each agency. They can also become significant challenges to many of the consolidation options which may be available. Several internal and external stakeholder groups expressed relief that some of these obstacles may deter consolidation.

Arlington Fire Department Comments: AFD is the only municipal fire department participating in the study. The political structure, financing structure, and physical manner in which service is delivered are different than the other participating agencies. The competing needs of service delivery in a municipality place sharp focus on the type, level, and cost of each service provided to that municipality.

The City of Arlington is motivated to determine whether there are greater levels of efficiency that can be gained in fire services through partnerships and even consolidations with other agencies in the region. This study concept was initiated by Arlington for those reasons. This is not to say the other agencies participating in this study aren't equally motivated to find efficiencies.

The city is predominantly supplied by fire hydrants, providing necessary fire flow for any structure fires which occur in an urban setting. Providing the personnel to fight those potential fires is more challenging. AFD has developed new response configurations out of a need for cost containment, placing greater reliance upon "part-time" firefighters (stipend-funded volunteers who pull shift work on a self-assigned basis).

This new configuration is troublesome to the labor force who expressed concern whether additional reductions or creative staffing schemes will reduce service effectiveness or increase risks to the community or the workforce. However, creative service delivery is required in times of financial uncertainty or scarcity. Cost containment, cost avoidance, and increased efficiency are descriptions of the "new normal" in today's local government lexicon.

Arlington Fire Department Recommendations:

- Conduct formal, written performance reviews annually for the fire chief position.
- Establish a regular interval for review and revision of job descriptions.
- Formally assign department historian role to a person or group to maintain ongoing department history.
- Conduct self-assessment of the Washington Survey & Rating Bureau Public Protection Classification for Fire Departments to determine the potential for a likely classification improvement.
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire department to the community.

Camano Island Fire & Rescue Comments: CIF&R is a fire district in Island County and is the only participating agency not located in Snohomish County. It is not only in a different county than the other agencies, it is truly an island, isolated from other agencies except for a single bridge on its northeast end. Mutual aid assistance is limited to access from that northeast corner of the island. North County Regional Fire Authority is the only logical fire agency assistance within a short travel time to the island.

CIF&R must be as self-reliant as possible, knowing it will be limited to its own resources for a considerable period of time. The island is dotted with numerous private water associations and one small water district, but reliable water for firefighting is not always available. Thus, CIF&R has four water tenders which shuttle water in to incidents for firefighting purposes.

The district no longer provides ALS service under contract to the City of Stanwood and recently laid off the remaining seven firefighters used to staff the city medic unit. The district has

pursued, and continues to be open to service partnerships provided they make both operational and financial sense for island citizens.

Camano Island Fire & Rescue Recommendations:

- Establish a regular interval for review and revision of job descriptions, policies, procedures, rules and regulations.
- Formally assign district historian role to a person or group to maintain ongoing district history.

Snohomish County Fire District #15 Comments: ESCI's review of the organizational components of the District finds that it is configured in a manner that it typical of similar sized fire districts. However, many of the fundamental managerial documents and foundational guiding elements that provide the organization with guidance and a sense of direction are absent.

Snohomish County Fire District #15 Recommendations:

- Establish an employment contract for the fire chief's position and properly define his/her roles, responsibilities and authority.
- Define roles and responsibilities of all personnel.
- Establish defined rules and regulations for departmental operations.
- Update and complete a District Policy document.
- Establish job descriptions for all positions.

Snohomish County Fire District #19 Comments: FD #19 (Silvana) is a fire district serving a rural community. It is unique in this study in that it is central to the participating agencies in this study geographically but only touches two neighbors jurisdictionally. It borders North County RFA, Snohomish County Fire District 21 in the Island Crossing area, and Arlington Fire Department. It is separated from Camano Island Fire & Rescue by Port Susan and Tulalip Bay to the west, and separated from Fire District #15 by the Tulalip Tribal Reservation to the south. The remaining participating fire districts are east of Silvana's eastern neighbors.

The district is rural in nature and is essentially an all-volunteer fire district with the fire chief the only employee. The district and the community share a very tight bond whose cultures appear to blend seamlessly. The citizens interviewed in this study expressed deep reservations about any partnership or consolidation that changed the culture of the fire district. Indeed, the internal district personnel expressed serious concern about any potential change of attitudes or

philosophies that may come as a result of a consolidation. The pride expressed by members of the department and the citizens of the district were beyond typical agency loyalty.

The district serves the residents with part-time (stipend-funded volunteer) firefighters who self-assign shift work, providing consistent two-person response capability around the clock, augmented by community volunteers who respond from home. The part-time firefighters display a very high standard of professionalism in their appearance and competence; a standard they fear may be diminished through a consolidation.

Snohomish County Fire District #19 Recommendations:

- Conduct formal, written performance reviews annually for the fire chief position.
- Establish a regular interval for review and revision of job descriptions, policies, procedures, rules and regulations.
- Secure a reserve engine or, through interagency agreement, contract for one if the need arises.
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire district to the community.

Snohomish County Fire District #21 Comments: FD #21 (Arlington Rural) serves a rural community and is split by the City of Arlington into north and south segments. The district contracts with AFD to provide initial fire response and all EMS services to the south segment since the district cannot serve the area without passing AFD fire stations to get there.

FD #21 is essentially an all-volunteer agency operationally, with the fire chief and assistant chief as the only full-time employees. The district also employs a district secretary as a 0.2 employee. The district secretary is heavily involved in HR and Finance functions on behalf of the board of fire commissioners. The fire chief reports that he is uninvolved in the formation of the operational budget. The district does not use an electronic incident reporting program to track or report its incident activity. All incident reports are handwritten.

The district has a very strong connection with the community it serves. The citizens interviewed expressed great concern over any form of consolidation changing the organization or the services it relies upon in FD #21. Internal personnel expressed the same sentiment. Further, there was concern expressed that disconnect existed between the fire chief and the assistant chief, sending unintended mixed signals to the line personnel.

Snohomish County Fire District #21 Recommendations:

- Conduct formal, written performance reviews annually for the fire chief and assistant chief positions.
- Establish and enforce a policy clearly defining the division between administration (fire chief) and policy (board).
- Establish a regular interval for review and revision of job descriptions, policies, procedures, rules, and regulations.
- Expand the role of the fire chief in budget development and budget management for full understanding and management of the fiscal condition of the district.
- Maintain a secure, on-site document retention and retrieval system to keep important documents and contracts.
- Consider posting approved board meeting minutes on website.
- Formally assign district historian role to a person or group to maintain ongoing district history.
- Secure a reserve engine or, through interagency agreement, contract for one if the need arises.
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire department to the community.
- Obtain local software or a web-based incident reporting program to create and maintain electronic incident reports. Report these incidents annually to the Washington State Fire Marshal.

Snohomish County Fire District #24 Comments: FD #24 (Darrington) is a rural and somewhat isolated fire district. It is essentially hemmed in by Mt. Baker-Snoqualmie National Forest, adjoining the community of Oso (not a participant in this study) to the west. It is the most easterly fire agency of those participating in the study. It is a rural fire district which also serves the Town of Darrington.

FD #24 is essentially an all-volunteer fire district, with the fire chief and a part-time administrative assistant who also assists in managing the finances and administrative tasks of the district. The fire chief is also a full-time career firefighter in Seattle, so his hours at FD #24 are worked around his shift schedule at Seattle.

Members of the district are also an integral part of the fabric of the community in Darrington. Controversy in the town affects the district, and the opposite is also true. A recent take-over of ambulance service by the district created a loyalty split in the community. Some supported the ambulance company, feeling that some personnel were victimized by the move. Others supported the district, feeling that the ambulance company was not adequately providing care.

Criticism has been leveled toward the fire district by some within the community for taking this action. Criticism has been leveled at the district for not taking patients to the local physician in town for assessment and possible treatment before spending time, effort, and expense to transport a patient to Cascade Valley Hospital in Arlington. This is a constraint placed upon the district by medical regulations beyond the control of the district. However, Snohomish County EMS protocols have recently defined when patients can be transported to a clinic.

Snohomish County Fire District #24 Recommendations:

- Conduct formal, written performance reviews annually for the fire chief position.
- Maintain a secure, on-site document retention and retrieval system to keep important documents and contracts.
- Establish and enforce a policy clearly defining the division between administration (fire chief) and policy (board).
- Establish a district website to better facilitate communication with the community.
- Establish a regular interval for review and revision of job descriptions, policies, procedures, rules, and regulations.
- Maintain a span of control of no greater than 1:7 by creating subordinate positions to reduce the number of direct reports to the fire chief.
- Formally assign department historian role to a person or group to maintain ongoing department history.
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire department to the community.

North County Regional Fire Authority Comments: North County RFA is a suburban fire agency with significant rural regions. The RFA is made up of former fire districts which combined to form a regional fire authority in 2008. It has recently been expanded to include the City of Stanwood under contract for services.

Internal staff indicated that the history of the formerly separate agencies has been difficult to overcome. When a new challenge faces the organization, there is a tendency to fall back on the old history. The staff interviewed expressed hope that the consolidations of the districts coupled with the new contract for Stanwood will provide a fresh start and an opportunity to shed old histories.

North County is a new agency and in many ways is still finding its identity. However, the critical infrastructure which creates the foundation of an organization is solidly in place. The staff

members are optimistic about the future and the community members interviewed have strong support for the agency and are willing to help.

North County Regional Fire Authority Recommendations:

- Conduct formal, written performance reviews annually for the fire chief position.
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire department to the community.

Figure 2: AFD Organizational Chart

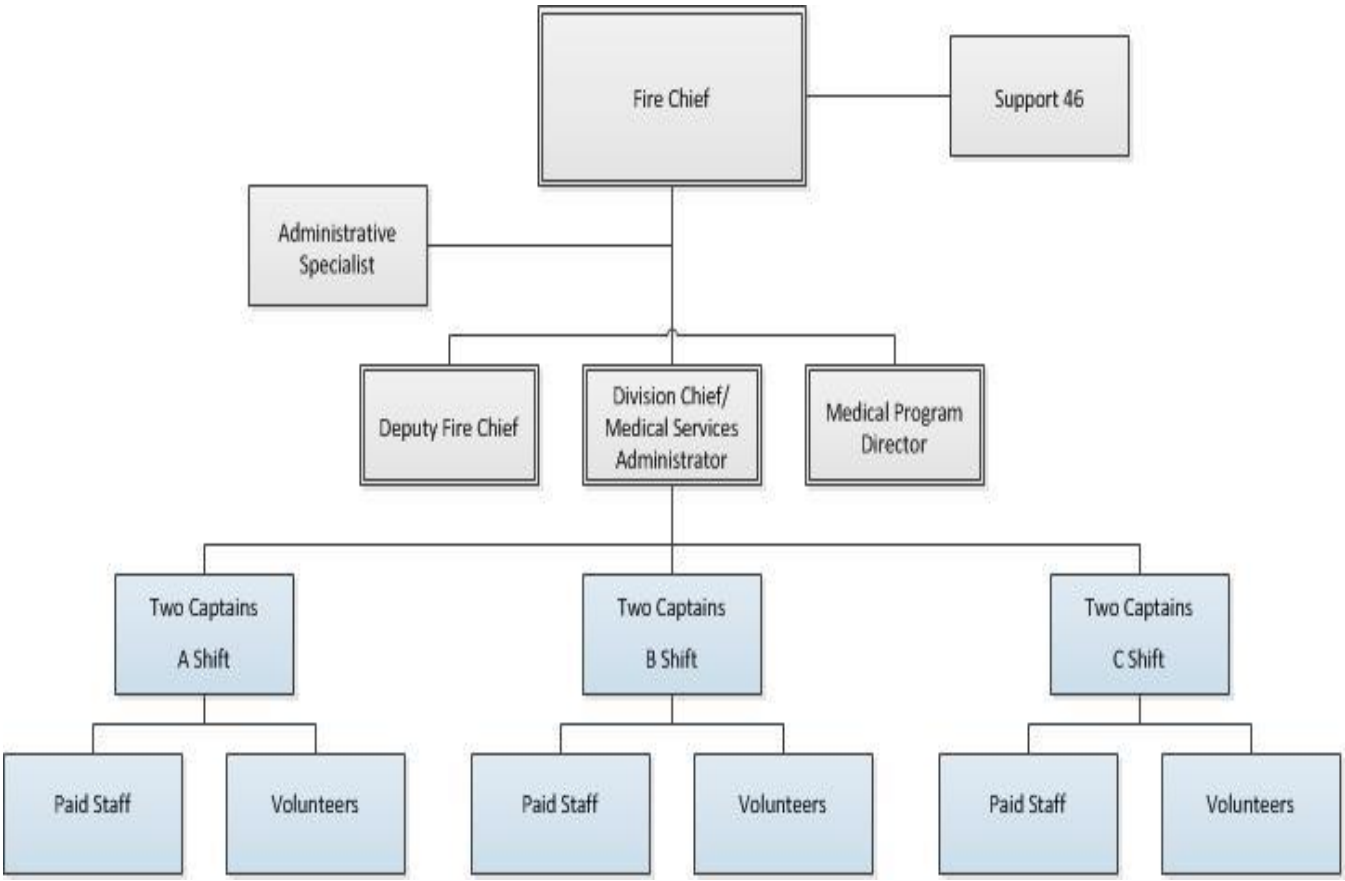


Figure 3: CIF&R Organizational Chart

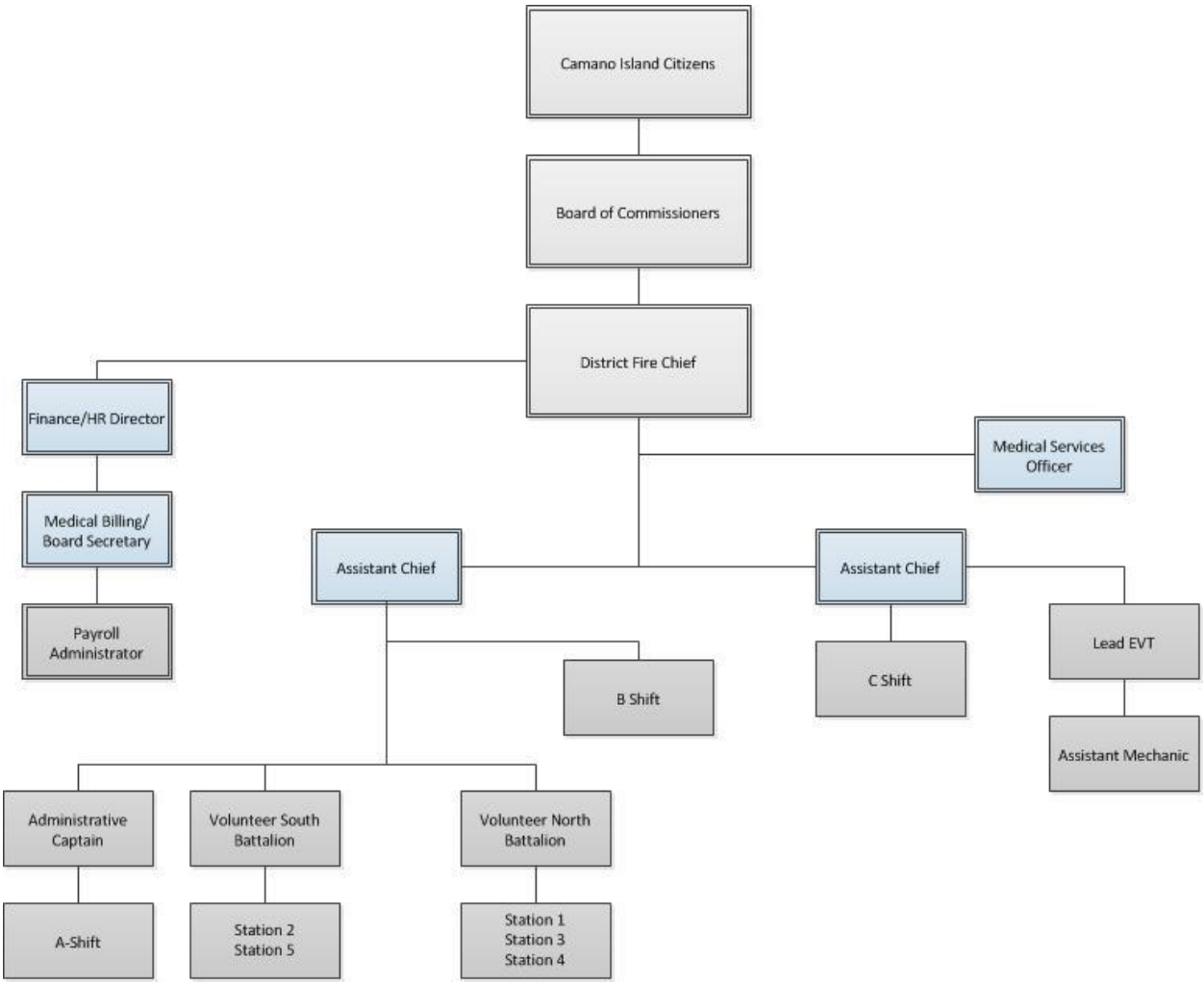


Figure 4: Snohomish #15 Organizational Chart

Snohomish #15 has experienced a leadership change and has not yet created an organizational chart

Figure 5: Snohomish #19 Organizational Chart

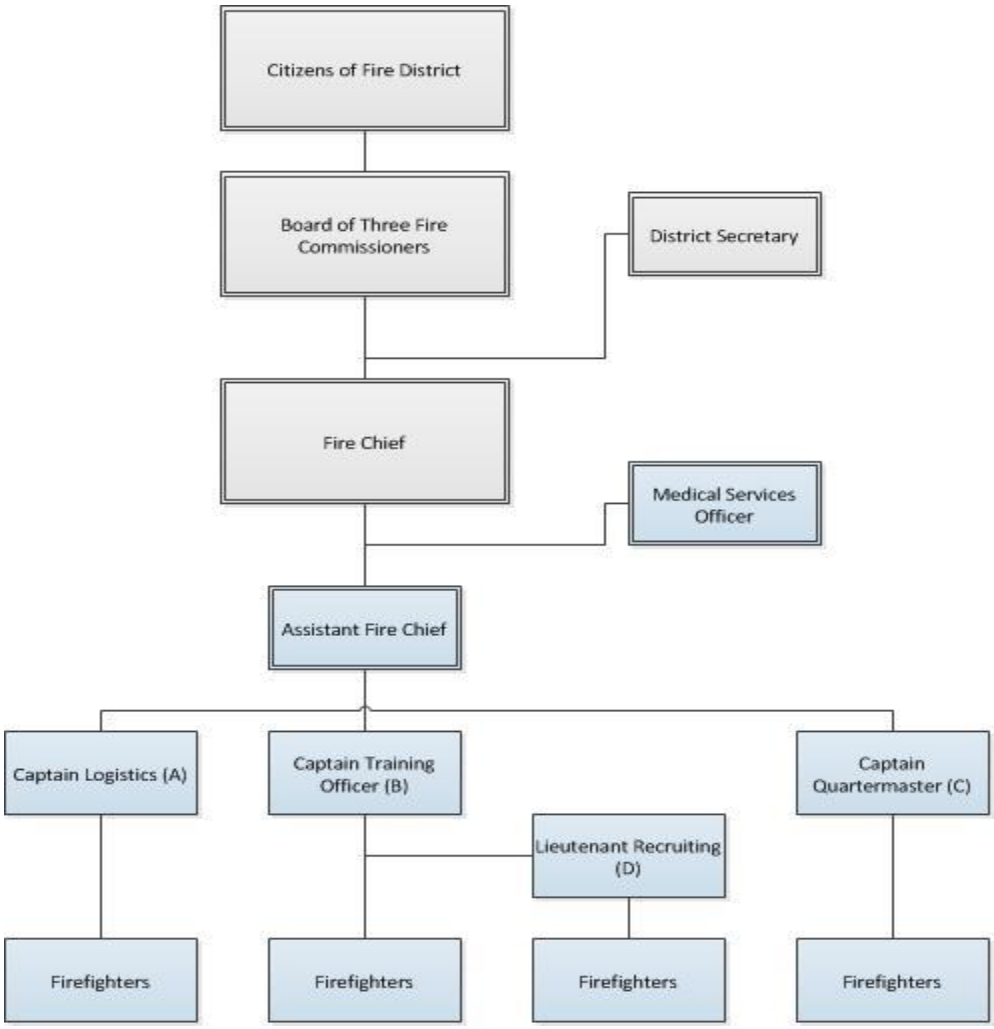


Figure 6: Snohomish #21 Organizational Chart

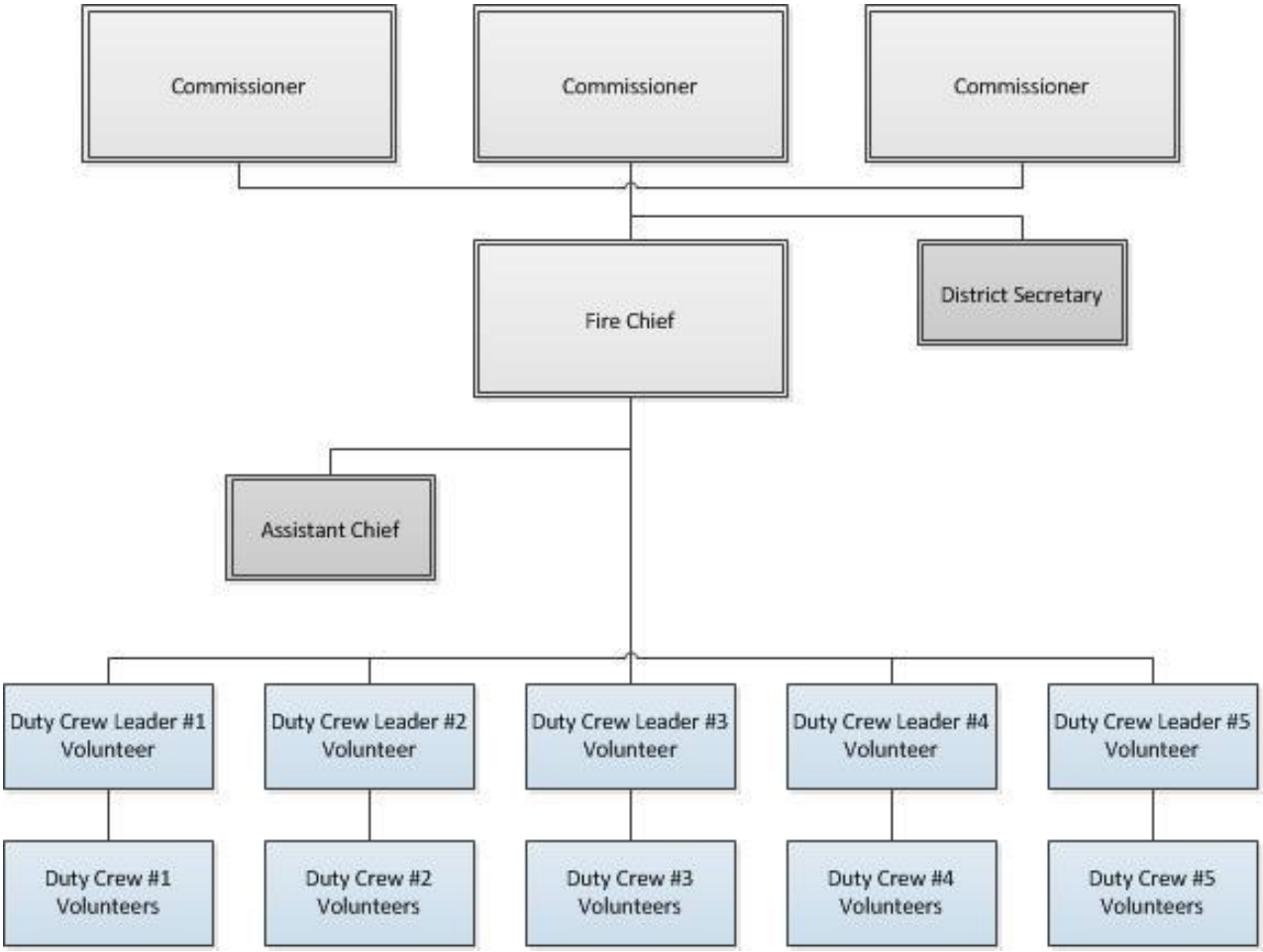


Figure 7: Snohomish #24 Organizational Chart

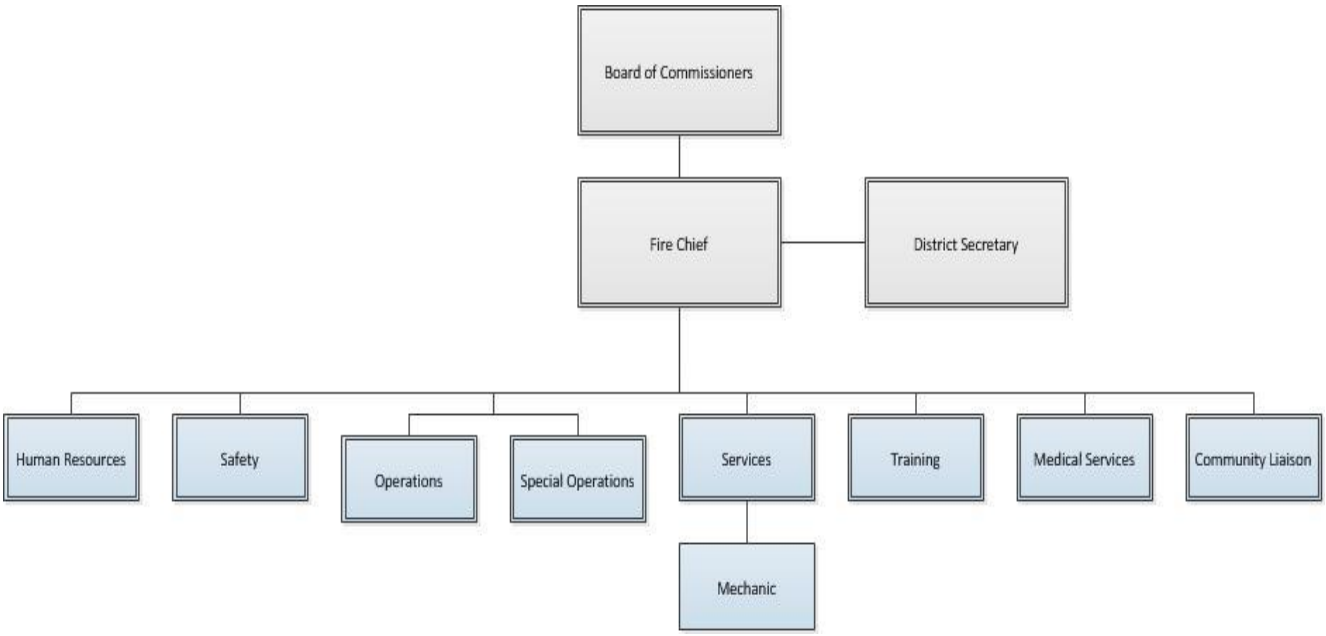
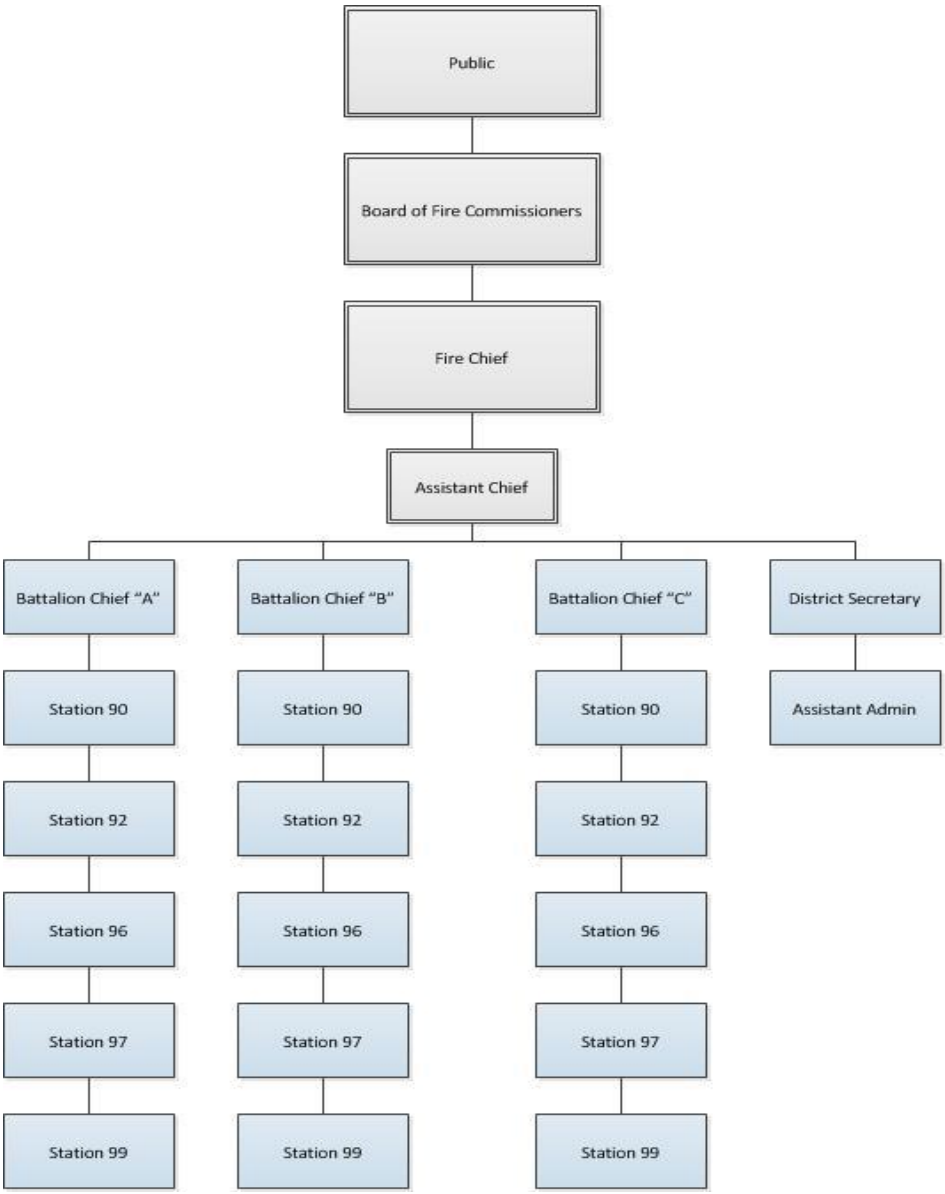


Figure 8: North County RFA Organizational Chart



Management Components

Fire department management coupled with organizational growth is a common challenge for fire service leaders. The regional study agencies are not immune to the need for adequate management to meet current conditions. The modern fire department must address management complexities in areas that include the consistency and adequacy of response, maintenance of competencies, and recruitment of a qualified and diverse workforce. This section examines each department's efforts to manage the organization and evaluates measures that are being taken for the future.

Figure 9: Survey Table – Management Components

Survey Components	Observations – Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
1. Mission, Vision, Strategic Planning, Goals and Objectives							
A. Mission statement adopted	Yes	Yes	No	Yes	Yes	No	Yes
i) displayed	Yes – posted at each station	Yes	N/A	Yes – posted at each fire station	Yes, in strategic plan	N/A	Yes – website and at each station
B. Vision established and communicated	Yes	Yes	No	No	Yes, in strategic plan	No	Yes
C. Values of staff established	Yes – FF safety, incident effectiveness & reduced liability	Yes	No	No	Yes, in the strategic plan	No	Yes
D. Strategic or master plan	No	Completed April 2012; new plan to be developed	No	No	Yes	Business plan (2008)	No
i) adopted by elected officials	N/A	N/A	No	N/A	Yes	accepted	N/A
ii) published and available	N/A	N/A	No	N/A	Yes	Yes	N/A
iii) periodic review	N/A	N/A	No	N/A	Yes, annually	No	N/A
E. Agency goals and objectives established	Yes	Yes	No	Yes	Yes	No	No

Survey Components	Observations – Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
i) date developed	November 2012 for 2013	2012	N/A	2012	2012	N/A	N/A
ii) periodic review	annually	annually	N/A	annually	annually	N/A	N/A
F. Code of ethics established	Yes – in current policy manual & will be updated in Lexipol contract	Yes – adopted an SOP on business ethics and general rules	No	Yes, by policy	Yes, in Policy and SOGs	Included in Performance policies	Yes – by policy
2. Availability of SOPs, Rules and Regulations, Policies							
A. Copies of rules provided	Being developed as part of Lexipol	Yes. Being updated as part of Lexipol	Admin. & Personnel Policy Manual (1995)	Yes	Yes	Yes	Yes
i) last date reviewed	Being updated	Being updated	1995	Updated as need is identified	Being updated	Yes	Updated as need is identified
B. Copies of SOPs or guidelines available	Being developed as part of Lexipol	Yes. Being updated as part of Lexipol	SOGs (Red Book). Not current.	Yes	Yes	Yes	Yes
i) regular update	Annual	Being updated	Ad hoc/as needed	As needed	As needed	Yes	As needed
ii) SOGs used in training evolutions	Yes	Yes	Indirectly	Yes	Yes	No	Yes – in training manual
C. Policy manual available	Being developed as part of Lexipol	Yes. Being updated as part of Lexipol	Single copy only, outdated	Yes	Yes	Yes	Yes
i) reviewed for consistency	Yes	Yes	No	Yes	By exception	Yes	By exception
ii) reviewed for legal mandates	Yes	Yes	No	Yes	Yes	No	No
iii) training on policies provided	Will be done when Lexipol implemented	Yes	No	Yes	Yes	No	Inconsistently

Survey Components	Observations – Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
3. Critical Issues							
A. Critical issues are identified							
i) first critical issue	Funding	District's evolution to combination agency creates cultural challenges	Not identified (leadership transition)	Funding	Training & retention of volunteers	Long-term financing for equipment replacement	Economy
ii) second critical issue	Staffing	Two hour out of service transport time and delayed response to tertiary calls	Not identified (leadership transition)	Volunteer staffing	Have a working budget	Retention of volunteers	Keeping up with apparatus
iii) third critical issue	Apparatus	Officer development and training	Not identified (leadership transition)	Annexation	Setting funds aside for apparatus replacement	Establishing policies and procedures that are well thought out & understood by everybody	Healthcare in the future/ ambulance reimburse-ment
4. Internal and External Communications							
A. Internal communications							
i) regularly scheduled staff meetings (fire department)	Yes	Yes – weekly Officer meetings monthly	Dept. in transition -- No current Officer Core -- interim Association meeting first Wednesday of every other month	Yes	Yes, drill nights plus once a month officers meeting and important changes	Monthly officers meeting, drills twice a week (am and pm)	No – try to do it monthly

Survey Components	Observations – Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
ii) written staff meeting minutes	No	No – for weekly staff -- Officer meeting minutes are kept	Yes - Association	Yes	No	No, but starting	No
iii) memos	Yes	Yes	Yes	Yes	e-mails	e-mails	No
iv) member newsletter	No	No	No	No	No	No	No
v) member forums	Yes – shift by shift	Yes – on a shift basis	No	Association meeting monthly	Yes, during drills	Yes	B/Cs conduct these
vi) open door policy	Yes	Yes	Yes	Yes	Yes	Yes	Yes
vii) vertical communication path clearly identified (Chain of Command)	Yes	Yes	Informal	Yes	Yes, sometimes doesn't follow Chain of Command	Yes	Yes
B. External communications	City PIO	Assistance from comm. consultant					
i) community newsletter	Yes – via city newsletter	Yes	No	Yes – intent is once per year	No	No	Once a year
ii) website	Yes – should be updated more frequently	Yes	Domain name; under construction	Yes	Yes	Yes, but not kept up	Yes
iii) advisory committee(s)	Yes	Goal	No; meet with Tribal leadership periodically	Yes	No need as yet	Use school district flyer and mailings that we insert	No
iv) complaint process	Yes – online and tracking	No	No	No	Suggestion Box	Yes	No
v) community survey	No	When there is a need	No	No	No	Yes	When there is a need

Survey Components	Observations – Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
5. Decision Making Process							
A. Preferred management methodology of the fire chief	Seek input, make a decision	Surround self with people with different skill sets than I have to complete our team	In flux – interim leadership currently in place	Collaborative decision-making with officer team	Involve stakeholders, gain perspective, make the decision	Accessible to all personnel	Set expectations, delegate authority and responsibility, then get out of their way
6. Document Control							
A. Process for public records access established	Yes	Yes – by policy	Limited access but no policy	Yes, by policy	Yes – forwarded to district secretary	Yes	Yes by policy and on website
B. Hard copy files protected	Yes – locked cabinets	Yes	Locked storage room; limited access to key staff	Yes	Yes	Yes	Yes
C. Computer files backed up	Yes -- IT	Yes	Yes	Yes	Yes – Evergreen IT	Yes	Yes – updating server
7. Security							
A. Building security	Yes – combination locks	Yes – keys and combination locks	Combination door locks	Yes – combination locks	Yes	Yes	Yes – combination or key locks
B. Office security	Yes -- keys	Yes – keyed and alarmed	Limited	Yes - keys	Yes	Yes	Yes
C. Computer security	Password protected – changed every three months	Password protected – Outside IT is revamping system	Password protected – not changed regularly	Password protected – not changed regularly	Password protected – not changed regularly	Password protected – not changed regularly	Password protected – passwords not changed regularly

Survey Components	Observations – Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
D. Vehicle security	Lockable rigs are locked, others are kept inside fire stations	Lockable rigs are locked, others are kept inside fire stations	Lockable rigs are locked, others are kept inside fire stations	Lockable rigs are locked, others are kept inside fire stations	Lockable rigs are locked, others are kept inside fire stations	Lockable rigs are locked, others are kept inside fire stations	Lockable rigs are locked, others are kept inside fire stations
E. Capital inventory maintained	Yes	Yes	Yes; just started due to State Auditor finding	Yes	No	Working on now	Yes
i) asset security system used	Yes – asset tags	Yes -- barcode	Yes – asset tags	No	N/A	N/A	Yes
ii) inventory interval	Annual	Annually by policy	Annual	No – working on it	N/A	N/A	Try to perform annually
F. Monetary controls used							
i) cash access controls	No petty cash	Yes – admin offices only – logged and deposits handled by two people	Separate account at Bank of America; two-signature check; goes through voucher system for approval. $1,500 limit	No petty cash	A checking account with debit card – District secretary purchases by board approval -- separation of duties on district secretary purchases?	Yes – strict controls and accounting for petty cash and audited, separation of payable/ receivables	Yes – Secretary has records locked in file cabinet – secretary balances and audits
ii) credit card controls	Yes – Pcards – each admin, each captain and certain FF with program responsibility	Yes – Finance Manager controls it	No credit cards other than fuel cards	Credit cards – fire chief only	Yes – Chiefs, Board and Secretary	Gas cards to officers, 2 credit cards – same separation of purchasing	Yes – chief, 3 B/Cs, secretary and each commissioner has one

Survey Components	Observations – Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
iii) purchasing controls	Yes	Yes – Finance Manager controls	Purchase authorization plus purchase order	Yes – board reviews/ approves	Yes- board reviews & approves	Yes – Trudy LaDouceur, Dist./Board Secretary	Yes – board reviews and approves expenditures
8. Reporting and Records							
A. Records kept by computer	Yes	Yes	Some	Yes	In progress	Yes	Yes
i) operating system	Windows 7	Windows 7	Windows 7	Windows 7	Windows 7	Windows 7	Windows XP
B. Periodic report to elected officials							
i) financial report	Yes – Finance officer does	Yes – budget monthly	Yes -- Monthly cash flow	Yes -- monthly	Yes -- monthly	Yes	Yes
ii) management report	Yes -- monthly	Yes, informally	Yes -- monthly	Yes - monthly	Verbally	Yes	No
iii) operational report	Yes -- monthly	Yes -- monthly	Limited	Yes -- monthly	Verbal	Yes	Yes – B/Cs develop and provide
C. Annual report produced	Working on one now – for internal consumption	Yes, in 2012 & HB1756 report	No	No	No	No	Yes
i) distributed to others	No	Just the board and by request	N/A	N/A	N/A	N/A	Just the board
ii) analysis of data provided	Yes	Yes	N/A	N/A	N/A	N/A	Yes
D. Required records maintained							
i) incident reports	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ii) patient care reports	Yes	Yes	Yes	Yes	Yes	Yes	Yes
iii) exposure records	Yes	Yes	No	Yes	Yes	Yes	Yes
iv) SCBA testing	Yes	Yes	Just started	Yes	Yes	Yes	Yes
v) hose testing	Yes	Yes	Yes	Yes	Yes	No	Yes
vi) ladder testing	Yes	Yes	No	No	No – inspections only	No	Yes
vii) pump testing	Yes	Yes	Yes	Yes	Yes -- biannually	Yes, may skip a year	Yes

Survey Components	Observations – Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
viii) breathing air testing	Yes	Yes	Yes -- quarterly	Yes	Yes	Yes, not every year	Yes
ix) vehicle maintenance records	Yes	Yes	Yes – hard copies	Yes	Yes – hard copies	Yes	Yes
x) gas monitors calibrated	Yes	Yes – as needed	Not calibrated	Yes – when alarm indicates they need calibration	N/A	N/A	Yes – send out for calibration
9. Planning							
A. Capital improvement plan							
i) plan period	Ambulance replacement, not for fire yet. Working on it	Yes – six years (facilities and apparatus)	Capital Acquisition Fund plan is in place for 2012-2014	Apparatus replacement schedule	Not for facilities; apparatus replacement schedule not funded	No	No
ii) periodic review	Just developed – will review annually	Annual	As needed	Yes -- annually	N/A	N/A	N/A
iii) projects	Turnouts, SCBA,	Facilities and equipment	Station expansion design – 2012	No	N/A	N/A	N/A
iv) funding	Budget request/grant	Yes	From general fund budget	Partially	Not funded	N/A	Some funds set aside

Management Components Assessment

Discussion: There are wide variations between the seven agencies in management infrastructure such as staff support; presence of mission, vision, and values; records handling; and platform. The fire chiefs are engaged in their agencies and are committed to continuous improvement. In Fire District #15, the interim fire chief has the unenviable task of trying to fully incorporate earlier report recommendations while learning the new job. Every indication is that Chief Dodge is dedicated and committed to improving the district and is up to the task.

The agencies already cooperate significantly in such areas as EMS, ambulance transportation, and use of part-time personnel. The fire chiefs meet regularly as part of the Snohomish County Fire Chiefs' Association but have taken it a step further by establishing a North Snohomish County Fire Chiefs Group. At these meetings, they discuss shared challenges and opportunities for cooperation. In most of the agencies the economic climate and financial circumstances facing the agencies are in the top three critical issues they face.

Arlington Fire Department Comments: The AFD has all of the key management documents in place (mission, vision, values) and is currently establishing a comprehensive set of policies, procedures, rules, regulations, and procedures via Lexipol. Lexipol is a commercial public safety risk-management organization which enjoys a very positive reputation in the fire service. The private firm creates and updates these critical organizational documents to guide the conduct of employees, which helps protect agencies from unnecessary legal liability. AFD is joined by Camano Island Fire & Rescue to become the first fire service agencies in the State of Washington to contract with Lexipol's services.

According to the fire chief, funding, staffing, and apparatus are the top three critical issues facing the department. All are specifically related to direct service delivery to the community and are on the resource side of the equation. Focusing on the demand side of the equation can help reduce (but not eliminate) the stress on the existing resources. More discussion on this will follow later in this report.

Communication with members within the organization and the larger community externally is robust. Interviews with department members, citizens, and business interests reflect positively on the effort expended by the administration to communicate. Appropriate internal controls are reported to be in place on the physical inventory and on P-Cards. Testing and calibrating essential equipment is regularly conducted. Major EMS equipment is identified on a capital

equipment replacement plan, but fire apparatus is not yet included in the plan. This is a project under way currently. There is no dedicated funding for replacement, relying instead on budget requests and grants for funding.

Arlington Fire Department Recommendations:

- Develop and adopt a five-year strategic plan for the fire department.
- Make the AFD annual report available to the public via a pdf copy on the website.
- Establish and fund an apparatus replacement schedule for all major apparatus.

Camano Island Fire & Rescue Comments: CIF&R has all of the key management documents in place (mission, vision, values) and is currently updating their comprehensive set of policies, procedures, rules, regulations and procedures via Lexipol. Lexipol is a commercial public safety risk-management organization which enjoys a very positive reputation in the fire service. The private firm creates and updates these critical organizational documents to guide the conduct of employees, which helps protect agencies from unnecessary legal liability. CIF&R is joined by Arlington Fire Department to become the first fire service agencies in the State of Washington to contract with Lexipol's services.

Cultural challenges as the district evolves to a combination agency, EMS transports causing delays in secondary and tertiary responses, and officer training are identified as the top three critical issues facing the district from the fire chief's perspective. The district has a six-year apparatus and facilities repair/replacement schedule and has dedicated funding to address the plan. This plan is reviewed regularly and updated as needed.

Camano Island Fire & Rescue Recommendations:

- Develop and adopt a five-year strategic plan for the fire district.
- Publish weekly staff meeting minutes, once approved, capturing key decisions.
- Develop a formal complaint process for the general public, possibly web-based.
- Make the CIF&R annual report available to the public via a pdf copy on the website.

Snohomish County Fire District #15 Comments:

Review of Snohomish #15's management components finds that the District is lacking some of the baseline documents and practices that are expected in a fire department that is well managed. The District has not established statements of its organizational mission, vision, and goals. While the process of developing these proclamations may seem to some to be only an esoteric exercise, it is important to establishing an agency's foundation.

The best way to complete the process is through a Strategic Planning project. The District has done so in the past; however, previous strategic planning efforts have been incomplete and a plan has not been revised and updated on a regular basis, as is recommended. ESCI can assist in this effort using our *Customer Centered Strategic Planning* process, if needed.

District policies, procedures and operating guidelines were also reviewed and found to be inadequate. Existing documents are partial in content and dated. It is critical that an organization maintain current and applicable organizational policies, including BOC policies. Guidance on the development of fire district policies is available from the Washington Fire Commissioner's Association, in the *Commissioner's Handbook*. The handbook is available electronically or in hard copy from the Association and is strongly recommended reading for all fire commissioners.

Standard Operating Guidelines (SOGs) is another critical component that needs to be addressed. SOGs are analogous to a sports team's "play book" in that they declare how specific operations on an emergency scene, as well as around the fire station, will be conducted. It is imperative that current, well developed SOGs be in place in the interest of operational efficiency and, most importantly, firefighter safety. Resources are available for the composition of an SOG manual and can be provided by ESCI.

With regard to the SOGs and policies that do exist currently, ESCI observed that all members of the agency are not be fully versed on their content. It is recommended that training be provided as well as placing a requirement on members to read the manuals and sign off on their content.

Snohomish County Fire District #15 Recommendations:

- Develop a Respiratory Protection Program compliant with OSHA Chapter 29 CFR 1910.135, requiring testing, maintenance and use of Self Contained Breathing Apparatus (SCBA).
- Develop a Blood Borne Pathogens Exposure Control Plan as outlined in OSHA Chapter 29 CFR 1910.1030.
- Develop annual testing, repair and maintenance processes of all safety-related equipment, such as ladder, hose, pump, SCBA and breathing air systems.

Snohomish County Fire District #19 Comments: The district has most of the standard management infrastructure in place (other than the recommendations which follow), but the fire chief spends concerted effort establishing and reinforcing the district's culture. That culture consists of professionalism at all times, pride in your equipment, facilities and appearance, and

setting a high standard of performance in the field. The fire chief is very hands on and engaged in all facets of service delivery, instilling a strong work ethic by the volunteers.

Funding, volunteer staffing and annexation are the top three critical issues facing the district from the fire chief's perspective. The district has an apparatus replacement schedule which is partially funded. The district enjoys significant support from the community, who describe the district as integral to the fabric of the community. Evidence of that support is found in the citizens interviewed and the successful passage of a bond issue which funded constructed the headquarters fire station and a significant addition to the headquarters fire station in a two-phase project.

Snohomish County Fire District #19 Recommendations:

- Establish vision and values for the district personnel to aspire toward and live out.
- Develop and adopt a five-year strategic plan for the fire district
- Establish a regular interval to review and revise district Rules & Regulations and Policies & Procedures.
- Incorporate review of operational procedures into the district's training schedule.
- Develop a formal complaint process for the general public, possibly web-based.
- Establish a bar-code or other asset tag identification process to facilitate conducting annual inventory review.
- Establish an annual report to the community and publish on the district website.
- Conduct ladder testing in compliance with *NFPA 1932*.
- Seek opportunities to fully fund the apparatus replacement schedule.

Snohomish County Fire District #21 Comments: Most of the standard management infrastructure is in place in the district, including an up-to-date strategic plan. The fire chief and assistant chief are full-time employees of the district; the district secretary is a part-time position. A few significant gaps exist in the operational structure of the district. The assistant chief and the fire chief are seen by several of the volunteers as "being on different pages". Examples offered include the assistant chief countermanding direction given by the fire chief and often breaching the chain of command by going directly to the board of fire commissioners on operational issues. The fire commissioners are also active volunteer firefighters, making their engagement in operational discussions awkward or confusing to the line personnel (i.e., which role are you playing in this discussion?). The fire chief must have a greater role in the budget process for the position to be effective.

Training and retention of volunteers, having authority to manage the district budget, and fully funding the apparatus replacement schedule are the top three critical issues facing the fire district from the perspective of the fire chief. In addition, incident reporting is done by hand-written reports. These reports must be computerized, with annual reports submitted to the state Fire Marshal annually, which is standard practice in the fire service nationally.

Snohomish County Fire District #21 Recommendations:

- Establish a regular interval to review and revise district Rules & Regulations and Policies & Procedures.
- Provide the fire chief with operational budget development and operational budget management authority, responsibility, and accountability.
- Take and publish staff meeting minutes, once approved, to capture and communicate key decisions.
- Reinforce adherence to the chain of command for job-related discussions or inquiries.
- Develop a formal complaint process for the general public, possibly web-based.
- Establish a bar-code or other asset tag identification process to facilitate conducting annual inventory review.
- Establish budgetary controls, purchase limits, and budget guidance to the fire chief.
- Ensure separation of duties for management of debit card orders, receiving, and reconciling.
- Change the computer password at regular intervals.
- Establish an electronic records management system (preferably on a file server).
- Provide written management and operational reports to the board monthly.
- Create and publish a district annual report available to the public via a pdf copy on the website.
- Conduct ladder testing in compliance with *NFPA 1932*.
- Conduct pump testing in compliance with *NFPA 1911*.
- Establish a funding mechanism to fund the apparatus replacement schedule.

Snohomish County Fire District #24 Comments: FD #24 (Darrington) is a remote, rural district which relies on its citizen-volunteers to a greater extent than most fire districts. The fire chief is a part-time employee of the district, with the administrative assistant pulling part-time duties but acting as the continuity between the administration and operations due to the fire chief's work schedule. The fire chief manages multiple, varied interests in the community. A recent break-up of the community ambulance service due in part to the fire district's dissatisfaction with the service created a community rift which is still expressed today. The

district has an established "business plan" which sets forth the goals and objectives of the district. The district does not have a strategic plan.

From the fire chief's perspective, long-term funding of apparatus, retention of volunteers, and establishing a cogent set of policies and procedures are the top three critical issues facing the district. Communicating the first two of those critical issues to the community is challenging with the lack of a local newspaper, leaving word-of-mouth, direct mailers, or combining with other direct-mailers as the only mechanism remaining.

Snohomish County Fire District #24 Recommendations:

- Establish a five-year strategic plan, which creates a mission, vision, values, and goals and objectives for the district.
- Incorporate operational SOGs (standard operating guidelines) into training evolutions.
- Schedule a legal review of policies on a periodic basis and train on relevant policies with affected personnel.
- Publish staff or crew meeting minutes, once approved, to capture key decisions.
- Establish a mechanism to regularly update the district website as a key communication tool for the district and the community.
- Change the computer password on a regular interval.
- Establish a bar-code or other asset tag identification process to expedite annual inventory review.
- Publish an annual report available to the public via a pdf copy on the website.
- Conduct fire hose testing in compliance with NFPA 1962.
- Conduct ladder testing in compliance with NFPA 1932.
- Conduct pump testing in compliance with NFPA 1911.
- Conduct breathing air testing in compliance with NFPA 1989.
- Establish an apparatus replacement schedule and seek opportunities to fully fund it.

North County Regional Fire Authority Comments: The NCRFA was formed in 2008 with the combining of Fire Districts #14 and #18, later also providing contracted service to the City of Stanwood. The agency is still addressing the adjustments that come from multiple agencies forming one new agency. Citizens interviewed express support for the fire agency and want to assist, specifically in the area of local knowledge and expertise in water rescues in the bay and the tide-flats. These areas are described as treacherous if one isn't acutely aware of the habits of the area when a front comes in or the tide rises.

The economy, keeping up with apparatus replacement, and future health care costs, including ambulance reimbursement changes are the top three critical issues facing the agency according to the fire chief. The agency has an apparatus replacement schedule and does have some funding set aside for apparatus replacement.

North County Regional Fire Authority Recommendations:

- Establish a five-year strategic plan, which creates goals and objectives for the fire authority.
- Establish a regular interval to review and revise fire authority Rules & Regulations and Policies & Procedures.
- Make a concerted effort to conduct regular staff meetings to keep employees informed.
- Develop a formal complaint process for the general public, possibly web-based.
- Change the computer password on a regular basis.
- Establish a bar-code or other asset tag identification process to expedite annual inventory review.
- Make the NCRFA annual report available to the public via a pdf copy on the website.
- Establish an apparatus replacement schedule and seek opportunities to fully fund it.

Fiscal Management

The relative financial health of each agency is an important factor in determining whether opportunities exist to take advantage of economies of scale, form partnerships to leverage strengths, or shore up weaknesses. The current fiscal conditions for each agency are listed in the following survey table, making side-by-side comparisons easier to perform.

Figure 10: Survey Table - Fiscal Management

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
1. Finance Overview							
A. Designated fiscal year	January through December	January through December	January through December	January through December	January through December	January through December	January through December
B. Assessed property value, (Expense Fund)	'13: 1,727,872,805 '12: 1,822,509,261 '11: 2,018,675,444 '10: 2,239,257,103 '09: 2,306,249,447	'13: 2,809,225,232 '12: 3,056,377,681 '11: 3,139,570,989 '10: 3,439,321,289 '09: 3,510,485,204	'13: 311,276,588 '12: 346,503,930 '11: 379,035,895 '10: 418,717,265 '09: 455,888,687	'13: 321,071,551 '12: 338,180,272 '11: 381,117,041 '10: 418,481,080 '09: 515,748,942	'13: 679,932,073 '12: 768,137,315 '11: 863,505,830 '10: 952,242,171 '09: 1,048,653,735	'13: 219,368,363 '12: 261,388,964 '11: 304,714,852 '10: 311,320,282 '09: 348,958,255	'13: 1,525,279,544 '12: 1,618,547,727 '11: 1,828,198,485 '10: 2,028,863,352 '09: 2,237,428,383
C. Revised 2012 general operating fund budget, fire department	Fire: 2,242,305 EMS: 2,980,906	2013 Fire & EMS: $5,681,288.60	$753,460	$662,436	$933,263	$283,600	2013 Fire & EMS: $5,040,491
D. General (Expense) fund property tax, District levy	'13: 2,453,331 '12: 2,392,478 '11: 2,360,662 '10: 2,315,625 '09: 2,239,628	'13: 3,048,915 '12: 3,095,006 '11: 3,089,891 '10: 3,033,400 '09: 3,048,915	'13: 441,668 '12: 430,000 '11: 423,868 '10: 418,989 '09: 411,281	'13: 395,867 '12: 421,434 '11: 478,712 '10: 502,290 '09: 577,000	'13: 493,499 '12: 483,944 '11: 476,987 '10: 415,002 '09: 350,142	'13: 174,841 '12: 173,799 '11: 177,261 '10: 164,242 '09: 161,568	'13: 2,100,599 '12: 2,235,250 '11: 2,544,586 '10: 2,840,455 '09: 3,147,637
i) levy rate (5-year history)	'13: $1.2141 '12: $1.0454 '11: $0.9652 '10: $0.8916 '09: $07417	'13: $1.1200 '12: $1.0126 '11: $0.9842 '10: $0.8820 '09: $0.8685	'13: $1.4189 '12: $1.2410 '11: $1.1183 '10: $1.0007 '09: $0.9022	'13: $1.2330 '12: $1.2462 '11: $1.2561 '10: $1.2003 '09: $1.1188	'13: $0.7258 '12: $0.6300 '11: $0.5524 '10: $0.4358 '09: $0.3339	'13: $0.7970 '12: $0.6649 '11: $0.5829 '10: $0.5276 '09: $0.4630	'13: $1.3772 '12: $1.3810 '11: $1.3919 '10: $1.4000 '09: $1.4068
ii) general fund levy collection rate FY 2012	'12: 97.7% '11: 98.8% '10: 99.4% '09: 99.8%	2012: 99%	2012: 98% to 99%	2012: 98% to 99%	2012: 98% to 99%	2012: 98% to 99%	2012: 98% to 99%

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
E. Bonds, fire department	No	GO (2008)	No	#1 GO (1998) #2 GO (2009) #3 Non-Voted	No	No	Non-Voted
i) levy rate	N/A	’13: Not Yet Avail. ‘12: $0.2034 ‘11: $0.1914 ‘10: $0.1676 ‘09: $0.1653	N/A	2013: #1: $0.3206 #2: $0.3927 #3: $0.2670	N/A	N/A	’13: $0.1228 ‘12: $0.1190 ‘11: $0.1082 ‘10: $0.1000 ‘09: $0.0932
F. Other tax levies/fees	EMS (permanent)	EMS (6-year levy, expiring in 2015)	EMS (permanent)	EMS (permanent) M&O (2013)	EMS (Permanent) –EMS services are provided by Arlington City FD, 100% of the EMS property tax revenue is paid to Arlington City	EMS (Permanent) – ALS services are provided by Arlington City FD. 70% of the EMS property tax revenue is paid to Arlington City. The remaining 30% (not to exceed $30K for 2013) is for the District to provide BLS	EMS (6-year levy, expiring in 2016)
i) levy rate	$ 0.50	$ 0.50	$ 0.25	EMS: $ 0.50 M&O: $ 0.60	$ 0.50	$ 0.50	$ 0.50
2. Budgetary Controls							
A. Budget officer	Jim Chase (City Finance Director)	Chief Ganz and Linda Layton	Chief Dodge	Chief Strotz	Wendy Britton, Dist. Secty.	Trudy LaDoucer and Chief Fenstermaker	Chief Fulfs

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Budget development process							
i) role of electeds	Review and approval of budget	Identify direction & objectives –a very robust committee. Approval after several workshops	Work with Fire Chief developing the Budget and the approval the final and amendments	The Board of Commissioners review the proposed budget, and they approve the adopted budget	Participates in budget workshops, long- & short-term planning, and generally very involved	Approval and a couple of working sessions	Board members attend annual budget retreat, Also approval of budget
ii) role of administration	Finance compiles and reviews numbers and analysis with City Administrator	Review and analysis	Fire Chief holds this role and prepares financial reports for review with the Board Chair	Chief & A/C build budget and presents it to the Board	Chief & AC propose numbers and present to the Commissioners	Trudy LaDoucer and Chief Fenstermaker create the proposed budget and present it to the Fire Commissioners	Chief & BCs analyze and build budget
iii) role of management	Initial preparation of the budget, managing budget process, grants, proposing changes to fee structure	Guide budget development process, gather data, create analysis	Fire Chief also fulfills this role by working with staff to identify potential budget needs	Chief Strotz gathers data and review prior budget performance	Dist. Secretary provides data analysis and reports for the budget development	Trudy LaDoucer and Chief Fenstermaker review expenses.	BCs contribute with data and guidance
iv) role of staff	Provide budget suggestions when solicited	Some staff has budget responsibilities & develops division or program budgets under the guidance of the Chief. Present their budgets directly to the budget committee	Staff suggests items for consideration	Staff suggests items for consideration	Provide Data and budget needs/proposals	Trudy LaDoucer and Chief Fenstermaker propose budget and present it to the Fire Commissioners	Offer insight and bring forward equipment requests and needs for consideration

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
v) role of community	Budget hearing open to the public	Public hearing that has considerable public involvement	Open public meetings	Budget meetings are open to the public.	Open public meetings	Open public meetings (low attendance)	Open public meetings
C. Budget adoption process							
i) budget approval	Budget adopted by city council	Board of Fire Commissioners	Board of Fire Commissioners	Board of Fire Commissioners	Board of Fire Commissioners	Board of Fire Commissioners	Governing Board
ii) funding approval	Council has to approve	Board of Fire Commissioners	Board of Fire Commissioners	Board of Fire Commissioners	Board of Fire Commissioners	Board of Fire Commissioners	Governing Board
D. Financial control officer							
i) financial report	Jim Chase	Linda Layton	Chief Dodge	Chief Strotz	Wendy Britton	Trudy LaDoucer and Chief Fenstermaker	Chief Fulfs
ii) financial review	Jim Chase & Department Heads	Monthly budget & ytd review by Linda Layton and AC Yengoyan. Additionally, budget amendment process can be implemented if needed. Annual review by independent CPA	Chief Dodge reviews Cash Flow Monthly/ Expense and Revenue Budget update Quarterly , BARS reporting yearly to state auditor	Chief Strotz runs expense and revenue reports ad hoc and month-end summary reports reviews expense details at least once a month.	Dist. Secty., Chief, A/C present revenue & expenditures to Board once a month.	Trudy LaDoucer, Chief Fenstermaker, and the Commissioners review expenses and payroll monthly.	Board reviews all POs to maintain checks and balances for financial accountability
iii) auditor	State Auditor	State Auditor	State Auditor	State Auditor	State Auditor	State Auditor	State Auditor
E. Basis of accounting	Cash	Cash	Cash	Cash	Cash	Cash	Cash

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
F. Purchasing							
i) purchasing policy	Policy guiding purchasing authorizations & dollar amounts where bids/additional approvals are required. Approved budget expenditures allowed by dept. if below minimum thresholds on the Contract Authorization Summary	Yes the policy is in place and documented	Yes, policy requires formal POs to be signed by Chief and checks and balances are in place to ensure oversight. Annual Budget is basic control mechanism. Approved bills processed via FC to Board for approval at open public meeting	Chief Strotz is the only one that makes purchases and has authority to make any budgeted purchases. The Chief doesn't purchase EMS supplies but does review the order before it is placed.	Chief has open approval, smaller local vendor accounts only have a couple people who can sign. All purchases are reviewed monthly by District Secretary and the Board of Commissioners	Trudy LaDoucer and Chief have authority over all budgeted purchasing. Amounts over $3,000 requires board review/approval	Policy requires a PO for every expense
ii) central supplies/ logistics	FD purchases separately from city	Most from central supply within the Fire Department. Captain sends Linda purchase requests for items not supplied through dept. inventory	Budgeted items are obtained from local vendors under the purchasing policy	Chief Strotz makes mostly local purchases as needed and distributes supplies to staff	Standard supplies and materials are purchased from local vendors as needed	Use local businesses when available (use purchase cards)	Supplies are ordered from local vendors as appropriate, and by only one person as a control measure
iii) joint agreements/ ventures	Piggy back on county purchases, mutual aid agreements.	For apparatus, PPE, but by resolution by the board. State bid process for software	The district has in the past, but does not have any current purchase in progress.	Snohomish County purchase agreement	EMS supplies through City of Arlington -- Dept. of Enterprise Services – Master Contract User Agreement, CIF&R for District's fleet services	WA State Department of Enterprise. Also, the District has a service agreement with CIF&R for the District's fleet services	Can purchase under the County-wide purchasing agreement

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
iv) JPAs	Telephone system with Bellevue	No	No	No	No	No	The District has a joint purchasing agreement with Snohomish County
v) bidding	Capital > $8K	Follow State Law	Follow State Law	Is required for anything over $10K (State Policy), but will go out at lower amount if they think they can save money	Follow State Law, Bid matrix per legal counsel.	follow state law rules/most purchases are from a local sole source	Policy requires 3 bids from $10K - $200K, depending on the work (public work), material or service, on the vendor list, or if a contract is in place
vi) leases	Copier	Copier	No	Copier	No	Copier	No
3. Budget							
A. Operating budgetary funds							
i) organized by program or category (BARS)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ii) sub accounts	Standard account coding	Standard account coding	Standard account coding	Standard account coding	Standard account coding	Standard account coding	Standard account coding

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Reserve funds	City Policy Target: 8% of General Fund budgeted taxes, licenses & permits plus one-month operating cash within the General Fund	Goal: 15% of the annual expense fund. Currently at 16% of expense fund including health care reserves	No formal written policy, but they do currently have approx. $700K of combined reserves	Currently the reserve fund has a balance of $180,000, enough for six months of expenses	$530K currently set aside in reserve.	No	Emergency Reserve Account: $612,000, Apparatus Reserve: $2,400,000 Operations stabilization fund $1,000,000, equipment fund $600,000, building facilities reserve $500,000.00 and employee separation fund $50,000
C. Revenue funds	Grants, Expense, EMS	Expense, Reserve, Capital, Trust, Bond, Medical Expense	Expense	Expense, EMS, Bond, Reserve	Expense, Bond	Expense	Expense, Bond
D. Enterprise funds	No	No	No	No	No	No	No
E. Adopted budget FD income accounts, 2013	Not broken out separately	Fire & EMS: $5,622,798	Fire & EMS: $813,220	Fire & EMS: $725,946	$933,263	$286,600	Fire & EMS: $5,041,691
F. Revised budget FD expense accounts, 2013	Fire: $2,441,491 EMS: $2,573,584	Fire & EMS: $5,520,273	Fire & EMS: $813,220	Fire & EMS: $725,946	$933,263	$286,600	Fire & EMS: $5,041,691
i) personnel	FD: 2,140,376 EMS: 1,974,334	Fire: 1,781,532 EMS: 1,944,561	523,852	326,150	732,823	105,850	4,134,759
ii) contractual	FD: 193,925 EMS: 451,075	Fire: 50,159 EMS: 48,000	64,900	29,600	112,823	28,500	196,350

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
iii) commodities	FD: 101,790 EMS: 145,175	Fire: 775,494 EMS: 144,199	224,468	370,196	77,617	149,250	660,944
iv) capital outlay	FD: 5,400 EMS: 0	0	0	0	0	0	48,438
G. Municipal overhead							
i) reserve fund contributions	There is a reserve fund, but the economy of the past couple years hasn't allowed for contributions.	N/A	N/A	N/A	N/A	N/A	N/A
ii) fleet rental charges	N/A	N/A	N/A	N/A	N/A	N/A	N/A
iii) fleet maintenance charges	Equipment Rental and Maintenance Fund	N/A	N/A	N/A	N/A	N/A	N/A
iv) motor fuel charges	Equipment Rental and Maintenance Fund	N/A	N/A	N/A	N/A	N/A	N/A
v) property/ casualty insurance	Through the State	N/A	N/A	N/A	N/A	N/A	N/A
vi) medical and dental insurance	Yes	N/A	N/A	N/A	Yes	N/A	N/A
vii) workers' compensation	Yes	N/A	N/A	N/A	Yes	N/A	N/A
viii) workers' compensation mod rate	$1 per hour worked	N/A	N/A	N/A	N/A	N/A	N/A
ix) employee pension plan	State retirement (LEOFF II)	State retirement (LEOFF II)	State retirement (LEOFF II)	State retirement (LEOFF II)	State retirement (LEOFF II)	N/A	State retirement (LEOFF II)

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
x) city administrative overhead	EMS fund has a 2013 charge of $88,200 for administrative & payroll services – none for Fire	N/A	N/A	N/A	N/A	N/A	N/A
4. Debt							
A. Bonded debt	City: four separate LTGO bonds totaling $16,125,976 of principal outstanding as of 12/31/2013	Yes, in year 5 of 20 for a total of $10M	No	Fire Station Bond $1,2M 20-year (1999 - 2018) Fire Station Bond $1,5M 20-year (2009 -2028)	No	No	GO Bonds
B. Capital lease	Copiers	No	No	No	No	No	No
C. Unfunded liability							
i) pension fund	Don't have to report OPEB, do report sick and vacation leaves.	pension through the state	No	No	BVFF	No	No
ii) workers' compensation claims	Handled directly through state; currently no outstanding claims	1 full-time and 1 part-time employees with current claims.	Currently no outstanding claims	Currently no outstanding claims	No – exempt -- Volunteer with State, no outstanding claims	Board of Vol and Reserve firefighter (State volunteer pension system)	No outstanding claims
5. Revenue							
A. Tax levy							
i) limitations	City General Fund is limited to $2.875 (and $0.50 for EMS)	Statutory limits of $1.50 for Fire, and $0.50 for EMS	Statutory limits of $1.50 for Fire, and $0.50 for EMS	Statutory limits of $1.50 for Fire, and $0.50 for EMS	Statutory limits of $1.50 for Fire, and $0.50 for EMS	Statutory limits of $1.50 for Fire, and $0.50 for EMS	Statutory limits of $1.50 for Fire, and $0.50 for EMS

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Service contracts	Fire: FD21: $50K EMS: FD21 - $350K, FD24 - $83K, FD25 - $44K FC 19 – $77K	The District has four Fleet Enterprise agreements (FD21, FD19, Skagit #3, Skagit #6) with budgeted 2013 revenue of $43K; Cadet program with H.S. $8,500, EM Coordinator Reimbursement $5,768	No	The District provides its own ambulance transports ($50K per)	Contract with AFD for all EMS services and first due Fire response for the south side of the District.	BLS Transport	City of Stanwood for Fire & EMS was budgeted at $1,279,392 in 2013
C. Benefit Charge	No	No	No	No	No	No	No
D. Grants	Currently 2 employees on SAFER - $21K; MEDIC1 grant - $1,200	Just finished a SAFER grant, WA health grant, $2M in grants over last five years	No	Yes (Group grant with 4 or 5 other agencies for Incident Command) $12K	Regional ICS grant, Tribal grants and King County Trauma Grant.	IMS Equipment joint grant, Assistance to FF grant for SCBA 2006, grants from tribes	EMS $1,400
i) recent awards	Just getting approved AFG for $68K	Radio grant for $200,000. FEMA seismic grant initially awarded but later disallowed $400,000 -- appealing	No	No	No	No	No
ii) outstanding applications	No	Hose Grant pending ($167,000)	No	No	Water Rescue Equipment "Stillaguamish Tribe"	County fire station expansion $207K (HUD grant)	No

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
E. Fundraising							
i) Foundation	No	No	No	No	No	No	No
ii) Volunteer Association	Yes, they are involved in fundraising.	No	Yes, they are involved in community fundraising events	Silvana Fire Fighter association involved in fundraising.	Yes fundraising for community events	Yes fundraising for community events	North County fire fighters association did some fundraising several years ago, nothing recently
F. Fees for service							
i) billing for fire response	No - Transport fees budgeted at $950K	No	No	No	No	For BLS Transport $450 for non-residents, 2012 transport fees = $95,000	No
ii) inspection fee	No	No	Not applicable , reservation land, not subject to inspection	No	No	No	No
iii) hazardous materials	No	No	No, the District pays into county special ops plan to cover Haz Mat teams and special ops via mutual aid	Billed at the Snohomish county fire chiefs rate	Billed at the Snohomish county fire chiefs rate	No	No
iv) recovery outside of jurisdiction	No other than transport services	No	No	No	No	No	No
v) airport/port fee(s)	2012: $264,900	No	No	No	No	No	No
vi) event stand-by charges	Occasionally, not more than $4-5K annually	No	No	No	No	No	No

Survey Components	Observations – Fiscal Management						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
G. Ambulance service collection(s)							
i) percentage collected (2012)	48% (net of Medicare and Medicaid) 68% with Medicare and Medicaid	2013 - $375K budgeted revenue for ambulance transport fees. This is net of un-collected and fees. Accounts sent to collections are subject to a 60% for the district and 40% for the collection agency	N/A	50% collections, the net to the District is $50K per year	N/A	N/A	Handled by a billing fee company. 2012 collection rate approximately 50%.
ii) collection fee(s)	Flat fee per bill prepared. 2012: $52,381	Yes, $22 dollars per call to the billing agency, 2013 has $18,000 budgeted for fees	N/A	Lake Stevens Fire ($20 per MIR)	N/A	Systems Designs billing $22.00 per Transport	2012 the total fees were $26,942

Fiscal Management Assessment

Operating Budget, Funding, Fees, Taxation, and Financial Resources

Budgeting for local government agencies across the northwest has become a more challenging undertaking. Many public entities are experiencing a flattening or downturn in their revenue growth. There are several factors affecting governmental revenues. The financial crisis of 2007-08 and resulting economic downturn, home foreclosures, and tight credit resulted in dramatic reductions in home values. Additionally, new commercial and residential development growth slowed, further restraining overall revenue growth.

Controlling expenses is vital to healthy fiscal management, and it too has become more challenging to manage. A concerning factor effecting long-term operating budgets is when inflation outpaces revenue growth, as it has for many public entities recently. Increases in personnel benefits such as health care and pension benefits can have significant impact on constrained budgets.

Economic Indicators

As of July 2013 the full affects the Federal Government sequestration are largely unknown. However, the initial impacts of the spending cuts appear to have had little effect on the economy while some key indicators have been very favorable. The Thomson-Reuters/University of Michigan consumer sentiment index hit a six-year high in May 2013. May also saw continued strong growth in median home sale prices, according to the S&P/Case-Shiller indexes.

Property Tax

In Washington property tax is administered by local governments. County assessors value and assess the tax and county treasurers collect it. Property tax revenue is typically the primary funding source for fire districts and departments.

Assessed Values

Washington State Law requires that county Assessors appraise property at 100 percent of its “true and fair market value” according to the “highest and best use” of the property. Assessed values are adjusted each year by the county assessors. Both Island[1] and Snohomish[2] counties use a “mass appraisal” process to appraise property types, including land, single family residences, and manufactured homes each year. "Mass appraisal" is the processes of valuing large numbers of properties as of a given date, using standard methods, employing common

[1] http://www.islandcounty.net/assessor/TaxationValuationProcess.htm.
[2] http://assessor.snoco.org/forms/massappr12.aspx.

data, and allowing for statistical testing. The assessors use local market data, based on sales data, as one of the primary factors along used produce the assessed value adjustments.

Each year the appraisal process uses the prior year's sales data as the basis for adjustments to the following year's values. This means 2007 sales data wasn't represented in assessed values until 2009. This lag should be considered when relating market trends with the assessed values.

Figure 11: Assessed Values (Expense Fund) by Agency, 2007 - 2013[3]

	2007	2008	2009	2010	2011	2012	2013
AFD	1,882,294,666	2,239,293,774	2,306,249,447	2,239,257,103	2,018,675,444	1,822,509,261	1,727,872,805
Island #1	2,946,673,244	3,366,215,851	3,510,485,204	3,439,321,289	3,139,570,989	3,056,377,681	2,809,225,232
Snohomish #15	361,780,852	456,503,828	455,888,687	418,717,265	379,035,895	346,503,930	311,276,588
Snohomish #19	393,716,250	508,482,808	515,748,942	418,481,080	381,117,041	338,180,272	321,071,551
Snohomish #21	877,654,603	1,050,340,386	1,048,653,735	952,242,171	863,505,830	768,137,315	679,932,073
Snohomish #24	137,146,580	330,820,405	348,958,255	311,320,282	304,714,852	261,388,964	219,368,363
NCRFA			2,237,428,383	2,028,863,352	1,828,198,485	1,618,547,727	1,525,279,544
Total AV	**6,599,266,195**	**7,951,657,052**	**10,423,412,653**	**9,808,202,542**	**8,914,818,536**	**8,211,645,150**	**7,594,026,156**

A noticeable decline in assessed values was not apparent until the 2010 tax year. The 2008 tax year saw large year-over-year growth with the overall average of 20.5 percent. In 2009 the overall average rate fell to 2.9 percent, and 2010 was in negative territory at -5.9 percent.

Figure 12: Graphical Comparison of Agency Assessed Values, 2007 - 2013[4]

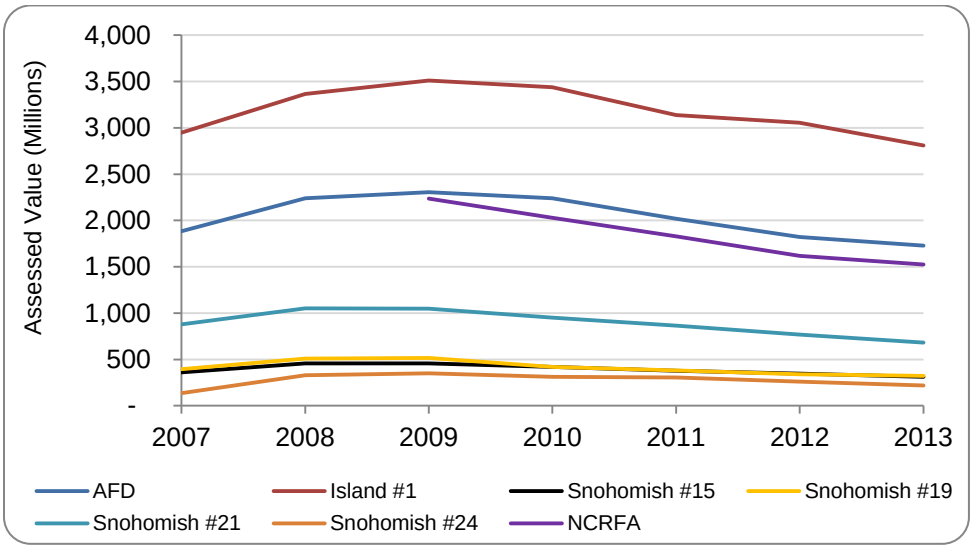


Figure 12 shows each agency's total assessed value between 2007 and 2013. Each agency's assessed values were similarly affected by the downturn in the economy.

[3] http://dor.wa.gov/Content/AboutUs/StatisticsAndReports/stats_proptaxstats_report.aspx
[4] Ibid.

Figure 13: Year-Over-Year Change in Assessed Value, 2007 - 2013[5]

	2007	2008	2009	2010	2011	2012	2013
AFD	0.0%	19.0%	3.0%	-2.9%	-9.9%	-9.7%	-5.2%
Island #1	0.0%	14.2%	4.3%	-2.0%	-8.7%	-2.6%	-8.1%
Snohomish #15	0.0%	26.2%	-0.1%	-8.2%	-9.5%	-8.6%	-10.2%
Snohomish #19	0.0%	29.1%	1.4%	-18.9%	-8.9%	-11.3%	-5.1%
Snohomish #21	0.0%	19.7%	-0.2%	-9.2%	-9.3%	-11.0%	-11.5%
Snohomish #24	0.0%	141.2%	5.5%	-10.8%	-2.1%	-14.2%	-16.1%
NCRFA	0.0%	0.0%	0.0%	-9.3%	-9.9%	-11.5%	-5.8%
Total Y-O-Y Change	**0.0%**	**20.5%**	**2.9%**	**-5.9%**	**-9.1%**	**-7.9%**	**-7.5%**

Figure 13 shows the year-over-year change for each agency. Annexations and changes in taxing districts service are can play a role in the total growth rate. Currently assessors do not separate out new or lost property values; therefore these changes represent the total net changes.

Washington Tax Limitations

Regular property tax levies are subject to several specific legal limitations:

- Levy limit (aka 101 percent)
- District or City statutory dollar rate limit
- $5.90 aggregate limit
- 1 percent constitutional limit

The **levy limit** applies to taxing district's levy amount and not to increases in the assessed value of individual properties. It was approved by voters in 2001 under initiative 747. I-747 limits taxing districts' annual budget increases to 101 percent of its highest previous levy (since 1985) plus amounts attributed to new construction, wind turbines, and/or annexations to the district unless voters approve a greater increase. This limitation is calculated by the assessor at the beginning of the calculation process to ensure each taxing authority is within its budgetary limitations.

Taxing districts have **statutory limits** on their regular levy rates. Fire Districts and Regional Fire Authorities are limited to $1.50 per $1,000 of assessed valuation (AV). EMS is limited to $0.50 per $1,000 of AV. Cities normally have a maximum regular levy rate of $3.375 per $1,000 of AV. Cities with a Fireman's Pension Fund can levy an additional $0.225 per $1,000 of AV, resulting in a maximum levy of $3.60 per $1,000 of AV. However, these maximum levy amounts are reduced for cities that annex into a fire or library district. The annexed city maximum levy rate is lowered by the special district(s) (fire or library) regular levy rate(s).

[5] http://dor.wa.gov/Content/AboutUs/StatisticsAndReports/stats_proptaxstats_report.aspx

- **Example:** A city with a maximum rate of $3.60 annexes into a fire district that is levying at its maximum rate of $1.50 as well as library district levying at its maximum rate of $0.50. The city's revised maximum levy rate would be $3.60 - $1.50 - $0.50 = $1.60.

The $5.90 aggregate limit: the combination of all senior and junior taxing districts levies (not including state, port districts, public utility districts, emergency medical levies, and conservation futures) cannot exceed $5.90.

Finally, the **1 percent constitution limit** applies to regular (non-voted) combined property tax rates and restricts their annual growth to 1 percent ($10 per $1,000) of assessed value. However, voters may vote for special levies (such as school, bonds, capital projects, and m&o levies) that are added to this figure.

Banked Capacity

Banked capacity is the difference between the highest lawful levy that could have been made and the actual levy that was imposed. The amount of banked capacity usually changes each year because the highest lawful levy and the actual levy are recalculated. Having banked capacity for one year does not guarantee the district will have the same amount or more the following year.

If a district or city levies less than its highest lawful levy, it will have banked capacity. If a district or city levies at its highest lawful levy, it will not have banked capacity.

Figure 14: Banked Capacity by District, 2008 - 2012[6]

	2008	2009	2010	2011	2012
AFD	-	-	-	-	-
Island #1	-	-	-	-	-
Snohomish #15	-	-	-	-	-
Snohomish #19	-	-	271,333	294,911	352,189
Snohomish #21	-	94,539	41,742	-	-
Snohomish #24	-	8,571	9,964	-	-
NCRFA	-	-	515,688	811,618	1,120,954

When a district wants to use banked capacity, its resolution must authorize a large enough increase that will allow the district to levy at its highest lawful levy.

[6] http://www.dor.wa.gov/Content/AboutUs/StatisticsAndReports/stats_proptaxstats_report.aspx

Housing Market

The S&P/Case-Shiller Home Price Indices are one of the leading measures for the U.S. residential housing market, tracking changes in the value of residential real estate both nationally as well as in 20 metropolitan regions. The Seattle region index can be used in conjunction with local market data to help inform the coming year's assessed values.

Figure 15: S&P/Case-Shiller Home Price Indices, 2000 - 2013[7]

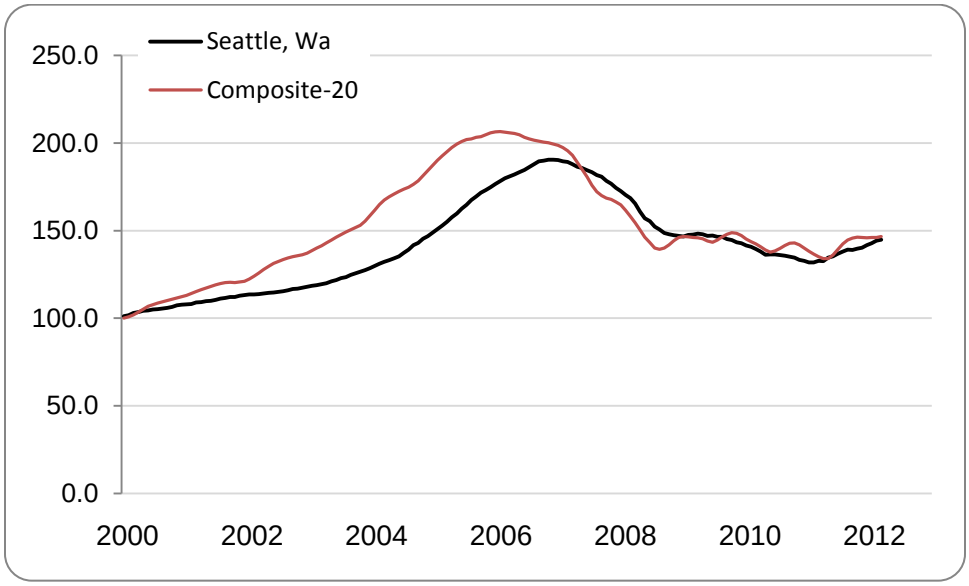


Figure 15 graphically shows the Seattle index has historically been less volatile than the 20 metropolitan regions (Composite-20). The Seattle region index has been trending upward since early 2012 and through the winter which is can depress sales unlike the Composite-20 which have fluctuated with the seasonality of the housing market. This is an indication of relative stability in the Seattle region housing market.

Historic Residential Property Sales

County assessors analyze property sales data from each calendar year to establish adjustments to assessed values. Currently, for the 2013 budget year, districts and departments are receiving revenue based on assessed values that were adjusted based on sales that occurred during 2011. Both nationally and in the Seattle area the housing market was at the end of its downward trend during 2011. In 2012, median sale prices began to rise and the quantity of sales increased. The Case-Shiller index, which is based on sales data, reported an 8.25 percent increase from December 2011 to December 2012. These increases in reported sale prices

[7] http://www.standardandpoors.com/indices/sp-case-shiller-home-price-indices/en/us/?indexId=spusa-cashpidff--p-us----

should result in growth in 2014 tax year assessed values. However, the impact of the growth in 2012 on assessed value in 2014 is difficult to forecast because it is the first year after the four prior consecutive losses. Because of this the growth that Case-Shiller reported should still be considered but factored conservatively.

The following figures record the number (count) of home sales within the stated areas, as well as the median sales price based on the sales in each related quarter reported.

Figure 16 illustrates the number of home sales and the median sales prices, by quarter, from January 2008 through March 2013 for all Snohomish County. From the peak median prices in Q1 2008 of ~$350,000 to the low set in Q4 2011 of just under ~$250,000, the median prices were hovering just above ~$250,000 in Q1 2013. During 2012 the velocity of sales slowed while the median values have fluctuated, perhaps due to seasonality, while continuing to trend upward. Overall, the high number of sales in Snohomish County increases the value of the data and weight its trending should add to future forecasting.

Figure 16: Snohomish County - Homes Sold & Median Sales Price, Q1 2008 - Q1 2013[8]

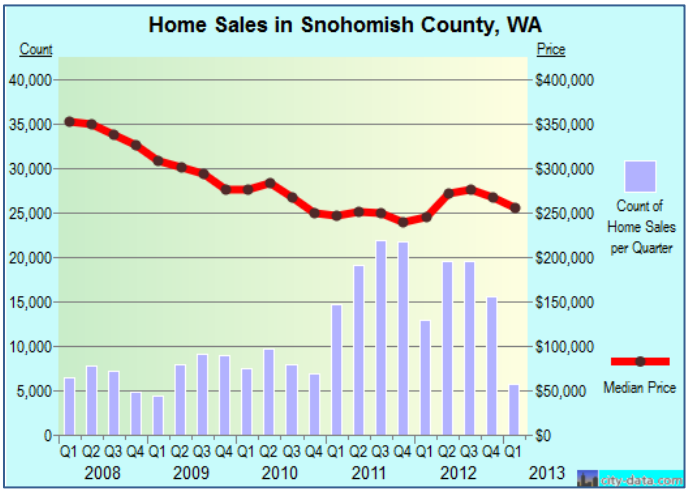


Figure 17 illustrates the number of home sales and the median sales prices, by quarter, from January 2008 through March 2013 for all Island County. From the peak median prices in Q2 2008 of ~$295,000 to the low set in Q1 2012 of ~$190,000, the median prices were ~$215,000 in Q1 2013. During 2012 the velocity of sales increased slightly while the median values have fluctuated but are continuing to trend upward slightly. The fluctuations in median sales price can potentially be attributed to the low number of total sales. Fewer total sales in the dataset can

[8] http://www.city-data.com/housing/houses-Snohomish-Washington.html

allow large individual sales, as opposed to the lack of them, to have significant impacts on the quarterly numbers. Therefore, a moving average would be useful to smooth out the fluctuations and establish a growth forecast.

Figure 17: Island County - Homes Sold & Median Sales Price, Q1 2008 - Q1 2013[9]

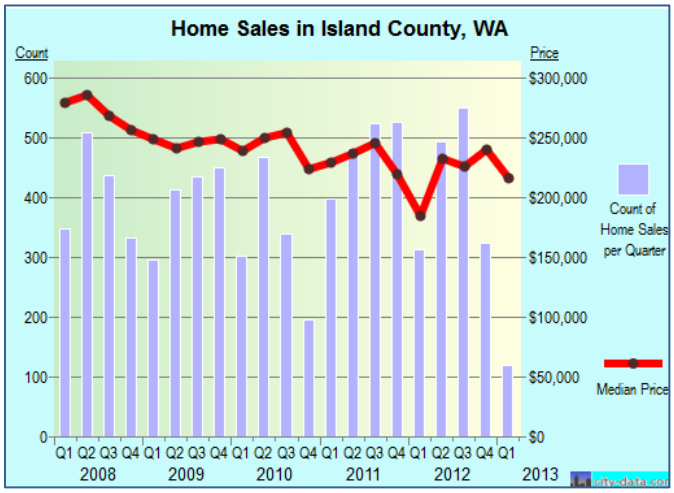
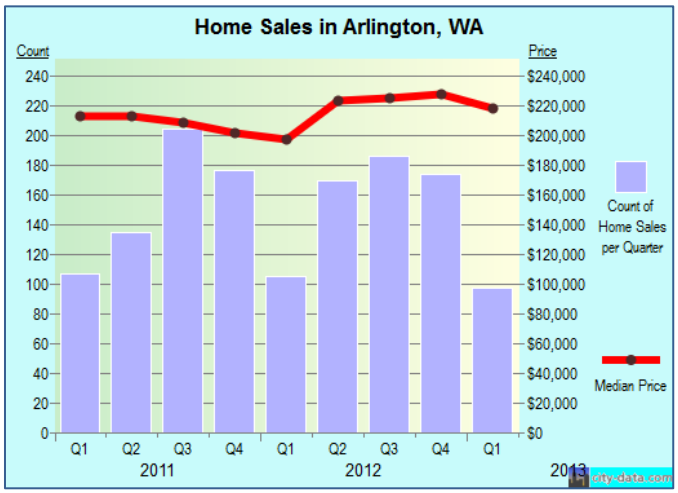


Figure 18 illustrates the number of home sales and the median sales prices, by quarter, from January 2011 through March 2013 for Arlington, Washington. Arlington's dataset only includes 2011 forward, which doesn't allow for complete side-by-side analysis. The lowest median values were recorded in Q1 2012 at ~$200,000, and the high was in Q4 2012 at just above ~$220,000.

Figure 18: Arlington, WA - Homes Sold & Median Sales Price, Q1 2011 - Q1 2013[10]



[9] http://www.city-data.com/county/Island_County-WA.html
[10] http://www.city-data.com/housing/houses-Arlington-Washington.html

Figure 19 illustrates the number of home sales and the median sales prices, by quarter, from January 2008 through March 2013 for Camano, Washington. Q1 2008 was the peak median price at ~$325,000, and the low was during Q1 2012 at ~$200,000.

Figure 19: Camano Island, WA - Homes Sold & Median Sales Price, Q1 2008 - Q1 2013[11]

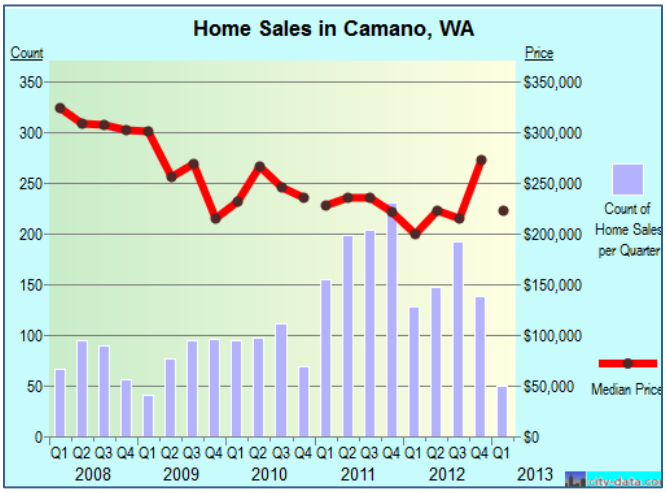
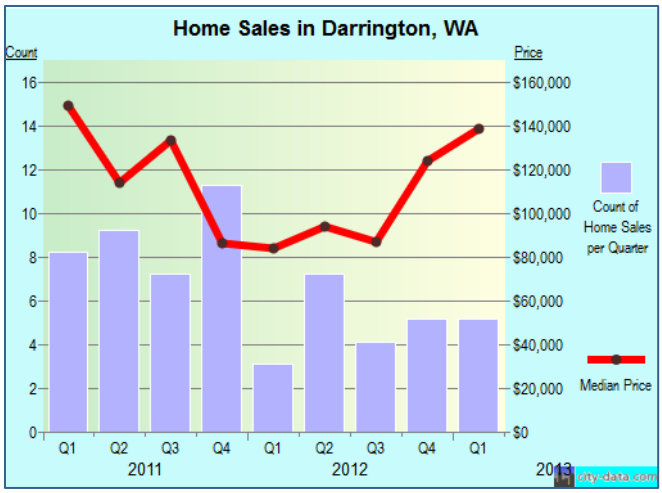


Figure 20 illustrates the number of home sales and the median sales prices, by quarter, from January 2011 through March 2013 for Darrington, Washington. Darrington's dataset only includes 2011 forward, which doesn't allow for complete side-by-side analysis. During Q1 2011 the median sales prices peaked at ~$150,000, and hovered around ~$90,000 between Q4 2011 to Q3 2012.

Figure 20: Darrington, WA - Homes Sold & Median Sales Price, Q1 2011 - Q1 2013[12]



[11] http://www.city-data.com/housing/houses-Camano-Washington.html
[12] http://www.city-data.com/city/Darrington-Washington.html

Figure 21 illustrates the number of home sales and the median sales prices, by quarter, from January 2008 through March 2013 for Stanwood, Washington. Q1 2008 was the peak median price at ~$330,000, and the low was during Q1 2012 at ~$200,000.

Figure 21: Stanwood, WA - Homes Sold & Median Sales Price, Q1 2008 - Q1 2013[13]

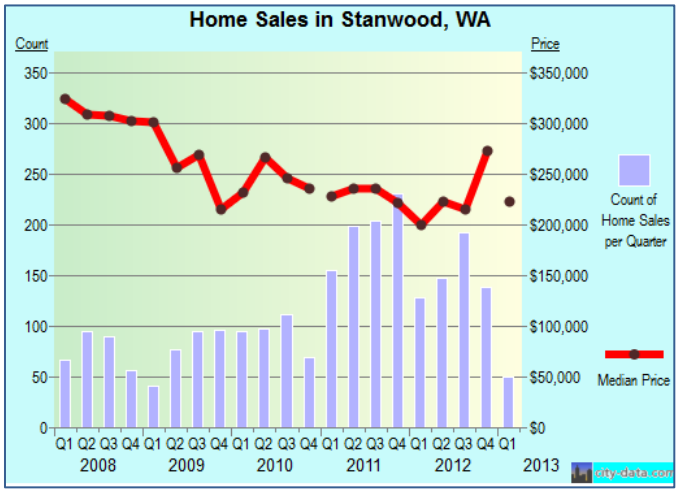
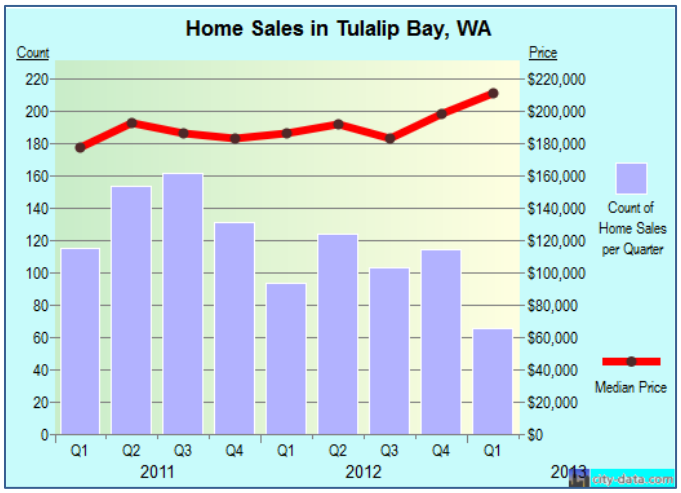


Figure 22 illustrates the number of home sales and the median sales prices, by quarter, from January 2011 through March 2013 for Tulalip Bay, Washington. Tulalip Bay's dataset only includes 2011 forward, which doesn't allow for complete side-by-side analysis. The lowest median values were recorded in Q1 2012 at ~$180,000, and the high was in Q1 2013 at just above ~$215,000.

Figure 22: Tulalip Bay, WA - Homes Sold & Median Sales Price, Q1 2011 - Q1 2013[14]



[13] http://www.city-data.com/housing/houses-Stanwood-Washington.html
[14] http://www.city-data.com/housing/houses-Tulalip-Bay-Washington.html

New Construction

Washington property tax limitations exclude new construction in the first year that the property comes onto the tax roll. This allows taxing districts' revenue to grow at rates greater than the statutory limitations. While new construction can be complicated to forecast, especially beyond the coming year, using historical values can inform baseline assumptions

Figure 23: New Construction by Agency, 2008 - 2012[15]

	2008	2009	2010	2011	2012
AFD	42,790,400	35,327,300	15,762,714	16,483,780	7,171,900
Island #1	79,692,018	49,619,846	25,613,214	17,818,342	12,885,296
Snohomish #15	6,830,600	3,066,872	1,427,600	2,344,700	832,620
Snohomish #19	15,571,900	10,097,800	3,305,700	3,223,560	3,288,700
Snohomish #21	28,084,034	18,290,200	13,307,421	6,705,000	5,028,800
Snohomish #24	3,619,500	4,960,494	5,135,221	4,348,718	1,216,800
NCRFA	-	36,868,420	21,812,461	14,907,680	10,457,624

Historic Unemployment Rate

The level of employment in the region could potentially impact the number of homes being sold and ultimately the sales price. The following table shows the historic unemployment rates for Island County.

Figure 24: Unemployment Rate in Island County, 2003 - 2013[16]

	Unemployment Rate
2003	7.70%
2004	8.00%
2005	6.50%
2006	5.30%
2007	5.40%
2008	5.60%
2009	7.70%
2010	10.70%
2011	9.90%
2012	9.30%
2013	8.80%
10-Year Avg.	**7.20%**

[15] http://www.dor.wa.gov/Content/AboutUs/StatisticsAndReports/stats_proptaxstats_report.aspx.
[16] U.S. Department of Labor, Bureau of Labor Statistics, local area unemployment statistics: LAUCN53029003,LAUCN53029004,LAUCN53029005,LAUCN53029006 Not Seasonally Adjusted.

Figure 25 depicts the unemployment rate visually with the statewide average.

Figure 25: Island County Historical Unemployment Rate, January 2003 – March 2013[17]

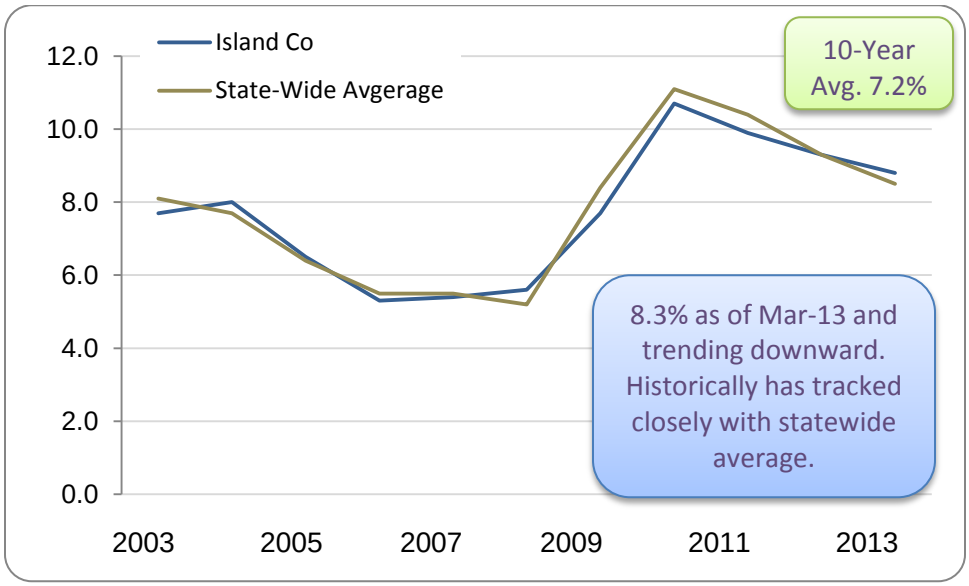


Figure 26 lists the unemployment rates for Snohomish County as of January of each year while the 10-year average is based on each individual monthly rate.

Figure 26: Unemployment Rate for Snohomish County, 2003 - 2013[18]

	Unemployment Rate
2003	7.20%
2004	6.80%
2005	5.70%
2006	4.80%
2007	4.80%
2008	4.30%
2009	8.80%
2010	11.40%
2011	10.60%
2012	8.80%
2013	7.10%
10-Year Avg.	**7.00%**

[17] U.S. Department of Labor, Bureau of Labor Statistics, local area unemployment statistics: LAUCN53029003,LAUCN53029004,LAUCN53029005,LAUCN53029006 Not Seasonally Adjusted.
[18] U.S. Department of Labor, Bureau of Labor Statistics, local area unemployment statistics: LAUPS53030003,LAUPS53030004,LAUPS53030005,LAUPS53030006 Not Seasonally Adjusted.

Figure 27 is another way to visualize the unemployment data along with the State-wide average.

Figure 27: Snohomish County Historical Unemployment Rate, January 2003 – March 2013[19]

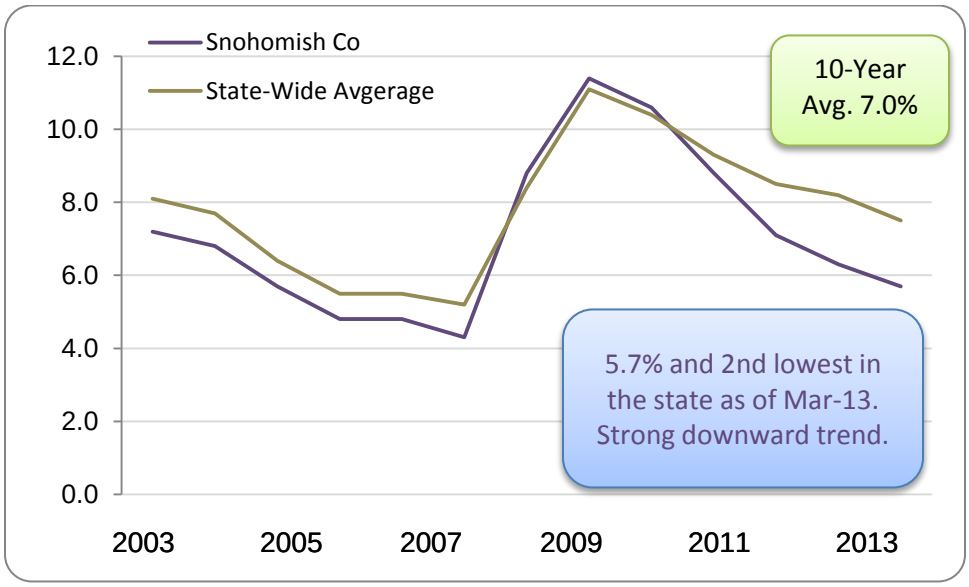
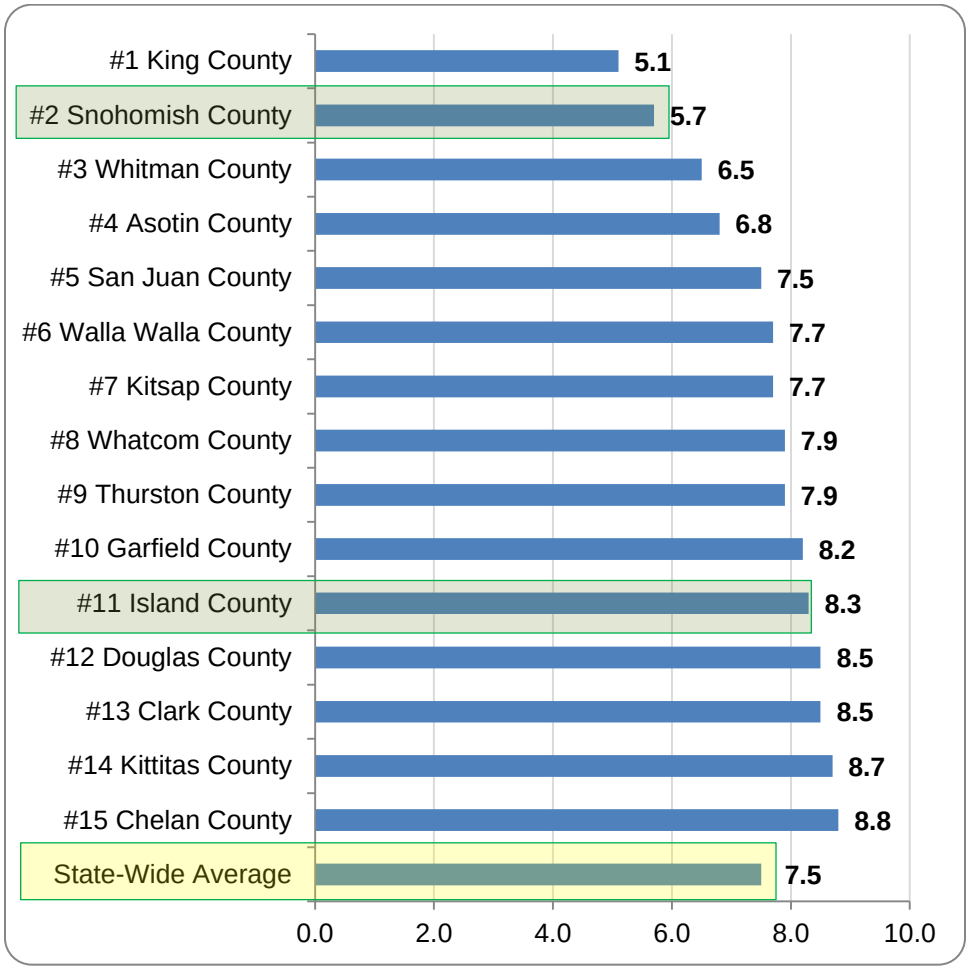


Figure 28 lists the Washington counties with the lowest unemployment rates in March 2013. Snohomish County was at the second lowest at 5.7 percent, and Island County was at number 11 with 8.3 percent. The statewide average unemployment rate was 7.5 percent.

[19] U.S. Department of Labor, Bureau of Labor Statistics, local area unemployment statistics: LAUPS53030003,LAUPS53030004,LAUPS53030005,LAUPS53030006 Not Seasonally Adjusted.

Figure 28: Unemployment Rates by County, March 2013[20]



Annual Inflation Rate

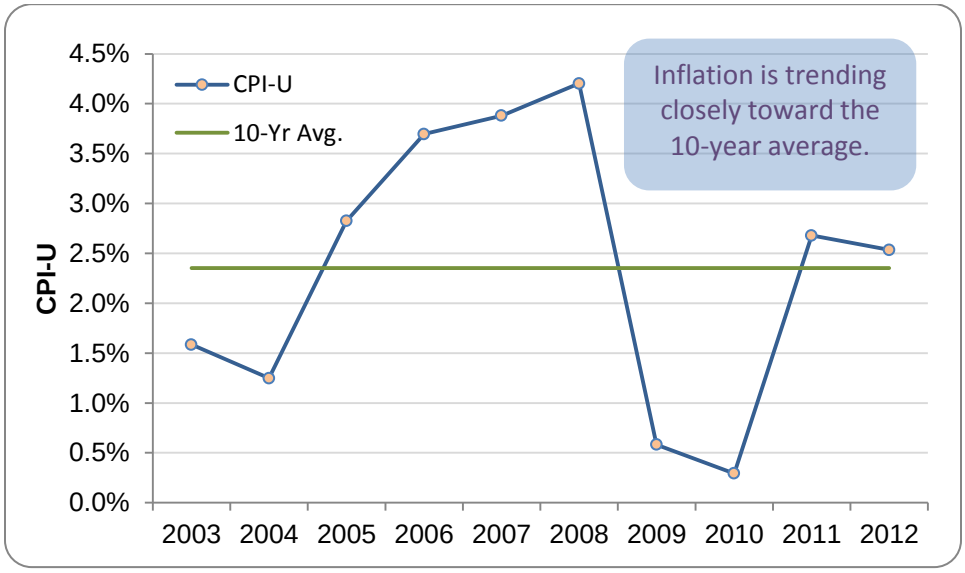
Inflation is also an important consideration when forecasting costs. For the purpose of this analysis, ESCI will use the average Consumer Price Index for all urban consumers (CPI-U) reported for 2003 though the 2012 period, for the Seattle-Tacoma-Bremerton, WA statistical area as compiled by the U.S. Department of Labor. The information is displayed in both table and graphical format (Figure 29 and Figure 30).

[20] http://www.bls.gov/data/

Figure 29: Average CPI-U, 2003 - 2012[21]

Year	CPI-U
2003	1.58%
2004	1.25%
2005	2.82%
2006	3.70%
2007	3.88%
2008	4.20%
2009	0.58%
2010	0.29%
2011	2.68%
2012	2.53%
10-Year Average	**2.35%**

Figure 30: Historical CPI-U, 2003 - 2012[22]



[21] U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index-All Urban Consumers, Series Id: CUURA423SA0.
[22] U.S. Department of Labor, Bureau of Labor Statistics, Consumer Price Index-All Urban Consumers, Series Id: CUURA423SA0.

Arlington Fire Department

AFD Debt

AFD (City) currently has no voter approved bonds outstanding. As of December 31, 2012, AFD (City) had $16,735,997 of outstanding general obligation debt. AFD's (City) budgeted debt service for these LTGO bonds is $610,021 for principal and $739,015 for interest payments in 2013. The outstanding balance is budgeted at $16,125,976 as of December 31, 2013.

AFD AV History

Figure 31: AFD Historical Assessed Value and Levy Rates, 2009 - 2013

	2009	2010	2011	2012	2013
Base Assessed Value	2,306,249,447	2,239,257,103	2,018,675,444	1,822,509,261	1,727,872,805
New Construction	35,327,300	15,762,714	16,483,780	7,171,900	23,495,636
Total Assessed Value	2,341,576,747	2,255,019,817	2,035,159,224	1,829,681,161	1,751,368,441
Expense Levy Rate	0.9711	1.0341	1.1694	1.3127	1.4199
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.3853	0.4107	0.4646	0.5000	0.5000
Bond Levy Rate	-	-	-	-	-
Total City Rate	**1.3564**	**1.4448**	**1.6340**	**1.8127**	**1.9199**
Expense Levy Rate **(F.D. Only)**	0.7417	0.8916	0.9652	1.0454	1.2141
Non-Voter Bond Levy Rate					
EMS Levy Rate	0.3853	0.4107	0.4646	0.5000	0.5000
Bond Levy Rate					
Total Fire Department Rate	**1.1270**	**1.3023**	**1.4298**	**1.5454**	**1.7141**

Arlington's assessed value lost 25.1 percent of its value between 2009 and 2013. The loss to assessed value resulted in the total increase to the total City Expense levy rate of 46.2 percent over the same five-year period. Despite the increase, the City's Expense levy rate has stayed well below the rate limit of $3.10 per $1,000 of assessed value. The City's rate limit is based on $3.375 + $0.225 = $3.60 minus $0.50 for annexation into the library district.

AFD Revenue History

AFD provides Fire and EMS services for the southern portion of Snohomish #21. For 2013, AFD budgeted $50,000 for providing Fire Service and contractually receives 100 percent of Snohomish #21's EMS levy. AFD provides ALS services for Snohomish #24 and contractually receives 70 percent of Snohomish #24's EMS levy. AFD provides ALS services for Snohomish #25 and contractually receives 90 percent of Snohomish #25's EMS levy.

Figure 32: AFD Revenue History, 2009 - 2013

Revenue	Actuals				Budget
	2009	2010	2011	2012	2013
Total Property Taxes **(F.D. Only)**	2,583,861	2,929,790	2,900,943	2,824,944	2,963,841
Fire Service Revenues					
FIRE DIST #21 Srvc Contract	44,334	46,551	48,879	51,323	50,000
AIRPORT FIRE SERVICES	226,340	242,324	242,300	264,900	264,900
EMS Service Revenues					
Dist #21 EMS Levy	434,112	327,918	552,157	398,592	351,000
Dist #24 EMS Levy	77,296	86,091	97,979	54,521	83,000
Dist #25 EMS Levy	49,587	51,746	55,650	48,614	44,000
EMS Service DIST #19	-	-	-	-	77,000
Federal Grants	1,500	651	-	-	-
State Grants	-	2,799	1,738	1,534	1,600
Stilly Tribe - EMS Service	-	2,451	3,300	-	-
Transportation fees	648,695	765,843	813,570	792,130	950,000
EMS Services - Airport	109,219	112,000	120,120	120,120	120,120
Miscellaneous Reveneue	3,054	4,918	1,170	1,323	500
Total Revenue	**4,177,998**	**5,302,679**	**4,926,664**	**4,638,456**	**4,931,961**

AFD's budgeted 2013 revenue is comprised of 60.1 percent city property-tax (Expense and EMS), 20.1 percent relates to providing Fire and EMS services for other fire districts, and 19.3 percent is related to EMS transportation fees.

AFD Expenditure History

Figure 33: AFD Expenditure History, 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	2,577,713	2,865,717	3,075,506	2,992,281	3,042,211
Personnel Benefits	797,816	891,915	840,185	855,521	1,072,549
Supplies	108,282	126,179	95,725	64,255	95,300
Services	247,041	374,228	288,569	307,528	338,140
Int Gov Srv	371,392	55,192	102,888	59,083	61,775
InterFund Pmts Services	-	-	82,570	107,925	141,750
Capital Outlay	11,249	129,124	10,895	65,070	5,441
Transfers-Out	-	-	-	-	-
Total Expenditure	**4,113,493**	**4,442,355**	**4,496,338**	**4,451,663**	**4,757,166**

Figure 34: AFD Expenditures (as Percentages of Total), 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	62.7%	64.5%	68.4%	67.2%	64.0%
Personnel Benefits	19.4%	20.1%	18.7%	19.2%	22.5%
Supplies	2.6%	2.8%	2.1%	1.4%	2.0%
Services	6.0%	8.4%	6.4%	6.9%	7.1%
Int Gov Srv	9.0%	1.2%	2.3%	1.3%	1.3%
InterFund Pmts Services	0.0%	0.0%	1.8%	2.4%	3.0%
Capital Outlay	0.3%	2.9%	0.2%	1.5%	0.1%
Transfers-Out	0.0%	0.0%	0.0%	0.0%	0.0%
Total Expenditure	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

AFD Fund Balance History

A balance history will not be displayed because the City of Arlington doesn't separate out the Fire Department from other Expense Fund Departments.

AFD Other Funds

AFD has an Equipment Rental M&O Fund for tracking associated costs (by department) outside of the Expense Fund. Expenses captured in this fund include equipment rental costs, fuel, maintenance, insurance and attributable admin overhead. During 2012 Fire specific expenses totaled $116,506, and EMS totaled 83,928. During 2011 Fire specific expenses totaled $89,846 and $66,426 for EMS expenses.

AFD Capital Replacement

Currently, AFD does not have a capital replacement plan.

AFD Undefined Liabilities

AFD currently pays medical costs for two fire retirees. The medical insurance for both retirees totaled approximately $15,000 in budgeted 2013, and is handled through the LEOFF trust.

AFD Status Quo Financial Forecast, 2013 – 2018

Using assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for AFD. Future forecasts use the 2013 budget as the basis for all calculations. Any change made to the base data are identified in the section being reviewed.

AFD AV Forecast

Because data from the tax years 2009 through 2013 were all reported losses of assessed value, and due to the fact that 2013 values are based on 2011 sales (prior to when home prices began

to rise), this forecast uses the Arlington home market data as well as the Seattle region Case/Shiller index as the basis for the following growth projections.

The magnitude[23] of AFD's annual change in assessed value compared to the Case/Shiller Seattle region index averaged 96.5 percent between 2007 and 2011, and indicates a strong correlation between the Arlington housing market and the greater Seattle region. Case/Shiller reported an 8.25 percent increase in median home prices from December 2011 to December 2012 for the Seattle region. However, several factors have been considered which limit growth of that magnitude: statutory limitations, lack of historical recovery data and how it related to changes in assessed values, complexities in estimating new construction, and state assessed properties. Based on these factors ESCI has taken a conservative approach with these projections.

The forecast percent of growth for assessed value from 2014 through 2018 is shown in the following table. These growth rates conservatively estimate the impact of new construction and state assessed properties; strong growth in either of these components would have considerable impact on these projections.

Figure 35: AFD Five-Year Growth Projections, 2014 - 2018

Year	Percent Change
2014	2.6%
2015	4.0%
2016	4.3%
2017	4.2%
2018	3.7%

Figure 36 forecasts the change in the assessed value from 2014 through 2018 using the growth factors identified above.

[23] Magnitude is in absolute terms and is always positive regardless of the direction of change.

Figure 36: AFD Forecast Assessed Value, 2014 - 2018

			Forecast		
	2014	2015	2016	2017	2018
Base Assessed Value	1,772,797,498	1,869,366,632	1,976,767,206	2,088,132,928	2,195,009,625
New Construction	24,670,418	25,903,939	27,199,136	28,559,092	29,987,047
Total Assessed Value	1,797,467,916	1,895,270,571	2,003,966,341	2,116,692,020	2,224,996,672
Expense Levy Rate	1.3980	1.3582	1.3159	1.2760	1.2432
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.4923	0.4783	0.4634	0.4493	0.4378
Bond Levy Rate	-	-	-	-	-
Total City Rate	**1.8903**	**1.8365**	**1.7792**	**1.7253**	**1.6810**
Expense Levy Rate **(F.D. Only)**	1.2681	1.2494	1.2276	1.2075	1.1936
Non-Voter Bond Levy Rate					
EMS Levy Rate	0.4922	0.4848	0.4761	0.4681	0.4626
Bond Levy Rate					
Total Fire Department Rate*	**1.7603**	**1.7342**	**1.7037**	**1.6756**	**1.6561**

AFD Revenue Forecast

Property taxes in the following figure were based on the 2013 budgeted amount and increased based on the corresponding growth rate. All other revenues use the 2013 budgeted amounts and have been inflated based on the ten-year average CPI-U of 2.35 percent.

Figure 37: AFD Forecast Revenue, 2014 - 2018

Revenue			Forecast		
	2014	2015	2016	2017	2018
C.E. Levy **(F.D. Only)**	2,216,816	2,270,635	2,326,575	2,384,268	2,443,678
C.E. - New Construction **(F.D. Only)**	31,337	32,904	34,087	35,215	36,418
EMS Levy	872,575	893,760	915,575	938,047	961,161
EMS - New Construction	12,335	12,750	13,185	13,598	14,038
Total Property Taxes **(F.D. Only)**	3,133,064	3,210,049	3,289,422	3,371,128	3,455,296
Fire Service Revenues					
FIRE DIST #21 Srvc Contract	51,176	52,380	53,613	54,874	56,165
AIRPORT FIRE SERVICES	271,132	277,511	284,040	290,722	297,561
EMS Service Revenues	-	-	-	-	-
Dist #21 EMS Levy	359,258	367,710	376,360	385,215	394,277
Dist #24 EMS Levy	84,953	86,951	88,997	91,091	93,234
Dist #25 EMS Levy	45,035	46,095	47,179	48,289	49,425
EMS Service DIST #19	78,812	80,666	82,563	84,506	86,494
Federal Grants	-	-	-	-	-
State Grants	1,638	1,676	1,716	1,756	1,797
Stilly Tribe - EMS Service	-	-	-	-	-
Transportation fees	972,350	995,226	1,018,639	1,042,604	1,067,133
EMS Services - Airport	122,946	125,838	128,799	131,829	134,930
Miscellaneous Reveneue	512	524	536	549	562
Total Revenue	**5,120,875**	**5,244,625**	**5,371,864**	**5,502,562**	**5,636,875**

AFD Expenditure Forecast

All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Figure 38 reflects forecasted expenses through 2018.

Figure 38: AFD Forecast Expenditures, 2014 - 2018

Expenditure	Forecast				
	2014	2015	2016	2017	2018
Salaries and Wages	3,113,783	3,187,038	3,262,017	3,338,760	3,417,308
Personnel Benefits	1,158,353	1,251,021	1,351,103	1,459,191	1,575,926
Supplies	97,542	99,837	102,186	104,590	107,050
Services	346,095	354,237	362,571	371,101	379,832
Int Gov Srv	63,228	64,716	66,238	67,797	69,392
InterFund Pmts Services	145,085	148,498	151,992	155,568	159,227
Capital Outlay	5,569	5,700	5,834	5,971	6,112
Transfers-Out	-	-	-	-	-
Total Expenditure	**4,929,655**	**5,111,047**	**5,301,941**	**5,502,977**	**5,714,847**

AFD Fund Balance Forecast

Arlington city combines all departments within its Expense Fund making a Fund Balance forecast not possible.

Camano Island Fire & Rescue

CIF&R Debt

CIF&R currently has two outstanding voter approved general obligation bonds that were combined to fund $10,000,000 of capital projects. The bonds are scheduled to be paid off in 2027 and 2028, respectively.

CIF&R AV History

Between 2009 and 2013, CIF&R lost 20.0 percent of its total assessed value. During the same period the Expense levy rate increased 29.0 percent to $1.120, yet well below the statutory limit of $1.50 per $1,000 of assessed value. The following table illustrates CIF&R total assessed value and levy rates for 2009 through 2013.

Figure 39: CIF&R Historical Assessed Value and Levy Rates, 2009 - 2013

	2009	2010	2011	2012	2013
Total Assessed Value	3,510,485,204	3,439,321,289	3,139,570,989	3,056,377,681	2,809,225,232
% Change From Previous Year		-2.0%	-8.7%	-2.6%	-8.1%
Expense Levy Rate	0.8685	0.8820	0.9842	1.0126	1.1200
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.3230	0.5000	0.5000	0.5000	0.5000
Bond Levy Rate	0.1653	0.1676	0.1914	0.2034	0.2160
Total Rate	**1.3568**	**1.5496**	**1.6756**	**1.7160**	**1.8360**

CIF&R Revenue History

Figure 40 depicts historical revenues for CIF&R. The year-over-year property tax revenue fell by 2.4 percent in 2012 and 1.7 percent in 2013 due to losses to assessed value and the limited EMS levy rate. 2012 and 2013 also saw reductions in Charges for Services which added to the 21.4 percent lower 2013 revenue compared to 2011.

Figure 40: CIF&R Expense Fund Revenue History, 2009 -2013

Revenue	Actuals				Budget
	2009	2010	2011	2012	2013
General Property Taxes	4,229,044	4,774,173	4,818,167	4,703,494	4,622,096
Timber Harvest Taxes	1,058	-	111	2,058	500
Excise Taxes	263	402	514	2,304	500
Federal Grants	80,711	150,198	33,745	103,560	-
State Grants	39,272	7,797	3,476	3,068	3,200
Charges For Services	1,644,651	1,617,083	1,569,461	913,970	434,618
Interest & Other Earnings	7,024	2,160	1,476	2,393	2,000
Rents, Leases & Concessions	7,055	11,018	17,695	17,637	2,500
Contributions & Donations	42,482	4,880	1,025	25	-
Miscellaneous Revenues	46,885	36,211	18,051	4,780	15,000
Total Revenue	**6,098,444**	**6,603,922**	**6,463,721**	**5,753,288**	**5,080,414**

CIF&R Expenditure History

The following table depicts CIF&R expense history. With the Medical Expense Fund separated out between 2009 and 2013, total expenses appear to have decreased by 10.5 percent.

Figure 41: CIF&R Expense Fund Expenditure History, 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	3,545,818	3,831,214	3,800,644	3,364,103	3,269,252
Personnel Benefits	1,156,734	1,010,651	430,953	417,205	473,657
Supplies	497,096	307,619	298,006	263,492	244,150
Services	695,677	683,128	738,254	754,238	753,886
Int Gov Srv	36,248	5,933	46	113	-
Capital Outlay	-	-	-	-	-
Transfers-Out	232,900	637,384	823,469	870,083	779,328
Total Expenditure	**6,164,473**	**6,475,929**	**6,091,371**	**5,669,234**	**5,520,273**

In addition to the above, the district had a one-time carryover of $500,000 for 2013.

CIF&R Fund Balance History

Figure 42: CIF&R Expense Fund Balance History, 2009 - 2013

Current Expense / General Fund	Actuals 2009	2010	2011	2012	Budget 2013
Beginning Cash and Investments	2,047,280	2,002,147	2,138,416	2,556,499	2,689,498
Revenues	6,122,819	6,618,108	6,510,861	5,802,689	5,122,798
Expenditures					
Salaries and Wages	3,545,818	3,831,214	3,800,644	3,364,103	3,269,252
Personnel Benefits	1,156,734	1,010,651	430,953	417,205	473,657
Supplies	497,096	307,619	298,006	263,492	244,150
Services	695,677	683,128	738,254	754,238	753,886
Int Gov Srv	36,248	5,933	46	113	-
Capital Outlay	-	-	-	-	-
Transfers-Out	232,900	637,384	823,469	870,083	779,328
Total Expenditures	6,164,473	6,475,929	6,091,371	5,669,234	5,520,273
Ending Cash and Investments	**2,008,160**	**2,138,416**	**2,556,499**	**2,689,498**	**2,292,023**

CIF&R Other Funds

In addition to the Expense fund, CIF&R has the following funds: Bond, Capital, Medical Expense, Reserve, and Trust. Figure 43 depicts the Bond Fund balance history from 2009 through 2013 for CIF&R.

Figure 43: CIF&R Bond Fund Balance History, 2009 - 2013

Bond Fund	Actuals 2009	2010	2011	2012	Budget 2013
Beginning Cash and Investments	7,703,563	5,078,969	1,482,603	4,181	62,506
Revenues	984,478	646,480	672,881	1,168,641	638,188
Expenditures					
Int Gov Srv	403	-	27	4	-
Debt Service - Principal	115,000	130,000	150,000	180,000	215,000
Debt Service - Interest	435,412	437,939	434,063	429,213	423,138
Capital Outlay	3,058,478	3,674,907	316,309	-	-
Total Expenditures	3,609,293	4,242,846	900,398	609,216	638,138
Ending Cash and Investments	**5,078,969**	**1,482,603**	**4,181**	**62,506**	**62,556**

Figure 44 depicts the Capital Fund balance history from 2009 through 2013 for CIF&R.

Figure 44: CIF&R Capital Fund Balance History, 2009 - 2013

Capital Fund	Actuals				Budget
	2009	2010	2011	2012	2013
Beginning Cash and Investments	6,742	3,310	22	495,702	90,365
Revenues	232,900	298,100	2,081,521	919,603	136,470
Expenditures					
Int Gov Srv	-	-	-	-	-
Debt Service - Principal	139,810	187,567	158,491	136,065	117,309
Debt Service - Interest	23,715	24,578	17,436	33,719	19,112
Capital Outlay	72,933	89,243	1,409,905	1,155,165	-
Total Expenditures	236,458	301,387	1,585,832	1,324,949	136,421
Ending Cash and Investments	**3,310**	**22**	**495,702**	**90,365**	**90,414**

The following table depicts the Medical Expense Fund balance history. The fund was started in 2011 and is funded via transfers from the Expense Fund.

Figure 45: CIF&R Medical Expense Fund Balance History, 2009 - 2013

Medical Expense Fund	Actuals				Budget
	2009	2010	2011	2012	2013
Beginning Cash and Investments	-	-	-	10,762	75,103
Revenues	-	-	656,498	655,119	642,908
Expenditures					
Personnel Benefits	-	-	631,517	590,778	639,096
Transfers-Out	-	-	14,218	-	-
Total Expenditures	-	-	645,735	590,778	639,096
Ending Cash and Investments	**-**	**-**	**10,762**	**75,103**	**3,812**

The Reserve Fund balance history from 2009 through 2013 for CIF&R is provided in the following table.

Figure 46: CIF&R Reserve Fund Balance History, 2009 - 2013

Reserve Fund	Actuals				Budget
	2009	2010	2011	2012	2013
Beginning Cash and Investments	1,052,354	1,058,487	1,414,238	795,828	732,302
Revenues	6,353	355,751	1,378	977	1,500
Expenditures					
Int Gov Srv	-	-	87	40	-
Services	160	-	-	-	-
Reclassification & Allocations	1,294	-	-	-	-
Debt Service - Interest	10,065	-	-	-	-
Transfers-Out	-	-	619,700	64,463	-
Total Expenditures	11,519	-	619,787	64,503	-
Ending Cash and Investments	**1,058,487**	**1,414,238**	**795,828**	**732,302**	**733,802**

Figure 47 depicts the Trust Fund balance history from 2009 through 2013 for CIF&R.

Figure 47: CIF&R Trust Fund Balance History, 2009 - 2013

Trust Fund	Actuals				Budget
	2009	2010	2011	2012	2013
Beginning Cash and Investments	27,296	28,961	24,931	24,258	25,076
Revenues	4,615	5,030	2,499	4,035	2,180
Expenditures					
Services	2,950	1,000	3,172	3,216	2,000
Total Expenditures	2,950	1,000	3,172	3,216	2,000
Ending Cash and Investments	**28,961**	**24,932**	**24,258**	**25,076**	**25,076**

CIF&R Capital Replacement

CIF&R has historically reviewed capital needs on an annual basis and has recently developed a five year capital and apparatus replacement plan.

CIF&R Undefined Liabilities

As of December 31, 2012, without any LEOFF 1 retirees, CIF&R has no unfunded liabilities.

CIF&R Status Quo Financial Forecast, 2013 – 2018

Using assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for CIF&R. Future forecasts use the 2013 budget as the basis for all calculations. Any change made to the base data are identified in the section being reviewed.

CIF&R AV Forecast

Because data from the tax years of 2009 through 2013 were all reported losses of assessed value, and due to the fact that 2013 values are based on 2011 sales (prior to when home prices began to rise), this forecast uses the Camano Island home market data as well as the Seattle region Case/Shiller index as the basis for the following growth projections.

The magnitude[24] of CIF&R annual change in assessed value compared to the Case/Shiller Seattle region index averaged 96.0 percent between 2007 and 2011 and indicates a strong correlation between the Camano Island housing market and the greater Seattle region. Case/Shiller reported an 8.25 percent increase in median home prices from December 2011 to December 2012 for the Seattle region. However, several factors have been considered which limit growth of that magnitude, including the statutory limitations, lack of historical recovery data, and how it related to changes in assessed values, complexities in estimating new construction,

[24] Magnitude is in absolute terms and is always positive regardless of the direction of change.

and state assessed properties. Based on these factors, ESCI has taken a conservative approach with these projections.

The forecast percent of growth for assessed value from 2014 through 2018 are shown in Figure 48 below. These growth rates conservatively estimate the impact of new construction and state assessed properties; strong growth in either of these components would have considerable impact on these projections.

Figure 48: CIF&R Five-Year Growth Projections, 2014 - 2018

Year	Percent Change
2014	2.5%
2015	3.7%
2016	4.0%
2017	4.0%
2018	3.5%

Figure 49 forecasts the change in the assessed value from 2014 through 2018 using the growth factors identified above.

Figure 49: CIF&R Forecast Assessed Value and Levy Rates, 2014 - 2018

	Forecast				
	2014	2015	2016	2017	2018
Base Fire Assessed Value	2,879,455,863	3,013,459,819	3,162,615,951	3,318,940,274	3,466,292,996
New Construction	26,484,175	27,517,057	28,672,774	30,135,085	31,671,975
Total Fire Assessed Value	2,905,940,037	3,040,976,876	3,191,288,725	3,349,075,359	3,497,964,971
Base EMS Assessed Value	3,073,064,500	3,214,231,975	3,371,418,994	3,536,095,438	3,691,048,592
New Construction	26,484,175	27,517,057	28,672,774	30,135,085	31,671,975
Total EMS Assessed Value	3,099,548,674	3,241,749,032	3,400,091,767	3,566,230,523	3,722,720,566
Expense Levy Rate	1.1038	1.0753	1.0445	1.0147	0.9904
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.5000	0.5000	0.5000	0.4857	0.4741
Bond Levy Rate	-	-	-	-	-
Total Rate	**1.6038**	**1.5753**	**1.5445**	**1.5004**	**1.4645**

CIF&R Revenue Forecast

Property taxes in Figure 50 were based on the 2013 budgeted amount and increased based on the corresponding growth rates from Figure 48. All other revenues use the 2013 budgeted amounts and have been inflated based on the ten-year average CPI-U of 2.35 percent.

Figure 50: CIF&R Forecast Revenue, 2014 - 2018

Revenue	Forecast				
	2014	2015	2016	2017	2018
Current Expense Levy	3,177,796	3,239,532	3,302,604	3,366,769	3,432,229
C.E. - New Construction Levy	29,662	30,372	30,831	31,477	32,137
EMS Levy	1,536,532	1,607,116	1,685,709	1,717,046	1,749,435
EMS - New Construction Levy	13,242	13,759	14,336	15,068	15,383
Total General Property Taxes	4,757,232	4,890,779	5,033,481	5,130,361	5,229,184
Timber Harvest Taxes	512	524	536	549	562
Excise Taxes	512	524	536	549	562
Federal Grants	-	-	-	-	-
State Grants	3,275	3,352	3,431	3,512	3,595
Charges For Services	444,843	455,308	466,020	476,984	488,205
Interest & Other Earnings	2,047	2,095	2,145	2,195	2,247
Rents, Leases & Concessions	2,559	2,619	2,681	2,744	2,808
Contributions & Donations	-	-	-	-	-
Miscellaneous Revenues	15,353	15,714	16,084	16,462	16,849
Total Revenue	**5,226,333**	**5,370,916**	**5,524,913**	**5,633,354**	**5,744,012**

CIF&R Expenditure Forecast

All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Figure 51 reflects forecasted expenses through 2018.

Figure 51: CIF&R Forecast Expense Fund Expenses, 2014 - 2018

Expenditure	Forecast				
	2014	2015	2016	2017	2018
Salaries and Wages	3,039,107	3,110,606	3,183,786	3,258,689	3,335,353
Personnel Benefits	367,538	396,941	428,696	462,992	500,031
Supplies	249,894	255,773	261,790	267,949	274,253
Services	771,622	789,775	808,356	827,373	846,838
Int Gov Srv	-	-	-	-	-
Capital Outlay	-	-	-	-	-
Transfers-Out	743,531	794,908	850,204	909,729	973,816
Total Expenditure	**5,171,692**	**5,348,003**	**5,532,833**	**5,726,732**	**5,930,292**

CIF&R Fund Balance Forecast

Figure 52 depicts CIF&R forecast Expense Fund balance.

Figure 52: CIF&R Forecast Expense Fund Balance, 2014 - 2018

Current Expense / General Fund	2014	2015	2016	2017	2018
		Forecast			
Beginning Cash and Investments	2,292,023	2,346,663	2,369,576	2,361,656	2,268,279
Revenues	5,226,333	5,370,916	5,524,913	5,633,354	5,744,012
Expenditures					
Salaries and Wages	3,039,107	3,110,606	3,183,786	3,258,689	3,335,353
Personnel Benefits	367,538	396,941	428,696	462,992	500,031
Supplies	249,894	255,773	261,790	267,949	274,253
Services	771,622	789,775	808,356	827,373	846,838
Int Gov Srv	-	-	-	-	-
Capital Outlay	-	-	-	-	-
Transfers-Out	743,531	794,908	850,204	909,729	973,816
Total Expenditures	5,171,692	5,348,003	5,532,833	5,726,732	5,930,292
Ending Cash and Investments	**2,346,663**	**2,369,576**	**2,361,656**	**2,268,279**	**2,081,999**

A minimum of $2,000,000 is needed to start each year (Ending Cash and Investments) in order to cover expenses from the first quarter of the following year until tax revenue is received.

Snohomish County Fire District #15

Snohomish #15 Debt

Snohomish #15 currently has no outstanding debt.

Snohomish #15 AV History

Between 2009 and 2013 Snohomish #15 lost 31.7 percent of its total assessed value. During the same period the Expense levy rate increased 57.3 percent to $1.4189 in 2013. Figure 53 illustrates Snohomish #15 total assessed value and levy rates for 2009 through 2013.

Figure 53: Snohomish #15 Historical Assessed Value and Levy Rates, 2009 - 2013

	2009	2010	2011	2012	2013
Total Assessed Value	455,888,687	418,717,265	379,035,895	346,503,930	311,276,588
% Change From Previous Year		-8.2%	-9.5%	-8.6%	-10.2%
Expense Levy Rate	0.9022	1.0007	1.1183	1.2410	1.4189
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.2500	0.2500	0.2500	0.2500	0.2500
Bond Levy Rate	-	-	-	-	-
Total Rate	**1.1522**	**1.2507**	**1.3683**	**1.4910**	**1.6689**

Snohomish #15 Revenue History

Snohomish #15 total revenue grew by 10.4 percent from 2009 to 2013. Over the same period contributions and donations have ranged between 27.9 percent and 32.5 percent of the total revenue. The loss of these contributions and donations would have considerable impact of

Snohomish #15 operating budget. Figure 54 illustrates Snohomish #15 revenue history between 2009 and 2013.

Figure 54: Snohomish #15 Revenue History, 2009 - 2013

Revenue	Actuals				Budget
	2009	2010	2011	2012	2013
General Property Taxes	524,473	520,101	507,216	522,069	517,898
Timber Harvest Taxes	40	112	75	-	-
State Grants	1,726	2,186	1,738	1,534	1,208
Fire Control Services	30,937	7,345	23,765	86,575	69,554
Interest & Other Earnings	2,044	602	446	426	300
Rents, Leases & Concessions	10,720	11,042	11,373	11,714	12,100
Contributions & Donations	220,000	260,200	260,100	270,400	270,400
Total Revenue	**789,940**	**801,588**	**804,713**	**892,718**	**871,460**

Snohomish #15 Expenditure History

Figure 55 depicts Snohomish #15 expense history between 2009 and 2013. Total expenses grew by 20.0 percent between 2009 and 2013, outpacing revenues growth by nearly double over the same period.

Figure 55: Snohomish #15 Expense History, 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	193,319	211,402	412,914	427,253	440,482
Personnel Benefits	75,827	86,451	78,832	76,721	83,370
Supplies	52,319	44,794	47,719	64,731	59,630
Services	336,293	329,422	141,275	184,755	228,238
Int Gov Srv	966	-	1,208	-	1,500
Capital Outlay	19,083	50,411	-	-	-
Total Expenditure	**677,807**	**722,480**	**681,948**	**753,460**	**813,220**

Figure 56: Snohomish #15 Expense Fund Expenditures (as Percent of Total), 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	28.5%	29.3%	60.5%	56.7%	54.2%
Personnel Benefits	11.2%	12.0%	11.6%	10.2%	10.3%
Supplies	7.7%	6.2%	7.0%	8.6%	7.3%
Services	49.6%	45.6%	20.7%	24.5%	28.1%
Int Gov Srv	0.1%	0.0%	0.2%	0.0%	0.2%
Capital Outlay	2.8%	7.0%	0.0%	0.0%	0.0%
Total Expenditure	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Snohomish #15 Fund Balance History

Figure 57 illustrates Snohomish #15 Expense Fund balance history between 2009 and 2013.

Figure 57: Snohomish #15 Expense Fund Balance History, 2009 - 2013

Current Expense / General Fund	Actuals				Budget
	2009	2010	2011	2012	2013
Beginning Cash and Investments	252,232	253,418	272,796	396,556	535,814
Revenues	790,410	806,534	805,721	892,718	871,460
Expenditures					
Salaries and Wages	193,319	211,402	412,914	427,253	440,482
Personnel Benefits	75,827	86,451	78,832	76,721	83,370
Supplies	52,319	44,794	47,719	64,731	59,630
Services	336,293	329,422	141,275	184,755	228,238
Int Gov Srv	966	-	1,208	-	1,500
Capital Outlay	19,083	50,411	-	-	-
Total Expenditures	677,807	722,480	681,948	753,460	813,220
Ending Cash and Investments	**253,418**	**272,796**	**396,556**	**535,814**	**594,054**

Snohomish #15 Other Funds

Currently Snohomish #15 only has an Expense Fund.

Snohomish #15 Capital Replacement

Currently, Snohomish #15 does not have a capital replacement plan.

Snohomish #15 Undefined Liabilities

As of December 31, 2012, without any LEOFF 1 retirees, Snohomish #15 has no unfunded liabilities.

Snohomish #15 Status Quo Financial Forecast, 2013 – 2018

Using assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for Snohomish #15. Future forecasts use the 2013 budget as the basis for all calculations. Any change made to the base data are identified in the section being reviewed.

Snohomish #15 AV Forecast

Because data from the tax years of 2009 through 2013 were all reported losses of assessed value, and due to the fact that 2013 values are based on 2011 sales (prior to when home prices began to rise), this forecast uses the Tulalip Bay home market data as well as the Seattle region Case/Shiller index as the basis for the following growth projections.

The magnitude[25] of Snohomish #15's annual change in assessed value compared to the Case/Shiller Seattle region index averaged 97.3 percent between 2007 and 2011, and indicates a very strong correlation between the Tulalip Bay housing market and the greater Seattle region. Case/Shiller reported an 8.25 percent increase in median home prices from December 2011 to December 2012 for the Seattle region. However, several factors have been considered which limit growth of that magnitude, they are: the statutory limitations, lack of historical recovery data, and how it related to changes in assessed values, complexities in estimating new construction and state assessed properties. Based on these factors ESCI has taken a conservative approach with these projections.

The forecast percent of growth for assessed value from 2014 through 2018 are shown in the following figure. These growth rates conservatively estimate the impact of new construction and state assessed properties, strong growth in either of these components would have considerable impact on these projections.

Figure 58: Snohomish #15 Five-Year Growth Projection, 2014 - 2018

Year	Percent Change
2014	2.7%
2015	4.1%
2016	4.4%
2017	4.3%
2018	3.8%

Figure 59 forecasts the change in the assessed value from 2014 through 2018 using the growth factors identified above.

[25] Magnitude is in absolute terms and is always positive regardless of the direction of change.

Figure 59: Snohomish #15 Forecast Assessed Value and Levy Rates, 2014 - 2018

			Forecast		
	2014	2015	2016	2017	2018
Base Fire Assessed Value	311,276,588	311,276,588	311,276,588	311,276,588	311,276,588
New Construction	1,917,948	1,996,584	2,084,434	2,194,909	2,311,239
Total Fire Assessed Value	313,194,536	313,273,172	313,361,022	313,471,497	313,587,827
Base EMS Assessed Value	328,849,393	344,328,802	361,563,703	379,285,006	395,976,152
New Construction	1,917,948	1,996,584	2,084,434	2,194,909	2,311,239
Total EMS Assessed Value	330,767,341	346,325,386	363,648,136	381,479,915	398,287,390
Expense Levy Rate	1.3955	1.3726	1.3500	1.3278	1.3060
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.2500	0.2500	0.2500	0.2500	0.2500
Bond Levy Rate	-	-	-	-	-
Total Rate	**1.6455**	**1.6226**	**1.6000**	**1.5778**	**1.5560**

Snohomish #15 Revenue Forecast

Property taxes in Figure 60 are based on the 2013 budgeted amount and increased based on the corresponding growth rates from Figure 58. All other revenues use the 2013 budgeted amounts and have been inflated based on the ten-year average CPI-U of 2.35 percent.

Figure 60: Snohomish #15 Forecast Revenue, 2014 - 2018

Revenue			Forecast		
	2014	2015	2016	2017	2018
Current Expense Levy	446,085	453,294	460,641	468,137	475,812
C.E. - New Construction Levy	2,721	2,786	2,861	2,963	3,069
EMS Levy	80,851	82,144	83,470	84,831	86,233
EMS - New Construction Levy	479	499	521	549	578
Total General Property Taxes	530,137	538,724	547,493	556,480	565,692
Timber Harvest Taxes	-	-	-	-	-
State Grants	1,236	1,266	1,295	1,326	1,357
Fire Control Services	71,190	72,865	74,579	76,334	78,130
Interest & Other Earnings	307	314	322	329	337
Rents, Leases & Concessions	12,385	12,676	12,974	13,279	13,592
Contributions & Donations	276,761	283,273	289,937	296,758	303,740
Total Revenue	**892,017**	**909,118**	**926,601**	**944,507**	**962,847**

Snohomish #15 Expenditure Forecast

Figure 61: Snohomish #15 Forecast Expenses, 2014 - 2018

Expenditure			Forecast		
	2014	2015	2016	2017	2018
Salaries and Wages	450,845	461,452	472,308	483,419	494,792
Personnel Benefits	90,039	97,242	105,022	113,424	122,498
Supplies	61,033	62,469	63,938	65,443	66,982
Services	233,608	239,103	244,729	250,486	256,379
Int Gov Srv	1,535	1,571	1,608	1,646	1,685
Capital Outlay	-	-	-	-	-
Total Expenditure	**837,060**	**861,838**	**887,605**	**914,418**	**942,336**

All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Figure 61 reflects forecasted expenses through 2018.

Snohomish #15 Fund Balance Forecast

Figure 62 depicts Snohomish #15 forecast fund balance from 2014 through 2018.

Figure 62: Snohomish #15 Expense Fund Balance Forecast, 2014 - 2018

Current Expense / General Fund			Forecast		
	2014	2015	2016	2017	2018
Beginning Cash and Investments	594,054	649,011	696,291	735,287	765,376
Revenues	892,017	909,118	926,601	944,507	962,847
Expenditures					
Salaries and Wages	450,845	461,452	472,308	483,419	494,792
Personnel Benefits	90,039	97,242	105,022	113,424	122,498
Supplies	61,033	62,469	63,938	65,443	66,982
Services	233,608	239,103	244,729	250,486	256,379
Int Gov Srv	1,535	1,571	1,608	1,646	1,685
Capital Outlay	-	-	-	-	-
Total Expenditures	837,060	861,838	887,605	914,418	942,336
Ending Cash and Investments	**649,011**	**696,291**	**735,287**	**765,376**	**785,887**

Snohomish County Fire District #19

Snohomish #19 Debt

The following table depicts Snohomish #19 debt service requirements from 2013 to 2028. The first group, labeled "LTGO" for Limited Tax General Obligation debt, consists of non-voted debt from 2005 in the amount of $241,389 for a fire engine, from 2007 in the amount of $132,802 for a command vehicle, and $155,000 for the purchase of an aid car and supporting equipment. The second group, labeled "1998 UTGO" for Unlimited Tax General Obligation Bonds, was used to build Station #1. The third group, labeled "2008 Bonds", was used to build Station #2.

Figure 63: Snohomish #19 Debt Service Requirements, 2013 - 2028

	LTGO (Apparatus)		1998 UTGO (Station #1)		2008 Bonds (Station #2)		Grand Totals		
	Principal	Interest	Principal	Interest	Principal	Interest	Principal	Interest	Total
2013	$ 85,052	$ 7,750	$ 80,000	$ 30,053	$ 75,000	$ 59,813	$ 240,052	$ 97,616	$ 337,668
2014	88,545	4,258	85,000	26,053	75,000	56,813	248,545	87,124	335,669
2015	18,307	1,357	95,000	21,803	75,000	53,813	188,307	76,973	265,280
2016	19,073	591	100,000	17,005	75,000	50,813	194,073	68,409	262,482
2017			110,000	11,905	75,000	47,438	185,000	59,343	244,343
2018			120,000	6,240	75,000	44,063	195,000	50,303	245,303
2019					75,000	40,688	75,000	40,688	115,688
2020					75,000	36,750	75,000	36,750	111,750
2021					75,000	32,813	75,000	32,813	107,813
2022					75,000	28,875	75,000	28,875	103,875
2023					75,000	24,938	75,000	24,938	99,938
2024					75,000	21,000	75,000	21,000	96,000
2025					75,000	16,800	75,000	16,800	91,800
2026					75,000	12,600	75,000	12,600	87,600
2027					75,000	8,400	75,000	8,400	83,400
2028					75,000	4,200	75,000	4,200	79,200
Total	$ 210,977	$ 13,956	$ 590,000	$ 113,059	$ 1,200,000	$ 539,817	$ 2,000,977	$ 666,832	$ 2,667,809

Snohomish #19 AV History

Between 2009 and 2013 Snohomish #19 lost 37.7 percent of its total assessed value. During the same period the Expense levy rate increased 34.1 percent to $1.50 (including non-voted bonds) in 2013. Figure 64 illustrates Snohomish #19 total assessed value and levy rates for 2009 through 2013.

Figure 64: Snohomish #19 Historical Assessed Value and Levy Rates, 2009 - 2013

	2009	2010	2011	2012	2013
Total C.E. Assessed Value	515,748,942	418,481,080	381,117,041	338,180,272	321,071,551
Total EMS Assessed Value	541,097,742	437,563,980	395,218,341	347,821,872	330,101,451
% Change From Previous Year		-18.9%	-8.9%	-11.3%	-5.1%
New Construction	10,097,800	3,305,700	3,223,560	3,288,700	-
Expense Levy Rate	1.1188	1.2003	1.2561	1.2462	1.2330
Non-Voter Bond Levy Rate	-	0.2053	0.2259	0.2538	0.2670
EMS Levy Rate	0.3438	0.4334	0.5000	0.5000	0.5000
Bond Levy Rate	0.4646	0.5411	0.6267	0.7083	0.7133
M&O Levy Rate	-	-	-	-	0.5995
Total Rate	**1.9271**	**2.3800**	**2.6087**	**2.7083**	**3.3128**

Snohomish #19 Revenue History

Figure 65 shows Snohomish #19 revenue history. Between 2009 and 2013 total revenue decreased 11.1 percent.

Figure 65: Snohomish #19 Revenue History, 2009 - 2013

Revenue	Actuals				Budget
	2009	2010	2011	2012	2013
Total General Property Taxes	755,801	778,046	763,777	683,695	843,721
Transport	23,190	59,404	17,406	111,357	30,000
Tax Adjustments	201	613	847	681	586
Interest Adjustments & Other	282	45	(9)	37	89
Transfers-In	-	-	-	-	-
Total Revenue	**779,474**	**838,108**	**782,020**	**795,770**	**874,395**

Snohomish #19 Expenditure History

Figure 66 depicts Snohomish #19 expense history between 2009 and 2013. Total expenses grew by 7.9 percent between 2009 and 2013, far outpacing revenue growth.

Figure 66: Snohomish #19 Expense History, 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	282,780	309,819	322,101	289,038	281,850
Personnel Benefits	23,407	23,661	25,346	30,246	43,800
Supplies	105,948	92,809	166,181	117,305	137,910
Services	212,586	206,169	116,673	159,477	146,646
Capital Outlay	64,559	25,000	-	30,000	30,000
Tranfers-Out	119,000	85,927	86,087	174,571	85,740
Total Expenditure	**808,279**	**743,386**	**716,388**	**800,638**	**725,946**

Figure 67: Snohomish #19 Expense History (as Percentages of Total), 2009 - 2013

Expenditure	Actuals 2009	2010	2011	2012	Budget 2013
Salaries and Wages	35.0%	41.7%	45.0%	36.1%	38.8%
Personnel Benefits	2.9%	3.2%	3.5%	3.8%	6.0%
Supplies	13.1%	12.5%	23.2%	14.7%	19.0%
Services	26.3%	27.7%	16.3%	19.9%	20.2%
Capital Outlay	8.0%	3.4%	0.0%	3.7%	4.1%
Tranfers-Out	14.7%	11.6%	12.0%	21.8%	11.8%
Total Expenditure	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Snohomish #19 Fund Balance History

Figure 68 illustrates Snohomish #19 Expense Fund balance history between 2009 and 2013.

Figure 68: Snohomish #19 Expense Fund Balance History, 2009 - 2013

Current Expense / General Fund	Actuals 2009	2010	2011	2012	Budget 2013
Beginning Cash and Investments	390,585	361,780	456,503	522,135	517,267
Revenues	779,474	838,108	782,020	795,770	874,395
Expenditures					
Salaries and Wages	282,780	309,819	322,101	289,038	281,850
Personnel Benefits	23,407	23,661	25,346	30,246	43,800
Supplies	105,948	92,809	166,181	117,305	137,910
Services	212,586	206,169	116,673	159,477	146,646
Capital Outlay	64,559	25,000	-	30,000	30,000
Tranfers-Out	119,000	85,927	86,087	174,571	85,740
Total Expenditures	808,279	743,386	716,388	800,638	725,946
Ending Cash and Investments	**361,780**	**456,503**	**522,135**	**517,267**	**665,716**

Snohomish #19 Other Funds

In addition to the Expense Fund Snohomish #19 also has the following Funds: Bond, Capital, M&O. Balance history and summary information for these funds is not available.

Snohomish #19 Capital Replacement

Currently, Snohomish #19 has an apparatus replacement schedule that runs out to 2027.

Snohomish #19 Undefined Liabilities

As of December 31, 2012, without any LEOFF 1 retirees, Snohomish #19 has no unfunded liabilities.

Snohomish #19 Status Quo Financial Forecast, 2013 – 2018

Using assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for Snohomish #19. Future forecasts use the 2013 budget as the basis

for all calculations. Any change made to the base data are identified in the section being reviewed.

Snohomish #19 AV Forecast

Because data from the tax years of 2009 through 2012 were all reported losses of assessed value, and due to the fact that 2013 values are based on 2011 sales (prior to when home prices began to rise), and Silvana home market data was not available, leaving only the Seattle region Case/Shiller index and assessed value history as the basis for the following growth projections.

The magnitude[26] of Snohomish #19 annual change in assessed value compared to the Case/Shiller Seattle region index averaged 97.5 percent between 2007 and 2011, and indicates a very strong correlation between the Silvana market and the greater Seattle region. Case/Shiller reported an 8.25 percent increase in median home prices from December 2011 to December 2012 for the Seattle region. However, several factors have been considered which limit growth of that magnitude, they are: the statutory limitations, lack of historical recovery data, and how it related to changes in assessed values, complexities in estimating new construction and state assessed properties. Based on these factors ESCI has taken a conservative approach with these projections.

The forecast percent of growth for assessed value from 2014 through 2018 are shown in the following table Figure 69. These growth rates conservatively estimate the impact of new construction and state assessed properties, strong growth in either of these components would have considerable impact on these projections.

Figure 69: Snohomish #19 Five-Year Growth Projections, 2014 - 2018

Year	Percent Change
2014	1.4%
2015	2.2%
2016	2.3%
2017	2.3%
2018	2.0%

Figure 70 forecasts the change in the assessed value from 2014 through 2018 using the growth factors identified above.

[26] Magnitude is in absolute terms and is always positive regardless of the direction of change.

Figure 70: Snohomish #19 Forecast Assessed Value and Levy Rates, 2014 - 2018

			Forecast		
	2014	2015	2016	2017	2018
Base Fire Assessed Value	325,245,481	332,788,870	340,493,312	348,368,854	356,415,760
New Construction	3,272,653	3,334,834	3,404,865	3,472,963	3,535,476
Total Fire Assessed Value	328,518,134	336,123,704	343,898,177	351,841,816	359,951,236
Base EMS Assessed Value	325,245,481	332,788,870	340,493,312	348,368,854	356,415,760
New Construction	3,272,653	3,334,834	3,404,865	3,472,963	3,535,476
Total EMS Assessed Value	328,518,134	336,123,704	343,898,177	351,841,816	359,951,236
Expense Levy Rate	1.2327	1.4466	1.4466	1.5000	1.5000
Non-Voter Bond Levy Rate	0.2673	0.0534	0.0534	-	-
EMS Levy Rate	0.5000	0.5000	0.5000	0.5000	0.5000
Bond Levy Rate	0.7131	0.6996	0.6849	0.6712	0.6591
M&O Levy Rate	0.5842	-	-	-	-
Total Rate	**3.2973**	**2.6996**	**2.6849**	**2.6712**	**2.6591**

Snohomish #19 Revenue Forecast

Figure 71: Snohomish #19 Forecast Revenue, 2014 - 2018

Revenue			Forecast		
	2014	2015	2016	2017	2018
Current Expense Levy	401,409	481,323	492,393	522,316	532,762
C.E. - New Construction Levy	4,035	4,111	4,925	5,024	5,303
EMS Levy	167,361	171,043	174,977	179,002	182,582
EMS - New Construction Levy	1,636	1,667	1,702	1,736	1,768
Non-Voter Bond Levy	86,941	17,771	18,179	-	-
M&O Levy	190,000	-	-	-	-
Total General Property Taxes	851,383	675,915	692,178	708,078	722,415
Transport	30,706	31,428	32,168	32,924	33,699
Tax Adjustments	599	613	628	643	658
Interest Adjustments & Other	91	93	95	97	100
Transfers-In	-	-	-	-	-
Total Revenue	**882,779**	**708,050**	**725,069**	**741,743**	**756,871**

Property taxes in Figure 71 were based on the 2013 budgeted amount and increased based on the corresponding growth rates from Figure 69.

Snohomish #19 Expenditure Forecast

All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Figure 72 reflects forecasted expenses through 2018.

Figure 72: Snohomish #19 Forecast Expenses, 2014 - 2018

Expenditure			Forecast		
	2014	2015	2016	2017	2018
Salaries and Wages	288,481	295,268	302,214	309,324	316,601
Personnel Benefits	47,304	51,088	55,175	59,589	64,357
Supplies	141,154	144,475	147,874	151,353	154,914
Services	150,096	153,627	157,241	160,941	164,727
Capital Outlay	30,706	31,428	32,168	32,924	33,699
Tranfers-Out	86,941	17,771	18,179	-	-
Total Expenditure	**744,682**	**693,657**	**712,852**	**714,131**	**734,298**

Snohomish #19 Fund Balance Forecast

Figure 73 illustrates Snohomish #19 Expense Fund forecast balance from 2014 to 2018.

Figure 73: Snohomish #19 Forecast Expense Fund Balance, 2014 - 2018

Current Expense / General Fund			Forecast		
	2014	2015	2016	2017	2018
Beginning Cash and Investments	665,716	803,813	818,206	830,423	858,034
Revenues	882,779	708,050	725,069	741,743	756,871
Expenditures					
Salaries and Wages	288,481	295,268	302,214	309,324	316,601
Personnel Benefits	47,304	51,088	55,175	59,589	64,357
Supplies	141,154	144,475	147,874	151,353	154,914
Services	150,096	153,627	157,241	160,941	164,727
Capital Outlay	30,706	31,428	32,168	32,924	33,699
Tranfers-Out	86,941	17,771	18,179	-	-
Total Expenditures	744,682	693,657	712,852	714,131	734,298
Ending Cash and Investments	**803,813**	**818,206**	**830,423**	**858,034**	**880,608**

Snohomish County Fire District #21

Snohomish #21 Debt

Currently Snohomish #21 has no outstanding debt.

Snohomish #21 Assessed Value History

Figure 74 depicts Snohomish #21 historical assessed value and levy rates. Between 2009 and 2013 Snohomish #21's total assessed value decreased by 35.2 percent. The resulting impact increased the Expense Levy rate by 66.5 percent of the same five-year period, keeping in mind that the non-voter Bond levy rates are included under the Expense levy category.

Figure 74: Snohomish #21 Historical Assessed Value and Levy Rates, 2009 - 2013

	2009	2010	2011	2012	2013
Total Assessed Value	1,048,653,735	952,242,171	863,505,830	768,137,315	679,932,073
% Change From Previous Year		-9.2%	-9.3%	-11.0%	-11.5%
Expense Levy Rate	0.3339	0.4358	0.5524	0.6300	0.7258
Non-Voter Bond Levy Rate	0.1021	0.0562	-	-	-
EMS Levy Rate	0.4042	0.4595	0.5000	0.5000	0.5000
Bond Levy Rate	-	-	-	-	-
Total Rate	**0.8401**	**0.9515**	**1.0524**	**1.1300**	**1.2258**

Snohomish #21 Revenue History

Figure 75 shows Snohomish #21 revenue history. Between 2009 and 2013 total revenue decreased 15.4 percent.

Figure 75: Snohomish #21 Revenue History, 2009 - 2013

Revenue	Actuals			Budget	
	2009	2010	2011	2012	2013
General Property Taxes	789,984	877,114	914,957	965,000	983,147
Timber Harvest Taxes	1,687	4,516	6,106	-	-
Excise Taxes	645	547	438	-	-
DNR Timber Trust	57,337	145,739	183,528	-	-
Interest & Other Earnings	2,239	559	683	-	-
Total Revenue	**851,892**	**1,028,475**	**1,105,712**	**965,000**	**983,147**

Snohomish #21 Expenditure History

The following table depicts Snohomish #21 expense history between 2009 and 2013. Total expenses decreased by 3.0 percent between 2009 and 2013.

Figure 76: Snohomish #21 Expenditure History, 2009 - 2013

Expenditure	Actuals			Budget	
	2009	2010	2011	2012	2013
Salaries and Wages	186,552	156,207	183,343	219,700	219,700
Personnel Benefits	10,118	11,846	14,026	32,950	65,823
Supplies	-	-	-	66,360	70,100
Services	765,342	590,069	869,266	629,154	577,590
Int Gov Srv	-	1,862	-	-	-
Capital Outlay	-	-	-	-	-
Total Expenditure	**962,012**	**759,984**	**1,066,635**	**948,164**	**933,213**

Figure 77: Snohomish #21 Expenditure History (as Percentages of the Total), 2009 - 2013

Expenditure	Actuals			Budget	
	2009	2010	2011	2012	2013
Salaries and Wages	19.4%	20.6%	17.2%	23.2%	23.5%
Personnel Benefits	1.1%	1.6%	1.3%	3.5%	7.1%
Supplies	0.0%	0.0%	0.0%	7.0%	7.5%
Services	79.6%	77.6%	81.5%	66.4%	61.9%
Int Gov Srv	0.0%	0.2%	0.0%	0.0%	0.0%
Capital Outlay	0.0%	0.0%	0.0%	0.0%	0.0%
Total Expenditure	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

Snohomish #21 Fund Balance History

Figure 78 depicts Snohomish #21 Expense Fund balance history between 2009 through 2013.

Figure 78: Snohomish #21 Expense Fund Balance History, 2009 - 2013

Current Expense / General Fund	Actuals			Budget	
	2009	2010	2011	2012	2013
Beginning Cash and Investments	1,017,841	1,131,078	852,878	783,795	766,959
Revenues	902,306	1,038,184	1,135,716	965,000	983,147
Expenditures					
Salaries and Wages	186,552	156,207	183,343	219,700	219,700
Personnel Benefits	10,118	11,846	14,026	32,950	65,823
Supplies	-	-	-	66,360	70,100
Services	765,342	590,069	869,266	629,154	577,590
Int Gov Srv	-	1,862	-	-	-
Capital Outlay	-	-	-	-	-
Total Expenditures	962,012	759,984	1,066,635	948,164	933,213
Ending Cash and Investments	**1,131,078**	**852,878**	**783,795**	**766,959**	**816,893**

Snohomish #21 Other Funds

As of December 31, 2012, without any LEOFF 1 retirees, Snohomish #21 has no unfunded liabilities.

Snohomish #21 Capital Replacement

Currently, Snohomish #21 does not have a capital replacement plan.

Snohomish #21 Undefined Liabilities

As of December 31, 2012, Snohomish #21 does not have any unfunded liabilities.

Snohomish #21 Status Quo Financial Forecast, 2013 – 2018

Using assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for Snohomish #21. Future forecasts use the 2013 budget as the basis for all calculations. Any change made to the base data are identified in the section being reviewed.

Snohomish #21 AV Forecast

Because data from the tax years of 2009 through 2013 were all reported losses of assessed value, and due to the fact that 2013 values are based on 2011 sales (prior to when home prices began to rise), and Snohomish #21 home market data was not available, leaving only the Seattle region Case/Shiller index and the assessed value history as the basis for the following growth projections.

The magnitude[27] of Snohomish #21's annual change in assessed value compared to the Case/Shiller Seattle region index averaged 96.8 percent between 2007 and 2011, and indicates a strong correlation between the Snohomish #21 market and the greater Seattle region. Case/Shiller reported an 8.25 percent increase in median home prices from December 2011 to December 2012 for the Seattle region. However, several factors have been considered which limit growth of that magnitude: the statutory limitations, lack of historical recovery data, and how it related to changes in assessed values, complexities in estimating new construction, and state assessed properties. Based on these factors ESCI has taken a conservative approach with these projections.

The forecast percent of growth for assessed value from 2014 through 2018 are shown in Figure 79 below. These growth rates conservatively estimate the impact of new construction and state assessed properties; strong growth in either of these components would have considerable impact on these projections.

Figure 79: Snohomish #21 Five-Year Growth Projections, 2014 - 2018

Year	Percent Change
2014	1.6%
2015	2.4%
2016	2.6%
2017	2.5%
2018	2.2%

Figure 80 forecasts the change in the assessed value from 2014 through 2018 using the growth factors identified above.

[27] Magnitude is in absolute terms and is always positive regardless of the direction of change.

Figure 80: Snohomish #21 Forecast Assessed Value and Levy Rates, 2014 - 2018

			Forecast		
	2014	2015	2016	2017	2018
Base Fire Assessed Value	690,810,986	718,483,294	748,545,117	778,924,534	808,099,627
New Construction	10,832,855	11,092,844	11,381,258	11,779,602	12,191,888
Total Fire Assessed Value	701,643,841	729,576,137	759,926,375	790,704,136	820,291,515
Base EMS Assessed Value	711,486,789	739,655,316	770,267,612	801,190,091	830,855,026
New Construction	10,832,855	11,092,844	11,381,258	11,779,602	12,191,888
Total EMS Assessed Value	722,319,645	750,748,160	781,648,870	812,969,693	843,046,914
Expense Levy Rate	0.7216	0.7119	0.7009	0.6908	0.6828
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.4971	0.4904	0.4829	0.4759	0.4704
Bond Levy Rate	-	-	-	-	-
Total Rate	**1.2187**	**1.2023**	**1.1838**	**1.1667**	**1.1532**

Snohomish #21 Revenue Forecast

Property taxes in Figure 81 were based on the 2013 budgeted amount and increased based on the corresponding growth rates from Figure 79.

Figure 81: Snohomish #21 Forecast Revenue, 2014 - 2018

Revenue			Forecast		
	2014	2015	2016	2017	2018
Current Expense Levy	498,434	511,360	524,558	537,986	551,705
C.E. - New Construction Levy	7,863	8,004	8,102	8,257	8,423
EMS Levy	353,643	362,650	371,845	381,201	390,758
EMS - New Construction Levy	5,416	5,514	5,581	5,688	5,802
Non-Voter Bond Levy	-	-	-	-	-
Total General Property Taxes	867,370	889,543	912,102	935,149	958,706
Timber Harvest Taxes	-	-	-	-	-
Excise Taxes	-	-	-	-	-
DNR Timber Trust	-	-	-	-	-
Interest & Other Earnings	-	-	-	-	-
Total Revenue	**867,370**	**889,543**	**912,102**	**935,149**	**958,706**

Snohomish #21 Expenditure Forecast

All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Figure 82 reflects forecasted expenses through 2018.

Figure 82: Snohomish #21 Forecast Expenditure, 2009 - 2013

Expenditure			Forecast		
	2014	2015	2016	2017	2018
Salaries and Wages	224,869	230,159	235,574	241,116	246,788
Personnel Benefits	71,089	76,776	82,918	89,551	96,716
Supplies	71,749	73,437	75,165	76,933	78,743
Services	591,178	605,087	619,322	633,892	648,805
Int Gov Srv	-	-	-	-	-
Capital Outlay	-	-	-	-	-
Total Expenditure	**958,885**	**985,459**	**1,012,979**	**1,041,493**	**1,071,053**

Snohomish #21 Fund Balance Forecast

Figure 83 illustrates Snohomish #21 Expense Fund balance forecast from 2014 to 2018.

Figure 83: Snohomish #21 Forecast Expense Fund Balance, 2014 - 2018

Current Expense / General Fund			Forecast		
	2014	2015	2016	2017	2018
Beginning Cash and Investments	816,893	725,377	629,461	528,585	422,241
Revenues	867,370	889,543	912,102	935,149	958,706
Expenditures					
Salaries and Wages	224,869	230,159	235,574	241,116	246,788
Personnel Benefits	71,089	76,776	82,918	89,551	96,716
Supplies	71,749	73,437	75,165	76,933	78,743
Services	591,178	605,087	619,322	633,892	648,805
Int Gov Srv	-	-	-	-	-
Capital Outlay	-	-	-	-	-
Total Expenditures	958,885	985,459	1,012,979	1,041,493	1,071,053
Ending Cash and Investments	**725,377**	**629,461**	**528,585**	**422,241**	**309,894**

Snohomish County Fire District #24

Snohomish #24 Debt

Currently Snohomish #24 has no outstanding debt.

Snohomish #24 AV History

Figure 84 depicts Snohomish #24's historical assessed value and levy rates. Between 2009 and 2013 Snohomish #24's total assessed value decreased by 37.1 percent. The resulting impact increased the Expense Levy rate by 72.1 percent of the same five-year period.

Figure 84: Snohomish #24 Historical Assessed Value and Levy Rates, 2009 - 2013

	2009	2010	2011	2012	2013
Total Assessed Value	348,958,255	311,320,282	304,714,852	261,388,964	219,368,363
% Change From Previous Year		-10.8%	-2.1%	-14.2%	-16.1%
Expense Levy Rate	0.4630	0.5276	0.5829	0.6649	0.7970
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.3014	0.3442	0.4955	0.5000	0.5000
Bond Levy Rate	-	-	-	-	-
Total Rate	**0.7644**	**0.8718**	**1.0784**	**1.1649**	**1.2970**

Snohomish #24 Revenue History

Figure 85 shows Snohomish #24 revenue history. Between 2009 and 2013 total revenue increased 26.6 percent.

Figure 85: Snohomish #24 Revenue History, 2009 - 2013

Revenue	Actuals				Budget
	2009	2010	2011	2012	2013
General Property Taxes	279,363	275,474	343,541	324,043	340,000
Timber Harvest Taxes	5,213	-	4,270	6,003	5,000
Excise Taxes	-	-	226	201	200
State Grants	1,726	2,186	-	1,534	1,500
Ambulance Service Charges	-	-	11,820	61,540	20,000
Interest & Other Earnings	2,259	585	425	364	350
Contributions & Donations	265	50	200	50	50
Miscellaneous Revenues	2,671	3,418	5,032	2,345	2,000
Total Revenue	**291,497**	**281,713**	**365,514**	**396,081**	**369,100**

Snohomish #24 Expenditure History

Figure 86 depicts Snohomish #24 expense history between 2009 and 2013. Total expenses decreased by 17.8 percent between 2009 and 2013.

Figure 86: Snohomish #24 Expenditure History, 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	71,018	58,088	86,622	108,012	91,100
Personnel Benefits	8,542	2,250	11,812	17,468	14,750
Supplies	20,858	32,806	51,394	37,593	35,600
Services	102,780	241,326	198,295	232,999	113,950
Int Gov Srv	141,592	144,518	28,537	34,147	28,000
Capital Outlay	-	-	-	-	-
Total Expenditure	**344,790**	**478,988**	**376,660**	**430,218**	**283,400**

Figure 87: Snohomish #24 Expenditures (as Percentages of Total), 2009 – 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	20.6%	12.1%	23.0%	0.0%	32.1%
Personnel Benefits	2.5%	0.5%	3.1%	0.0%	5.2%
Supplies	6.0%	6.8%	13.6%	0.0%	12.6%
Services	29.8%	50.4%	52.6%	0.0%	40.2%
Int Gov Srv	41.1%	30.2%	7.6%	0.0%	9.9%
Capital Outlay	0.0%	0.0%	0.0%	0.0%	0.0%
Total Expenditure	**100.0%**	**100.0%**	**100.0%**	**0.0%**	**100.0%**

Snohomish #24 Fund Balance History

The following table depicts Snohomish #21 Expense Fund balance history between 2009 through 2013.

Figure 88: Snohomish #24 Expense Fund Balance History, 2009 - 2013

Current Expense / General Fund	Actuals				Budget
	2009	2010	2011	2012	2013
Beginning Cash and Investments	565,566	512,273	314,998	303,852	344,715
Revenues	291,497	281,713	365,514	471,081	369,100
Expenditures					
Salaries and Wages	71,018	58,088	86,622	108,012	91,100
Personnel Benefits	8,542	2,250	11,812	17,468	14,750
Supplies	20,858	32,806	51,394	37,593	35,600
Services	102,780	241,326	198,295	232,999	113,950
Int Gov Srv	141,592	144,518	28,537	34,147	28,000
Capital Outlay	-	-	-	-	-
Total Expenditures	344,790	478,988	376,660	430,218	283,400
Ending Cash and Investments	**512,273**	**314,998**	**303,852**	**344,715**	**430,415**

Snohomish #24 Other Funds

Currently Snohomish #24 only has an Expense Fund.

Snohomish #24 Capital Replacement

Currently, Snohomish #24 does not have a capital replacement plan.

Snohomish #24 Undefined Liabilities

As of December 31, 2012, without any LEOFF 1 retirees, Snohomish #24 has no unfunded liabilities.

Snohomish #24 Status Quo Financial Forecast, 2013 – 2018

Using assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for Snohomish #24. Future forecasts use the 2013 budget as the basis

for all calculations. Any change made to the base data are identified in the section being reviewed.

Snohomish #24 AV Forecast

Because data from the tax years of 2009 through 2013 were all reported losses of assessed value, and due to the fact that 2013 values are based on 2011 sales (prior to when home prices began to rise), this forecast uses the Darrington home market data as well as the Seattle region Case/Shiller index as the basis for the following growth projections.

The magnitude[28] of Snohomish #24's annual change in assessed value compared to the Case/Shiller Seattle region index averaged 93.7 percent between 2007 and 2011, and indicates a loose correlation between the Darrington housing market and the greater Seattle region. Case/Shiller reported an 8.25 percent increase in median home prices from December 2011 to December 2012 for the Seattle region. However, several factors have been considered which limit growth of that magnitude: the statutory limitations, lack of historical recovery data, and how it related to changes in assessed values, complexities in estimating new construction and state assessed properties. Based on these factors ESCI has taken a conservative approach with these projections.

The forecast percent of growth for assessed value from 2014 through 2018 are shown in Figure 89. These growth rates conservatively estimate the impact of new construction and state assessed properties; strong growth in either of these components would have considerable impact on these projections.

Figure 89: Snohomish #24 Five-Year Growth Projections, 2014 - 2018

Year	Percent Change
2014	1.4%
2015	2.2%
2016	2.3%
2017	2.3%
2018	2.0%

Figure 90 forecasts the change in the assessed value from 2014 through 2018 using the growth factors identified above.

[28] Magnitude is in absolute terms and is always positive regardless of the direction of change.

Figure 90: Snohomish #24 Forecast Assessed Value and Levy Rates, 2014 - 2018

			Forecast		
	2014	2015	2016	2017	2018
Base Fire Assessed Value	222,439,520	229,523,796	236,794,594	244,260,506	251,967,916
New Construction	3,915,308	4,001,445	4,093,478	4,228,563	4,368,106
Total Fire Assessed Value	226,354,828	233,525,241	240,888,073	248,489,069	256,336,021
Base EMS Assessed Value	227,392,403	234,546,019	241,887,129	249,424,336	257,204,039
New Construction	3,915,308	4,001,445	4,093,478	4,228,563	4,368,106
Total EMS Assessed Value	231,307,711	238,547,464	245,980,607	253,652,899	261,572,145
Expense Levy Rate	0.7939	0.7908	0.7878	0.7847	0.7817
Non-Voter Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.4981	0.4961	0.4942	0.4923	0.4904
Bond Levy Rate	-	-	-	-	-
Total Rate	**1.2920**	**1.2870**	**1.2820**	**1.2770**	**1.2721**

Snohomish #24 Revenue Forecast

Property taxes in Figure 91 were based on the 2013 budgeted amount and increased based on the corresponding growth rates from Figure 89.

Figure 91: Snohomish #24 Forecast Revenue, 2014 - 2018

Revenue			Forecast		
	2014	2015	2016	2017	2018
Current Expense Levy	176,589	181,507	186,530	191,665	196,946
C.E. - New Construction Levy	3,121	3,177	3,237	3,331	3,428
EMS Levy	113,248	116,357	119,534	122,780	126,119
EMS - New Construction Levy	1,958	1,993	2,031	2,090	2,150
Total General Property Taxes	294,915	303,034	311,332	319,867	328,643
Timber Harvest Taxes	5,118	5,238	5,361	5,487	5,616
Excise Taxes	205	210	214	219	225
State Grants	1,535	1,571	1,608	1,646	1,685
Ambulance Service Charges	20,471	20,952	21,445	21,950	22,466
Interest & Other Earnings	358	367	375	384	393
Contributions & Donations	51	52	54	55	56
Miscellaneous Revenues	2,047	2,095	2,145	2,195	2,247
Total Revenue	**324,699**	**333,519**	**342,535**	**351,803**	**361,331**

Snohomish #24 Expenditure Forecast

All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Figure 92 reflects forecasted expenses through 2018.

Figure 92: Snohomish #24 Forecast Expenditures, 2014 - 2018

Expenditure	2014	2015	Forecast 2016	2017	2018
Salaries and Wages	93,243	95,437	97,682	99,980	102,332
Personnel Benefits	15,930	17,204	18,581	20,067	21,673
Supplies	36,438	37,295	38,172	39,070	39,989
Services	116,631	119,375	122,183	125,058	128,000
Int Gov Srv	28,659	29,333	30,023	30,729	31,452
Capital Outlay	-	-	-	-	-
Total Expenditure	**290,900**	**298,644**	**306,641**	**314,905**	**323,446**

Snohomish #24 Fund Balance Forecast

The following table illustrates Snohomish #24 Expense Fund forecast balance from 2014 to 2018.

Figure 93: Snohomish #24 Forecast Expense Fund Balance, 2014 - 2018

Current Expense / General Fund	2014	2015	Forecast 2016	2017	2018
Beginning Cash and Investments	430,415	464,214	499,090	534,983	571,882
Revenues	324,699	333,519	342,535	351,803	361,331
Expenditures					
Salaries and Wages	93,243	95,437	97,682	99,980	102,332
Personnel Benefits	15,930	17,204	18,581	20,067	21,673
Supplies	36,438	37,295	38,172	39,070	39,989
Services	116,631	119,375	122,183	125,058	128,000
Int Gov Srv	28,659	29,333	30,023	30,729	31,452
Capital Outlay	-	-	-	-	-
Total Expenditures	290,900	298,644	306,641	314,905	323,446
Ending Cash and Investments	**464,214**	**499,090**	**534,983**	**571,882**	**609,767**

North County Regional Fire Authority

NCRFA Debt

On January 1, 2008, Snohomish County Fire Protection District #18, combined with Snohomish County Fire Protection District #14 to become North County Regional Fire Authority. Snohomish #18 had an existing long-term debt owed on a fire engine. The final payment on this pre-existing debt is scheduled in 2014 in the amount of $24,850.39.

Additionally, Snohomish County Fire Protection District #14 issued a $2,000,000 general obligation bond with the purpose of financing the acquisition, construction, and equipping of a new fire station on July 16, 2003. Each December principal in the amount of $125,000 has been paid in addition to interest originally based on a rate of 4.3 percent. Figure 94 lists the remaining payment requirements through the final payment due in December 2018.

Figure 94: NCRFA Debt Service Requirements, 2013 - 2018

	Principal	Interest	Remainer	Total Payment
2013	125,000	31,448	750,000	156,448
2014	125,000	26,206	625,000	151,206
2015	125,000	20,965	500,000	145,965
2016	125,000	15,724	375,000	140,724
2017	125,000	10,483	250,000	135,483
2018	125,000	5,241	125,000	130,241
	750,000	110,066	2,625,000	860,066

NCRFA AV History

Figure 95 depicts NCRFA historical assessed value and levy rates. Between 2011 and 2013 total assessed value decreased by 16.6 percent. The combination of the Expense levy rate and the non-voter bond levy rate were $1.50 between 2009 and 2013; however, NCRFA is not actually at its statutory limit because of $1,120,954 of banked capacity in the 2013 tax year.

Figure 95: NCRFA Historical Assessed Value and Levy Rates, 2009 - 2013

	2009	2010	2011	2012	2013
Total Assessed Value	2,237,428,383	2,028,863,352	1,828,198,485	1,618,547,727	1,525,279,544
% Change From Previous Year		-9.3%	-9.9%	-11.5%	-5.8%
Expense Levy Rate	1.4068	1.4000	1.3919	1.3810	1.3772
Non-Voter Bond Levy Rate	0.0932	0.1000	0.1082	0.1190	0.1228
EMS Levy Rate	-	-	0.5000	0.5000	0.5000
Bond Levy Rate	-	-	-	-	-
Total Rate	**1.5000**	**1.5000**	**2.0000**	**2.0000**	**2.0000**

In 2009 and 2010 Fire District's 14 & 18 passed an EMS levy and turned the funds over to NCRFA.

NCRFA Revenue History

Figure 96 shows NCRFA revenue history. Between 2009 and 2013 total revenue increased 2.9 percent.

Figure 96: NCRFA Revenue History, 2009 - 2013

Revenue	Actuals				Budget
	2009	2010	2011	2012	2013
General Property Taxes	3,911,566	3,661,432	3,479,708	3,079,278	2,813,289
Timber Harvest Taxes	2,813	8,086	9,645	7,081	-
Excise Taxes	17,193	9,389	8,474	7,070	5,000
Federal Grants	38,000	-	5,539		
State Grants	1,726	2,186	1,738	3,068	1,439
Fire Control Services	6,525	12,101	3,728		
Emergency Services	17,100	17,100	17,100	17,100	17,100
ALS Services	-	-	-	984,411	1,279,393
Fire Protection Services	2,195	11,730	350	1,885	-
Amb & Emer Aid Fees	559,492	508,735	417,266	583,703	650,000
Interest & Other Earnings	17,723	7,053	3,753	3,929	3,000
Rents, Leases & Concessions	30,989	25,145	24,772	32,977	22,500
Contributions & Donations	44,823	37,395	2,433	69,999	
Miscellaneous Revenues	7,851	7,817	1,521	1,116	-
Total Revenue	**4,657,996**	**4,308,169**	**3,976,027**	**4,791,618**	**4,791,721**

NCRFA Expenditure History

Figure 97 depicts NCRFA expense history between 2009 and 2013. Total expenses increased by 42.5 percent between 2009 and 2013.

Figure 97: NCRFA Expenditure History, 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	1,615,267	1,721,180	1,878,515	2,941,996	3,210,404
Personnel Benefits	521,290	533,609	586,171	854,280	924,356
Supplies	157,667	134,601	136,200	154,287	156,750
Services	973,079	908,746	871,594	865,177	695,245
Int Gov Srv	8,458	4,843	5,538	1,280	6,500
Capital Outlay	262,767	260,721	328,982	161,721	48,438
Total Expenditure	**3,538,528**	**3,563,700**	**3,807,000**	**4,978,740**	**5,041,692**

Figure 98: NCRFA Expenditures (as Percentages of Total), 2009 - 2013

Expenditure	Actuals				Budget
	2009	2010	2011	2012	2013
Salaries and Wages	45.6%	48.3%	49.3%	59.1%	63.7%
Personnel Benefits	14.7%	15.0%	15.4%	17.2%	18.3%
Supplies	4.5%	3.8%	3.6%	3.1%	3.1%
Services	27.5%	25.5%	22.9%	17.4%	13.8%
Int Gov Srv	0.2%	0.1%	0.1%	0.0%	0.1%
Capital Outlay	7.4%	7.3%	8.6%	3.2%	1.0%
Total Expenditure	**100.0%**	**100.0%**	**100.0%**	**100.0%**	**100.0%**

NCRFA Fund Balance History

The following table depicts NCRFA Expense Fund balance history between 2009 through 2013.

Figure 99: NCRFA Expense Fund Balance History, 2009 - 2013

Current Expense / General Fund	Actuals				Budget
	2009	2010	2011	2012	2013
Beginning Cash and Investments	1,824	12,675	6,383	2,606,023	2,429,256
Revenues	3,549,375	3,557,263	6,837,314	4,801,967	5,041,692
Expenditures					
Salaries and Wages	1,615,267	1,721,180	1,878,515	2,941,996	3,210,404
Personnel Benefits	521,290	533,609	586,171	854,280	924,356
Supplies	157,667	134,601	136,200	154,287	156,750
Services	973,079	908,746	871,594	865,177	695,245
Int Gov Srv	8,458	4,843	5,538	1,280	6,500
Capital Outlay	262,767	260,721	328,982	161,721	48,438
Total Expenditures	3,538,528	3,563,700	3,807,000	4,978,740	5,041,692
Ending Cash and Investments	**12,675**	**6,269**	**2,606,023**	**2,429,256**	**2,477,694**

NCRFA Other Funds

In addition to the Expense Fund NCRFA currently has a Bond and Reserve Fund.

NCRFA Capital Replacement

Currently, NCRFA has a 15-year apparatus replacement plan scheduled out to 2028.

NCRFA Undefined Liabilities

As of December 31, 2012, without any LEOFF 1 retirees, NCRFA has no unfunded liabilities.

NCRFA Status Quo Financial Forecast, 2013 – 2018

Using assumptions outlined in the section entitled Economic Indicators, financial forecast projections were created for NCRFA. Future forecasts use the 2013 budget as the basis for all calculations. Any change made to the base data are identified in the section being reviewed.

NCRFA AV Forecast

Because data from the tax years of 2009 through 2013 were all reported losses of assessed value, and due to the fact that 2013 values are based on 2011 sales (prior to when home prices began to rise), this forecast uses the Stanwood home market data as well as the Seattle region Case/Shiller index as the basis for the following growth projections.

The magnitude[29] of NCRFA annual change in assessed value compared to the Case/Shiller Seattle region index averaged 97.7 percent between 2007 and 2011, and indicates a very strong correlation between the Stanwood housing market and the greater Seattle region. Case/Shiller reported an 8.25 percent increase in median home prices from December 2011 to

[29] Magnitude is in absolute terms and is always positive regardless of the direction of change.

December 2012 for the Seattle region. However, several factors have been considered which limit growth of that magnitude, they are: the statutory limitations, lack of historical recovery data, and how it related to changes in assessed values, complexities in estimating new construction and state assessed properties. Based on these factors ESCI has taken a conservative approach with these projections.

The forecast percent of growth for assessed value from 2014 through 2018 are shown in Figure 100 below. These growth rates conservatively estimate the impact of new construction and state assessed properties, strong growth in either of these components would have considerable impact on these projections.

Figure 100: NCRFA Five-Year Projections, 2014 - 2018

Year	Percent Change
2014	2.4%
2015	3.7%
2016	4.0%
2017	3.9%
2018	3.4%

Figure 101 forecasts the change in the assessed value from 2014 through 2018 using the growth factors identified above.

Figure 101: NCRFA Forecast Assessed Value and Levy Rates, 2014 - 2018

	Forecast				
	2014	2015	2016	2017	2018
Base Fire Assessed Value	1,561,886,253	1,641,465,018	1,729,784,151	1,820,790,026	1,907,275,996
New Construction	21,011,546	21,788,973	22,660,532	23,770,898	24,935,673
Total Fire Assessed Value	1,582,897,799	1,663,253,991	1,752,444,683	1,844,560,925	1,932,211,668
Base EMS Assessed Value	1,563,957,547	1,643,612,950	1,732,018,000	1,823,110,995	1,909,675,878
New Construction	21,011,546	21,515,823	22,075,235	22,869,943	23,693,261
Total EMS Assessed Value	1,584,969,093	1,665,128,773	1,754,093,235	1,845,980,938	1,933,369,139
Expense Levy Rate	1.3586	1.3237	1.2860	1.2506	1.2219
Non-Voter Bond Levy Rate	0.0968	0.0889	0.0814	0.0744	0.0683
EMS Levy Rate	0.5000	0.5000	0.5000	0.5000	0.5000
Bond Levy Rate	-	-	-	-	-
Total Rate	**1.9554**	**1.9126**	**1.8674**	**1.8250**	**1.7902**

NCRFA Revenue Forecast

Property taxes in Figure 102 were based on the 2013 budgeted amount and increased based on the corresponding growth rates from Figure 100.

Figure 102: NCRFA Forecast Revenue, 2014 - 2018

Revenue	Forecast				
	2014	2015	2016	2017	2018
Current Expense Levy	2,121,605	2,172,047	2,223,667	2,276,199	2,329,836
C.E. - New Construction Levy	28,937	29,603	29,996	30,570	31,184
EMS Levy	771,288	789,611	808,511	828,040	848,324
EMS - New Construction Levy	10,506	10,894	11,330	11,885	12,468
Non-Voter Bond Levy	151,206	145,965	140,724	135,483	130,241
Total General Property Taxes	3,083,542	3,148,121	3,214,227	3,282,176	3,352,054
Timber Harvest Taxes	-	-	-	-	-
Excise Taxes	5,118	5,238	5,361	5,487	5,616
Federal Grants	-	-	-	-	-
State Grants	1,473	1,508	1,543	1,579	1,616
Fire Control Services	-	-	-	-	-
Emergency Services	17,502	17,914	18,336	18,767	19,208
ALS Services	1,309,492	1,340,299	1,371,831	1,404,105	1,437,139
Fire Protection Services	-	-	-	-	-
Amb & Emer Aid Fees	665,292	680,944	696,964	713,361	730,143
Interest & Other Earnings	3,071	3,143	3,217	3,292	3,370
Rents, Leases & Concessions	23,029	23,571	24,126	24,693	25,274
Contributions & Donations	-	-	-	-	-
Miscellaneous Revenues	-	-	-	-	-
Transfer-In / Non-Revenues	-	-	-	-	-
Total Revenue	**5,108,518**	**5,220,738**	**5,335,605**	**5,453,461**	**5,574,421**

NCRFA Expenditure Forecast

All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Figure 103 reflects forecasted expenses through 2018.

Figure 103: NCRFA Forecast Expenditures, 2014 - 2018

Expenditure	Forecast				
	2014	2015	2016	2017	2018
Salaries and Wages	3,285,932	3,363,238	3,442,362	3,523,347	3,606,238
Personnel Benefits	998,304	1,078,168	1,164,422	1,257,576	1,358,182
Supplies	160,438	164,212	168,076	172,030	176,077
Services	711,601	728,342	745,477	763,016	780,966
Int Gov Srv	6,653	6,809	6,970	7,134	7,301
Capital Outlay	49,578	50,744	51,938	53,160	54,410
Tranfers-Out	151,206	145,965	140,724	135,483	130,241
Total Expenditure	**5,363,712**	**5,537,479**	**5,719,968**	**5,911,744**	**6,113,416**

NCRFA Fund Balance Forecast

The following table illustrates NCRFA Expense Fund forecast balance history from 2014 to 2018.

Figure 104: NCRFA Forecast Expense Fund Balance, 2014 - 2018

Current Expense / General Fund	2014	2015	Forecast 2016	2017	2018
Beginning Cash and Investments	2,477,694	2,222,500	1,905,759	1,521,396	1,063,113
Revenues	5,108,518	5,220,738	5,335,605	5,453,461	5,574,421
Expenditures					
Salaries and Wages	3,285,932	3,363,238	3,442,362	3,523,347	3,606,238
Personnel Benefits	998,304	1,078,168	1,164,422	1,257,576	1,358,182
Supplies	160,438	164,212	168,076	172,030	176,077
Services	711,601	728,342	745,477	763,016	780,966
Int Gov Srv	6,653	6,809	6,970	7,134	7,301
Capital Outlay	49,578	50,744	51,938	53,160	54,410
Tranfers-Out	151,206	145,965	140,724	135,483	130,241
Total Expenditures	5,363,712	5,537,479	5,719,968	5,911,744	6,113,416
Ending Cash and Investments	**2,222,500**	**1,905,759**	**1,521,396**	**1,063,113**	**524,118**

Staffing and Personnel Management

Fire and EMS organizations must provide adequate staffing in three key areas: emergency response and operations, administration, and support. ESCI considered these elements when reviewing staffing methodologies among the agencies involved in the Arlington Regional Cooperative Efforts Feasibility Study to assure that an appropriate balance between the three is maintained given the realities of available local resources.

Several standards address staffing issues. Specifically, the *OSHA Respiratory Protection Standard 29 CFR 1910.134*; *NFPA 1710 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, to the Public by Career Fire Departments*; and *NFPA 1720 Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments* are frequently cited as authoritative documents. In addition, the Center for Public Safety Excellence (CPSE) publishes benchmarks for the number of personnel required on the emergency scene for various levels of risk.[30]

However, numbers and deployment of people are not the only considerations. Careful attention must be paid to managing the workforce to achieve maximum productivity for the organizations as well as maximum satisfaction for the individual. A safe working environment, fair treatment, and recognition for a job well done are key components to job satisfaction.

It is also important that the organization's members know to whom they should go when they have a problem, question, or issue related to their relationship to the organization. In large organizations, a human resource department typically handles this function. Staff within such a department address questions, issues, and tasks related to appointment, benefits, performance, discipline, promotion, or termination of employees. These duties are often combined with other responsibilities in smaller organizations, as is the case with all of the study agencies except Arlington.

[30] CPSE: formerly the Commission on Fire Accreditation International (CFAI).

Figure 105: Survey Table - Staffing & Personnel

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
1. Policies, Rules, Regulations, and Operational Guidelines							
A. Human resource manager	Julie Good HR Analyst	Linda Layton, Finance Manager (Other duties)	Undefined	Fire Chief Keith Strotz A/C Jeremy Swearengen	Fire Chief Rick Isler	Jan McClelland HR Officer	Sue Evenson (District Secretary)
B. Personnel policy manual maintained	Yes; City has manual; FD has limited policy manual but is updating via Lexipol project	Union CBA Non-union manual	None	Yes (Fire Chief) Contained in policy and procedure manual	Policy & SOG manual; not specifically personnel but includes it	Contained in SOG manual	Yes At each station + electronically; Fire Chief reviews & maintains
i) manual provided at initial hiring	Yes; hard copy; sign for it; also electronic copy	Available but no	N/A	Yes; must sign having read it	Policy & SOG Orientation	One-on-one orientation & review; attest to receipt	No
ii) training provided	Yes; WCIA training primary; biannually	Orientation	N/A	Yes; Orientation & every time there is a change in a policy	Only orientation	On-going mentoring	Yes; orientation meeting
iii) periodic review & update	Frequently; updated with changes	Yes; to be done by LM & Policy Committee	N/A	As needed and/or directed	Upon need or problem	Yes	Fire Chief handles
C. Retention program established	Turnover rate is low; not needed	Longevity pay both career & volunteer	Only BVFF disability and pension program	Training program is an incentive; LOS included in compensation	BVFF pension and addition District paid insurances	BVFF pension	No

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
2. Compensation, Point System, and Benefits							
A. Uniformed employee compensation, FT							
i) fire chief	$11,780/mo.	$12,487/mo as contract employee with no major benefits	Contract in progress with new chief	$7,500/mo	$5,508 p/month @ 40 hours p/week	$2100 per mo.	$116,784
ii) deputy/asst. chief, Ops	DC: $9,300/mo	AC: $7,572/mo	No	Assistant Chief (Volunteer compensation)	Assistant Chief $5,000/mo	No	AC: $1,200 month contract; no benefits
iii) deputy/asst. chief, Support	No	AC: $7,572/mo	No	No	No	No	No
iv) fire marshal	DC	No	No	No	No	No	No
v) battalion chief	N/A	Volunteer BCs $1,588/month stipend	No	No	No	No	$8,151/mo
vi) training captain, nonexempt	$7,523/mo	Admin Captain	No	No	No	No	No
vii) deputy fire marshal, nonexempt	No	No	No	No	No	No	No
viii) emergency management coordinator, exempt	N/A Shared responsibility	No	No	No	No	No	No
ix) field training officer, captain – nonexempt	Line Captain coordinates training from Snohomish County module; no extra pay	No	No	No	No	No	No
x) EMS coordinator, nonexempt	Administrator (MSA) $8,765/mo	Lt/PM/MSO	No	Lt/MSO	No	No	MSO: $300 pro/pay
xi) captain	$7,523/mo	$7,197/mo	No	No	No	No	$7,117/mo

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
xii) technical services coordinator, lieutenant	City staff	No	No	No	No	No	No
xiii) EMS field coordinator	N/A	No	No	No	No	No	No
xiv) fire lieutenant/fire investigator	Snohomish County	Snohomish County under contract	No	Snohomish County	Snohomish County	Snohomish County	Snohomish County
xv) fire plans examiner/inspector	Deputy Chief	No	No	Snohomish County	Snohomish County	Snohomish County	Snohomish County
xvi) lieutenant	No	Volunteer = $318 p/month stipend	Volunteer $200 mo stipend	No	No	No	Volunteer points
xvii) engineer	No	No	No	No	No	No	No
xviii) firefighter/ paramedic	$7,021/mo	$5,598/mo	No	No	No	No	PM 1: $5,536 PM 2: $5,840 PM 3: $6,144 PM 4: $6,448 Senior: $6,752
xix) public information specialist – exempt	No	No	No	No	No	No	No
xx) firefighter II	$6,269/mo	$4,921/mo	$6,097/mo	N/A	N/A	N/A	FF2: $5,170 FF3: $5,475 FF4: $5,779 $6,083
xxi) firefighter I entry level	$4,701/mo	Career = $4,921/mo Part time = $10.74 p/hour	Volunteer points	Volunteer stipend	Stipend only	Volunteer points	$4,866/mo
xxii) Firefighter trainee (not authorized to enter IDLH w/o supervision)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
B. Additional compensation							
i) EMT premium pay	N/A	No	No	See Volunteer compensation grid	No	No	No

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
ii) paramedic pay	$752 (top)	PM 11% above top step FF LtPM 19% above top step FF	No	No	No	No	Captain PM; $7,360/mo
iii) clothing allowance	No	No	No	No	No	No	$50 p/mo
iv) longevity pay	5+ 1% 10+ 2% 15+ 3% of base	2.5% @ 7 yrs 5% @ 10 yrs 7.5% @ 15 yrs 11% @ 20 yrs	No	See Volunteer compensation grid	No	No	No
v) other specialty pay	Mechanic 3% IV Airway 2% Ed Incent AAS 2% BS 4% MS 6% Acting Captain: 10% of regular hourly rate	Out of Class + $3.11 p/hour	No	No	No	No	Holiday pay: $152 p/mo MERP: $75 p/mo
C. Non-uniformed employee compensation, FT annual							
i) administrative assistant	$3,830	$4,140	No	No	District Secretary $2,500 p/mo; plus $13 p/call	District Secretary $18.00 per hour	$15 p/hour ½ time
ii) staff assistant	No	No	No	No	No	No	No
iii) management intern	No	No	No	No	No	No	No
D. Career employee benefits							
i) social security	Non-union only	Non-uniformed only	No	No	Fire Chief and Assistant Chief	No	Only volunteers
ii) workers' compensation	Yes	Yes	Yes	No	Yes	No	Yes

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
iii) pension	LEOFF 2 PERS 2 or 3	LEOFF 2 PERS 2 or 3	LEOFF 2 & BVFF	LEOFF & BVFF	BVFF & LEOFF 2	BVFF (transitioning to be PERS 1)	LEOFF 2 PERS 2
iv) deferred compensation	State Deferred Comp Union: City matches up to 6.2% in lieu of Social Security	Yes; Uniformed matches up to 5% in lieu of Social Security. Fire Chief and Non-Uniformed no match	No	7.8% match	No	No	2% match of monthly State Deferred Comp
v) medical insurance	Yes; employees only Union: LEOFF Trust Non-Union: AWC	Yes Self-funded (Mimics WFCA PPO 100); CBA + MERP	Yes WFCA for FT BVFF for Volunteers	Fire Chief only BVFF for volunteers	BVFF	No	Yes NWFF Trust
vi) dental insurance	Yes	Yes	Yes (FT)	Yes	No	No	Yes
vii) short and long term disability insurance	Union opted out Non-Union yes	Yes (District pays 75% of premium for nonunion)	No	BVFF	BVFF	No	Employee pays
viii) life insurance	$26,000 with accidental death & disability	$50,000 (can triple based on incident)	No	BVFF	BVFF and accidental death and disability VFIS	No	$10,000 accidental death & disability
ix) vision insurance	Yes	Yes	Yes (FT)	Yes	No	No	In medical
x) survivor income benefit	No	No	No	No	No	No	No
xi) additional life insurance	No	No	No	No	No	No	No

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
E. Volunteer compensation	Stipend: $120 12-hour day shift $100 12-hour night shift $25 off-duty call or drill	Per Call: Base = $8.59 + 50¢ each for: Academy; FF1; EMT; Driver; Tech Rescue; Instructor 1; Safety Officer	Point system @ $1.80/point earned in several ways. (Day shift = 68 points, night shift = 40 points, Duty Officer 83/weekend + points for drills and alarm attendance)	FF = $100 day/ $60 night. Driver = $120 day/$80 night. Officer = $130 day/$90 night. Vol Call Pay: 0-5|5-10|10+ FF = $10|12|14 Off = $12|14|16	Stipend: FF $13 p/call/drill Officers $15 p/call/drill	$10/call Points for training: $1.50 per point; Drill 4 points 6 points Full day 20 points	Point system; 1.0 base; 1.3 FF1/EMT 1.4 FF2; additional points for other certifications Day pay = 70 x base Night pay = 50 x base
i) LOSAP	No	No	No	Part of grid	No	No	No
ii) other benefits/incentives	BVFF pension & disability fees	BVFF pension & disability fees	BVFF pension & disability fees	BVFF pension & disability fees	BVFF pension & disability fees	No	BVFF pension & disability fees
3. Reports and Records							
A. Personnel records maintained	Yes; hard copy; secured; locked file in locked office	Yes; hard copy in locked file; in locked and alarmed storage	Yes; hard copy files	Yes; Fire Chief/AC	Yes; locked in Fire Chief office; limited access	Yes; Locked file in locked office	Yes; hard copy; soon electronic; secured in locked drawer & locked office
i) application retained	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ii) historical records archived	Yes; initially locally (5 years) then with State	Yes; on-site; state archives up to 2009	Yes	Yes; on-site; locked in station but not separate lock; BoFC records in locked office (officer access)	Archived on-site in secured area; sprinkler protection	Hard copy & electronic; locked in office	Yes; on-site; state archives up to 1970

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
iii) performance evaluations retained	Yes	Yes	Not performed	Fire Chief; maintained	Only A/C; supposed to for Fire Chief but not recently (3 years)	No	Yes
iv) injury and accident records retained	Yes	Yes	Kept in separate file with personnel files	Yes; moving to electronic storage	Yes	Yes	Yes
v) health and exposure records maintained	Yes	Yes; separate, fireproof safe	Kept in separate file with personnel files	Yes	Yes	Yes	Yes
4. Disciplinary Process							
A. Disciplinary policy established	City policy; labor contract has time thresholds	CBA Limited in personnel manual	A policy in the SOG manual; membership not generally aware of policy. Has historically been applied irregularly	Yes; written policy; Fire Chief process is in Fire Chief contract	Yes; limited	Yes	Yes
B. Disciplinary process communicated	Yes	Yes	Placed in SOG manual, not circulated	Yes; written policy	Uncertain	Yes	Yes
C. Appeal process provided	Yes; per contract or per Civil Service	CBA/Arbitration for uniformed; District SOP for non-union	Yes	Yes	Yes; to BoFC	Adopted NCFA policy	Yes
i) recent litigation	No	No	No	No	No	No	No
ii) pending litigation	One; rules violation	No	No	No	No	No	One; policy violation
5. Counseling Services							
A. Critical incident stress debriefing	Snohomish County Team	Snohomish County Team	Snohomish County Team	Volunteer support unit (clerical); Snohomish County	Snohomish County Team	Snohomish County Team	Snohomish County Team

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Employee assistance program	Yes; all employees	Yes; all	No – working on for 2014	Yes	No	No	No
C. Intervention program	Generally yes; EAP; drug-free workplace policy	Yes; EAP; drug-free workplace policy	None	Informal	Informal	Not formal	Yes
6. The Application and Recruitment Process							
A. Recruitment program	Year around website advertisement. Recruit at EVCC Fire Academy	Volunteer B/Cs; Signage; WFC/WSFFA program; Website	Comm College/National Testing service	A/C through local Comm College programs	Word of mouth & reader board; WFC/WSFFA program	Word of mouth	Website
B. Application process	Yes	Yes	Yes	Yes	Yes	Yes	Yes
i) qualification check	Yes	Yes	Yes	Yes	Yes	No	Yes
ii) reference check	Yes	Yes	Not performed	Yes	Yes	Limited	No
iii) background check	Yes; WSP for volunteers; full background for employees	Yes; WSP + Data Quest for volunteers plus full background for FTE employees	Washington State Patrol criminal history check and driver's abstract	WSP	WSP	WSP	Full background Talent Wise
iv) physical standards established	FF = CPAT	Career & PT FF = CPAT Vol = internal	Internal and P/FT	CPAT or local agility test	Yes; local design	No	CPAT
v) knowledge testing	Written	Yes	FF1 and EMT certification	FF 1	No	No	No
vi) interview	Yes; 1st round use adjacent agencies; 2nd Fire Chief interview	Yes; officers Career adds Fire Chief interview	Yes 3 total	Yes; Fire Chief/AC or other officers	Yes; membership review board + chiefs	Yes	Yes
vii) medical exam required	Yes; LEOFF exam	Yes; LEOFF exam by occupational physician	New Hires & P/FT for all members	Yes	Yes; Occupational physician	BVFF	Yes

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
viii) psychological exam required	Yes; uniformed employees	Yes Career only	No	No	No	No	Yes Career only
7. Testing, Measuring and Promotion Process							
A. Periodic competence testing	Annual skills confidence test	OTEP	No	EMS annual recertification process; no fire skills testing	EMS annual recertification, Quarterly SCBA	Quarterly SCBA	No
B. Periodic physical competence testing	Monitoring during confidence testing	No	No	No	No	No	Yes
C. Periodic performance review	Annual	Annual	Air pack donning testing is inconsistently performed quarterly and not enforced. No complete performance review.	Not for volunteers; Fire Chief annual	No	No	Yes
D. Promotional testing	Yes; Assessment Center; writing sample; written; scene simulator	Yes; outside consultant; written + assessment center	Not defined	Written, practical & assessment center	Interview only	Chief's appointment	3rd party Assessment center
8. Health and Safety							
A. Medical standards established	CPAT/LEOFF	LEOFF	Unknown	BVFF	BVFF	BVFF	CPAT/form based on BVFF model
i) periodic medical exam	No; HazMat biannual WAC medical	As needed	P/FT	No	No; except those using CDL	No	No

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Safety committee established	FD: Yes City: Yes, has representative from all departments	Yes	No safety committee is in place	Yes	Yes	No	Yes
i) membership	MSA (leader); local; volunteer	AC, BoFC, Chief, Career, + Volunteer	N/A	Yes two management appointed and three members elected from the membership	Yes -- 2 management appointed members 2 members elected by membership, Fire Chief/AC	No	B/C 4-6 members
ii) meetings	FD = bimonthly City = quarterly	Quarterly	N/A	Quarterly	Quarterly	No	Monthly
iii) meeting minutes	FD = yes City = yes	Yes	N/A	Yes	Yes	No	Yes
9. Administration and Other Support Staff							
A. Fire chief	1	1	1	1	1	1	1
B. Deputy fire chief, administration	1	2 ACs (also perform operational role)	0	A/C	0	0	0
C. Deputy fire chief, technical services	0	0	0	0	1	0	0
D. Captain, training	0	Shift Captain fills this role	0	0	0	0	1 Training Assistant
E. Fire Marshal	0	0	0	0	0	0	0
F. Emergency management coordinator	0	0	0	0	0	0	0
G. Captain, field training officer	0	0	0	0	0	0	0

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
H. EMS coordinator	MSA (1); Local Medical Control Physician (Cascade Valley) $23,000 annual + Snohomish County	Shift LT/PMs fill role	0	0	0	0	MSO PM assigned to role in addition to shift duties
I. Lieutenant, technical services coordinator	0	0	0	0	0	0	0
J. Fire lieutenant/fire investigator	0	0	0	0	0	0	0
K. Fire plans examiner/inspector	0	0	0	0	0	0	0
L. Fire prevention specialist	0	0	0	0	0	0	0
M. Public information specialist, exempt	0	0	0	0	0	0	0
N. Public education specialist, exempt	0	0	0	0	0	0	0
O. Administrative assistant	1	Finance Manager District Secretary	0	District secretary part time	District Secretary part time – works for Board	1	1 District Secretary
P. Staff assistant	0	0	0	0	0	0	½ time secretary
Q. Management intern	0	0	0	0	0	0	0
R. Total administrative & support staff	4	5 Admin 2 Service Division	1	1	3	2	3.5
S. Percent administrative & support to total	13%	6.5%- Administration 2.5 % Service Division	4%	4%	8.5%	10%	6%

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
10. Emergency Service Staff							
A. Battalion chief	0	Assistant Chiefs fills role 2 Volunteer BCs	0	0	0	0	3
B. Captain	6	3 Career	0	1	0	0	6
C. EMS field coordinator	0	1	0	0	Assistant Chief fills role	0	0
D. Lieutenant	0	4 Career 3 Volunteer	2 part time volunteer	1	6 Duty Crew Leaders	0	0
E. Engineer	0	0	0	0	0	0	0
F. Firefighter, paramedic	10	7	0	0	0	0	10
G. Firefighter I and II	11	13 Career 6 Part Time 30 Volunteer	24 part time, 1 full time	22	8	18	8 career 43 part time
H. Total operational staff	27	69	25	23	35	18	51
I. Fire department total	31	76	25	24	35	20	54.5
J. Percent of operational personnel	87%	91%	96%	96%	91.5%	90%	94%
11. Use of Career and Volunteer Personnel							
A. Career schedule	48/96	48/96	4 12's T-F + 3 hrs Wed night Drill	N/A	Chief Unscheduled work week – Assistant Chief 40 hours M-F	Limited 8 hour duty staffing	Detroit Modified 24/48
i) length of normal duty period	48	48	12	Day shift per diem	N/A	0	24 hours
ii) FLSA period	182 hours	24 days	Data unavailable	No	N/A	0	Unsure
iii) duty hours per week	56	56	51	N/A	N/A	N/A	56
iv) normal shift begins	0700	0800	0600	Day shift/Night shift	N/A	N/A	0700
v) callback requirements	No	Yes	No	Yes	Yes	No	Yes

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
vi) residency requirements	No	No	No	Volunteers yes; Per diem no	Yes	Yes	No
vii) standby duty requirements	No	Chief Officer only	No	No	No	No	No
B. Operational career services							
i) fire suppression	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ii) EMS/rescue, first response	BLS	BLS	BLS; non-transport	BLS	BLS; non-transport	BLS transport	BLS
iii) EMS, advanced life support	ALS	ALS	Contract w/ MFD for ALS	Contract w/ AFD for ALS	Contract w/ AFD for ALS	AFD	ALS
iv) specialized rescue	Snohomish County Tech Rescue Team members; 4 members	Marine, technical rope rescue	Water Rescue	Water rescue (hovercraft)	Water rescue (Stillaguamish Team) hovercraft	Water rescue	Marine rescue
v) fire prevention inspections	Company inspections	No	No	No	No	No	No
vi) emergency management	Provide some instruction	Island County provides	Snohomish County	Fire Chief on Snohomish County EM	Snohomish County	Community planning	Snohomish County
vii) public education	Limited; elementary schools, businesses on call	Schools, newsletter, website	Community Health Fairs with Tribes and elementary school, Special Events	Limited school effort, open house, community fair, aid and CPR on request	Limited school effort, open house, community BBQ, aid and CPR on request	Schools & daycares; Special event	Schools
viii) hazardous materials response (level)	Snohomish County Team; Some at Operations level; most at Awareness level	Operations level	Data unavailable	Awareness and operations level	Awareness level; limited operations level	Awareness level	Operations level

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
D. Volunteer services							
i) chaplain	Support 46	Stanwood – Camano Incident Support	Support 99 & Support 46	Support 46	Support 46 from AFD	Support 46 & 99	Stanwood Camano Support Services
ii) civilian administrative volunteer	No	No	No	No	No	No	No
12. Responsibilities and Activity Levels of Personnel							
A. Assignment of routine duties:							
i) by position	No	No	No	No	No	No	No
ii) by areas of personal interest	Yes	Yes	Yes	Yes	Yes	Yes	Yes
B. Special duties assigned by:							
i) bid	Possible	Seniority if appropriate	No	No	No	No	No
ii) duty assignment	Yes	Yes	Yes	No	No	No	No
iii) areas of personal interest	Possible	Yes	Yes	Primarily yes	Yes	Yes	Yes
C. Committees and work groups							
i) EMS quality management	Yes; monthly meeting with Physician Control; required for PM & IV Techs	Yes; MSO does QI/QM; run review with MPD	Data unavailable	MSO and four quarterly run reviews are done by an Arlington medic	No	MSO	No
ii) chaplain	Support 46 w/SCSS	Stanwood – Camano Incident Support	Support 99 & Support 46	Support 46	No	Support 46	Stanwood Camano Support Services

Survey Components	Observations – Staffing & Personnel						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
iii) training	No; monthly officer meetings	Participation in Snohomish and Island County Training Officers Associations	Data unavailable	No	No; A/C	No	No
iv) safety	Yes	Yes	Data unavailable	Yes	Yes	No	Yes
v) building development	No	No	Data unavailable	No	Yes	No	No
vi) standards	No	No	Data unavailable	No	No	No	No

Staffing & Personnel Management Assessment

Discussion:

Each of the participating agencies presented a varied approach to the personnel management function. Variations were observed in regard to the depth of commitment to effective and comprehensive personnel systems, and some of the smaller agencies were found to be challenged to fully address some of the routine functions that exist in today's fire service. In most of the agencies, the Human Relations (HR) or Personnel functions are either assigned as "other duties" to an administrative staff member or they are the responsibility of the fire chief.

Three of the agencies are bound by collective bargaining agreements with their local unions; the remainder are primarily comprised of volunteer or part-time personnel. The wages and benefits for non-union career personnel are established by the governing body; compensation for volunteer personnel is typically some form of pay per call/drill or an established stipend for in-station duty coverage. These stipends vary by agency and range from $60 to $130 per duty tour depending upon (1) time of day, (2) duration, and (3) function (e.g., firefighter, driver or officer).

With the exception of Arlington Fire Department, there are few to no staffing resources committed to EMS operations, training, fire prevention, public education, fire investigation or emergency management functions. These agencies have chosen to primarily rely upon the resources of Snohomish County or Island County to address code enforcement, fire investigation and emergency management functions.

Administrative support resources are either sharply limited or non-existent in all agencies. Concern arises of a lack of common entry level screening standards (e.g., physical agility, medical exams, written exams, background investigations, and reference checks). There appears to be a lack of clear focus on the pre-membership screening processes, especially among the volunteer agencies. Further, there is a general lack of attention toward responder fitness both pre and post acceptance, again especially among the volunteer agencies. To the extent safety policies and practices are insufficient in these agencies, combined with the foregoing, risk is increased to the members.

Agency Recommendations:

Arlington Fire Department Recommendations:

- Move to an electronic personnel records management system.
- Implement a standards-based periodic physical competency testing process.

- Implement a regular medical examination for all response personnel.
- Develop and implement a training advisory committee.

Camano Island Fire & Rescue Recommendations:

- Provide new members with a copy of the District's personnel policies upon becoming a member.
- Move to an electronic personnel records management system
- Implement a standards-based periodic physical competency testing process.
- Implement a regular medical examination for all response personnel.
- Develop and implement an internal training advisory committee.

Snohomish County Fire District #15 Recommendations:

- Identify the Fire Chief as the Human Resource Manager as a part of the job description. Clearly define roles, responsibilities, and authority of the chief with regard to personnel matters.
- Develop a Personnel Policy Manual.
- Establish a manual of District Rules and Regulations.
- Update and complete District Standard Operating Guidelines.
- Establish job descriptions for all positions including full time and part time.
- Conduct annual performance evaluations for all personnel.
- Create a clearly defined progressive disciplinary process, institutionalize it in the form of District policy and inform all personnel of its contents, including mandatory sign-off to acknowledge receipt.
- Develop a structured recruitment and retention program, as needed.
- Complete reference and qualification checks, driver's license confirmation, and criminal history checks for prospective recruits.
- Establish minimum physical standards that are uniformly applied to all emergency responders.
- Conduct technical competence testing for all personnel evaluating fundamental emergency scene skills.
- Define a promotional testing and evaluation practice.
- Establish a safety committee consistent with OSHA requirements and define roles, authority and meeting requirements.

Snohomish County Fire District #19 Recommendations:

- Establish and implement a periodic review and update of the District's personnel policies; this may be either a comprehensive review or an incremental process.

- Move to an electronic personnel records management system and developing a records archive system with the State of Washington.
- Adopt a recognized/validated physical ability testing process for new members.
- Develop, adopt and implement a standards-based periodic skills competency testing process.
- Implement a standards-based periodic physical competency testing process.
- Develop and implement a regular, periodic performance review and appraisal process for all members.
- Implement a regular medical examination for all response personnel.
- Develop and implement of a training advisory committee.

Snohomish County Fire District #21 Recommendations:

- Develop a separate personnel policy manual. Establish and implement a periodic review and update of the District's personnel policies; this may be either a comprehensive review or an incremental process.
- Implement an incentive program for retention of volunteer personnel.
- Move to an electronic personnel records management system and develop a records archive system with the State of Washington.
- Enroll in an employee assistance program suitable to the needs of your personnel.
- Adopt a recognized/validated physical ability testing process for new members.
- Develop, adopt and implement a standards-based periodic skills competency testing process.
- Implement a standards-based periodic physical competency testing process.
- Develop and implement a regular, periodic performance review and appraisal process for all members.
- Implement a regular medical examination for all response personnel.
- Participate in a regular, structured EMS QA/QI review process.
- Develop and implement a training advisory committee.

Snohomish County Fire District #24 Recommendations:

- Move to an electronic personnel records management system and developing a records archive system with the State of Washington.
- Develop a regular performance appraisal system.
- Enroll in an employee assistance program suitable to the needs of your personnel.
- Adopt a recognized/validated physical ability testing process for new members.
- Develop, adopt and implement a standards-based periodic skills competency testing process.
- Implement a standards-based periodic physical competency testing process.

- Develop and implement a regular, periodic performance review and appraisal process for all members.
- Implement a regular medical examination for all response personnel.
- Develop and implement a regular safety committee operation.
- Develop and implement of a training advisory committee.

North County Regional Fire Authority Recommendations:

- Move to an electronic personnel records management system.
- Enroll in an employee assistance program suitable to the needs of your personnel.
- Develop, adopt and implement a standards-based periodic skills competency testing process.
- Implement a regular medical examination for all response personnel.
- Participate in a regular, structured EMS QA/QI review process.
- Develop and implement a training advisory committee.

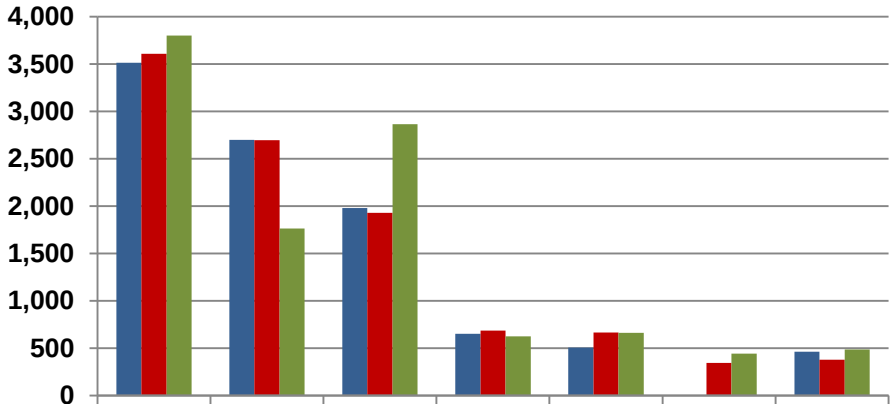
Service Delivery and Performance

In this section of the Arlington Regional Cooperative Efforts Feasibility Study, ESCI reviews current service delivery and performance within the study area. Observations will be made concerning service delivery for the study area as a whole; and for the individual agencies where appropriate and depending on the available data.

Demand Study

In the demand study, ESCI reviews current and historical service demand by incident type and temporal variation for the study area and the participating jurisdictions. GIS software is used to provide a geographic display of demand within the overall study area. The data used in this section is derived from the National Fire Incident Reporting System (NFIRS) data provided by the individual agencies, and in some cases from the Snohomish County regional dispatch center (Snopac). Figure 106 displays overall agency workload by agency, for 2010 through 2012.

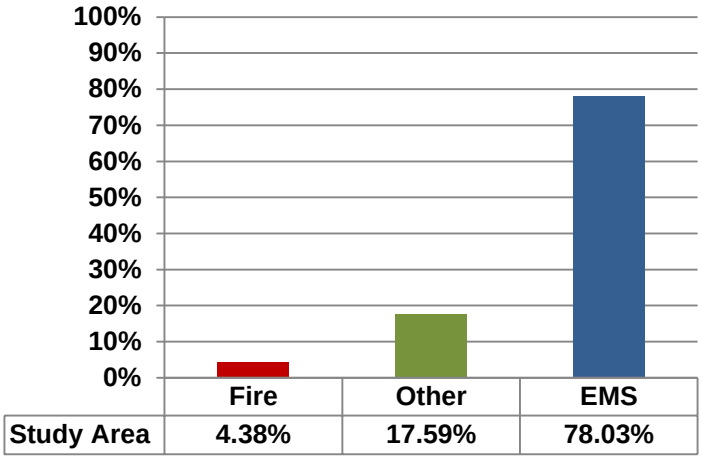
Figure 106: Study Area Historical Service Demand, 2010 through 2012



	AFD	ICFD1	NCRFA	SFD15	SFD19	SFD21	SFD24
2010	3,513	2,698	1,980	652	509	No Data	463
2011	3,606	2,696	1,929	687	666	347	380
2012	3,800	1,764	2,865	626	663	442	488

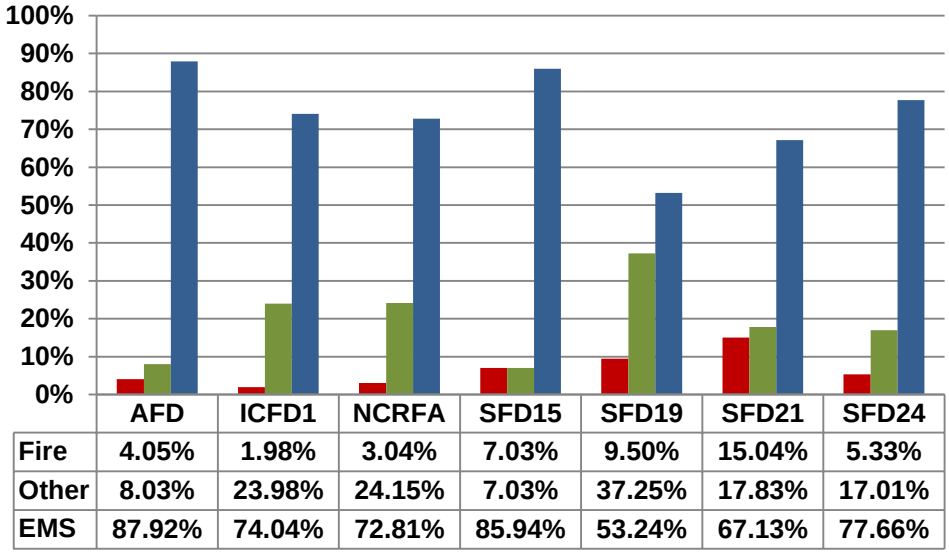
Note that in 2012 CIF&R workload decreased and North County Regional Fire Authority (NCRFA) workload increased. This reflects the change in service provider for the City of Stanwood that occurred in March of 2012. The next figure demonstrates service demand by incident type in the study area during 2012.

Figure 107: Study Area Service Demand by Incident Type, 2012



As expected, EMS responses comprise the majority of service demand throughout the study area. While actual fire incidents make up only a small part of overall workload, incidents classified as 'other' (alarms, service calls, public assist, etc.) make up a large percentage of total service demand. In the next figure, ESCI examines service demand by incident type for each agency.

Figure 108: Agency Service Demand by Incident Type, 2012

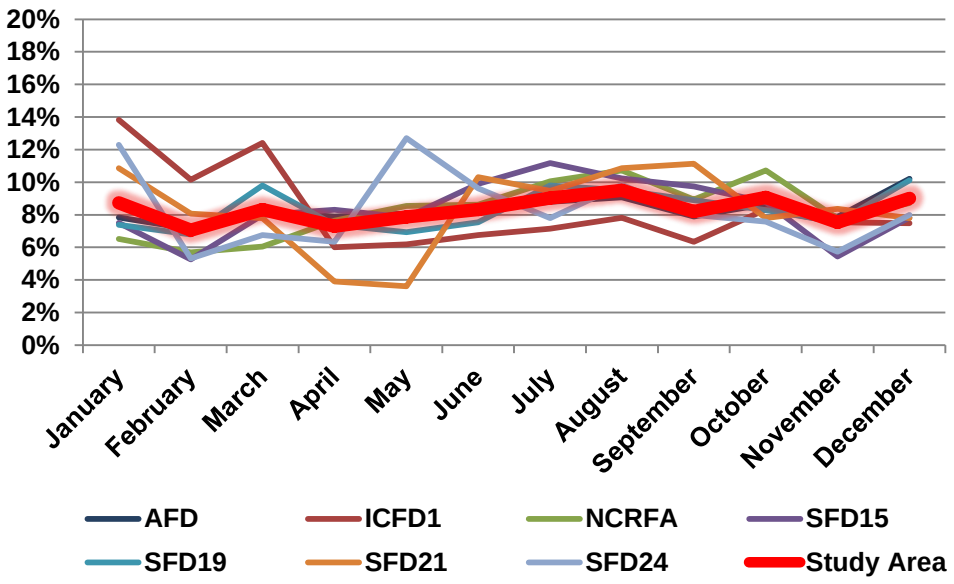


The percentages vary throughout the study area; however, Figure 108 demonstrates that EMS incidents constitute the greatest workload for all of the participating agencies and fires represent the lowest workload.

Temporal Variation

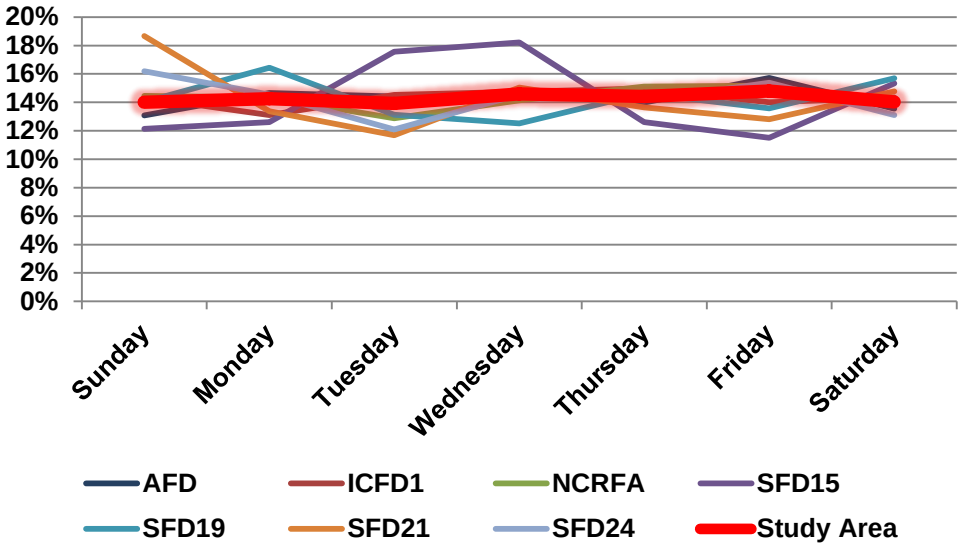
The following charts demonstrate activity and demand changes for the participating Arlington Regional Study Area jurisdictions based on various measures of time. Figure 109 summarizes annual workload by monthly increments.

Figure 109: Study Area Service Demand by Month, 2012



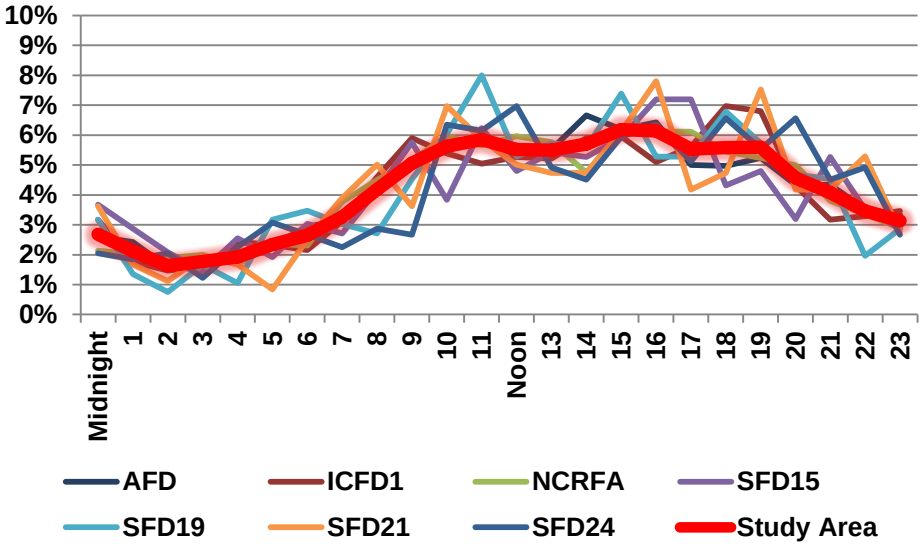
Service demand across the departments is highly variable. Overall service demand varies from a low of approximately 7 percent in February to a high of 9.5 percent in August. The next figure looks at service demand by day of the week.

Figure 110: Study Area Service Demand by Day of the Week, 2012



Again, service demand by day of the week varies for each jurisdiction. Overall study area workload is slightly higher on Fridays. The last analysis of temporal variation demonstrates workload by hour of the day.

Figure 111: Study Area Service Demand by Hour of Day, 2012



The data for the study area displays a distinct bell curve that closely follows typical human activity patterns. Over 66 percent of 2012 service demand in the study area occurred between 8 AM and 8 PM. Evaluating service demand temporally allows departments to provide necessary

resources in a more dynamic way than typical continuous staffing levels. It also allows departments to increase staffing and resources during periods of expected high demand.

Geographic Demand

In addition to the temporal analysis of workload, it is useful to examine the geographic distribution of service demand. ESCI uses geographical information systems software (GIS) to plot the location of 2012 incidents within the Arlington Regional Study area and calculates the mathematical density of incidents in the study area. Due to the extent of the study area (nearly 50 miles west to east), the area is presented in two figures-western and eastern. All calculations are for the overall study area.

Figure 112: Study Area (West) Overall Incident Density, 2012

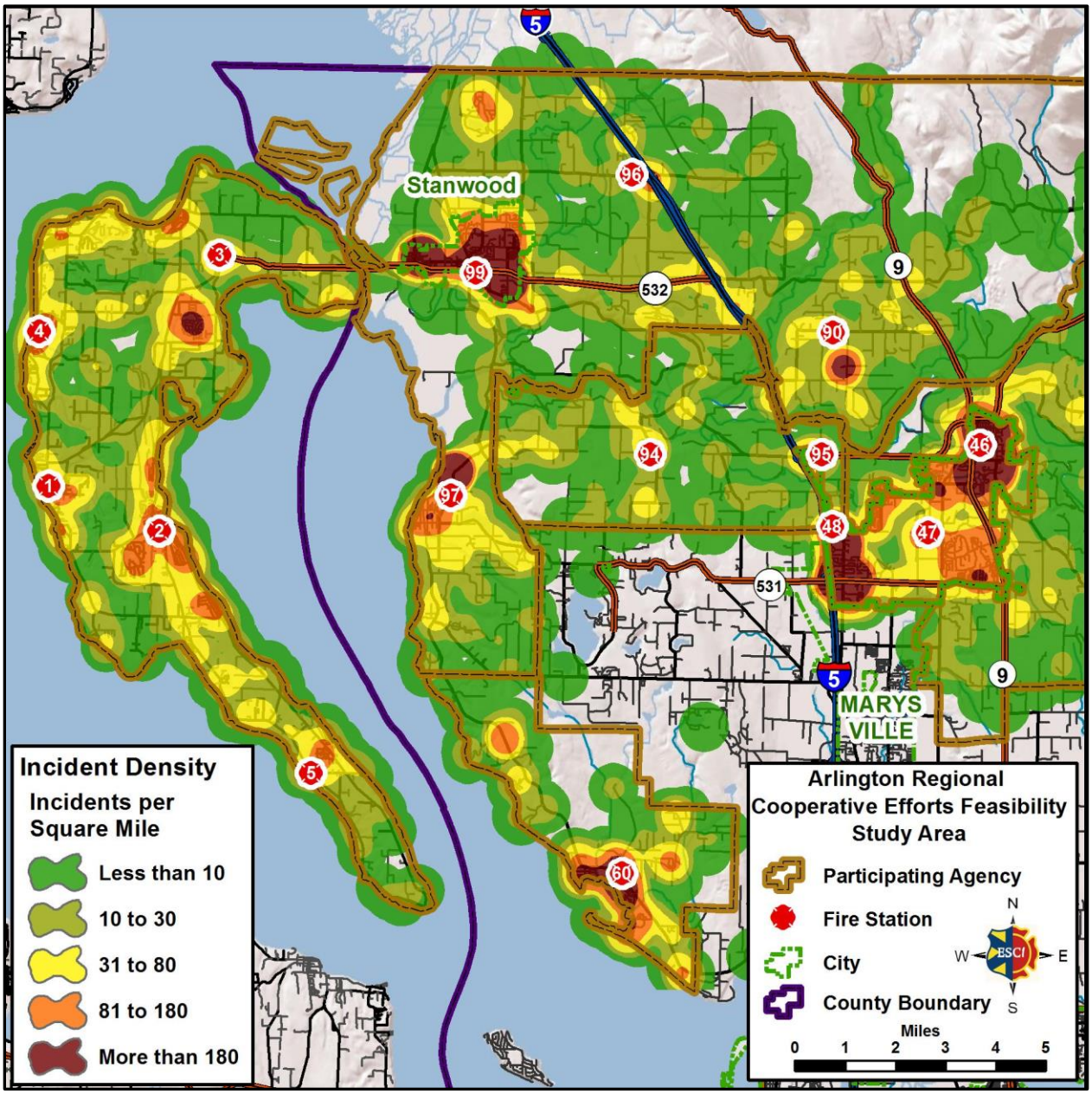
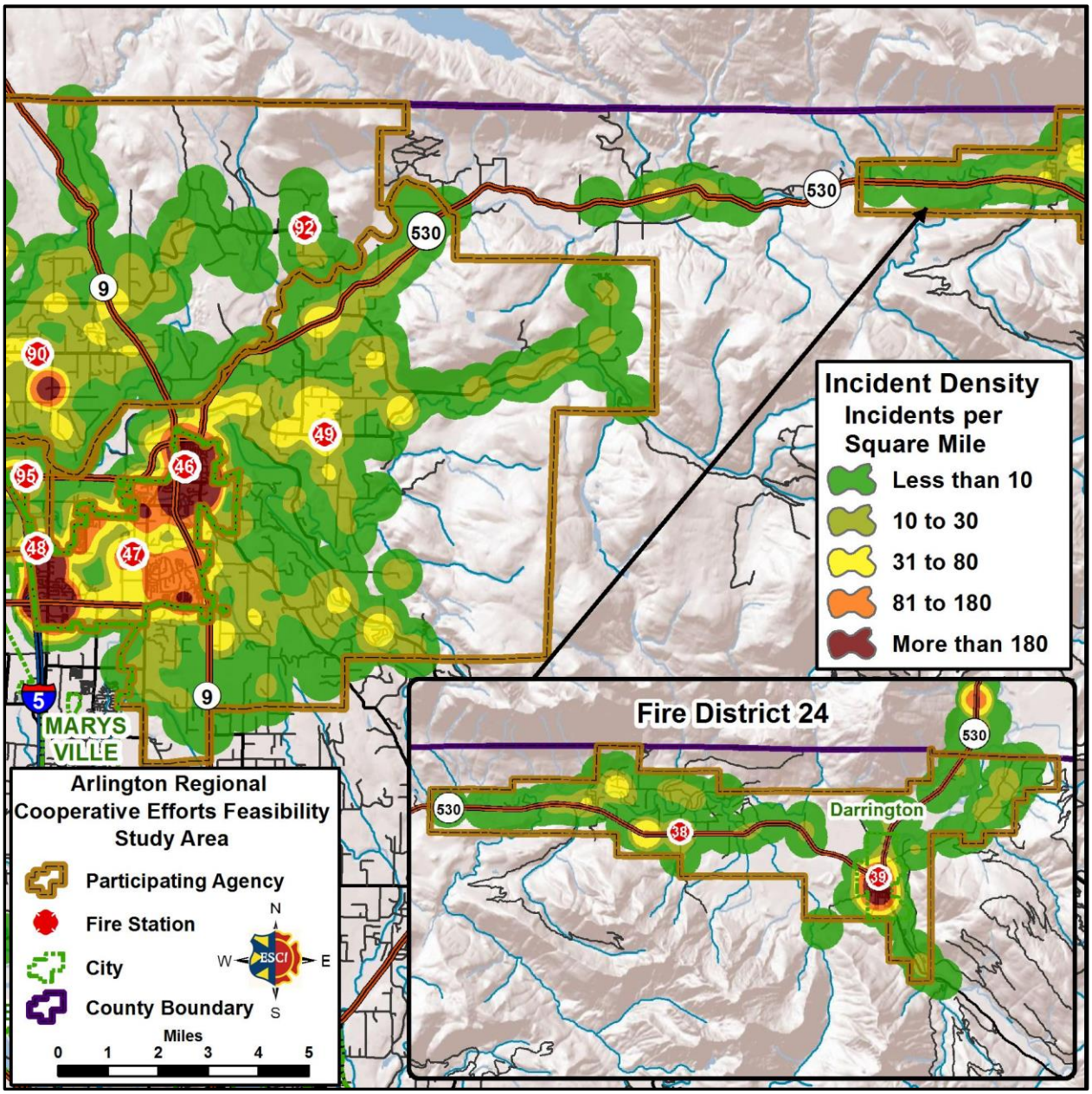


Figure 113: Study Area (East) Overall Incident Density, 2012



Service demand is spread throughout the study area. The two preceding maps demonstrate the highest concentrations of incident density are in the cities of Arlington (AFD) and Stanwood (NCRFA). Other areas of high incident density are scattered throughout the study area. The figures above represent all incident types. The next two figures display the same data and a subset of the data, demonstrating the distribution of incidents coded as “Fire” in the study area NFIRS data.

Figure 114: Study Area (West) Fire Incidents over Incident Density, 2012

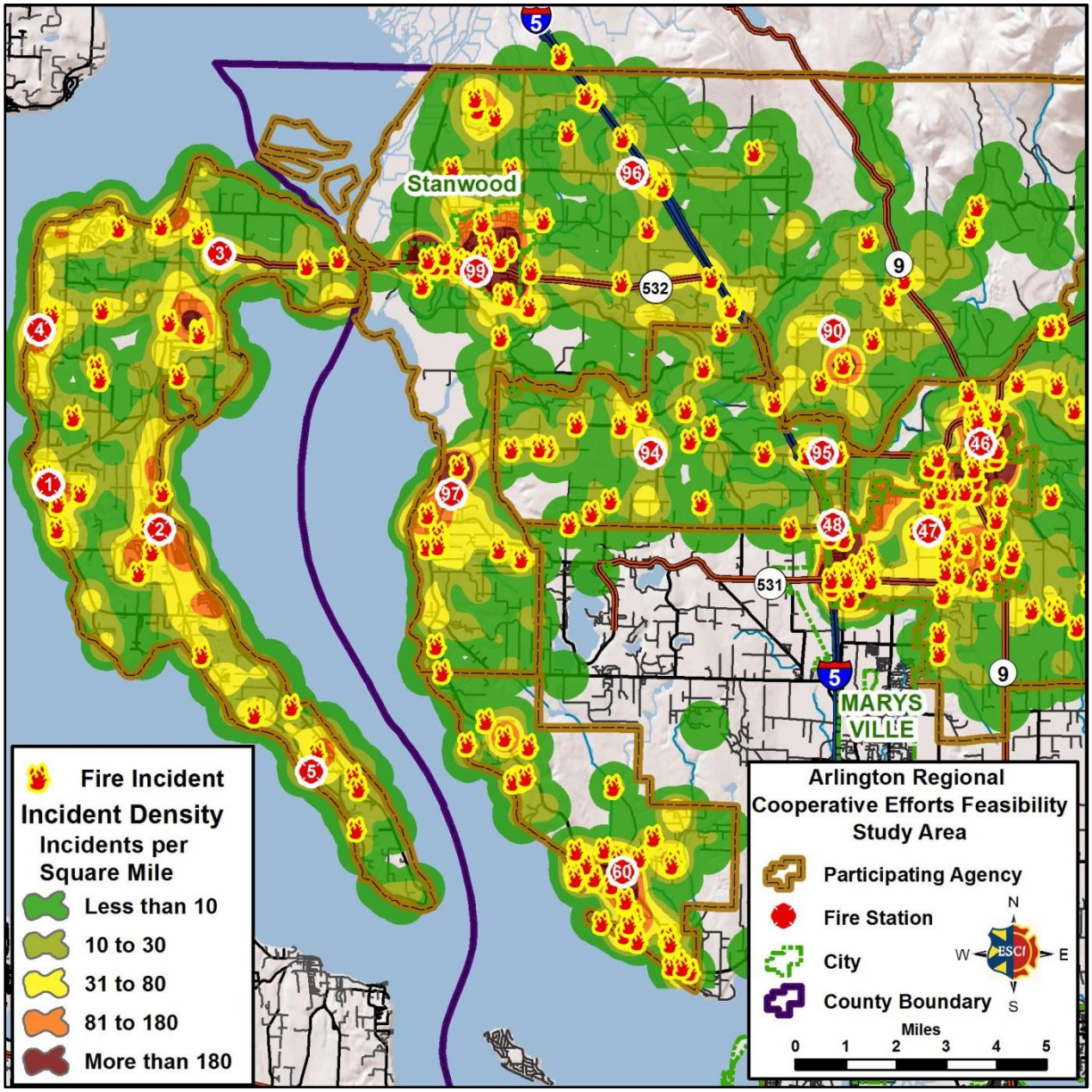
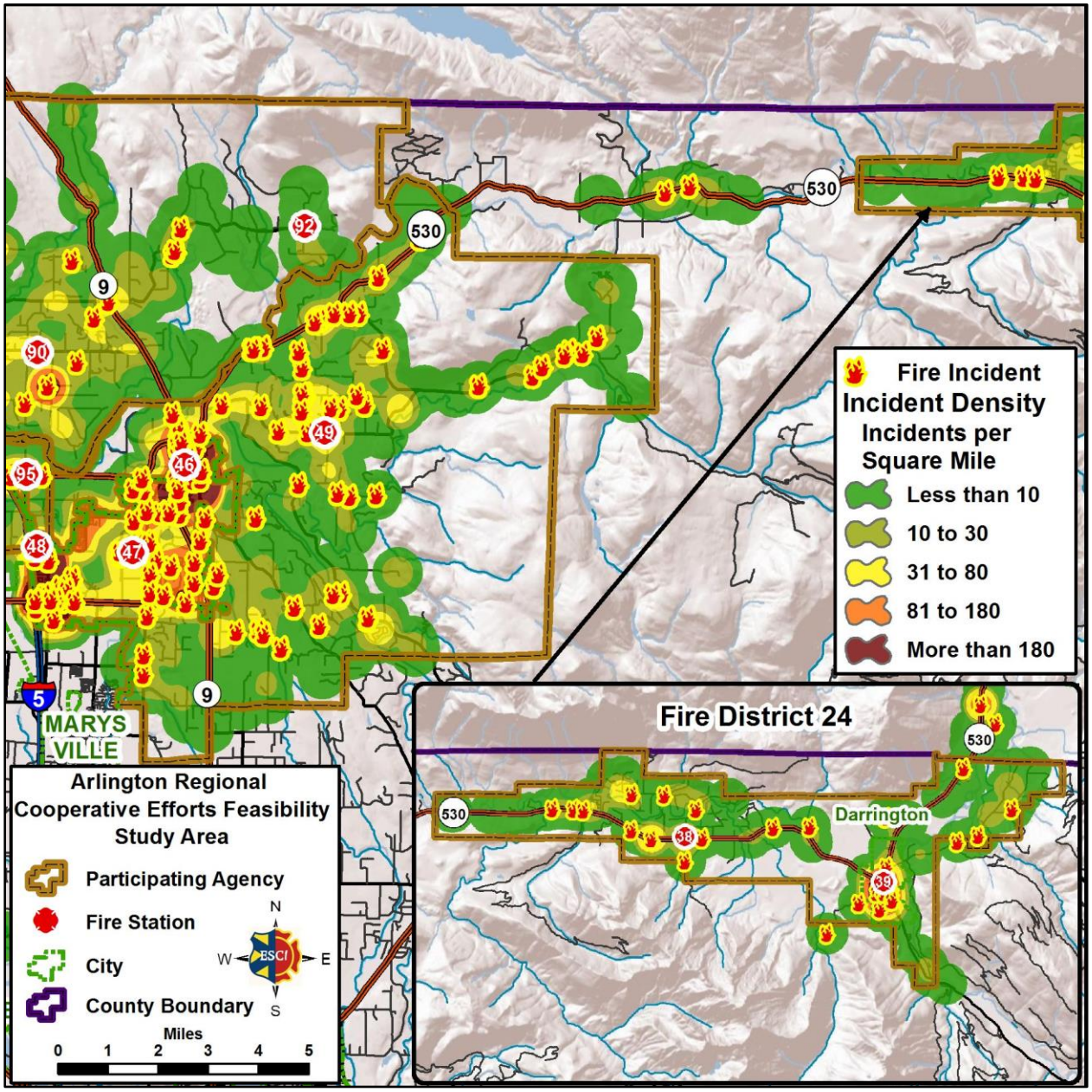


Figure 115: Study Area (East) Fire Incidents over Incident Density, 2012

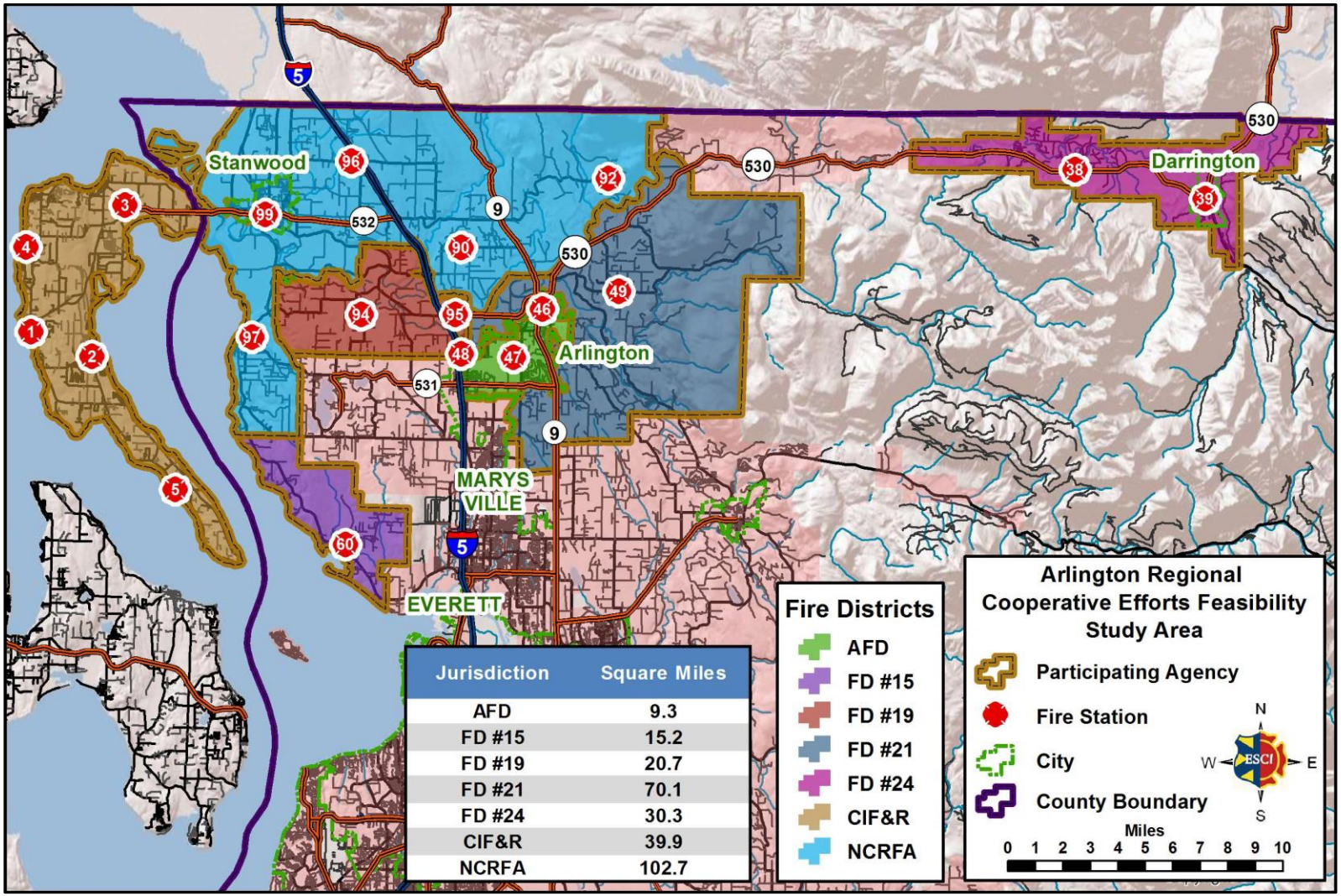


Fire incidents are the least frequent incident type in the data set. However, fire service demand is distributed throughout the study area in a pattern that is similar to the overall incident data.

Distribution

In the distribution summary, ESCI presents an overview of the current distribution of fire agency resources in the study area. Figure 116 displays the Arlington Regional Cooperative Efforts Feasibility Study Area and the participating fire jurisdictions.

Figure 116: Arlington Regional Cooperative Efforts Feasibility Study Area



Jurisdiction	Square Miles
AFD	9.3
FD #15	15.2
FD #19	20.7
FD #21	70.1
FD #24	30.3
CIF&R	39.9
NCRFA	102.7

The participating agencies provide coverage to the approximately 288 square miles in the study area from 19 stations distributed throughout their respective jurisdictions. The table in the figure above uses GIS software to calculate the square miles of each jurisdiction. The calculation is made for the legal taxing district boundaries of each jurisdiction and does not include areas served by special agreements or ambulance service areas that are outside of the fire district boundary.

Population activity and density are two primary drivers of emergency service demand. The next two figures examine population density and distribution in the Arlington Regional Study Area.

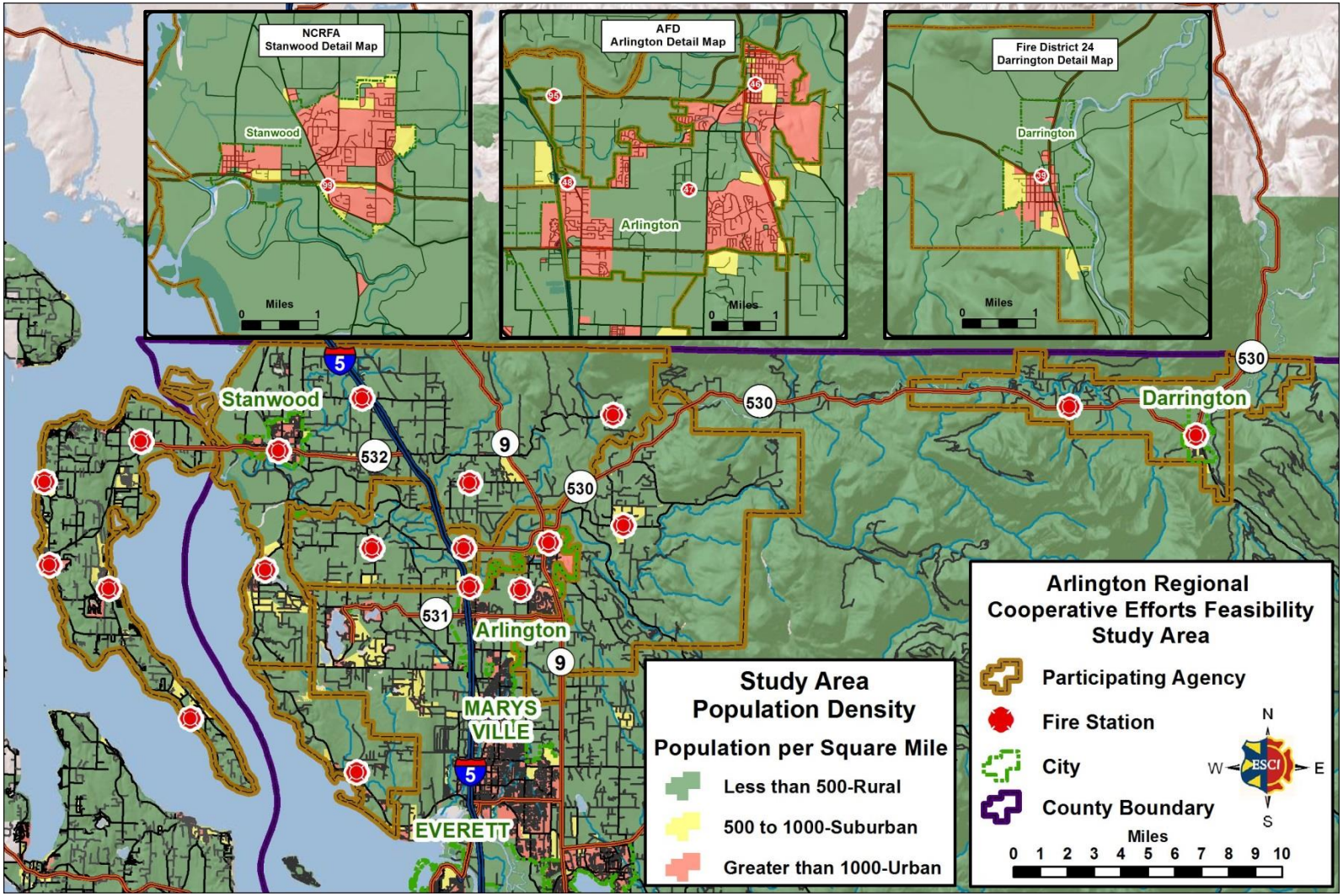
Figure 117: Study Area Population Density, 2010 Census Data

Study Area Population Density							
	AFD	CIF&R*	FD15	FD19	FD21	FD24	NCRFA*
Rural	48.1%	83.5%	90.6%	95.9%	97.1%	97.8%	94.1%
Suburban	4.0%	9.8%	3.3%	3.1%	2.4%	1.0%	3.1%
Urban	47.9%	6.7%	6.1%	1.1%	0.5%	1.2%	2.7%

*Population densities were prior to Stanwood transferring to NCRFA in March, 2012

The figure above uses 2010 Census Bureau data to summarize population density and distribution for each of the participating jurisdictions. Figure 118 demonstrates the geographic distribution of the population using the same data.

Figure 118: Population Density, Arlington Regional Study Area, 2010 Census Data



The study area is largely rural with pockets of higher population density in the unincorporated communities and incorporated cities within the study area. Arlington and Stanwood have the highest populations in the study area.

The Washington Survey and Rating Bureau (WSRB) is a statewide insurance industry organization that evaluates fire protection for communities across Washington. A jurisdiction's WSRB rating is an important factor when considering fire station and apparatus distribution since it can affect the cost of fire insurance for fire district residents and businesses. To receive maximum credit for station and apparatus distribution, WSRB recommends that all "built upon" areas in a community be within 1.5 road miles of an engine company. Additionally, a structure should be within five miles of a fire station to receive any fire protection rating for insurance purposes. In the following figures, ESCI examines fire facility distribution by WSRB distance criteria over the existing road network.

Figure 119: Study Area (West) 1.5 and 5 Miles Travel Distance - All Stations

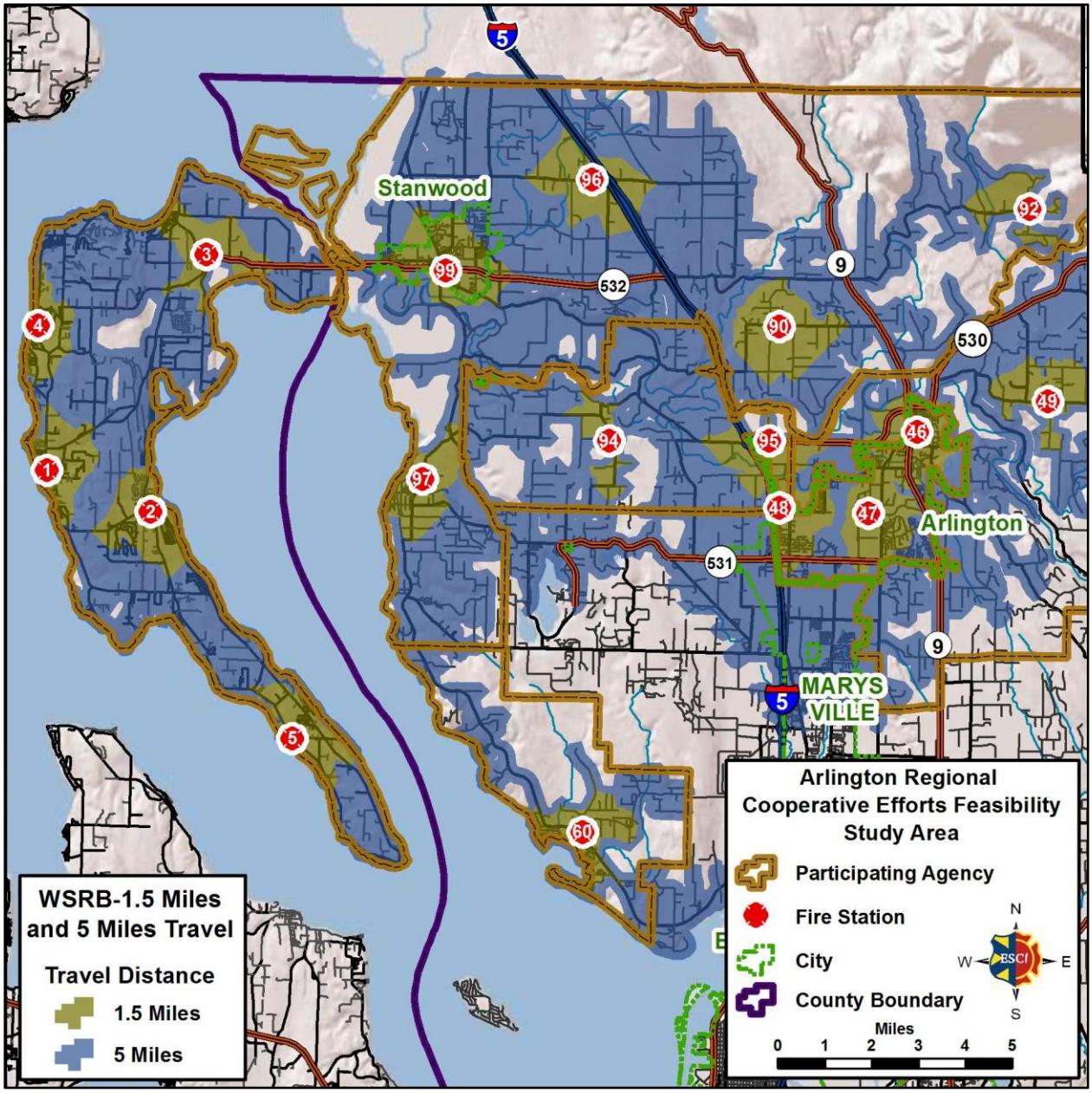
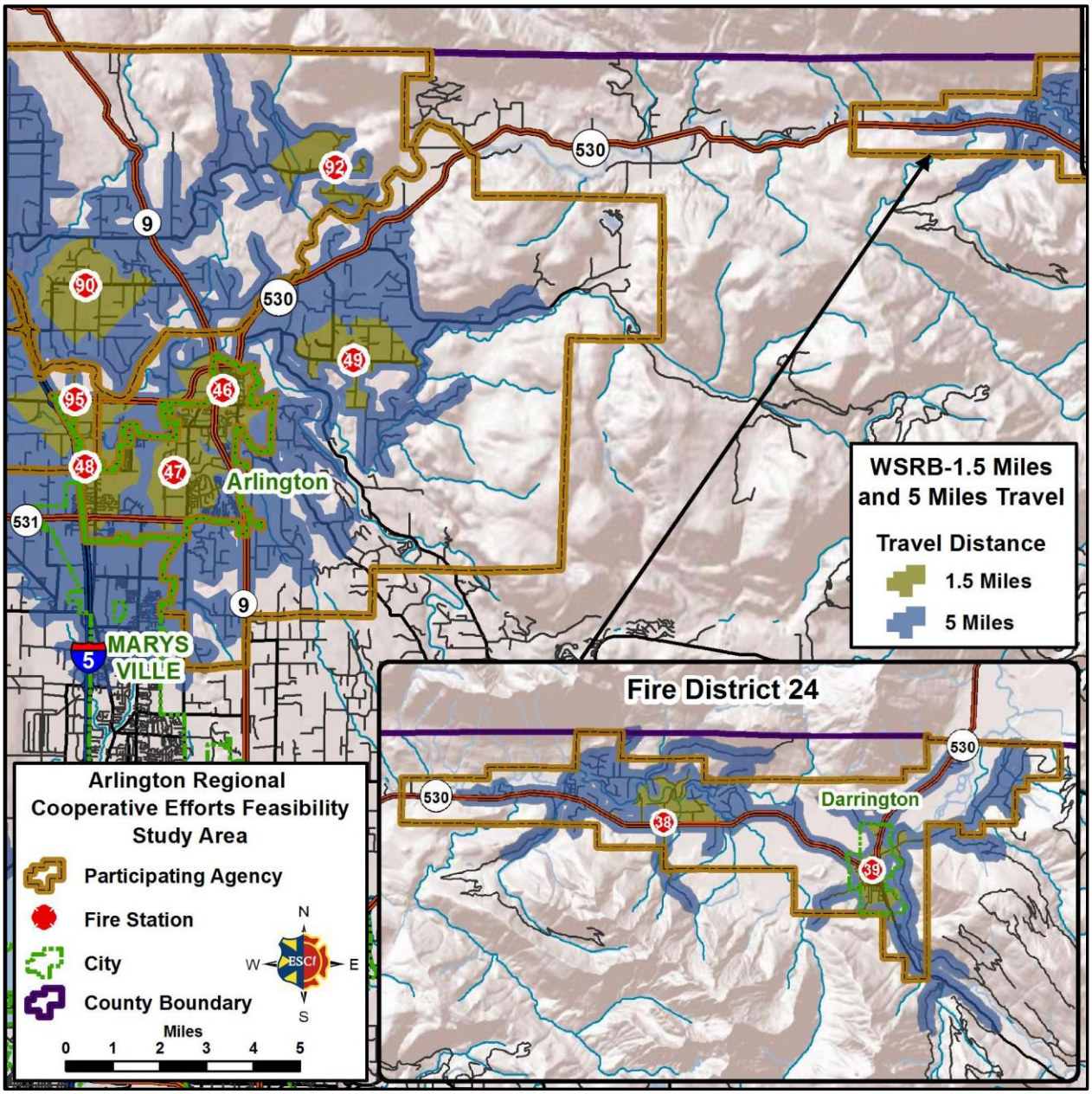


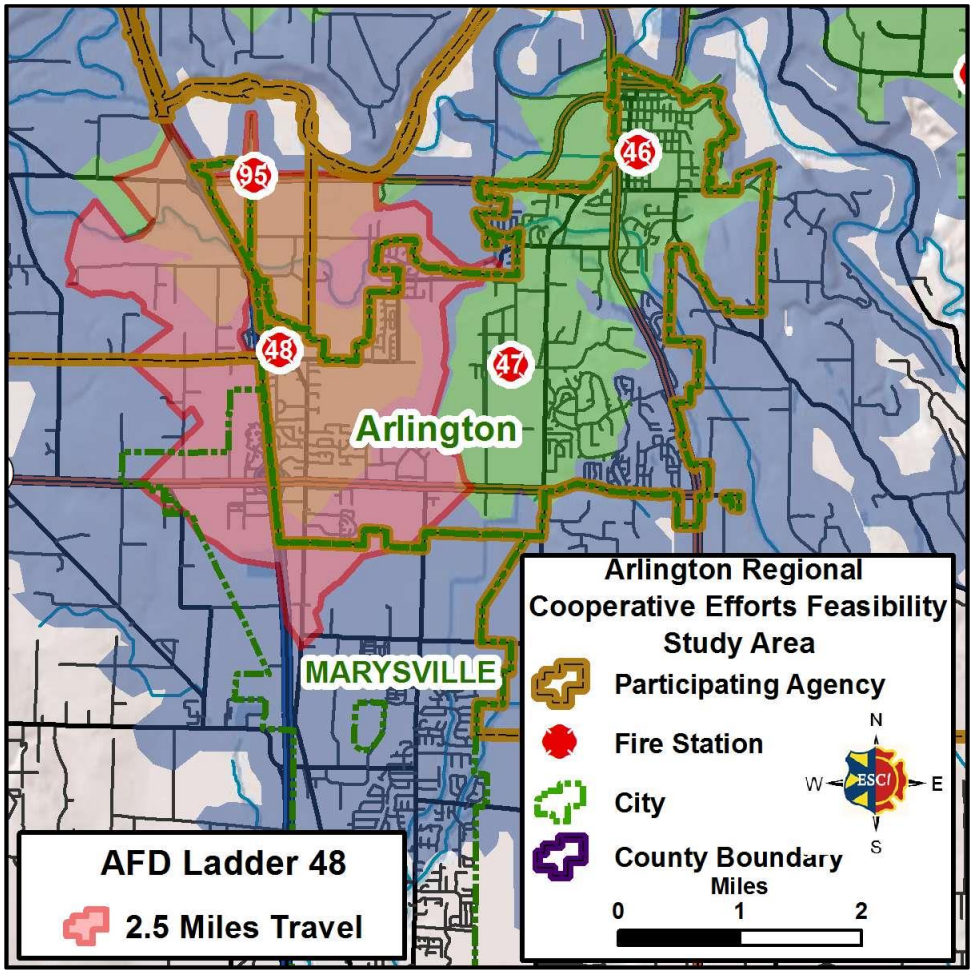
Figure 120: Study Area (East) 1.5 and 5 Miles Travel Distance - All Stations



Based on the WSRB rating criteria, fire stations are appropriately located throughout the study area. Approximately 91 percent of the road network in the study area is within five miles of a fire station. Generally, the WSRB 1.5-mile travel criteria applies to municipal areas such as Arlington, Stanwood, and Darrington. The fire stations in these communities provide adequate coverage for the cities. Similar to engine company criteria, WSRB recommends that truck companies (aerial apparatus) be placed at 2.5-mile intervals in areas with buildings over three stories in height. Arlington FD staffs an aerial apparatus at Station 48; NCRFA also has an

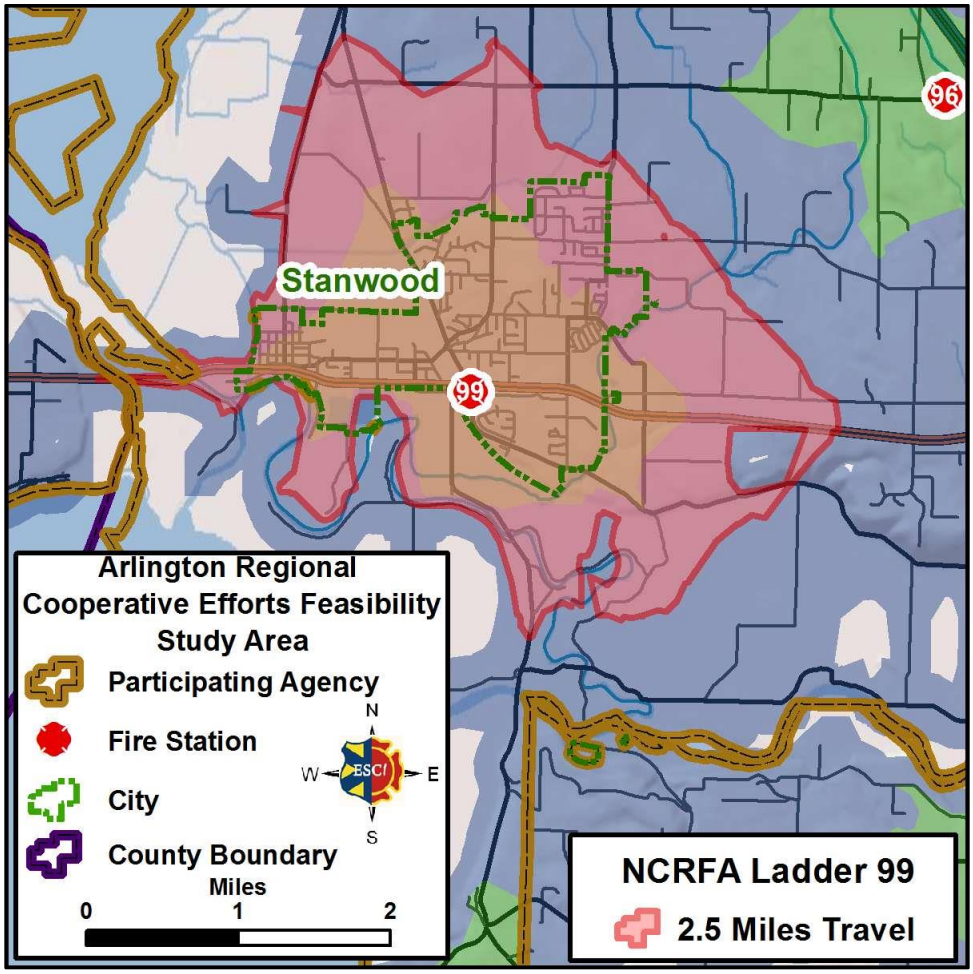
aerial apparatus available at the Stanwood station (Station 99). The next two figures illustrate the 2.5-mile service areas for these stations.

Figure 121: AFD 2.5 Miles Travel Distance for Ladder Company



Station 48 is located in the largely commercial Smokey Point area within Arlington. The 2.5-mile service area from this station is limited to the east due to a lack of road network interconnectivity.

Figure 122: NCRFA 2.5 Miles Travel Distance for Ladder Company



The 2.5-mile service area for the NCRFA ladder company stationed in Stanwood extends well beyond the boundaries of Stanwood.

While distance is an important factor when considering apparatus and station distribution; equally important is the time required to respond from a fire station to a call for service. The analysis presented in the following two figures reflects travel time. As with any emergency service delivery system, time is of the essence in responding to fire and medical incidents. Thus, physical facilities should be distributed such that a quick and effective response can be achieved.

The following maps demonstrate the travel distance capability of emergency apparatus based on travel time over the existing road network. Travel time capability of the road network is calculated using the local speed limits. The travel times assume travel speeds are as posted and adjusted to account for negotiating turns and intersections. Further, the maps reflect the

distance a unit is able to travel assuming the time starts when the vehicle leaves the station and begins to travel toward the call. It does not reflect turnout time (the time between dispatch notification and the unit actually beginning the travel, which may add a minute or two if the station is staffed and three minutes or longer if personnel have to respond from home to arrive at the station and begin the response). This underscores the importance of minimizing turnout time to the extent possible.

Figure 123: Study Area (West) Travel Distance - 4, 6, and 8 Minutes

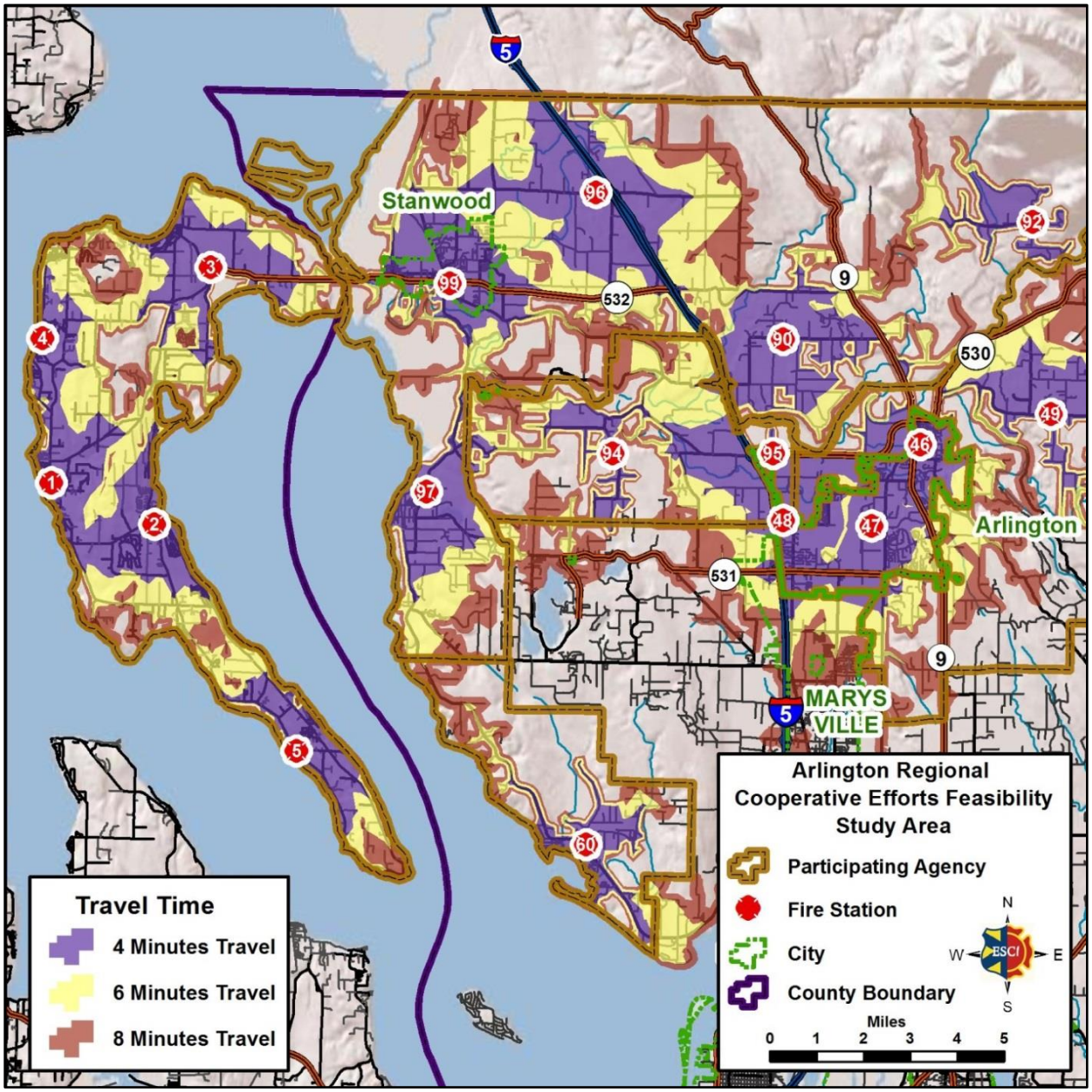
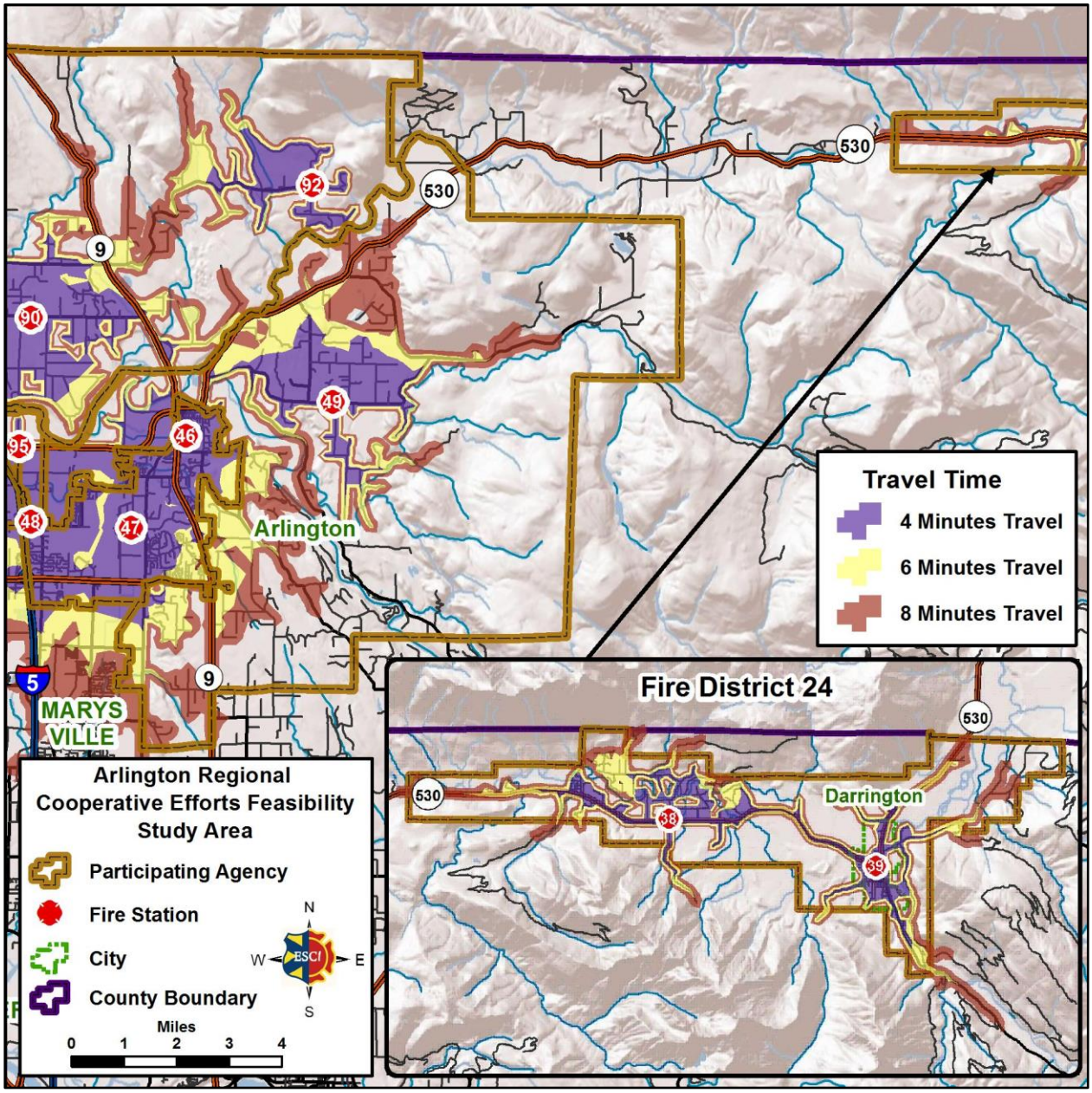
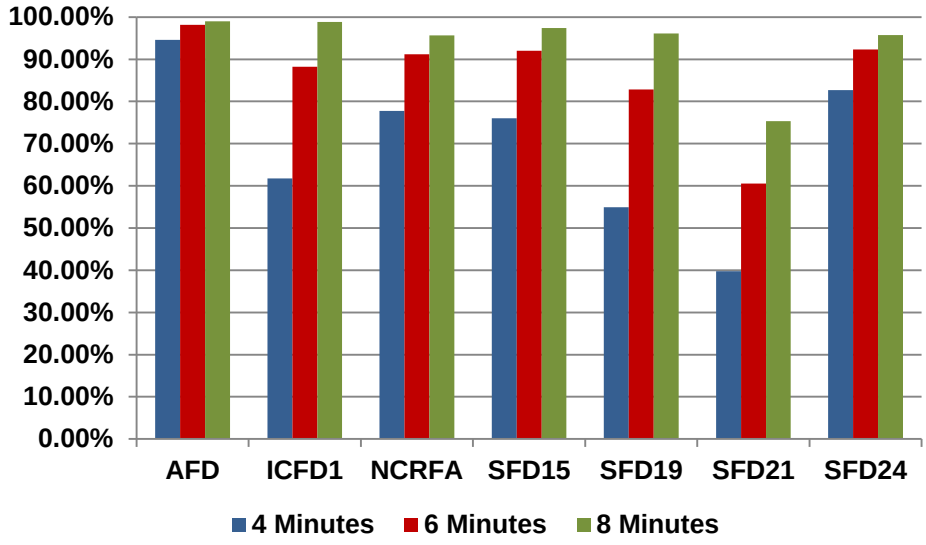


Figure 124: Study Area (East) Travel Distance - 4, 6, and 8 Minutes



Based on the travel time model, apparatus in the current stations are capable of reaching the majority of the study area within eight minutes travel time. The next figure summarizes the percentage of each agency's emergency service demand in 2012 within eight minutes travel of a fire station.

Figure 125: Study Area Service Demand Coverage

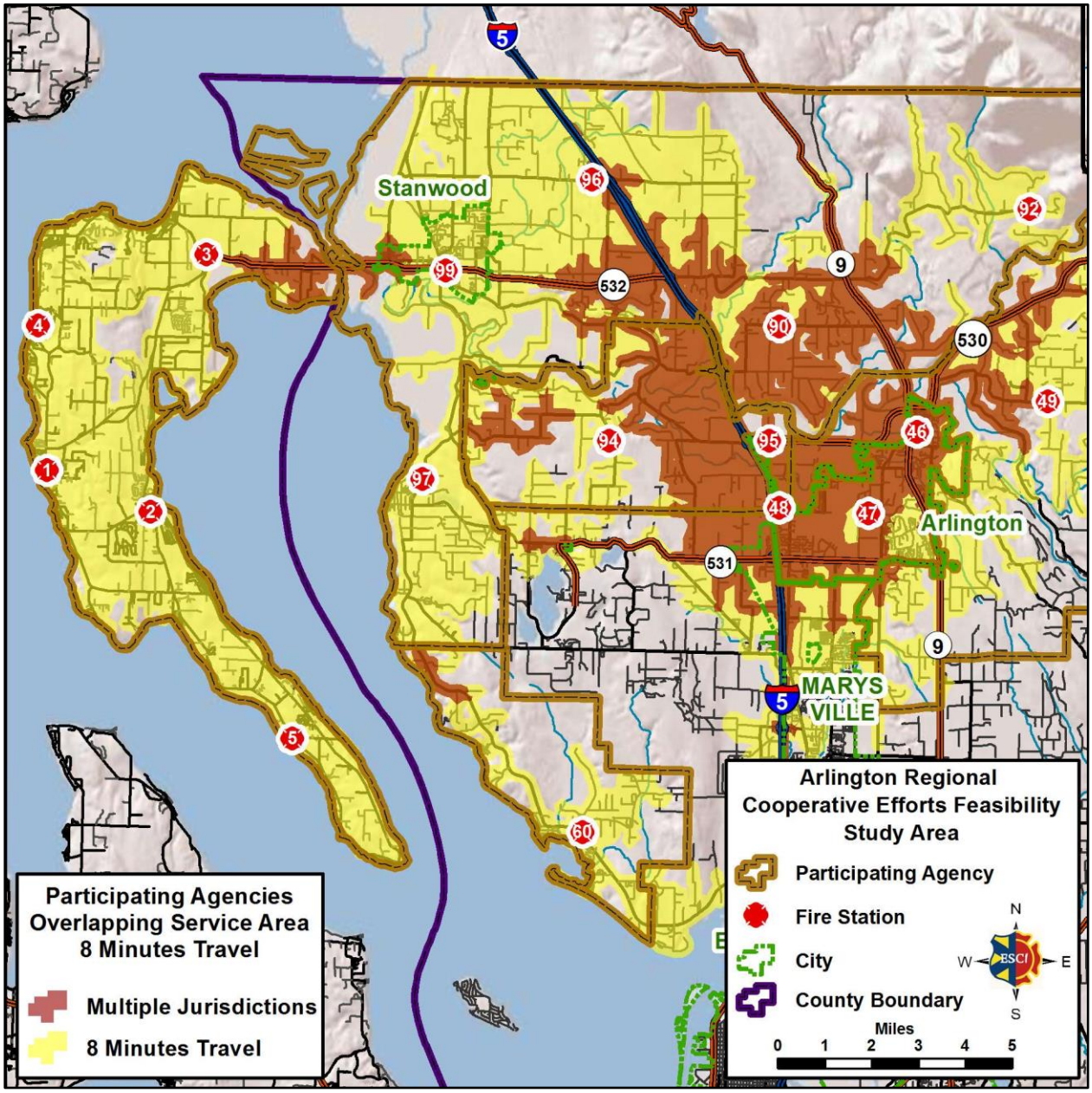


As demonstrated in Figure 125, all of the participating agencies, with the exception of Fire District 21, are within eight minutes travel time for over 90 percent of 2012 calls in their respective jurisdictions. SFD 21 response time capabilities are hampered by the size of the district (over 70 square miles) being served by one fire station, and a geographic barrier (South Fork of the Stillaguamish River).

Concentration

Standard firefighting procedures call for the arrival of the entire initial assignment (sufficient apparatus and personnel to effectively deal with an emergency based on its level of risk, referred to as Effective Response Force or Effective Firefighting Force) within a specified amount of time (as determined by the local jurisdiction). This is to ensure that enough people and equipment arrive soon enough to safely control a fire or mitigate any emergency before there is substantial damage or injury. In this analysis, ESCI examines the participating agencies' ability to assemble multiple resources across the study area. The following figure uses the eight-minute travel time model to illustrate the overlapping service areas.

Figure 126: Study Area Overlapping Service Area - 8 Minutes Travel



The majority of the study area is within eight minutes travel of a fire station. The figure above demonstrates areas within the eight-minute service area of two or more jurisdictions. The largest area extends from south of Arlington to just north of NCRFA Station 96. This area can be reached by AFD, SFD 19, and NCRFA resources in eight minutes; SFD 21 also serves portions of Arlington. There are smaller areas of overlap between CIF&R and NCRFA, SFD 19 and NCRFA, and NCRFA and SFD 15. SFD 24 does not share any coverage with the other

participating jurisdictions and is not displayed in the map. The next two figures demonstrate the concentration of stations throughout the Arlington Regional Study Area.

Figure 127: Study Area (West) Station Concentration - 8 Minutes Travel

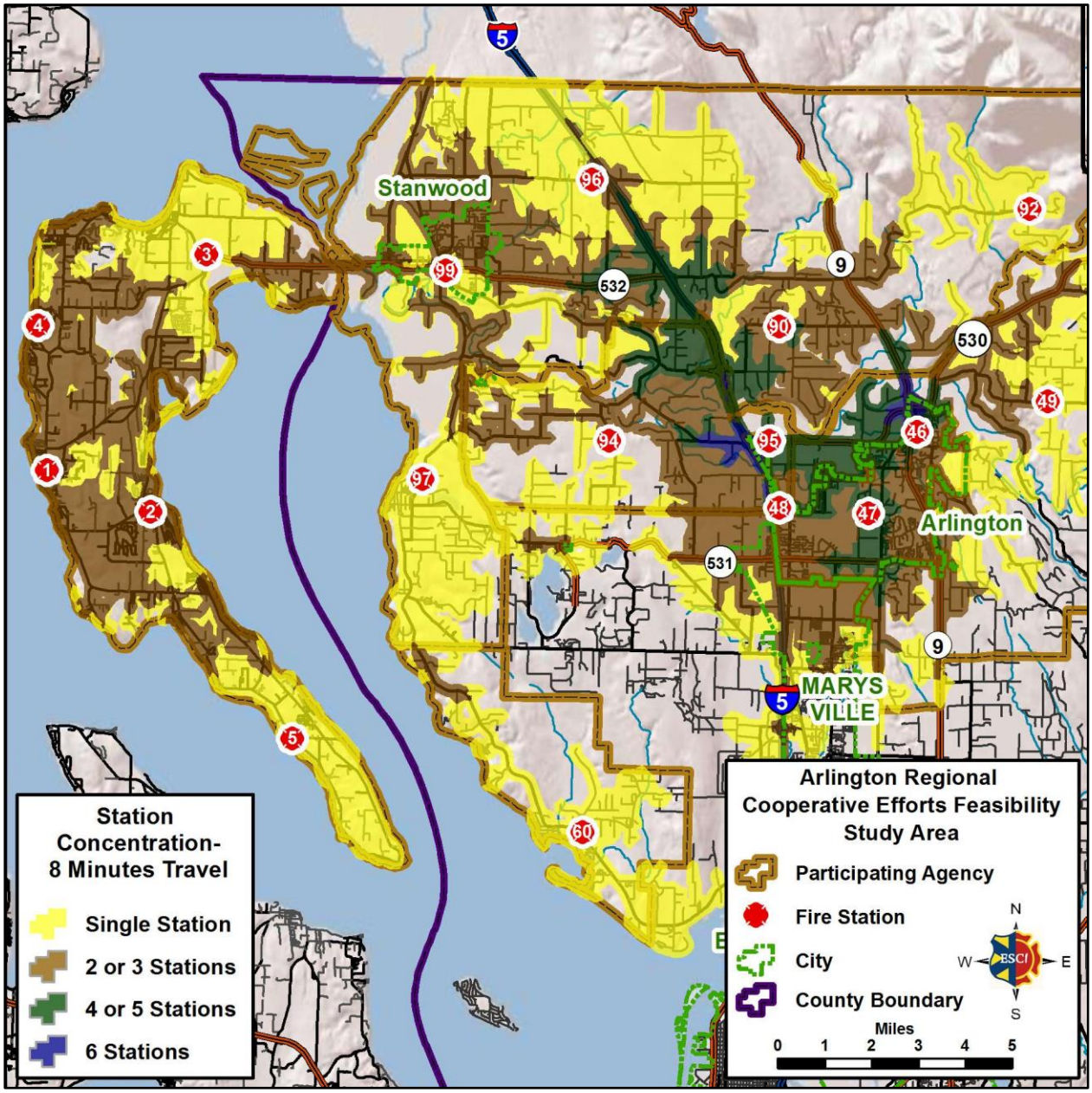
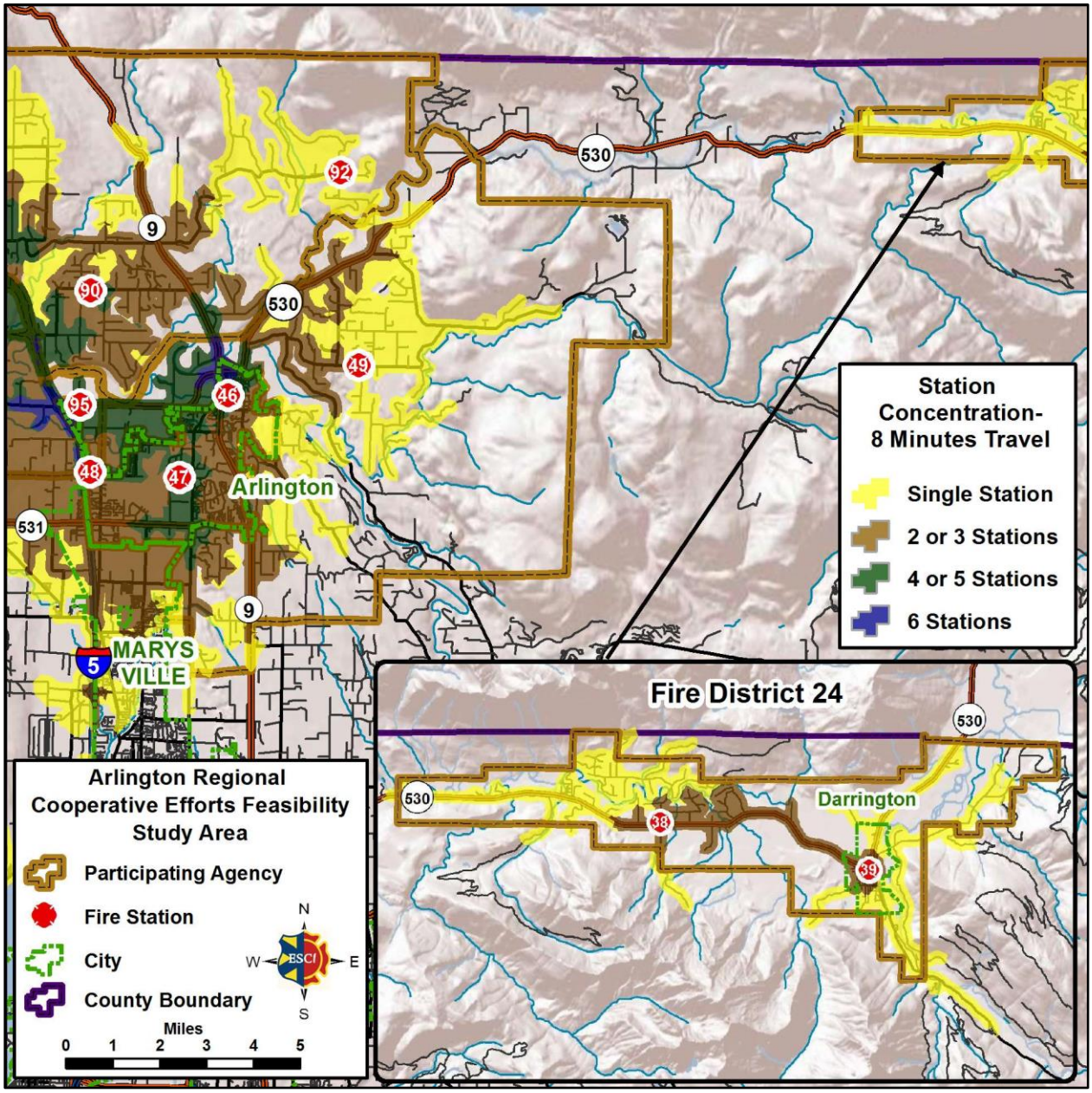


Figure 128: Study Area (East) Station Concentration - 8 Minutes Travel



The figures above reveal that the distribution of stations throughout the study area provides multiple station coverage to a large portion of the study area. Once again the heaviest concentration of stations occurs in Arlington and on either side of Interstate 5, north to NCRFA Station 96. Much of CIF&R is within eight minutes of two or three stations; also the area between SFD 24 Stations 38 and 39, and the City of Darrington is served by both SFD 24 stations in eight minutes. ESCI calculates that two or more fire stations in the study area served approximately 64 percent of the 2012 emergency service demand.

Reliability

The workload of emergency response units can be a factor in response time performance. Concurrent incidents or the amount of time individual units are committed to an incident can affect a jurisdiction's ability to muster sufficient resources to respond to additional emergencies.

In the figure below, ESCI examines 2012 incidents for each agency to find the frequency that the departments are handling multiple calls in their jurisdictions. This is important because the more calls occurring at one time; the more stretched available resources become leading to extended response times from distant responding available apparatus.

Figure 129: Study Area Concurrent Incidents, 2012

	Single Incident	2 Incidents	3 Incidents	4 or More Incidents
AFD	69.83%	24.53%	5.04%	0.61%
CIF&R	87.30%	11.34%	0.96%	0.40%
NCRFA	68.23%	24.52%	5.99%	1.16%
SFD15	98.23%	1.77%	0.00%	0.00%
SFD19	94.42%	5.28%	0.30%	0.00%
SFD21	95.88%	4.12%	0.00%	0.00%
SFD24	93.85%	5.53%	0.41%	0.20%

The frequency of concurrent (simultaneous) incidents varies from agency to agency. The percentage of simultaneous incidents in SFD 15, SFD 19, SFD 21, and SFD 24 ranges from slightly over 6 percent (SFD 24) to less than 2 percent in SFD 15. Approximately 12.7 percent of CIF&R incidents occur concurrently and the number of concurrent incidents experienced by AFD and NCRFA exceeds 30 percent each.

Unit hour utilization (UHU) describes the amount of time that a unit is not available for response because it is already committed to another incident. The larger the number, the greater its utilization and the less available it is for assignment to subsequent calls for service. UHU rates are expressed as a percentage of the total hours in a year. The following figures display the amount of time primary response apparatus were committed to an incident in 2012.

Figure 130: AFD Apparatus UHU

AFD		
Apparatus	Time Committed	UHU
E46	419:56:57	4.79%
M46	944:07:23	10.78%
A47	1,671:55:05	19.09%
L48	91:57:29	1.05%
M48	736:44:59	8.41%

Figure 131: CIF&R Apparatus UHU

Camano Island Fire & Rescue		
Apparatus	Time Committed	UHU
Eng 1-1	0:30:39	0.01%
Eng1-2	464:49:29	5.31%
Med/Aid 102	258:28:12	2.95%
Med 103	1,009:05:09	11.52%
Eng 1-3	23:34:32	0.27%
Aid 104	581:16:23	6.64%
Eng1-4	21:27:20	0.24%
Aid 1-5	51:11:33	0.58%
Eng 1-5	37:26:41	0.43%

Figure 132: NCRFA Apparatus UHU

North County RFA		
Apparatus	Time Committed	UHU
M90	348:06:29	3.97%
E90	93:08:18	1.06%
E92	10:52:07	0.12%
BR92	1:37:52	0.02%
A96	1,029:45:29	11.76%
B96	53:17:08	0.61%
E96	27:38:16	0.32%
M96	44:49:16	0.51%
A97	410:56:02	4.69%
E97	45:42:25	0.52%
M97	407:26:34	4.65%
B99	124:41:24	1.42%
E99	470:08:35	5.37%
M99	705:38:11	8.06%
SU99	111:48:25	1.28%

Figure 133: SFD 15 Apparatus UHU

Snohomish FD 15		
Apparatus	Time Committed	UHU
B60	42:42:55	0.49%
BT60	0:44:15	0.01%
CH60	19:38:57	0.22%
E60	326:19:28	3.73%
E60A	5:09:41	0.06%
LT60	6:58:33	0.08%
S60	35:34:53	0.41%
T60	11:14:23	0.13%

Figure 134: SFD 19 Apparatus UHU

Snohomish FD 19		
Apparatus	Time Committed	UHU
A94	550:14:15	6.28%
E94	114:16:51	1.30%
B94	17:34:26	0.20%
T94	10:37:25	0.12%
E95	27:14:29	0.31%
T95	14:15:26	0.16%

Figure 135: SFD 21 Apparatus UHU

Snohomish FD 21		
Apparatus	Time Committed	UHU
A49	20:14:11	0.23%
E49	27:09:32	0.31%
HC49	10:45:08	0.12%
R49	117:54:10	1.35%
T49	17:40:23	0.20%
TE49	62:13:51	0.71%
U49	63:58:14	0.73%

Figure 136: SFD 24 Apparatus UHU

Snohomish FD 24		
Apparatus	Time Committed	UHU
A38	366:00:23	4.18%
R38	97:29:14	1.11%
E38	14:24:28	0.16%
A39	173:20:38	1.98%
E39	17:27:50	0.20%
CH39	74:35:16	0.85%
R39	53:42:51	0.61%

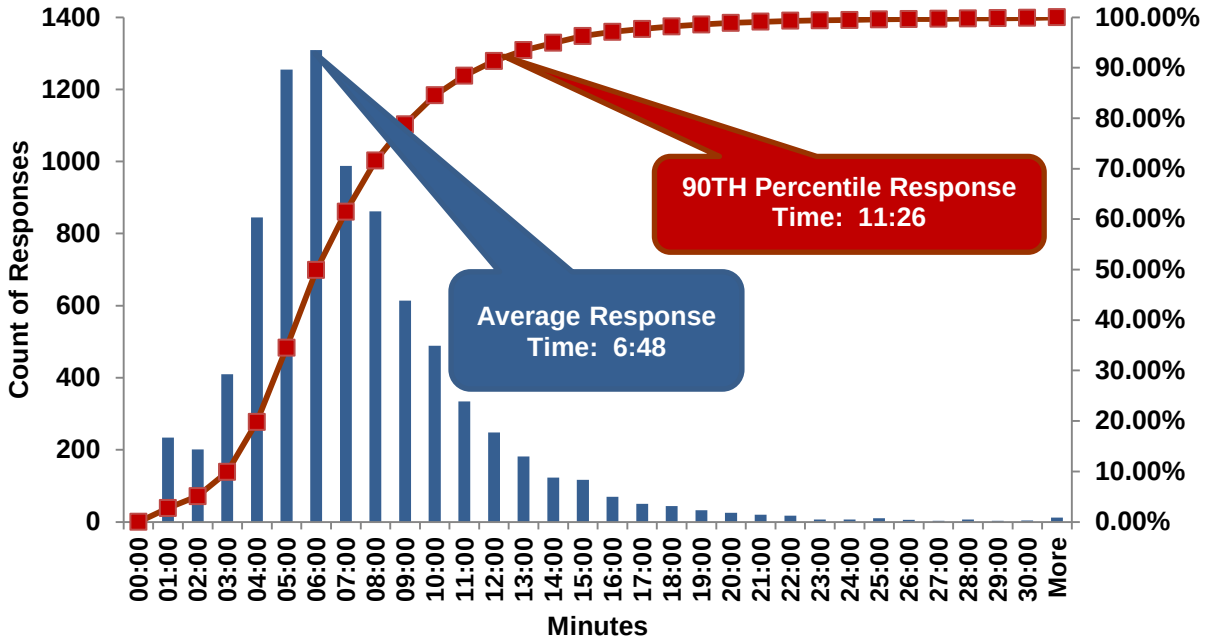
Unit hour utilization varies by apparatus and agency throughout the study area. Generally medic and aid units have the highest UHU rates; while engines and other apparatus demonstrate much lower utilization. AFD Aid 47 demonstrates the highest UHU for a medic or aid unit (19.09 percent); the engine with the highest UHU was NCRFA Engine 99 (5.37 percent) during 2012. Specialty apparatus are not included in these figures, but examination of the data reveals that no specialty apparatus (tender, boat, Hazmat, etc.) had a UHU rate greater than 0.75 percent (approximately 65 hours annually) in 2012.

The Commission on Fire Accreditation (CFAI) Standards of Cover, 5th Edition suggests that UHU rates in the range of 25 to 30 percent for Fire and EMS units can lead to medic burnout issues and can affect station and unit reliability. Currently UHU rates in the study area do not exceed the levels mentioned; however, AFD Aid 47 is approaching 20 percent utilization.

Performance

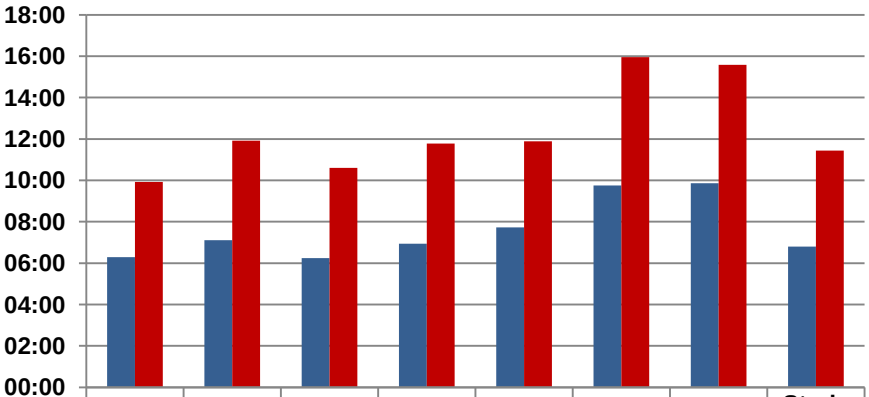
In the performance summary, ESCI examines emergency incident response time performance for the study area as a whole and for the individual agencies when data is available. Incident data was provided to ESCI by the individual agencies and from the regional dispatch center (Snopac). Non-emergency incidents, mutual or auto aid incidents, data outliers, and invalid data are removed from the data set whenever possible. Total response time is measured from time of receipt of the alarm at the 911 center to when the first apparatus arrives on the scene of the emergency. ESCI generates average and 90th percentile response data for these emergency incidents. Figure 137 displays overall response time frequency throughout the study area in 2011.

Figure 137: Study Area Response Time Frequency, 2011



The most frequently recorded response time for emergency calls is within the sixth minute. Specifically, the average is 6 minutes 48 seconds (06:48), with 90 percent of all calls answered in 11:26 or less. The following figure examines emergency response performance for each of the agencies involved in the study for 2012.

Figure 138: Agency Response Performance, 2012

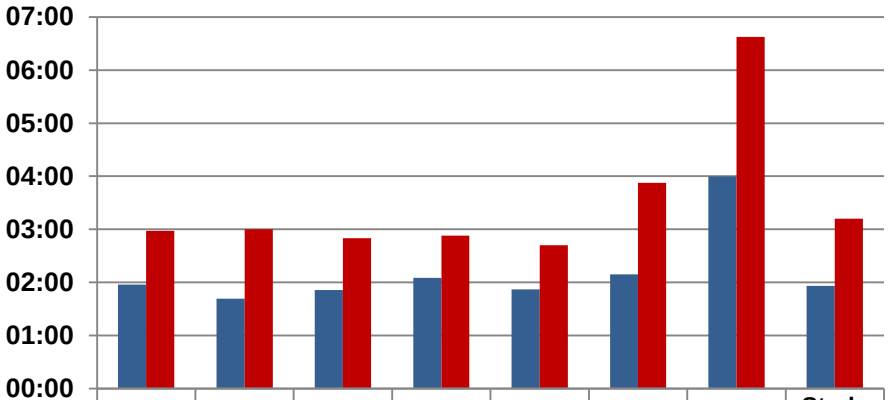


	AFD	CIF&R	NCRFA	SFD15	SFD19	SFD21	SFD24	Study Area Overall
Average	06:18	07:06	06:14	06:57	07:44	09:45	09:52	06:48
90th Percentile	09:55	11:55	10:36	11:47	11:54	15:57	15:35	11:26

Response times fluctuate throughout the study area. AFD has the smallest service area and has 24 hour staffing, therefore has the shortest response times, as would be expected. SFD 21 protects a large service area from a single station with volunteer personnel responding from home and exhibits the longest response times, as would be expected.

Turnout time is the period that begins when emergency personnel are notified to respond and ends when an apparatus begins to respond. Turnout time is an important piece of total response performance, and can be influenced by factors such as staffed versus unstaffed fire stations, donning of protective equipment prior to leaving the station, station design, or minimum staffing requirements before apparatus are allowed to respond. Figure 139 looks at turnout time performance for each agency and the overall regional study area in 2012.

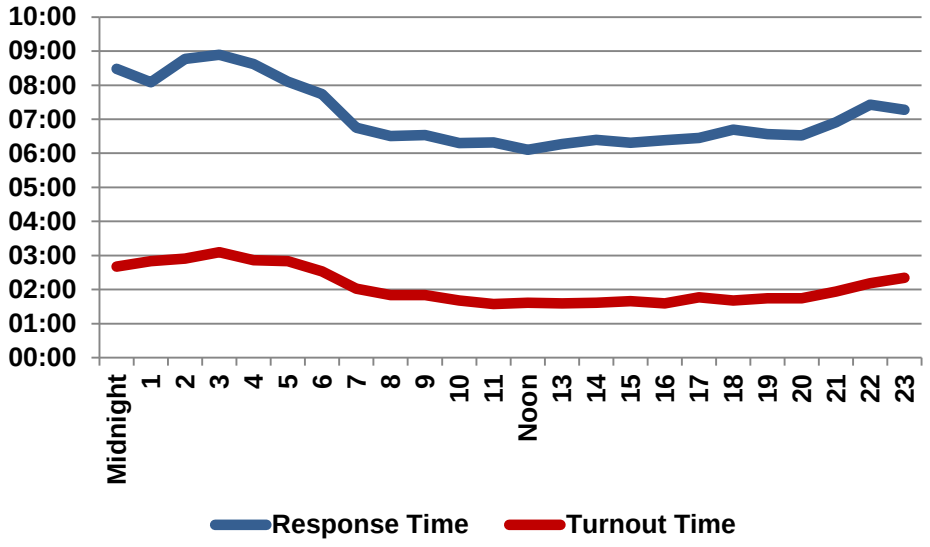
Figure 139: Agency Turnout Time Performance, 2012



	AFD	CIF&R	NCRFA	SFD15	SFD19	SFD21	SFD24	Study Area Overall
Average	01:58	01:42	01:52	02:05	01:52	02:09	04:00	01:56
90th Percentile	02:58	03:00	02:50	02:53	02:42	03:52	06:37	03:12

Figure 139 demonstrates an overall turnout time performance of just over 3 minutes, measured at the 90th percentile (90 percent of all turnout times are equal to or less than 03:12). The overall average is nearly two minutes. Turnout time performance for the AFD, NCRFA, CIF&R, SFD15, and SFD 19 mirrors the overall turnout performance. SFD 21 and SFD 24 have extended turnout times, which may reflect low routine staffing at the station or volunteer personnel living further away from the fire station than their rural counterparts in the rest of the study area. The following figure examines turnout performance and total response performance throughout the day; and illustrates how turnout performance affects total response performance.

Figure 140: Study Area Response Performance and Turnout Performance, 2012[31]

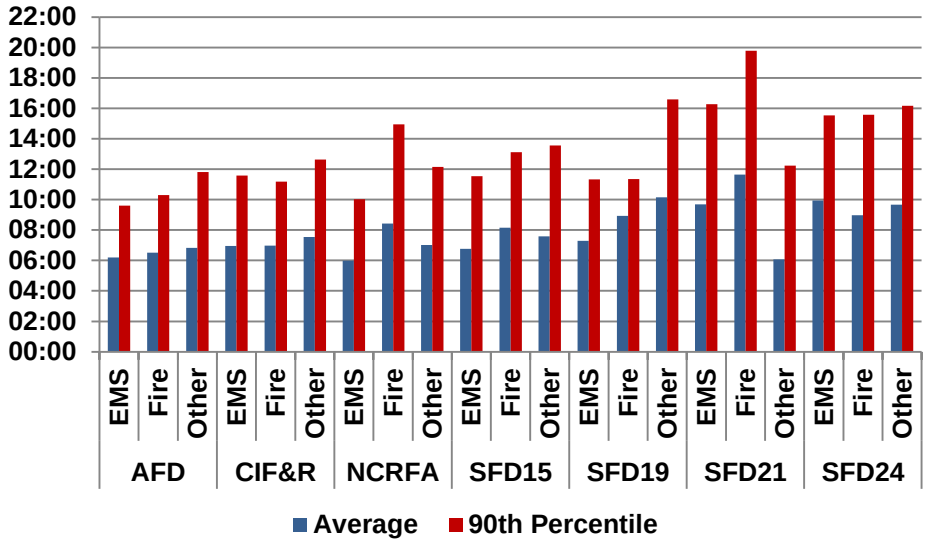


The variations displayed in the preceding figure demonstrate that turnout time performance directly effects total response performance. The rise in turnout time at night is a nationwide phenomenon and is reflected in the increased total response times during the same time period. This pattern is seen in response performance for both career staffed and volunteer staffed jurisdictions. Turnout time is one area of the overall response time that fire department and district personnel have some ability to control, given proper facilities that allow for rapid and efficient movement of responders. ESCI encourages all jurisdictions to monitor turnout time performance as part of overall response performance and provide performance information to response crews regularly for self-correction.

The last figure in the performance summary examines total response performance by incident type in 2012 for each jurisdiction. In the following figure "Fire" refers to any incident coded as a fire in the National Fire Incident Reporting System (NFIRS) data. The "EMS" category includes all calls for medical service including MVAs and rescues; and the "Other" category refers to incidents such as hazmat, false alarms, service calls, or weather related incidents.

[31] The average response and turnout performance measurement is used in this figure.

Figure 141: Agency Response Performance by Incident Type, 2012



Response times may vary depending on the type of emergency reported. EMS calls (other than MVA's) do not require donning protective equipment, fire calls require firefighters don protective equipment prior to the apparatus leaving the station, and some incidents require a specific apparatus that may result in a longer travel time and hence a longer total response time.

Analysis of Emergency Service Delivery & Performance

Discussion:

The study area is approximately 288 square miles and served by a total of 19 fire stations, some staffed 24 hours a day with career firefighters or part-time firefighters, and many unstaffed with volunteers responding from home to staff the station. As expected, response activity (demand for services) is a reflection of population and density. Urban clusters are located in Arlington (AFD), Stanwood (NCRFA), Tulalip Bay (SFD #15), and a small area in Darrington.

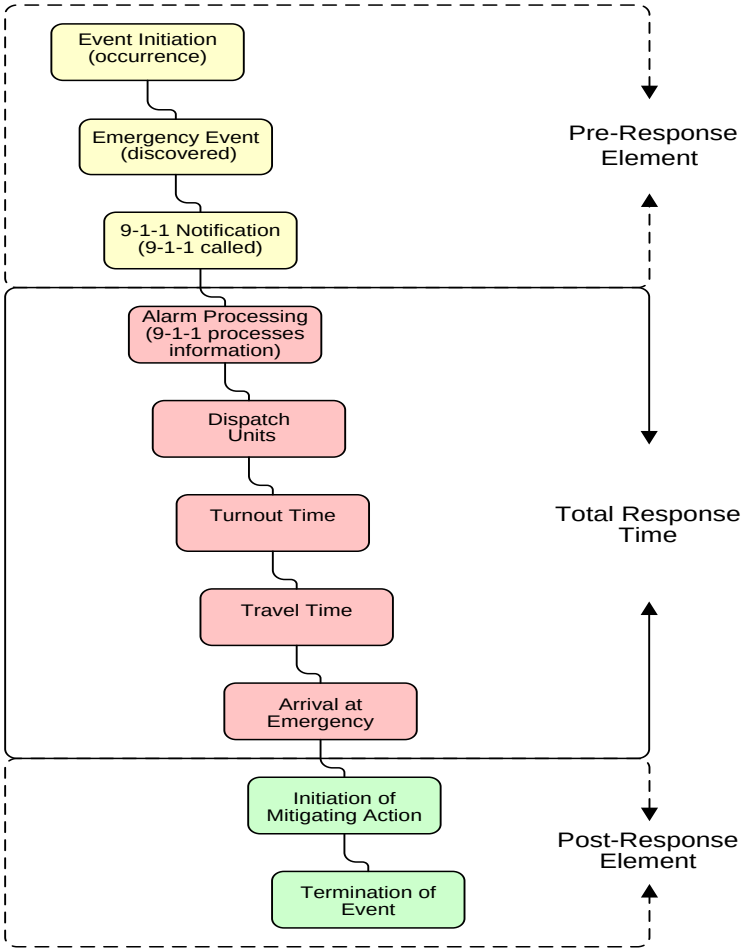
The three most populous fire agencies have the highest demand for emergency services in the study area (North County RFA, Arlington FD, and Camano Island F&R). Also predictable is the breakdown of call types by agency over the study area. Collectively, Emergency Medical Service represents 78.03 percent of all emergency calls; Fire represents the lowest at 4.38 percent. This varies between individual agencies and generally reflects the types of service the agencies provide (ALS transport services, BLS first response, expanded non-emergent "service" calls, etc.), but in all cases EMS response make up well over half of all calls for service.

The temporal variations over the study area are typical of the fire service in the northwest. While the types of calls for service vary by season (heating fires in the winter and brush fires in the summer, for example), there is almost no variation in the monthly numbers of calls for service, with the lowest activity in February (7 percent) and the highest activity in August (9.5 percent). Activity by day of the week is also fairly flat, with a slightly elevated increase in demand for service on Fridays. Time of day is a reflection of human activity, with over 66% of all the calls occurring in any given day occurs between 8:00 AM and 8:00 PM when most people are active. This variable lends itself in some cases to potential modification of resource utilization (peak activity staffing or power shifting) for greater efficiency.

The fire stations are well distributed throughout the study area; 91 percent of the road miles are within five miles of a fire station, meeting the minimum criteria set by the Washington Survey and Rating Bureau (WSRB), an agency which assists insurance companies in setting fire insurance premiums. The WSRB also establishes 1.5 miles and 2.5 miles as the desirable maximum distance for a fire engine or a ladder truck, respectively, to travel to the risk being protected. While each fire station in the entire service area has the 1.5-mile travel distance for fire engines covered, Arlington is the only fire agency which achieves this nearly jurisdiction-wide, which is a reflection of the number of fire stations combined with the compactness of its service area. Likewise, the entire study area is well served with an eight-minute travel time from the existing fire stations, but almost all of the City of Arlington can be reached from an existing fire station in four minutes travel time. Snohomish County Fire District #21 (Arlington Rural) has the most difficulty providing a large percentage of its service area in eight minutes travel time. The size of the district (70 square miles) being served by only one fire station and the South Fork of the Stillaguamish River bisects the district, isolating the southern end of the district from the district station. The district contracts with Arlington Fire Department to serve its southern area for EMS response and as part of the total fire response assignment.

It should be noted that while most of the fire stations throughout the study area have effective travel time coverage, this is only one the time it takes to travel on the existing road network. This does not include call processing time, dispatch time, and turnout time, which occurs before travel can begin. The context of travel time as a component of total response time is illustrated below:

Figure 142: Emergency Response – Cascade of Events



The stations in the study area provide multi-station and multi-jurisdiction overlap. ESCI calculates that approximately 64 percent of the 2012 calls for service in the study area were able to be served by two or more fire stations, regardless of jurisdiction. Overlap is important to maintain to provide adequate resources arriving in a timely manner. However, substantial overlap by multiple jurisdictions may also indicate an opportunity for consolidation of effort while ensuring sufficient resources are able to be assembled for the risks inherent to the area of overlap. Even if the number and types of response units are appropriate in these areas, combining station operations may reduce costs for participating agencies.

The most significant overlap occurs in the northwest corner of the City of Arlington (Station 46) and west of Interstate 5 in Snohomish #19 straddling State Route 530 (west of Station 95). These two segments are capable of receiving an eight-minute travel time from six stations. Other areas of significant station overlap in eight minutes of travel time is on the northern edge

of the city limits of Arlington (AFD and Snohomish #21), in the south-center of Arlington (Station 47), and both east and west of the 236th Street NE interchange with Interstate 5 in Snohomish #19 and NCRFA, extending north past State Route 532 on Interstate 5 and east and west on SR 532.

Positioning fire stations and response units appropriately is an important factor in emergency mitigation for their assigned areas. Reliability of those units is an equally critical factor in success. If a unit is unavailable for an emergency response when it occurs, a unit from further away must handle the call. This results in delays in response times which can exacerbate the emergency conditions when a unit(s) finally does arrive. Units can be unavailable for several reasons; out of service or out of position for training and already deployed on another emergency are the most common reasons.

In evaluating the concurrent calls for service for incidents in 2012 by agency, Arlington Fire Department and North County Regional Fire Authority experience the highest incidents of simultaneous or concurrent calls for service. Both NCRFA and AFD experienced two or more concurrent calls for service in over 30 percent of their incidents in 2012. Camano Island Fire & Rescue experienced two or more concurrent calls for service in almost 13 percent of its incidents in 2012. The remaining agencies had less than 7 percent of their calls for service occurring concurrently.

Another way to measure the workload of individual units is through Unit Hour Utilization (UHU), which is expressed as a percentage of time a unit was committed to a response and therefore not available for another call. The Commission on Fire Accreditation International (CFAI) states that fire department units having a UHU of more than 25 to 30 percent of the time runs the risk of paramedic burnout[32] and is an excessive demand to place on a crew. None of the units in the study area are within that threshold. The highest unit UHU's in the study area are listed on the following table.

[32] Commission on Fire Accreditation International, *Standard of Cover, 5th Edition*, 2008, page 96.

Figure 143: Top Ten Busiest Units -- Unit Hour Utilization, 2012

Ranking	Agency	Unit	UHU	Time Committed
1	AFD	Aid 47	19.09%	1671:55:05
2	NCRFA	Aid 96	11.76%	1029:45:29
3	CIF&R	Medic 103	11.52%	1009:05:09
4	AFD	Medic 46	10.78%	944:07:23
5	AFD	Medic 48	8.41%	736:44:59
6	NCRFA	Medic 99	8.06%	705:38:11
7	CIF&R	Aid 104	6.64%	581:16:23
8	SCFD 19	Aid 94	6.28%	550:14:15
9	NCRFA	Engine 99	5.37%	470:08:35
10	CIF&R	Engine 1-2	5.31%	464:49:29

Note: 25-30% is danger zone

It is predictable that the busiest units in the study area are EMS related, since that call type represents the largest segment of all call types. The last two units, both fire engines, likely become the secondary unit responding when the first unit (an EMS unit) is unavailable. This is in addition to responses to their primary risk response model, fires.

The response times provided by each agency for 2012 vary by as much as six minutes between the agencies. The fastest average response time in the study area is NCRFA at 6:14. However, the agency providing the fastest response time where at least 90 percent of the calls for the agency are being handled is AFD at 9:55. Both of these agencies rely on career staffing 24 hours per day at their busiest stations, accounting for the quick responses due to short turnout times (the interval between notification by dispatch and the dispatched vehicle rolling toward the call). NCRFA and AFD have turnout times at the 90th percentile of 2:50 and 2:58, respectively. This is actually slower than it should be with career staffed stations. The turnout time objective as established in *RCW 52.33 Fire Department -- Performance Measures* (for substantially career staffed fire districts and RFAs) compliance document for NCRFA is 2:00 minutes 90 percent of the time. In 2011, NCRFAs turnout objective was met 66 percent of the time and achieved 2:45 minutes at the 90th percentile. It has slightly deteriorated in 2012. AFD does not have a compliance document for the companion statute, *RCW 35.103 Fire Department -- Performance Measures* (for substantially career staffed fire departments). This should be compiled, adopted and implemented immediately.

The slowest average response time is Snohomish #24 (Darrington) at 9:52. The slowest response time where at least 90 percent of the calls for the agency are being handled is Snohomish #21 (Arlington Rural) at 15:57. Both of these agencies are all-volunteer and have to rely on response from home to the fire station to initiate a response on a unit. For Snohomish #21 and Snohomish #24, their turnout times at the 90th percentile are 3:52 and 6:37, respectively.

There is no statute requiring substantially volunteer fire departments, fire districts, or RFAs to establish performance measures, but it is nonetheless a good business practice. While not legally required, Snohomish County Fire Districts #15, #19, #21, and #24 should use RCW 52.33 as a guide in establishing their own service level objectives, including the turnout time components, using the data reported in this study as a baseline. From there, adjustments can be made to the various components that make up total response time, and the districts can focus on areas where improvement can be made by adjusting resources or by simply bringing the objectives to the attention of the firefighters. It is axiomatic that what is measured is treasured. Knowing what the target is helps all personnel strive to achieve it.

Support Programs – Emergency Services Training

Firefighters operate in a complex, dangerous, and dynamic environment, as demonstrated by over 100 fatalities and 3,000 serious injuries annually. Firefighter training is the single most important factor that prepares them to meet the challenges of the situations and environments in which they work. The delivery of safe and effective fire and emergency medical services is, therefore, clearly dependent on a well-trained response force. The International Fire Service Training Association (IFSTA) states:

> *…regardless of the particular system used, an effective training program will include: (1) the continuous training of all levels of personnel in the organization; (2) a master outline or plan; (3) a system for evaluating the scope, depth, and effectiveness of the program: and (4) revising the program, as required, to include changing state and federal mandates, advances in equipment, products, and operational techniques.*

Without a comprehensive training program, emergency outcomes are compromised, response personnel are at risk, and the fire department may be exposed to liability for the actions of its employees. Training and education of personnel are critical functions for all of the participating fire departments. Anthony Granito, author of *Fire Service Instructor's Guide*, makes the following statement:

> *A good training program is undoubtedly the single most important factor producing and maintaining a high proficiency in any fire department. It not only produces high efficiency initially, but also affects future efficiency when we consider that the rawest recruit now being trained may be chief of the department or at least a senior officer in 20 or 30 years.*

The function of a training program is not merely imparting personal knowledge and technical skills to an individual, it is developing the self-confidence to perform correctly under stressful if not hostile conditions. A training program must be systematic and must provide positive feedback to the trainee, firefighter, or officer. The goals of training should always focus on performance, not merely on acquiring a certain number of training hours.

Today's industry standards outline certain areas that are considered integral to effective training programs. The program should include the following:

- General training competencies
- Training administration and scheduling
- Training facilities and resources
- Training procedures, manuals, and protocols
- Record keeping (records management system)

ESCI reviewed fire suppression and emergency medical services training practices in each of the Snohomish County participating agencies. Current practices are summarized in the following table and compared to industry best practices and standards, as well as the experience of ESCI consultants.

Figure 144: Survey Table - Training

Survey Components	Observations - Training						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
1. General Training Competency							
A. Incident command system – cert levels defined?	NIMS based	NIMS based	No	NIMS based	NIMS based	NIMS based	NIMS based at multiple levels
B. Accountability procedures	Included - Passport system	Included - Passport system	Command board & tags	Included - Passport system	Included - Passport system	Included - Passport system	Included - Passport system
C. Policy and procedures	Included in ongoing training	Included in ongoing training	SOGs (limited)	Included in ongoing training	Included in ongoing training	Newly written SOPs incorporated into training	Included in ongoing training
D. Safety procedures	Included in ongoing training	Included in ongoing training	SOGs (limited)	Included in SOGs	Addressed in SOGs	Addressed in SOPs	Incorporated into all training
E. Recruit academy	Minimum FF I and EMT-B required for acceptance. 2 week “mini-academy”, familiarization, FIT test and EMT skills	Annual recruit class. 160 contact hours train to FF I and Haz Mat Operations. Applied equally to career, part time and volunteers	North County Fire or Community College. Must have completed Firefighter I training to be hired	Firefighter I and EMT required for acceptance. Recruits grouped into a 4 month accelerated academy plus 6 month shadowing	No academy requirement. Incorporated into ongoing training, no formal initial training	Firefighter I training encouraged but not required. About 75% are FF I. The remainder are not fully trained	4 month in-house recruit program targets NFPA 1001 including live fire. Minimum requirement FFI and EMT-Basic for acceptance
F. Special rescue (high angle, confined space, etc.)	All members trained to awareness levels at a minimum. Several are members of County technical rescue team	Surface water rescue, high angle, some trench and confined space rescue. Use the Snohomish County Technical Rescue Team	Awareness level	Swift water rescue team. Confined space, high angle at awareness level	Only swift water rescue at technician level, Use the Snohomish County Technical Rescue Team	Swift water team in place with 8 members in the area. No confined space, high angle, etc.	Active surface water rescue program. Confined space, high and low angle rescue at awareness level

Survey Components	Observations - Training						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
G. Hazardous materials	Awareness level minimum, plus some Operations and Technician	Operations level	Awareness level	Awareness and Operations level	Awareness level	Minimal, only a few at awareness level	Awareness and Operations levels
H. Wildland firefighting	Basic level only. Some members are red-carded	About 10 personnel are red-carded, balance at awareness level	None	None	Most are red-carded	8 personnel are red-carded	Core of red card personnel. Two train-the-trainers
I. Vehicle extrication	Routinely	Conducted in-house	Conducted in-house	Included	Included	Included in ongoing training	Included in ongoing training in-house
J. Defensive driving	EVIP course completed every other year	All personnel complete EVIP training every 5 years. Portion provided each year	EVIP (Emergency Vehicle Incident Prevention) course offered via VFIS	EVIP course completed every 3 years. Repeated if concerns arise	EVIP course used but not well enforced	EVIP course completed every 3 years EVIP required for code responses	EVIP course completed every 3 years
K. Radio communications & dispatch protocol?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
L. EMS skills and protocol?	EMT-Basic via OTEP[33] and Paramedic skills via PCEP program	EMT-Basic and Paramedic via OTEP and PCEP programs	Competency Based Training (CBT) via Snohomish EMS	EMT-Basic level	At EMT-Basic level using OTEP	EMT-Basic and 1st responder	EMT-B minimum and 10 Paramedics. EMS Online program used.
2. Training Administration							
A. Director of training program	A shift Captain is assigned to training	Administrative Captain is designated as Training Officer	Fire Chief	Fire Chief serves as training officer	Assistant Chief	Assistant Chief/Training Officer	One shift Battalion Chief is also assigned training duties

[33] OTEP – Washington EMS Ongoing Training and Evaluation Program

Survey Components	Observations - Training						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Goals and objectives identified	Unwritten. Program designed based on maintenance of FF I, FF II, EMT and Haz Mat skills. Working toward IFSAC certification	Yes. Target skills maintenance FF I and Haz Mat Operations as a minimum. Moving career personnel and some volunteers to Firefighter II	Use Snohomish County Fire Chiefs Association training plan; goals & objectives (see SCFCA website)	Informal only. Training is designed around FFI and FFII continuing education requirements and EMT-Basi.	Informal only. Based from County Training Officer's Assn. training program	Not formally defined. Basic skills maintenance. Use FF I content, but do not maintain certification	One year training plan developed, includes goals and objectives
3. Training Facilities and Resources							
A. Training facilities (tower, props, pits)							
i) live fire prop	North Bend facility is used for live fire. Roof ventilation prop is under construction. Several burn buildings have been used recently	Shipping container live fire prop owned by the district. Also a car, dumpster and LPG tank prop and SCBA, roof and mayday prop.	None. North Bend available but not used.	No live fire prop on site. Roof prop at station. North Bend facility is used 2 to 3 times annually	Only props available are at North Bend facility. Used infrequently	None. Have had some local practice burns recently	Dumpsters used for class A fires. Only full burn props are at North Bend. Also use Navy mobile prop annually
ii) fire and driving grounds	Local streets and parking lots	School parking lots and roads	Clinic & Tribal Center parking lots	Area streets and parking lots	Local streets	Area streets and parking lots	Large vacant parking lot used
B. Classroom facilities	Two small meeting rooms in station. Also access several area larger classrooms.	All stations have adequate classroom facilities	Headquarters training room	Excellent classroom at main station seats 30 plus	Adequate classroom space at station	Good sized classroom in the station. Also use grange hall.	Adequate classrooms at all stations.
C. Video, computer simulations	Well equipped	All are well equipped with AV	Adequate AV equipment	Well equipped	Adequate equipment available	Adequate AV equipment available	Adequate AV equipment at all stations

Survey Components	Observations - Training						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
D. Books, magazines, instructional materials	Partial library, building currently	Adequately supplied, IFSTA manuals used	Fire Chief magazine, Firehouse	Well supplied with training materials	Well equipped	Well supplied with reference materials	Well equipped with IFSTA and other manuals
4. Training Procedures Manual							
A. Manual developed and used	Quarterly manual developed that outlines training	Recruit, pump and officer training manuals are in place.	None	Manual is in place, always under revision	None	None	No formal manual but information is available on the County Training site
5. Training Methodology							
A. Manipulative	Yes	Yes	Yes	Yes	Yes	Yes	Yes
B. Task performances/frequency	Skills performance is incorporated into quarterly training content	Quarterly SCBA performance. Skills demonstration incorporated into each drill	SCBA quarterly; hose evolutions quarterly	All EMS skills regularly. Group fire skills evaluated, not individual	SCBA skills tested quarterly	No regular task performance requirements, however quarterly SCBA skills test enforced	Quarterly SCBA, hose evolution and ladder skills testing
C. Annual training hours	Training is configured based on IFSAC and NFPA standards using competency based approach in place of annual training hours	Rather than hours, training is competency based on quarterly skills demonstration requirements. Volunteers also required 75% of drills as well as above	Estimated at 100 hours/FF; moving to competency based	75% drill attendance required and 100% for mandatory subject areas. Competency based approach	Once weekly drill two hours only. minimum 50% attendance requirements. Contact time is also sometimes limited	50% drill attendance mandatory. Night drills repeated during day for better access. Not well enforced	Not formally defined. 96 hour BVFF standard for volunteers enforced. 10 hours training per month scheduled for paid and volunteers

Survey Components	Observations - Training						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
D. Use of lesson plans	From County Training program	IFSTA, County, and Department lesson plans used	From County Training program	IFSTA lesson plans used as well as County Training Assn. plans	From County Training program	IFSTA Manual lesson plans and use materials from NCRFA	From County Training Officers program
E. Night drills	Yes	Tuesday night volunteer drills – 3 hours.	Occasionally; including Wednesdays	Yes	Yes	Most are at night	Yes
F. Multi-agency drills	3 to 4 times annually	Periodically	Rarely	Infrequent	Infrequent	Frequently	Infrequently
G. Inter-station drills	Routinely	Most are inter-station	N/A	All	N/A	Routinely	Routinely
H. Disaster drills conducted	Annual disaster drill conducted	MCI drills annually and some emergency management	No	No	No	No annual drill, but CERT training is provided	Annual MCI drill completed
I. Annual performance evaluation conducted	No. Included in ongoing training	No. Included in ongoing training	No	No. Included in ongoing training	No. Included in ongoing training	No. Included in ongoing training	No, quarterly evaluations
6. Training Operation & Performance							
A. Attention to safety	High level of attention to safety	High level of attention to safety	Described as adequate but needs work	High level of attention to safety	Generally adequate	High level of attention to safety	High level of attention to safety
B. Post incident analysis	Completed on larger incidents and any with issues	Routinely completed on larger incidents and on request	Review fire incidents. CISD conducted on an as-needed via county debriefing team	Completed on larger incidents and any with issues	Routinely	Completed on larger incidents, special circumstances	Routinely completed on large incidents, mandatory
C. Priority by management toward training	High	High	Adequate	High	High with full time AC	High	High priority is placed on training

Survey Components	Observations - Training						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
7. Recordkeeping							
A. Individual training files maintained	Yes	Yes	Hard copy record of matter and attendance date only	Yes	Yes	Yes	Yes
B. Training records and files computerized	Retained in FDM	Hard copy file and recorded in RMS	No	ERS system is used	Hard copy only	Hard copy, data put into ERS system	Electronic via RMS and hard copy files
C. Daily training records	Yes	Yes	Not always	Yes	N/A	Drill night	Yes
D. Company training records	Shift based	Shift based	N/A	Yes	N/A	N/A	Yes
E. Pre-fire planning included in training	Yes	High hazards toured annually	No	Not routinely	None	Informal	Completed but limited
8. Personnel Trained							
A. Training objective (who, level, etc.)	Skills maintenance at FF I and FF II levels plus EMT	Skills maintenance at FF I and Haz Mat Operations levels as minimum	Baseline level FF I & EMT Basic	Skills maintenance at FF I and FF II levels plus EMT	Basic skills maintenance only	Basic skills maintenance only	Maintenance of FFI and Haz Mat skills maintenance
B. Employee development program used	Officer development program is in place	Officer development program is being developed. Ongoing officer training targeted	None	Promotional requirements identified. Not a formal development program	None	None	Pre-promotional testing information provided
9. Administrative Priority							
A. Budget allocated to training	Funding level is inadequate to meet current needs	Adequate. District commits to training	Whatever the Fire Chief believes is warranted	Adequate, has been more limited recently	Generally adequate	Generally adequate - $1500.00 for 2013	Adequate, but should be more
B. Using certified instructors	Yes	Yes	External yes. Not always for internal	As available	As available	As available	Yes

Survey Components	Observations - Training						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
C. Annual training report produced	No formal reporting	Yes, as part of annual Goals and Objectives development	No	No	No	No	Quarterly to city. Individual training reported to the chief annually
D. Adequate training space/ facilities/equipment	Inadequate	Well equipped	Need place to practice ladders, vent prop	Well equipped	Adequate	Adequate	Adequate
10. Training Program Clerical Support							
A. Support Staff support	Captain only	District clerical staff is shared	Firefighters	Fire Chief	Assistant Chief	District Secretary	Training Assistant
B. Records computerized software used	FDM	RMS	No	ERS	Hard copy	ERS	Maintained in RMS and hard copy
C. Adequate office space, equipment, and supplies	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate	Adequate

Training Assessment

Discussion: Each of the participating agencies demonstrates a healthy appreciation of the importance of training. Variations were observed in regard to the depth of commitment to training and some of the smaller agencies were found to be challenged to fully address all of the continuing educational needs that exist in today's fire service. Even so, firefighters in the region generally benefit from quality training.

Of note is the baseline level of training that is identified and broadly adopted for firefighters in North Snohomish County. In many communities, ESCI finds that foundational training levels are not defined or are limited, at best. However, in the study area, a standard of Firefighter I level training is a generally accepted baseline with most agencies meeting or exceeding this minimum.

Further, a significant training asset exists in the form of the Snohomish County Training Officer's Association. The group is highly active in the development of training standards and resources that are used throughout the county as well as by fire departments in other counties and even other states. An excellent internet website offers exceptional, open-source, training planning resources that provide an organization with information for developing internal training schedules. In addition, detailed and comprehensive drill outlines, lesson plans, and background information are readily accessible. With these tools, a training officer can readily create an annual plan as well as find the materials needed to accomplish the associated education delivery.

The Training Officer's Association resources are highly valuable to the area fire departments. Opportunities exist to further develop the Association's programs and for some of the participating departments to make more effective use of them. All agencies are encouraged to maximize their use of the Association and to participate actively in its ongoing development.

A shortcoming that is common to all of the agencies is the lack of adequate training facilities. Each agency maintains limited props and drill grounds in an attempt to meet the need, but none have, or have access to a fully developed facility. All of the departments would benefit from the collaborative development of a regionally based training facility. The initiative is further discussed later in this report.

Arlington Fire Department Comments: The Arlington Fire Department training program is managed by a Captain who also serves as a shift officer, in the absence of a dedicated training

officer position. While the Captain has been able to develop a well-organized and impressive program, doing so is difficult and less than fully effective when the individual is also working on a rotating shift. The officer is not able to have daily and consistent interaction with the other two shifts. Establishment of a dedicated training officer's position should be considered in future planning.

AFD makes excellent use of the Snohomish County Training Officer's Association resources. A six-year training program is outlined, using the Association website, and is broadly based and all inclusive. All drills are planned in advance on a quarterly basis and content for each class is defined and readily available to shift personnel for completion of training sessions.

The program is well established and effective; its direction and purpose was clearly articulated by department staff. However, the program's purpose and direction has not been formally defined in the form of identified goals and objectives enunciating its foundational intent.

Arlington Fire Department Recommendations:

- Consider the development of a dedicated Training Officer position.
- Establish written training program goals and objectives.

Camano Island Fire & Rescue Comments: The Camano Island Fire & Rescue (CIF&R) training program is operated under the oversight of an Administrative Captain who is assigned as the department's Training Officer. CIF&R is the only agency in the study area that has a dedicated Training Officer in place. The Captain/Training Officer also serves as the second Vice-Chair of the Snohomish County Training Officer's Association and Chair of the Annual Training Program Committee. Like AFD, CIF&R makes regular and effective use of the Association's resources including lesson plans, competency testing, and skills development.

The training program is well developed and the District's leadership is strongly committed to training from the highest levels. Continuing education includes the fundamental requirements related to Firefighter I and Hazardous Materials Operations level skills maintenance as a minimum standard and is supplemented with additional identified needs including quarterly Self Contained Breathing Apparatus use evaluation and similar practices. The agency does not mandate Firefighter II level training for its personnel but has started moving in that direction. ESCI encourages the practice and recommends CIF&R continue that effort.

The District's training program was found to be well developed, appropriately managed, and effective in developing and maintain the skills of CIF&R responders.

Camano Island Fire & Rescue Recommendations:

- Continue efforts to increase the minimum training level to that of Firefighter II.

Snohomish County Fire District #15 Comments: Snohomish #15's training program structure and content does not appear to adequately address fundamental firefighting subject areas. There is no training manual in place and applicable Standard Operating Guidelines (SOGs) are incomplete, non-existent, or out of date.

Responders are required to meet the requirements of Firefighter 1 training and hold a Washington State EMT certificate prior to being hired. Subsequent to that training, SCFD15 defers to the annual training plan published by the Snohomish County Fire Chiefs Association for continuing education. While this training plan subject matter is relatively comprehensive, the provided content is comprised primarily of anecdotal/illustrative material and skills sheets; there are no clear lesson plans available for the local instructor to use and a number of the links appear to be broken. There are no established fire suppression training facilities within the District and there are no agreements in place to access and use adjacent facilities. The Washington State fire training facility located at North Bend is the only resource listed and its use is very limited.

Records provided to ESCI offer only simple notations of hours per subject area for involved responders with no competency evaluation. Annual training hours provided were only an estimate and, as estimated, total less than two hours per week; attendance at training is not an enforced requirement, which should be corrected immediately. There is no distinct emphasis or declared commitment to firefighter safety in the training delivery process.

Based upon the survey responses, the training records and materials noted, and the responses to ESCI's assessment, the training program should be regarded as minimal at best and a cause for genuine management concern.

Snohomish County Fire District #15 Recommendations:

- Implement appropriate Incident Command System training and certification practices.
- When SOGs, Policies and Procedures are updated to current standards, provide training to all personnel on their content.
- Complete EVIP (Emergency Vehicle Incident Prevention) or equivalent training as a requirement for all personnel that drive vehicles.
- Create defined goals and objectives for the SCFD15 Training program.

- Purchase a set of current training manuals published by IFSTA, Delmar, Jones and Bartlett or a comparable source.
- Develop a District Training Manual.
- Implement technical skills testing as a component of training program.
- Establish mandatory minimum annual training hours or a competency-based training approach and enforce minimum requirements.
- Reinforce safety as the highest priority via District Policy, Procedure and Standard Operating Guidelines.
- Enforce minimum training attendance requirements.
- Implement a computerized training record system.
- When established, include pre-fire planning in the training plan.
- Create a training plan and budget funds to achieve training goals and needs.
- Provide training skills education to instructors and use outside teaching resources regularly.

Snohomish County Fire District #19 Comments: The District 19 Fire Chief serves as the Training Officer. The training program is well managed and effectively organized. Of particular note is the District's recruit training program, which is very well developed and effective.

Program goals and objectives are unwritten but priorities and direction are defined and the fire chief was able to articulate them clearly. Attendance to training sessions is well enforced and minimum requirements are established. Make up classes are made available for mandatory subjects for those that are unable to attend. Pre-incident planning is not routinely included in training content, which is recommended. Overall, the District demonstrates a high level of commitment to training.

Snohomish County Fire District #19 Recommendations:

- Include pre-incident planning in ongoing training program content.

Snohomish County Fire District #21 Comments: The District 21 Training Officer is the full time assistant chief, a recent change. An area found to be of concern is the agency's recruit training program. The process is critical but under-developed. There is no recruit academy or formal protocol for the initial training for new personnel. They are instead incorporated into the ongoing departmental training events. Development of a structured program for training of new personnel is recommended.

Unlike most of the participants in this analysis, District 21 has not adopted a minimum standard of Firefighter I training for its personnel. Although doing so may seem burdensome to the organization and the individual members, it is recommended.

Training program goals are not defined but are loosely guided by those of the Snohomish County Training Officer's Association program. A training manual has not been developed and periodic skills testing is not required.

Minimum requirements for attendance to training have not been established by the District. Members are required to attend 50 percent of drills. Failure to do so voids their BVFF retirement credit for the year.

Snohomish County Fire District #21 Recommendations:

- Further develop the training program with regard to both new recruit training and continuing education for established responders.
- Develop a structured training procedure for new members, or incorporate new hires into a neighboring agency's recruit training program.
- Identify minimum training levels for all members.
- Establish skills-based testing practices, and defined program goals and objectives.

Snohomish County Fire District #24 Comments: District 24 personnel have established the foundation of an effective training program with a good portion of the necessary components. They indicate a positive appreciation for additional work that needs to be done and demonstrate a healthy interest in improving the program. The following comments and recommendations will assist in that effort.

At the foundational level, the District has partially institutionalized a minimum training level Firefighter I certification, like many of the others in the county have. However, Firefighter I training is not required but rather "encouraged" by the organization. An estimated 75 percent of the members have reached the Firefighter I level of training. The remaining responders are not fully trained in a manner that is consistent with adopted standards in most of the county.

Training is conducted on a regular, weekly basis; on the evening of ESCI's site visit, the members were observed to be actively and enthusiastically engaged in a drill exercise.

A recruit training academy has not been established and, if new members obtain Firefighter I training, they usually do so via external training sources. Practices are in place to limit the

activities of new members, on an emergency scene. While a requirement that untrained members wear a differently colored helmet to identify them and limitations on their activities are said to exist, they are reportedly not enforced.

Ongoing training is targeted towards fundamental skills maintenance generally planned on an as-needed basis in the absence of a structured training plan and established program goals. Planning of subject matter for drills is generally developed around the training necessary to maintain Fire Fighter I level skills, which is appropriate.

A minimum drill attendance requirement of 50 percent of classes offered is in place. The requirement is reported to be weakly enforced, however. A 50 percent standard for once weekly training is minimal and should be enforced at least at that level. Annual skills performance testing is not completed; however, quarterly SCBA skills demonstration is required, which is appropriate.

Snohomish County Fire District #24 Recommendations:

- Develop a training plan with defined program goals and objectives.
- Continue to efforts to further develop the training program for both new recruit and existing members.
- Develop a structured training approach for new members or leverage the use of neighboring agency's recruit training programs.
- Review and update minimum training attendance standards and enforce them.
- Strictly limit non-trained personnel from interior firefighting performance.

North County Regional Fire Authority Comments: NCRFA has developed a strong training program based on appropriate standards and best practices. The program is well organized and effectively structured.

Emphasis has been placed on training of new personnel in the form of a four-month training academy. The program brings recruits to an appropriate training level, based on Firefighter I and Hazardous Materials – Operations level standards.

A plan is established for the training program on an annual basis. The plan sets the program priorities for the year and includes defined goals and objectives. An active driver education program is also in place; however, an EVIP (Emergency Vehicle Incident Prevention) course is reportedly completed on a three-year cycle. Annual EVIP training is recommended.

The training program is administered by a Battalion Chief who is also assigned to a shift rotation. As a result, the contact with the other shifts is limited to some extent which compromises the ability of the Battalion Chief to effectively manage training related activities. It is advised that consideration be given to either establishing a dedicated Training Officer position or developing a shared training administration relationship with neighboring agencies.

North County Regional Fire Authority Recommendations:

- Increase EVIP course frequency to annual
- Consider establishing a dedicated Training Officer position, or develop a shared training program management relationship with one or more neighboring agencies.

Support Programs – Fire Prevention

An aggressive risk management program, through active fire and life safety services, is a fire department's best opportunity to minimize the losses and human trauma associated with fires and other community risks.

> *The National Fire Protection Association recommends a multifaceted, coordinated risk reduction process at the community level to address local risks. This requires engaging all segments of the community, identifying the highest priority risks, and then developing and implementing strategies designed to mitigate the risks.*[34]

A fire department should actively promote fire resistive construction, built-in warning and fire suppression systems, and an educated public trained to minimize their exposure to fire and health issues and to respond effectively when faced with an emergency.

In the study area, the participating agencies vary widely in their fire prevention activities. Most of the agencies rely substantially on the Snohomish County Fire Marshal's Office for prevention services, and some actively conduct existing occupancy inspections in the form of courtesy inspections, company inspections, or more structured code enforcement inspections.

[34] Kirtley, Edward, *Fire Protection Handbook*, 20th Edition, 2008, NFPA, Quincy, MA.

Figure 145: Survey Table - Prevention

Survey Components	Observations – Prevention						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
1. Code Enforcement							
A. Fire codes adopted							
i) code used – year/version	International Fire Code, 2012 version	Island County is the agency having jurisdiction and has adopted portions of the 2009 International Fire Code	District has not adopted a code. All code enforcement is completed by the County Fire Marshal's Office	District has not adopted a code. All code enforcement is completed by the County Fire Marshal's Office	District has not adopted a code. All code enforcement is completed by the County Fire Marshal's Office	District has not adopted a code. All code enforcement is completed by the County Fire Marshal's Office	Fire Authority has not adopted a code. The City of Stanwood has adopted International Fire Code
B. Local codes or ordinances adopted, amendments	No	N/A	No	N/A	N/A	N/A	No
C. Sprinkler ordinance in place	No	N/A	No	No	No	No	No
2. New Construction Inspections and Involvement							
A. Consulted in proposed new construction	Building department submits plans to the Fire Marshal for review	Inconsistently advised by Island County of a permit and provided opportunity to comment	No	No	Will likely be consulted/ advised	Handled by County Fire Marshal	Yes
B. Perform fire and life safety plan review	Fire Marshal completes fire and life safety plan reviews	Not performed. Completed by County Building Official.	No	County Fire Marshal	County Fire Marshal	County Fire Marshal	Completed by the County Fire Marshal in unincorporated areas. In City, FD may be consulted by the City Building Official.
C. Sign-off on new construction	Yes	N/A	No	No	No	No	No

Survey Components	Observations – Prevention						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
D. Charges for inspections or reviews	Included in permit fees	N/A	N/A	N/A	N/A	N/A	Incorporated into building permit fees
E. Perform existing occupancy inspections	Department completes about 1,100 existing occupance inspections annually.	Pre-Incident planning only. Attempting to take on inspection program from the County Building Official	No	County Fire Marshal	County Fire Marshal	County Fire Marshal	City: Annual commercial inspections performed. Unincorporated area: County Fire Marshal, unknown frequency
F. Special risk inspections	Completed by the Fire Marshal	May be processed by County Building Official if they are aware of it	No	County Fire Marshal	County Fire Marshal	County Fire Marshal	By the County Fire Marshal outside of the city. By RFA inside the city
G. Storage tank inspections	Completed by Fire Marshal	May be processed by County Building Official if they are aware of it	No	County FM	County Fire Marshal	County Fire Marshal	By the County Fire Marshal outside of the city. By RFA inside the city
H. Key-box entry program in place	Knox Box system used	Knox Box system used	Knox box system used	Supra Box system used	Knox box program pending	None	Yes, but two separate systems in city and unincorporated area
I. Hydrant flow records maintained	Maintained by Public Works Department	By private purveyor	No	By private purveyor	By private purveyor. A few by PUD	None	City water department. Fire Authority flows and maintains hydrants in the unincorporated areas

Survey Components	Observations – Prevention						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
3. General Inspection Program							
A. Self-inspection program in place	Yes	N/A	No	No	No	No	No
B. Frequency of inspections	High hazards inspected annually. About 80% of total annually	Determined by Island County	N/A	N/A	N/A	N/A	Annually in the city. SCFM completes in the County, frequency is unknown
C. Inspection program	Companies complete inspections. Problems are referred to Fire Marshal	Determined by Island County	N/A	County FM performs all inspection work	County FM performs all inspection work	County FM performs all inspection work	Companies complete inspections in the City of Stanwood only
D. Citation process in place	Yes	County only	N/A	N/A	N/A	N/A	No
E. Inspections computerized	Handwritten and input into FDM software[35]	N/A	N/A	N/A	N/A	N/A	Hard copy only
F. Number of personnel devoted to program	Fire Marshal is also Operations Chief. Shift crews conduct most inspections	Assistant Chief as an additional duty	None	N/A	N/A	N/A	Shift Battalion Chief is assigned to prevention
G. Fees for specialty inspections	No	N/A	N/A	N/A	N/A	N/A	No
4. Fire Safety and Public Education							
A. Public education/ information officer in place	Ongoing school programs, tours and fire extinguisher classes	Ongoing school programs throughout year	No	Outreach to the school 1-2 times annually. 3 annual community outreach events	No. Annual Open House and presentations on request from school only	Visits to school during Fire Prevention Week	Same Battalion Chief as above is responsible

[35] FDM - Flexible Data Management commercial software

Survey Components	Observations – Prevention						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
B. Public education in the following areas:							
i) calling 9-1-1	Included	Included	No	Included	Included	911	911
ii) EDITH (exit drills in the home)	Included	Included	No	If requested	Included	Included	Included
iii) smoke alarm program	No	Not currently	No	Supplied to any resident in district	Included, also CO alarm	No	Smoke detector handouts provided
iv) fire safety (heating equipment, chimney, electrical equipment, kitchen/cooking, etc.)	Included	Included	No	Included	Included	Include	Included
v) injury prevention (falls, burns/scalding, bike helmets, drowning, etc.)	Bike helmet program is in place	Some senior injury prevention effort underway	No	No	As requested	No	Included
vi) fire extinguisher use	Classes offered	For CERT classes and High School program	No	No	As requested	No	Offered
vii) fire brigade training	No	No	No	No	No	No	No
viii) elderly care and safety	Informal interaction only	Currently developing a program	No	No	Included in open house activities	No	Outreach provided on request
ix) curriculum used in schools	In-house curriculum used	Varies, use NFPA and related materials	Unknown	None	Not specifically	Informal	Internally developed curriculum based on grade
x) baby-sitting classes offered	No	No	No	No	No	No	No
xi) CPR courses, blood pressure checks offered	Blood Pressure checks – Yes Available from outside resources	CPR classes periodically and blood pressure checks daily	Blood pressure checks on request	CPR classes offered community-wide, also BP checks	CPR classes and blood pressure checks on request	CPR classes and blood pressure checks on request	CPR offered. Blood pressure checks on request.

Survey Components	Observations – Prevention						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
C. Publications available to public	Yes	Supplies available, reduced due to budget	No	Available	Some	No	Available
D. Annual report distributed to community	No	No written report	No	No	No	No	Monthly report to chief
E. Juvenile fire setter program offered	Intervention available via County Fire Prevention Officer's Association	Intervention available via County Fire Prevention Officer's Association	Intervention available via County Fire Prevention Officer's Association	Intervention available via County Fire Prevention Officer's Association	Intervention available via County Fire Prevention Officer's Association	Intervention available via County Fire Prevention Officer's Association	Intervention available via County Fire Prevention Officer's Association
F. Wildland interface education offered	No	Some materials on hand and web site information	No	N/A	N/A	No	No
5. Fire Investigation							
A. Fire origin and cause determination	Chief, Fire Marshal complete initial review, refer to County Fire Marshal if needed	Fire Chief and Asst. Chief do preliminary cause and origin determination. Referred to County Fire Marshal if needed	Referred to County Fire Marshal	Referred to County Fire Marshal	Referred to County Fire Marshal	Referred to County Fire Marshal	Referred to County Fire Marshal
B. Arson investigation and prosecution	Completed by the County Fire Marshal	No. Referred to Snohomish County Fire Marshal and Island County Sheriff's Office (AHJ)	Completed by County Fire Marshal	Completed by County Fire Marshal	Completed by County Fire Marshal	Completed by County Fire Marshal	Referred to County Fire Marshal

Survey Components	Observations – Prevention						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
i) arson investigation training provided	No. Referred to County Fire Marshal	Some limited training beyond basic cause and origin	No. Referred to County Fire Marshal	No. Referred to County Fire Marshal	No. Referred to County Fire Marshal	No. Referred to County Fire Marshal	No. Referred to County Fire Marshal
C. Person responsible for investigations	Snohomish Co. Fire Marshal's Office	Fire Chief for initial cause and determination. Criminal referred to ICSO.	Fire Chief via County Fire Marshal	Fire Chief via County Fire Marshal	Fire Chief via County Fire Marshal	Fire Chief	Referred to County Fire Marshal
D. Local FIT membership (fire investigation team)	None	Tri-county team in place and used if needed	None	None	None	None	None
E. Process for handling juvenile suspects	Processed via County Juvenile	Referred to County Sheriff	County Fire Marshal handles via juvenile court	County Fire Marshal handles via juvenile court	County Fire Marshal handles via juvenile court	County Fire Marshal handles via juvenile court	County Fire Marshal handles via juvenile court
F. Liaison with law enforcement	Chief and Fire Marshal	Fire Chief and Assistant Chief	Fire Chief/ Tribal Police	Fire Chief	Fire Chief	Fire Chief	Fire Chief
G. Scene control practices in place	Scene preservation practices in place	Yes	No	Scene preservation practices in place	Scene preservation practices in place	Scene preservation practices in place	Scene preservation practices in place
H. Photographer available	County Fire Marshal	County Fire Marshal	Yes	County Fire Marshal	County Fire Marshal	County Fire Marshal	None
I. Adequate and appropriate equipment issued/supplied	County Fire Marshal	County Fire Marshal	N/A	County Fire Marshal	County Fire Marshal	County Fire Marshal	N/A
J. Evidence collection process in place	County Fire Marshal	County Fire Marshal and ICSO	N/A	County Fire Marshal	County Fire Marshal	County Fire Marshal	N/A
K. Reports and records of all incidents made	Yes	Yes, in conjunction with County Fire Marshal and ICSO	N/A	At County level	At County level	At County level	Yes

Survey Components	Observations – Prevention						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
6. Statistical Collection and Analysis							
A. Records kept by computer	In FDM program	In RMS system	Some administrative, no training records	In ERS system	All records are kept in hard copy	In ERS system	In RMS System
B. Information collected in the following areas:							
i) fire incidents	Collected	Collected	Collected	Collected	Basic incident report only. Not NFIRS compliant	Collected	Collected
ii) time of day and day of week	Collected	Collected	Yes	Collected	Not NFIRS compliant	Collected	Collected
iii) method of alarm (how received)	Collected	Collected	Yes	Collected	Not NFIRS compliant	Collected	Collected
iv) dispatch times	Collected	Collected	Yes	Collected	Only via dispatch records	Collected	Collected
v) response times	Collected	Collected	Yes	Collected	Only via dispatch records	Collected	Collected
C. Information analyzed & used for planning	Not routinely	Yes	Not typically	Not routinely	No	Not routinely	Not routinely
D. FTEs used in data collection & analysis	Fire Marshal only	Staff	None	None	N/A	None	None

Fire Prevention Assessment

Arlington Fire Department Comments: AFD maintains an active fire prevention program. The city has adopted the most current fire code and new construction building permit applications are appropriately reviewed by the Fire Marshal in collaboration with the city Building Department.

The department has also placed an appropriate level of emphasis on fire and life safety code enforcement with regard to existing occupancies. An active inspection program is in place that accomplishes approximately 1,100 building inspections annually. The result is that approximately 80 percent of the buildings that qualify for inspection are reviewed annually by the fire department.

The prevention program is managed by the Fire Marshal, who fills the role as an additional assigned duty. His primary work assignment is that of the department's Operations Chief. To accomplish the fire prevention mission, AFD depends on the use of on-duty fire response companies to address a high percentage of the inspection workload, an effective approach.

The Fire Marshal has done well in achieving a balance between his responsibilities as both Operations Chief and Fire Marshal. Doing so, however, compromises his ability to perform both functions with full effectiveness. To fully address future fire prevention program needs, consideration should be given to establishing a dedicated Fire Marshal's position.

Arlington Fire Department Recommendations:

- Work toward the future establishment of a dedicated Fire Marshal's position.

Camano Island Fire & Rescue Comments: Island County is experiencing a unique challenge in regard to fire prevention. Island County is the agency having jurisdiction regarding all building permitting, fire inspections, and fire investigations. CIF&R has no legal authority in these areas. While the district does pre-fire planning for operational purposes, he Building Official has not routinely addressed fire prevention concerns due to budget restraints. As a result, existing occupancy inspections have not been completed in the district for approximately eight years.

Due to jurisdictional issues, CIF&R fire prevention efforts have been limited to public education. Further, the lack of County resources to adequately address fire prevention and investigations has caused CIF&R to seek to engage in an interlocal agreement with Island County to perform fire inspection services. Code enforcement will remain the responsibility of Island County. In

addition, CIF&R has already contracted with the Snohomish County Fire Marshal to perform fire investigation cause and determination as needed. ESCI recommends that the District continue to pursue the effort.

Camano Island Fire & Rescue Recommendations:

- Continue to assertively pursue an agreement with Island County under which the District operates a fire and life safety program.

Snohomish County Fire District #15 Comments: Snohomish #15 invests little in fire prevention programs. For the most part, the District relies upon the actions of the Snohomish County Fire Marshal's Office to address code enforcement and fire investigation matters. District personnel noted that there are some limited public safety education efforts but these are incidental in nature and do not result from an organized plan or agency commitment.

District representatives state that they are unable to conduct fire prevention or code enforcement activities because the area served is tribal land. While direct enforcement of a model fire code on tribal properties may well be problematic, voluntary code application can and should be accomplished and is clearly in the best interest of both the residents and the fire district. It is recommended that the District meet with tribal representation to discuss the importance of fire prevention efforts in the protection of property and reduction of safety risk to firefighters and develop an agreement on application of fire prevention practices.

Snohomish County Fire District #15 Recommendations:

- Seek participation or consultation with building officials in the processing of new construction building permits.
- Establish a program of existing occupancy inspections (even if conducted only on a voluntary basis).
- Obtain records of hydrant flows, where available and monitor hydrant flow testing by water purveyors.
- Develop a public safety education program within the District.

Snohomish County Fire District #19 Comments: As is common to many smaller fire districts in Washington, nearly all fire prevention efforts are deferred by District 19 to the Snohomish County Fire Marshal (SCFM). The District has not adopted a fire code independently and has no involvement in the review and issuance of new construction building permits in the jurisdiction or in inspection and code enforcement in existing occupancies.

Use of SCFM in as the code enforcement authority in the District is an acceptable practice and a necessity, given the limited paid staffing that exists in the District. The County Fire Marshal will be effective in the review and approval of new construction building permits. However, they are typically going to be unable to inspect all existing occupancies simply due to workload. As a result, some lower risk commercial buildings may not be inspected regularly. It is recommended that the District work with the SCFM to determine which, if any, occupancies are not being inspected and to develop options such as inspections by the District or a self-inspection program to fill the gap.

The District does engage in public fire education activities. Two to three times annually, personnel conduct educational events; additionally, several community outreach programs are provided to the public annually. A smoke alarm program also provided free detectors to residents upon request.

Snohomish County Fire District #19 Recommendations:

- Work with the Snohomish County Fire Marshal to identify existing occupancies that may not be inspected and develop alternative approaches.

Snohomish County Fire District #21 Comments: Like District 19, District 21 has not adopted a fire code and defers fire and life safety reviews and enforcement to the Snohomish County Fire Marshal's Office. District personnel do not conduct inspections in existing occupancies. However, the fire chief is generally informed of new construction building permit applications and, while the plan review and approval is completed the SCFM, the chief is advised and consulted.

As discussed above, it is difficult for SCFM to inspect all occupancy types in the District and some lower risk exposures will not be reviewed. Establishing a relationship with the Fire Marshal to identify those that are not inspected and develop alternatives is recommended.

District leadership has recognized the importance of fire and safety community education. An annual open house offers a variety of prevention information to community members. Additionally, personnel fulfill school requests for presentations.

Snohomish County Fire District #21 Recommendations:

- Work with the Snohomish County Fire Marshal to identify existing occupancies that may not be inspected and develop alternative approaches.

Snohomish County Fire District #24 Comments: Fire prevention in District 24 is also deferred to the Snohomish County Fire Marshal. The District has no involvement in either new construction building permit review and approval or in code enforcement inspections in existing occupancies. The practice is appropriate in District 24 considering staffing limitations and also because there are few commercial buildings that would be subject to inspection.

The same caution and recommendation regarding coordination with SCFM to identify gaps in inspection or existing occupancies applies in District 24.

The District's public fire education efforts are limited. Schools are visited during fire prevention week, but no other outreach is completed.

Snohomish County Fire District #24 Recommendations:

- Work with the Snohomish County Fire Marshal to identify existing occupancies that may not be inspected and develop alternative approaches.

North County Regional Fire Authority Comments: NCRFA has not adopted a fire code for applicability to its unincorporated areas; however, the City of Stanwood, which falls in the Fire Authority's jurisdiction, has adopted the current version of the International Fire Code, as has Snohomish County.

Prevention program activities are performed differently within the city, compared to the unincorporated portions of the jurisdiction. A Battalion Chief is assigned to fire prevention as an assigned duty in addition to his shift supervision responsibilities. Work is divided between fire prevention and oversight of a shift, limiting his ability to fully address code enforcement and other prevention needs. The addition of a dedicated Fire Marshal position is recommended when possible.

Within the City of Stanwood, NCFR is involved in new construction plan reviews only when consulted by the City Building Official. Outside of the city, however, the responsibility is deferred to the Snohomish County Fire Marshal. Input on the plan review process is limited by this approach, compromising the RFA's ability to provide input on buildings that will be constructed and subsequently become the protection responsibility of the Authority. Increased involvement in the process is recommended, but it will require a higher level of staffing commitment to do so.

Fire safety inspections of existing commercial buildings are conducted by the RFA only in the City of Stanwood. The inspections may be completed by either the Battalion Chief - Fire

Marshal or by on-duty station crews. They are completed on an annual basis, which is appropriately addressing existing occupancy code enforcement. In the portions of the jurisdiction that fall outside of the city, all inspection responsibility is forfeited to the Snohomish County Fire Marshal. NCRFA staff were not informed of the frequency with which the inspection are completed by the County.

While time consuming and labor intensive, the annual inspection of existing commercial structures that is performed in the City of Stanwood should be expanded to include the unincorporated areas. The RFA has an inherent interest in assuring the safety of the buildings for which it is responsible and, as previously discussed; the SCFM is challenged to inspect the number and type of structures that the RFA may desire with the appropriate frequency.

North County Regional Fire Authority Recommendations:

- Work toward the future establishment of a dedicated Fire Marshal's position.
- Increase involvement and input in the new construction plan review process.
- Work with the Snohomish County Fire Marshal to identify existing occupancies that may not be inspected and develop alternative approaches.

Emergency Medical Services

Emergency Medical Service (EMS) response constitutes the majority of emergency responses in all of the agencies participating in this study. However, the approaches to EMS service delivery vary widely between the response agencies. Some agencies provide Basic Life Support (BLS) first response to their communities, leaving patient transportation responsibilities to external transport providers in the region. Others offer both initial response to medical incidents at the Advanced Life Support (ALS) and the BLS level, along with ambulance transportation of patients to area hospitals.

A key consideration in the effective delivery of EMS services is the oversight and management of the agency programs. The importance of standardization and consistency in the application of medical oversight throughout the study area is underscored and summarized in the following tables.

Figure 146: Survey Table – EMS

Survey Components	Observations - EMS						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
1. Medical Control							
A. EMS Service Delivery Level	ALS and BLS transport. 2 ALS Medic and 1 BLS transport unit	ALS Transport and 1 BLS/ALS engine company, mostly ALS. Minimum 1 ALS and 1 cross staffed Engine/ Ambulance	BLS first response. ALS transport provided by Marysville, BLS transport by private provider.	Provides BLS transport. Arlington Medic Unit dispatched to priority calls.	BLS first response to all incidents	Provides BLS patient transport. 2 front-line and 2 reserve ambulances.	ALS and BLS ambulance transport via cross staffed engine crews. Minimum 1 BLS unit at all times and at least 2 stations staffed with ALS crews
B. Written protocols adopted	Standardized county-wide protocols are in place	Standardized county-wide protocols are in place	Standardized county-wide protocols are in place	Standardized county-wide protocols are in place	Standardized county-wide protocols are in place	Standardized county-wide protocols are in place	Standardized county-wide protocols are in place
C. Case reviews conducted regularly	Monthly run reviews with MPD.[36] All ALS calls are reviewed	Conducted monthly by MPD. Dr. Paul Zaveruha	Run reviews incorporated into quarterly OTEP training	Quarterly run reviews conducted by a paramedic from Arlington	No formal reviews conducted	Recently developed review process. Charts reviewed bi-weekly	Monthly run reviews with MPD for ALS plus BLS run reviews 2 times annually
D. EMS Officer conducts in service training	Coordinates OTEP[37] and PCEP program plus run reviews and use of King County on line training	Monthly run review and continuing education training based on OTEP for EMT and PCEP[38]	Marysville Paramedic conducts CBT training	Lieutenant uses EMS Online program for ongoing training	Assistant Chief is responsible	Volunteer MSO provides training, also North County paramedic for CBT (Competency Based Training)	Firefighter/Paramedic serves and MSO and develops training based on OTEP for EMT and PCEP

[36] MPD – Medical Program Director
[37] OTEP – Ongoing Training and Evaluation Program
[38] PCEP - Paramedic Continuing Education Program

Survey Components	Observations - EMS						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
2. Q.A./Q.I.							
A. Internal committee	Internal concerns handled locally and a county QA committee is also in place.	Lieutenant processes QA/QI. Reviewed with employee and/or MPD	No formalized internal committee	Lieutenant reviews all call reports along with Arlington paramedic for concerns	No formal committee	MSO reviews all charts for compliance and completeness	No internal committee. MSO reviews reports, uses fall out criteria to select reports for review
B. Lessons learned are shared?	Incorporated into monthly run review sessions	Incorporated into monthly run review sessions	Shared during run reviews and as-needed	Shared during run reviews	Communicated with city ALS personnel	Shared as appropriate with individual and others	Issues addressed during run reviews
C. Medical Program Director participates?	MPD actively participates in process. Dr. Hutchinson	MPD is very actively engaged in ongoing training	Advisor is Dr. Iguchi. Coordinates with MPD, Dr. Cooper	Dr. Cooper does not participate routinely	Dr. Eric Cooper – county wide MPD	Dr. Eric Cooper – county wide MPD	Dr. Cooper participates in monthly run reviews
D. Charts spot evaluated for accuracy?	Ongoing process using ESO	Checked as a part of the QI/QA process	Random checks performed	By Lieutenant	Not routinely	All charts are reviewed	Incorporated into the QI/QA process
3. Certification/Recertification							
A. Ongoing Training & Evaluation system in place?	OTEP and PCEP used	Yes, based on Snohomish County PCEP process	Per County EMS protocols. Marysville paramedic also used	OTEP system is used along with Competency Based Training	On-line continuing medical education system used	OTEP based system using EMS Online For ALS	OTEP based system using EMS Online For ALS
B. Skills Assessment performed by qualified evaluators?	State certified evaluators used	State certified evaluators used	State certified evaluators used	Annually by four certified in-house evaluators	When applicable	State certified evaluators used	MPD and State certified evaluators used
C. Recertification exams (if required) administered by qualified testing center?	Incorporated into OTEP and PCEP ongoing programs	Incorporated into OTEP and PCEP ongoing programs	Incorporated into OTEP	Incorporated into OTEP	Via EMS Online system	Incorporated into OTEP	Incorporated into OTEP and PCEP ongoing programs
4. Medical Supplies							
A. Controlled meds security	Yes	Yes, including random audit	N/A	N/A	N/A	N/A	County security process used

EMS System Assessment

Arlington Fire Department Comments: AFD provides ALS and BLS transport services using two ALS ambulances and one BLS transport vehicle. Medical procedures are governed via medical protocols that are adopted universally throughout the county, under the supervision of a Medical Program Director (MPD). Incident case reviews are completed regularly and appropriately and training of responders is based on King County training standards. The AFD EMS program is well developed and effectively managed.

Arlington Fire Department Recommendations:

- No recommendations.

Camano Island Fire & Rescue Comments: Camano Island Fire & Rescue offers its citizens ALS level ambulance transportation services and also configures engine companies for both ALS and BLS initial response. The district has defined medical procedures by way of standardized protocols; the Medical Program Director is actively involved in quality control and quality assurance activities. Although it is located in Island County, the district makes appropriate use of Snohomish County medical training practices and delivers an appropriate level of training to both BLS and ALS responders.

Camano Island Fire & Rescue Recommendations:

- No recommendations.

Snohomish County Fire District #15 Comments: Snohomish #15 is a Basic Life Support agency. The district participates in Competency Based Training (CBT) via Snohomish County EMS. The vast majority of the district responses are EMS at 87 percent.

Snohomish County Fire District #15 Recommendations:

- No recommendations.

Snohomish County Fire District #19 Comments: District 19 provides transport of medical patients at the BLS level as well as first response. For more serious patient conditions, transportation and ALS treatment is provided by the Arlington Fire Department. The district operates under the same, countywide, treatment protocol as the other participants and completes run reviews on a quarterly basis, incorporating the assistance of an Arlington paramedic to effectively address quality assurance needs.

The District uses Dr. Eric Cooper as its Medical Program Director (MPD), who fills the role on a county-wide basis. The MPD does not routinely participate in quality assurance activities. While MPD participation is typically limited with BLS agencies, the District is encouraged to seek opportunities to have the doctor interface with responders at least periodically.

The District 19 EMS program is well organized and all of the appropriate components are in place to assure quality service delivery.

Snohomish County Fire District #19 Recommendations:

- Work with the MPD to increase contact with District responder.

Snohomish County Fire District #21 Comments: District 21 provides only Basic Life Support first response services. Patient transportation and ALS patient care is the responsibility of the Arlington Fire Department. The medical treatment protocols that are adopted throughout the county are also used in the District.

Responders do not routinely review medical incidents for compliance with protocols or for quality assurance purposes. It is recommended that the District establish a practice of periodic medical incident reviews.

Snohomish County Fire District #21 Recommendations:

- Implement a process of periodic medical incident reviews.

Snohomish County Fire District #24 Comments: Responders in District 24 transport medical emergency patients, providing BLS level treatment, based on Snohomish County medical protocols. Two front line ambulances and two reserve vehicles are employed to transport patients, generally to Arlington for definitive medical care.

The district has only recently established a process of incident review and quality assurance steps. The process is important and ESCI commends the District for implementing the process. However, it is reportedly not fully developed as it is a new undertaking. Further work to assure that appropriate case review and quality assurance practices are in place is recommended.

Snohomish County Fire District #24 Recommendations:

- Continue development of incident review and quality assurance practices.

North County Regional Fire Authority Comments: NCRFA is an EMS transporting agency at the ALS and BLS level. The EMS program is well established and provides an appropriate level of service using the Snohomish County patient treatment protocols that are standardized regionally.

Monthly run reviews are completed in coordination with the MPD; however, there is no internal Quality Assurance/Quality Improvement Committee in place, which is recommended moving forward. Run reviews are completed, however, and issues of concern are addressed at that time. The District's MPD participates actively in the process each month.

North County Regional Fire Authority Recommendations:

- Establish an EMS Quality Assurance/Quality Improvement Committee.

Capital Facilities and Equipment

Expensive assets are needed to provide emergency services and must be maintained and replaced as needed. Capital improvement and replacement plans help provide a stable and predictable financial environment while also assuring firefighter safety and emergency scene effectiveness. Organizations with capital asset plans for facilities, apparatus, and other high value equipment do not experience the negative financial consequence of unplanned capital replacement. Capital plans identify when an asset needs to be replaced and should determine the funding mechanism for doing so.

ESCI recommends the development of long-range capital plans for asset management, as well as specific plans to address current problems. Emergency service facilities and equipment are costly items. Capital planning reduces the potential for redundant costs and misuse of hard-to-come-by public funds. Long-range capital management plans should include a variety of items, such as:

- Location, timing, and cost of any new facilities or equipment
- Identified long-term maintenance and upgrade requirements for existing facilities and equipment
- Long-term funding mechanisms

The status of capital asset planning in the participating agencies was reviewed, the findings of which are listed in the following table.

Figure 147: Survey Table – Capital

Survey Components	Observations – Capital						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
1. Fire Stations/Structures							
A. Plan maintained	No formal plan maintained. Stations are in acceptable condition	Yes. First phase of Capital Facilities Plan complete	No formal plan. Station expansion planned in 2012-13	No formal plan maintained	No formal plan but identified in strategic plan	No formal plan maintained	No formal plan maintained
i) period of plan (from – to)	N/A	Phase 1: 2005 - 2012 Phase 2: Projects defined. Timeline to be identified as part of Strategic Plan	No dates defined	N/A	N/A	N/A	N/A
ii) funding mechanism	N/A	Phase 1: $11 million bonds, grants, and capital funds Phase 2: not funded	Capital Acquisition Fund	N/A	N/A	N/A	N/A
2. Apparatus							
A. Plan maintained	In the process of drafting a 20 year plan	Yes, First phase of Capital Facilities Plan complete	None planned	Complete replacement schedule is in place	In the process of developing	No formal plan maintained	Replacement schedule is in place
i) period of plan (from – to)	N/A	Phase 1: 2005 - 2012 Phase 2: 2013 - 2018	No calendar/ schedule	Through 2027	N/A	N/A	Through 2028

Survey Components	Observations – Capital						
	AFD	CIF&R	FD #15	FD #19	FD #21	FD #24	NCRFA
ii) funding mechanism	Funds have been reserved but are limited. $20K currently	Annual $125K reserve allocated. Existing debt service to expire in 2014 and 2016	Capital Acquisition Fund	Dedicated funds in reserve	Can fund via reserves. Last engine was financed via bank loan	Bonded debt, historically. Grants as available.	Dedicated funds in reserve
3. Support Equipment							
A. Plan maintained	Small equipment replacement plan is in place	Small equipment replacement plan is in place	No active plan. Plan to replace hose via grant.	SCBA compressor scheduled. Other equipment is not.	In the process of developing	No formal plan maintained	Included in vehicle purchases.
i) period of plan (from – to)	Ongoing	Ongoing	No schedule in place	Compressor scheduled for 2032	N/A	N/A	N/A
ii)funding mechanism	Funds reserved but not this year	General fund budget and sale of assets	General fund budget	Reserve funds	N/A	General fund budget	General fund budget

Fire Stations

Fire stations play an integral role in the delivery of emergency services for a number of reasons. A station's location will dictate, to a large degree, response times to emergencies. A poorly located station can mean the difference between confining a fire to a single room and losing the structure. The location of a station can even make the difference between saving or losing a life.

Fire stations need to be designed to adequately house equipment and apparatus, as well as meet the needs of the organization, its workers, and/or its members. It is essential to research need based on call volume, response time, types of emergencies, and projected growth prior to making a station placement commitment. Locating fire stations is also a matter of the greater community (region) need.

Consideration should be given to a fire station's ability to support the department's mission as it exists today and in the future. The activities that take place within the fire station should be closely examined to ensure the structure is adequate in both size and function. Examples of these functions may include:

- The housing and cleaning of apparatus and equipment
- Gender appropriate residential living space for on-duty crew members
- Administrative or management office(s)
- Training, classroom, and library areas
- Firefighter fitness area

While this list may seem elementary, the lack of dedicated space compromises the ability of the facility to support all of these functions and can detract from its primary purpose.

The following section of this report evaluates each individual fire station separately.

Figure 148: Arlington Station 46

137 N MacLeod Avenue, Arlington

Survey Components	
1. Structure	
A. Construction type	Convention construction with brick veneer.
B. Date	2011
C. Seismic protection/energy audits	Built to current code.
D. Auxiliary power	Automatic auxiliary generator provides uninterrupted power to building.
E. Condition	Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Administrative, public meeting area, and living areas are ADA compliant; living areas are mixed gender appropriate. There is adequate storage.
2. Square Footage	**10,000 square feet**
3.Facilities Available	
A. Exercise/workout	Designated exercise area in apparatus bay area.
B. Kitchen/dormitory	Kitchen area is modern and adequate for current staffing. Seven individual sleeping areas with storage.
C. Lockers/showers	Separate male and female restrooms and showers.
D. Training/meetings	Training room and public meeting room.
E. Washer/dryer	Residual and commercial extractor for PPE.
4. Protection Systems	
A. Sprinkler system	Yes
B. Smoke detection	Heat and smoke detectors present.
C. Security	Building is secured with card locks.
D. Apparatus exhaust system	Apparatus exhaust system in place.

Comments: AFD Station 46 is located near the old downtown core of Arlington. The station was extensively remodeled in 2011 to meet current needs and building code. The station is attractive, well maintained, and fits the area. An engine company and ALS Medic Unit are stationed at this station.

Figure 149: Arlington Station 47

6231 188th Street NE, Arlington

Survey Components	
1. Structure	
A. Construction type	Conventional framing with wood lap siding.
B. Date	1982
C. Seismic protection/energy audits	None documented
D. Auxiliary power	Auxiliary generator provides emergency power.
E. Condition	Fair to Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Living quarters are mixed gender appropriate. Storage is adequate, but at capacity.
2. Square Footage	**4,000 square feet**
3.Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	Small kitchen area, three sleeping rooms with storage.
C. Lockers/showers	Restroom/shower for on-duty crew. Restrooms for administrative staff and public.
D. Training/meetings	Office space for administrative staff.
E. Washer/dryer	Residential washer/dryer.
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke detectors
C. Security	Building is secured with card locks.
D. Apparatus exhaust system	None

Comments: Station 47 is located just east of the Arlington Airport. The Arlington Fire Department administrative offices and a BLS transport unit are housed in this station. The facility is well maintained and adequate for the current use; but is at capacity for storage and future needs.

Figure 150: Arlington Station 48

18824 Smokey Point Boulevard #104, Arlington

Survey Components	
1. Structure	
A. Construction type	Metal pole building, conventional framing living quarters.
B. Date	2008
C. Seismic protection/energy audits	None Documented
D. Auxiliary power	None
E. Condition	Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Living quarters are mixed gender appropriate. Limited storage in apparatus bays.
2. Square Footage	**2,800 square feet**
3.Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	Kitchen and living area are adequate for current staffing. There are three sleeping areas with lockers.
C. Lockers/showers	Restrooms/showers available.
D. Training/meetings	Work area for on duty crews.
E. Washer/dryer	Residential and extractor available for PPE.
4. Protection Systems	
A. Sprinkler system	Building is sprinkled.
B. Smoke detection	Smoke detectors present.
C. Security	Building secured with card locks.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: AFD Station 48 is situated in a leased metal building in the Smokey Point area; annexed into the City of Arlington in 2009. The living quarters and apparatus bays in the leased building currently meet the department needs; but the facility will need to be replaced with a permanent structure at some time in the future. AFD's aerial/pumper (Quint) and an ALS medic unit are cross manned with a three-person, 24-hour duty crew.

Arlington Fire Department Comments: AFD does not maintain a plan for replacement of fire stations. The facilities are in good condition, however, and are not subject to short-term replacement. Apparatus replacement planning has been limited in the past, but the fire chief is currently developing a long-range plan. Completion of the plan is encouraged.

Funding has been set aside for apparatus replacement; however, it is limited to approximately $20,000 at this time and additional funding will be necessary to meet future needs.

Arlington Fire Department Recommendations:

- Complete a long-range capital facilities plan.
- Complete a long-range apparatus replacement plan.
- Obtain appropriate levels of reserved funding to meet the needs of the replacement schedule.

Figure 151: Camano Island Fire & Rescue Station 1

985 Orchid Road, Camano Island

Survey Components	
1. Structure	
A. Construction type	Conventional and cinder block construction on a concrete slab
B. Date	Original building-1946, two bays added in 1980
C. Seismic protection/energy audits	None
D. Auxiliary power	None
E. Condition	Fair but aging.
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	There is no public access or living facilities, some storage in two of the apparatus bays.
2. Square Footage	**3,000 square feet**
3.Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	None
C. Lockers/showers	None
D. Training/meetings	Small office area.
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Building is secured with key code locks.
D. Apparatus exhaust system	Apparatus exhaust system is present.

Comments: Camano Island Fire and Rescue (CIF&R) Station 1 is located on the west side of Camano Island, south of Station 4. A volunteer staffed engine and a reserve engine are housed in the station. There are no crew facilities and the station serves primarily as equipment storage.

Figure 152: Camano Island Fire & Rescue Station 2

1326 S Elger Bay Road, Camano Island

Survey Components	
1. Structure	
A. Construction type	Conventional framing on a concrete slab.
B. Date	Built 1972, remodeled in 1994, seismic refit in 2009.
C. Seismic protection/energy audits	Seismic audit
D. Auxiliary power	Yes
E. Condition	Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Public areas are ADA compliant, living area is mixed gender appropriate, storage is adequate.
2. Square Footage	**8,000 square feet**
3.Facilities Available	
A. Exercise/workout	Large, well equipped exercise area.
B. Kitchen/dormitory	Adequate kitchen and living area with 6 sleeping rooms.
C. Lockers/showers	Lockers in sleeping rooms, separate restrooms and showers.
D. Training/meetings	Large public meeting room with kitchen facilities and restrooms.
E. Washer/dryer	Extractor style for PPE cleaning, separate washer/dryer for on duty crew laundry.
4. Protection Systems	
A. Sprinkler system	Building is equipped with sprinklers.
B. Smoke detection	Alarm system throughout building.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: CIF&R Station 2 is on the east side of Camano Island. The station is staffed with a minimum of three career personnel. Volunteer personnel augment staffing when available. The station is located on a large piece of property that is currently being utilized as a training ground. This facility is well located and has been updated to meet the current and future needs of CIF&R.

Figure 153: Camano Island Fire & Rescue Station 3

525 E North Camano Drive, Camano Island

Survey Components	
1. Structure	
A. Construction type	Conventional framing on a concrete slab.
B. Date	Major remodel and seismic upgrade in 2012.
C. Seismic protection/energy audits	Remodeled structure built to current building and seismic code.
D. Auxiliary power	Yes
E. Condition	New
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Structure is ADA compliant, living quarters. are mixed gender appropriate.
2. Square Footage	**6,000 square feet**
3.Facilities Available	
A. Exercise/workout	Yes
B. Kitchen/dormitory	Modern well equipped kitchen, 4 sleeping areas with lockers.
C. Lockers/showers	Separate restrooms and showers.
D. Training/meetings	Public meeting room, operations office area.
E. Washer/dryer	Washer/dryer for staff use.
4. Protection Systems	
A. Sprinkler system	Sprinkler system is present.
B. Smoke detection	Smoke and heat detection system present.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: CIF&R Station 3 is situated on the only access route onto Camano Island, Highway 532. The station is well positioned to serve the residential and commercial properties in the northeastern portion of the island. An ALS medic is staffed with two career personnel; who also cross staff fire apparatus along with volunteer personnel when available. The well designed and attractive new building meets the current and future needs of Camano Island Fire and Rescue.

A three-bay shop facility is located in back of Station 3. A certified emergency vehicle mechanic and assistant maintain and repair CIF&R apparatus at this facility. The CIF&R shop also contracts with other emergency agencies to provide apparatus maintenance and repair.

Figure 154: Camano Island Fire & Rescue Station 4

273 West Camano Drive, Camano Island

Survey Components	
1. Structure	
A. Construction type	Conventional framing on a concrete slab.
B. Date	2010
C. Seismic protection/energy audits	New structure built to current building and seismic code.
D. Auxiliary power	Yes
E. Condition	New
F. Special considerations (ADA, mixed gender appropriate, storage, exhaust removal, etc.)	ADA compliant, mixed gender appropriate, office space, operations room, adequate storage space.
2. Square Footage	**14,000 square feet**
3.Facilities Available	
A. Exercise/workout	Large well equipped exercise area.
B. Kitchen/dormitory	Well equipped kitchen and living area, 5 sleeping rooms with lockers.
C. Lockers/showers	Separate restrooms and showers.
D. Training/meetings	Public meeting room, office space, training room with AV equipment.
E. Washer/dryer	Washer/dryer for staff use, Extractor for PPE cleaning.
4. Protection Systems	
A. Sprinkler system	Sprinkler system present.
B. Smoke detection	Smoke and heat detection.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: Station 4 was constructed in 2010 when it was determined that it was economically unfeasible to bring the old station up to current building and seismic standards. The station was designed to meet the current and future needs of CIF&R. Two career personnel staff a BLS Aid unit. Volunteer personnel participate in a sleeper program at Station 4; which augments overnight staffing.

Figure 155: Camano Island Fire & Rescue Station 5

3651 South Camano Drive, Camano Island

Survey Components	
1. Structure	
A. Construction type	Conventional and block construction on a concrete slab.
B. Date	1957, Remodeled in 1980.
C. Seismic protection/energy audits	Seismic audit-no major retrofit.
D. Auxiliary power	Yes
E. Condition	Fair to Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Public area is ADA compliant, no living quarters, office/ops area.
2. Square Footage	**3,400 square feet**
3.Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	Kitchen area attached to public meeting room.
C. Lockers/showers	Restrooms attached to meeting room.
D. Training/meetings	Public meeting room also used for training.
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Smoke and heat detectors installed.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: CIF&R Station 5 is situated on the main route around the south end of Camano Island. The station is well located to serve the southern portions of Camano Island. The station houses an engine, water tender, and aid car; and is staffed by volunteer personnel. Two large above ground water cisterns are located next to the station to augment fire suppression water supply in the area. Station 5 meets the current needs for the southern portions of Camano Island. Future upgrades specified in Capital Facilities Plan.

Figure 156: Camano Island Fire & Rescue Administration Office

811 N. Sunrise Boulevard, Camano Island

Survey Components	
1. Structure	
A. Construction type	Conventional construction.
B. Date	Built in 2005. Acquired by CIF&R in 2009.
C. Seismic protection/energy audits	Facility built to current building and life safety code.
D. Auxiliary power	Yes
E. Condition	Good to Excellent
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Public areas are ADA compliant. No living quarters. Adequate office and storage space.
2. Square Footage	**4,000 square feet**
3.Facilities Available	
A. Exercise/workout	Not applicable.
B. Kitchen/dormitory	Small break room. No living quarters
C. Lockers/showers	None
D. Training/meetings	Offices for administrative staff. Conference room used for training and meetings.
E. Washer/dryer	Not applicable.
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Heat and smoke detectors present.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Not applicable.

Comments: The CIF&R administrative offices are located in a separate building near Station 3. The building was acquired in 2009, as an alternative to the proposed construction of an administration building. The purchase of an existing building provided a significant cost savings for the fire district. The facility houses the CIF&R chief officers and administrative staff. There is ample office space and room for storage of department records. The building is well maintained, attractive; and meets the current and future needs of Camano Island Fire and Rescue.

Camano Island Fire & Rescue Comments: Camano Island Fire and Rescue has recently completed Phase 1 of a long range capital facilities plan. This phase, funded by $11 million in bonds, grants, and capital funds, completed the following:

- One new station
- Two stations remodeled and seismically upgraded
- Three pieces of apparatus purchased
- New Administration office purchased
- Exhaust extraction systems upgraded at all stations and the shop facilities.
- New water storage tank built for firefighting in the south end of the island.
- Site survey studies completed for future facility upgrades in Mabana and Camano City.

In the last six years the district has replaced one engine, one tender, three medic units, one support vehicle, and one boat. The district has set aside $125,000 for future apparatus replacement needs although a formal plan has not been defined. The payoff of two existing apparatus loans in 2014 and 2016, combined with potential sale of assets, provide the district with funding options for future apparatus replacement needs

Camano Island Fire & Rescue Recommendations:

- Update the long-range capital facilities plan.
- Reestablish a formal apparatus replacement plan.
- Identify long range funding mechanisms necessary to fund replacement planning.

Figure 157: Snohomish #15 Station 1

7812 Waterworks Road, Marysville

Survey Components	
1. Structure	
A. Construction type	Original structure is wood frame. A 1998 addition is wood frame construction.
B. Date	Original structure was built in 1991. Back area in 1998.
C. Seismic protection/energy audits	None documented.
D. Auxiliary power	Automatic auxiliary generator provides uninterrupted power to building.
E. Condition	The building and grounds are well maintained.
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Administrative and living areas are ADA compliant. Living areas are mixed gender appropriate. There is adequate storage.
2. Square Footage	**7,000 square feet**
3.Facilities Available	
A. Exercise/workout	Designated workout area at rear of apparatus bays
B. Kitchen/dormitory	Kitchen area is modern and adequate for current staffing. Four individual sleeping areas with beds and lockers.
C. Lockers/showers	Separate male and female shower rooms
D. Training/meetings	Large training and meeting room equipped with AV equipment.
E. Washer/dryer	Washer and dryer available; SCFD15 sends out decontamination of PPE.
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	Heat and smoke detectors are present.
C. Security	Building is secured with key code locks.
D. Apparatus exhaust system	Apparatus mounted (Ward Diesel).

Comments: SCFD 15 Station 60 is located just off of Marine Drive near the community of Tulalip. The SCFD15 station is attractive and well maintained. It serves its purpose adequately, providing sufficient space for both administrative and operational needs.

Snohomish County Fire District #15 Comments: While Snohomish #15 maintains a capital acquisition fund, there is no established long-term plan attributed to that fund. There is a common agreement that some of the funds will be used for an expansion of the current fire station. Other capital equipment is expected to be replaced when a need is identified. The District does successfully pursue grant funds from both the DHS Fire Act grant program and Washington state EMS grant funds.

Snohomish County Fire District #15 Recommendations:

- Create a Capital Replacement Plan that addresses long term replacement of fire stations along with forecast repair and maintenance.
- Establish a funding mechanism for the Capital Replacement Plan.

Figure 158: Snohomish FD #19 Station 94

2720 212 Street NW, Stanwood

Survey Components	
1. Structure	
A. Construction type	Conventional and metal pole on a concrete slab
B. Date	2003, Additional admin and living area added in 2011.
C. Seismic protection/energy audits	Unknown
D. Auxiliary power	Yes
E. Condition	Excellent
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	ADA compliant. Building meets current code. Mixed gender appropriate.
2. Square Footage	**19,000 square feet**
3.Facilities Available	
A. Exercise/workout	Yes
B. Kitchen/dormitory	Modern well equipped kitchen and living area. 5 sleeping rooms with storage.
C. Lockers/showers	Separate restrooms and showers.
D. Training/meetings	Public meeting room. Office space for administrative staff and on duty crews.
E. Washer/dryer	Washer/dryer
4. Protection Systems	
A. Sprinkler system	Yes
B. Smoke detection	Smoke and heat detectors
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: Snohomish County FD 19 Station 94 is a modern, well designed fire station built to meet the current and futures needs of SCFD 19. The facility is staffed with a minimum staffing of two on-duty volunteer personnel, 24 hours a day. A BLS aid car/ambulance, a structural engine, water tender, air trailer, and water rescue (hovercraft) are stationed at Station 94.

Figure 159: Snohomish FD #19 Station 95

21207 27 Avenue NE, Arlington

Survey Components	
1. Structure	
A. Construction type	Block construction on a concrete slab.
B. Date	1972
C. Seismic protection/energy audits	None documented.
D. Auxiliary power	None
E. Condition	Fair
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	No public access or living quarters. Limited storage for equipment and turnouts.
2. Square Footage	**2,100 square feet**
3.Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	None
C. Lockers/showers	PortaPotty
D. Training/meetings	None. Small office area with computer networked for incident information.
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: SCFD 19 Station 95 is located just east of Interstate 5. The station houses a BLS aid car, an engine, and a water tender. This station is manned by volunteer personnel who respond to the station. Station 95 was designed as an apparatus storage facility, without any personnel facilities; and is adequate for the current use. The station is located on leased land and there are limited possibilities for expansion.

Snohomish County Fire District #19 Comments: District 19 has been proactive with regard to capital planning. There is no facility replacement plan in place; however, a well-developed apparatus replacement schedule has been created. The plan extends to 2027. Most importantly, funding is set aside in reserve on an annual basis. Resources are reportedly available in reserve in a sufficient amount to fund the replacement schedule.

Snohomish County Fire District #19 Recommendations:

- No recommendations.

Figure 160: Snohomish FD #21 Station 49

12131 228 Street NE, Arlington

Survey Components	
1. Structure	
A. Construction type	Block construction on a concrete slab.
B. Date	1973
C. Seismic protection/energy audits	None documented.
D. Auxiliary power	Yes
E. Condition	Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Public area is ADA compliant. No 24 hour staff facilities. Storage of apparatus is inadequate.
2. Square Footage	**7,500 square feet**
3.Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	Small adequate kitchen. No sleeping facilities.
C. Lockers/showers	No locker area. Single shower.
D. Training/meetings	Training/meeting room. Office and operations room.
E. Washer/dryer	HD washing machine
4. Protection Systems	
A. Sprinkler system	Building is sprinkled.
B. Smoke detection	Heat and smoke detectors present.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	None

Comments: Station 49 is the only SCFD 21 station. The station is located in the Arlington Heights area of the fire district; and is well placed to serve this portion of SCFD 21. There is a portion of the fire district that is protected by contract with Arlington Fire Department, due to extended travel time from Station 49. All SCFD 21 apparatus are housed at Station 49. Volunteers respond from home to staff apparatus. The station is well maintained and adequate for the current use. There appear to be opportunities for expansion in the future.

Snohomish County Fire District #21 Comments: District 21 has not created a replacement plan for facilities or apparatus. A station replacement plan is, however, identified in the district's

strategic plan. In addition, a schedule for the replacement of fire apparatus was reported to be under development at the time of our field work.

Historically, some funding has been set aside for major vehicle replacement and most apparatus has been paid for by that method. The most recently purchased engine was financed, however.

ESCI recommends that the replacement planning that is currently being considered in District 21 be completed and that funding resources be identified in concert with the plan development.

Snohomish County Fire District #21 Recommendations:

- Complete current facility and apparatus replacement plan development.
- Identify financial resources via which capital plans will be funded.

Figure 161: Snohomish FD #24 Station 38

30020 Swede Heaven Road, Arlington

Survey Components	
1. Structure	
A. Construction type	Conventional framing on a concrete slab.
B. Date	1995
C. Seismic protection/energy audits	None documented.
D. Auxiliary power	Yes
E. Condition	Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Building has no public access. No living quarters. Adequate storage for apparatus and equipment.
2. Square Footage	**2,200 square feet**
3.Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	None
C. Lockers/showers	None
D. Training/meetings	None
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: Snohomish County FD 24 Station 38 is situated on State Highway 530 and serves the western portions of SCFD 24. The station houses two engines, 2 BLS aid cars, and a rescue unit. The station is staffed by volunteer personnel who respond to the station. There are no living or staff facilities at this station. The station is well maintained and adequate for the current use. The building is on a large piece of property with potential for future expansion.

Figure 162: Snohomish FD #24 Station 39

1115 Seeman Street, Darrington

Survey Components	
1. Structure	
A. Construction type	Conventional framing on a concrete slab.
B. Date	Late 1970's
C. Seismic protection/energy audits	None documented
D. Auxiliary power	Yes
E. Condition	Fair to good.
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Building is not ADA compliant. No living quarters. Storage is at capacity.
2. Square Footage	**6,500 square feet**
3.Facilities Available	
A. Exercise/workout	Exercise area in engine bays
B. Kitchen/dormitory	Small kitchen area. No living area or dormitory.
C. Lockers/showers	Separate restrooms. No lockers
D. Training/meetings	Training/meeting room. 2 small office spaces.
E. Washer/dryer	Washing machine only, no dryer
4. Protection Systems	
A. Sprinkler system	None
B. Smoke detection	None
C. Security	Building is adequately secured.
D. Apparatus exhaust system	No apparatus exhaust system.

Comments: Snohomish County FD 24 Station 39 is located in the town of Darrington. Station 39 serves as the headquarters station for SCFD 24. Volunteers respond to the station to staff apparatus. The primary response vehicles from this station are 2 BLS ambulance/aid cars, a rescue vehicle, 3 structural engines, 1 tender, 1 inflatable raft & motor with trailer. The facility is at capacity for apparatus and equipment storage. There are limited opportunities for expansion.

Snohomish County Fire District #24 Comments: Planning for future replacement of fixed facilities and vehicles has not been undertaken in District 24. In the past, when vehicles have been due for replacement, the district has sought approval from the voters to secure funding by way of bonded debt. Grant funding is also pursed and has been used when available.

ESCI recommends that District 24 undertake a process of inventorying its current apparatus fleet and projecting service lives and replacement dates. In addition, efforts should be made to place funds, if available, in reserve for future apparatus replacement based on the schedule.

Snohomish County Fire District #24 Recommendations:

- Complete current facility and apparatus replacement plan development.
- Identify financial resources via which capital plans will be funded.

Figure 163: North County RFA Station 90

3002 252 Street NE, Arlington

Survey Components	
1. Structure	
A. Construction type	Block construction on a concrete slab.
B. Date	1977-remodeled in 2002
C. Seismic protection/energy audits	None documented
D. Auxiliary power	Yes
E. Condition	Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Building is ADA compliant. Living quarters are mixed gender appropriate.
2. Square Footage	**8,500 square feet**
3.Facilities Available	
A. Exercise/workout	Yes
B. Kitchen/dormitory	Well equipped kitchen. 8 sleeping areas (3 used as offices).
C. Lockers/showers	Lockers in sleeping areas. Separate restrooms and showers
D. Training/meetings	Public meeting room. Ops room and training room.
E. Washer/dryer	Washer/dryer for staff. No extractor
4. Protection Systems	
A. Sprinkler system	Sprinklers are present.
B. Smoke detection	Smoke and heat detectors are present.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system is present.

Comments: North County RFA (NCRFA) Station 90 is situated east of Interstate 5 and north of Arlington. Station 90 is well positioned to serve this portion of NCRFA's jurisdiction. The station is staffed with 24 hour duty personnel. Station 90 is a well maintained and attractive facility that meets the current needs of NCRFA. The station is configured in a manner that should provide for the future needs of North County RFA.

Figure 164: North County RFA Station 92

29219 Heimer Road, Arlington

Survey Components	
1. Structure	
A. Construction type	Conventional framing on a concrete slab.
B. Date	2000
C. Seismic protection/energy audits	None documented.
D. Auxiliary power	Yes
E. Condition	Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	No public access. No living areas. Storage is adequate.
2. Square Footage	**2,850 square feet**
3.Facilities Available	
A. Exercise/workout	None
B. Kitchen/dormitory	None
C. Lockers/showers	None
D. Training/meetings	There is a single restroom
E. Washer/dryer	None
4. Protection Systems	
A. Sprinkler system	Building is sprinkled.
B. Smoke detection	Smoke and heat detectors present.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system present.

Comments: Station 92 is located in the largely rural eastern portion of NCRFA. The station is staffed by volunteer personnel. The station location provides improved response performance to the Grandview area and is well suited to the current use. There are opportunities for expansion or modification to address future growth in the area.

Figure 165: North County RFA Station 96

3231 300 Street NW, Stanwood

Survey Components	
1. Structure	
A. Construction type	Block construction on a concrete slab.
B. Date	1968
C. Seismic protection/energy audits	None
D. Auxiliary power	Yes
E. Condition	Good
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	There is no public access. Living quarters are mixed gender appropriate. Storage is adequate.
2. Square Footage	**5,800 square feet**
3.Facilities Available	
A. Exercise/workout	Exercise area with equipment.
B. Kitchen/dormitory	Adequate kitchen and dayroom. Separate sleeping areas with lockers.
C. Lockers/showers	Separate restrooms and showers.
D. Training/meetings	Operations area for on duty personnel.
E. Washer/dryer	Washer/dryer available for personal use.
4. Protection Systems	
A. Sprinkler system	Yes, with fire pump support
B. Smoke detection	Heat and smoke detectors present.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: NCRFA Station 96 is located just west of Interstate 5 at Exit 215. This location provides good access to both sides of I-5 and both north and south bound 1-5. The station is staffed with 24 hour duty personnel. Although built in 1968 the building appears well maintained and clean. The station meets the current needs and could be updated or modified to satisfy future demands.

Figure 166: North County RFA Station 97

19727 Marine Drive, Stanwood

Survey Components	
1. Structure	
A. Construction type	Metal pole construction and conventional on a concrete slab.
B. Date	2005
C. Seismic protection/energy audits	Built to current building and life safety code.
D. Auxiliary power	Yes
E. Condition	Excellent
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Public areas are ADA compliant. Living quarters are mixed gender appropriate. There is adequate storage.
2. Square Footage	**10,500 square feet**
3.Facilities Available	
A. Exercise/workout	Well-equipped exercise room.
B. Kitchen/dormitory	Modern kitchen area. 4 separate sleeping areas with lockers.
C. Lockers/showers	Separate restrooms and showers.
D. Training/meetings	Public meeting room available.
E. Washer/dryer	Washer/dryer available for personal use. Extractor available for PPE cleaning.
4. Protection Systems	
A. Sprinkler system	Sprinkler system is present.
B. Smoke detection	Smoke and heat detectors present.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system installed.

Comments: NCRFA Station 97 as the headquarters station for North County RFA. The Fire Chief and administrative staff are located at this station. 24-hour duty personnel staff Station 97 apparatus. The station is located in the south west portion of NCRFA, near the community of Warm Beach. The station is a modern, well maintained fire station; designed to meet the current and future demands of North County RFA.

Figure 167: North County RFA Station 99

8117 267 Street NW, Stanwood

Survey Components	
1. Structure	
A. Construction type	Block construction on a concrete slab.
B. Date	2003
C. Seismic protection/energy audits	None documented
D. Auxiliary power	Yes
E. Condition	Excellent
F. Special considerations (ADA, mixed gender appropriate, storage, etc.)	Public areas are ADA compliant. Living areas are mixed gender appropriate. Storage is adequate.
2. Square Footage	**14,500 square feet**
3.Facilities Available	
A. Exercise/workout	Well-equipped exercise room.
B. Kitchen/dormitory	Modern well equipped kitchen. Separate sleeping areas with storage.
C. Lockers/showers	Separate restrooms and showers.
D. Training/meetings	Public meeting room available. Ops work area. Training/study room available. Reception area.
E. Washer/dryer	Washer/dryer available for on duty staff. Extractor available for PPE cleaning.
4. Protection Systems	
A. Sprinkler system	Sprinklers are present.
B. Smoke detection	Smoke and heat detectors installed.
C. Security	Building is adequately secured.
D. Apparatus exhaust system	Apparatus exhaust system is in place.

Comments: NCRFA Station 99 is located in the City of Stanwood. The building is owned by the City of Stanwood and operated by NCRFA personnel (24 hour on duty personnel). Station 99 is well positioned to serve Stanwood and the surrounding area. NCRFA Station 99 is adequate for the current use and future needs of the area.

North County Regional Fire Authority Comments: A formalized facility replacement plan is not in place at NCRFA. However, the Fire Authority leadership has developed a comprehensive apparatus replacement schedule which is extended to 2028 for all vehicles. Funds are also

placed in reserve on a regular basis and it is reported that reserve fund balances are sufficient to fund the replacement schedule.

North County Regional Fire Authority Recommendations:

- No recommendations

Apparatus

Other than the firefighters assigned to stations, response vehicles are probably the next most important resource of the emergency response system. If emergency personnel cannot arrive quickly due to unreliable transport or if the equipment does not function properly, then the delivery of emergency service is likely compromised.

Fire apparatus are unique and expensive pieces of equipment, customized to operate efficiently for a narrowly defined mission. An engine may be designed such that the compartments fit specific equipment and tools, with virtually every space on the vehicle designed for function. This same vehicle, with its specialized design, cannot be expected to operate in a completely different capacity, such as a hazardous materials unit or a rescue squad. For this reason, fire apparatus are very expensive and offer little flexibility in use and reassignment. As a result, communities across the country have sought to achieve the longest life span possible for these vehicles.

Unfortunately, no piece of mechanical equipment can be expected to last forever. As a vehicle ages, repairs tend to become more frequent, parts are more difficult to obtain, and downtime for repair increases. Given the emergency mission that is so critical to the community, downtime is one of the most frequently identified reasons for apparatus replacement.

Because of the expense of fire apparatus, most communities develop replacement plans. To enable such planning, communities often turn to the accepted practice of establishing a life cycle for the apparatus that results in an anticipated replacement date for each vehicle.

The reality is that it may be best to establish a life cycle for use in the development of replacement funding for various types of apparatus; yet, apply a different method (such as a maintenance and performance review) for actually determining the replacement date in real life, thereby achieving greater cost efficiency when possible. As the frontline units are aging, fleet

will experience higher costs and more down time associated with necessary repairs and routine maintenance.

AFD Apparatus Summary

Figure 168: AFD Station 46 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Medic 46	Ambulance	2008	International	Good	2	N/A	N/A
Engine 46	Type 1 Engine	1998	Spartan	Fair, aging	2	1,500	750
Engine 46A	Engine	2006	HME	Good	2	1,500	1,000

Figure 169: AFD Station 47 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Aid 47	Ambulance	2009	Ford	Good	2	N/A	N/A
Engine 47	Type 1 Engine	1995	International	Fair, aging	2	1,500	750

Figure 170: AFD Station 48 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Medic 48	Ambulance	2005	Braun	Good	3	N/A	N/A
Ladder 48	Aerial	1995	International	Fair, aging	3	1,500	500

Arlington Fire Department Comments: Apparatus in the Arlington fleet average just less than ten years of age. However, three vehicles, Engine 46, Engine 47, and Ladder 48 have seen 15, 18, and 18 years of service, respectively, and are going to need to be replaced soon. The fire chief has developed a replacement strategy which includes disposal of Engine 47 and transferring Engine 46 and Ladder 48 to reserve status. ESCI reviewed a recent memorandum recommending apparatus replacement plans from the chief to the city administration and concurs with the findings therein.

Vehicle maintenance practices were reviewed. ESCI finds that the department has a well-established preventative maintenance program in place

Arlington Fire Department Recommendations:

- Pursue replacement of aging apparatus as proposed to the city by the fire chief.

CIF&R Apparatus Summary

Figure 171: Camano Island Fire and Rescue Station 1 Major Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 1-1	Type I Engine	1998	Freightliner	Very Good	3	1,250	1,000
Reserve Engine	Type I Engine (not in service)	1989	Darley/ Ford	Good	3	1,000	750

Figure 172: Camano Island Fire and Rescue Station 2 Major Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 1-2	Type I Engine	2007	HME	Very Good	3	1,500	750
Tender 1-2	Water Tender	1983	International	Fair, aging	1	500	1,000
Aid 102	Aid Car	2009	Braun	Very Good	2	N/A	N/A
Boat 1-2	19 ft. Boat	2005	Bullfrog	Very Good	2	N/A	N/A
Rescue 1-2	Air Unit	2000	Hesse	Very Good	1	N/A	N/A
Support 1-2	Support Unit	1992	Chevrolet Suburban	Good	1	N/A	N/A

Figure 173: Camano Island Fire and Rescue Station 3 Major Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 1-3	Type I Engine	1998	Freightliner	Very Good	3	1,250	1,000
Tender 1-3	Water Tender	1988	Darley	Fair, aging	1	500	2,500
Engine 1-32	Reserve Engine	1997	Freightliner	Good, aging	3	1,250	1,000
Medic 103	Ambulance	2008	Horton	Good	2	N/A	N/A
Support 1-3	Squad	1995	Road Rescue	Good	1	N/A	N/A

Figure 174: Camano Island Fire and Rescue Station 4 Major Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 1-4	Type I Engine	2000	Pierce Sabre	Good	3	1,250	1,000
Tender 1-4	Water Tender	1995	H & W	Good, aging	1	750	2,900
Aid 104	Ambulance	2006	Horton	Good	2	N/A	N/A
Aid 1-42	Ambulance	1995	Road Rescue	Good	2	N/A	N/A
Marine 1-4	Fire Boat	2008	North River	Good	2	500	N/A
Marine 1-1	Reserve Boat	1996	Apex	Good	2	N/A	N/A
Utility 1-4	Pickup	2012	Ford -350	Very Good	1	N/A	N/A

Figure 175: Camano Island Fire and Rescue Station 5 Major Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 1-5	Type I Engine	2000	Pierce Kenworth	Very Good	3	1,250	1,000
Tender 1-5	Water Tender	2009	Rosenbauer	Very Good	1	1,000	2,900
Aid 105	Ambulance	1995	Horton	Good	2	N/A	N/A

Camano Island Fire & Rescue Comments: Camano Island Fire & Rescue operates a large fleet of 23 fire and EMS vehicles that average over 13.5 years in age. Within the fleet are some older vehicles, including two water tenders that date back to 1983 and 1988. Because of the high number of vehicles, many of which are approaching the end of their service lives, the cost of replacement on a timeline that is appropriate to vehicle age will be costly.

The district maintains its own vehicle maintenance facility, and preventative maintenance practices are in place that are appropriate. The facility is staffed by CIF&R personnel who are appropriately trained and certified Emergency Vehicle Technicians. Repair and maintenance is also provided to other fire agencies in the area. Regular response readiness checks and annual equipment testing procedures are in place and are consistent with standards and best practices.

Camano Island Fire & Rescue Recommendations:

- Review fire apparatus fleet to determine if all vehicles are needed.

Snohomish #15 Apparatus Summary

Figure 176: SCFD 15 Station 60 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 60	Pumper	2004	H&W	Good	4	1,500	750 gal
Engine 60A	Pumper	1996	H&W	Good	4	1,250	750 gal
Rescue	Ambulance	2008	Road Rescue	Good	6	-	-
Tender 60	Tender	2006	H&W	Good	2	1,000	3,000 gal
Chief 60	Staff	1999	F-350	Fair	-	-	-
Battalion 60	Staff	1999	Suburban	Fair	-	-	-
Car 60	Staff	2003	Crown Victoria	Fair	-	-	-

Snohomish County Fire District #15 Comments: There is no documented apparatus and equipment maintenance program nor are there adequate records of maintenance performed. Firefighting components of apparatus maintenance are taken to H&W Fire Apparatus (an apparatus dealer in Hillsboro, Oregon); truck, chassis, and power train maintenance is taken to Kenworth NW (Marysville or Bellingham, Washington). There is no established vehicle maintenance and safety inspection program in place; any such inspection would occur during oil changes, which are accomplished yearly at a minimum or no more than every 5,000 miles; other inspections occur as problems arise.

The Road Rescue vehicle (ambulance) is routinely scheduled at a local automotive facility for oil change service at 5,000-mile intervals. The average age of SCFD15 apparatus is 8.5 years. The District's primary engine and water tanker are relatively new (purchased in 2004 and 2006, respectively) and in excellent condition. The 1996 engine is within four years of what is generally accepted as a maximum service life of 20 years.

Snohomish County Fire District #15 Recommendations:

- Plan for replacement of apparatus and support equipment.

Snohomish #19 Apparatus Summary

Figure 177: Fire District 19 Station 94 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 94	Engine	2005	HME	Excellent	2	1,500	1,200
Tender 94	Water Tender	1987	GMC	Good	2	500	1,800
Aid 94	Aid Car	2006	Ford E-450	Good	2	N/A	N/A
Aid 94A	Aid Car	1996	Ford E-350	Fair	2	N/A	N/A
Utility 94	Utility	2008	Ford E-350	Good	2	N/A	N/A
HC 94	Hovercraft	2009	Neoteric	Excellent	2	N/A	N/A
Air 94	Air Trailer	2007	Bauer	Excellent	2	N/A	N/A

Figure 178: Fire District 19 Station 95 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 95	Engine	1995	HME	Good	2	1,250	750
Tender 95	Water Tender	1991	International	Good	2	500	2,500
Aid 95	Aid Car	2008	Ford F-450	Excellent	2	N/A	N/A

Snohomish County Fire District #19 Comments: District 19 vehicles are in generally good to excellent condition, averaging just over 13 years of age. Engine 95 and Water Tender 95 are the oldest vehicles in the fleet, but their replacement is appropriately scheduled and funding is set aside for use when the time comes to purchase new apparatus.

Preventative maintenance procedures were provided to ESCI for review. They were found to be appropriately developed and annual equipment testing, consistent with applicable standards and best practices, is performed. A single exception is annual testing of ground ladders which is identified in national standards as an annual undertaking. The District has not performed ladder testing in the past but indicates that they plan to do so this year. ESCI recommends that annual ground ladder testing be performed.

Snohomish County Fire District #19 Recommendations:

- Conduct annual testing of ground ladders per NFPA standards.

Snohomish #21 Apparatus Summary

Figure 179: Fire District 21 Station 49 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Rescue 49	Rescue	1999	HME	Good	No min.	N/A	N/A
Engine 49	Type 1 Engine	2002	HME	Good	No min.	1,500	1,000
Tender/ Engine	Tender/ Engine	2003	HME	Good	No min.	1,000	2,850
Tender 49	Tender	2004	Kenworth	Good	No min.	500	3,000
Hovercraft 49	Hovercraft	2009	Neoteric	Good	No min.	N/A	N/A

Snohomish County Fire District #21 Comments:

District 21 has five pieces of rolling stock in its fleet housed at Station 49. The oldest is Rescue 49, which was purchased in 2000 and will be reaching the end of its service life in the next five years. When averaged, the fleet calculates to 11 years, relatively new for a smaller, rural fire department.

District 21 also owns T-94 currently being used by District 19 via an Interlocal Agreement, and E-46A which is stationed at Arlington for their use via the contract for first due response for the south side of the District.

Vehicles are checked for response readiness each week during drill night and major servicing is performed annually. A Department of Transportation safety check is also completed annually. Service for vehicles is contracted to CIF&R and a mobile mechanic service is also used, depending on the nature of needed repairs.

Annual testing of fire hose on the apparatus is conducted, consistent with standards and best practices. Ground ladders are inspected each year but are not tested and fire apparatus pumps receive a flow test bi-annually. Pump and ladder testing should be performed annually per NFPA standards.

Snohomish County Fire District #21 Recommendations:

- Conduct annual fire pump flow testing and testing of ground ladders.

Snohomish #24 Apparatus Summary

Figure 180: Fire District 24 Station 39 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
3901	Rescue	2001	Ford	Good	2	50 g/m	300
3902	Engine	1997	Freightliner	Good	2	1,250	1000
3903	Engine	1979	Ford	Fair	2	1,250	1000
3904	Tender	1988	International	Fair	1	750	3000
3905	Engine	1984	Ford	Fair	2	1,250	1000
3908	Squad	1984	Ford	Poor	1	N/A	N/A
3911	Aid	1994	Ford	Poor	2	N/A	N/A
3912	Aid	1990	Ford	Fair	2	N/A	N/A

Figure 181: Fire District 24 Station 38 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
3801	Rescue	2000	Ford	Good	1	50 g/m	300
3802	Engine	1997	Freightliner	Good	2	750	1470
3803	Engine	1980	Ford	Poor	2	1250	1000
3804	Aid	2004	Ford	Good	2		
3805	Aid	2003	Ford	Good	2		

Snohomish County Fire District #24 Comments:

District 24 has twelve vehicles, some of which are aging. The fleet averages just under 22 years of age with a number of vehicles that exceed 20 years in age and two that are 33 and 34 years old. While the district lists apparatus as being in good to fair condition generally, the age of the vehicles alone is of concern.

Preventative maintenance is performed largely on an as-needed basis, absent a structure maintenance schedule. Routine repairs and maintenance are performed by fire department members and more complex issues are taken to CIF&R's facility for servicing. At a minimum, it is recommended that a routine preventative maintenance schedule be established.

National standards and best practices require that annual testing be conducted on fire apparatus pumps, fire hose and ladders. These tests are not completed by the district and are highly recommended.

Snohomish County Fire District #24 Recommendations:

- Develop a preventative maintenance schedule for vehicles.

- Conduct annual fire pump testing.
- Conduct annual fire hose testing.
- Conduct annual ground ladder testing.

North County RFA Apparatus Summary

Figure 182: North County RFA Station 90 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 90	Type I Engine	2005	Pierce	Good	3	1,250	1,000
Medic 90	Ambulance	2008	Ford	Good	2	N/A	N/A
Tender 90	Water Tender	1993	Freightliner	Good, aging	2	500	2,850
Utility 90	Pickup	2003	Ford	Good	1	N/A	N/A

Figure 183: North County RFA Station 92 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 92	Type I Engine	1996	Freightliner	Fair	2	1,250	1,000
Brush 92	Brush	1989	Ford	Fair	2	135	300

Figure 184: North County RFA Station 96 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Aid 96	Ambulance	2004	Ford	Fair	2	N/A	N/A
Tender 96	Water Tender	1998	International	Good	2	1,000	2,850
Brush 96	Brush	2010	Ford	Excellent	2	160	300
Gator 96	ATV	2010	John Deere	Excellent	2	N/A	N/A

Figure 185: North County RFA Station 97 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 97	Type I Engine	1995	Spartan	Good	2	1,500	1,000
Medic 97	Ambulance	2008	Ford	Excellent	2	N/A	N/A
Tender 97	Water Tender	1998	International	Good, aging	2	1,000	2,850
Boat 97	Boat	2002	Silverstreak	Good	2	N/A	N/A
Aid 97	Ambulance	2010	Ford	Excellent	2	N/A	N/A

Figure 186: North County RFA Station 99 Apparatus

Apparatus Designation	Type	Year	Make/ Model	Condition	Minimum Staffing	Pump Capacity	Tank Capacity
Engine 99	Type I Engine	2007	HME	Good	3	1,500	750
Medic 99	Ambulance	2005	Ford	Good	2	N/A	N/A
Ladder 99	Aerial	1996	Pierce	Good	3	1,500	350
Engine 99A	Type I Engine	1995	Freightliner	Good	0	1,500	750

North County Regional Fire Authority Comments: With six fire stations, and because ambulances are included, NCRFA has a large number of emergency vehicles, totaling 23, exclusive of staff and support vehicles. Averaging about 11 years, the fleet is relatively young, with the exception of a 24-year-old brush vehicle and a 20-year-old water tender.

Appropriate preventative maintenance practices are in place in NCRFA. Annual testing of fire pumps, hose, ladders and the aerial apparatus is appropriately completed in compliance with national standards.

North County Regional Fire Authority Recommendations:

- No recommendations.

Future Opportunities for Collaborative Efforts

Processes for Collaboration

The possible efficiencies this study identified can be categorized using an escalating level of cooperation between districts, RFAs, and a city. Those general partnering options fall in a range from remaining autonomous to the creation of a new organization encompassing two or more agencies.

General Partnering Options

A number of policy options exist for integrating the fire and emergency services of the participating agencies. The various partnering options are described, beginning with a do-nothing approach and ending with complete consolidation of the agencies into a new emergency service provider. The following alternatives will be evaluated and discussed:

- Maintain status quo
- Administrative consolidation (contractual)
- Functional consolidation (contractual)
- Operational consolidation (contractual)
- Full merger (statutory)
- Annexation of a city into a fire district
- Regional Fire Authority (statutory)

Status Quo

This is a do-nothing option. While typically viewed negatively, in some cases the best action is no action. In this case, maintaining status quo means that essentially nothing changes. The participating agencies remain as they are today, as neighboring agencies who occasionally call upon each other for assistance, but remain completely independent.

The advantages of this approach are that it is the easiest option to implement, creates the least amount of work or stress on the organizations, and does not necessitate any reorganizing. One additional consideration is that it maintains local control. That is, the currently elected boards and councils continue to oversee their individual agencies as their electorate desires, without the complication of considering the views of a different constituency.

The disadvantages of this approach are that the current fiscal difficulty facing the agencies is not changed, the opportunities for efficiency (either financial or service level) through greater

collaboration are not realized, and some duplication and overlap continue. In today's environment, taxpayers typically hold their elected officials accountable for delivering a quality level of service at an affordable rate, and expect creative thinking to solve problems or achieve those ends. While "maintaining the status quo" is easy and involves the least amount of impact to the agencies, it may well be one of the riskier decisions to make politically.

Administrative Consolidation

An administrative consolidation occurs when two or more agencies maintain their separate legal status and separate operational elements, but combine some or all of their administrative functions. Examples include combining the administration under one fire chief and combining clerical, HR, IT and/or Financial functions while maintaining separate operational activities. An Administrative Consolidation is accomplished legally through an Interlocal Cooperation Agreement between the agencies.[39] There are no limitations regarding crossing county lines.

The advantages of such a model include reduced overhead costs by eliminating administrative duplication; a gradual alignment of otherwise separate operations under a single administrative head; less resistance to change by the rank and file in the operational elements than other consolidation options; and singularity of purpose, focus, and direction at the top of the participating organizations. This option lends itself well to a gradual move toward a single, consolidated agency where differences in attitude, culture, and/or operation are otherwise too great to overcome in a single move to combine.

The disadvantages include potential conflicts in policy direction from the various boards and councils; potentially untenable working conditions for the fire chief ("one person, multiple bosses"); and increased potential for personnel conflict as separate employee groups vie for dominance/supremacy.

Functional Consolidation

Functional consolidation is when the participating agencies continue to exist separately, but they combine certain functions into a common resource, such as combining training divisions into one single division for all agencies. Implementing this option requires alignment of standard operating guidelines, policies, procedures, and certain operational aspects to make the consolidated function perform properly. A structure of shared decision-making is typically created as they relate to the consolidated function(s). This requires policy-makers and

[39] RCW 39.34.030.

administrators to voluntarily forfeit their authority to unilaterally change actions, activities or direction in the consolidated function area in favor of a collaborative approach. A Functional Consolidation is accomplished legally through an Interlocal Cooperation Agreement between the agencies.[40] There are no limitations regarding crossing county lines.

The advantages of this option are greater opportunities for efficiency; an opportunity to reinvest redundant resources into those areas lacking in resources (e.g., transferring redundant training officers back to a line (operations) function, increasing line strength); and a closer working relationship between members of the agencies in the consolidated function(s) that can spill over to other unrelated activities in the otherwise separate agencies. This type of consolidation may segue to greater levels of cooperation. Barriers can be broken down as members of each agency realize that the other agencies' members "aren't so bad after all".

The disadvantages are that functional consolidations require a much greater collaboration between the participating agencies than the previously discussed partnering options; numerous details must be worked out in advance of such a consolidation, including but not limited to, work rules, employee assignments, compensation, office location, logos, asset allocation, authority, and even the name of the consolidated function. Further, independence and autonomy are lost in the consolidation areas, spilling into other seemingly unaffected areas.

Operational Consolidation

This partnering option takes the next step in the continuum of closer collaboration. In this case, all operations are consolidated under a single organization that serves all participating agencies. The agencies remain independent organizations from a legal/political/taxing standpoint; but from a service level standpoint, the organization operates as one agency. An Operational Consolidation is accomplished legally through an Interlocal Cooperation Agreement.[41] There are no limitations regarding crossing county lines.

This option requires a significant commitment toward a full consolidation and is usually done as a last sequential step toward full consolidation as the administrations and policy-making bodies work out the last details. The level of trust required to implement operational consolidation is very high, since independence and autonomy have been willingly relinquished in favor of the preferred future state of a full consolidation.

[40] RCW 39.34.030.
[41] RCW 39.34.030.

The advantages of this form of consolidation are that the greatest opportunity for efficiency is typically in the operational element where service is delivered to the communities; and the level of trust and cooperation required to make implementation of this option successful implies a near-readiness to take the next step to full consolidation.

The disadvantage is that administrators and policy-makers must share power and gain consensus where they once had unilateral authority to control and implement.

Full Merger

A merger is a complete combining of the participating fire districts (cities are not able to merge with districts) agencies into one agency. There are no limitations regarding crossing county lines. One or more fire districts are absorbed into and become part of the surviving district. Fire districts merging into a surviving district are referred to as the merging agency(s) and the surviving district is referred to as the merger agency. The employees of the merging agency(s) are transferred to the merger agency, and the elected officials are brought into the merger district and are reduced over the next three regular elections until the board of fire commissioners is down to three or five depending on the structure of the merger district board.

A merger would require a decision on which agency will be the merger district and which agency(s) will be the merging district(s). The merger is subject to review by the Boundary Review Board if jurisdiction is invoked by an affected governmental agency, if a petition is submitted by 5 percent of the affected population requesting review, or if three members of the Boundary Review Board request review.[42]

Once a decision to merge is made by the merging district board(s), a merging district(s) must submit a petition to merge to the merger district. If the merger district accepts the petition and terms of the proposed merger, it adopts a resolution accordingly and sends the resolution, along with the original petition, back to the merging district board. The merging district board then adopts a resolution requesting the county auditor to call a special election in the merging district. A simple majority determines the outcome of the election. If the majority votes yes, the respective district boards adopt concurrent resolutions declaring the districts merged under the name of the merger district.

The board of fire commissioners of the merged district shall consist of all of the fire commissioners of the merging district(s). The combined board will then be reduced by one

[42] RCW 36.93.100.

whenever a fire commissioner resigns from office or a vacancy otherwise occurs on the board, or during regular elections until the board reaches three or five members, whichever structure the merger district has. The election for merger may also establish commissioner districts if unanimously approved by the boards prior to the merger vote and is included in the ballot language for merger. In this case, the same process of board member reductions occurs as if no commissioner districts were formed until the merged board is reduced to the three or five members. At that point, the commissioner districts shall be drawn and used for the election of the successor fire commissioners.

Annexation

A city may be annexed into a fire district for the purposes of receiving fire protection services. An annexation into a fire district expands the boundaries of the fire district to include the current and future boundaries of the city. The city boundaries do not change as a result of annexation. The city simply transfers its responsibility for fire protection and EMS services to the fire district. The city does not hold any authority of the governing board in this case. However, once annexation occurs, city residents and original district residents are equally eligible to run for office as a fire commissioner. Commissioner Districts can be created, guaranteeing representation from within a city if the district were created accordingly. Annexation does not affect any other authority of the city.

The city's maximum allowed tax levy rate is reduced by the actual tax levy rate of the fire district. Although the city's tax capacity may be reduced by the amount of the district's tax levy, depending on the city's tax rate, this may or may not decrease the City's actual tax levy.

Current Property Tax Levy Rates:

City 1.89	Maximum allowed	$3.60
Fire District 1.00	Maximum allowed	$1.50

City Annexes into District:

Fire District levy 1.00

City tax capacity 2.60 (calculated as follows $3.60 – 1.00)

There are no statutory requirements that a city being annexed by a fire district must transfer its fire department assets. The city may retain its fire stations, for example, and lease them to the district at a nominal rate. RCW 52.04.111 through .131 provide for the transfer of city fire fighters to the district in the event of the annexation of the city by the district. These statutory

provisions should be reviewed in detail prior to the initiation of annexation proceedings to ensure that the rights of all parties will be protected and to further ensure compliance with the statutory requirements.

Regional Fire Authority

An alternative to a merger is the formation of a Regional Fire Authority (RFA). An RFA is a new entity whereby fire agencies, whether districts or cities or a combination, fall under this new structure with a new tax base, a new operational plan, and a new legal framework.

If agencies contemplate forming an RFA, it is usually wise to begin meeting informally to discuss and address issues in advance of initiating the first formal step in the process. Most successful efforts start with establishing exploratory or steering committees composed of a wide variety of stakeholders to determine the feasibility of creating an RFA far in advance of forming the actual Planning Committee. Should the decision be made to move forward with RFA formation, the first legal step is the formation of a Planning Committee, considered to be the most important component of the process. The Planning Committee is charged with establishing the RFA Plan, which specifies how the RFA will be funded, operated, and governed. The RFA plan should be considered the “charter” or “constitution” of the new agency.

The Planning Committee is comprised of three elected officials appointed from each of the participating agencies, assuring an equal voice in the decision-making process for everyone involved. Moving forward with the formation of an RFA also requires approval by all of the affected governing bodies prior to the initiative being put before the voters. The Planning Committee composition, responsibilities, and procedures are discussed in further detail in the legal considerations discussion, below.

Funding Mechanisms

A key consideration of the RFA formation decision is that of funding. The RFA Plan will identify funding sources that may include some or all of the following:

- Fire levies
- EMS levies
- Excess levies
- Benefit charges
- Bonds for capital purchases

Facilities and Equipment

The ownership or transfer of ownership of capital assets is not prescribed by law and will be determined by the Planning Committee. Although ownership of facilities and equipment will most likely be transferred to the newly formed RFA, the responsibility for bonded indebtedness for capital assets will remain that of the originating agency until the debt is satisfied.

Staffing and Personnel

Under a Regional Fire Authority configuration, employees and members of the agencies joining forces in the RFA become employees and members of the new organization, including career and volunteer personnel. Unless otherwise declared in the process of forming the new Authority, employees will retain the rights, benefits, and privileges that they had under their pre-existing collective bargaining agreements.

Roles and responsibilities assigned to agency personnel may change in a newly formed RFA when modifications are necessary in the interest of service delivery requirements. For this reason, involvement of labor and volunteer organization representatives from the onset of the process is essential.

Governance and Administration

A Regional Fire Authority is governed by a single governance board. The number of board members and the length of their service terms is determined by the Planning Committee. The statute authorizing the formation of an RFA does not place limitations on the number of members serving on the board, leaving that decision to the Planning Committee and, ultimately, the voters. ESCI is familiar with one RFA where there are nine board members.

Administration of the new Authority, once established, becomes the responsibility of the newly established governing board. The Planning Committee, however, will include in its body of work identification of the composition of the RFA's administrative staff. The fire chief and his/her command staff, as agreed to by the Planning Committee, will subsequently report to the governing board.

Legal Considerations

A number of important legal considerations must be taken into account in the formation of a Regional Fire Authority. They are summarized below:

Fire Protection Jurisdiction – Only "fire protection jurisdictions" may participate in the formation of an RFA. RCW 52.26.020 defines fire protection jurisdictions as "fire district, city, town, port district or Indian Tribe." It is important to recognize that Tribes could elect to participate in the RFA as full participants in this study or elect to allow fire districts that serve them to represent their interests as their current provider of fire services.

Regional Fire Protection Service Authority Plan – Planning Committees are tasked with forming the RFA Plan. The RFA Plan outlines the plan for governance, financing, operations, boundary changes, and other considerations and is the Plan that the voters are asked to approve when voting on the formation of the RFA.

Formation Procedures – Like any other type of significant consolidation, the formation of RFA requires careful planning. Because the RFA creates a new entity, there is an added layer of complexity to the planning. The new entity will need to register with the Internal Revenue Service (IRS), establish new accounts with the County and vendors, contracts will need to be assigned and negotiated, labor agreements need to be negotiated, payroll systems may need to be established, and so on. In other words the formation of a new entity can be incredibly time intensive and attention to detail is critical. The formation of an RFA is not subject to review by a Boundary Review Board or a County legislative authority. The formation of an RFA is, however, likely subject to compliance with the State Environmental Policy Act "SEPA". Legal counsel familiar with RFAs should be obtained to guide policy-makers in the process.

The advantages of this option are that it allows agencies to retain the strengths they bring to the new agency, minimizes the weaknesses of each agency, and may allow for establishing new "best practices" not currently provided by any of the participating agencies alone; it facilitates a contemporary look at services, resources, and costs, finding the right balance for the community; it retains (or has the potential to retain) all of the policy-makers of the participating agencies in a governing board, thus utilizing the vision and commitment that initiated the implementation of this option; creates an opportunity to "right-size" the revenue with the cost of operation; and provides an active role for the citizens being served in setting their service level and costs.

The disadvantages of pursuing this option are the loss of autonomy; the loss of a familiar structure (although RFAs operate almost identically to a fire district); the investment of time and

effort to develop an RFA plan can be rendered moot by the voters; and funding options are not significantly better for RFAs than they are for fire districts.

There are numerous configuration options with an RFA. In addition to Tribal participation, Camano Island can participate even though it is in a separate county. There are no limitations regarding crossing county lines.

Strategies for Shared Services

In the following section, the four broad operational goals and four governance (policy) strategies for shared services are detailed and their feasibility is evaluated.

The operational goals are able to be developed and implemented operationally by the fire chiefs of the participating agencies once approval is given by their policy-makers. ESCI feels these four operational goals, if implemented, will provide substantial efficiency and flexibility for all seven agencies. Further, they work to complement the four governance strategies by aligning the operational aspects of all seven agencies, reducing differences between potentially combining agencies.

The four governance (policy) strategies fall within the purview of the elected officials and require their active involvement to come to fruition. This is not to say the fire chiefs don't have a role, but the issue of governance is clearly within the realm of policy-makers who perform the bulk of the "heavy lifting" for these strategies to be seriously considered. The fire chiefs act as support staff to the elected officials in this regard.

The decision to establish a single regional agency with all seven of the participating agencies is a daunting task. A single combined agency will be complex and challenging to accomplish in the near term. The complexities currently facing many of the agencies make a single combined agency where there were once seven separate agencies an extremely low likelihood of success in the near or mid-term. Multiple, smaller partnerships and collaborative efforts are less complex to implement as initial steps toward what may become a larger fire agency in the future. ESCI focused on the feasibility of smaller combinations as a strategy to incrementally move the region to a point where the agencies can at that time consider whether to take the next step of forming a single "mega-agency" in the future. To weigh the various approaches, ESCI identified two key considerations that must be incorporated into the analysis.

Sustainability

The first factor to consider in evaluating the operational goals and governance strategies is that of containing costs and/or reducing them. In conducting our fiscal analysis, four of the participating agencies are projected to have expenses exceed revenues within the next five years; three of those four are also projected to see declining fund balances within the same timeframe. Arlington Fire Department does not have a fund balance account since the city has its own reserve fund to address unforeseen costs for all city services. Any partnership should

be evaluated by its positive or negative impact to the projected fiscal condition, avoid future costs, improve efficiency, or eliminate redundancies.

Service Delivery

The second factor which must be included in the evaluation is the service level the participating agencies currently provide as compared to any service level enhancement opportunities gained through a partnership. Typically, this is viewed as the emergency response delivery system. However, other services such as training or maintenance functions also fall under service delivery.

Fire stations need to be located strategically so responders can reach into their response areas within an acceptable time frame. Stations should also be sited in a manner that provides adequate overlaps in coverage while avoiding excessive redundancy. The fire stations for each agency are located to provide an acceptable level of service to their existing service areas. However, they do not take into account potential resources available from neighboring agencies.

Along with station locations, staffing of facilities will impact response performance and reliability. Not only is the number of assigned personnel at each station important, but also whether the responders are present at all times or responding to the station as volunteers. Most of the agencies participating in this study rely heavily on volunteers. Maintaining an adequate pool of firefighters is critical to successful service delivery.

With the above in mind, the operational goals and governance strategies presented are designed to leverage the advantages of improved service delivery while identifying opportunities for increased efficiency wherever possible. However, ESCI recognizes that service delivery and its future sustainability must be viewed with equal importance.

Operational Goals

Goal 1 – Consolidate Agency Training Programs into a Single Training Division

Standardization of operations benefits all agencies in areas such as equipment purchases, emergency incident interoperability, and relationship building. This can best be accomplished by combining training efforts. This has the added benefit of leveraging each agency's individual efforts, making what is impossible to achieve individually very achievable collectively. This goal drives standardization throughout the individual agencies.

Work Groups Assigned

Administration, Operations, Labor, Volunteers

Timeline for Completion

Mid-Term

Section

Training

Affected Stakeholders

All Agencies

Summary - Training

Responsibility for fire department training programs is often assigned to either one person or a group of people. Two classic forms of providing training are: 1) a training division with assigned personnel or 2) a company officer assigned training responsibilities in combination with regular duties.

Historically, the training programs for participating agencies in Snohomish County have been managed and operated independent of one another. Multiple assignments given to training officers also tend to underscore the difficulty faced by many officers in trying to balance staff responsibilities. The Snohomish County Training Officer's Association has been effective in coordinating training efforts to the extent they can, but this can be further improved and coordinated. The association can play a significant role in forming a regional training center or regional training division.

With the creation of a single training division, the personnel used to perform collateral duties will be positively affected. As specialists it will take fewer individuals to conduct training than is currently required by the fire departments individually. Further, shared resources also means shared costs, reducing expense across the collective group.

Discussion - Training

To varying degrees, most fire department training programs display strengths and weaknesses. The weaknesses are commonly a result of a basic problem influencing many agency training officers – multiple responsibilities and a lack of time to "do it all", forcing the training officer to juggle job responsibilities, which at times seem overwhelming.

Training officers typically recognize that company officers need to have the knowledge and skills necessary to be successful in supervisory, management, administrative, and executive positions. To provide the necessary knowledge and skills, an Officer Development Program must be adopted. However, a lack of time to research, plan, develop, and conduct the training appears to be an insurmountable challenge for each agency. Collaborating on this effort increases efficient use of existing resources, enabling additional capacity to be created, thereby facilitating the development of such a program.

Given the resources and expertise within the agencies, there exists an opportunity to eliminate duplication by consolidating the training programs. The mission of the training division would be to coordinate the administration, management, and delivery of the training program for all participating departments/districts. Combining the existing fiscal resources being invested individually, as well as supplies, services, and personnel resources would provide greater efficiency of effort.

Guidance - Training

- Establish a single training division.
  - Develop a training manual with the best practices of the participating agencies but at least compliant with Washington State or IFSTA standards.
  - Pool the training resources of all seven agencies to deliver the training curriculum to all personnel. Evaluate duplication and inefficiency, adjusting as experience dictates.
  - Provide adequate training facilities and office space for training staff initially. After experience has informed the agencies of what a central training facility must accommodate, begin long-range planning for a centrally located training center.
  - Establish a chief training officer, who should report to a User Advisory Group made up of the chiefs or their designees for each participating agency.
  - A chief training officer should have overall training program administration, supervision, and management responsibilities.

- Adequate personnel to administer and provide training for:
  - A joint recruit academy.

- Skills maintenance training for Firefighter I and II, and Fire Officers.
- Officer level training and officer development.
- Apparatus operator/engineer skills and engineer development.
- Administration and coordination of the emergency medical services training and recertification program.
- An RMS (records management system) for tracking individual, company, and department training.
- Adequate clerical support staff.

Critical Issues – Training

- Select a highly respected and highly qualified individual to head the Training Division. This selection may be one of the single most critical decisions affecting other collaborative efforts, since alignment of organizational systems usually involve standardized training.
- The variations between current programs used by the participating agencies may initially require personnel to receive additional training. Managing sensitivity to this issue requires that all personnel go through foundational training to ensure a standard capability.
- Personnel involved in the development of a combined training manual should also be involved with development of mutual training strategies.

Fiscal Considerations - Training

- Increased efficiencies by eliminating duplication of staff effort in managing individual department training programs.
- Potential for increased instructional capacity through pooled instructors.
- Cost of purchasing any additional training aids might be offset by liquidating duplicate equipment.
- Maintenance and capital replacement costs should be a shared cost for all agencies.

Goal 2 – Logistics

This goal reflects two parallel areas for collaboration: logistical support such as inventory and warehouse management, and fleet maintenance. Each is discussed in greater detail below.

Work Groups Assigned

Finance, Logistics, Labor, Volunteer, Administration

Timeline for Completion

Mid Term

Section

Logistics or Support Services

Affected Stakeholders

All Agencies

Summary – Logistics

Throughout nearly every public or private emergency preparedness institution, the state of readiness and effectiveness is highly dependent upon logistics. Logistics assures the materials necessary to keep an agency operational and functioning are available when needed. Each agency participating in this study provides some form of logistical support whether formally created or not. Support offered under a combined logistics division can be modular and may include:

- Standardization of apparatus, equipment, and Personal Protective Equipment
- Standardization of fire/EMS/rescue supplies
- Centralized purchasing, warehousing, and distribution of inventory
- Centralized fleet and equipment maintenance (whether provided or contracted)
- A preventative and safety maintenance program for facilities, apparatus, equipment, and other physical assets

The purchasing program can create much more competitive bids for supplies and equipment for all agencies and can achieve additional benefits such as integrated inventory of supplies that can warehoused, bypassing lag times in deliveries from manufacturers and suppliers.

Discussion – Logistics

At the heart of any fire department are the activities and functions that support the delivery of emergency services. A logistics division keeps agency assets in operational readiness and ensures that enough supplies, tools, and equipment are available for emergency workers to

mitigate the emergency. The participating agencies in this study dedicate a certain level of daily effort in maintaining emergency apparatus and equipment.

Although emergency services providers, the participating agencies are also businesses that spend tens of thousands of dollars each year to ensure emergency mission readiness. Like all businesses, fire departments need to be receptive to new practices to maximize the effectiveness of budget dollars. Such practices may take the form of economies of scale, administrative efficiencies, paperwork reduction, technological advances, and innovative cost saving concepts.

Acquiring and maintaining physical assets (facilities and grounds), IS/IT systems, vehicles, and equipment is a labor-intensive process requiring good policies and attention to detail. The procurement and distribution of routine supplies is also an important behind-the-scenes process that needs hands-on work and meticulous record keeping. These support services are currently provided by a variety of personnel in the agencies, some are support and some are management. Filling the demand for logistical services is a constant necessity in any organization and vital to ensure the operational readiness of the agency. Key elements of a combined logistical services division are:

- Assessment of current assets.
- Assessment of current levels of support service activities.
- Standardization of apparatus, equipment, and supplies.
- Standardization of preventative maintenance programs and recordkeeping.
- Centralization of apparatus and equipment repair and maintenance.
- Provisions for mobile repair and maintenance services during emergency incidents.
- Centralization of supply and equipment acquisition, warehousing and distribution.

As listed above, a key to realizing the benefits of shared support services is standardization of apparatus, equipment, and supplies. In this process alone, standardization assures greater financial and operational efficiency and effectiveness. This is the most important aspect of forming a combined logistics division.

Standardizing specifications for the purchase, repair, and maintenance of apparatus, self-contained breathing apparatus (SCBA), communication devices, Personal Protective Equipment (PPE), and miscellaneous equipment often equates to less out-of-service time. Support personnel will need to be certified for repairing and maintaining fewer apparatus and equipment

types. Fewer parts need to be stocked for repair and maintenance. These economies of scale accrue to the benefit of each participating agency.

NFPA 1911 points out that repairs by qualified technicians may provide longer apparatus life, safer operations, and the early detection of maintenance and repair problems.[43] The result is often short and long-term savings on rolling stock and small equipment. A centralized repair and maintenance facility cooperatively organized or cooperatively contracted out to a qualified agency or company ensures that routine maintenance and repairs of physical assets are completed in a timely manner. Maintaining public assets in this way is a demonstration of good stewardship.

The standardization of apparatus, equipment, and supplies plays strongly into the overall effectiveness and efficiency of daily emergency operations. Standardized support functions are a key part of unified emergency operations and response.

A multi-agency purchasing program could improve management of the agencies' supply chains and lends itself well to expansion to other agencies in the region for even greater efficiency. In theory, the agencies would collectively create or contract for a logistics center to manage procurement, warehousing, and distribution. The logistics center would work with each of the agencies to standardize supplies and equipment. The program would follow state and organizational purchasing guidelines and make supplies and equipment available to all of the member agencies.

Distribution can be managed internally or through agreements with suppliers to gain the advantages of collective purchasing and supply: 1) a larger collective bid process for supplies can achieve lower prices and attract additional competitors, 2) the logistics center can negotiate terms of the conditions of the sale that might not be available to smaller purchasing centers, and 3) it can conduct collective bidding processes that are applicable to all of the agencies.

Critical Issues – Logistics

- Coordination issues
  - A cross-functional group must be assigned and work together to design standardized purchasing rules for each participating agency.
  - The group must provide a standardized equipment list for the agencies.

[43] National Fire Protection Association, *Standard 1911: Standard for the Inspection, Maintenance, Testing, and Retirement of In-Service Automotive Fire Apparatus*, 2007 Edition.

- The agencies must establish a single bidding process so that the bidding procedure used by the purchasing agent can be used by all agencies.
- A single logistics chief should be identified and should report to a User Advisory Group made up of the chiefs or their designees for each participating agency.to ensure that the goods are received and distributed to the appropriate location.
- Fire agencies should have agreements in place to specify inventory and purchasing plans.
- Fleet maintenance should be managed and staffed by qualified and certified Emergency Vehicle Technicians.
- Weigh the value of outsourcing apparatus maintenance.
- Explore the opportunity to share reserve apparatus, liquidating excess apparatus.

- Receiving and distribution issues
  - Fire agency partners should design distribution plans to deliver goods directly to the appropriate location. Using a joint purchasing system, the agencies will no longer have to receive goods at the agency; instead, they can receive goods at the central warehouse for storage. At the point of utilization, the appropriate amount of on hand supplies can be delivered to the appropriate station or ambulance location, thus reducing storage space requirements at these facilities.
  - The agencies can jointly determine the proper level of inventory to maintain within the system. The use of system-wide inventory planning ensures that the most cost-effective inventory management can be established for the system participants. This is referred to as "Just-In-Time" Inventory. To a great degree, a just-in-time inventory process relies on the efficient monitoring of the usage of materials and ordering replacement goods that arrive shortly before they are needed. This simple strategy helps to prevent incurring the costs associated with carrying large inventories of raw materials at any given point in time.

Guidance – Logistics

- Develop a system-wide, cross-functional group to explore a joint purchasing process.
- Work with elected officials to adopt purchasing policies that help the agencies meet purchasing goals and guidelines.
- Establish standards for fire and EMS system equipment and supplies.
- Establish inventory standards and methods for distributing equipment and supplies.
- Develop specific standards for apparatus, equipment, PPE, SCBA, communication equipment, and supplies.
- Inventory and evaluate current physical assets, apparatus, equipment, and operational/facility supplies.
- Evaluate current levels of support functions and identify successful elements to incorporate into the joint program.
- Determine the most efficient and effective location for logistics to be housed.

Fiscal Considerations – Logistics

- Marginal costs of creating system-wide purchasing infrastructure should be compared against the reduced level of effort of individual agencies.
- Financial support may be necessary, as the agencies will be required to meet the costs of creating or modifying existing logistics systems.
- The soft costs generated by cross-functional group meetings necessary to accomplish objectives of the program.
- New, additional, or reassigned FTEs to operate support service functions.
- Incremental costs of transitioning to standard apparatus, PPE (Personal Protective Equipment), SCBA (Self-Contained Breathing Apparatus), and small equipment.
- Potential costs for conversion of an existing facility or acquisition of a new facility for a logistics center.
- Expected cost savings and operational benefits will result from:
    - Elimination of duplication of services, administration, supplies, parts, and equipment.
    - Standardization of equipment, parts, and operational/facility supplies.
    - Effective acquisition, accountability, and distribution of supplies and equipment.
    - Bulk purchasing.
    - Preventive maintenance of physical assets, apparatus, and equipment for optimum safety and readiness.

Goal 3 – Combine Volunteer Services

This goal creates a consortium of employers which pools all volunteer efforts in all seven agencies into one program and one pool of resources to be used by all agencies.

Work Groups Assigned

Volunteer, Administration, Operations

Timeline for Completion

Mid Term

Section

Emergency Operations

Affected Stakeholders

All Agencies

Summary – Volunteers

All participating agencies significantly rely upon volunteers to provide emergency services to the communities. By combining these critical resources into a single resource pool, the currently separate groups can be combined and expanded to provide greater benefit to the entire region, while reducing the administrative and training workload currently expended maintaining the separate groups. Part-time firefighters are also considered volunteers, receiving a stipend for shifts they work. Where volunteers are mentioned below, it refers to community volunteers as well as part-time firefighters.

Discussion – Volunteers

There are many similarities between the agencies on how the volunteers are used. However, there are slight differences between programs. Each agency has the same end goal: sufficient, qualified volunteer firefighters available for emergency responses regardless of when the incident occurs. Most of the agencies use part-time firefighters who are given a stipend. Snohomish #21 and #24 rely on community volunteers and do not use part-time firefighters. One issue they all have in common, however, is that recruitment of volunteers requires constant attention.

A volunteer recruitment effort can be established in partnership with local high schools, potentially including creditable coursework at the school or at the fire station. Recruiting opportunities exist during large community events, and a consolidated effort by all of the participating agencies makes this task easier to perform. Seeking information from volunteers

who leave the organizations is a good way to determine what types of program adjustments need to be made to attract and retain volunteers.

Non-combat, support volunteers are also a potential resource that all agencies can take advantage of. There are numerous citizens in the communities who would enjoy interaction with others with similar interests, who may not have any interest or ability to actively fight fires, but who could assist administratively, during community events, or in support of other important activities.

With such a large need for part-time firefighters across the region, pooling them and establishing a common standard is essential to maintaining the resource and improving efficiency. A common handbook for all volunteers can be developed by an inter-agency group, likely training, operations, and incumbent volunteers formerly from each fire department/district. This establishes a standard approach to volunteers, which begins setting the stage for formally combing the groups.

The next logical step is conducting a single volunteer recruit academy, training all volunteers together, and breaking down barriers of affiliation (a sense of belonging to one agency over the others).

Critical Issues – Volunteers

- There must be no tolerance of incumbent volunteers subordinating all other agencies to the one he/she previously belonged to. They are part of the solution and cannot be allowed to become part of the problem.
- Careful legal analysis must be sought to avoid issues with total number of hours worked by each person, which may jeopardize their status as a part-time employee.

Guidance – Volunteers

- Actively include current volunteer leadership in the discussion.
- Gather senior volunteer leadership together and help them to bond and problem-solve. Give them leadership responsibility for implementing the volunteer pool.
- Seek opportunities to celebrate small successes. Develop as many non-monetary incentives as possible.
- For part-time firefighters, the group making up this pool should manage itself in terms of coordinating assignments to various fire departments/districts.

Fiscal Considerations – Volunteers

- No significant financial considerations.

Goal 4 – Implement Peak Activity Units (PAUs)

This goal takes advantage of multiple agencies' potential for reassigning one firefighter together with firefighters from the other participating agencies to a single unit deployed dynamically. The unit is assigned as an additional resource for all participating agencies based on statistically busy times and locations, as well as covering holes in coverage for agencies participating in training.

Work Groups Assigned

Volunteer, Administration, Operations, Labor

Timeline for Completion

Mid Term

Section

EMS and/or Emergency Operations

Affected Stakeholders

All Agencies

Summary – PAUs

Staffing is usually the single most expensive resource a fire agency has, and is therefore usually in the shortest supply. One of the difficulties is that firefighters travel in teams, so it is expensive to create a single team to staff a unit. However, agencies sharing in the cost of the personnel necessary to staff a unit make that unit much more affordable. Placing that unit in service only during the most statistically busy times of the day and week make the unit that much more efficient. These units can be a fire engine, ambulance, multi-purpose squad, or ladder truck. Regardless of the type of unit it is, what makes it unique is the way it is deployed and staffed. They are referred to as Peak Activity Units, or PAUs, and can be staffed by volunteers, part-time firefighters, or full-time career firefighters. The latter requires bargaining the hours and working conditions under which the unit is staffed. A modified version of this concept could be used between NCRFA and AFD as they each back-up the other for ALS transport units. A single unit could be added to both agencies, requiring shared staffing on this unit as well as expense and revenue sharing for that unit.

Discussion -- PAUs

A PAU can be staffed for a scheduled event, for periods of peak demand, or to cover a response zone while other fire personnel attend training. Adding PAUs as an ***adjunct*** to

existing staffing patterns adds flexibility to fire department emergency operations. In this case, it is not limited to one jurisdiction, but can move to where the need is, across all seven jurisdictions.

A traditional fire company is staffed and continuously available 24 hours per day to respond to emergencies. Move-ups (the repositioning of a fire company to cover understaffed response zones due to emergencies or training) have been a long-standing practice for many fire departments. Only recently as a result of more powerful analytical tools have some fire departments become more aggressive with move-ups, spawning such terms as "dynamic redeployment," "system status management," and PAUs.

For the purpose of this discussion, we assume that a PAU would be operated by two personnel and would be made available for response 12 hours per day, six days per week, although it can be placed into service in various work period configurations. A PAU can be activated for a scheduled event, for periods of peak demand, or to cover a response zone while other fire personnel attend training. It should be noted that a PAU would have staff assigned that may work a different schedule than the hours worked by typical firefighters. An example of this type of staffing schedule is shown in the figure below. In this example, a total of four personnel (two officers and two firefighters) work a 48-hour work week. Each person is assigned two 12-hour shifts and one 24-hour shift. Under this arrangement when working a 24-hour shift, it is possible that a person could be assigned to fill a vacancy of another company during the second 12 hours (the back half of the shift).

> *Note: Any discussion of alternative working schedules is only hypothetical and is used here as a way of illustrating this partnering strategy. Any and all proposed changes to work schedules and working conditions must be conducted through a collective bargaining process with representatives of the respective firefighter unions. The exception is when a unit is designated as a volunteer unit and is staffed by volunteers exclusively.*

Figure 187: Sample Schedule for Staffing a PAU

Sample Schedule for Staffing a PAU Engine						
Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**	**Sunday**
Officer – 24 hours	Officer – 12 hours	Officer – 12 hours	Off	Off	Off	Off
Firefighter – 12 hours	Firefighter – 12 hours	Firefighter – 24 hours	Off	Off	Off	Off
Off	Off	Off	Officer – 24 hours	Officer – 12 hours	Officer – 12 hours	Off
Off	Off	Off	Firefighter – 12 hours	Firefighter – 12 hours	Firefighter – 24 hours	Off

Other possible configurations for staffing PAUs include but are not limited to:

- Staff a PAU with overtime/callback personnel to meet individual situations. A PAU may be deployed for training sessions, fire prevention activities, special community events, and anticipated peak activity periods.
- Staff an engine available 12 hours per day, four days each week. The staffed hours would be adapted to cover the time when the greatest number of calls for service typically occurs.
- Staff an ambulance available 12 hours per day, seven days each week. The staffed hours would be adapted to cover the time when the greatest number of calls for service typically occurs.
- Staff a PAU with personnel eight hours per day, five days each week.

Critical Issues

- Discussions involving any changes to work schedules and or working conditions for career personnel must be bargained with the respective firefighter unions.
- Training issues
  - The personnel used to provide PAUs will need to be included in on-going training activities.
  - The personnel on PAUs must be cross-trained to understand the operational structures and expectations of each host agency.
- Roles and responsibilities
  - The agencies must clearly define roles and responsibilities of the personnel on PAUs. The roles and responsibilities should be clearly communicated to all personnel and not limited to those assigned to a PAU.
  - The agencies should have integrated electronic reporting mechanisms for incident reports. Personnel that staff PAUs should not have to learn multiple reporting methods based on where they happen to be temporarily assigned.
  - Lines of supervision for PAUs must be clearly defined.
- Financial issues
  - Agencies will need to determine how the cost of PAUs will be allocated if personnel staffing PAUs are paid and shared.
  - If a PAU has EMS responsibilities, it may be necessary to address dissimilar patient care reporting systems, likely requiring an integrated patient care reporting system so that personnel can provide patient care reports irrespective of where they are assigned.

Guidance

- Do not limit potential options for non-traditional staffing.
- Develop guidelines for uniform incident reporting.
- Establish standards for deploying personnel between agencies.

- Align agencies to provide appropriate oversight irrespective of where the personnel are assigned.
- Ensure agency support for standardized personnel services.
- Establish minimum training and certification standards as personnel prerequisites to work on a PAU.

Fiscal Considerations

- Financial support will be necessary and a process for allocating costs between agencies will be required.
- The agencies must determine whether and what type of hardware and software will be needed for incident reports if standardization is necessary.

The following maps of posting locations for a PAU are used to illustrate the potential for such a unit. They are not intended to suggest these are the best or only locations for posting a PAU. Factors such as call volume by time of day for each agency, current configuration of static resources, type of PAU, staffing levels for the PAU, and negotiation between the participating agencies will combine to determine what type of PAU will be used, and where, when, and how it will be used. These decisions will identify the most appropriate uses, locations and times for the PAU. Further, a PAU may post at existing stations when used to cover units being pulled into a training activity or extended out of service time.

Figure 188: Sample – Post 1 – Station 95

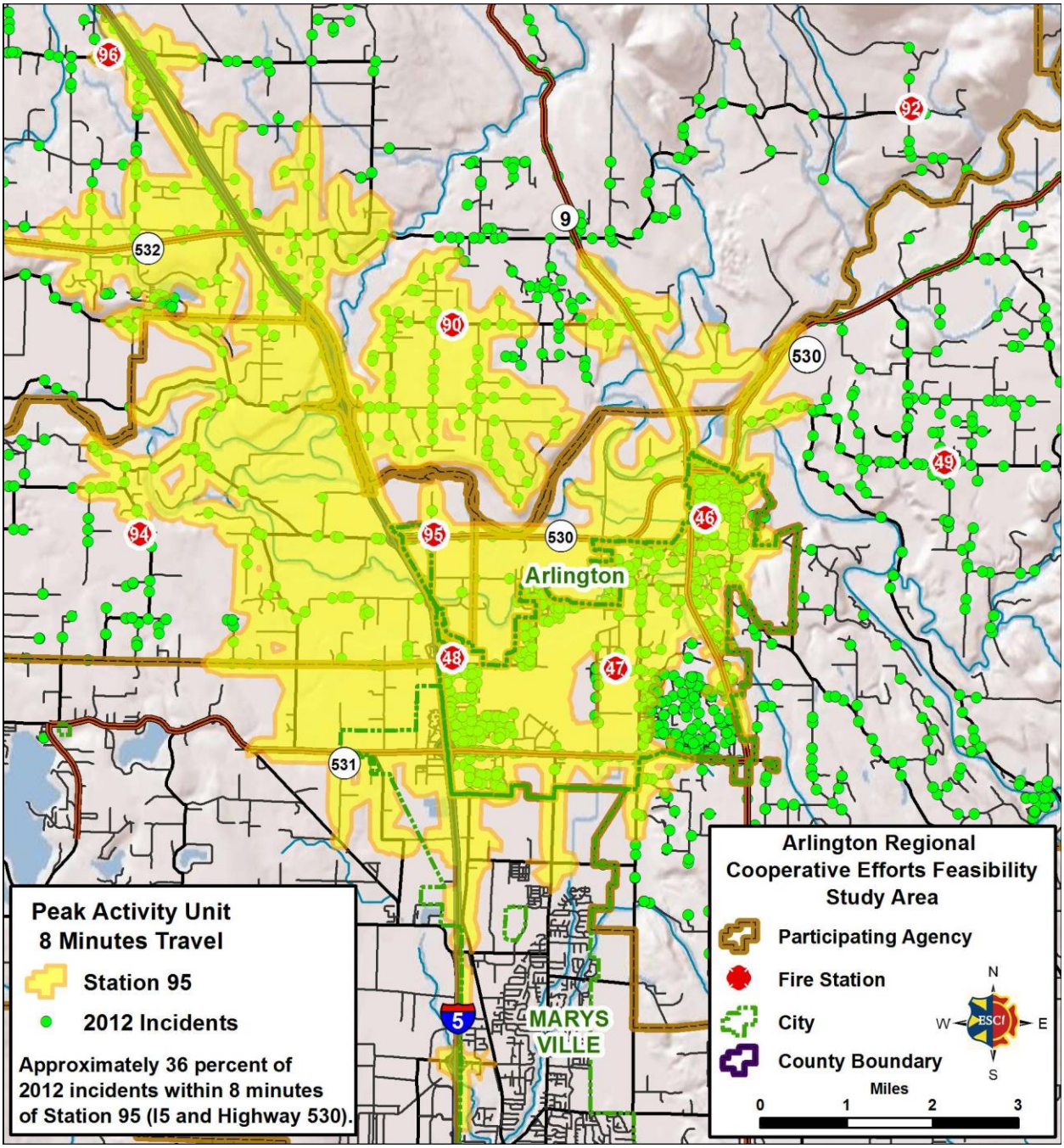


Figure 189: Sample -- Post 2 – Station 99

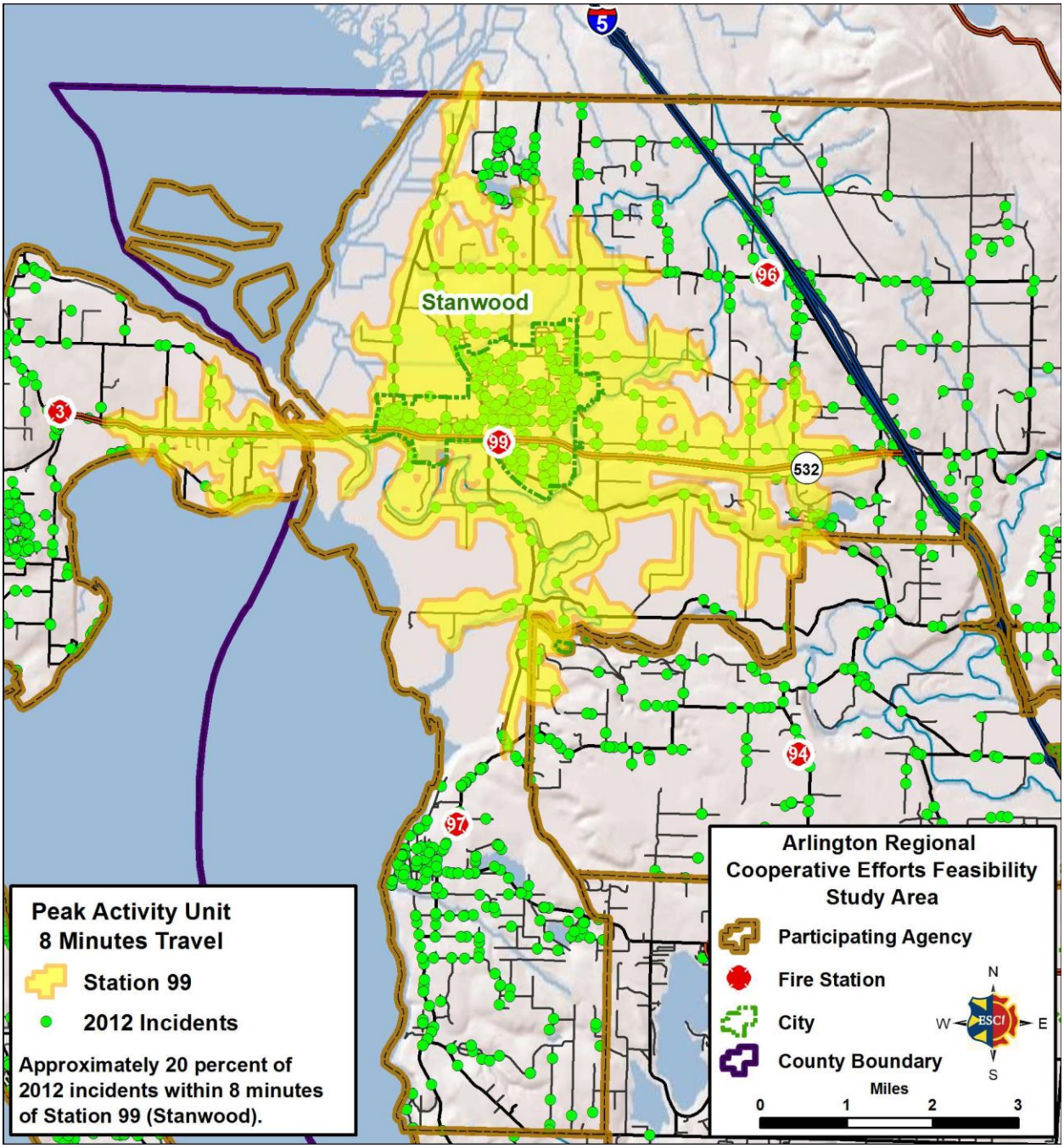


Figure 190: Sample – Post 3 – Interstate 5 & SR 531

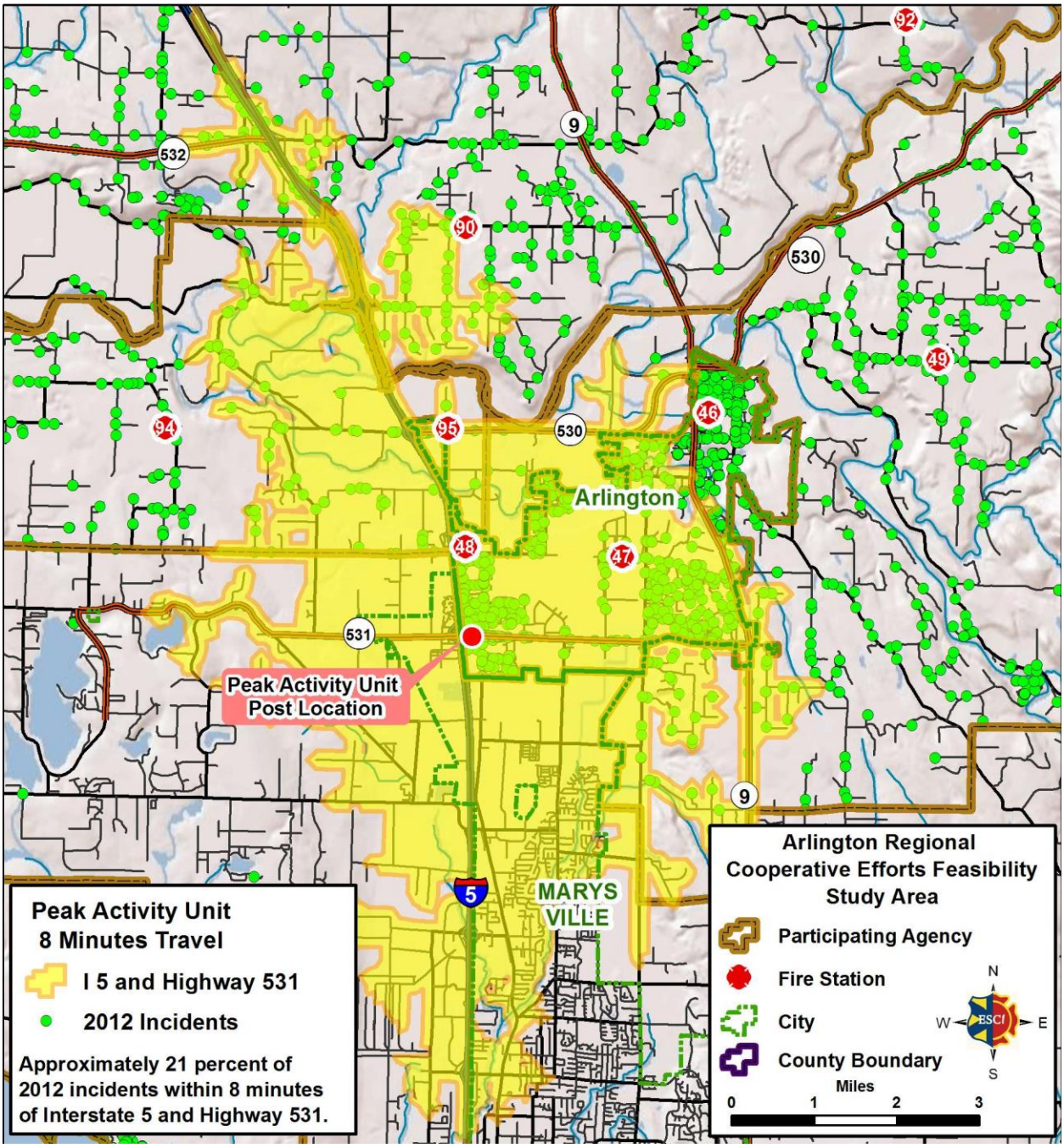
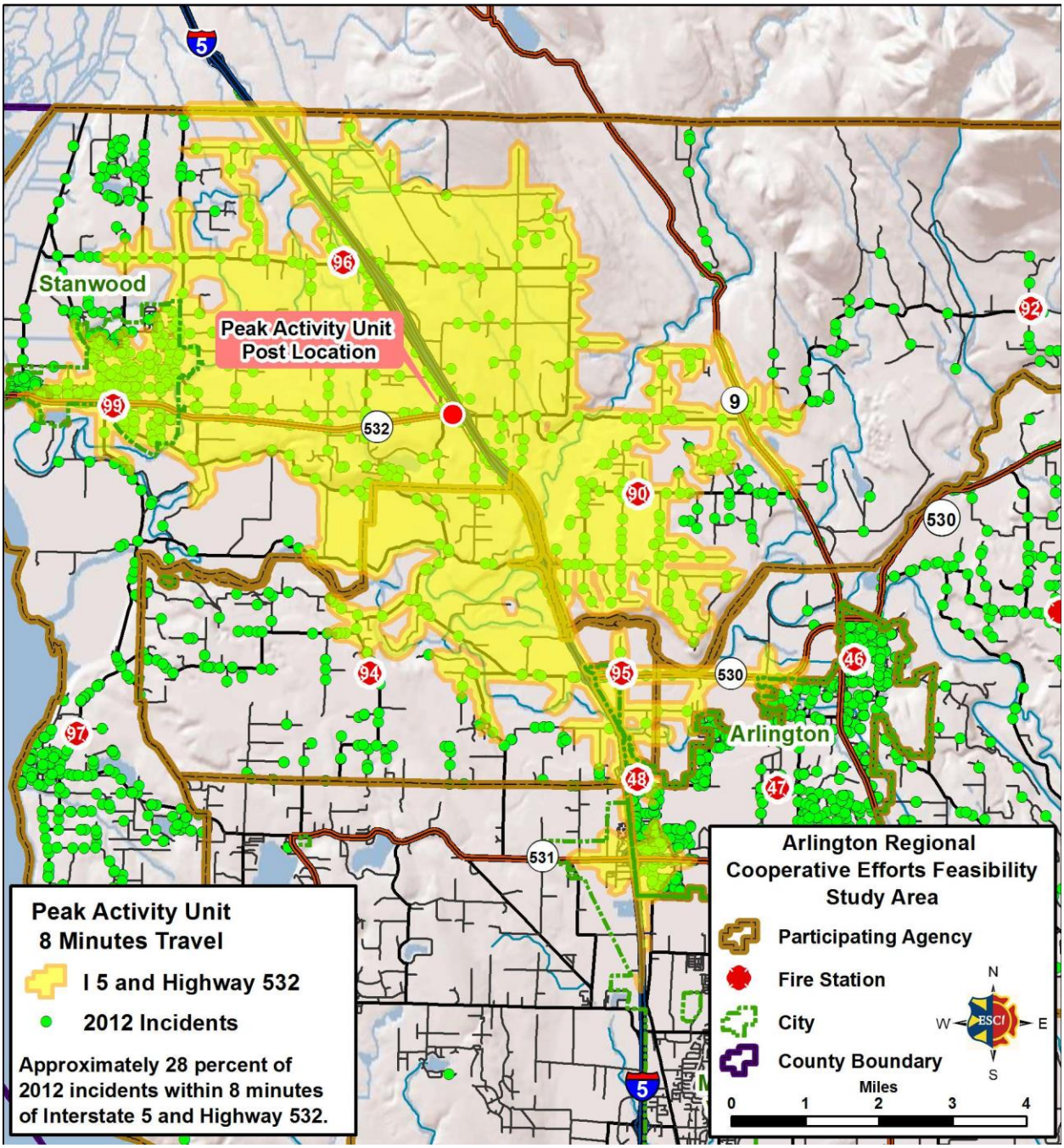


Figure 191: Sample – Post 4 – Interstate 5 & SR 532



Governance (Policy) Strategies

Governance Strategy 1: Regional Fire Authority with AFD, Snohomish #19, and Snohomish #21

Summary of the Initiative

Under this strategy, the Arlington Fire Department, Snohomish #19 (Silvana), and Snohomish #21 (Arlington Rural) would be unified into a single agency via a Regional Fire Authority.

Objective of the Initiative

The intent of the proposed strategy is to maintain or enhance fire and emergency medical service delivery by the combined agencies and increase organizational efficiency. In addition to addressing service delivery needs, a goal of reducing and/or containing costs and achieving long-range cost avoidance is considered.

Discussion

Strategy 1 utilizes the process described earlier in this report to form a regional fire authority. As prescribed in RCW 52.26, a planning committee is formed consisting of three elected officials from each of the participating agencies to set services, service level standards, budget, funding mechanism(s), governance, and any other considerations deemed appropriate by the committee, thus forming a proposed "charter" for the RFA. The approach would create a medium-sized fire agency consisting of 6 fire stations, servicing a population of 28,868 citizens, and covering 100.1 square miles of response area. Establishment and management of a new regional fire authority formed from two fire districts and a city would be straightforward. The cultures of the three agencies vary widely. The personnel within each agency are rightfully proud of their respective organizations. The communities they serve are also proud of their fire departments/districts. The greatest fear expressed by each agency stakeholder group (both internal and external) is that their culture would be changed as a result of any combining.

Tax Rates:

The combined agencies would form an RFA with a fire service levy of $1.21 per $1,000 of assessed valuation plus a $0.50 per $1,000 of assessed valuation EMS levy to cover the expenses of the new agency at current service levels. The AFD (Fire Dept.) levy rate would go down by ~$0.03 per $1,000 of AV. Snohomish #19 would see a reduction of ~$0.26 per $1,000 of AV. Snohomish #21 would see their rate increase by ~$0.51 per $1,000 of AV.

Service Levels:

Types of services and delivery methods vary significantly between the three agencies. Fire suppression services are provided by all three agencies, but EMS response differs in that AFD provides Advanced Life Support transport services (ambulance), whereas the two districts provide Basic Life Support, relying on AFD for paramedic services and ambulance transport services. All three agencies have volunteer suppression personnel, but the two districts rely exclusively upon them. Arlington is career staffed and augmented by part-time personnel. Snohomish #21 uses community volunteers traditionally, with residents of the community responding from home. Snohomish #19, however, uses part-time firefighters regularly signed up for shift work and augmented by community volunteers responding from home. Snohomish #21 contracts with Arlington for Fire & EMS services to its south area, since that area is land-locked from the rest of the district. The contract expense is eliminated in this scenario.

Geography:

The three agencies have common boundaries, with the City of Arlington connecting the two districts east and west of the city. The jurisdiction would straddle Interstate 5 east and west, bounded by the Mt. Baker-Snoqualmie National Forest to the east, North County Regional Fire Authority to the west (near the Puget Sound) and to the north The south boundary is essentially Snohomish County Fire District #12 (Marysville).

Complexity:

The level of complexity in forming a Regional Fire Authority is low, but combining three agencies with significant service level and structural differences increases the complexity to a moderate level.

Affected Stakeholders:

- AFD
- Snohomish #19
- Snohomish #21
- Applicable Collective Bargaining Units
- Applicable Volunteer Associations

Fiscal Analysis:

All forecasts are based on 2013 budgeted revenues and costs as well as 2013 actual property tax data unless otherwise stated.

Figure 192: AFD, Snohomish #19, and Snohomish #21 - 2013 AV and Levy Rates

Based on 2013 Actuals	AFD (F.D.)	#19	#21
Total Assessed Value	1,727,872,805	321,071,551	679,932,073
Expense Levy Rate	1.27	1.23	0.73
Non-Voter Bond Levy Rate	-	0.27	
Total Rate Under Fire Service Limit	**1.27**	**1.50**	**0.73**
EMS Levy Rate	0.50	0.50	0.50
Total Rate Fire & EMS	**1.77**	**2.00**	**1.23**
Bond Levy Rate (Till 2028)	-	0.71	-
M&O Levy Rate (2-Year end 2014)	-	0.60	-
Total Combined Rate	**1.77**	**3.31**	**1.23**

The three fire agencies' levy rates in 2013 vary considerably as depicted in the preceding figure. Property owners within current Snohomish #19 service area would continue to pay their existing Bond and M&O levies after any combination. Whereas property owners in the other service areas would not incur Snohomish #19 previous existing voter approved Bonds and M&O obligations. Snohomish #19 M&O is a two-year levy that ends in 2014. Snohomish #19 existing Bond debt is scheduled to be retired in 2028. Also, Snohomish #19 has Non-Voter Bonds totaling ~$225,000 of remaining payments scheduled between 2013 and 2016. Non-voter bonds are acquired by and become the responsibility of the combined agency. The remaining Non-voter Bond payments have been factored into the model and added to the forecast expenses, as well as revenues (calculated based on levy rate and the amount of the annual debt payments). Non-voter bond rates are included under the $1.50 limitation calculation.

Figure 193: Growth Projections, 2014 – 2018

Year	Percent Change
2014	2.6%
2015	4.0%
2016	4.3%
2017	4.2%
2018	3.7%

AFD's growth projections were used to model the combined Agency's revenue forecast. The following figure depicts the combination of the three agencies based on existing 2013 AV and the growth projections in Figure 193.

Figure 194: AFD, Snohomish #19, and Snohomish #21 - Combined Assessed Value and Levy Rate Forecast, 2014 - 2018

			Forecast		
	2014	2015	2016	2017	2018
Base Fire Assessed Value	2,799,827,216	2,952,147,268	3,121,165,717	3,296,020,732	3,463,434,510
New Construction	38,775,926	40,341,434	42,001,972	43,838,969	45,749,215
Total Fire Assessed Value	2,838,603,143	2,992,488,702	3,163,167,689	3,339,859,701	3,509,183,725
Base EMS Assessed Value	2,835,048,248	2,988,777,142	3,159,370,674	3,335,830,298	3,504,717,030
New Construction	38,775,926	40,341,434	42,001,972	43,838,969	45,749,215
Total EMS Assessed Value	2,873,824,175	3,029,118,576	3,201,372,647	3,379,669,267	3,550,466,245
Expense Levy Rate	1.214	1.179	1.143	1.108	1.080
Non-Voter Bond Levy Rate	0.031	0.029	0.028	0.026	0.025
M&O Levy Rate	-	-	-	-	-
EMS Levy Rate	0.492	0.478	0.463	0.449	0.438
Total Rate	**1.737**	**1.687**	**1.634**	**1.584**	**1.542**

The forecasted Expense Levy rate for the combined Agency is ~$1.21 per $1,000 of AV, the non-voter bond levy rate would be $0.03 (ends after 2016), and when added to the $0.50 EMS levy, the total combined forecasted levy rate would be ~$1.74 per $1,000 of AV. The forecast $1.74 is ~$.03 lower than AFD's current effective rate of $1.77, ~$.26 lower than Snohomish #19's current rate of $2.00 (not including the district's Bond and M&O levy), and ~$.51 higher than Snohomish #21's current $1.23.

Figure 195: AFD, Snohomish #19, and Snohomish #21 Comparison of Existing Levy Rates to Forecast Levy Rate

Based on 2013 Actuals	AFD (F.D.)	#19	#21
Expense Levy Rate	1.27	1.23	0.73
Non-Voter Bond Levy Rate	-	0.27	
Total Rate Under Fire Service Limit	1.27	1.50	0.73
EMS Levy Rate	0.50	0.50	0.50
Total Rate Fire & EMS	**1.77**	**2.00**	**1.23**
Forecast Combined Agency Rate	**1.74**	**1.74**	**1.74**
Difference	**(0.03)**	**(0.26)**	**0.51**
Bond Levy Rate (Till 2028)	-	0.71	-
M&O Levy Rate (2-Year end 2014)	-	0.60	-
Total Forecast Rate by Original Taxing District	**1.74**	**3.05**	**1.74**

The following table depicts the forecasted combined property tax revenue, as well as the other revenue sources. All other revenues use the 2013 budgeted amounts and have been projected based on the ten-year average CPI-U of 2.35 percent growth.

Figure 196: AFD, Snohomish #19, and Snohomish #21 - Forecast Revenue, 2014 - 2018

Revenue	Forecast				
	2014	2015	2016	2017	2018
Current Expense Levy	3,398,229	3,480,499	3,564,768	3,650,450	3,737,546
C.E. - New Construction Levy	47,809	48,974	49,539	50,091	50,690
EMS Levy	1,395,418	1,428,955	1,463,303	1,498,226	1,533,725
EMS - New Construction Levy	19,388	19,860	20,089	20,313	20,556
Non-Voter Bond Levy	86,941	86,942	86,943	86,944	86,945
Total General Property Taxes	4,947,785	5,065,229	5,184,642	5,306,024	5,429,462
Fire Service Revenues					
Asst To FF,& SAFER Grants	26,612	27,238	27,879	28,534	29,206
Airport Fire Services	271,132	277,511	284,040	290,722	297,561
EMS Service Revenues					
Dist #24 EMS Levy	84,953	86,951	88,997	91,091	93,234
Dist #25 EMS Levy	45,035	46,095	47,179	48,289	49,425
State Grants	1,638	1,676	1,716	1,756	1,797
Transportation fees	972,350	995,226	1,018,639	1,042,604	1,067,133
EMS Services - Airport	122,946	125,838	128,799	131,829	134,930
Miscellaneous Reveneue	512	524	536	549	562
Total Revenue	**6,472,962**	**6,626,288**	**6,782,426**	**6,941,398**	**7,103,310**

Any pre-existing inter-agency services contracts between any of these three agencies would be eliminated upon a combination, as such the external services revenues and expenses related to the agreements has been removed from the forecast model. The tax revenue and operating expenses related to the services agreements have been included as they would continue to exist beyond a combination.

Figure 197: AFD, Snohomish #19, and Snohomish #21 - Forecast Expenses, 2014 - 2018

Expenditure	Forecast				
	2014	2015	2016	2017	2018
Salaries and Wages	3,524,780	3,607,704	3,692,580	3,779,452	3,868,368
Personnel Benefits	1,384,746	1,495,525	1,615,167	1,744,381	1,883,931
Supplies	310,445	317,749	325,224	332,876	340,707
Services	547,153	560,025	573,200	586,685	600,488
Int Gov Srv	63,228	64,716	66,238	67,797	69,392
Capital Outlay	36,275	37,128	38,002	38,896	39,811
Tranfers-Out	92,803	19,664	19,664	-	-
Total Expenditure	**5,959,429**	**6,102,511**	**6,330,076**	**6,550,086**	**6,802,697**

The preceding table shows the forecasted expenses between 2014 and 2018. All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures

were forecast using the ten-year average CPI of 2.35 percent. Transfers-Out reflect the remaining non-voter bond scheduled payments.

Figure 198: AFD, Snohomish #19, and Snohomish #21 - Forecast Fund Balance, 2014 - 2018

Current Expense / General Fund	2014	2015	Forecast 2016	2017	2018
Beginning Cash and Investments	-	513,533	1,037,309	1,489,659	1,880,971
Revenues	6,472,962	6,626,288	6,782,426	6,941,398	7,103,310
Expenditures					
Salaries and Wages	3,524,780	3,607,704	3,692,580	3,779,452	3,868,368
Personnel Benefits	1,384,746	1,495,525	1,615,167	1,744,381	1,883,931
Supplies	310,445	317,749	325,224	332,876	340,707
Services	547,153	560,025	573,200	586,685	600,488
Int Gov Srv	63,228	64,716	66,238	67,797	69,392
Capital Outlay	36,275	37,128	38,002	38,896	39,811
Tranfers-Out	92,803	19,664	19,664	-	-
Total Expenditures	5,959,429	6,102,511	6,330,076	6,550,086	6,802,697
Ending Cash and Investments	**513,533**	**1,037,309**	**1,489,659**	**1,880,971**	**2,181,585**

The forecast fund balance model above begins with a **zero** beginning fund balance to show the annual growth (or loss) to the ending fund balance. The model depicts the forecast fund balance between 2014 and 2018. Based on the current existing operating expenses and revenues of each agency and the projections previously stated, the combination of AFD, Snohomish #19, and Snohomish #21 demonstrates solid growth and a sound business model. Additionally, all of the three agencies' existing fund balances would be pooled into the combined organization's beginning fund balance upon the formation of the new district.

Conclusion:

ESCI concludes that the approach identified in Strategy 1 presents a moderate likelihood of success. The primary challenge includes the fiscal imbalance with Snohomish #21, and to a lesser extent differing levels of service between the city and the two districts. The combined service area flows well from a response standpoint. The southern portion of Snohomish #21 is better served by AFD from an access and response time perspective, making AFD and Snohomish #21 a good combination. Station 95 and Station 48 have significant overlap and can be combined for efficiency, making AFD and Snohomish #19 a good combination. Creation of a Regional Fire Authority is appropriate for the three agencies to consider.

Governance Strategy 2: Regional Fire Authority between CIF&R and NCRFA

Summary of the Initiative:

Under this strategy, the North County Regional Fire Authority (NCRFA) and Camano Island Fire & Rescue (CIF&R) would be unified into a single agency via expansion of the existing Regional Fire Authority or formation of a new Regional Fire Authority. If annexation were to be pursued, the two agencies should engage in high level discussions about how the RFA plan might be amended to reflect the new addition of Camano Island, addressing new service level requirements and impacts, funding, and other details in advance of passing a resolution seeking annexation into the NCRFA. These steps are required by statute (RCW 52.26) if a new RFA formation were to be pursued.

Objective of the Initiative:

The intent of the proposed strategy is to maintain or enhance fire and emergency medical service delivery by the combined agencies and increase organizational efficiency. In addition to addressing service delivery needs, a goal of reducing and/or containing costs and achieving long-range cost avoidance is considered.

Discussion:

If annexation is sought, establishing a planning committee is not necessary since one already exists via the NCRFA. The plan must be amended, however, to reflect the changes required to incorporate Camano Island into the RFA. Given the size of the unification, it is advisable that the respective boards meet to discuss current service levels and potential impacts of combining. The administrations of both agencies should be tasked with studying the detailed changes which should occur and the impacts of those changes to finances, operations, and service delivery. The resulting combined agency would result in an organization covering 142.6 square miles from 10 fire stations serving 37,019 citizens.

If a new RFA is sought, the entire process of creating a Regional Fire Authority is required, including establishing a planning committee, formulating a plan, and the numerous steps outlined in RCW 52.26.040.

Tax Rates:

If CIF&R were to be annexed into NCRFA, the levy rate would be adjusted to equalize revenue across the entire service area to cover the expenses of the combined agencies at current service levels. The fire service levy would be $1.26 per $1,000 of assessed valuation plus a

$.50 per $1,000 of assessed valuation EMS levy to cover the expenses of the new agency. This is a ~$0.14 increase for CIF&R and a ~$0.24 decrease for NCRFA.

If the parties were to seek formation of a new Regional Fire Authority, an adequate level of funding and funding mechanism(s) would have to be identified to provide a sustainable financial base to operate from. This may include benefit charge, general fund levy, EMS levy, Maintenance & Operating levy, Capital Bonds or other fees for service. This is determined through the planning committee and is based largely on the level of service defined by the committee.

Service Levels:

The services provided by each agency are similar in that both provide fire suppression service and ALS transport service to their constituents. Both agencies are career staffed, augmented by part-time personnel and have volunteer suppression personnel. Camano Island is essentially a very large "cul-de-sac" with just one road connecting the entire island to the mainland. That single bridge links Camano Island and NCRFA in more ways than access. NCRFA is CIF&R's only contiguous, immediately available automatic response resource. Likewise, CIF&R is NCRFA's closest, immediately available automatic response to the jurisdiction. The jurisdictions both have significant waterfront rescue challenges with dangerous tidal influences.

Geography:

The two agencies have a common boundary on the Highway 532 Bridge that links Camano Island to the mainland at Stanwood. Otherwise, Camano Island is isolated, extending into Puget Sound. NCRFA is bounded by the Skagit County line to the north (Skagit County Fire District #3), to the east by Snohomish County Fire District #25 (Oso) and Snohomish County Fire District #21 (Arlington Rural), to the south by the City of Arlington, Snohomish County Fire District #19 (Silvana), Snohomish County Fire District #12 (Marysville), and Snohomish County Fire District #15 (Tulalip Bay).

Complexity:

Combining Camano Island and North County RFA is a simple process with low complexity. The process is governed by RCW 52.26.300 (if annexation is pursued) or RCW 52.26.040 (if a new RFA is pursued). The discussions/negotiations between the agencies leading up to such an action however, can be challenging.

Affected Stakeholders:

- NCRFA
- Camano Island F&R
- Applicable Collective Bargaining Units
- Applicable Volunteer Associations

Fiscal Analysis:

Figure 199: CIF&R and NCRFA 2013 AV and Levy Rates

Based on 2013 Actuals	CIF&R	NCRFA
Total Assessed Value	2,809,225,232	1,525,279,544
Expense Levy Rate	1.12	1.38
Non-Voter Bond Levy Rate	-	0.12
Total Rate Under Fire Service Limit	1.12	1.50
EMS Levy Rate	0.50	0.50
Total Rate Fire & EMS	**1.62**	**2.00**
Bond Levy Rate (Scheduled till 2028)	0.22	-
M&O Levy Rate	-	-
Total Combined Rate	1.84	2.00

The preceding table lists CIF&R and NCRFA 2013 AV and levy rates. Property owners within current CIF&R service area would continue to pay their full Bond levy after any combination. Whereas property owners in NCRFA service areas would not incur CIF&R's previous existing Bond obligations. CIF&R's existing Bond debt is scheduled to be retired in 2028. Also, NCRFA has Non-voter Bonds totaling ~$860,000 (with remaining payments scheduled between 2013 and 2018). Non-voter bonds are acquired by and become the responsibility of the combined agency. The remaining Non-Voter Bond payments have been factored into the model and added to the forecast expenses as well as the revenues calculated by levy rate to service the annual debt payments. Non-voter bond rates are included under the $1.50 limitation calculation.

The following table depicts growth projections used to model the property tax revenues for 2014 to 2018.

Figure 200: Growth Projections, 2014 - 2018

Year	Percent Change
2014	2.5%
2015	3.7%
2016	4.0%
2017	4.0%
2018	3.5%

Figure 201 depicts the combined and projected assessed values, Expense, Non-Voter Bond, and EMS Levy rates forecast for 2014 through 2018. The forecasted Expense Levy rate for the combined agency is ~$1.23 per $1,000 of AV, the non-voter bond levy rate would be $0.03 (ends in 2018), and when added to the $0.50 EMS levy, the total combined forecasted levy rate would be ~$1.76 per $1,000 of AV.

Figure 201: CIF&R and NCRFA - Combined Assessed Value and Levy Rate Forecast, 2014 - 2018

	Forecast				
	2014	2015	2016	2017	2018
Base Fire Assessed Value	4,442,867,395	4,656,506,551	4,893,989,998	5,143,021,711	5,378,670,813
New Construction	47,495,721	49,253,062	51,223,185	53,761,684	56,425,997
Total Fire Assessed Value	4,490,363,116	4,705,759,614	4,945,213,183	5,196,783,394	5,435,096,810
Base EMS Assessed Value	4,638,549,349	4,859,428,737	5,105,029,072	5,362,502,347	5,605,833,272
New Construction	47,495,721	49,253,062	51,223,185	53,761,684	56,425,997
Total EMS Assessed Value	4,686,045,070	4,908,681,800	5,156,252,257	5,416,264,031	5,662,259,268
Expense Levy Rate	1.232	1.200	1.166	1.133	1.106
Non-Voter Bond Levy Rate	0.034	0.031	0.029	0.026	0.024
EMS Levy Rate	0.493	0.480	0.466	0.453	0.442
Total Rate	**1.759**	**1.712**	**1.661**	**1.612**	**1.572**

The following table compares the 2013 actual rates to the forecast combined rate. NCRFA taxpayers would see a total rate decrease of ~$0.24 per $1,000 of AV; CIF&R would see a ~$0.14 increase.

Figure 202: CIF&R and NCRFA Comparison of Existing Levy Rates to Forecast Levy Rate

Based on 2013 Actuals	CIF&R	NCRFA
Total Assessed Value	3,248,388,149	1,670,466,736
Expense Levy Rate	1.12	1.38
Non-Voter Bond Levy Rate	-	0.12
Total Rate Under Fire Service Limit	1.12	1.50
EMS Levy Rate	0.50	0.50
Total Rate Fire & EMS	**1.62**	**2.00**
Forecast Combined Agency Rate	**1.76**	**1.76**
Difference	**0.14**	**(0.24)**
Bond Levy Rate (Scheduled till 2028)	0.22	-
M&O Levy Rate	-	-
Total Forecast Rate by Original Taxing District	**1.97**	**1.76**

Figure 203 illustrates the projected revenues for the combined agency from 2014 through 2018. No pre-existing inter-agency services contracts between CIF&R and NCRFA currently exist. Notably the NCRFA service contract with the City of Stanwood, which was budgeted at ~$1,280,000 in 2013, makes up 10.0 percent of the total revenue per year of each of the projections in the revenue forecast.

Figure 203: CIF&R and NCRFA - Forecast Revenue, 2014 - 2018

Revenue	Forecast				
	2014	2015	2016	2017	2018
Current Expense Levy	5,472,312	5,586,999	5,704,150	5,823,283	5,944,823
C.E. - New Construction Levy	59,370	60,675	61,476	62,681	63,909
EMS	2,285,334	2,332,173	2,380,007	2,428,643	2,478,252
EMS New Construction Levy	23,748	24,270	24,590	25,072	25,563
Non-Voter Bond Levy	151,206	145,965	140,724	135,483	130,241
General Property Taxes	7,993,984	8,152,096	8,312,963	8,477,178	8,644,806
Timber Harvest Taxes	512	524	536	549	562
Excise Taxes	5,629	5,762	5,897	6,036	6,178
Federal Grants	-	-	-	-	-
State Grants	4,748	4,860	4,974	5,091	5,211
Services	1,771,837	1,813,522	1,856,187	1,899,856	1,944,552
Amb & Emer Aid Fees	665,292	680,944	696,964	713,361	730,143
Interest & Other Earnings	5,118	5,238	5,361	5,487	5,616
Rents, Leases & Concessions	25,588	26,190	26,806	27,437	28,082
Contributions & Donations	-	-	-	-	-
Miscellaneous Revenues	15,353	15,714	16,084	16,462	16,849
Total Revenue	**10,488,061**	**10,704,849**	**10,925,773**	**11,151,457**	**11,382,000**

Figure 204 shows the forecasted expenses between 2014 and 2018. All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Transfers-Out reflect the remaining non-voter bond scheduled payments.

Figure 204: CIF&R and NCRFA - Forecast Expenses, 2014 - 2018

Expenditure	Forecast				
	2014	2015	2016	2017	2018
Salaries and Wages	6,325,039	6,473,843	6,626,148	6,782,036	6,941,591
Personnel Benefits	1,365,842	1,475,110	1,593,118	1,720,568	1,858,213
Supplies	410,332	419,985	429,866	439,979	450,330
Services	1,483,223	1,518,118	1,553,833	1,590,389	1,627,805
Int Gov Srv	6,653	6,809	6,970	7,134	7,301
Capital Outlay	49,578	50,744	51,938	53,160	54,410
Tranfers-Out	751,206	793,965	840,564	891,310	946,535
Total Expenditure	**10,391,873**	**10,738,574**	**11,102,437**	**11,484,575**	**11,886,186**

In the following figure the forecast fund balance model below begins with a **zero** beginning fund balance to show the annual growth (or loss) to the ending fund balance.

Figure 205: CIF&R and NCRFA - Forecast Fund Balance, 2014 - 2018

Current Expense / General Fund	Forecast				
	2014	2015	2016	2017	2018
Beginning Cash and Investments	-	96,188	62,464	(114,200)	(447,317)
Revenues	10,488,061	10,704,849	10,925,773	11,151,457	11,382,000
Expenditures					
Salaries and Wages	6,325,039	6,473,843	6,626,148	6,782,036	6,941,591
Personnel Benefits	1,365,842	1,475,110	1,593,118	1,720,568	1,858,213
Supplies	410,332	419,985	429,866	439,979	450,330
Services	1,483,223	1,518,118	1,553,833	1,590,389	1,627,805
Int Gov Srv	6,653	6,809	6,970	7,134	7,301
Capital Outlay	49,578	50,744	51,938	53,160	54,410
Tranfers-Out	751,206	793,965	840,564	891,310	946,535
Total Expenditures	10,391,873	10,738,574	11,102,437	11,484,575	11,886,186
Ending Cash and Investments	**96,188**	**62,464**	**(114,200)**	**(447,317)**	**(951,503)**

Figure 205 depicts the forecast fund balance between 2014 and 2018. Based on the current existing operating expenses and revenues of each agency, and the projections previously stated, the combination of CIF&R and NCRFA demonstrates clear decline in fund balance over the next five years upon CIF&R joining NCRFA.

Conclusion:

ESCI concludes that the approach identified in Strategy 2 presents a moderate to low likelihood of success for financial reasons. Financially, the levy rates are close enough to consider the partnership a reasonable fiscal investment. However, a substantial projected fund balance decline indicates the combined levy rate is insufficient to maintain an adequate fund balance at the end of each year, which is required to cover expenses for the first portion of the next year until tax collections have been distributed at the end of April.

Operationally, a combination makes sense. The two agencies share a common border and have each provided contract services to the City of Stanwood, which lies between the two agencies. They each have demonstrated they can work together, although there may be lingering tension over vying for the Stanwood contract. The two agencies are very similar with a core career staff, relying substantially on volunteers for service to the more remote areas of their respective agencies. Both agencies provide transport services and NCRFA is CIF&R's only automatic aid partner with contiguous boundaries. The only issue with crossing the county line is aligning medical protocols from two different medical program directors, which can be coordinated between the two physicians.

If CIF&R annexed into the existing NCRFA at NCRFA's current levy rate, the result is a substantial tax increase to the taxpayers of Camano Island. Pursuing the formation of a new Regional Fire Authority would require establishing a new levy rate sufficient to address the fiscal needs of the combined agencies into the foreseeable future, equalizing the rate across the entire service area.

Governance Strategy 3: Regional Fire Authority with Snohomish #15 and the Tulalip Tribe

Summary of the Initiative

Snohomish County Fire District #15 (Tulalip Bay) serves the northern half of the Tulalip Indian Reservation from the Priest Point area to Fire Trail road. Much of the service area is considered tribal trust land and is not currently subject to property taxes for fire protection. The tribe donates annually to the fire district to help with the expenses of providing fire services. The district has financial challenges and cannot forecast revenues based on donations, making long-range planning difficult. The district and the tribe could combine as a Regional Fire Authority (RCW 52.26) and share the leadership of the district as well as levy taxes as part of the shared governance model.

Snohomish County Fire District #15 (Tulalip Bay) is a junior taxing district as defined by RCW Title 52. It has the ability to levy property taxes up to the limits set by the state and perform such duties as allowed by Washington State law. The Tulalip Tribe, organized in 1934 under the Indian Reorganization Act (IRA), is recognized by the federal government as a sovereign Indian Tribe operating under a Tribal Constitution approved by the Secretary of Interior. Its status as a sovereign entity maintains the tribe's right to self-govern as a "nation within a nation" and includes the inherent right as a government to raise revenue for the community.

RCW 52.26.020(3) states that a fire protection jurisdiction is authorized to form a Regional Fire Authority, and that a fire protection jurisdiction is defined as "… a fire district, city, town, port district, municipal airport, or Indian tribe."

Objective of the Initiative:

Form a Regional Fire Authority consisting of Snohomish County Fire District #15 and the Tulalip Tribe for purposes of uniform taxation, shared governance, and shared decision-making related to fire and EMS service delivery.

Discussion:

This strategy constitutes a small but very complicated Regional Fire Authority formation process. The complication lies in the fact that three agencies are involved in serving the tribe; two fire districts and a state agency, with the tribe itself being a sovereign nation. This has the potential to be Washington State's first Regional Fire Authority where a tribe is one of the partnering agencies.

The tribal reservation spans an area beyond Snohomish #15, including area protected by the Washington State Department of Natural Resources (DNR) and Snohomish County Fire District #12 (Marysville). A Regional Fire Authority can be created to include Snohomish #12 (which is not a party to this study), but the area protected by the DNR would have to be annexed into either fire district first. There is insufficient information available to ESCI to evaluate such an endeavor, so no further analysis of this strategy was performed. Snohomish #15 Fire Commissioners should remain cognizant of the potential for an RFA inclusive of the Tulalip Tribe in the future to include Snohomish #12, should circumstances provide an opportunity to move forward.

Governance Strategy 4: NCRFA, Snohomish #15, and Snohomish #19

Summary of the Initiative:

Under this strategy, North County Regional Fire Authority would either annex Snohomish #15 (Tulalip Bay) and Snohomish #19 (Silvana) into the existing Regional Fire Authority or form a new RFA with a new RFA plan. Due to the size and complexity of this unification, the three agencies should engage in high level discussions about how the existing RFA plan might be amended to reflect the new addition of two districts before submitting the annexation to the voters. Alternatively, the agencies should discuss the formation of a new Regional Fire Authority with a new plan.

Objective of the Initiative:

The intent of the proposed strategy is to maintain or enhance fire and emergency medical service delivery by the combined agencies and increase organizational efficiency. In addition to addressing service delivery needs, a goal of reducing and/or containing costs and achieving long-range cost avoidance is considered.

Discussion:

This strategy constitutes a moderately complex Regional Fire Authority expansion of an existing RFA. The process would create a medium sized Regional Fire Authority consisting of 8 fire stations serving a population of 29,122 citizens, and covering 138.6 square miles of response area. Amending the existing plan at NCRFA or establishing a new RFA plan and ultimately a new RFA will be challenging and time consuming. Moving forward cautiously and deliberately is prudent.

Tax Rates:

Snohomish #15 and Snohomish #19 would be annexed into NCRFA, but the levy rate would be adjusted to equalize revenue across the entire service area to cover the expenses of the combined agencies at current service levels. The fire service levy would be $1.50 per $1,000 of assessed valuation plus a $0.50 per $1,000 of assessed valuation EMS levy to cover the expenses of the new agency. This is a ~$0.33 increase for Snohomish #15 and no change for Snohomish #19 or for NCRFA.

Service Levels:

Types of services and delivery methods vary significantly between the three agencies. Fire suppression services are provided by all three agencies, but EMS response differs in that

NCRFA provides Advanced Life Support transport services (ambulance), whereas the two districts provide Basic Life Support, relying on NCRFA for paramedic services and ambulance transport services. All three agencies have volunteer suppression personnel, but the two districts rely more heavily upon them. NCRFA has career staffing at its key stations and is augmented by part-time personnel. Snohomish #15 has a small career staff and uses part-time firefighters to augment staffing. Snohomish #19, however, uses part-time firefighters regularly signed up for shift work and augmented by community volunteers responding from home.

Geography:

The combined service area at the north end runs along the Snohomish County line with Skagit County significantly east across Interstate 5 to Snohomish County Fire District #25 (Oso), then southward along Snohomish #21's northwestern boundary toward the City of Arlington southward to the northern boundary of Snohomish #12 (Marysville), then southward again to the outskirts of the northern tip of the City of Everett. The Puget Sound and Tulalip Bay forms the western edge of the area northward back to the county line.

Complexity:

This strategy represents the most complex of the strategies offered in the project. The addition of two districts with two very different service models and the addition of a tribe make this a moderate risk to pursue.

Affected Stakeholders:

- NCRFA
- Snohomish #15
- Snohomish #19
- Tulalip Tribe
- Applicable Collective Bargaining Units
- Applicable Volunteer Associations

Fiscal Analysis:

The three districts levy rates in 2013 vary considerably as illustrated by the following table. Property owners within current Snohomish #19 service area would continue to pay their existing Bond and M&O levies after any combination. Whereas property owners in NCRFA and Snohomish #15 service areas would not incur Snohomish #19 previous existing Bond and M&O obligations. Snohomish #19 M&O is a two-year levy that ends in 2014. Snohomish #19 existing

Bond debt is scheduled to be retired in 2028. Snohomish #19 has Non-voter Bonds totaling ~$225,000 (with remaining payments scheduled between 2013 and 2016). Additionally, NCRFA has Non-voter Bonds totaling ~$860,000 (with remaining payments scheduled between 2013 and 2018). Non-voter bonds are acquired by and become the responsibility of the combined agency. The remaining Non-voter Bond payments have been factored into the model and added to the forecast expenses, as well as the revenues calculated by levy rate to service the annual debt payments. Non-voter bond rates are included under the $1.50 limitation calculation.

Figure 206: NCRFA, Snohomish #15, and Snohomish #19 - 2013 AV and Levy Rates

Based on 2013 Actuals	NCRFA	#15	#19
Total Assessed Value	1,525,279,544	311,276,588	321,071,551
Expense Levy Rate	1.38	1.42	1.23
Non-Voter Bond Levy Rate	0.12	-	0.27
Total Rate Under Fire Service Limit	**1.50**	**1.42**	**1.50**
EMS Levy Rate	0.50	0.25	0.50
Total Rate Fire & EMS	**2.00**	**1.67**	**2.00**
Bond Levy Rate (Till 2028)	-	-	0.71
M&O Levy Rate (2-Year end 2014)	-	-	0.60
Total Combined Rate	**2.00**	**1.67**	**3.31**

Figure 207 depicts growth projections used to model the property tax revenues for 2014 to 2018.

Figure 207: Growth Projections, 2014 - 2018

Year	Percent Change
2014	2.4%
2015	3.7%
2016	4.0%
2017	3.9%
2018	3.4%

Figure 208 depicts the combined and projected assessed values, Expense and EMS Levy rates forecast for 2014 through 2018.

Figure 208: NCRFA, Snohomish #15, and Snohomish #19 - Combined Assessed Value and Levy Rate Forecast, 2014 - 2018

			Forecast		
	2014	2015	2016	2017	2018
Base Fire Assessed Value	2,209,410,747	2,318,330,572	2,439,279,212	2,563,676,142	2,681,309,059
New Construction	26,202,148	27,130,209	28,166,545	29,466,082	30,817,192
Total Fire Assessed Value	2,235,612,895	2,345,460,781	2,467,445,757	2,593,142,224	2,712,126,251
Base EMS Assessed Value	2,229,870,214	2,339,547,039	2,461,344,338	2,586,601,807	2,705,014,197
New Construction	26,202,148	26,857,059	27,581,247	28,565,127	29,574,780
Total EMS Assessed Value	2,256,072,362	2,366,404,098	2,488,925,585	2,615,166,934	2,734,588,978
Expense Levy Rate	1.388	1.352	1.314	1.277	1.248
Non-Voter Bond Levy Rate	0.104	0.071	0.065	0.053	0.049
M&O Levy Rate	-	-	-	-	-
EMS Levy Rate	0.493	0.481	0.467	0.454	0.444
Total Rate	**1.985**	**1.903**	**1.846**	**1.784**	**1.740**

Figure 208 depicts the combined and projected assessed values, Expense, Non-Voter Bond, and EMS Levy rates forecast for 2014 through 2018. The forecasted Expense Levy rate for the combined agency is ~$1.39 per $1,000 of AV, the non-voter bond levy rate would be $0.11 (ends in 2018), and when added to the $0.50 EMS levy, the total combined forecasted levy rate would be ~$2.00 per $1,000 of AV.

The following table compares the 2013 actual rates to the forecast combined rate. While NCRFA and Snohomish #19 would see no change in their forecast total levy rate, Snohomish #15 would see an increase in ~$0.33 per $1,000 of AV.

Figure 209: NCRFA, Snohomish #15, and Snohomish #19 - Comparison of Existing Levy Rates to Forecast Levy Rate

Based on 2013 Actuals	NCRFA	#15	#19
Total Assessed Value	1,525,279,544	311,276,588	321,071,551
Expense Levy Rate	1.38	1.42	1.23
Non-Voter Bond Levy Rate	0.12	-	0.27
Total Rate Under Fire Service Limit	1.50	1.42	1.50
EMS Levy Rate	0.50	0.25	0.50
Total Rate Fire & EMS	**2.00**	**1.67**	**2.00**
Forecast Combined Agency Rate	**1.98**	**1.98**	**1.98**
Difference	**(0.02)**	**0.32**	**(0.02)**
Bond Levy Rate (Till 2028)	-	-	0.71
M&O Levy Rate (2-Year end 2014)	-	-	0.60
Total Forecast Rate by Original Taxing District	**1.98**	**1.98**	**3.30**

Figure 210: NCRFA, Snohomish #15, and Snohomish #19 - Forecast Revenue, 2014 - 2018

Revenue	Forecast				
	2014	2015	2016	2017	2018
Current Expense Levy	3,065,726	3,133,613	3,202,977	3,273,471	3,345,298
C.E. - New Construction Levy	36,861	37,651	38,084	38,705	39,362
EMS Levy	1,099,692	1,123,921	1,148,676	1,173,833	1,199,465
EMS - New Construction Levy	13,101	13,382	13,535	13,756	13,990
Non-Voter Bond Levy	238,147	238,148	238,149	238,150	238,151
M&O Levy	190,000	-	-	-	-
UnCollected (2% of Total Levy)	-	-	-	-	-
Total General Property Taxes	4,643,527	4,546,715	4,641,421	4,737,915	4,836,266
Timber Harvest Taxes	-	-	-	-	-
Excise Taxes	6,354	6,504	6,657	6,813	6,973
Federal Grants	-	-	-	-	-
State Grants	2,709	2,773	2,838	2,905	2,973
Services	1,398,185	1,431,079	1,464,746	1,499,206	1,534,477
Amb & Emer Aid Fees	695,998	712,372	729,131	746,285	763,842
Interest & Other Earnings	3,378	3,457	3,538	3,622	3,707
Rents, Leases & Concessions	35,414	36,247	37,100	37,973	38,866
Contributions & Donations	276,761	283,273	289,937	296,758	303,740
Miscellaneous Revenues	-	-	-	-	-
Total Revenue	**7,062,326**	**7,022,419**	**7,175,369**	**7,331,477**	**7,490,844**

Figure 211 shows the forecasted expenses between 2014 and 2018. All expenditures are based on 2013 budgeted amounts. Personnel Benefits have been increased by 8.0 percent to account

for uncertainty in health care and pension expense increases, all other expenditures were forecast using the ten-year average CPI of 2.35 percent. Transfers-Out reflect the remaining non-voter bond scheduled payments.

Figure 211: NCRFA, Snohomish #15, and Snohomish #19 - Forecast Expenses, 2014 - 2018

Expenditure	Forecast				
	2014	2015	2016	2017	2018
Salaries and Wages	4,025,258	4,119,957	4,216,884	4,316,091	4,417,632
Personnel Benefits	1,135,647	1,226,499	1,324,619	1,430,589	1,545,036
Supplies	362,625	371,156	379,888	388,825	397,973
Services	1,095,305	1,121,073	1,147,448	1,174,443	1,202,073
Int Gov Srv	8,188	8,381	8,578	8,780	8,986
Capital Outlay	136,518	68,515	70,117	53,160	54,410
Tranfers-Out	238,147	163,736	158,903	135,483	130,241
Total Expenditure	**7,001,688**	**7,079,316**	**7,306,436**	**7,507,369**	**7,756,351**

The forecast fund balance model provided in the following table below begins with a **zero** beginning fund balance to show the annual growth (or loss) to the ending fund balance.

Figure 212: NCRFA, Snohomish #15, and Snohomish #19 - Forecast Fund Balance, 2014 - 2018

Current Expense / General Fund	Forecast				
	2014	2015	2016	2017	2018
Beginning Cash and Investments	-	60,638	3,741	(127,327)	(303,219)
Revenues	7,062,326	7,022,419	7,175,369	7,331,477	7,490,844
Expenditures					
Salaries and Wages	4,025,258	4,119,957	4,216,884	4,316,091	4,417,632
Personnel Benefits	1,135,647	1,226,499	1,324,619	1,430,589	1,545,036
Supplies	362,625	371,156	379,888	388,825	397,973
Services	1,095,305	1,121,073	1,147,448	1,174,443	1,202,073
Int Gov Srv	8,188	8,381	8,578	8,780	8,986
Capital Outlay	136,518	68,515	70,117	53,160	54,410
Tranfers-Out	238,147	163,736	158,903	135,483	130,241
Total Expenditures	7,001,688	7,079,316	7,306,436	7,507,369	7,756,351
Ending Cash and Investments	**60,638**	**3,741**	**(127,327)**	**(303,219)**	**(568,725)**

Figure 212 depicts the forecast fund balance between 2014 and 2018. Based on the current existing operating expenses and revenues of each agency, and the projections previously stated, the combination of NCRFA, Snohomish #15, and Snohomish #19 demonstrates negative growth. Reductions to the cost structure would have to be addressed in order for this combination to be a financially feasible concept. Reductions to existing expenses would allow for more stable growth and security. Additionally, all of the agencies' existing fund balances

would be pooled into the combined organization's beginning fund balance upon the expansion of the RFA.

Conclusion:

ESCI concludes that the approach identified in Strategy 4 presents a moderate to low likelihood of success because of the level of complexity, service level differences, lack of advantageous response flow, and fiscal imbalance. While the approach should be considered in the future as a long-range solution for increasing efficiency and achieving sustainability, ESCI concludes that an incremental or phased approach carries a greater likelihood of success. Intentionally managing toward closer alignment of tax levies by the three agencies will reduce the fiscal imbalance, making the taxpayer impact less significant.

Implementation of Goals and Strategies

Policy Actions

The governing bodies of all of the participating agencies will need to evaluate the proposed goals and strategies with care and then decide whether they choose to move forward. Formation of task forces or steering committees is recommended to analyze the feasibility of each option or permutation and fully understand the impact that may be felt by the affected city or fire district.

Should the decision be made to move forward with any of the operational goals, the first step is for the elected officials/policy makers to provide direction and any parameters to the fire chiefs. The chiefs should be expected to establish a regular meeting interval with their peers, along with a timeline and a status report interval to report progress to the policy makers.

Should the decision be made to move forward with any of the governance strategies, the first step is for the governing body of each participating organization to formally declare its intent to do so. The elected officials of the governing body will then need to appoint representatives from within their ranks to serve on an Exploratory Committee. The responsibilities of this group are to consider the recommendations contained in this report, gather additional supporting information, identify barriers to moving forward, and to generally determine whether the discussions warrant moving forward with implementation.

It is critically important for the elected officials to inform the public on the need for change. The community must understand the need for the fire agencies to address funding mechanisms, service delivery options and infrastructure to provide for a better or more sustainable level of service. The message must be closely coordinated between agencies, setting the tone for ongoing discussions. A press conference would be a powerful opportunity to demonstrate a shared concern for the future and display unity in providing efficient and effective services. Community meetings should quickly follow the initial press conference and the dialogue must be continuous.

Guidance

Should any of the above defined strategies be adopted as a desired approach, the following guidance is offered for moving forward:

Consult With Service Partners

The involved city councils, fire district boards and administrators should begin a dialog with each other, and with service partners of neighboring fire agencies, regarding the proposals, verifying which agencies are likely to participate in the governance strategy.

Consult With Legal Counsel

The city councilors and district board members should consult with legal counsel regarding the procedural details of the options chosen.

Jointly Adopt a Regional Fire and EMS Vision

The involved city councils and boards of commissioners should formally adopt a Regional Fire and EMS Vision. A unified vision statement should be developed, stating the purpose, goals and vision of the proposed action

Partnering Consideration Factors and Pitfalls

Following is a listing of factors, challenges, and issues that need to be considered, along with policy guidance and implementation procedures.

Motivating Factors

When organizations are asked to list reasons for undertaking an organizational restructuring, respondents most often cite internal decisions to increase the effectiveness and/or efficiency of their organization. Notwithstanding the fiscal issues facing many communities, most perceive that they undertake restructuring to improve the quality and/or range of service. This implies that most organizations approach the decision to carry out an alliance or integration because of forecasting and planning. Interestingly, funding issues are less frequently mentioned reasons for reconfiguring an organization. The quality and efficiency of service delivery is often the primary consideration.

Organizations tend to consider significant changes when the agencies experience certain events. Often, a sudden interruption of the status quo may occur (such as the loss of a CEO, a financial crisis, or a rapid change of the community or service demand) that compels change. Other times, forward-thinking individuals of the policy body or administration may champion the idea. Frequently, these same leaders work against their own self-interest, especially in promoting something that stands to impact their positions, like merging with another agency. Last, the political or operational climate in which the agency operates may change in a way that forces the agency to change the way it does business.

Success Factors

The success of an organizational restructuring depends on many things. In our experience with dozens of alliances and integrations, leadership is the single factor that most frequently determines success. Nearly always, a key staff, council member or board member champions the concept, garnering the support of the various affected groups (political, labor, member, and community). In addition, good leadership fosters an organizational culture that is receptive to planning, calculated risk taking, and flexibility. The manner in which leaders promote a trusting relationship between all groups and aid two-way communication between them is essential. From these issues, the research by Kohm, Piana, and Gowdy identifies five factors that most often seem to contribute to the successful implementation of an alliance or integration:[44]

- Leadership that believes strongly in the partnership and demonstrates this belief, often by acting selflessly to maintain it.
- Multiple forms of communication to keep all persons (council, board, staff, members, and community) up to date about plans, problems, and benefits concerning the partnership.
- Face-to-face communications with partner organizations in the form of meetings, training, and other forums to build trust and understanding among staff.
- Flexibility through an expectation that even in the best-planned partnership unforeseen issues will arise, mistakes will be made, and alternative paths will be identified.
- Early evidence of benefit to assure everyone that they are on the right track, such as better or less expensive employee benefits or improved facilities.

Restructuring Pitfalls

Organizational integrations fail for many reasons. Sometimes law prohibits the idea at the outset. Other times, the proposal may be doomed by the unfavorable outcome of a public election, or the reality of finance. These issues aside, however, four major pitfalls can cause even the most feasible alliance to go wrong. Specifically, the four are command, communication, control, and culture.

Command

Undertaking any partnership absolutely requires that effective leadership be demonstrated consistently at all levels. Policymakers and administrators must guide their respective agencies; yet, at the same time, they must cooperate with partner organizations. Differing leadership styles may tend to cause repressed friction at best and open conflict at worst. Problems with

[44] Amelia Kohm, David La Piana, and Heather Gowdy, "*Strategic Restructuring, Findings from a Study of Integrations and Alliances Among Nonprofit Social Service and Cultural Organizations in the United States,*" Chapin Hall, June 2000, page 15.

sharing control and making decisions sends the wrong message to the members of the organization, which can lead to an unraveling of even the best proposal.

Communication

Silence or limited information from leaders about potential or upcoming partnerships breeds fear, mistrust, and misinformation among affected persons. The leadership of collaborating organizations must agree to communicate actively with all affected groups. Everyone must be provided the same information at the same time. Most importantly, leaders must demonstrate two-way communication skills by carefully listening to (and acting on) the concerns of all constituents.

Control

Frequently, the strategic restructuring process is compared to a marriage. As the saying goes, "Marriage is when two people become as one; the trouble starts when they try to decide which one."[45] As in marriage, restructuring often fails because of organizational or personal ego issues.

The tenets of leadership require that someone be in charge; but, in the interest of the greater good, some of those in leadership positions must agree to yield power. Some who are accustomed to operating in a position of control may have trouble adjusting to new roles that require more collaboration. Personal sacrifice in the interest of the community may not always win out.

Culture

Two schools of thought exist regarding organizational culture. The first views culture as implicit in social life, naturally emerging as individuals transform themselves into social groups (tribes, organizations, communities, and nations). The second offers that culture is comprised of distinct observable forms (language, use of symbols, customs, methods of problem solving, and design of work settings) that people create and use to confront the broader social environment. This second view is most widely used in the evaluation and management of organizational culture, but the first is no less important when considering bringing two or more separate organizations into a closer relationship.

The general characteristics of a fire department encourage the creation of a culture that is unique to that organization. The paramilitary structure, the reliance on teamwork, and the

[45] Source unknown.

hazards of the work builds strong bonds between the members who tend to share group behaviors, assumptions, beliefs, and values. Bringing two, three or more such groups together with cultures formed through different experiences always results in a change to both organizational cultures. If the partnership is successful, no one culture will overcome the other – instead, a new culture will evolve from the others. If the organizational cultures are incompatible, all manner of chaos will unfold and the partnership will fail.

Leaders must be aware of organizational culture and its role in the wellness of the agency's soul. Early recognition by leadership of the importance of culture to the success of a partnership can help to overcome differences and build on strengths.

Implementation Timelines and Milestones

Timelines for implementation of these strategies are highly variable. Numerous questions will be raised by the participating agencies and additional research and legal guidance will be necessary, potentially extending the time that it will take to move forward. A more complex or multi-faceted strategy will take longer to develop.

Cost Apportionment

Local governments provide services (such as fire protection) based on an assumption of public interest rather than the need for profitability, as in the private sector. Consequently, the limiting market forces of supply, demand, and price are not typically found at the forefront of policy decisions concerning fire protection. While elected officials may spend significant time and effort debating the overall cost of fire protection, it is very unusual that the point of service price is considered. In this light, it is not surprising that local governments find it difficult to establish a fair market price for essential services when entering into partnerships.

Usually when a single local government provides fire protection to its residents, that community bears the entire financial burden because of the presumption that everyone benefits from the service. In the case of municipalities, the full cost of the service may not be easily determined because administrative and support expenses are frequently borne by other municipal departments and not documented in the fire department's budget. It all works because individual users of the service are not charged; therefore, the real price of that service is never an issue. On the other hand, when two or more communities share in providing fire protection, elected officials must assure that each community assumes only its fair *pro rata* share of the

cost, thereby fulfilling an obligation to act as stewards to the best interest of their respective constituencies.

However, while purely economic considerations may suggest that those who benefit from a service should pay in direct proportion to the level of benefit (the "benefits received" principle), social and political concerns may also enter into the price-setting process. For example, ESCI completed an evaluation of the fire protection system comprised of a city and a fire protection district. The fire district provides no emergency service of its own, contracting instead with the city fire department for all operations within the district's territory. The fire district compensates the city for a percentage of the fire department budget (minus certain budgetary transfers and any funds not spent during the previous year) equivalent to a rolling five-year average of district alarms compared to city alarms.

Cost Allocation Options

What follows is a listing of system variables that can be used (singly or in combination) to allocate cost between allied fire departments. Each option is summarized by the concept, its advantages and disadvantages, and other factors that should be considered. Regardless of the option(s) chosen to share the cost of fire protection, the resulting intergovernmental service agreement needs to address the issues of full cost versus marginal cost and should be clear about the inclusion of administrative or overhead cost. In addition, service contracts often must reconcile the exchange of in-kind services between the participating agencies.

Area

The cost of emergency service can be apportioned based on the geographic area served relative to the whole. For instance, the jurisdictional boundaries of the seven agencies represent about 288.2 square miles.[46] The following figure displays the services area in square miles and the percentage for each jurisdiction.

[46] Square mileage is for fire services area and excludes EMS areas served beyond district/city boundaries.

Figure 213: Cost Allocation by Service Area, 2013

Jurisdiction	Service Area in Square Miles	Percentage of Total
AFD	9.3	3.23%
CIF&R	39.9	13.84%
Snohomish #15	15.2	5.27%
Snohomish #19	20.7	7.18%
Snohomish #21	70.1	24.32%
Snohomish #24	30.3	10.51%
NCRFA	102.7	35.63%
Total	**288.2**	**100.00%**

Apportionment founded on service area alone may work best in areas that are geographically and developmentally homogeneous.

Pro: Service area is easily calculable from a variety of sources. Size of service area generally remains constant with few if any changes.

Con: Service area does not necessarily equate to greater risk or to greater workload.

Consider: Service area may be combined with other variables (such as assessed value and number of emergencies) to express a compound variable (such as assessed value per square mile and emergencies per square mile).

Assessed Value

The assessed value (AV) of agencies is established by tax assessors under laws of the state. Usually, higher-valued structures and complexes carry a greater risk to the community from loss by fire; consequently, assessed value also tends to approximate the property at risk within an area. Fire departments are charged with being sufficiently prepared to prevent property loss by fire. Therefore, the cost of contracted fire protection may be apportioned relative to the assessed value of the allied jurisdictions. Typically, AV is used to apportion cost of shared service by applying the percentage of each partner's AV to the whole.[47] The following table illustrates the allocation of cost by the assessed value of the seven agencies.

[47] AV used is the total assessed value of the service area.

Figure 214: Cost Allocation by Assessed Value, 2013

Jurisdiction	Assessed Valuation	Percentage of Total
AFD	$1,727.8 B	22.75%
CIF&R	$2,809.2 B	36.99%
Snohomish #15	$311.3 M	4.10%
Snohomish #19	$321.1 M	4.23%
Snohomish #21	$679.9 M	8.95%
Snohomish #24	$219.4 M	2.89%
NCRFA	$1,525.2 B	20.08%
Total	**$7,593.9 B**	**100.00%**

Pro: AV is updated regularly, helping to assure that adjustments for changes relative to new construction, annexation, and inflation are included. Because a third party (the assessor) establishes AV in accordance with state law, it is generally viewed as an impartial and fair measurement for cost apportionment. Fire protection is typically considered a property-related service; thus, apportionment tied directly to property value has merit.

Con: AV may not reflect the property risk associated with certain exempt property, such as schools, universities, government facilities, churches, and institutions. AV may not always represent the life risk of certain properties, such as nursing homes or places of assembly, which might dictate more significant use of resources. In addition, some large facilities may seek economic development incentives through AV exemptions or reductions. Adjustments may need to be made to AV if such large tracts of exempt property in one jurisdiction cause an imbalance in the calculation. Last, AV typically includes the value of land, which is not usually at risk of loss by fire. Depending on the local circumstance, however, this may not be a significant factor if the relative proportion of land value to structure value is reasonably uniform over the whole of the territory.

Consider: Discounted AV depending on the class of property (commercial or residential), which may skew the overall proportion of those properties compared to risk. As an additional consideration, assessors usually establish the AV in accord with the property tax cycle, which can lag somewhat behind the budget cycle of local agencies and the time when service contracts are reviewed or negotiated.

Deployment

The cost for service is based on the cost of meeting specific deployment goals. Deployment goals may be tied to the physical location of fire stations, equipment, and personnel (strategic deployment) or by stating the desired outcome of deployment (standards of cover). A strategic goal could specify the location of two stations, two engines, and four on-duty firefighters. A standard of cover might state the desired outcome as two engine companies and four emergency workers on the scene of all structure fire emergencies within eight minutes 90 percent of the time. While both strategic and outcome goals can be used effectively to assist in allocating cost, ESCI views outcome goals to be more dynamically linked to the quality of

service and therefore preferable to strategic goals. This alternative is highly variable due to the independent desires of each community in regard to outcome goals.

A weighted scoring system uses a critical task analysis. This type of scoring system for each agency allows the ranking of each area based on the assigned risk as well as the apparatus, manpower, and Needed Fire Flow (NFF). The following illustrates the allocation of cost by the number of resources deployed to serve each jurisdiction, including fire stations and frontline engines and ladder trucks.

Figure 215: Cost Allocation by Resource Deployment, 2013

Jurisdiction	Facilities	Engines and Aerials	Total	Percentage of Total
AFD	3	4	7	17.07%
CIF&R	5	5	10	24.39%
Snohomish #15	1	1	2	4.88%
Snohomish #19	2	2	4	9.76%
Snohomish #21	1	2	3	7.32%
Snohomish #24	2	3	5	12.20%
NCRFA	5	5	10	24.39%
		Total	**41**	**100.00%**

Pro: Deployment is intuitively linked to the level of service. The outcome of deployment based on a standard of cover can be monitored continuously to assure compliance. Such deployment can be adjusted if standards are not met. This assures the continuous quality of emergency response throughout the life of a service contract.

Con: Strategic deployment may not equate to better service because such goals are prone to manipulation wherein resources may be sited more for political reasons and less for quality of service reasons. Outcome goals require common reporting points and the automatic time capture of dispatch and response activities to assure accuracy. Record keeping needs to be meticulous to assure the accurate interpretation of emergency response outcomes.

Consider: Contracts for deployment-based fire protection should address the inclusion of administrative or overhead cost, as well as capital asset cost, depreciation, rent, and liability insurance.

Service Demand

Service demand may be used as an expression of the workload of a fire department or geographical area. Cost allocation based on emergencies would consider the total emergency response of the service area and apportion system cost relative to the percentage of emergencies occurring in the jurisdictions.

Figure 216: Cost Allocation by Service Demand, 2012

Jurisdiction	Service Demand	Percentage of Total
AFD	3,631	28.75%
CIF&R	1,764	13.97%
Snohomish #15	687	5.44%
Snohomish #19	665	5.26%
Snohomish #21	442	3.50%
Snohomish #24	488	3.86%
NCRFA	4,954	39.22%
Total	**12,631**	**100.00%**

Pro: Easily expressed and understood. Changes in the workload over the long term tend to mirror the amount of human activity (such as commerce, transportation, and recreation) in the corresponding area.

Con: Emergency response fluctuates from year to year depending on environmental and other factors not directly related to risk, which can cause dependent allocation to fluctuate as well. Further, the number of alarms may not be representative of actual workload; for example, one large emergency event requiring many emergency workers and lasting many hours or days versus another response lasting only minutes and resulting in no actual work. Last, emergency response is open to (intentional and/or unintentional) manipulation by selectively downgrading minor responses, by responding off the air, or by the use of mutual aid. Unintentional skewing of response is most often found in fire systems where dispatch and radio procedures are imprecisely followed. Further, service demand does not follow a predetermined ratio to land area. As such, the service demand per square mile ratios may produce large variations.

Consider: Using a rolling average of alarms over several years can help to suppress the normal tendency for the year-to-year fluctuation of emergencies. Combining the number of emergencies with the number of emergency units and/or personnel required may help to align alarms with actual workload more closely; however, doing so adds to the complexity of documentation. In a similar manner (and if accurate documentation is maintained), the agencies could consider using the total time required on emergencies as an aid to establish the comparative workload represented by each jurisdictional area.

Fixed Rate

The use of fixed fees or rates (such as a percentage) to calculate allocation of shared cost is more common between municipalities and independent fire districts. Occasionally, fixed-rate contracts involve the exchange of in-kind services.

Pro: The concept is simple and straightforward. A menu of service options and the fees corresponding to those alternatives can be developed by the contractor agency. The contracting agencies can tailor a desired level of service based on risk and community expectation by choosing from the various menu items.

Con: Partnering communities may change (i.e., population, jobs, commerce, structures, and risk) at divergent rates, causing disconnection between the rationales used to establish the fee and the benefit received. A fixed-rate contract may be difficult to coherently link to the services provided and/or received, which can lead to a lack of support by officials and the community.

Consider: Partnering agencies need to assure that provision for rate adjustment is included in the agreement, including inflation. The agreement should address the issue of full cost versus marginal cost. The inclusion or non-inclusion of administrative and/or overhead cost also requires statement, as does the reconciliation of in-kind service exchange. The ownership and/or depreciation of capital assets should be addressed, as should rent, utilities, and liability insurance. In the case of a fixed fee, the agreement should establish how the participation of other public agencies in the partnership would affect cost.

Population

Payment for service can be based on the proportion of residential population to a given service area. The following figure lists the population by jurisdiction and the percentage of the total number of individuals living in each service area.

Figure 217: Cost Allocation by Population, 2010 Census

Jurisdiction	Population	Percentage of Total
AFD	17,926	24.06%
CIF&R	15,661	21.02%
Snohomish #15	4,622	6.20%
Snohomish #19	3,142	4.22%
Snohomish #21	7,800	10.47%
Snohomish #24	4,000	5.37%
NCRFA	21,358	28.66%
Total	**74,509**	**100.00%**

Pro: Residential population is frequently used by governmental agencies to measure and evaluate programs. The U.S. Census Bureau maintains an easily accessible database of the population and demographics of cities, counties, and states. Estimates of population are updated regularly.

Con: While census tracts for cities frequently follow municipal boundaries, this is not the case with fire district boundaries, forcing extrapolated estimates, which can fail to take into account pockets of concentrated population inside or outside of the fire district boundaries. Residential population does not include the daily and seasonal movement of a transient population caused by commerce, industry, transport, and recreation. Depending on the local situation, the transients coming in (or going out) of an area can be very significant, which can tend to skew community risk. Residential population does not statistically link with emergency workload; rather, human activities tend to be the linchpin that connects people to requests for emergency assistance.

For example, if residential population actually determined emergency workload, emergencies would peak when population was highest within a geographic area. However, in many communities where the residential population is highest from about midnight to about 6:00 a.m. (bedroom communities), that time is exactly when the demand for emergency response is lowest. It turns out that emergency demand is highest when people are involved in the activities of daily life—traveling, working, shopping, and recreating. Often, the persons involved in such activities do not reside in the same area. Additionally, simply relying on population will not account for the effects that socio-economic conditions have on emergency service response activity.

Consider: The residential population of unincorporated areas can sometimes be estimated by using the GIS mapping capability now maintained by most counties and municipalities. By counting the residential households within the area in question, then applying demographic estimates of persons per household, it may be possible to reach a relatively accurate estimate of population within the area in question. Alternately, residential population can be estimated by using information obtainable from some public utility districts by tallying residential electrical meters within a geographic area and then multiplying by the persons per household.

All of the agencies experience a daily or seasonal influx of people who are not counted as residential population. This transient population can be estimated by referring to traffic counts, jobs data, hotel/motel occupancy rates, and, in some cases, park visitor statistics. Residential population plus transient population is referred to as functional population. Where functional population is significantly different from residential population, service agreements based on population should be adjusted to account for it.

Multiple-Variable Allocation

Frequently, even though everyone may agree on the benefit of allied fire protection, officials find it difficult to reach an accord on the cost. The differences between community demographics and/or development, along with changes that occur within the system over the long term, can cause the perception of winners and losers. This can be especially prevalent when a single variable is used to apportion cost. A service contract based on more than one allocation determinate may help solve these problems.

For example, ESCI is familiar with a 9-1-1 dispatch center that serves more than 20 fire agencies of all sizes and types—large, small, metropolitan, and rural; on-duty career and on-call volunteer. Here, the service contract includes three determinates applied to each agency.

Base charge — 10 percent of the dispatch center's budget is divided equally between all agencies. This charge is based on the acknowledgement that each agency is equally responsible to maintain the dispatch center on continuous stand-by, irrespective of size of the agency or its use of the dispatch services.

Usage charge — 45 percent of the dispatch center's budget is divided between the agencies in accordance with the number of emergency dispatches made for each during the preceding year. The member agencies determined that this charge fairly assesses the overall use of the 9-1-1 dispatch system by each.

Risk charge — 45 percent of the dispatch center's budget is divided between the agencies in accordance with the relative percentage of each department's AV. The member agencies determined that this charge is relational to each department's community risk and that it is closely associated with the overall ability to pay.

By apportioning the dispatch center cost over three variables, the members of this alliance have been able to reach a long-term agreement that fits the diversity of the partnering agencies. Other partnerships in other geographical areas may require a different solution involving different combinations of variables. In summary, when choosing a cost-sharing strategy for partnered fire protection, it is important to keep any apportionment formula fair, simple, and intuitively logical to assure that the public accepts and supports the endeavor.

Allocation Summary

The information provided previously serves as a detail of cost allocation factors. Given the lengthy discussion provided with each option, ESCI has compiled the information into a summary table illustrating the distribution of factors among the seven agencies. These examples are for illustrative purposes and may be used as part of a check for fairness of assigning the cost for service.

Figure 218: Summary of Cost Allocation Factors by Percentage

Jurisdiction	Area	Assessed Value	Resources	Service Demand	Population
AFD	3.23%	22.75%	17.07%	28.75%	24.06%
CIF&R	13.84%	36.99%	24.39%	13.97%	21.02%
Snohomish #15	5.27%	4.10%	4.88%	5.44%	6.20%
Snohomish #19	7.18%	4.23%	9.76%	5.26%	4.22%
Snohomish #21	24.32%	8.95%	7.32%	3.50%	10.47%
Snohomish #24	10.51%	2.89%	12.20%	3.86%	5.37%
NCRFA	35.63%	20.08%	24.39%	39.22%	28.66%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

ESCI extrapolated the cost of emergency services using the fiscal year 2013 budgeted amounts for Fire and EMS using a multiple variable formula. This was applied to the cost allocation factors derived from the data contained in this report. The dollar amount used in the calculations was the operational budgets of the seven fire agencies, $15,336,068.

In addition to the individual funding alternatives, several multiple-variable scenarios are also provided as examples of how this type of methodology can be modified and applied. The following figures show three multiple cost allocations by variable, the weighted apportionment by percentage, and cost to each agency. The first allocates costs on the basis of assessed value (50 percent) and service demand (50 percent).

Figure 219: 50% Assessed Value and 50% Service Demand

Jurisdiction	Allocation	Cost
AFD	25.75%	$3,949,037.51
CIF&R	25.48%	$3,907,630.13
Snohomish #15	4.77%	$731,530.44
Snohomish #19	4.75%	$728,463.23
Snohomish #21	6.23%	$955,437.04
Snohomish #24	3.38%	$518,359.10
NCRFA	29.65%	$4,547,144.16
Total	**100%**	**$15,337,601.61**

The second example allocates costs on the basis of assessed value (70 percent) and service demand (30 percent).

Figure 220: 70% Assessed Value and 30% Service Demand

Jurisdiction	Allocation	Cost
AFD	24.55%	$3,765,004.69
CIF&R	30.08%	$4,613,089.25
Snohomish #15	4.50%	$690,123.06
Snohomish #19	4.54%	$696,257.49
Snohomish #21	7.32%	$1,122,600.18
Snohomish #24	3.18%	$487,686.96
NCRFA	25.82%	$3,959,772.76
Total	**100%**	**$15,334,534.39**

The third example allocates the cost based on assessed value (50 percent), deployment (25 percent), and service demand (25 percent).

Figure 221: 50% Assessed Value, 25% Resources, 25% Service Demand

Jurisdiction	Allocation	Cost
AFD	22.83%	$3,501,224.32
CIF&R	28.09%	$4,307,901.50
Snohomish #15	4.63%	$710,059.95
Snohomish #19	5.87%	$900,227.19
Snohomish #21	7.18%	$1,101,129.68
Snohomish #24	5.46%	$837,349.31
NCRFA	25.94%	$3,978,176.04
Total	**100%**	**$15,336,068.00**

Findings

Based on evaluation of current conditions, fiscal analysis, and our experience with other projects of similar character and scope, we draw certain conclusions regarding Arlington Fire Department, Camano Island Fire & Rescue, Snohomish County Fire District #15, Snohomish County Fire District #19, Snohomish County Fire District #21, Snohomish County Fire District #24, and North County Regional Fire Authority, the region, and the opportunities for collaboration. A summary of those findings follow.

All Participating Agencies are Interdependent – The fire departments and districts depend upon each other for mutual aid and automatic aid assistance during emergency incidents. As stand-alone fire departments/districts, each agency would be challenged to effectively combat a significant, multiple alarm fire or other major incident without each other's assistance.

All Participating Agencies Value Customer Service – During the work leading to this report, each fire department/district consistently demonstrated a focus toward serving those who live, work, and play in the area. Each agency is proud of its community and works hard to care for it. Likewise, the communities are proud of and in some cases fiercely protective of their fire agencies.

Each Participating Agency Strives to Meet the Expectations of its Customers – The departments/districts make considerable effort to assure that they provide acceptable levels of service to their communities. Stakeholder interviews with the communities indicated that expectations are generally being met, with some concern expressed by business interests that more needs to be done in Arlington.

Each Organization Needs Infrastructure Improvements – Although the need varies from agency to agency, important gaps were identified in each organization. They range from the need for a reliable records management system to provide solid data in order to make good management decisions (Snohomish #15, #21, and #24), to staffing shortages for emergency operations (all agencies).

Other Organizations Should Be Included in Partnership Initiatives – Organizations outside of the participating agencies, such as Snohomish #25 (Oso) and Snohomish #12 (Marysville), should be included in some partnership discussions as appropriate. While these agencies were initially included in early discussions before this study was commissioned but ultimately opted out, there are opportunities to include additional partners in some initiatives. Governance options for Snohomish #24 have been severely curtailed by isolation from the other participating agencies as a result of Oso opting out of the study.

Cultural Differences Exist – Organizational culture is one of the most important factors impacting the success or failure of a cooperative effort. It is also, without question, the most difficult aspect to evaluate and it is challenging to predict the effect that differing internal cultures will have on the collaborative strategies.

The staff and line level members in participating organizations serve their fire departments/districts for similar reasons and from that standpoint are much alike. However, differences suggest that the organizational cultures contrast to varying degrees

between agencies. For integration of any elements of the organizations to be successful, the membership will need to develop similar attitudes and outlooks on not only the delivery of emergency services, but also on how they view each other and each other's organizations. Cultural shifts take time and are best accomplished, based on ESCI's experience, on the training ground. This is a key consideration and has resulted in the training related strategy recommendations herein.

Participating Agency Policymakers Should Convene to Consider Study Recommendations – The participating fire department/districts and their administrations have created a foundation for partnerships by conducting this study. Without a clear commitment from policymakers, momentum and progress on valuable initiatives may eventually falter. Policymakers should adopt a plan, similar to the one outlined in this report, to evaluate each of the recommendations contained herein, aligning the processes, services, and operations of the agencies wherever possible.

Opportunities Exist for Cost Avoidance – Opportunities to reduce duplication and/or increase efficiency exist for the participating agencies. Such opportunities include potential savings as a result of standardized specifications for fire equipment, the creation of a single fire training division, pooling volunteer services, cooperating in the staffing of Peak Activity Units (PAUs), and sharing of other resources and unified programs.

Combining Arlington, Snohomish #19 and #21 is Feasible – These agencies should begin discussions on formation of a Regional Fire Authority. If pursued incrementally, it should start with shared management services. An agreement would result in eliminated duplication and increased efficiency at the administrative level. Some cost savings can be realized, though limited.

Combining North County RFA and Camano Island Fire & Rescue is Not Financially Viable – An RFA formation between CIF&R and NCRFA, whether by annexation or new formation process, would result in either a substantial tax increase to Camano Island taxpayers or an unsustainable fiscal forecast over the next five years with a steeply declining fund balance. An effort to align levy rates between the two agencies and move toward a sustainable revenue model over time may facilitate future consideration of this option.

Combining Snohomish #15 and Tulalip Tribe is Not Feasible – Although RCW 52.26 provides for tribes to participate in forming RFAs with local fire agencies, it would require annexation of the DNR protected land and including Snohomish #12 in the formation (or de-annexing the tribal land Snohomish #12 currently serves). These complications make this strategy unfeasible. Snohomish #15 policy-makers should be cognizant of any changing circumstances, renewing this potential for a change in governance in the future.

Collaborative Steps between North County RFA, Snohomish #15, and Snohomish #19 Not Financially Viable – The agencies should explore incrementally moving toward expanding North County's RFA to include Snohomish #15 and #19. Moving toward alignment of levy rates improves the feasibility of combining as a long-term strategy.

Recommendations

The agencies should implement the following operational goals:

- Regional Training Consolidation
- Regional Logistics Consolidation
- Combine Volunteer Services Regionally
- Implement Peak Activity Units Regionally

The agencies should implement the following strategies:

- Strategy 1 (AFD, Snohomish #19, Snohomish #21 RFA)

The agencies should monitor conditions for future opportunity to implement:

- Strategy 2 (NCRFA, CIF&R RFA)
- Strategy 3 (Snohomish #15, Tulalip Tribe RFA)
- Strategy 4 (NCRFA annex Snohomish #15, Snohomish #19)
- Snohomish #24 and #25 (Oso) should explore a potential partnership (Oso is not a party to this study)

Beyond these goals and strategies, additional steps should be taken which improve efficiency and effectiveness among all of the participating agencies. These partnering strategies can be implemented individually on a stand-alone basis or they may be incorporated as part of a regional process designed to bring the organizations together as they consider the possibilities as a system. ESCI recommends the latter.

The process of considering and implementing any or all of these recommendations starts first with a shared vision by the policymakers of the participating agencies. From the vision, further goals and objectives can be identified which, if accomplished, propel the agencies toward the vision. This process, in essence, is the framework of a strategic plan for collaboration.

With the vision, goals, and objectives identified, the next steps are to identify critical issues which might have a bearing on these elements and identify specific tasks which must be accomplished (see critical issues at the beginning of this report). A process must be followed to ensure that focused effort and momentum are maintained throughout the endeavor. The process must involve all of the key stakeholders, timelines must be established, and a clearly defined work loop must be in place to hold work groups accountable to the tasks and the

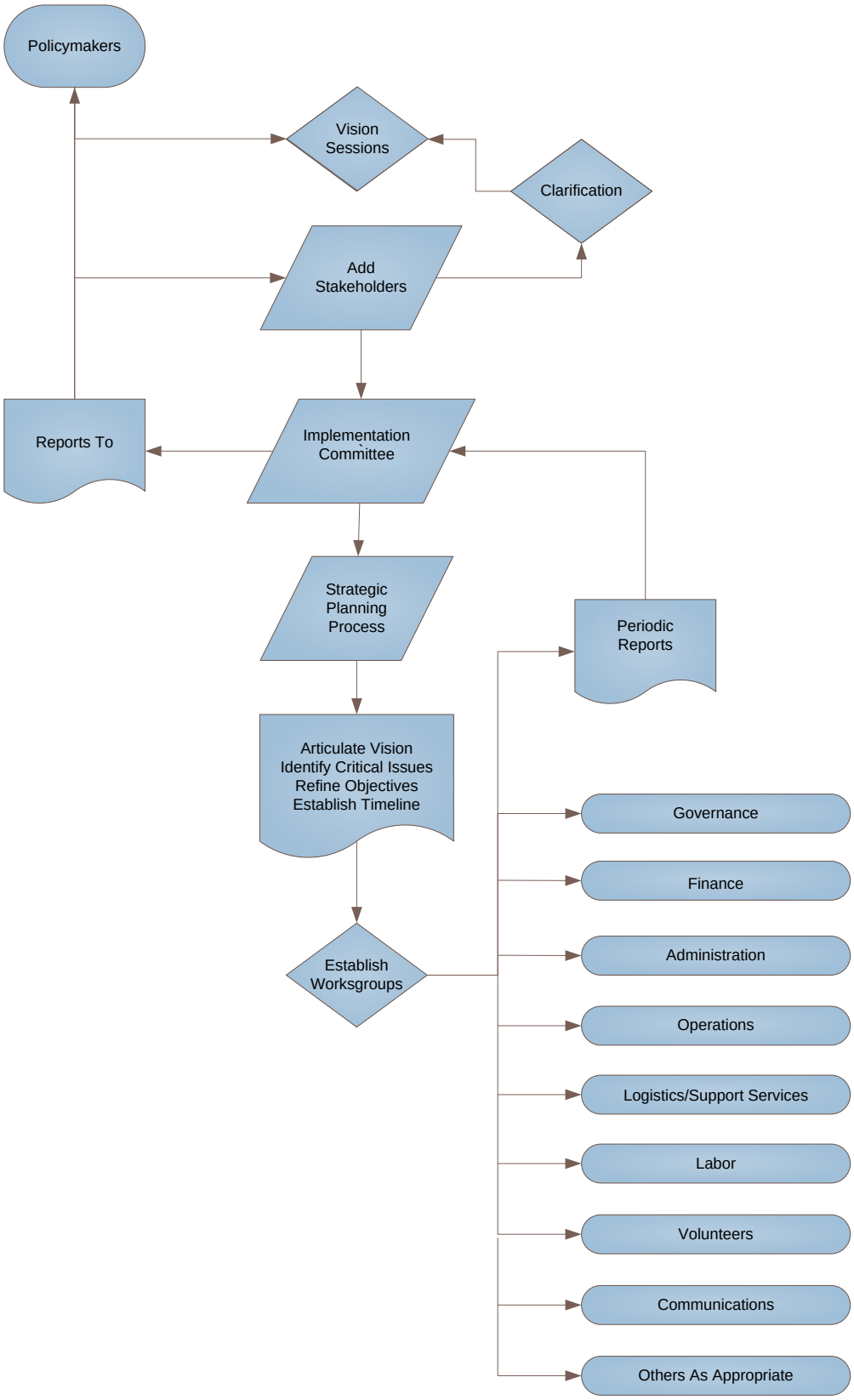
leadership accountable to the vision. Progress reports must be provided to the Implementation Committee who is ultimately accountable to the policymakers.

So, Now What?

Many studies and reports have been published and presented to clients over the years by ESCI. Many times, clients are overwhelmed with information and options. It takes time to digest the report and then figure out what to do next. ESCI finds it helpful to offer a process whereby the clients can break the process down into smaller segments. Those smaller pieces allow policy-makers and fire chiefs and communities examine details and have discussions about what is possible. The following is offered as a framework to consider in the initial stages of evaluation. It is a strategic planning approach to partnerships.

The following flowchart outlines a process whereby these goals and strategies can be further refined, other critical issues identified, timelines assigned, and specific tasks developed and implemented.

Figure 222: Process for Evaluating & Implementing Partnering Strategies



The process flowchart starts with the policymakers convening a series of meetings to discuss and develop a shared vision of all of the agencies. Key external stakeholders are often invited into the process to lend their expertise and perspective, ensuring that the community at large is represented in these important deliberations. Often, internal stakeholders have difficulty with "possibilities thinking" because of their close association with the status quo, which is human nature. The external stakeholders add valuable perspective by asking key questions and challenging the status quo.

Establish Implementation Working Groups

As the flowchart indicates, various Implementation Working Groups should be established that will be charged with the responsibility of performing the necessary detailed work involved in analyzing and weighing critical issues and identifying specific tasks. Membership for these Implementation Working Groups should be identified as part of that process as well.

The number and titles of the working groups will vary depending on the type and complexity of the strategies begin pursued. The following list provides some key recommended working groups used in most collaboration processes and a description of some of their primary assigned functions and responsibilities.

Joint Implementation Committee (Task Force)

This committee is typically made up of the fire chiefs or chief executives of each of the participating agencies but may also include outside stakeholders such as business and community interests. The responsibilities of this group are to:

- Develop goals and objectives which flow from the joint vision statement approved by the policymakers' vision sessions.
- Include recommendations contained in this report where appropriate.
- Establish the work groups and commission their work.
- Identify anticipated critical issues the work groups may face and develop contingencies to address these.
- Establish timelines to keep the work groups and the processes on task.
- Receive regular updates from the work group chairs.
- Provide regular status reports to the policymakers as a committee.

Governance Working Group

This group will be assigned to examine and evaluate various governance options for the cooperative service effort. A recommendation and the proposed process steps will be provided back to the Joint Implementation Committee and the Policy-Maker Group. Once approved, this working group is typically assigned the task of shepherding the governance establishment through to completion. The membership of this group typically involves one or more elected officials and senior city/district and agency management from each participating agency. Equality of representation is a key premise.

Finance Working Group

This group will be assigned to review the financial projections contained in the feasibility study and complete any refinements or updating necessary. The group will look at all possible funding mechanisms and will work in partnership with the Governance Working Group to determine impact on local revenue sources and options. Where revenue is to be determined by formula rather than a property tax rate, such as in a contractual cooperative venture, this group will evaluate various formula components and model the outcomes, resulting in recommendations for a final funding methodology and cost distribution formula. The membership of this group typically involves senior financial managers and staff analysts, and may also include representatives from the agencies' administrative staffs.

Administration Working Group

Working in partnership with the Governance Working Group, this group will study all of the administrative and legal aspects of the selected strategies they are assigned and will identify steps to ensure the process meets all administrative best practices and the law. Where necessary, this group will oversee the preparation and presentation of policy actions such as proposed ordinances, joint resolutions, dissolutions, and needed legislation to the policymakers. The membership of this group typically involves senior city/district management staff from the various entities involved and may also include legal counsel.

Operations Working Group

This group will be responsible for an extensive amount of work and may need to establish multiple sub-groups to accommodate its workload. The group will work out all of the details necessary to make operational changes required by the strategy. This involves detailed analysis of assets, processes, procedures, service delivery methods, deployment, and operational staffing. Detailed integration plans, steps, and timelines will be developed. The group will

coordinate closely with the Support Services and Logistics Working Group. The membership of this group typically involves senior agency management, mid-level officers, training staff, volunteer leadership and labor representatives. This list often expands with the complexity of the services being provided by the agencies.

Logistics/Support Services Working Group

This group will be responsible for any required blending of capital assets, disposition of surplus, upgrades necessary to accommodate operational changes, and the preparation for ongoing administration and logistics of the cooperative effort. The membership of this group typically involves mid-level agency management, administrative, and support staffs. Where involved, support functions such as Maintenance or Fire Prevention may also be represented.

Volunteer Working Group

This group will be responsible for blending the best practices of the volunteer workforces of the participating agencies. This often includes analysis of volunteer response patterns, training activities, recognition activities, recruitment and retention programs, rank structure, authority, roles, and responsibilities. This group typically is made up of volunteer leadership from the participating agencies and may also include senior city/district management staff.

Labor Working Group

This group will have the responsibility, where necessary, for blending the workforces involved. This often includes the analysis of differences between collective bargaining agreements, shifts schedules, policies, and working conditions. The process also includes work toward developing a consensus among the various bargaining units on any unified agreement that would be proposed for the future. Often, once the future vision is articulated by the policy-makers, labor representatives are willing to step up and work together as a team to identify challenges presented by differing labor agreements and offer potential consensus solutions. The membership of this group typically involves labor representatives from each bargaining unit, senior agency management and, as needed, legal counsel.

Communications Working Group

Perhaps one of the most important, this group will be charged with developing an internal and external communication policy and procedure to ensure consistent, reliable, and timely distribution of information related to the cooperative effort. The group will develop public information releases to the media and will select one or more spokespersons to represent the

communities in their communication with the public on this particular process. The importance of speaking with a common voice and theme both internally and externally cannot be overemphasized. Fear of change can be a strong force in motivating a group of people to oppose that which they do not clearly understand. A well informed workforce and public will reduce conflict. The membership of the group typically involves public information officers and senior city or agency management.

Meet, Identify, Challenge, Refine, and Overcome

Once the working groups are established, they will set their meeting schedules and begin their various responsibilities and assignments. It will be important to maintain organized communication up and down the chain of command. The working group chairs should also report regularly to the Joint Implementation Committee. When new challenges, issues, impediments, or opportunities are identified by the working groups, this needs to be communicated to the Joint Implementation Committee right away so that the information can be coordinated with findings and processes of the other working groups. Where necessary, the Joint Implementation Committee and a working group chairperson can meet with the policy-makers to discuss significant issues that may require a refinement of the original joint vision.

The process is continual as the objectives of the strategic plan are accomplished one by one. When sufficient objectives have been met, the Joint Implementation Committee can declare various goals as having been fully met, subject to implementation approval by the policy bodies. This formal “flipping of the switch” will mark the point at which implementation ends and integration of the agencies, to whatever extent has been recommended, begins.

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Appendix B: Summary Table of Recommended Actions (Current Conditions)

Arlington Fire Department

- Conduct formal, written performance reviews annually for the fire chief position. 18
- Establish a regular interval for review and revision of job descriptions.....18
- Formally assign department historian role to a person or group to maintain ongoing department history.....18
- Conduct self-assessment of the Washington Survey & Rating Bureau Public Protection Classification for Fire Departments to determine the potential for a likely classification improvement. 18
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire department to the community.....18
- Develop and adopt a five-year strategic plan for the fire department. 39
- Make the AFD annual report available to the public via a pdf copy on the website. 39
- Establish and fund an apparatus replacement schedule for all major apparatus.....39
- Move to an electronic personnel records management system. 127
- Implement a standards-based periodic physical competency testing process.....127
- Implement a regular medical examination for all response personnel.....128
- Develop and implement a training advisory committee.....128
- Consider the development of a dedicated Training Officer position. 176
- Establish written training program goals and objectives.....176
- Work toward the future establishment of a dedicated Fire Marshal's position. 190
- Complete a long-range capital facilities plan.....208
- Complete a long-range apparatus replacement plan. 208
- Obtain appropriate levels of reserved funding to meet the needs of the replacement schedule.....208
- Pursue replacement of aging apparatus as proposed to the city by the fire chief.....233

Camano Island Fire & Rescue

- Establish a regular interval for review and revision of job descriptions, policies, procedures, rules and regulations.....19
- Formally assign district historian role to a person or group to maintain ongoing district history. 19
- Develop and adopt a five-year strategic plan for the fire district.....39
- Publish weekly staff meeting minutes, once approved, capturing key decisions. 39
- Develop a formal complaint process for the general public, possibly web-based. 39
- Make the CIF&R annual report available to the public via a pdf copy on the website.....39
- Provide new members with a copy of the District's personnel policies upon becoming a member.....128
- Move to an electronic personnel records management system 128

- Implement a standards-based periodic physical competency testing process.....128
- Implement a regular medical examination for all response personnel.....128
- Develop and implement an internal training advisory committee.....128
- Continue efforts to increase the minimum training level to that of Firefighter II. 177
- Continue to assertively pursue an agreement with Island County under which the District operates a fire and life safety program. 191
- Update the long-range capital facilities plan. 215
- Reestablish a formal apparatus replacement plan. 215
- Identify long range funding mechanisms necessary to fund replacement planning. 215
- Review fire apparatus fleet to determine if all vehicles are needed.....234

Snohomish County Fire District #15

- Establish an employment contract for the fire chief's position and properly define his/her roles, responsibilities and authority.....19
- Define roles and responsibilities of all personnel. 19
- Establish defined rules and regulations for departmental operations. 19
- Update and complete a District Policy document.....19
- Establish job descriptions for all positions.....19
- Develop a Respiratory Protection Program compliant with OSHA Chapter 29 CFR 1910.135, requiring testing, maintenance and use of Self Contained Breathing Apparatus (SCBA).....40
- Develop a Blood Borne Pathogens Exposure Control Plan as outlined in OSHA Chapter 29 CFR 1910.1030.....40
- Develop annual testing, repair and maintenance processes of all safety-related equipment, such as ladder, hose, pump, SCBA and breathing air systems. 40
- Identify the Fire Chief as the Human Resource Manager as a part of the job description. Clearly define roles, responsibilities, and authority of the chief with regard to personnel matters.....128
- Develop a Personnel Policy Manual. 128
- Establish a manual of District Rules and Regulations.....128
- Update and complete District Standard Operating Guidelines. 128
- Establish job descriptions for all positions including full time and part time. 128
- Conduct annual performance evaluations for all personnel.....128
- Create a clearly defined progressive disciplinary process, institutionalize it in the form of District policy and inform all personnel of its contents, including mandatory sign-off to acknowledge receipt.....128
- Develop a structured recruitment and retention program, as needed.....128
- Complete reference and qualification checks, driver's license confirmation, and criminal history checks for prospective recruits.....128
- Establish minimum physical standards that are uniformly applied to all emergency responders. 128

- Conduct technical competence testing for all personnel evaluating fundamental emergency scene skills. 128
- Define a promotional testing and evaluation practice. 128
- Establish a safety committee consistent with OSHA requirements and define roles, authority and meeting requirements. 128
- Implement appropriate Incident Command System training and certification practices.177
- When SOGs, Policies and Procedures are updated to current standards, provide training to all personnel on their content. 177
- Complete EVIP (Emergency Vehicle Incident Prevention) or equivalent training as a requirement for all personnel that drive vehicles. 177
- Create defined goals and objectives for the SCFD15 Training program. 177
- Purchase a set of current training manuals published by IFSTA, Delmar, Jones and Bartlett or a comparable source. 178
- Develop a District Training Manual. 178
- Implement technical skills testing as a component of training program. 178
- Establish mandatory minimum annual training hours or a competency-based training approach and enforce minimum requirements. 178
- Reinforce safety as the highest priority via District Policy, Procedure and Standard Operating Guidelines. 178
- Enforce minimum training attendance requirements. 178
- Implement a computerized training record system. 178
- When established, include pre-fire planning in the training plan. 178
- Create a training plan and budget funds to achieve training goals and needs. 178
- Provide training skills education to instructors and use outside teaching resources regularly. 178
- Seek participation or consultation with building officials in the processing of new construction building permits. 191
- Establish a program of existing occupancy inspections (even if conducted only on a voluntary basis). 191
- Obtain records of hydrant flows, where available and monitor hydrant flow testing by water purveyors. 191
- Develop a public safety education program within the District. 191
- Create a Capital Replacement Plan that addresses long term replacement of fire stations along with forecast repair and maintenance. 217
- Establish a funding mechanism for the Capital Replacement Plan. 217
- Plan for replacement of apparatus and support equipment. 235

Snohomish County Fire District #19

- Conduct formal, written performance reviews annually for the fire chief position. 20
- Establish a regular interval for review and revision of job descriptions, policies, procedures, rules and regulations. 20

- Secure a reserve engine or, through interagency agreement, contract for one if the need arises. 20
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire district to the community. 20
- Establish vision and values for the district personnel to aspire toward and live out. 41
- Develop and adopt a five-year strategic plan for the fire district 41
- Establish a regular interval to review and revise district Rules & Regulations and Policies & Procedures. 41
- Incorporate review of operational procedures into the district's training schedule. 41
- Develop a formal complaint process for the general public, possibly web-based. 41
- Establish a bar-code or other asset tag identification process to facilitate conducting annual inventory review. 41
- Establish an annual report to the community and publish on the district website. 41
- Conduct ladder testing in compliance with *NFPA 1932*. 41
- Seek opportunities to fully fund the apparatus replacement schedule. 41
- Establish and implement a periodic review and update of the District's personnel policies; this may be either a comprehensive review or an incremental process. 128
- Move to an electronic personnel records management system and developing a records archive system with the State of Washington. 129
- Adopt a recognized/validated physical ability testing process for new members. 129
- Develop, adopt and implement a standards-based periodic skills competency testing process. 129
- Implement a standards-based periodic physical competency testing process. 129
- Develop and implement a regular, periodic performance review and appraisal process for all members. 129
- Implement a regular medical examination for all response personnel. 129
- Develop and implement of a training advisory committee. 129
- Include pre-incident planning in ongoing training program content. 178
- Work with the Snohomish County Fire Marshal to identify existing occupancies that may not be inspected and develop alternative approaches. 192
- Work with the MPD to increase contact with District responder. 199
- Conduct annual testing of ground ladders per NFPA standards. 236

Snohomish County Fire District #21

- Conduct formal, written performance reviews annually for the fire chief and assistant chief positions. 21
- Establish and enforce a policy clearly defining the division between administration (fire chief) and policy (board). 21
- Establish a regular interval for review and revision of job descriptions, policies, procedures, rules, and regulations. 21

- Expand the role of the fire chief in budget development and budget management for full understanding and management of the fiscal condition of the district. 21
- Maintain a secure, on-site document retention and retrieval system to keep important documents and contracts. 21
- Consider posting approved board meeting minutes on website. 21
- Formally assign district historian role to a person or group to maintain ongoing district history. 21
- Secure a reserve engine or, through interagency agreement, contract for one if the need arises. 21
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire department to the community. 21
- Obtain local software or a web-based incident reporting program to create and maintain electronic incident reports. Report these incidents annually to the Washington State Fire Marshal. 21
- Establish a regular interval to review and revise district Rules & Regulations and Policies & Procedures. 42
- Provide the fire chief with operational budget development and operational budget management authority, responsibility, and accountability. 42
- Take and publish staff meeting minutes, once approved, to capture and communicate key decisions. 42
- Reinforce adherence to the chain of command for job-related discussions or inquiries. 42
- Develop a formal complaint process for the general public, possibly web-based. 42
- Establish a bar-code or other asset tag identification process to facilitate conducting annual inventory review. 42
- Establish budgetary controls, purchase limits, and budget guidance to the fire chief. 42
- Ensure separation of duties for management of debit card orders, receiving, and reconciling. 42
- Change the computer password at regular intervals. 42
- Establish an electronic records management system (preferably on a file server). 42
- Provide written management and operational reports to the board monthly. 42
- Create and publish a district annual report available to the public via a pdf copy on the website. 42
- Conduct ladder testing in compliance with *NFPA 1932*. 42
- Conduct pump testing in compliance with *NFPA 1911*. 42
- Establish a funding mechanism to fund the apparatus replacement schedule. 42
- Develop a separate personnel policy manual. Establish and implement a periodic review and update of the District's personnel policies; this may be either a comprehensive review or an incremental process. 129
- Implement an incentive program for retention of volunteer personnel. 129
- Move to an electronic personnel records management system and develop a records archive system with the State of Washington. 129
- Enroll in an employee assistance program suitable to the needs of your personnel.....129
- Adopt a recognized/validated physical ability testing process for new members. 129

- Develop, adopt and implement a standards-based periodic skills competency testing process.....129
- Implement a standards-based periodic physical competency testing process.....129
- Develop and implement a regular, periodic performance review and appraisal process for all members.....129
- Implement a regular medical examination for all response personnel.....129
- Participate in a regular, structured EMS QA/QI review process.....129
- Develop and implement a training advisory committee.....129
- Further develop the training program with regard to both new recruit training and continuing education for established responders.....179
- Develop a structured training procedure for new members, or incorporate new hires into a neighboring agency's recruit training program.....179
- Identify minimum training levels for all members.....179
- Establish skills-based testing practices, and defined program goals and objectives. ...179
- Work with the Snohomish County Fire Marshal to identify existing occupancies that may not be inspected and develop alternative approaches.....192
- Implement a process of periodic medical incident reviews.....199
- Complete current facility and apparatus replacement plan development.....222
- Identify financial resources via which capital plans will be funded.....222
- Conduct annual fire pump flow testing and testing of ground ladders.....237

Snohomish County Fire District #24

- Conduct formal, written performance reviews annually for the fire chief position.....22
- Maintain a secure, on-site document retention and retrieval system to keep important documents and contracts.....22
- Establish and enforce a policy clearly defining the division between administration (fire chief) and policy (board).....22
- Establish a district website to better facilitate communication with the community.....22
- Establish a regular interval for review and revision of job descriptions, policies, procedures, rules, and regulations.....22
- Maintain a span of control of no greater than 1:7 by creating subordinate positions to reduce the number of direct reports to the fire chief.....22
- Formally assign department historian role to a person or group to maintain ongoing department history.....22
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire department to the community.....22
- Establish a five-year strategic plan, which creates a mission, vision, values, and goals and objectives for the district.....43
- Incorporate operational SOGs (standard operating guidelines) into training evolutions. 43
- Schedule a legal review of policies on a periodic basis and train on relevant policies with affected personnel.....43

- Publish staff or crew meeting minutes, once approved, to capture key decisions. 43
- Establish a mechanism to regularly update the district website as a key communication tool for the district and the community. 43
- Change the computer password on a regular interval. 43
- Establish a bar-code or other asset tag identification process to expedite annual inventory review. 43
- Publish an annual report available to the public via a pdf copy on the website. 43
- Conduct fire hose testing in compliance with NFPA 1962. 43
- Conduct ladder testing in compliance with NFPA 1932. 43
- Conduct pump testing in compliance with NFPA 1911. 43
- Conduct breathing air testing in compliance with NFPA 1989. 43
- Establish an apparatus replacement schedule and seek opportunities to fully fund it. ...43
- Move to an electronic personnel records management system and developing a records archive system with the State of Washington. 129
- Develop a regular performance appraisal system. 129
- Enroll in an employee assistance program suitable to the needs of your personnel.....129
- Adopt a recognized/validated physical ability testing process for new members. 129
- Develop, adopt and implement a standards-based periodic skills competency testing process.....129
- Implement a standards-based periodic physical competency testing process.....129
- Develop and implement a regular, periodic performance review and appraisal process for all members.....130
- Implement a regular medical examination for all response personnel. 130
- Develop and implement a regular safety committee operation. 130
- Develop and implement of a training advisory committee. 130
- Develop a training plan with defined program goals and objectives. 180
- Continue to efforts to further develop the training program for both new recruit and existing members. 180
- Develop a structured training approach for new members or leverage the use of neighboring agency's recruit training programs. 180
- Review and update minimum training attendance standards and enforce them.....180
- Strictly limit non-trained personnel from interior firefighting performance. 180
- Work with the Snohomish County Fire Marshal to identify existing occupancies that may not be inspected and develop alternative approaches. 193
- Continue development of incident review and quality assurance practices. 199
- Complete current facility and apparatus replacement plan development. 225
- Identify financial resources via which capital plans will be funded. 225
- Develop a preventative maintenance schedule for vehicles. 238
- Conduct annual fire pump testing. 239
- Conduct annual fire hose testing. 239
- Conduct annual ground ladder testing. 239

North County Regional Fire Authority

- Conduct formal, written performance reviews annually for the fire chief position. 23
- Determine property value exposed to fire and value of property lost to assess quantifiable benefit of fire department to the community. 23
- Establish a five-year strategic plan, which creates goals and objectives for the fire authority. 44
- Establish a regular interval to review and revise fire authority Rules & Regulations and Policies & Procedures. 44
- Make a concerted effort to conduct regular staff meetings to keep employees informed.44
- Develop a formal complaint process for the general public, possibly web-based. 44
- Change the computer password on a regular basis. 44
- Establish a bar-code or other asset tag identification process to expedite annual inventory review. 44
- Make the NCRFA annual report available to the public via a pdf copy on the website. ..44
- Establish an apparatus replacement schedule and seek opportunities to fully fund it. ...44
- Move to an electronic personnel records management system. 130
- Enroll in an employee assistance program suitable to the needs of your personnel.....130
- Develop, adopt and implement a standards-based periodic skills competency testing process.....130
- Implement a regular medical examination for all response personnel. 130
- Participate in a regular, structured EMS QA/QI review process. 130
- Develop and implement a training advisory committee. 130
- Increase EVIP course frequency to annual.....181
- Consider establishing a dedicated Training Officer position, or develop a shared training program management relationship with one or more neighboring agencies. 181
- Work toward the future establishment of a dedicated Fire Marshal's position. 194
- Increase involvement and input in the new construction plan review process. 194
- Work with the Snohomish County Fire Marshal to identify existing occupancies that may not be inspected and develop alternative approaches. 194
- Establish an EMS Quality Assurance/Quality Improvement Committee. 200

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