

Bothell, Northshore, Snohomish #10, Woodinville, WA

Regional Fire Authority Feasibility Study

March 2015



Table of Contents

Acknowledgements.....	v
Executive Summary.....	1
Purpose and Approach	1
Environmental Scan	2
Internal	2
External.....	3
Current Conditions.....	8
Capital	8
Staffing.....	9
Service Delivery	13
Optional Strategies	14
Findings & Recommendations	17
RFA-PC Guidance	17
Cost & Sustainability	19
SWOC Analysis	23
Evaluation of Current Conditions.....	29
Organization Overview.....	29
BF&EMS	29
NFD	30
SCFD #10	31
WF&R.....	31
Management Components	36
BF&EMS	36
NFD	37
WF&R.....	38
CAPITAL ASSETS AND INFRASTRUCTURE	40
Fire Stations	41
BF&EMS	41
NFD	42
SCFD #10	42
WF&R.....	42
Facilities Summary	54
Apparatus.....	55
Apparatus Summary	59
STAFFING AND PERSONNEL MANAGEMENT	60
Staffing.....	60
BF&EMS	60
NFD	60
SCFD #10	61
WF&R.....	61

Service Delivery and Performance	70
Bothell Fire and EMS (BF&EMS/D10)	70
Demand.....	70
Distribution	72
Concentration	77
Reliability	80
Response Performance.....	81
NorthShore Fire Department (NFD)	83
Demand.....	83
Distribution	86
Concentration	90
Reliability	92
Response Performance.....	93
Woodinville Fire and Rescue (WF&R)	95
Demand.....	95
Distribution	97
Concentration	101
Reliability	103
Response Performance.....	104
Combined Service Area – Proposed RFA.....	106
Northlake RFA Station Optimization	112
Potential Annexation Impacts	122
TRAINING	124
<i>Training Administration</i>	126
FIRE PREVENTION	130
<i>Fire Safety Code Enforcement and Inspection Programs</i>	130
<i>BF&EMS</i>	131
<i>NFD</i>	131
<i>WF&R</i>	132
<i>Fire Safety and Public Education</i>	132
<i>Fire Investigation</i>	133
EMERGENCY COMMUNICATIONS	134
Fiscal Analysis of current conditions	135
Future Opportunities for Collaborative Efforts	159
PROCESSES FOR COLLABORATION	159
GENERAL PARTNERING OPTIONS.....	159
<i>Status Quo</i>	159
<i>Contract for Services</i>	160
<i>Merger (with annexation)</i>	161
<i>Bothell Annexation (as part of a merger)</i>	162



Regional Fire Authority	163
STRATEGIES FOR SHARED SERVICES.....	165
STRATEGY A: STATUS QUO	167
STRATEGY B: CONTRACT FOR SERVICES	170
STRATEGY C: BOTHELL ANNEXATION & MERGER	181
STRATEGY D: REGIONAL FIRE AUTHORITY	186
Findings	192
Recommendations	195
Implementation	203
Appendices.....	208
Appendix A: Table of Figures.....	208
Appendix B: SURVEY TABLES	212
Appendix C: RFA Financial Model.....	244
Appendix D: RFA Organizational Chart.....	293

Acknowledgements

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The policy-makers from each of the four client agencies who made up the Regional Fire Authority Planning Committee were intimately involved in processing information and making initial policy decisions which guided the RFA study process. They met at least monthly for a year, and often twice a month to take in additional information and provide policy guidance when required. Three subcommittees made up of policy-makers and fire chiefs were actively involved and engaged in multiple intermediate steps throughout the process, reviewing and providing feedback along the way.

The fire chiefs communicated with the ESCI project manager regularly and the ESCI project team as appropriate through numerous interagency meetings and discussions. Separate meetings were held with the administrative staffs to refine information both in the current conditions portion of the report and in operational details needed for a future RFA. In short, this report reflects the efforts of an extremely committed group of officials who invested themselves deeply in the process.

Bothell Fire & EMS

Bill Evans, City Council, RFA-PC Vice-Chair
Del Spivey, City Council, Deputy Mayor
Tom Agnew, City Council
Bob Van Horne, Fire Chief

Northshore Fire Department

Eric Adman, Fire Commissioner, Board Chair
Carolyn Armanini, Fire Commissioner
Dave Maehren, Fire Commissioner
Jim Torpin, Fire Chief

Snohomish Co. Fire District #10

Mark Mitchell, Fire Commissioner, Board Chair
Dennis Butterfield, Fire Commissioner
Jack Van Eaton, Fire Commissioner

Woodinville Fire & Rescue

Roger Collins, Fire Commissioner, RFA-PC Chair
Kevin Coughlin, Fire Commissioner
Jim Dorney, Fire Commissioner
Greg Ahearn, Deputy Chief

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



Executive Summary

Emergency Services Consulting International (ESCI) was engaged by Bothell Fire & EMS, Northshore Fire Department, Snohomish County Fire District #10, and Woodinville Fire & Rescue (collectively referred to as the client agencies or clients) to conduct a regional fire authority (RFA) feasibility study, including other opportunities to bring the four agencies together. This report is the culmination of that evaluation.

ESCI thanks the participating members, staff, and policy-makers of all four agencies for their outstanding cooperation in the preparation of this report. While staff members from the agencies were engaged on a daily basis from time to time, the three policy-makers from each agency who made up the twelve-member Regional Fire Authority Planning Committee (RFA-PC) were uniquely engaged month to month and sometimes week to week. All involved were candid in their comments and provided valuable information, perspective, and data to the ESCI team. Policy guidance was provided by the RFA-PC via their subcommittees. The guidance, discussion, and debate between RFA-PC members and their staff members provided the context for this study.

Purpose and Approach

The purpose of the study was to:

- A. Assess the current fiscal, service level, and infrastructure conditions of each agency; recommend improvements to their existing processes independently where appropriate.
- B. Identify the opportunities, challenges, and feasibility of forming a sustainable regional fire authority among the four client agencies and which increases efficiency, effectiveness.
- C. Analyze the proposed structural models to determine those most sustainable and feasible, recommending those with the greatest opportunity for success financially and operationally.

This study is ***not*** an implementation plan. The decisions required to implement many of these options take active discussion and deliberation (and in some cases, negotiation) by the full boards and councils of the four client agencies, administrators, and labor groups. This document determines what options make sense and quantifies the issues, challenges and opportunities of each option being considered.

Further, this report evaluated the agencies as they existed when ESCI consultants arrived on site to conduct a current conditions assessment. Each agency has continued to conduct business as they each independently felt appropriate. However, ESCI has focused on the “snapshot in time” of the agencies during the site visits. Changes that have occurred in each agency in the intervening period of time between the site visits and the publishing of this report were not factored into the assessment. Examples of these changes include Bothell Station #45 ramp repairs and the sale of Woodinville F&R Stations #34 and #37.

This report contains the following major sections: *Environmental Scan* (including internal and external stakeholder interviews), *Current Conditions* (capital, staffing and service delivery elements); *Optional Strategies* (including four alternative strategies, ranging from status quo to complete integration of the four agencies through a RFA); and *Findings and Recommendations*. +

The approach taken by the ESCI project team in developing this study was to first evaluate each agency as it operates today autonomously, then identify areas where process improvement can be recommended. This information was gathered through data analysis and interviews with the staff members for each agency. The combined information was evaluated by the subject matter experts on the ESCI team who offered each agency considerations and recommendations for improvement as appropriate. These individual recommendations are listed following each section.

Environmental Scan

Internal

ESCI obtained feedback through interviews of both internal and external stakeholders regarding the strengths and weaknesses of each agency as they exist today, as well as the opportunities for or challenges facing each agency into the future. The results revealed a great deal of continuity between stakeholders within each agency, but not between agencies. The compiled list of critical issues is reflected by agency in the following table and was obtained through interviews with executives and policy-makers. Note that Snohomish County Fire District #10 does not have its own fire chief.

Critical Issues			
Bothell FD	Northshore FD	Snohomish #10	Woodinville F&R
Loss of representation	Increased cost for the same service is a deal breaker	Tax rates are a critical concern	Shift schedule difference
Single purpose organization can become self-serving. Single issue elected officials?	If Bothell retains partial funding, it will be a tough sell		Benefit charges
Cost	Need a financial model that is sustainable long term		Financial forecasting
Loss of local control	Unions must understand and be a part of problem solving		If Bothell does not participate, it can't happen
Disposition of property tax in Bothell after RFA is formed	Deal killer – absorbing financial liabilities		
May be grass roots opposition	Union must support or it won't happen		
	Financial sustainability		
	Same service at increased cost is not acceptable		

When interviewed, the fire chiefs of each agency were asked to identify the top three critical issues they had regarding the formation of a regional fire authority. The Bothell fire chief added a fourth critical issue. Those critical issues are listed in the following table:



Critical Issues	Bothell FD	Northshore FD	Woodinville F&R
1	M&O budget is limited due to the recession	Revenue constraints	Long term sustainability (personnel costs manageable)
2	Managing expectations for RFA	RFA – if it fails, then what? If it passes, lots of changes	Policy, admin and labor all stay in their lanes
3	Annexation of north end may require significant infusion of infrastructure to serve it	Succession plan calls for deputy chief-ops/training	Have a plan if the RFA doesn't happen
4	Succession planning & brain drain		

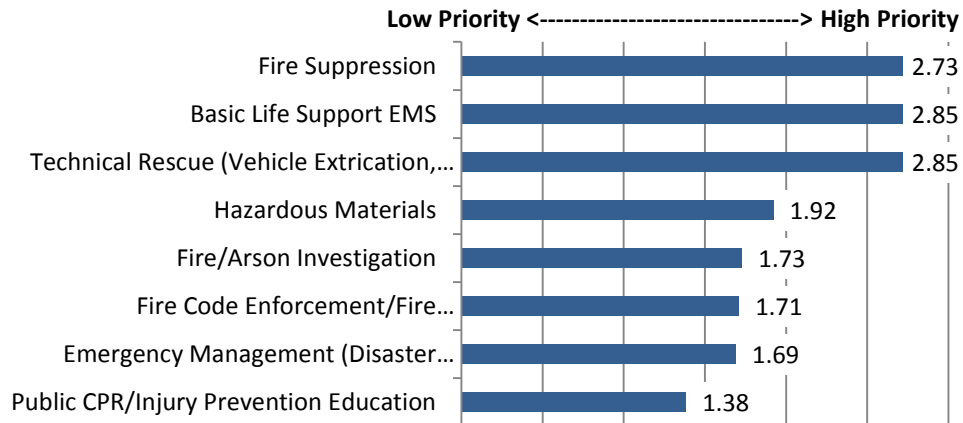
External

There were three separate citizen forums conducted, one for each service area. The attendance varied, with Bothell/Snohomish #10 (26), Northshore (23), and Woodinville (8). The citizens of each agency were given an overview of the service level performance of their current provider and an overview of the regional fire authority concept before being asked to comment on any concerns or issues. Many were intrigued by the effort to find greater efficiency, but the most common overriding concern was the potential loss of their familiar, known service provider in favor of a regional provider. There was a willingness to consider a more efficient regional model, but a common theme was that the benefit must be better than they receive today and sustainable.

The following graphs are the result of exclusively citizen feedback for each agency. For the service priorities, the participants were asked to rate each of the various service types on a three point scale, with 3=critical priority, 2=important priority, and 1=low priority. The participants were instructed to strike out any services deemed inappropriate for the fire department to provide, or to add any services the fire department doesn't currently provide, but should. There was no consensus of the participants to either add or delete any services.

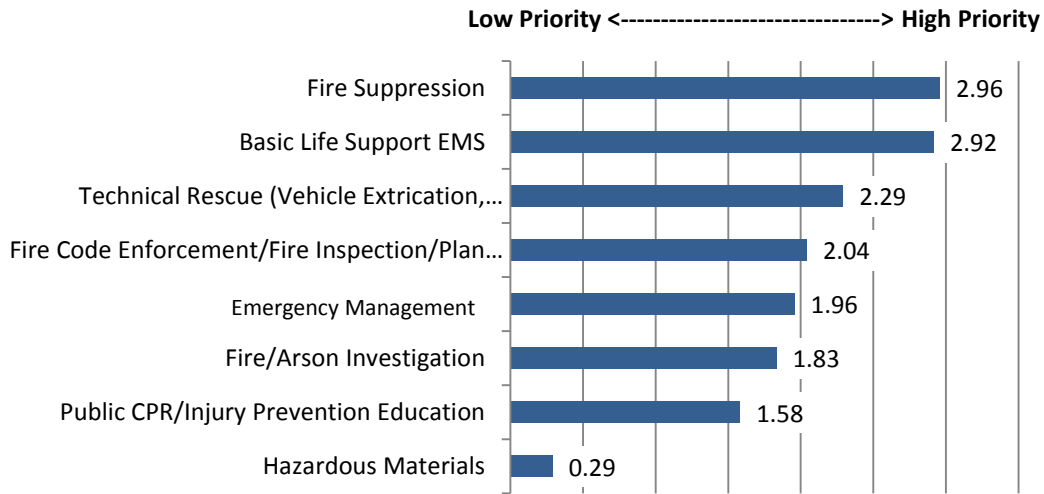
Bothell Fire & EMS/District #10

Service Priorities



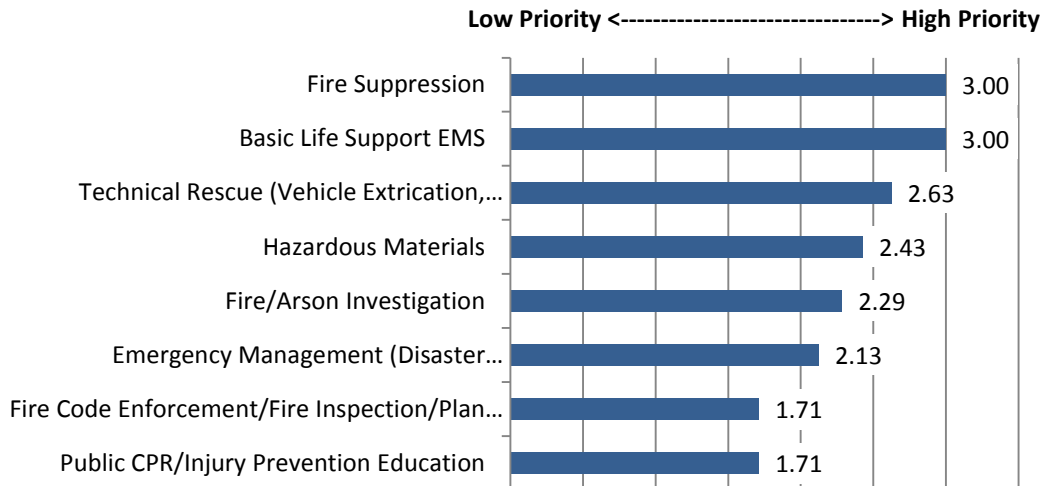
Northshore Fire Department

Service Priorities



Woodinville Fire & Rescue

Service Priorities

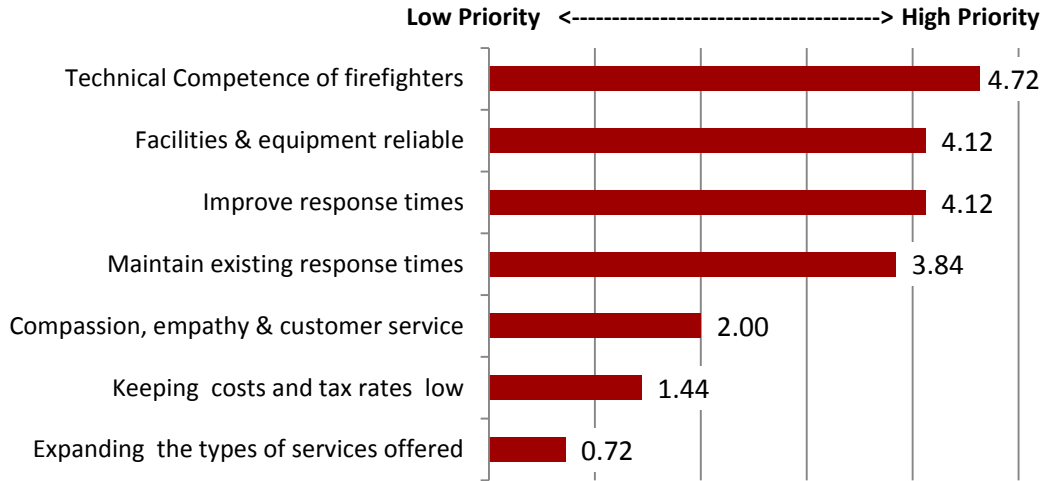


For the planning priorities, the participants were given a list of values to compare. The process forced a ranked order of the value statements, which are referred to as planning priorities. The results by agency are reflected in the following graphs.



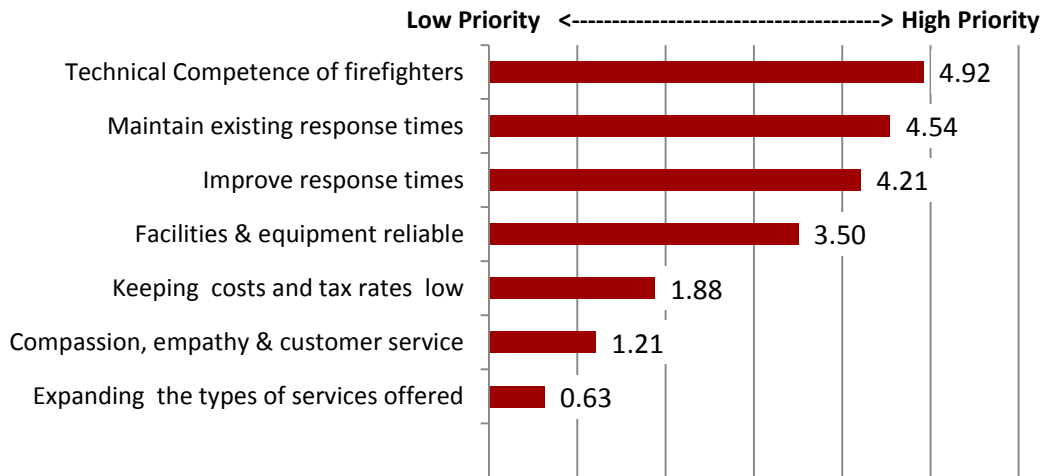
Bothell Fire & EMS/District #10

Planning Priorities



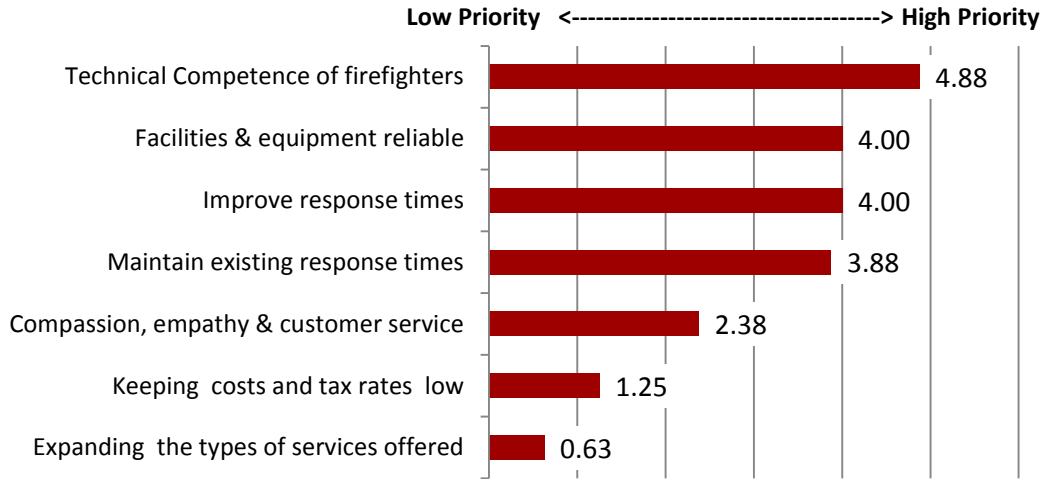
Northshore Fire Department

Planning Priorities



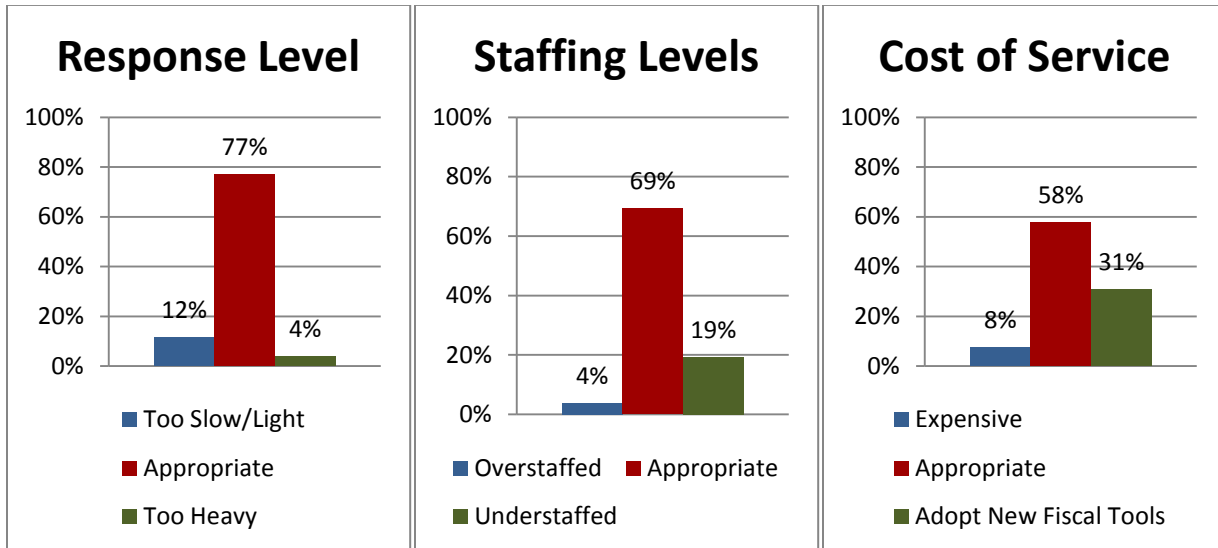
Woodinville Fire & Rescue

Planning Priorities

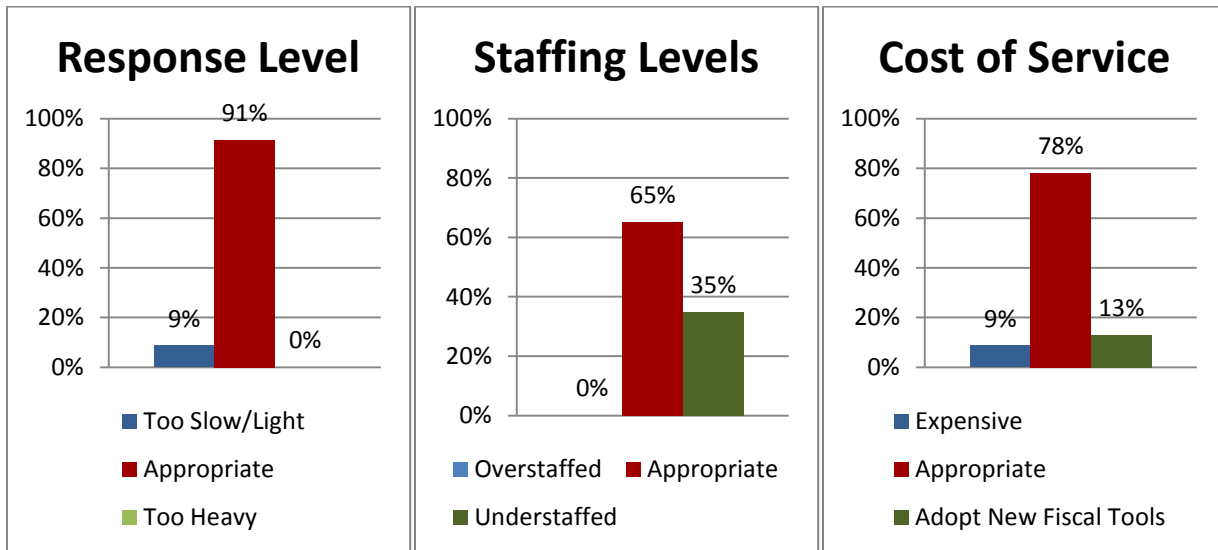


Finally, the citizens participating at each agency forum were asked to rate three areas of common interest; 1) how appropriate is the response, 2) how appropriate are the staffing levels, and 3) how appropriate is the cost? The responses are illustrated in the following graphs.

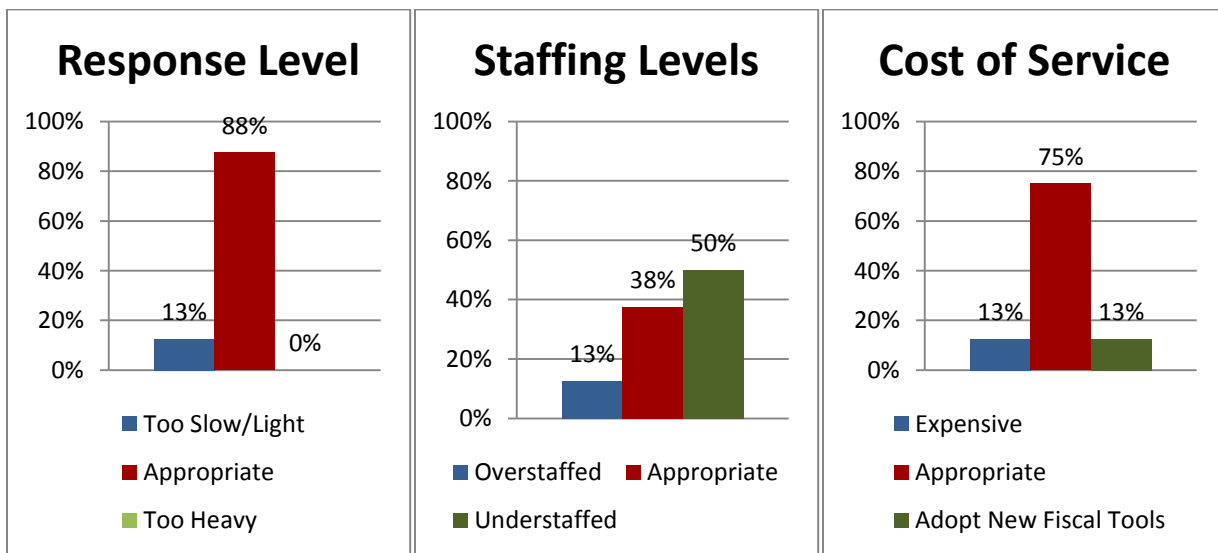
Bothell Fire & EMS/District #10



Northshore Fire Department



Woodinville Fire & Rescue



With the service section, all groups agreed that fire suppression and basic life support (BLS) emergency medical services are the highest priorities, with the remainder of the services falling into lesser priorities with no discernable pattern emerging.

In the planning section, maintaining the technical competence of the firefighters was the most important priority. Maintaining reliable equipment and facilities were ranked second for each agency except Northshore, likely due to the newer facilities and equipment the district owns and operates. All of the agencies had maintaining or improving response times as the next highest priority.

In the response, staffing and cost of service section, all groups ranked the response, staffing and cost of service as appropriate except Woodinville, whose citizens ranked the staffing portion as understaffed.



Current Conditions

Capital

The capital facilities¹ and equipment were evaluated for all four agencies. Bothell Fire & EMS serves Snohomish #10 via a service contract. While the district owns one fire station, it does not own the property the facility sits on. The property is owned by the federal government. Once it no longer hosts a fire station, the property ownership reverts back to the federal government. Bothell Fire & EMS operates the Snohomish #10 station as well as two stations of its own. Bothell's facilities appear to have the most deferred maintenance and are in need of replacement or upgrades. Station 45 has had repairs performed on the apron of the station since this report was initiated, improving the operations from the facility. All three stations operated by Bothell Fire & EMS were rated in fair condition. None of the three stations lend themselves to expanded use, such as a training facility or headquarters station for an RFA.

Northshore's two operational fire stations are in good to excellent condition, with their Station 51 being new and well suited for an RFA headquarters facility. The training tower, located on the same site, is currently a regional asset and is also new. The training function for an RFA would also be well positioned at this facility. A former fire station in the Finn Hill/Moorlands area in south Kenmore is not suitable as a fire station and is currently being rented out by the district to the YMCA.

Woodinville Fire & Rescue operates three fire stations. Two additional stations were on the inventory list of the district at the time of ESCI's site visit, but the facilities have since been liquidated and are no longer in the district's capital facilities inventory. The remaining three stations are in good to excellent condition. The headquarters Station 31 has ample office space and its close proximity to an auxiliary building makes it well suited as a logistics center for an RFA, which is consistent with and expands on the current use of the building.

The frontline and reserve apparatus currently in service at all four departments are well within industry standards. The newest front line engines are less than three years old; the oldest reserve engines still have five or more years left in their normal useful life estimate. All front line units were rated as good to excellent condition. In forming an RFA, an opportunity exists to reduce the number of reserve apparatus in the fleet, slightly reducing maintenance costs across a smaller base.

The liquidation of reserves does not represent a large financial windfall, as most apparatus in a reserve capacity has depleted most of its useful life, making it substantially lower in value. Northshore, Snohomish #10, and Woodinville have existing apparatus replacement plans and dedicated reserves for those replacements. Bothell has a replacement schedule which may not be fully funded.

¹ Snohomish #1, Station 18 is a mutual aid fire station which was recently relocated to the northwest of Snohomish #10, Station 44. Some of the maps within this report record the old location, while others reflect the new location. The location did not materially affect any data or conclusions contained in this report.

Currently, each agency contracts for apparatus maintenance with different vendors. ESCI recommends continuing this practice in an RFA, contracting with an agency which utilizes certified Emergency Vehicle Technicians for the maintenance function.

Staffing

Bothell Fire & EMS/District #10 have 51 responder personnel and 15.75 positions in support roles, all dedicated to the fire department. In addition, the fire department is supported by numerous other functions in the city of Bothell, including IT, Human Resources, Finance, Legal, the City Manager's office, and ultimately the city council. If Bothell became part of an RFA, these support functions would no longer be provided by the city of Bothell, but by support staff contained within the RFA. The city of Bothell could either absorb the support personnel currently supporting the fire department indirectly or reduce the staffing in those support activities, thereby reducing the city costs going forward. The RFA could also contract for these services, with Bothell being a possible vendor.

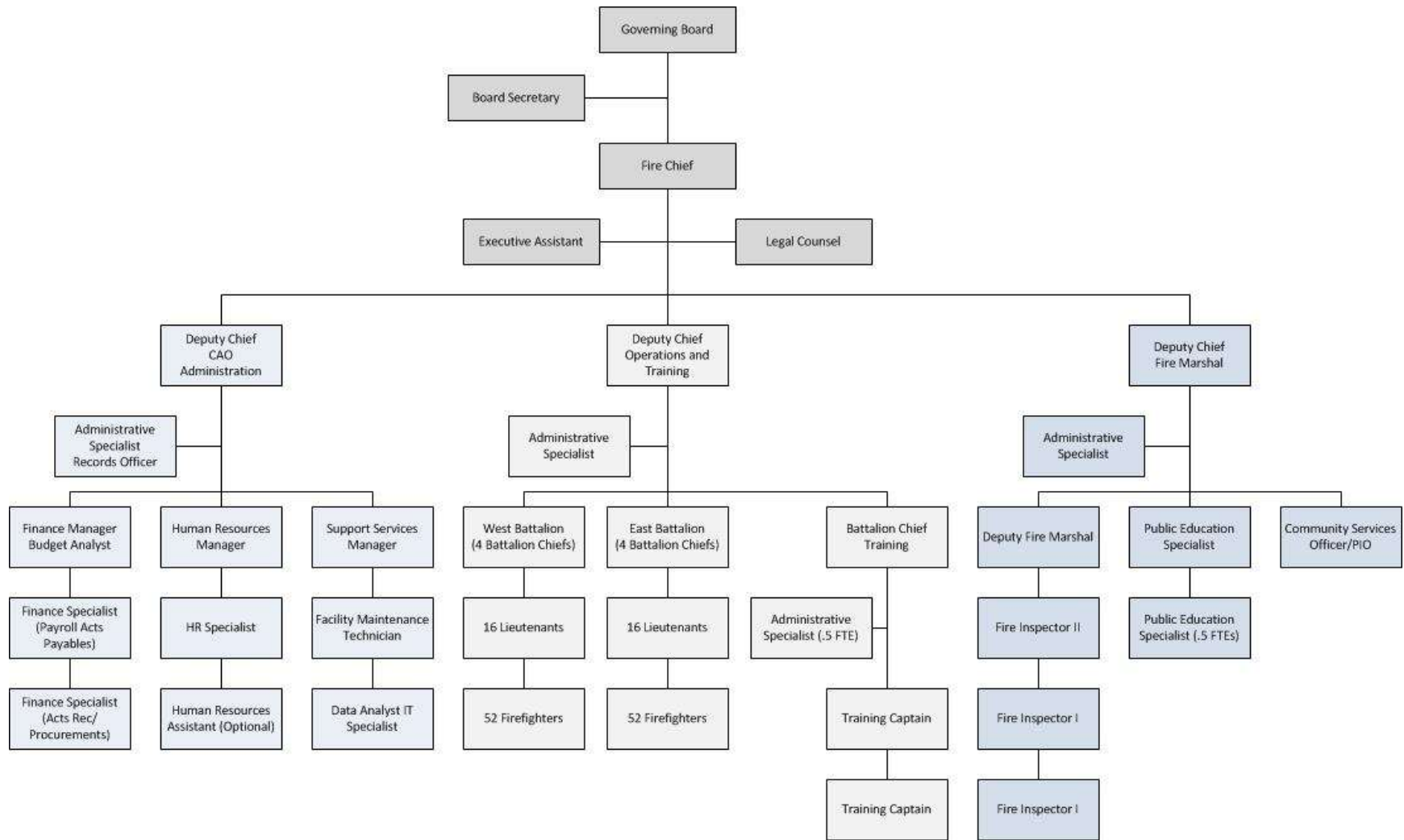
Northshore has 41 responders and 7.5 administrative or support positions. As a stand-alone fire district, it is responsible for providing its own support, either internally or via contract with an outside vendor. The same is true for Woodinville, which has 53 responders and 9 administrative or support positions. Both districts have held back on filling vacancies in administration and support to preserve the opportunity to permanently capture savings gained by integration.

The combined agencies provide 145 shift personnel, including 104 firefighters, 30 lieutenants (crew supervisors), and 11 battalion chiefs (shift supervisors). The uniformed administration and support includes 11 positions and civilian support includes 21 positions. All employees directly tied to the combined agencies total 177 positions. An RFA would not require this many positions, with five positions immediately excess to the needs. ESCI recommended temporarily retaining the excess positions as a transitional workforce due to the significant workload associated with combining the four agencies into one. These transitional positions should not be kept longer than three years, since the RFA should be stable by then. Additional staff efficiencies or gaps may be discovered in the process of bringing the agencies together. The RFA governing board may further adjust the structure once the RFA operates for a period of time.

In all three operational departments, the financial pressures of the last several years have resulted in temporary decisions or deferred action, not filling positions that might have become redundant in the course of an integration study. For example, support positions with Northshore are currently vacant. Integration with neighboring fire service providers might fill in those areas. Woodinville reduced their support services force by two in April, 2013, and the fire chief position is currently vacant, both in anticipation of potential regionalization. That district has contracted for fire chief services from Bothell. While Bothell has hired an office specialist, it is a limited term position until the question of consolidation is answered. Northshore's administrative to line ratio is very small and not sustainable. Permanent action to address this has been deferred in anticipation of the possibility of regionalization. These deferred actions essentially capture some of the efficiencies a regional approach would provide.

If a regional approach is ultimately not taken, these deferred actions will be addressed, increasing the stand-alone costs for each of the agencies.

The RFA organizational structure as defined by the RFA planning committee is reflected in the following figure.



Service Delivery

The three operational agencies have similar response demand patterns, which are illustrated in the following tables.

Percent of Total Incidents, 2013			
NFIRS Category	BF&EMS- Dist. 10	NFD	WF&R
1-Fires	2.34%	2.53%	3.17%
2-Rupture/Explosion	0.19%	0.23%	0.08%
3-EMS	74.88%	75.24%	61.54%
4-Hazmat	0.97%	1.47%	2.15%
5-Service Call	3.10%	2.88%	5.05%
6-Good Intent	8.44%	10.82%	13.50%
7-False Alarm	9.84%	6.59%	10.83%
8-Weather/Natural Disaster	0.17%	0.09%	0.24%
9-Other	0.08%	0.14%	0.13%

Most of the differences between the agencies in response demand are minor, with categorizing non-emergent call types following cultural norms within the agencies, such as determining whether a response was a good intent. Notable differences lie in the fire responses and in the relatively low percentage of EMS responses in WF&R (for an agency its size and demographics). However, ESCI found no wide swings of demand between or among the agencies.

Each of the agencies has an effective distribution of fire stations equipped and staffed to provide an effective response time to emergencies. In 2013, BF&EMS/D10 provided an emergency response in 7:23 or less, 90% of the time. NFD provided an emergency response in 7:25 or less, 90% of the time. WF&R provided an emergency response in 9:25 or less, 90% of the time. The longer response time for WF&R is a reflection of the more rural nature of their eastern region of the district. Individually, the fire stations are positioned to provide an appropriate response time to the communities they serve. When assimilated into an RFA, the system provides exceptionally well balanced coverage. The current configuration under an RFA fails to meet the NFPA 1710 standard for travel time (4 minutes or less 90% of the time) by 1.3%. By optimizing the location of the existing eight stations, the standard can be achieved.

The reliability of a unit to achieve its response time objectives is heavily dependent upon concurrent calls for service. If a second emergency occurs while a unit is handling the first emergency, units from farther away have to handle the call, causing a delay in service. The following table illustrates the demand by agency.

Agency	Concurrent Incidents			
	Single Incident	Two Incidents	Three Incidents	Four or More Incidents
BF&EMS/D10	70.3%	24.7%	4.7%	0.4%
NFD	82.7%	15.9%	1.4%	0.1%
WF&R	77.6%	19.9%	2.2%	0.3%

All three operational fire agencies are busy. Bothell has a higher concurrent call demand with frequent simultaneous emergencies and a significant occurrence of three simultaneous emergencies.

The number of personnel who can perform critical tasks at an emergency to positively impact an emergency outcome is referred to as an effective response force (ERF). The Center for Public Safety Excellence (CPSE) cites 14-16 personnel as typically necessary as an ERF for a typical house fire. None of the three operating agencies can provide an ERF without reliance upon mutual aid and assistance from neighboring agencies. As an RFA, there are sufficient resources on duty to provide an ERF and still have emergency resources to handle subsequent emergencies without reliance upon neighboring agencies.

Optional Strategies

STRATEGY A: STATUS QUO

If the agencies ultimately decided to implement this strategy, there are numerous temporary or deferred decisions that will have to be made to place the agencies in a steady-state position. Bothell elected leaders have expressed concern over spiraling costs and a revenue base which will be quickly outpaced for fire services. BF&EMS will need to develop alternative plans in anticipation of an unsustainable system as it currently exists. Minor decisions will also need to be made, such as whether or not to convert a limited term support specialist to full time. If WF&R opts to discontinue the leadership contract with Bothell, the sudden loss of that revenue for Bothell may impact what remains, even with the corresponding reduction of workload.

For WF&R, a decision must be made to either extend (or renegotiate) the contract with Bothell or separate and fill their own fire chief and operations chief positions. Multiple other options are also a consideration for WF&R, such as contracting with another agency for leadership services or seeking a partnership with another agency.

Northshore has made a temporary appointment of a battalion chief to deputy chief to help manage the administrative workload. It is a temporary assignment to preserve the efficiency should an RFA be formed. If an RFA is not formed, this position will need to be filled permanently. Options also exist for Northshore, such as competing with BF&EMS to provide fire chief services to WF&R and sharing the cost of an operations chief between the two agencies.



SCFD #10 will need to address its future viability given Bothell's annexation plans. The district could continue the existing contract with Bothell until it is annexed by Bothell or could negotiate an agreement with other neighboring agencies until such time as the district is annexed. In either case, it is unlikely the district will survive long term since the Municipal Growth Management Area (MUGA) for Bothell incorporates all of SCFD #10 and beyond.

This strategy is more than a status quo option, since deferred decisions will have to be made which will increase costs or risk for each agency.

STRATEGY B: CONTRACT FOR SERVICES

A contract for services, typically referred to as an interlocal cooperation agreement pursuant to the Interlocal Cooperation Act, is divided by ESCI into three major subheadings for ease of discussion and understanding: administrative, functional, and operational or full service agreements.

A shared administrative agreement provides for shared management, such as fire chief, the entire management team, or various components of traditional management structures. Efficiencies can be gained by integrating these components, eliminating duplication and aligning management infrastructure. By aligning policies, procedures, and processes, it further assists the organization in positioning the agencies for greater collaboration in the future. An example of this is the fire chief services being contracted to BF&EMS by WF&R.

A functional agreement provides for shared support activities, such as training, fire prevention or maintenance. Efficiencies can be gained by integrating these components, eliminating duplication and leveraging resources already committed to the function(s) being considered.

An operational or full service agreement essentially turns all daily operational matters over to the agency providing the service for a contracted fee. In this case, one agency provides all fire department services for the other agency. An example of this is the fire services contract between Snohomish #10 and BF&EMS.

In each of these examples, each agency retains its own taxing authority, operates within its own taxing limits, and board/council policy authority is retained by the policy-makers. The agency contracting out the services is primarily responsible for enforcing the service contract, and any other services not otherwise contracted out.

The contracted fee is negotiated between the agencies, and a detailed cost allocation example is provided in the main body of the report. In this case, no significant efficiencies are gained, since a contract is carefully negotiated to avoid either party subsidizing the other. Gains, however, can be shared between the parties.

STRATEGY C: BOTHELL ANNEXATION & MERGER

Cities cannot legally merge with a fire district, cities may be annexed into a fire district under certain circumstances, and fire districts may merge with each other. In this case, this strategy explored a fire

district annexing the city of Bothell, and then subsequently merging with the remaining fire districts to effectively create a single fire agency with a common funding structure.

However, an anomaly in the statutes limits the agencies that could annex Bothell because it straddles a county line with the population fairly evenly split. The statute specifically states:

“When a city or town is located in two counties, and at least eighty percent of the population resides in one county, all of that portion of the city lying in that county and encompassing eighty percent of the population may be annexed to a fire protection district if at the time of the initiation of annexation the proposed area lies adjacent to a fire protection district, and the population of the proposed area is greater than five thousand but less than ten thousand.”²

The Washington State Office of Fiscal Management (OFM) estimated the 2014 population split in the City of Bothell as 59.1% residing in King County and 40.9% residing in Snohomish County. Neither portion of Bothell achieves the 80% threshold. Strictly interpreting this statute eliminates annexation as a potential strategy toward a subsequent merger.

STRATEGY D: REGIONAL FIRE AUTHORITY

Regional Fire Authorities (RFAs) are authorized by statute for both cities and fire districts. Essentially, an RFA operates in a very similar manner as a contract for services with shared governance, voter approval, and the creation of an independent municipal corporation with its own taxing authority and statutory framework.³ All of the participating agencies are eligible to be included in an RFA; there is no prohibition against crossing county lines. However, if Bothell decided not to participate in the RFA none of the other agencies have contiguous borders and therefore would not collectively be able to form an RFA without Bothell’s participation.

Formation of an RFA requires the planning committee to adopt an RFA plan for action first by the elected officials of each participating agency, then by the voters served by those agencies as a homogenous group. It requires a simple majority of 50% plus one of the combined voters voting. If the funding mechanism includes a requirement of a supermajority (60%) of the voters voting, then the RFA formation also requires a 60% approval of the voters voting.

Under a Regional Fire Authority configuration, personnel from the agencies joining forces in the RFA become employees and members of the new organization. Unless an agreement for different terms of

² RCW 52.04.061(2)

³ *Fire Service Consolidations*, page 31. Snure Seminars Handbook, Brian K. Snure, author. Snure Law Office, PSC 612 S. 227th St. Des Moines, WA 98198-6836. Copyright © 2011.



transfer is reached between the collective bargaining representatives of the transferring employees and the participating fire protection jurisdictions, employees will retain the rights, benefits, and privileges that they had under their pre-existing collective bargaining agreements. While silent in the same statute, this requirement likely also pertains to non-represented employees.

It is a requirement of the statute to establish an RFA plan which addresses all of the various services, services levels, governance, funding mechanisms, asset transfers, debt liabilities, and structure. The RFA planning committee must determine whether all changes to the plan are required to be submitted to the voters for approval, no changes require voter approval, or some sections require voter approval and some only require majority vote by the governing board. The difficulty is adopting a plan which makes clear the intent of the parties without tying the hands of future elected officials if circumstances change which necessitate modification. If those modifications are regarding the substance of the plan, it will require voter approval to make the changes. In no circumstance can the plan exceed statutory authority.

RCW 52.26.120 provides a mechanism for dissolving the fire districts if RFA commissioner districts are created to serve on the governing board. RFA Commissioners are directly elected by the voters of the RFA and may be one or all of the governing board positions. In this manner, representation of elected officials can generally represent citizens living in their former agencies. The commissioner districts must be approximately equal by population.

The city's taxing authority cap is reduced by the amount levied by the RFA; in this case, Bothell's tax cap is reduced from \$3.60 per \$1,000 of assessed valuation, minus the library district levy (already in place) and the RFA levy. The RFA planning committee has decided to levy a benefit charge as part of the funding strategy if an RFA formation is pursued, which statutorily requires the RFA levy for property taxes to be reduced to a maximum of \$1.00 per \$1,000 of assessed valuation instead of the \$1.50 per \$1,000 normally allowed.

The result of this decision requires that the RFA plan voted upon achieve 60% approval, and requires Bothell to reduce its maximum taxing authority by \$1.00. Since Bothell's taxing authority is already below this reduction, there is no revenue loss to Bothell. In fact, since the expense of a fire department is removed from Bothell's budget, the city would receive a windfall. Since the city no longer has to fund the fire department in this scenario, the city will need to directly address the issue with its voters by either committing to reduce its property tax levy to offset or reduce the overall tax impact, or by convincing the voters that keeping the tax rate the same (causing an actual tax increase to the taxpayers) will improve other services within the city.

Findings & Recommendations

RFA-PC Guidance

The context that ESCI judges the viability of an RFA is formed by the decisions of the RFA planning committee and their subcommittee's guidance. In summary, the guidance received from each of the three subcommittees is as follows:

Fiscal – The finance subcommittee recommended the following policies/principles upon which an RFA should be measured:

1. A General Fund Beginning Fund Balance equal to 35% of the Expense Budget (10% cushion plus three months of Labor and Operation & Maintenance costs)
2. A Loss of Revenue Reserve Fund equal to 25% of the Expense Budget.
3. An Apparatus Replacement Fund equal to 100% of the calculated replacement liability of front line apparatus. This liability was calculated in the equity model based on a replacement cost of \$750K and current service life. The equity model identified the level of reserve contribution each agency brought to a partnership.
4. An Equipment Replacement Fund equal to 100% of the calculated replacement liability of larger ticket equipment that has a defined service life. This liability was calculated in the equity model based on an estimated replacement cost and the current service life of each agency's equipment.
5. A Facilities Reserve Fund capable of providing funding for unforeseen repairs and upgrades.
6. An Employee Liability Fund that is equal to 100% of the calculated liability for other post-employment benefits (OPEB – such as LEOFF1 and Retirement Incentive) and 50% of sick leave and vacation accruals, both of which were quantified in the equity model.
7. A Health Retirement Account (HRA) Trust Fund that contains 100% of the HRA fund balances as reported in the equity model.

Service Level – The level of service subcommittee identified numerous areas of interest and recommendations for an RFA to go forward:

1. Since each agency handles patient transportation differently, transport revenues should not be included in the revenue projections.
2. RCW 52.26.040 prevents RFAs from providing ambulance service unless local private ambulance companies are deemed deficient (impact varies by participating agency – legal opinion should be sought).
3. Fire Prevention services be standardized and uniform across RFA as follows:
 - a. Both permitted and non-permitted structures shall be inspected uniformly, with permitted structures receiving inspection by certified fire inspectors and non-permitted structures receiving inspection by engine company crews.
 - b. Code enforcement responsibility remains with the cities and counties.
 - c. New construction plan reviews for the cities within the RFA (requires discussion with cities to accomplish this).
 - d. Public education services (two full time positions classified as appropriate by the Labor & Organization subcommittee).



4. Staffing on units to remain as is currently deployed, with the following considerations:
 - a.
 - b. Maintain existing ladder truck response configuration, with consideration for a light force response model.
 - c. Peak activity units, possibly medical units and with alternative work force configuration.
 - d. Two battalion deployment configuration.
5. Analysis of optimum station locations was performed by ESCI and reported on in this report.

Labor and Organization – The Labor and Organization subcommittee identified several principles and considerations as follows:

1. For calculation purposes, a 50%-150% comparable class was chosen, which includes Everett, Kent RFA, Kirkland, Eastside F&R, Snohomish #1, Redmond, Renton, and Central Pierce F&R. The comparable range is consistent with the Public Employment Relations Commission (PERC) criteria.
 - a. Calculates the average wage of a firefighter on a 24 hour shift schedule, completion of 20 years of service, including an associate’s degree or equivalent and any longevity pay. Average of the comparables is an hourly rate of \$46.50 and just under a 48 hour work week. Average of the client agencies is currently \$45.03.
2. An organization chart that is designed to reflect an optimum span of control, organizational effectiveness, and efficiency.
 - a. A transitional plan utilizes existing positions during the RFA start-up, adjusting toward the optimum organization chart over time.
3. Develop a conceptual collective bargaining agreement in the event an RFA is formed so all parties have assurances of the costs, benefits, and working conditions going forward. Legal counsel will be sought prior to these discussions.

Cost & Sustainability

In determining the sustainability of an RFA over the long term, ESCI determined the effective tax levy rate for each participating agency. ESCI calculated the estimated effective tax levy rate of BF&EMS, essentially dividing the BF&EMS budget by the assessed value of the service area, not including ambulance transport fees. This does not include any expenses associated with indirect (overhead) costs or reserves. The fire districts have their effective tax levy rates calculated and reported to the county assessor’s office. The following table reflects the 2015 effective tax rate by agency in the first two columns, followed by the RFA effective tax levy rate in the next two columns, and the net effect for each agency in 2015 in the last two columns.

Agency (Stand-alone)	Effective Rate 2015	RFA Taxes by Source		Net Effect, 2015	
BF&EMS	1.46	Property Tax	1.00	BF&EMS	0.04
NFD	1.56	Benefit Charge	0.50	NFD	(0.06)



WF&R	1.50	Total	1.50	WF&R	0.00
SCFD #10	1.27			SCFD #10	0.23

The Northshore FD bond debt has been spread across the entire RFA as decided upon by the RFA planning committee. Spreading the debt across the entire RFA is not specifically addressed in the statute. This issue must be reviewed legally and may be pivotal to further consideration of an RFA.

The projected ongoing costs for an RFA are reflected in the following table.

RFA	2015	2016	2017	2018	2019	2020	2021	Notes
Property Tax	1.00	0.96	0.93	0.89	0.86	0.82	0.79	-3.85% rate of change
Benefit Charge	0.50	0.51	0.53	0.54	0.56	0.57	0.59	2.80% rate of change
								Total effective tax rate of RFA
Total	1.50	1.47	1.46	1.43	1.42	1.39	1.38	-1.38% net change

The starting rate for the RFA accounts for the cost of operation as designed by the RFA Planning Committee. This includes general fund contributions to reserve accounts to fully fund apparatus replacement, equipment, and facilities repair. If adequate reserves were put in place at the inception of the RFA, the effective levy rate would start approximately \$.05 per \$1,000 AV lower and decline from there.

The RFA Planning Committee also maintained personnel from redundant positions to address the transition workload associated with combining four agencies into one. This defers the savings that would accrue for the five identified redundant positions until such time as attrition eliminates these positions or on a date established by the RFA. ESCI recommends these redundant positions not be kept longer than three years.

Bothell city staff has stated that it cannot afford to transfer the necessary additional cash to match the cash contributions of NFD and WF&R and fully fund the reserves for the RFA at start-up, thereby reducing the general fund contributions to reserves at the inception of the RFA. Bothell projects that their assessed valuation growth will make up for the lack of reserves in nine to ten years, outpacing the shortfall in the out years.

The agencies have prudently held off filling any but the most critical vacancies in anticipation of a possible RFA formation. If an RFA is formed, these vacancies can be permanently vacated, incorporating those savings to the benefit of the entire RFA budget and organizational structure. If an RFA is not formed and the agencies remain as currently configured, additional costs will be incurred or risk exposure increased by each agency as they move to fill positions held in abeyance until the issue of regionalization is answered.

Service Level Improvements



Individually, the fire stations are positioned to provide an appropriate response time to the communities they serve. When assimilated into an RFA, the system provides exceptionally well balanced coverage. Theoretical station configurations were analyzed against the current configuration to identify potential for response time improvement. That analysis is summarized in the following table.

Station Deployment Model							
Travel Time	Existing 8 Stations	7 Stations	% Change	9 Stations	% Change	8 Stations Optimized	% Change
≤ 4 Minutes	88.70%	87.80%	-0.90%	91.30%	2.60%	90.40%	1.70%
≤ 5 Minutes	95.90%	94.30%	-1.60%	97.10%	1.20%	96.10%	0.20%
≤ 6 Minutes	98.80%	97.30%	-1.50%	99.20%	0.40%	97.60%	-1.20%

1% change ≈ 100 incidents

Optimizing the current eight stations by relocating them to the most advantageous locations also improves travel time potential in two of the three travel time models. It meets that portion of NFPA 1710, which calls for urban, primarily career staffed fire departments to distribute resources so that the first arriving apparatus is on the scene of an emergency incident in 4 minutes travel or less, 90 percent of the time. The current configuration fails to meet that standard by 1.3%. Forming an RFA and taking advantage of future station replacements can allow phased implementation of the optimized model, facilitating achievement of that portion of NFPA 1710.

The opportunity to create a peak activity unit (PAU) is increased in an RFA. A PAU is intended to serve “hot spots” in the RFA by shifting to statistically busier locations during peak times of the day. It may also be used to cover scheduled activities such as routine training activities, covering for units engaged in such training. The unit may be in any configuration (typically an aid unit) and can be staffed as additional personnel are available or on a scheduled basis. The independent agencies do not have sufficient resources to be able to utilize PAUs because their use would degrade basic response capability. However, an RFA pools the resources of the combined agencies, facilitating the staffing of a two-person PAU during peak periods of the day when staffing is above minimums. This can have a very positive effect on response time and service levels for EMS calls, which represents the largest demand for emergency services.

Fire prevention expertise drawn together as part of an RFA would improve the capability of the individual fire prevention programs. WF&R stands to gain the greatest benefit of this type of resource pooling as a result of significant curtailment of fire prevention activities in its service area. Public education is an area where forces joined together can have a powerful impact on education efforts throughout an RFA that would not be as likely as independent agencies.

One of the greatest advantages to forming an RFA is expanded capacity (resource depth). As separate entities, their scale is relatively small and with limited resources. Combined, the resources facilitate assembling an effective response force (ERF) of 14-16 firefighters within eight minutes in the highest



densities of Bothell and the east end of Northshore (Kenmore), to a lesser extent the east side of Woodinville. This can be done without reliance upon mutual or automatic aid agencies. Further, the combined agencies could manage most simultaneous incidents without difficulty. As single entities, they each may be hard-pressed to perform one activity (a house fire, for example) without exhausting their resources or leaving their community vulnerable to delays from back-to-back emergencies.

Given the analysis of this report, ESCI believes forming an RFA is a viable option, is cost-effective, enhances services, is in the long term best interest of the taxpayers and all of the agencies, and therefore recommends pursuing **Strategy D (Regional Fire Authority)**.

SWOC Analysis

ESCI conducted numerous stakeholder interviews to perform an environmental scan of the organizations. The stakeholders were made up of elected officials, administrative staff, line staff and support personnel. Analyzing each organization’s strengths, weaknesses, opportunities, and challenges (SWOC) from the perspective of those who know it best is the first step in identifying actionable strategies for the future. The survey table which follows is a summary of the results of those interviews.

Survey Table 1: Stakeholder SWOC

Strengths			
Bothell FD	Northshore FD	Snohomish #10	Woodinville F&R
Good reputation in community	Small but high quality organization	We have a lower tax rate than other districts around us	Delivering better than average fire and EMS services
We have local control	Administration	Great relationship with the fire crews	Living within a budget
Our people are known and recognized in our community	Solid financial practices	Provides equipment to Bothell crews on request. Good working relationships.	Well managed financially. Survived recession well.
No complaints from citizens – positive reputation in community	In-house HR is valuable	Excellent, well trained group of people	Good equipment
High quality EMS/ALS	Effective training program	Very capable and caring	Operationally very solid
Fire department has remained well funded throughout the recession	Great employees, stable workforce	Good training	
Hard working, quality fire protection	Excellent retention		
Good chief and leadership	Financially solid		
Only public education position in the area	Highly motivated employees		
Have been able to regain good community outreach	Strong on customer service		
Have been able to do a lot with very limited funding	Great training		
	Excellent facilities & apparatus		
	Low administrative costs		
	Well-funded + benefit charge		
	Shift schedule increases FF safety		
	Good reserves including LEOFF 1 liability		

Weaknesses			
Bothell FD	Northshore FD	Snohomish #10	Woodinville F&R
Concerned about financial sustainability looking forward	Lacking project management in general	Very little business revenue, primarily residential	Need to consolidate
Do not know of any weaknesses	Need to do more community outreach to measure citizen satisfaction	Some small issues with station, not critical	Station locations need to be reviewed as a result of annexations and coverage changes
Costly personnel	Need better defined performance standards and measures	Unclear how reserve funds are used/saved for capital replacement	Response and deployment is not being managed very well
Sometimes try to do too many things, be everything to everyone (specialty services)	Very lean administrative staff, no redundancy, backup		Need stronger leadership in the future
Not sure FD is adequately funded	Small department, limited resources		Station 33 may not be well located relative to Redmond
	High dependence on mutual aid		Turnover in leadership has been damaging
	Non-standard training & equipment between agencies		Union has a lot of influence
	Departments have differing ways of operating. Lack of standardization.		Internal communications could be stronger
	May be challenged to sustain current positive financial status in the long term		Loss of fire prevention is a serious detractor
			No existing occupancy inspections are being performed
			Labor/Management relations and history
			Training is weak but improving
			Poor relationships between the district and city manager
			Annexations
			Aging resources – people and capital



Opportunities			
Bothell FD	Northshore FD	Snohomish #10	Woodinville F&R
Increased opportunities for growth, promotion	Operational uniformity	Some efficiencies to be gained. Mostly at the top.	4 jurisdictions, 8 stations, 3 battalion chiefs. Can be streamlined.
More stable funding – not balanced against other city services	Common training practices	Better coordination of response, deployment	2 battalion chiefs in the consolidated agencies would be more than adequate.
May be some training advantages	Common operating guidelines	May be opportunities to move stations or redeploy crews with a regional outlook	Elimination of duplication, chiefs, administrative positions
May result in efficiencies, greater cost effectiveness May be able to reduce the number of ladder trucks, other apparatus	Increase redundancy where needed Broaden horizons of personnel	May be able to deploy people more effectively Standardization of apparatus and equipment	Broader based administrative pool Offers potential sustainability moving forward
Opportunities to combine efforts, economies of scale, cost savings	Larger pool – health care savings. Self-insure?		Financial advantages of pooling resources
May be able to fund other city priorities if no longer paying for fire protection	Reduced overhead costs		Improved service by erasing borders
Depth in personnel to cover leaves in administration	COLA & healthcare cost containment		Can reduce number of Battalion Chiefs, other resources
More effectively coordinated training and standardization	Possible use of more civilian positions in administration and prevention Fewer ladder trucks? Aid car only stations? Better coverage of underserved areas? (Finn Hill, 160 th & 405) Opportunity to standardize operations, equipment and procedures will increase public and FF safety		
	Buying power, economies of scale		



Challenges			
Bothell FD	Northshore FD	Snohomish #10	Woodinville F&R
How organizations value what they bring to the RFA.	Negotiating the changes	Reduction of number of management positions	Different shifts will be a big challenge
Increased taxation	Acceptance of change: at employee level at the community level	Disposition of part time position shared with Bothell	Organizational cultures are different: City vs district, Leadership strength differences. Training is different
If costs are going to increase, why do we need to do this?	Bargaining – will mirror against larger comparable agencies	Voter apathy and/or rejection of RFA initiative	City of Bothell will have to offset tax differential
Cost – more or save?	Appropriate representation on new board by district	Same service for increased cost?	Obtaining city council concurrence
City of Bothell may not be trusted by voters	Commitment from cities regarding extra taxing authority	Determining who will be in charge, people’s jobs changing	Bothell city voters will be hard to convince
Loss of local control may concern some	Management of LEOFF 1 obligations/liability	Increased cost at same service level will not fly	Cultural differences between some of the agencies
Voter agreement	Station and apparatus replacement planning and financing	If cost will increase, will have to come with increased service	Admin staff jobs may be at risk. Serious concern.
Buy in by labor. Shift schedule issue Once identified, implementation of the best model will be hard	Labor cost increases due to larger bargaining unit Medic 1 role, impacts?		
Union contract differences Identification of service level so that voters understand what they will be getting			
Very different priorities – specifically fire prevention			



Critical Issues			
Bothell FD	Northshore FD	Snohomish #10	Woodinville F&R
Loss of representation	Increased cost for the same service is a deal breaker	Tax rates are a critical concern	Shift schedule difference
Single purpose organization can become self-serving. Single issue elected officials?	If Bothell retains partial funding, it will be a tough sell		Benefit charges
Cost	Need a financial model that is sustainable long term		Financial forecasting
Loss of local control	Unions must understand and be a part of problem solving		If Bothell does not participate, it can't happen
Disposition of property tax in Bothell after RFA is formed	Deal killer – absorbing financial liabilities		
May be grass roots opposition	Union must support or it won't happen		
	Financial sustainability		
	Same service at increased cost is not acceptable		

Noteworthy comments from some stakeholders:

- Northshore has planned very well financially – will they absorb financial liabilities from others?
- Multiple responses: increased cost for the same service level is unacceptable.
- Bothell has a very good, well-functioning fire department. Why would we try to change that and lose local control?
- Decentralizing fire department destroys the local flavor of our neighborhood fire station.
- If it isn't broken, why are we fixing it?
- SCFD #10: 80% revenue goes to Bothell, 20% retained by district.
- Capital replacement planning and responsibility in SCFD #10 is unclear.
- Comparable agencies will be larger, higher cost comps.
- Why is Shoreline not involved when they provide ALS to all three participating agencies?
- If Bothell relinquishes some or all property tax, they may be unable to fund fluctuations in other tax sources.
- Bothell HR, payroll, finance, and other in kind service employees may be out of a job – what happens to them?
- Medic 1 should be discussed, at the table in these deliberations.
- One board member of Woodinville F&R is also a Northshore employee. Will need to recuse himself.
- Outcome: A department that is innovative, leading, that others want to be a part of, without getting too big.

Evaluation of Current Conditions

This section of the report provides an overview of the current conditions within Bothell Fire & EMS (BF&EMS), Snohomish County Fire District #10 (SCFD #10 or Snohomish #10), Northshore Fire Department (NFD), and Woodinville Fire & Rescue (WFR). SCFD #10 is receiving services from Bothell Fire & EMS which is collectively referred to as BF&EMS/D10. In this report, SCFD #10 will be discussed separately from BF&EMS where there are independent operations of note. Where the operations are essentially one and the same, they will be discussed as combined agencies.

The current conditions include a summary of each agency's organization; management structure; fiscal condition; staffing and personnel; service delivery and performance; support programs (training, fire prevention, and emergency communications); and finally, capital facilities and equipment. The surveys used to gather and analyze data from each agency are included in Appendix B at the end of this report.

ORGANIZATION OVERVIEW

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 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.

BF&EMS

BF&EMS is a municipal fire department formed as a volunteer fire department in 1910. The department's jurisdiction encompasses approximately 13.74 square miles in the city limits and is home to an estimated 41,600 people. The service area is predominantly characterized as urban (1,000 persons per square mile or greater). The city of Bothell is regulated by RCW 35A and is governed by a seven member city council that elects from among the council a mayor and deputy mayor. The city is a council-manager form of government. The city council establishes appropriate policies and directs the activities of the city by approving the budget and appointing a city manager to administer the daily affairs of the city. The fire chief is hired by and reports to the city manager. The fire chief administers the daily operations of the fire department.

BF&EMS responds to requests for assistance from the public from three fire stations, two owned by Bothell and one owned by SCFD #10. The city stations are located in downtown Bothell (Station 42), in Canyon Park (Station 45), and the SCFD #10 station in Queensborough (Station 44). Station 42 is staffed with six career personnel, plus the administrative staff and support personnel. They also share quarters with a Shoreline Medic Unit, staffed with Shoreline Advanced Life Support paramedics. The remaining two stations are staffed with three career personnel each. BF&EMS provides services to SCFD #10 via an interlocal agreement. The contract calls for BF&EMS to staff SCFD #10's station 44 and operate SCFD #10's equipment in providing service to the combined service area.

In any organization there is a path along which information and direction flows. This chain of command is the recognized conduit of communication for organizational business and authority. As is the case with most fire departments, BF&EMS/D10 uses a hierarchical sequence for ensuring that necessary information transmission is orderly and timely.

The fire chief is the administrator of the department, reporting directly to the city manager. The response operations deputy chief, community risk reduction deputy chief/fire marshal, emergency preparedness coordinator, and public safety administrative coordinator are direct reports to the fire chief. The response operations deputy chief supervises four subordinates. The community risk reduction deputy chief/fire marshal supervises five subordinates. A span of control of four to one results from this organizational configuration, which is an appropriate level.

NFD

NFD was formed in 1942 as King County Fire District #16 serving areas of unincorporated King County, which included what are now the cities of Kenmore and Lake Forest Park. Both cities were annexed into King County Fire District #16, which is now referred to as the Northshore Fire Department (NFD). All unincorporated areas of the district have been annexed into one of the cities, making NFD a fire district serving exclusively city limits. The current service area is 9.65 square miles and is home to an estimated 32,252 people. The service area is predominantly characterized as urban (1,000 persons per square mile or greater).

NFD responds to requests for assistance from the public from two fire stations. The stations are located in downtown Kenmore (Station 51) and downtown Lake Forest Park (Station 57). Station 51 is staffed with six career personnel, plus the administrative staff and support personnel. Station 57 is staffed with three career personnel. They also share quarters with a Shoreline Medic Unit staffed with Shoreline Advanced Life Support paramedics.

NFD uses a standard chain of command for communication, information flow, accountability, and decision-making. Different from most fire departments, however, NFD has a very lean administrative structure. The fire chief was promoted from the deputy chief position and the district opted not to back-fill the vacant position. In 2015, the district installed an acting Deputy Chief of Operations and training. The permanent status of this position will be determined after the efforts to explore regionalization opportunities have been concluded.

The fire chief is the administrator of the department, reporting directly to the Board of Fire Commissioners. The fire marshal, four battalion chiefs, the training director, and administrative support consisting of the finance specialist, human resources administrator, and administrative assistant all report to the fire chief. A span of control of nine to one results from this organizational configuration, which exceeds an appropriate level. One mitigating factor is that the four battalion chiefs are not on duty at the same time, reducing the supervisory burden.



SCFD #10

SCFD #10 was formed in 1951 as a special purpose district as established by authority of Title 52 of the Revised Code of Washington (RCW). The district has contracted for fire protection services with Bothell since January 1, 1975. The district serves 9,471 citizens in a 2.49 square mile area. It is led by a three member board of fire commissioners who manage the budget and the service contract with Bothell. The district also owns a fire station in Queensborough (Station 44), two fire engines (one of which is a reserve engine), and three aid units (one of which is a reserve unit). The district has no employees of its own, with Bothell providing a staff assistant to act as district secretary. The fire station and apparatus owned by SCFD #10 is staffed and operated by BF&EMS.

The recently approved interlocal agreement between SCFD #10 and Bothell calls for the district to pay the city a percentage of actual City Fire Department expenditures apportioned according to the district's percentage of the total city and district annual assessed valuation. The district pays for such expenses as errors and omissions insurance, legal services, board expenses, and a reserve fund to replace equipment as necessary. In addition, the district also budgets for fleet and facilities issues not covered by the city.

WF&R

WF&R was formed in 1948 as King County Fire District #36 serving areas of unincorporated King County surrounding the City of Woodinville. The city of Woodinville annexed into King County Fire District #36, which is now referred to as Woodinville Fire & Rescue (WF&R). The current service area is approximately 30 square miles and is home to an estimated 39,103 people. The service area is a mix of urban (1,000 persons per square mile or greater), suburban (between 500 and 1,000 persons per square mile), and rural (less than 500 persons per square mile) areas.

WF&R serves its citizens from three fire stations. The stations are located in downtown Woodinville on the northwest portion of the district (Station 31), in the south edge of the center of the district (Station 33), and near the center of the district (Station 35). Station 31 is staffed with six career personnel, plus the administrative staff and support personnel. Station 33 and station 35 are each staffed with three career personnel.

WF&R entered into an agreement with the City of Bothell on June 1, 2013 to preserve a possible vacancy if the regional fire authority effort is successful. The contract provides for WF&R to receive administrative and operational oversight from BF&EMS, specifically fire chief and deputy chief of response operations services on a part time basis. The fire chief of BF&EMS is the top administrative position in WF&R by contract, reporting directly to the WF&R Board of Fire Commissioners. WF&R has a deputy chief of administrative services who is the highest ranking officer within WF&R and is a direct report to the fire chief of BF&EMS. When added to the BF&EMS span of control, the fire chief has a five-to-one subordinate to supervisor ratio, which is an appropriate level. The combined chain of command incorporating WF&R into the BF&EMS organizational chart for communication, information flow, accountability, and decision-making is graphically depicted in the following section. The contractual

agreement for administrative and operational oversight is set to expire on May 31, 2015 but can be terminated with ninety days advanced notice by either party or extended by mutual consent.

A well-designed organizational structure should reflect the lines of responsibility and authority within the agency, provide for the equitable distribution of the workload, and clearly define the official path of internal communication. The lines of an organizational chart visually clarify accountability, coordination, and supervision. Detailed and up-to-date job descriptions should provide the particulars of each job within the organization, helping to ensure that each individual's specific role is clear and focused on the overall organization mission.

The following figures show the current organizational structure for each of the agencies.



Figure 1: Bothell Fire & EMS Organization Chart

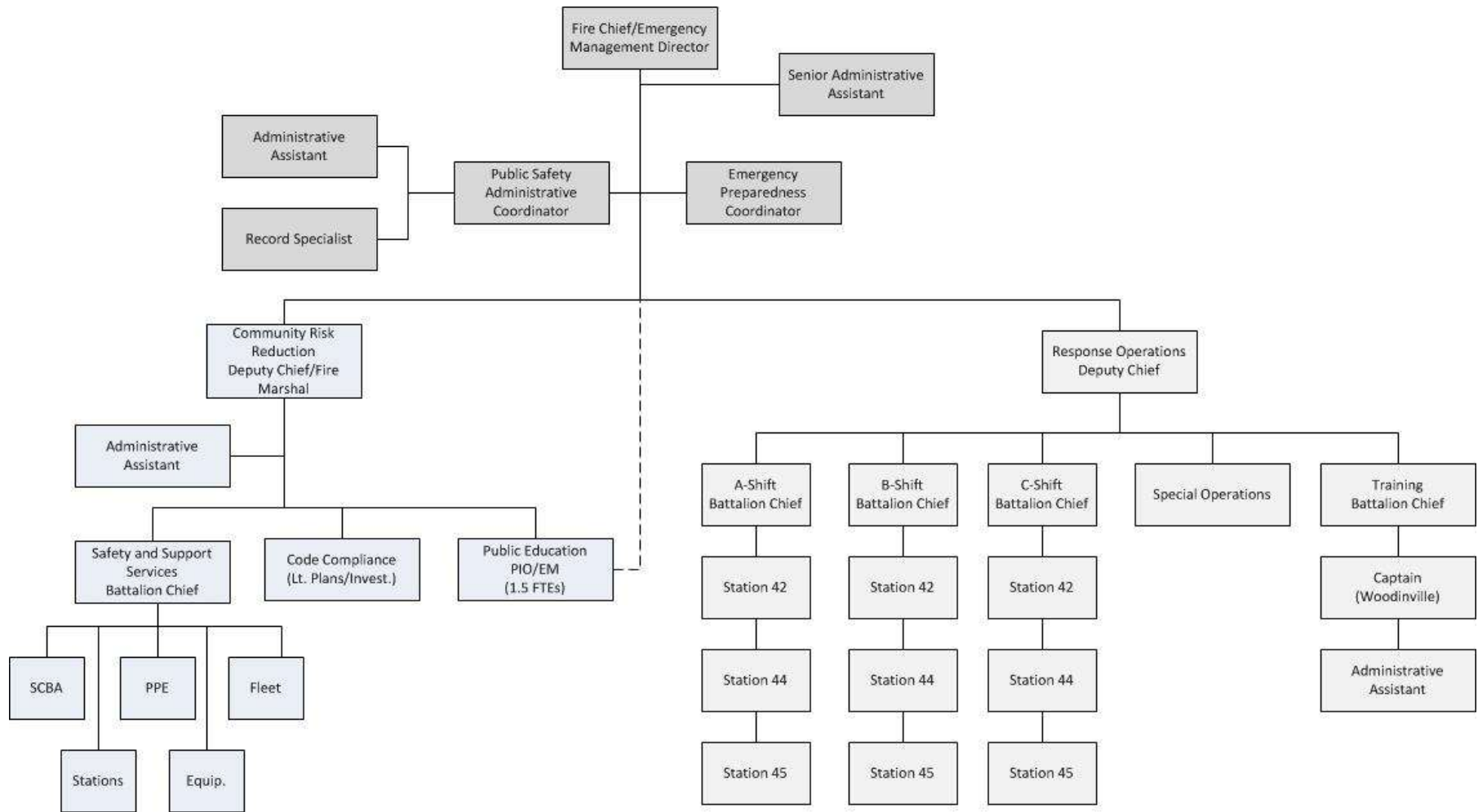


Figure 2: Northshore Fire Department Organization Chart

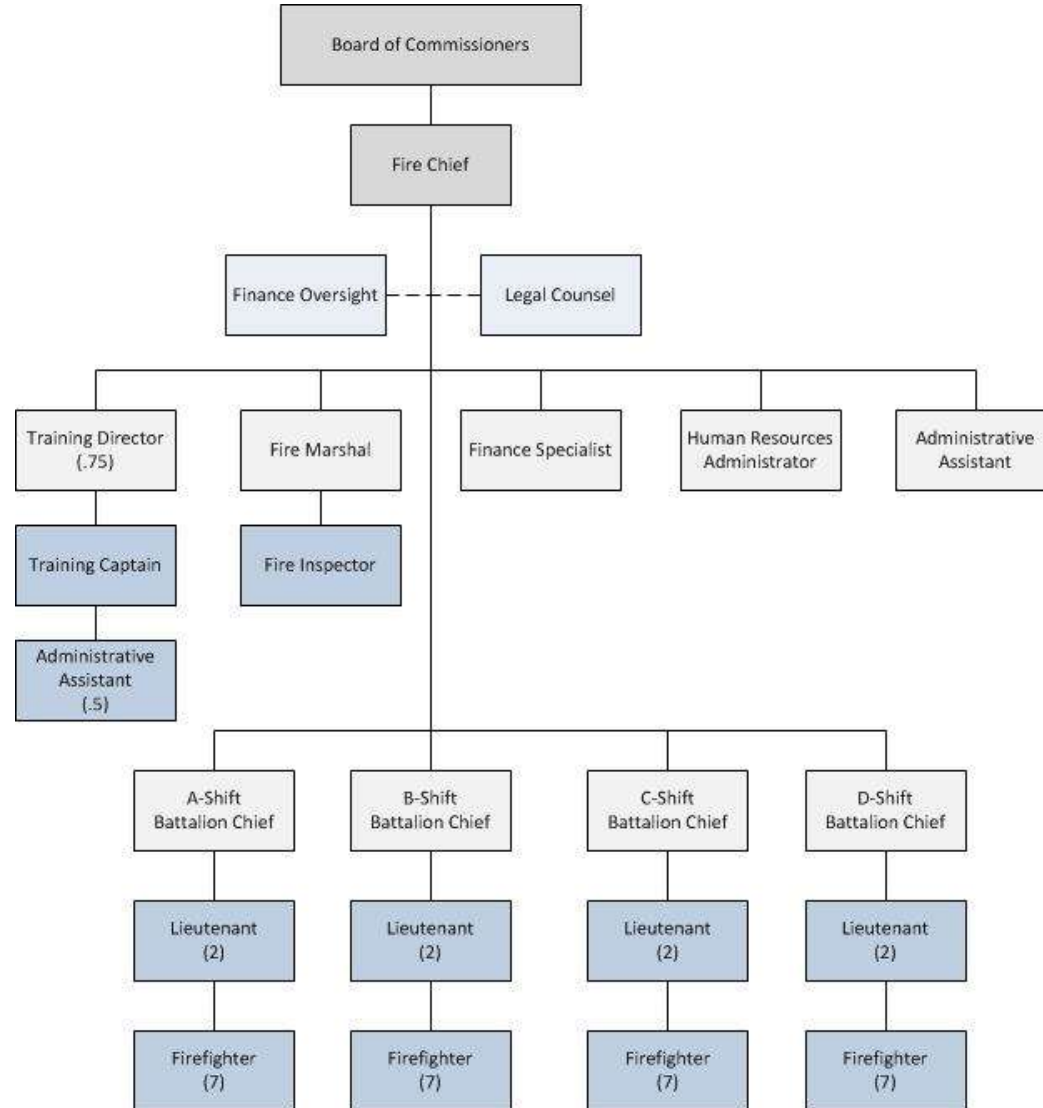
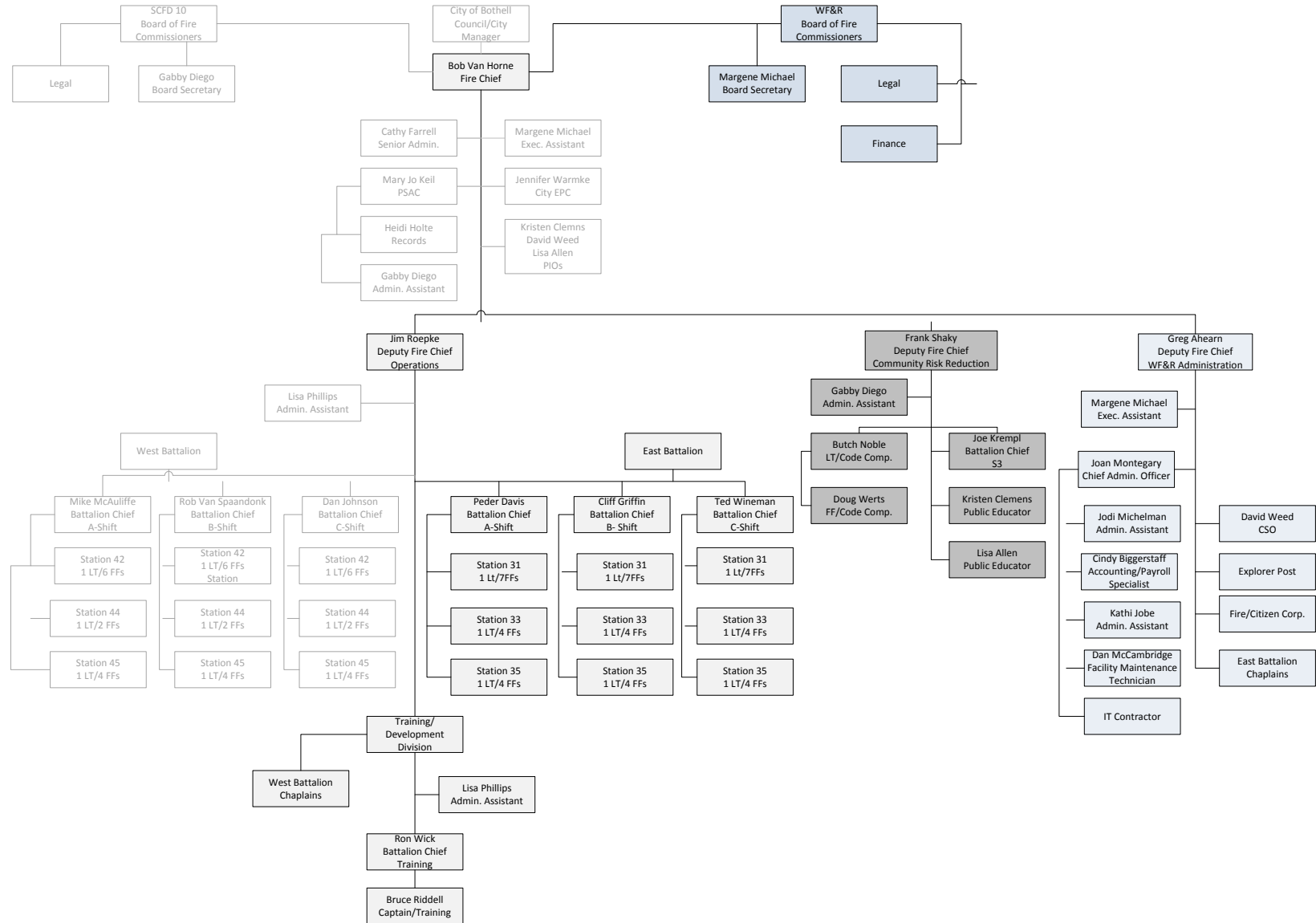


Figure 3: Woodinville Fire & Rescue Organization Chart



MANAGEMENT COMPONENTS

Effective fire department management is a common challenge for fire service leaders. Today's fire department must address management complexities that include an effective organizational structure, adequacy of response, maintenance of competencies, a qualified work force, and financial sustainability for the future.

To be effective, the management of a fire department needs to be based on a number of components. In the following report section, ESCI examines the client agencies' current efforts to manage their organizations, and identify measures and best practices recommended for the future.

BF&EMS

BF&EMS has created most of the essential elements that a fire department requires: mission, vision, values, and goals and objectives. What it lacks is a strategic plan that pulls these elements together and focuses the organization in a singular, cohesive direction. Strategic plans serve to unite the personnel in aligning work effort toward the highest agency priorities. When a strategic plan is developed in concert with active representation and participation of its members, it garners ownership and enhances understanding of the purpose of the various goals and initiatives. Further, it serves to disperse the workload across a broader base, engaging all employees in the effort. A strategic plan should have a maximum of a five year life span with annual reviews and revisions.

BF&EMS also does not have rules and regulations *per se*, but does have city policies which it relies upon to govern personnel conduct and behavior. The city policies are relied upon for a code of conduct or ethics. BF&EMS has a set of standard operating procedures which describe processes for performing certain tasks under certain conditions. These are incorporated into training activities as appropriate, but policies are not. There is no regular interval for reviewing and updating the Standard Operating Procedures (SOPs) or policies; they are amended by exception when a conflict is discovered.

Internal communication is robust in each of the agencies studied. BF&EMS conducts weekly staff meetings and shares talking points from those meetings with the line crews and support staff. Memoranda and directives are used to address key or complicated issues. A quarterly member newsletter is published and made available to all personnel, and the fire chief is accessible with an open door policy. On formal issues which require following the chain of command, an organizational chart (see Figure 1) identifies reporting relationships and thus a communication path.

Externally, BF&EMS communicates with the community passively, relying upon the broader city mechanisms to convey fire service information pertinent to the community. BF&EMS is sometimes highlighted in the ***Bothell Bridge*** newsletter and information about the department is provided on the city website. The city, and therefore the department, has a formal complaint process for citizens to follow if they are dissatisfied with service. Citizen surveys are occasionally performed by the city to determine level of satisfaction for a variety of services the city provides, including fire and EMS.

BF&EMS capital facilities plans are in place as a part of the broader city seven year capital facilities plan. The current plan spans 2013 through 2019. The plan is reviewed annually and updated as necessary. BF&EMS has a placeholder for a \$5 million fire station not otherwise specified. No specific location has been identified nor a specific project timeline determined. The funding has also not been secured. BF&EMS apparatus and other equipment are listed within the city's asset replacement plan, but no funding secured.

NFD

As with BF&EMS, NFD has created most of the essential elements that a fire department requires: mission, vision, values, and goals and objectives. NFD also lacks a strategic plan that pulls these elements together and focuses the organization in a singular, cohesive direction. The fire chief has stated that NFD will conduct a strategic plan if integration does not occur. If integration does occur, the new entity will likely conduct a strategic plan to focus the new agency toward the highest agency priorities. ESCI would recommend that if a strategic plan is developed as an independent agency, it should be done in concert with representation and participation by its members to garner ownership and enhance understanding of the purpose of the various goals and initiatives. Further, it serves to disperse the workload across a broader base, engaging all employees in the effort. A strategic plan should have a maximum of a five year life span with annual reviews and revisions.

NFD has a well-structured set of rules and regulations which are reviewed and revised on a three-year cycle. SOPs are also in place and are used in training operations. Organizational policies are in place and are reviewed on a three-year cycle. Human resource specialists and attorneys review the policies. HR related policies and supervisory training are also provided regularly.

NFD conducts full day battalion chief meetings every other month, which starts with the B/Cs interacting with their company officers for the first few hours. On a quarterly basis, the district conducts an "all hands" meeting. Memoranda and special notices are used to address key or complicated issues. A monthly training bulletin is published and made available to all personnel, and the fire chief is accessible with an open door policy. On formal issues which require following the chain of command, an organizational chart (see Figure 2) identifies reporting relationships and thus a communication path.

External communication exists via an infrequent community newsletter and a recently implemented community survey for fire prevention customer satisfaction. The website provides up-to-date information about the activities of the agency. There has not been a need to convene a citizen advisory panel. The fire chief reports that citizen complaints go directly to the fire chief's office as per policy 3200. ESCI recommends an update of the formal complaint process to require notification to the board of fire commissioners when a complaint is received, even if handled to the satisfaction of the complainant at a lower level.

NFD's capital facilities plans are in place, but do not have a specified time frame. The facilities are newer and are bonded. The maintenance of the facilities is funded. The capital facilities plan is reviewed annually and updated as necessary. The apparatus replacement plan is programmed for twenty years

(2013-2033). The apparatus and associated support equipment is identified for replacement with funding secured. The funding source is a reserve fund equipment replacement sub-account, which is contributed to annually from the fire department expense fund.

WF&R

Much like BF&EMS, WF&R has created most of the essential elements that a fire department requires: mission, vision, and values. The goals of the district are primarily reflected in the budget process, thus operational and service level goals and objectives with no monetary impact may not be addressed. These operational and service level goals and objectives should be addressed, most appropriately in a strategic planning process. A strategic plan pulls these elements together and focuses the organization in a singular, cohesive direction. Strategic plans serve to unite the personnel in aligning work effort toward the highest agency priorities. When a strategic plan is developed in concert with active representation and participation of its members, it garners ownership and enhances understanding of the purpose of the various goals and initiatives. Further, it serves to disperse the workload across a broader base, engaging all employees in the effort. A strategic plan should have a maximum of a five year life span with annual reviews and revisions.

Similar to BF&EMS, WF&R does not have specific rules and regulations, but does have SOPs and Standard Operating Guidelines (SOGs) which describe processes for performing certain tasks under certain conditions. The agency does have policies which serve to establish a code of conduct or ethics. The SOPs/SOGs and policies are incorporated into training activities as appropriate. The SOPs and policies are reviewed and updated as appropriate. The agency has incorporated a "P3" system: policies, procedures, and practices. The existing Manual of Operations is a cumbersome, 442 page series of documents which appears to leave no topic unregulated. While the thoroughness of the effort is to be acknowledged, the utility of the manual is unnecessarily complicated. The manual is in the process of being revised and converted into the P3 system, but ESCI recommends simplifying the manual further into major component parts (Policies, Standard Operating Procedures/Guidelines, and Safety) labeled for ease of use by all personnel.

Communication systems internally consist of weekly chief's chats with the operations crews, weekly executive staff meetings, quarterly all officers meetings, and monthly battalion chiefs and deputy chiefs meetings. Minutes of these meetings are kept and circulated to the attendees. Chief's memoranda are used to address emergent issues. A quarterly member newsletter is published and made available to all personnel, and the deputy chief (senior ranking officer on site) is accessible with an open door policy. Further, the fire chief (contractually, the BF&EMS fire chief) also has an open door policy. On formal issues which require following the chain of command, an organizational chart (see Figure 3) identifies reporting relationships and thus a communication path.

The external communication effort exerted by WF&R is significant in that they produce a community newsletter published quarterly. The agency communicates via its website with pertinent, up-to-date information, and has not recently used citizen advisory committees. The deputy chief states that the community has been asked to participate in WF&R advisory efforts many times in the past with



diminishing involvement. Support by the community, however, appears strong as evidenced by high voter support for the benefit charge renewal. The agency does have a formal customer concern process in place.

WF&R does not have a current capital facilities plan in place. The apparatus replacement plan is programmed for seven years (2012-2019). The apparatus and associated support equipment is identified for replacement with funding secured. The funding source is a reserve fund, which is contributed to annually from the fire department expense fund.

Figure 4: Critical Issues

Critical Issues	Bothell FD	Northshore FD	Woodinville F&R
1	M&O budget is limited due to the recession	Revenue constraints	Long term sustainability (personnel costs manageable)
2	Managing expectations for RFA	RFA – if it fails, then what? If it passes, lots of changes	Policy, admin and labor all stay in their lanes
3	Annexation of north end may require significant infusion of infrastructure to serve it	Succession plan calls for deputy chief-ops/training	Have a plan if the RFA doesn't happen
4	Succession planning & brain drain		

The management methodology used by the three senior chief officers is perhaps the most indicative of the challenges to integrating multiple agencies. The chiefs each describe their approaches very differently. There is no wrong answer or most effective methodology; most organizations require situational methods and these chiefs likely vary their approach based on the circumstances. However, the descriptions are somewhat divergent. Chief Van Horne describes himself as relational. Chief Torpin describes himself as equipping personnel with the skills to do their jobs and holding them accountable. Deputy Chief Ahearn describes himself as democratic and participatory. These three leaders will be critical to the success of any integration effort. It will be important to discuss and develop a guiding philosophy going forward for the leadership team, guided by the policy-makers collectively.

The three agencies maintain all appropriate records and maintain appropriate security to those records, whether secured in offices, in file cabinets, or electronically on file servers. Various asset identifiers (such as asset- or inventory tags and bar codes) are used on valuable inventory, but none of the three agencies perform a regular, annual inventory to account for these assets. ESCI recommends conducting an annual inventory of attractive assets within the organization. An attractive asset can be defined⁴ as:

⁴ *Defining terms for Administrative Policies and Procedures*. Whatcom County Administrative Policies & Procedures Online (APPOL). <http://www.whatcomcounty.us/appol/admin/defin/ad-00001/ad100001z.html>. Viewed June 27, 2014



- Excluding software, any asset with an original cost between \$1,000 and \$5,000, and a useful life of at least two years, or
- Excluding software, any portable asset with an original cost of less than \$1,000, but at the discretion of the asset custodian, is considered “attractive” and easily converted to personal use. An example of this is a digital camera that cost \$750.

Recommendations:

BF&EMS

- To the extent fire department rules, standards, and policies are different than city rules, standards, and policies, the exceptions should be documented in a separate fire department manual
- SOPs and policies should be on a schedule for regular review and update
- Capital facilities and equipment plans are in place but no funding secured. A funding mechanism should be identified in all cases, and funds secured as appropriate (unless bonds are identified as the mechanism)

NFD

- The formal complaint process should be modified to require notification to the board of fire commissioners when a complaint is received, even if handled to the satisfaction of the complainant at a lower level

WF&R

- Simplify the Manual of Operations (“P-3” system) into policies, SOPs/SOGs, and safety.
- Establish a capital facilities plan and secure funding as appropriate (unless bonds are identified as the mechanism)

All Agencies

- Develop and adopt a strategic plan
- Conduct an annual inventory of attractive assets within each organization

Cash, credit card, and purchasing controls are appropriately in place for all three agencies, with separation of duties appropriately maintained.

CAPITAL ASSETS AND INFRASTRUCTURE

Three basic resources are required to successfully carry out the emergency mission of a fire department—trained personnel, firefighting equipment (both tools and vehicles), and fire stations. Because firefighting is an extremely physical task, the training and capacity of personnel resources is of vital concern. However, no matter how competent or numerous the firefighters, the department will fail to execute its mission if it lacks sufficient fire equipment which has been strategically deployed in an efficient and effective manner.

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 and losing a life.

Fire stations also need to be designed properly. Stations must adequately house equipment and apparatus, as well as meet the needs of the organization and its members. It is essential to research need based upon call volume, response time, risk, and projected growth prior to making a station placement commitment. Locating fire stations is also a matter of the greater community need.

Consideration should be given to a fire station's ability to support the department's mission as it exists today and into 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
- Living space for on-duty crew members (male and female)
- Administrative or management offices
- Training, classroom, and library areas
- Firefighter fitness area
- Public meeting space

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 fire stations and other buildings belonging to or utilized by Bothell, Northshore, Snohomish #10, and Woodinville were analyzed for adequacy, location, and functionality.

BF&EMS

Bothell is the only city fire department partnering in this survey. The city operates three fire stations, two of which it owns and a third, owned by Snohomish Fire District #10, which the city provides the staffing and support for. Station 42, located in downtown Bothell on Beardslee Blvd., is also the administrative headquarters and houses a shift commander, cross-staffed ladder and engine, aid car, and an ALS response unit staffed by Shoreline paramedics as part of the King County Medic One program. Station 44, in the Queensborough neighborhood is the one owned by SCFD #10. A cross-staffed engine and aid car operates from this station. Station 45, in the Canyon Park neighborhood, houses a cross-staffed engine and aid car.

The main station was built in 1980 and the Queensborough station was built in 1968 by SCFD #10. The Canyon Park station was built in 1985. Each of these stations is small by current standards. For

example, fitness equipment is set up in the apparatus bays of stations 42 and 45, rather than in workout rooms. The apron at the front of Station 45 is also in need of repair. The concrete work has sunken and broken up at that location. Station 42 is segmented in a maze of hallways leading to multiple offices. The station layout is inefficient.

NFD

NFD provides fire and EMS services to the cities of Kenmore and Lake Forest Park from two fire stations—one located within each city. Station 51 can only be described as a “state of the art” combined fire station and main administration facility, constructed in 2011. It is located in Kenmore. Station 57, the second station, built in 1994, was fully remodeled in 2007 due to significant flood damage. Included in that project was the addition of a retaining wall which now deflects flood water from a nearby creek around the station. Northshore has two more buildings. One is a training tower located at the site of the main station; the other is a former volunteer station in the Finn Hill/Moorlands neighborhood of Kenmore. The Finn Hill station was built in the 1950s and is no longer adequate as a fire station. It is currently rented out to a YMCA-sponsored child care program.

The Lake Forest Park station also houses an ALS response vehicle staffed by paramedics from the Shoreline Fire Department as part of the King County Medic One program. Both staffed stations have up-to-date amenities, including fitness equipment, private, or semi-private living quarters and facilities for female firefighters, modern kitchens, and at least adequate office space. Station 57 (Lake Forest Park) lacks a training/community room, while the main station (Station 51), has significant room available for expansion. This is the result of anticipating and planning for future growth. Station 51 has the capacity to serve as the administrative headquarters of the RFA if it were to be established.

Northshore has two more buildings. One is a training tower located at the site of the main station; the other is a former volunteer station in the Finn Hill/Moorlands neighborhood of Kenmore. The Finn Hill station was built in the 1950s and is no longer adequate as a fire station. It is currently rented out to a YMCA-sponsored child care program. The training tower and associated grounds is the only such facility within the study area and is currently being used by all three fire departments.

SCFD #10

SCFD #10 does not employ any firefighters, but it owns the station known as Bothell Station 44 as well as the apparatus and some of the equipment associated with the station. Bothell operates equipment and personnel from this station. SCFD #10 covers about two-and-a-half square miles in two distinct areas of unincorporated Snohomish County, one to the northwest of Bothell and one to the north.

WF&R

Woodinville currently operates from three stations. Station 31 is the main station and houses the administration headquarters in addition to a Quint (ladder truck with a pump, fire hose and water tank), and an aid car. It is located in the City of Woodinville (which was annexed into the district) on



Woodinville-Snohomish Rd. Station 33 is located at 19401 NE 133rd Street on the south edge of the district serving the surrounding community with a cross-staffed engine and an aid car. Station 35 is located at 17825 Avondale Rd. NE serving the surrounding community with an engine and an ALS response unit staffed with paramedics from the city of Redmond. Woodinville also owns a building adjacent to its main station that is used for the district's logistics center and office of the Facilities Maintenance Technician.

It is beyond the scope of work and the expertise of ESCI to provide a structural engineering assessment of the fire facilities. The condition of these facilities is based upon the general appearance and suitability for the intended purpose and ESCI's experience in the fire service.

Survey Table 2: Bothell Station #42 - 10726 Beardslee Blvd.



Survey Components	
Structure	
Construction type	Brick/masonry
Date	1980, addition of crews quarters in 1994
Seismic protection/energy audits	No
Auxiliary power	Yes – 125 kw
Condition	Fair
Special considerations (ADA, mixed gender appropriate, storage, etc.)	ADA compliant, mixed gender appropriate, good storage capacity
Square Footage	14,249
Facilities Available	
Exercise/workout	In bay
Kitchen/dormitory	Yes, individual dorm rooms
Lockers/showers	Yes
Training/meetings	Yes
Washer/dryer	Yes, separate set for bunker gear
Protection Systems	
Sprinkler system	Yes
Smoke detection	Yes
Security	Key pad entry
Apparatus exhaust system	Yes

Comments: Small by current standards, with offices located down multiple hallways and corridors. Fitness equipment is set up in the apparatus bays rather than in workout rooms. This facility also serves as the fire department’s administrative offices.



Survey Table 3: Bothell Station #44 (owned by SCFD #10) - 330 228th St. SW



Survey Components	
Structure	
Construction type	Masonry
Date	1968
Seismic protection/energy audits	No
Auxiliary power	7kw generator
Condition	Fair
Special considerations (ADA, mixed gender appropriate, storage, etc.)	Individual bunk rooms; showers in restrooms.
Square Footage	5,009
Facilities Available	
Exercise/workout	Yes, located in secondary building
Kitchen/dormitory	Kitchen—yes; individual bunkrooms
Lockers/showers	Lockers in bunkrooms; showers in restrooms
Training/meetings	Day Room
Washer/dryer	Yes
Protection Systems	
Sprinkler system	No
Smoke detection	Yes
Security	Key pad entry
Apparatus exhaust system	Yes

Comments: Building shows its age but has been remodeled several times.

Survey Table 4: Bothell Station #45 - 1608 217th Pl. SE



Survey Components	
Structure	
Construction type	Wood frame
Date	1985
Seismic protection/energy audits	No
Auxiliary power	20 kW generator
Condition	Fair
Special considerations (ADA, mixed gender appropriate, storage, etc.)	Showers in restrooms
Square Footage	4,702
Facilities Available	
Exercise/workout	Yes
Kitchen/dormitory	Yes; dividers in bunkroom
Lockers/showers	Lockers in bunkroom; showers in bathrooms
Training/meetings	Yes
Washer/dryer	Yes
Protection Systems	
Sprinkler system	No
Smoke detection	Yes
Security	Key pad entry
Apparatus exhaust system	Yes

Comments: Small by current standards. Fitness equipment is set up in the apparatus bays rather than in workout rooms. The apron at the front of the station is in need of repair. The concrete work has sunken and broken up at that location.



Survey Table 5: Northshore Station #51 - 7220 NE 181st Street, Kenmore



Survey Components	
Structure	
Construction type	Brick/Masonry
Date	2010
Seismic protection/energy audits	Seismic protected, no energy audit
Auxiliary power	Yes
Condition	Excellent
Special considerations (ADA, mixed gender appropriate, storage, etc.)	ADA compliant, mixed gender appropriate, good storage capacity
Square Footage	32,248
Facilities Available	
Exercise/workout	Yes
Kitchen/dormitory	Yes, individual dorm rooms
Lockers/showers	Yes
Training/meetings	Yes. Also serves as an EOC during a disaster
Washer/dryer	Yes
Protection Systems	
Sprinkler system	Yes
Smoke detection	Yes
Security	Security camera, card key entry
Apparatus exhaust system	Yes

Comments: The building serves as an active fire station and district headquarters building. The station has four drive-through double deep bays and one non drive-through single bay.

Survey Table 6: Northshore Station #57 - 17020 Brookside Blvd., Lake Forest Park



Survey Components	
Structure	
Construction type	Brick/masonry
Date	1994, remodeled after flooding in 2007
Seismic protection/energy audits	Yes, no energy audits
Auxiliary power	Yes
Condition	Good
Special considerations (ADA, mixed gender appropriate, storage, etc.)	Yes
Square Footage	7,414
Facilities Available	
Exercise/workout	Yes
Kitchen/dormitory	Yes/6 single dorm rooms
Lockers/showers	Yes
Training/meetings	No
Washer/dryer	Yes
Protection Systems	
Sprinkler system	Yes
Smoke detection	Yes
Security	Cameras, card key entry
Apparatus exhaust system	Yes

Comments: Two single deep drive-through bays, one back-in bay. Building is shared with Shoreline. One engine, one aid unit, and one medic unit deployed at facility.

Survey Table 7: Training Tower Located at Station 51, Northshore



Survey Components	
Structure	
Construction type	Reinforced Masonry
Date	2010
Seismic protection/energy audits	Yes
Auxiliary power	N/A
Condition	Excellent
Special considerations (ADA, mixed gender appropriate, storage, etc.)	N/A
Square Footage	Unknown
Facilities Available	
Exercise/workout	N/A
Kitchen/dormitory	N/A
Lockers/showers	N/A
Training/meetings	Adjacent to Station 51
Washer/dryer	N/A
Protection Systems	
Sprinkler system	N/A
Smoke detection	N/A
Security	Cameras, card key entry
Apparatus exhaust system	N/A

Survey Table 8: Former Finn Hill/Moorlands Volunteer Station, 15036 70th Avenue NE, Kenmore



Survey Components	
Structure	
Construction type	Wood Frame
Date	1961
Seismic protection/energy audits	No
Auxiliary power	No
Condition	Poor -- Inadequate for fire station use
Special considerations (ADA, mixed gender appropriate, storage, etc.)	No
Square Footage	1843
Facilities Available	
Exercise/workout	No
Kitchen/dormitory	No
Lockers/showers	No
Training/meetings	No
Washer/dryer	No
Protection Systems	
Sprinkler system	Yes
Smoke detection	Yes
Security	N/A
Apparatus exhaust system	N/A

Comments: Building is owned by the district, but is currently leased to the YMCA for \$1 per year.



Survey Table 9: Woodinville Station 31 - 17718 Woodinville/Snohomish Rd. NE



Survey Components	
Structure	
Construction type	Wood Frame
Date	2002
Seismic protection/energy audits	Seismic Yes/Unknown
Auxiliary power	Diesel
Condition	Good/Excellent
Special considerations (ADA, mixed gender appropriate, storage, etc.)	ADA compliant/mixed gender/appropriate storage
Square Footage	20,470
Facilities Available	
Exercise/workout	Yes
Lockers/showers	Yes
Training/meetings	Yes
Washer/dryer	Yes
Protection Systems	
Sprinkler system	Yes
Smoke detection	Yes
Security	Keypad and Keyed
Apparatus exhaust system	Yes

Comments: Four Bays; two are drive through. The station appears to be well maintained.

Survey Table 10: Woodinville Station 33 - 19401 NE 133rd St.



Survey Components	
Structure	
Construction type	Wood Frame
Date	1988
Seismic protection/energy audits	No/No
Auxiliary power	Diesel
Condition	Good
Special considerations (ADA, mixed gender appropriate, storage, exhaust removal, etc.)	Single bunkrooms; appropriate storage; not ADA compatible
Square Footage	5,792
Facilities Available	
Exercise/workout	Yes
Kitchen/dormitory	Yes/Individual Bunks
Lockers/showers	Yes
Training/meetings	No
Washer/dryer	Yes
Protection Systems	
Sprinkler system	Yes
Smoke detection	No
Security	Key & Keypad
Apparatus exhaust system	Yes

Comments: Three Bays, two of which are drive through bays



Survey Table 11: Woodinville Station 35 - 17825 Avondale Rd. NE



Survey Components	
Structure	
Construction type	Wood Frame
Date	1988 significant remodel in 1996
Seismic protection/energy audits	No/no
Auxiliary power	Diesel
Condition	Good
Special considerations (ADA, mixed gender appropriate, storage, etc.)	Mixed gender and appropriate storage; ADA no
Square Footage	5,412
Facilities Available	
Exercise/workout	Yes
Kitchen/dormitory	Yes
Lockers/showers	Yes
Training/meetings	No
Washer/dryer	Yes
Protection Systems	
Sprinkler system	Yes
Smoke detection	Yes
Security	Keypad and keyed
Apparatus exhaust system	Yes

Comments: Three Bays, no drive through bays

Facilities Summary

All of the fire stations surveyed are adequate for utilization as modern fire stations except the former Finn Hill/Moorlands volunteer station, which is being leased to the YMCA by Northshore. Each department has made accommodations for both male and female firefighters and for the safe cleaning of turnouts. Bothell's facilities appear to have the most deferred maintenance and are in need of replacement or upgrades. For example, a means of safely separating contaminated water from the washing of fire apparatus has not been added to the Bothell stations, and there is concrete repair needed at Station 45. Some work has been budgeted for, but has yet to be performed.

The question of whether any of the existing stations might be considered to be "redundant" as the result of a GIS study of response patterns is addressed in another section of this report; however, at the present time none of the participating fire departments have plans to replace or remove any of their current facilities.

Apparatus

Other than firefighters assigned to stations, response vehicles are probably the next most important resource of the emergency response system. The delivery of emergency services will be compromised if emergency personnel cannot arrive quickly due to unreliable transportation or if the equipment does not function properly.

Fire apparatus are unique and expensive pieces of equipment, customized to operate efficiently for a narrowly defined mission. An engine may be built in such a way that the compartments fit specific equipment and tools. Virtually every space on a fire vehicle is designed for function. This same vehicle, with its specialized design, does not lend itself well to operate in a completely different capacity, such as a hazardous materials unit or a rescue squad. For this reason, fire apparatus offer little flexibility in use or reassigned purpose. 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 and more complex. Parts may become more difficult to obtain, and downtime for repairs 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 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 planning purposes, such as the development of replacement funding for various types of apparatus; yet, apply a different method (such as a maintenance and performance review) for determining the actual replacement date, thereby achieving greater cost effectiveness when possible.

Fire administrators should be concerned about aging of the fleet and having a funded replacement schedule. As frontline units age, fleet costs will naturally be higher and more down time will be associated with necessary repairs and routine maintenance.

It is beyond the scope of work and the expertise of ESCI to provide a mechanical assessment of the apparatus. These definitions describe the general appearance and suitability of apparatus for their intended purpose. For a mechanical evaluation of the apparatus, ESCI recommends seeking the services of a certified Emergency Vehicle Technician.

Figure 5: Bothell FD Apparatus Inventory

Apparatus Designation	Type	Year	Make/Model	Condition	Minimum Staffing	Pump/Tank (gpm/gal.)	Replace Schedule
7410	Aid Unit	2002	Braun/Ford Navistar	Good	2	N/A	12 years
7413	Aid Unit	2009	Braun/Northstar	Excellent	2	N/A	12 years
8401	Historical	1929	Ford/Model A	Good	N/A	N/A	N/A
8411	Engine	1994	Seagraves	Good	3	1500/500	15 years
8412	Engine	2001	Spartan M/H&W	Good	3	1500/500	15 years
8413	Engine	2006	Spartan M/H&W	Good	3	1500/500	15 years
9402	Aerial Platform	2004	Sutphen	Good	3	0/0	15 years
1417	Staff	2003	Chev/Impala	Good	N/A	N/A	10 years
1418	Command	2007	Chev/Tahoe	Good	1	N/A	10 years
1419	Command	2010	Ford/Escape	Excellent	1	N/A	10 years
2404	Support Chief	1996	Chev/Suburban	Good	1	N/A	10 years
2405	CRR	1997	GMC/Sonoma p/u	Good	1	N/A	10 years
2406	CRR	1999	Ford/Explorer	Good	1	N/A	10 years
2407	CRR	1999	Ford/Explorer	Good	1	N/A	10 years
2408	Pub Ed	2002	Chev/Astro Van	Good	N/A	N/A	10 years
2409	Operations	2005	Ford 2500 p/u	Good	1	N/A	10 years
2410	Command	2005	Chev/Suburban	Good	1	N/A	10 years
2411	Trailer	2006	Cargo Mate	Good	N/A	N/A	20 years
2412	HazMat	2010	F550	Good	1	N/A	10 years
2413	Trailer	2009	Cargo Mate	Good	N/A	N/A	20 years
2414	CRR	2010	Chev/Colorado p/u	Good	N/A	N/A	10 years
2415	Command	2014	Chev/Suburban	Excellent	1	N/A	10 years



Figure 6: Northshore FD Apparatus Inventory

Apparatus Designation	Type	Year	Make/Model	Condition	Minimum Staffing	Pump/Tank (gpm/gal.)	Replace Schedule
E51 (Station 51)	Engine	2010	Pierce/Arrow XT	Excellent	3	1500/500	12 years
E52 (Station 51)	Engine	2002	BME/HME	Good	3	1500/500	12 years
E57 (Station 57)	Engine	2010	Pierce/Arrow XT	Excellent	3	1500/500	12 years
E58 (Station 57)	Engine	1998	3D/HME	Good	3	1500/500	12 years
A51 (Station 51)	Aid Car	2008	Ford/Braun	Excellent	2	N/A	8 years
A57 (Station 57)	Aid Car	2000	Ford/Braun	Good	2	N/A	8 years
R51 (Station 51)	Rescue	2006	H&W/Spartan	Excellent	3	N/A	15 years
B51 (Station 51)	Command	2009	Chevrolet	Excellent	1	N/A	8 years
B52 (Station 51)	Command	1999	Chevrolet	Good	1	N/A	8 years
Utility 51 (Sta 51)	Utility	2009	Chevrolet	Good	1	N/A	8 years
3103 (Station 51)	Chief	2008	Trailblazer	Good	N/A	N/A	8 years
3900 (Station 51)	Prev Chief	2005	Trailblazer	Good	N/A	N/A	8 years
3400 (Station 51)	Fire Mar.	2008	Trailblazer	Good	N/A	N/A	8 years
3101 (Station 51)	Extra	2002	Crown Vic	Good	N/A	N/A	8 years
3800 (Station 51)	Staff	1998	Crown Vic	Good	N/A	N/A	8 years

Figure 7: SCFD #10 Apparatus Inventory

Apparatus Designation	Type	Year	Make/Model	Condition	Minimum Staffing	Pump/Tank (gpm/gal.)	Replace Schedule
7408	Aid Unit	1998	Braun/F-350	Good	2	N/A	12 years
7411	Aid Unit	2009	Braun/Northstar	Excellent	2	N/A	12 years
7412	Aid Unit	2009	Braun/Northstar	Excellent	2	N/A	12 years
8414	Engine	2006	Spartan M/H&W	Good	3	1500/500	20 years
8415	Engine	2013	Spartan M/H&W	Excellent	3	1500/500	20 years



Figure 8: Woodinville F&R Apparatus Inventory

Apparatus Designation	Type	Year	Make/Model	Condition	Minimum Staffing	Pump/Tank (gpm/gal.)	Replace Schedule
A9901	Rehab Unit	1999	Chev/3500	Good	N/A	N/A	20 years
A0401	Aid Unit	2004	Road Rescue/E-450	Good	2	N/A	11 years
A0402	Aid Unit	2004	Road Rescue/E-450	Good	2	N/A	11 years
A0601	Aid Unit	2006	Braun/E-450	Good	2	N/A	11 years
A0701	Aid Unit	2007	Braun/E-450	Good	2	N/A	10 years
Aid 31	Aid Unit	2010	Braun/Northstar	Excellent	2	N/A	10 years
Aid 34	Aid Unit	2104	Braun/Northstar	Excellent	2	N/A	10 years
E0901	Engine	2009	Pierce	Excellent	3	1750/750	15 years
E9601	Engine	1996	Smeal	Good	3	1750/750	15 years
E9602	Engine	1996	Smeal	Good	3	1500/750	15 years
E0401	Engine	2004	American/LaFrance	Good	3	1750/750	15 years
E0501	Engine	2004	American/LaFrance	Good	3	1750/750	15 years
T0301	Ladder Tractor	2003	American/LaFrance	Good	3	N/A	15 years
T0301	Ladder Trailer	2003	American/LaFrance	Good	3	N/A	20 years
C9501	Staff—Cargo Van	1995	Ford E-350	Fair	N/A	N/A	12 years
C0301	Staff—Van	2003	Chevy Express	Good	N/A	N/A	20 years
C0201	Staff-Pick-up	2002	Ford F-150	Good	N/A	N/A	12 years
C0302	Chief Response	2003	Ford Expedition	Good	1	N/A	10 years



Apparatus Summary

Briefly, the frontline and first up reserve engines currently in service at all four departments are well within industry standards. The newest front line engines are less than three years old; the oldest reserve engines still have five or more years left in their normal useful life estimate. The issue for fire departments contemplating any kind of integration is the concern over other partners' commitment to apparatus maintenance and planning for the replacement of this expensive and sophisticated equipment as they near the end of their useful lives.

Northshore, Snohomish #10, and Woodinville have existing replacement plans and dedicated reserves for those replacements. Bothell has a replacement schedule which may not be fully funded.

Currently, each of the departments contracts for apparatus maintenance with different vendors. Northshore's fire apparatus are serviced and repaired at the Northshore Utility District. Bothell uses the city of Redmond's shop, and Woodinville uses the East County Fire Support Services division located at Monroe Fire.

Another issue felt keenly by fire personnel from Chiefs to Firefighters, is the absence of a dedicated truck company. To civilians those large, red "trucks" may all seem the same, but at structure fires and at certain other major emergencies, ladder trucks, with the specialized equipment they are required to carry, can be essential. Bothell operates a ladder truck, but it is staffed with "jump" crews who must switch from one kind of apparatus to another based upon the nature of the call. Since fire crews can often be out in the community when a call for help arrives, such switching of vehicles is not always possible. Should a specific apparatus not be available, the dispatch center sends the next closest like resource. Woodinville has a quintuple combination pumper or quint, which has five major components; a pump, water tank, fire hose, aerial device, and ground ladders. It is essentially a ladder truck and fire engine combined. This unit is staffed and routinely dispatched to calls for service, but is used as a fire engine predominantly. While quints have positive applications, their limitation is that if used as an engine (the majority of the time), the hydraulic ladder is likely misplaced for effective elevated operations.

In a larger, integrated response model, the dedication of one or more companies of firefighters to a truck response may be possible. Finally, it may also be possible to reduce the total number of reserve vehicles necessary for the entire system if the fleet of vehicles can be managed as a whole and not as discreet parts of three different departments. Also, if any redundancy is discovered in any of the positions that require a response vehicle (for example, Operations Battalion Chief), further investment in rolling stock may be reduced.

STAFFING AND PERSONNEL MANAGEMENT

Staffing

An analysis of staffing is a review of personnel levels and distribution of those levels among primary, support, and administrative functions. Such an analysis also includes a review of staff allocations, scheduling, standards of cover, and career and volunteer firefighter/EMS distribution.

For the purposes of this analysis, we will not be discussing SCFD #10 because it doesn't actually employ fire staffing. The three remaining departments are relatively similar in size, sharing similarities and distinctions in numerous areas.

BF&EMS

Bothell Fire Department is composed of 51 responders and 15.75 professionals in the office, of which two are half-time and one three-quarter time positions. In addition, it enjoys the support of other city departments such as Human Resources, IT, Finance/Payroll, and Building Maintenance. Of the three departments surveyed, Bothell has the highest ratio of office staff to line staff. This is unusual because city fire departments do not have to provide all of their own support services the same way that fire districts do.

Bothell's staffing is reflective of its commitment to fire prevention, public education, and emergency management that some fire departments either do not have the statutory authority to perform or fail to prioritize. Emergency responses are the most visible activity to the public, but prevention and education have proven to make a difference in the overall safety of a community. The problem is that society does not always consider the emergencies that don't happen because of an agency's efforts in these areas. Bothell also staffs its training function adequately. This is another area in which financially challenged organizations will sometimes cut back.

Bothell's current level of staffing does not afford it enough resources to manage a well involved structure fire by itself. Like other departments in the area, Bothell fire must depend upon assistance from other departments to respond to and mitigate larger-sized or more complex emergencies. Some of Bothell's firefighters are trained in technical rescue and hazardous materials and are part of those specialized teams.

NFD

Northshore is the smallest of the three departments. It is composed of 41 responders and eight administrative or support staff (one of whom is part-time for an FTE count of 7.5). It has the leanest support structure of the three departments being surveyed and is still building back its non-line staff from cutbacks experienced during the recession. Northshore currently contracts for a training officer and has recently filled a vacancy at the rank of training captain. Northshore maintains a full service fire



prevention division staffed by a fire marshal and one fire inspector. The fire prevention division is supported by line staff that assists with public education and basic fire inspection activities.

Northshore's policies, HR management, fiscal management, and standards are up-to-date and consistent with the industry best practices for topic, process, and schedule for review and revision. NFD has civilian professionals in the HR and finance areas, with significant oversight and involvement by the fire chief.

Northshore's deployment of its emergency response resources is consistent with the majority of its calls for service. The great majority of fire service calls are now for medically-related emergencies. In response, all firefighters are certified to at least the BLS level, an aid car is staffed 24/7 and all fire crews can switch from a fire engine to an extra aid unit when members of the community require medical response. Northshore depends upon other fire departments for ladder truck response. However, Northshore does have a state of the art heavy rescue with members trained in technical rescue. Northshore staffs two fire stations. Northshore's current level of staffing does not afford it enough resources to manage a well involved structure fire by itself. Like other departments in the area, Northshore must depend upon assistance from other departments to respond to and mitigate larger-sized or more complex emergencies.

SCFD #10

Snohomish District 10 contracts with Bothell for fire services in its areas. It owns fire station 44 staffed by Bothell firefighters at 330 228th St. SW in Bothell. It also owns several apparatus that are maintained and used as part of Bothell fire's fleet. SCFD #10 shares an administrative assistant with the city of Bothell, who serves as the district's board secretary. For the purpose of this report, that FTE is included with Bothell's personnel survey.

WF&R

Woodinville is composed of 53 responders and nine administrative or support staff in its administrative headquarters station. The district has held off hiring a fire chief after the position was vacated and currently contracts for a fire chief from the city of Bothell. The intent is to preserve a potential efficiency if the agencies combine. Woodinville does not currently staff a fire marshal position or have assigned fire inspectors after vacating its fire prevention program due to a lack of statutory authority to enforce the fire codes. Woodinville's policies, HR management, and standards are up-to-date and consistent with the practices that we look for in fire service agencies. The "3Ps" (Policies, Procedures, and Practices) manual addresses key areas, but in the opinion of ESCI are overly complicated and burdensome to use. Some key documents (such as the revised Standards of Cover) are in draft form and need to be finalized.

Woodinville's deployment of its emergency response resources is consistent with the majority of its calls for service. Since the great majority of fire service calls are now for medically-related emergencies, all firefighters are certified to at least the BLS level, an aid car is staffed 24/7 and all fire crews can switch

from a fire engine or truck to an extra aid unit when members of the community require medical response. Woodinville staffs a “quint” from its main station in order to provide a flexible fire-related response on one piece of apparatus. A quint is defined in the Capital section of this report. The crews from the quint and from the department’s engines can also switch to staff additional aid cars when needed. Woodinville staffs three fire stations.

Similarities and Differences

All three departments utilize only career firefighters to deliver fire and EMS services to their communities, and each receives ALS/transport services from agencies that contract with King County Medic One for paramedic response to their citizens.

All three departments are already engaged in the cooperative sharing of services with other agencies and are geographically close enough to one another to be operationally familiar with each other.

There are differences, too. Northshore, Woodinville (and SCFD #10) are fire districts, while Bothell Fire is a municipal department within its city. Support staff within administration is unionized at Bothell and Woodinville, but they are not at Northshore. In Woodinville the non-sworn bargaining unit is a part of the IAFF local. In Bothell, it is a part of a larger AFSCME unit that represents other civilian employees with the city.

Another factor to be kept in mind is that in the case of all three departments being studied, the financial pressures of the last several years have already resulted in temporary decisions or deferred action, not filling positions that might have become redundant in the course of an integration study. For example, support positions with Northshore are currently vacant. Integration with neighboring fire service providers might fill in those areas. Woodinville reduced their support services force by two in April, 2013, and the fire chief position is currently vacant, both in anticipation of potential regionalization. That district has contracted for fire chief services from Bothell. While Bothell has hired an office specialist, it is a limited term position until the question of consolidation is answered. Northshore’s administrative to line ratio is very small and not sustainable. Action to address this has been deferred in anticipation of the possibility of regionalization.

What this means is that integration may be simplified because the parts fit neatly together, but some of the financial savings that would usually accrue may already be budgeted into the existing financial picture.

This study involves three fire districts and one city fire department, and since the only “employee” of SCFD #10 is a shared administrative assistant (whom we have included in the Bothell staff count), we will be describing staffing for the two remaining districts and the city only.

Emergency Response Staff

At the responder level, the difference between city fire departments and fire districts is irrelevant. What is important is the number of firefighters, how their teams (or “companies”) are organized and



deployed, the kinds of fire apparatus they are assigned to, and the practices and protocols they follow on emergency scenes.

The three departments are relatively close to one another in size of workforce. Northshore is the smallest with 41 line employees; Woodinville is the largest with 53, and Bothell is in between with 51 responders. All three departments maintain three-person minimum staffing on their engines and trucks and all three engage in the practice of utilizing “jump” or “swing” crews to staff a ladder (if applicable) or an aid unit when the particular emergency call warrants it. All three departments are BLS (Basic Life Support) EMS responders, relying on King County Medic One, through their contractors, to supply ALS (Advanced Life Support) or “paramedic” service to their communities. For line personnel the ranks and responsibilities shared by line personnel are the same. Overall supervision of each shift comes from battalion chiefs. Company level supervision is exercised by lieutenants, and all other response personnel hold the job title of “firefighter.” That all three departments share these many characteristics will be a positive influence should policy makers decide to move in the direction of integration.

These departments are already practicing functional cooperation on a daily basis. Training resources are shared, and with the recent increased participation in the East Metro Training Group, all three departments are on the way to achieving one of the advantages of working for one department—shared training policies and response practices. Because all three departments have experienced shared workplace settings and cooperative work environments with other agencies, they are used to the idea of sharing resources. Northshore shares facilities with Shoreline paramedics, as does Bothell, which also staffs SCFD #10’s station on SCFD #10’s apparatus. Woodinville partners with Redmond Fire for paramedic services within its district, and currently a Woodinville captain is working in the same office at Bothell’s training division.

Northshore staffs two fire stations with a minimum of nine line personnel per day. Bothell staffs three fire stations (one owned by SCFD #10) with a minimum of 12 line personnel per day. Woodinville staffs three fire stations with a minimum of 12 line personnel per day. Each department fields one dedicated aid unit. Bothell staffs aid units and a ladder truck with a jump crew. Woodinville and Northshore field additional aid units in this manner.

All three departments experience days when available staffing is above the minimums described above. Depending upon the number of additional firefighters on duty at those times, staffing is augmented on one or more apparatus or, at times, additional apparatus may be placed into service (depending upon external factors like weather, day of week, training schedules, and the certifications/skills/ranks of the extra personnel). There are some important differences between the departments as well. All three start their workdays at the same hour (0800), but all three diverge in terms of work hours. Northshore and Woodinville firefighter groups both work an average of 48 hours per week. Bothell firefighters work an average of 50 hours per week. Bothell and Woodinville firefighters work a three platoon (three shift) schedule. The shifts are 48 hours in length followed by 96 hours off. Northshore’s firefighters work a four platoon (four shift) schedule. The shifts are 24 hours in length followed by varying numbers of hours off before their next work period. Under their schedule, Northshore firefighters “owe” twelve or

thirteen 24-hour shifts back to the department over the course of each year in order to bring their average hours worked “up” to 48 per week. Bothell and Woodinville firefighters have their work cycles interrupted with “Kelly” days—shifts they are excused from working in order to bring their average hours worked “down” to 48 or 50 per week.

Administrative & Support Staff

This group includes both command officers (fire chiefs, deputy chiefs, fire marshals); other uniformed members serving in support divisions, such as Training, Fire Prevention or other roles; and civilian support staff. Across these three departments there are specific factors that cause job descriptions and job responsibilities to be customized for the organization. This can be the case for chief officers and for administrative assistants. The fire chief of a city (like Bothell) has a slightly different job (and confronts some challenges unique to that environment) than does the fire chief of a district (who has his or her own unique challenges).

As mentioned earlier, both Woodinville and Bothell have unionized support staffs. They share this similarity, and it differentiates them from Northshore where the support staff is not represented by a labor union. But the administrative staff at Bothell fire work under job descriptions that have to be consistent with administrative staff throughout the rest of the city’s departments and with pay and benefits that have to be consistent with those of other civilian employees of the city. They are represented by a typical public employee union in that environment—AFSCME. Woodinville’s administrative employees have their own bargaining unit, but they are represented by the same IAFF local that includes the firefighters in Woodinville. And, as the only employees in their bargaining unit, they have job descriptions and wages and benefits tailored solely to their roles at the district.

For these reasons, a survey or comparison of the employees in support roles across the three departments being studied is less useful and more difficult. It is less useful because each of the three departments has made choices regarding how to manage their missions within the challenge of less than optimal funding. It is more difficult because job descriptions adapted to fit the priorities of each organization make an “apples to apples” comparison problematic.

Another important point to remember is that across the three departments, most support positions are held by one person (compared to the number of personnel on the line with the same job descriptions—“firefighter” or “lieutenant” for example). Even the line position with the fewest incumbents—battalion chief—has more FTEs associated with it than any of the support positions.

Survey Table 4 – Staffing & Personnel, included in appendix B of this report, shows that in similar classes of support employees, salaries and benefits are within comparable ranges.

Discussion

Should the three departments decide to seek a greater degree of integration of their combined services, a prudent first step would be to develop an organizational structure including its support functions that



will a) manage both the emergency and non-emergency functions of the department, and b) support those who are carrying out both the emergency and non-emergency functions of the department. Once this has been done, current staff can be used as a pool from which to staff, according to skills and abilities, the new organization. There will likely be both redundancies and missing pieces. These will need to be managed through training, reassignment, and attrition as part of a transition plan.

At the emergency response, or street level, a similar analysis should be performed. It does not appear that Bothell, Northshore, and Woodinville will discover service overlaps or extra engines, ladders, or aid cars, but at the battalion chief level there should be an opportunity for the realignment of personnel. This could be done in either of two ways. The supervision of eight fire stations by one BC would be outside the recommended “span of control” for supervisors and managers. Additionally, the geographic layout of the resulting jurisdiction would make it very difficult for a single battalion chief to adequately respond to emergencies in a timely manner. Dividing the integrated department into two Battalions of four stations each would also reduce each BC’s span of control to five or fewer, which is within industry standards for span of control.

Based upon the GIS analysis, planning regarding the appropriate deployment of response units can begin. Each of the departments currently deploys its heaviest concentration of resources from a central station (designated as “headquarters” stations). This is typical for smaller fire departments that started in response to local population concentrations and traditional “downtowns.” Later, as communities grow, satellite stations are built and staffed. In smaller agencies the tendency to concentrate resources at the center is logical and makes strategic sense. However, as a community and its supporting fire/EMS department grows, another approach may become desirable. At times, and in certain locations, it can make more sense to “surround” the area of highest call volume, responding into it from bordering stations. This approach can maintain response time efficiencies while sharing the work load among more units and balancing responses. If the three fire departments apply this analysis to a shared response area, they may discover opportunities to improve their overall service through slight changes in their deployment model.

Support functions may be similarly improved when they are integrated within a larger model. Someone has to answer the phone at each of the individual departments, but a combined department the size of Bothell, Northshore, and Woodinville, would require only one person to perform that function. Combining the departments may require that the constituent agencies modify their expectations in these areas, increasing services in one community while slightly decreasing them in another area. This should be a part of the planning process.

Personnel Management

Fire departments are paramilitary in nature and are almost always organized with a top down structure. At the same time, since almost all chief officers come from the ranks of those they supervise, the fire service tends to have a culture that is somewhat relaxed around hierarchy. Generally, all three departments follow industry standards in their organization and personnel practices. While not the main thrust of this study, the ESCI team did review basic personnel management practices. We found them to be consistent with what we would expect in well-run fire departments the sizes of Bothell, Northshore, and Woodinville.

The focus of this section is then to identify some of the areas that decision-makers will need to consider when exploring the possibility of greater integration of their respective departments.

Emergency Response Staff

Bothell, Northshore, and Woodinville employees receive wage and benefit packages that are in some ways quite similar and in other ways diverge from one another. When analyzing the tables included in this report, the most obvious points of comparison are the monthly salaries of the line personnel. In all three bargaining unit categories (Battalion Chief, Lieutenant, and Firefighter), Bothell shows the highest monthly salaries and Northshore the lowest. However, monthly salaries do not reflect the difference in the number of on-duty hours per year each of the different employee groups. When adjusted for the number of scheduled work hours (2600 per year for Bothell, 2512 per year for Woodinville, and 2496 per year for Northshore), Woodinville's Battalion Chief hourly rate is actually the highest of the three. Comparing hourly rates (not shown in the survey tables), we see that at the Lieutenant and Firefighter ranks, the pay differential between the highest and lowest paid is less than 3.5%. At Battalion Chief, the differential between the top and the bottom is just over one-half percent.

There are other salary related issues. All three departments provide support for college level tuition and books but, in addition, Northshore and Bothell offer incentives of 2-4% of base pay for successful completion of an Associate and/or Bachelor's degrees. Woodinville does not. Northshore and Bothell also provide incentive pay for one or more "special" teams (Technical Rescue and HazMat for example), but Woodinville does not. These incentives have the effect of altering the salary comparisons discussed above. A Northshore employee can augment his or her pay in some ways that a Woodinville employee cannot.

A comparison of the paid leave policies at each department shows that while they are not identical, they are, like the pay differentials, within the norms of the area and more alike than dissimilar. All three departments frontload some sick accruals for new hires albeit through slightly different strategies. Vacation and holiday accruals total to approximately equal amounts with the departments that work more hours posting slightly higher time off hours over the span of an employee's career.

Another issue is the establishment of a civil service environment. The city of Bothell has a civil service system. Neither of the fire districts are civil service. Woodinville's labor agreement, however, includes specific rules and processes that would often be a part of the civil service system if it had one.

Northshore has policies and practices that function similarly. If a Regional Fire Authority is created, the collective bargaining representatives of the transferring employees and the participating fire protection jurisdictions must negotiate the establishment of a civil service system within the authority. This does not apply if none of the participating fire agencies provide for civil service.⁵

It is clear from stakeholder interviews that the unions representing the firefighters' interests are engaged and supportive of this initiative. In the case of Woodinville's unionized support staff, these employees share representation with their firefighters. Bothell's labor representative for its support staff was not interviewed for this project, but the city should communicate its intentions to the AFSCME leadership (if it has not already done so) immediately. Bothell employees will have both a union and a civil service interest in which integration may affect their positions.

Northshore's civilian employees should not be left out of the discussion just because they are not represented by a union. Because their numbers are small and because they work in close proximity to the fire chief, it may be assumed that they know what is going on. This may not always be so. A process should be put in place to assure that their interests and concerns are heard and that their ideas are considered.

Discussion

There are a number of items to consider regarding the combination of three bargaining units into one. It is often assumed that the three groups will pick the "best" of each contract in order to create a "super" contract. This is not always the case. Like employers, most union representatives recognize that a labor agreement consists of many "trade-offs," and that what one group values may differ from that of another group. For that reason, in their planning, employers should always focus on total cost of compensation (TCC). There may be some improvements in individual circumstance within the firefighter group, but the overall new contract should still be expected to fall within a target set by the employers. This does not necessarily mean that one of the groups may not receive a pay boost. It just means that such improvements should be offset by other savings valued by the city and the districts. Additionally, establishing a standard set of work rules (not factored into the TCC) is an important component of the overall agreement.

The number of hours to be worked by shift employees should be considered seriously by the three departments. It is not likely that the unions will propose moving to Bothell's higher work week, but it is incumbent upon the employers to keep in mind that the additional 104 hours worked per year by Bothell's 48 firefighters add up to about 1.5 FTEs. There was a time when the cost of overtime was an incentive to employers to hire more staff. Today, the cost of benefits—especially health insurance, make it more economical to get as many straight time hours of work out of existing staff. Under federal

⁵ RCW 52.26.100 (6)(b)

law, firefighters can work up to 53 hours per week before the employer must pay them at the time and one-half rate. Firefighters in all three agencies are paid overtime for any hours they work outside of their regular schedule. That means that those 1.5 FTEs represented by Bothell's extra work hours would cost Northshore or Woodinville one-half again as much (the equivalent of 2.25 FTEs).

Another important issue is the length of shift. The unions may be expected to propose that Northshore's staff move to the 48-96 shift configuration (due to simple majority). The employers need to decide if they are still comfortable with embracing the 48-hour duty shift. Such transitions are difficult for fire departments and always controversial, but this would be the time to address shift length.

Work week and work hours do not appear to be an issue for support staff. All are scheduled for 40 hour weeks, either on five 8-hour days, the nine-eighty schedule (where one week is five nine hour days and the following is four), or four 10-hour days.

A transitional opportunity with regard to shared staffing may present itself. On the line all three departments have days when they have extra staffing and days when they need to hire back staffing at overtime rates. Some savings could accrue if a department with an extra firefighter could share him or her with one of the other departments when they are below minimum staffing. Such sharing may prove to be counterproductive until the three work groups have joined under one labor agreement. To share employees in this way prematurely would introduce controversy between the work groups as a firefighter from one department interrupts the overtime opportunity of a firefighter from another department.

This does not preclude the temporary reassignment of one employee from one department to fill a long-term vacancy at another department. If this action saves one of the departments from hiring someone who might later be laid off as the integration becomes formal, it will likely find support. Before doing so, however, the employers would need to meet with and bargain the impacts with all affected labor unions.

It is more likely that such an opportunity will arise in the area of management or support services. One such instance is the sharing of the Bothell fire chief between Bothell and Woodinville. If the departments involved in this study decide to move forward with increased integration, they should carefully consider all future hiring and the possibility of sharing staff to cover those vacancies in the meantime.

Another staffing issue to consider is the staffing or contracting out of certain support services. The city of Bothell has a natural advantage already in its ability to share services like payroll, IT, and maintenance among a number of different departments within the city. Fire districts must provide these same services without the same opportunity for sharing internally. Northshore and Woodinville have both taken advantage of this challenge to utilize outside vendors (rather than manage some of these functions internally). The city will need to decide if it wants to maintain its support for fire or whether its own internal growth would make it easier not to have the fire department remain as one of its



“dependents.” Alternatively, the city might become one of the vendors bidding to provide certain services to the new fire agency. A decision in this area will probably depend upon the city’s own long-term strategy and the current deficit or excess capacity within its own systems.

NOTE:

Many of the suggestions included in this report require consultation and/or negotiations with the representatives of all the distinct labor groups. The recommendation or suggestion of a particular idea is not intended to bypass this step.

Recommendations:

- The three departments should create a proposed organizational chart with a fire chief, two or three deputy chiefs, and desired divisions and staffing below them. These positions should be filled from within the three departments.
- Establish a Standards of Cover (SOC) for the combined agencies, redeploying resources according to the level of service identified by the policy-makers. The SOC should address the effective response force, which will drive numbers, placement, and roles for battalion chiefs, engine companies, ladder companies, medical aid units, and specialty teams.
- The three employers and their executive staffs should decide on the work schedule and shift configuration that they would prefer, bargaining with affected unions as required.
- The three departments and their bargaining units should meet to discuss a timetable for creating a new, integrated contract.
- The three employers should decide upon which services should be contracted out, such as IT, janitorial, facilities, and apparatus maintenance.
- All three employers should adopt a single process for keeping all stakeholders apprised of progress towards greater integration to reduce “information shopping” and reliance upon the rumor mill.

SERVICE DELIVERY AND PERFORMANCE

In this portion of the 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.

This section of the report analyzes the actual response performance of the agencies. The analysis is broken down by agency, each containing five main components; demand, distribution, concentration, reliability, and performance. These terms are briefly described as follows:

- Demand – The type, frequency, and location of calls for service.
- Distribution – The assignment of fire department resources used to respond to the demand.
- Concentration – The number (depth) of resources assigned by a fire department to respond to the demand.
- Reliability – How often or frequently resources are actually available for calls occurring in their assigned area.
- Performance – How well resources achieve response standards such as call processing time, turnout time, travel time, total response time, achievement of an effective response force within set time parameters.

BOTHELL FIRE AND EMS (BF&EMS/D10)

Demand

BF&EMS/D10 responded to approximately 5,300 calls for service in 2013. Incidents in D10 accounted for 600 of the 5,300 incidents.

Figure 9: BF&EMS/D10 Incidents by NFIRS Category, 2013

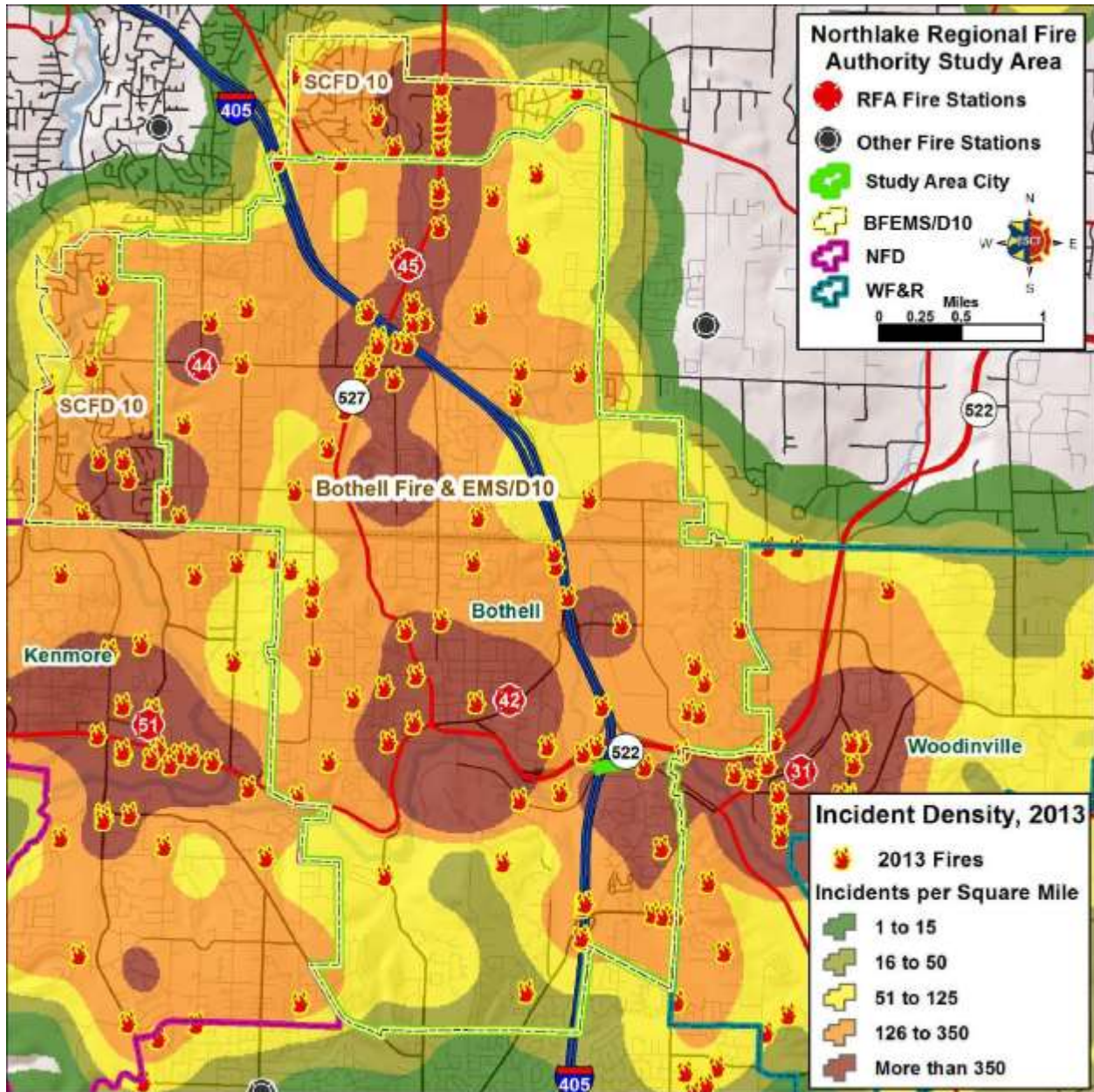
BF&EMS/D10	
NFIRS Category	Percent of Total Incidents
Fires	2.34%
Ruptures/Explosion	0.19%
EMS	74.88%
Hazmat	0.97%
Service Call	3.10%
Good Intent	8.44%
False Alarm	9.84%
Weather/Natural Disaster	0.17%
Other	0.08%

EMS incidents represent over 74 percent of current service demand, while actual fire incidents comprise slightly over 2 percent of calls for service. The percentages displayed in **Error! Reference source not found.** are similar to most modern all-risk fire departments.

The demand is illustrated graphically in the following figure, focusing on BF&EMS/D10s service area in 2013.

Geographic Demand

Figure 10: BF&EMS/D10 Geographic Demand, 2013



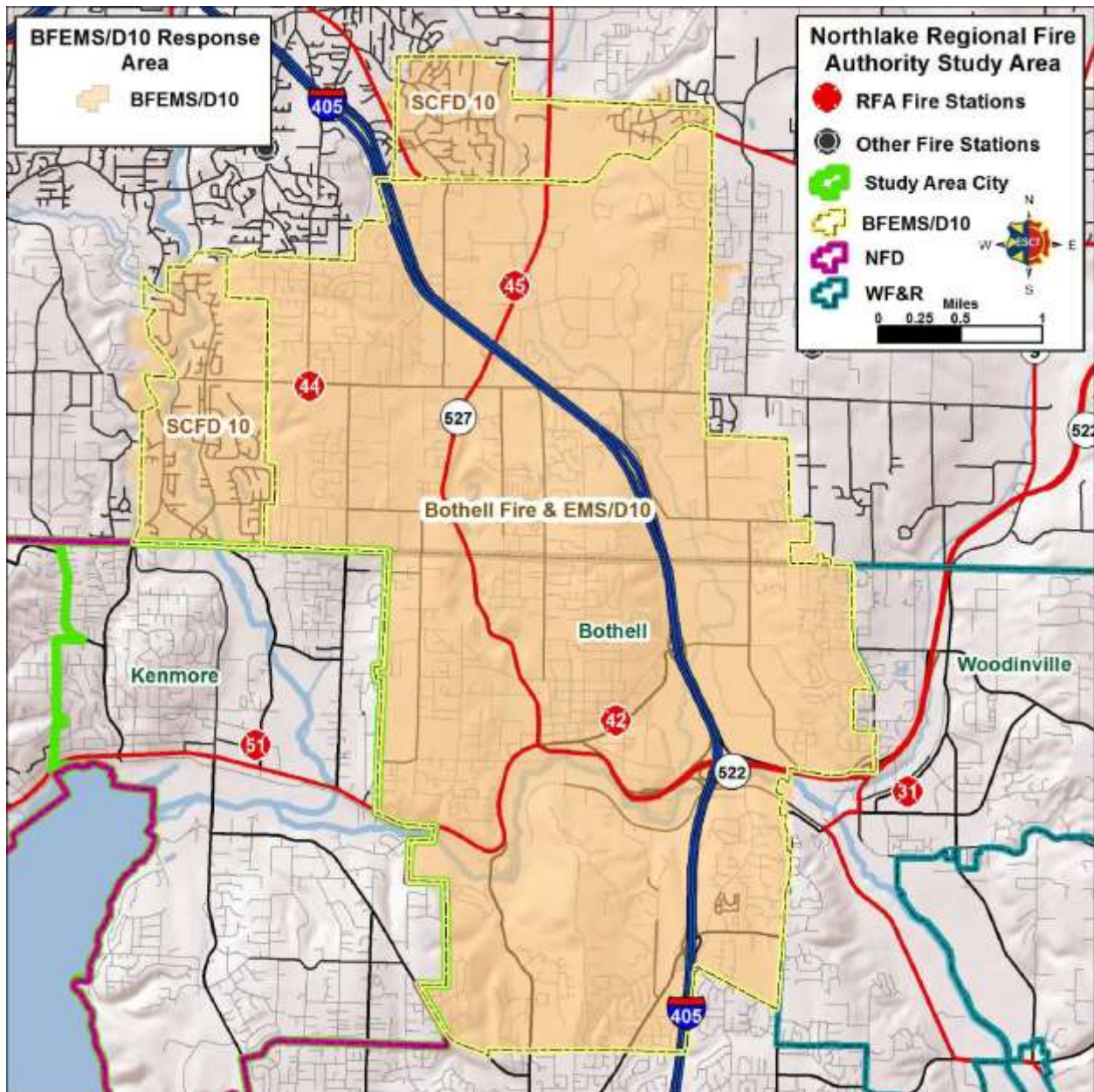
The majority of incidents used to calculate incidents per square mile are EMS related. Incidents coded as a fire (NFIRS Category 1) are pinpointed and placed on top of the overall incident density. BF&EMS/D10 service demand displays a similar density throughout the district with areas of higher demand along major transportation routes through the district, the core area around Station 42, and an area in D10, just west of Bothell. The location of fire incidents reflects a similar pattern.

Distribution

Analysis of distribution of resources presents an overview of the current deployment of fire department facilities, equipment, and personnel within the BF&EMS/D10 response area.



Figure 11: BF&EMS/D10 Response Area



BF&EMS/D10 provides service to the City of Bothell and Snohomish County Fire District 10, which borders the western and northern portions of Bothell. The city boundary in this figure shows the current Bothell city limits after annexations that became effective in March 2014. The service area is comprised of approximately 13.75 square miles in Bothell; and approximately 2.5 square miles in D10. BF&EMS/D10 operates from three stations, which are staffed with 24 hour career staff. A battalion chief, a ladder company and an engine company (cross-staffed depending on the nature of the call), and a basic life support (BLS) aid car are all stationed at Station 42. Stations 44 and 45 cross staff an engine or a BLS aid car.

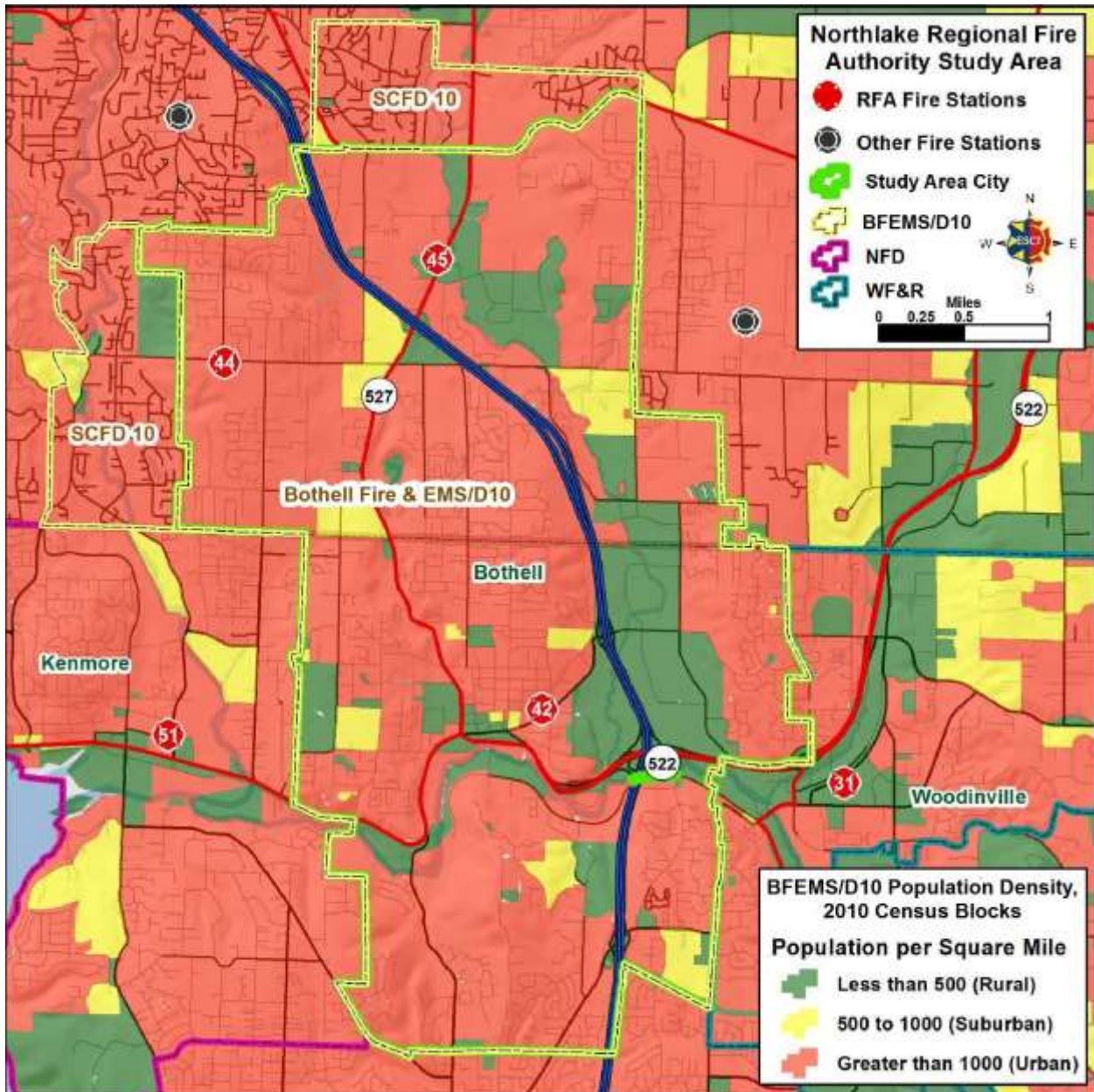
Figure 12: BF&EMS/D10 Career Minimum Staffing

BF&EMS Stations	
Station	Minimum Staffing
42	6
44	3
45	3

Minimum daily staffing for career personnel is 12, distributed as displayed in the preceding figure.



Figure 13: BF&EMS/D10 Population Density, 2010 Census Blocks

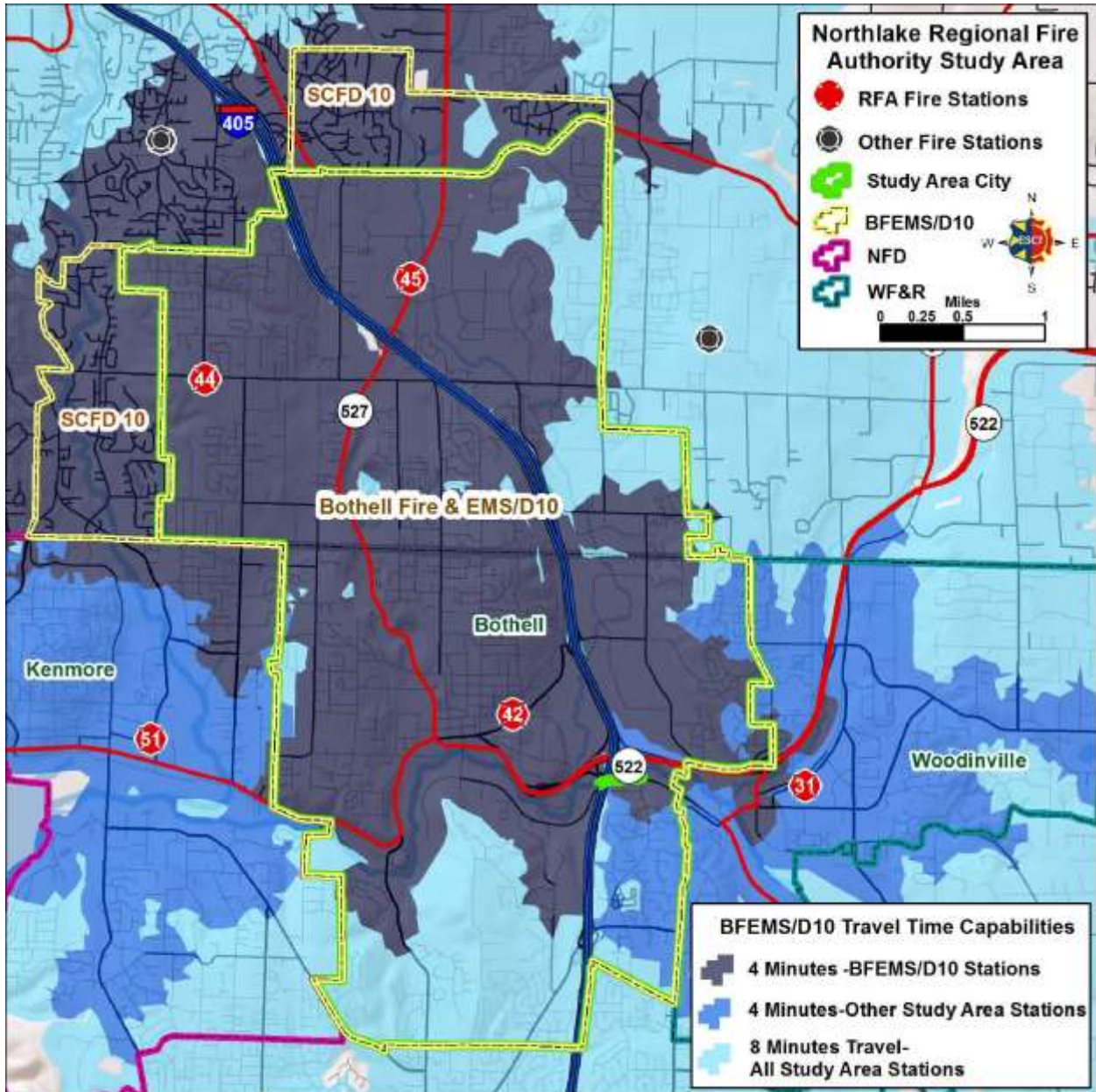


2010 US Census data is utilized to display population density throughout BF&EMS/D10. National Fire Protection Association (NFPA) population classifications summarize population density as Urban, Suburban, and Rural. The majority of the district is characterized as urban; with small areas classified as suburban or rural. The BF&EMS/D10 stations appear well placed to serve the majority of BF&EMS/D10 population. The figure below displays the BF&EMS/D10 service area population, square miles, and overall population density.

Figure 14: BF&EMS/D10 Demographics

BF&EMS/D10 Demographics		
Population	Square Miles	Population Density
50,011	16.3	3,067 per square mile

Figure 15: BF&EMS/D10 Travel Time Capabilities, Current Station Locations



Street network data provided by NORCOM is used to calculate travel time capabilities from the current BF&EMS/D10 stations. Travel time over the street network is adjusted for posted speeds and to account

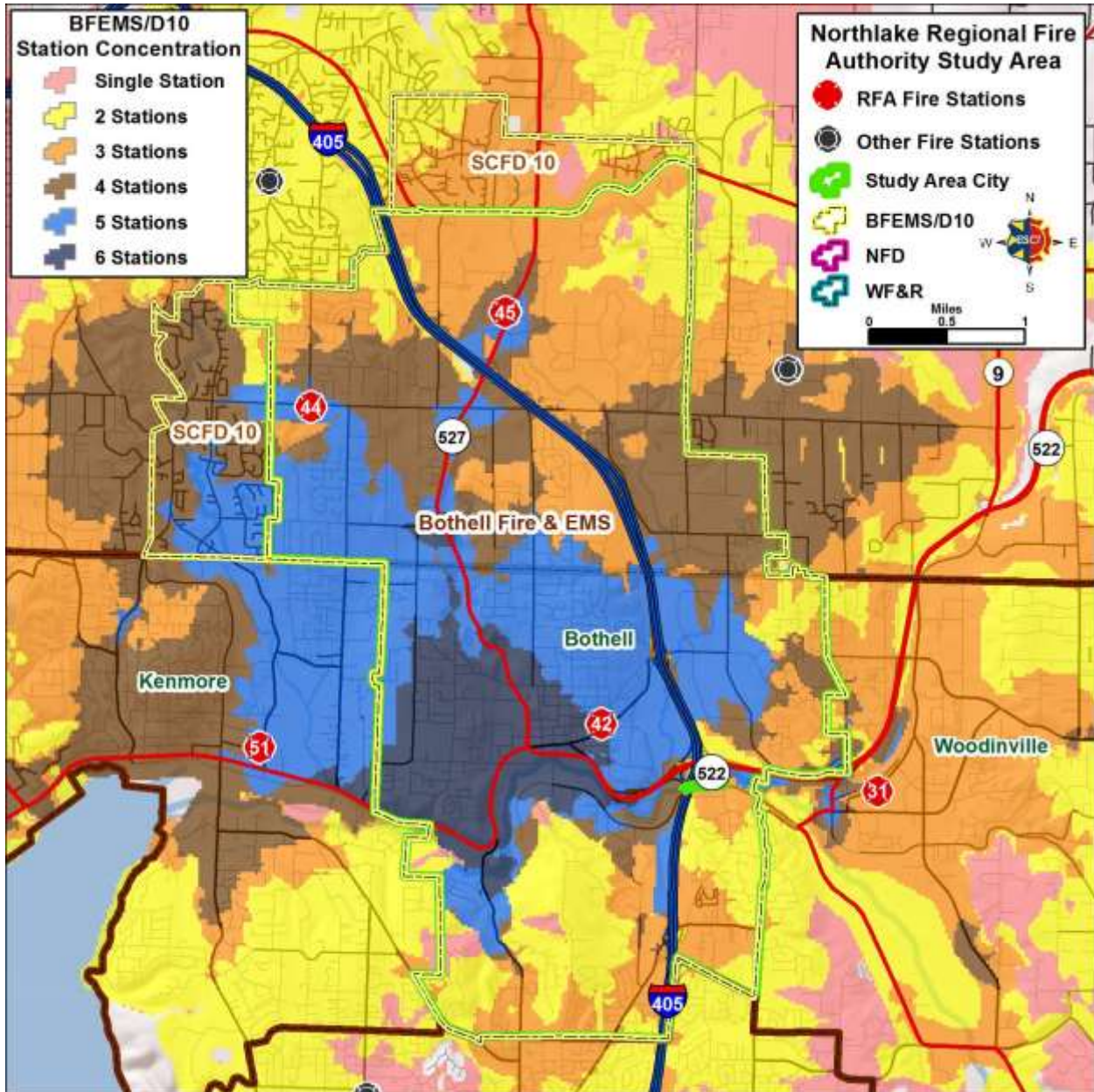


for negotiating intersections and turns. The majority of the BF&EMS/D10 service area is within 4 minutes travel of a BF&EMS or D10 station. Note that there is a small portion of Bothell south of Highway 522 and on either side of Interstate 405 that are not within 4 minutes travel of a BF&EMS station. However, the area east of the interstate is within 4 minutes travel of WF&R Station 31. There are two Kirkland FD stations that can reach portions of the area south of Highway 522 in 4 minutes travel time. King County fire jurisdictions utilize GPS technology and automatic vehicle location (AVL) to dispatch the closest available unit to emergency responses, regardless of jurisdictional boundaries.

Concentration

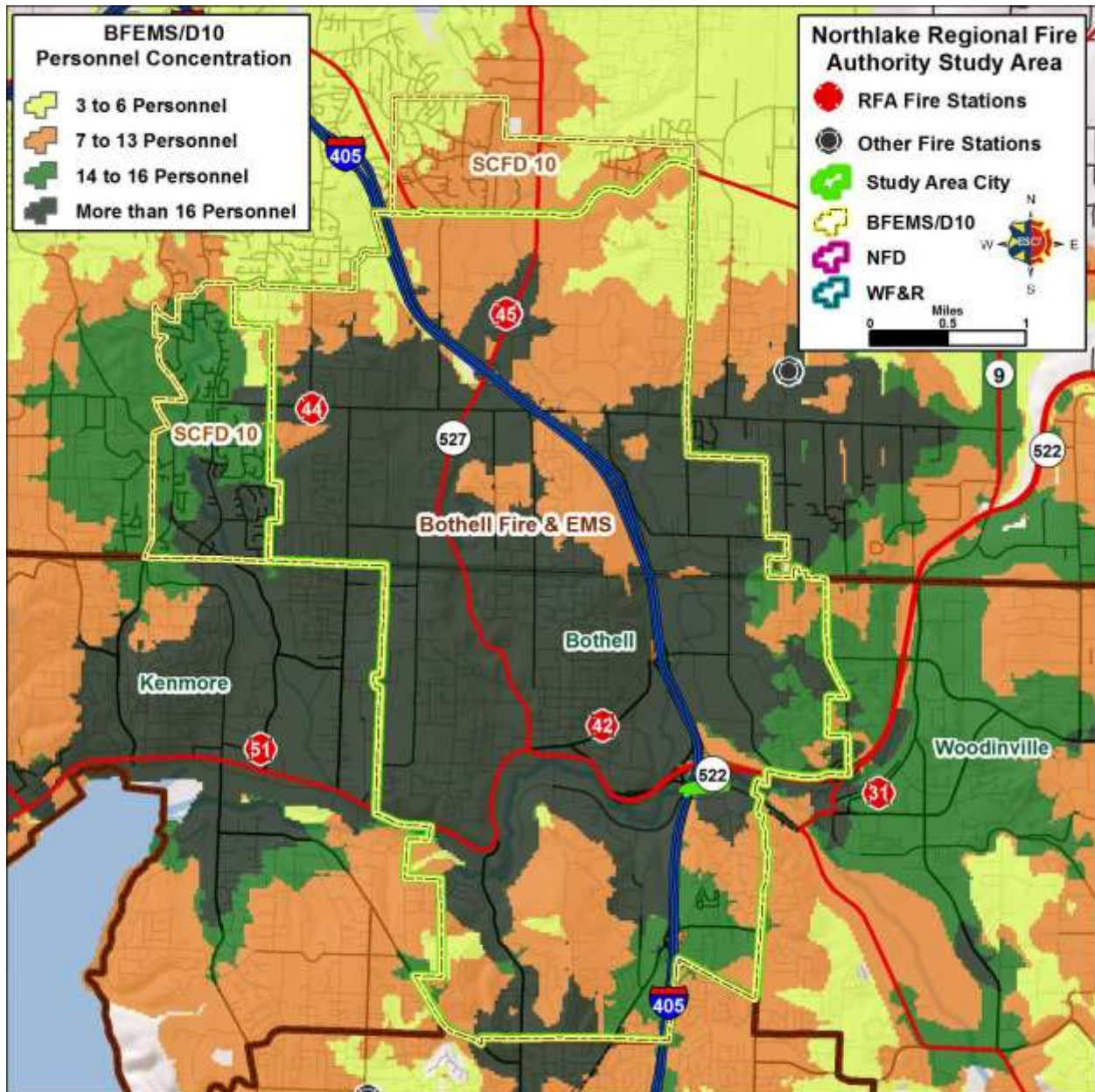
The concentration analysis examines the number of study area resources that can reach any portion of the BF&EMS/D10 service area in 8 minutes travel time from a current study area fire station. The following figure illustrates station concentration.

Figure 16: BF&EMS/D10 Station Concentration, 8 Minutes Travel Time



The central portions of Bothell around Station 42; and the Highway 522 and Highway 527 junction are within 8 minutes travel of five to six fire stations. The majority of the rest of the BF&EMS/D10 service area is served by three to four study area stations. There are some small areas within 8 minutes travel of just one or two fire stations. Note that this analysis does not include mutual or automatic aid stations, which are discussed elsewhere. Using the current minimum staffing data for each study area fire station, the next figure depicts the concentration of personnel within 8 minutes travel within the BF&EMS/D10 service area.

Figure 17: BF&EMS/D10 Personnel Concentration, 8 Minutes Travel Time



Fire service best practices documents suggest that 14 to 16 personnel are required to safely and effectively mitigate a moderate risk fire.⁶ The figure above demonstrates the portions of the BF&EMS/10

⁶ See: National Fire Protection Association, *Standard for Organization and Deployment of Fire Suppression Operations, EMS Operations, and Special Operations (NFPA 1710)*; and the Commission on Fire Accreditation (CFAI) *Standards of Cover, 5th Edition*.

service area can be reached by 14 or more personnel in 8 minutes travel. Examination of the GIS data reveals that the majority of the service area labeled as '7 to 13 personnel' in this figure is within 8 minutes travel of 12 study area personnel. Again, mutual or automatic aid personnel are not included in this analysis.

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.

The following figure displays the percentage of concurrent (simultaneous) incidents in the BF&EMS/D10 service area in 2013.

Figure 18: BF&EMS/D10 Concurrent Incidents, 2013

	Concurrent Incidents			
	Single Incident	Two Incidents	Three Incidents	Four or More Incidents
BF&EMS/D10	70.3%	24.7%	4.7%	0.4%

Slightly over 70 percent of BF&EMS/D10 incidents occurred as a single incident. Nearly 30 percent of service demand occurred while another incident was in progress somewhere in the BF&EMS/D10 service area. The percentage of concurrent incidents in BF&EMS/D10 is the highest of the three study area agencies. However the number of concurrent incidents is similar to that of fire jurisdictions with comparable service demand.

Unit hour utilization (UHU) describes the amount of time that an apparatus is not available for response because it is already committed to another incident. UHU rates are expressed as a percentage of the total hours in a year. The following figure displays the amount of time BF&EMS/D10 primary response apparatus were committed to an incident and the UHU rate in 2013.

Figure 19: BF&EMS/D10 Unit Hour Utilization, 2013

BF&EMS/D10 Unit Hour Utilization (UHU)		
Unit	Total Time Committed	UHU
Aid 42	1212:15:51	13.8%
Aid 44	536:11:17	6.1%
Aid 45	610:13:41	7.0%
BC 42	191:07:22	2.2%
Engine 42	359:49:58	4.1%
Engine 44	160:25:11	1.8%
Engine 45	260:34:15	3.0%
Ladder 42	79:19:46	0.9%

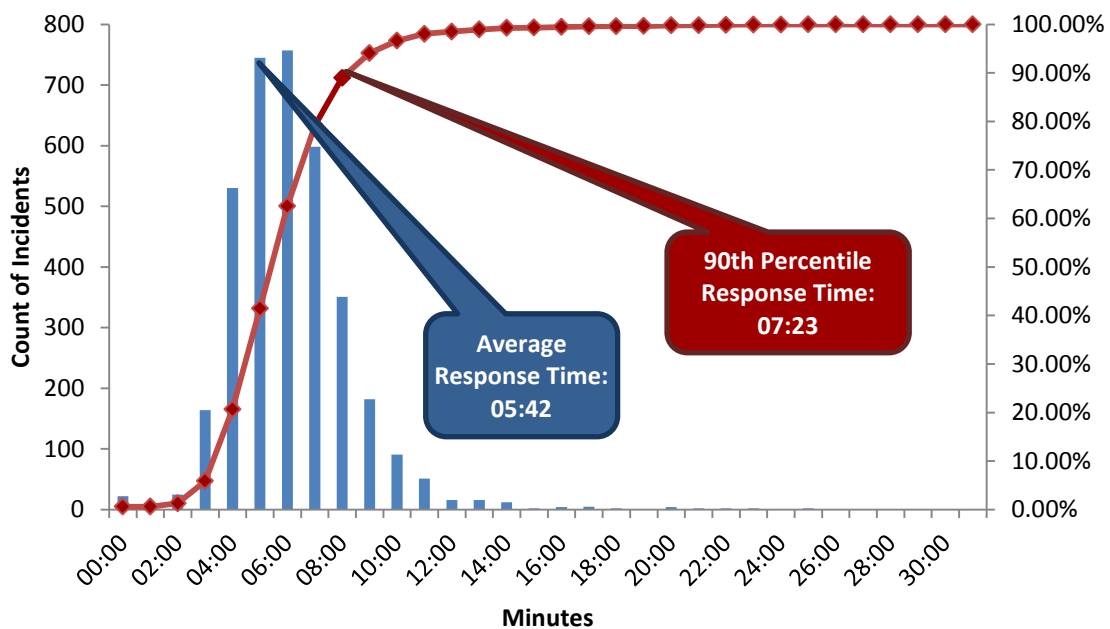


The Commission on Fire Accreditation (CFAI) *Standards of Cover, 5th Edition* suggests that UHU rates in the range of 25 to 30 percent for Fire and EMS units can negatively affect response performance and lead to personnel burnout issues. While no BF&EMS/D10 apparatus is approaching the levels mentioned; the UHU rate for Aid 42 is nearly twice that of the next busiest apparatus.

Response Performance

BF&EMS emergency response performance is analyzed using NORCOM dispatch center data. Non-emergency incidents, mutual or automatic aid incidents outside of the BF&EMS/D10 service area, data outliers, and invalid data points are removed from the data set whenever possible.

Figure 20: BF&EMS Response Frequency, 2013 Emergency Incidents



This figure displays overall emergency response time frequency throughout the BF&EMS/D10 service area. The most frequently recorded response time for emergency calls is within the sixth minute. The average for all emergency responses is 5 minutes 42 seconds. Ninety percent (90th percentile) of all emergency incidents in 2013 were answered in 8 minutes 5 seconds or less. **Figure 20** above measures the combination of turnout time and travel time. There are a number of components measured to determine total response time.

These components are defined as follows:

- Call Processing Time – The amount of time between when a dispatcher answers the 911 call and resources are dispatched.
- Turnout Time – The time interval between when units are notified of the incident and when the apparatus start traveling.
- Travel Time – The amount of time the responding unit actually spends travelling to the incident.
- Total Response Time – Total Response Time equals the combination of “Call Processing Time,” “Turnout Time,” and “Travel Time.”

Figure 21: BF&EMS/D10 Total Emergency Response Time Performance, 2013

Total Response Time Continuum					
	Call Processing	Turnout Time	Travel Time	Total Response Time	Response Time-Dispatch to Arrival
90th Percentile	01:12	02:23	05:42	08:05	07:23

This figure displays BF&EMS/D10 90th percentile response performance for the various components of the response time continuum. BF&EMS/D10 total response performance **for all emergency incidents** for 2013 was 50 seconds longer than the overall response time goal published in the 2013 Performance Measure Report (RCW 35.103). However, it is common for fire jurisdictions to measure response performance from the time apparatus are notified to the time the first apparatus arrives on scene. This measure of response performance shows BF&EMS/D10 response performance is within 8 seconds of the stated goal of 7 minutes 15 seconds. The next figure displays response performance summarized as fire or EMS emergencies.

Figure 22: BF&EMS/D10 Emergency Response Performance by Incident Type, 2013

Emergency Response Performance by Incident Type, Fire or EMS				
90th Percentile	Turnout Time	Travel Time	Total Response Time	Response Time-Dispatch to Arrival
Fire	02:38	06:10	08:47	07:44
EMS	02:22	05:43	08:04	07:22

Call processing time is not included in this table, but is included in the total response time calculation. Note that performance for all of the components of response performance is slightly longer for fire responses. This is typical and can be attributed to the necessity of donning protective equipment prior to responding, increased travel time for large heavy fire apparatus, and the distribution of a small number of fire incidents over the entire service area.

BF&EMS/D10 **Fire** Total Response Performance (Call received at 911 to Arrival) is 47 seconds longer than the BF&EMS/D10 goal. Response performance from Dispatched to Arrival is 16 seconds less than the



BF&EMS/D10 goal. **EMS** Total Response Performance is 1 minute 4 seconds longer than the goal. EMS Response performance from Dispatched to Arrival is 22 seconds longer.

Note that the response performance calculations presented in the figures above differ somewhat from the data presented in the BF&EMS/D10 2013 Performance Measure Report. Differences in the way the data was compiled and filtered, or the data points are collected are the most likely causes of the discrepancies. The value of monitoring and reporting the various components of response performance is in allowing fire departments to identify and correct deficiencies.

The following figure displays response performance in the BF&EMS/D10 service area.

Figure 23: BF&EMS/D10 Response Performance by Apparatus, 2013 Emergency Responses

BF&EMS/D10 Response Performance by Stations and First Due Apparatus				
Unit	Turnout	Travel	Total Response Time	Dispatch to Arrival
Station 42				
A42	02:20	05:34	07:45	07:16
B42	02:07	07:45	11:11	08:56
E42	02:21	06:26	09:02	08:02
L42	01:56	06:21	08:18	07:34
Station 44				
A44	02:34	05:10	07:38	07:00
E44	02:29	06:34	08:36	07:54
Station 45				
A45	02:21	05:16	07:37	07:06
E45	02:27	05:35	08:27	07:34

NORTHSHORE FIRE DEPARTMENT (NFD)

Demand

In 2013, Northshore Fire Department (NFD) responded to 3,474 calls for service, broken down by category in figure 24 as follows.

Figure 24: NFD Incidents by NFIRS Category, 2013

NFD Incidents by NFIRS Category, 2013	
NFIRS Category	Percent of Incidents
Fires	2.53%
Rupture/Explosion	0.23%
MS	75.24%
Hazmat	1.47%
Service Call	2.88%
Good Intent	10.82%
False Alarm	6.59%
Weather/Natural Disaster	0.09%
Other	0.14%

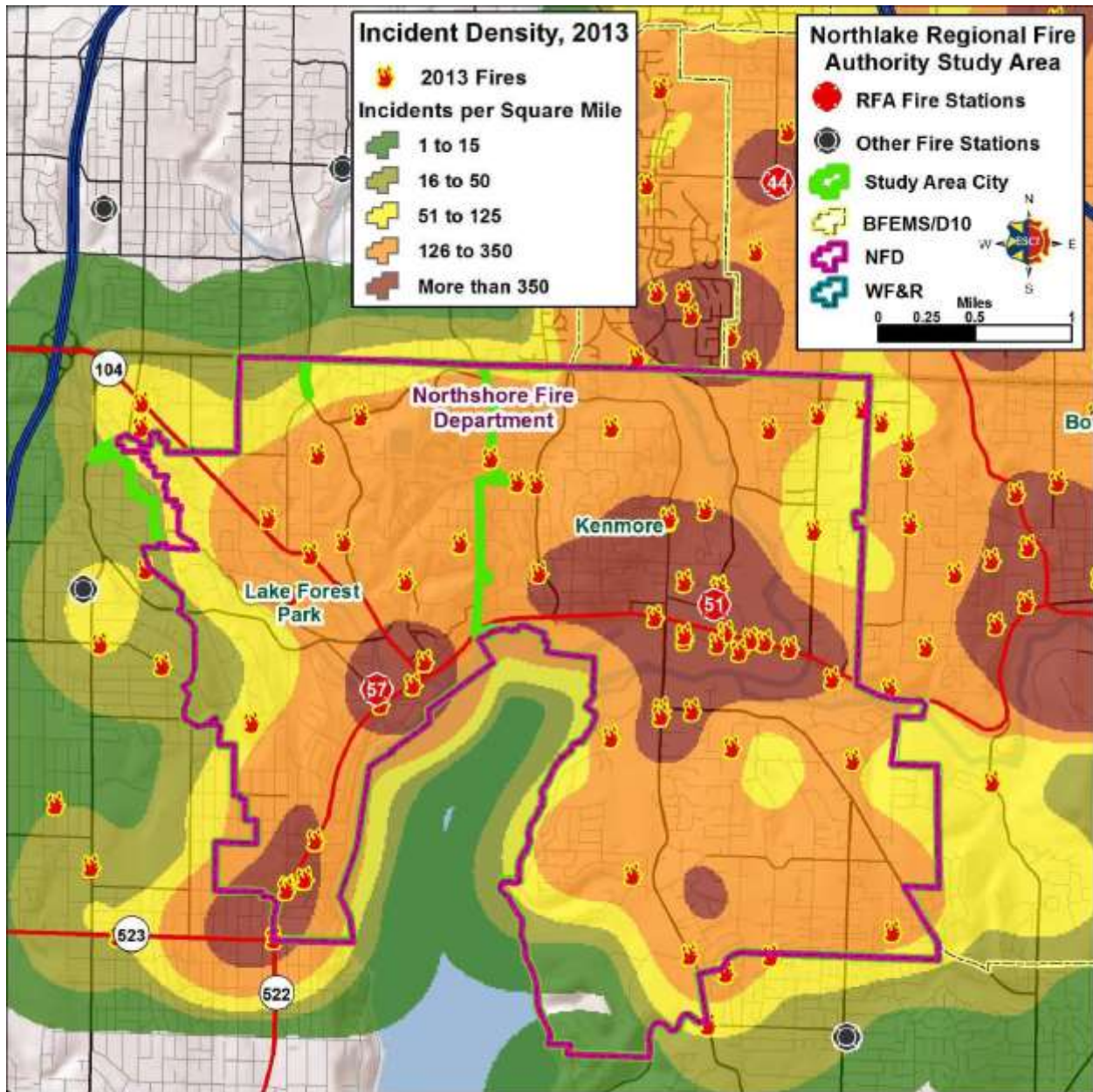
EMS incidents represent over 75 percent of current NFD service demand. While actual fire incidents make up approximately 2.5 percent of calls for service. The percentages displayed in this figure are similar to most modern all risk fire departments.

The demand is illustrated graphically in the figure above focusing on Northshore's service area in 2013.



Geographic Demand

Figure 25: NFD Geographic Demand, 2013

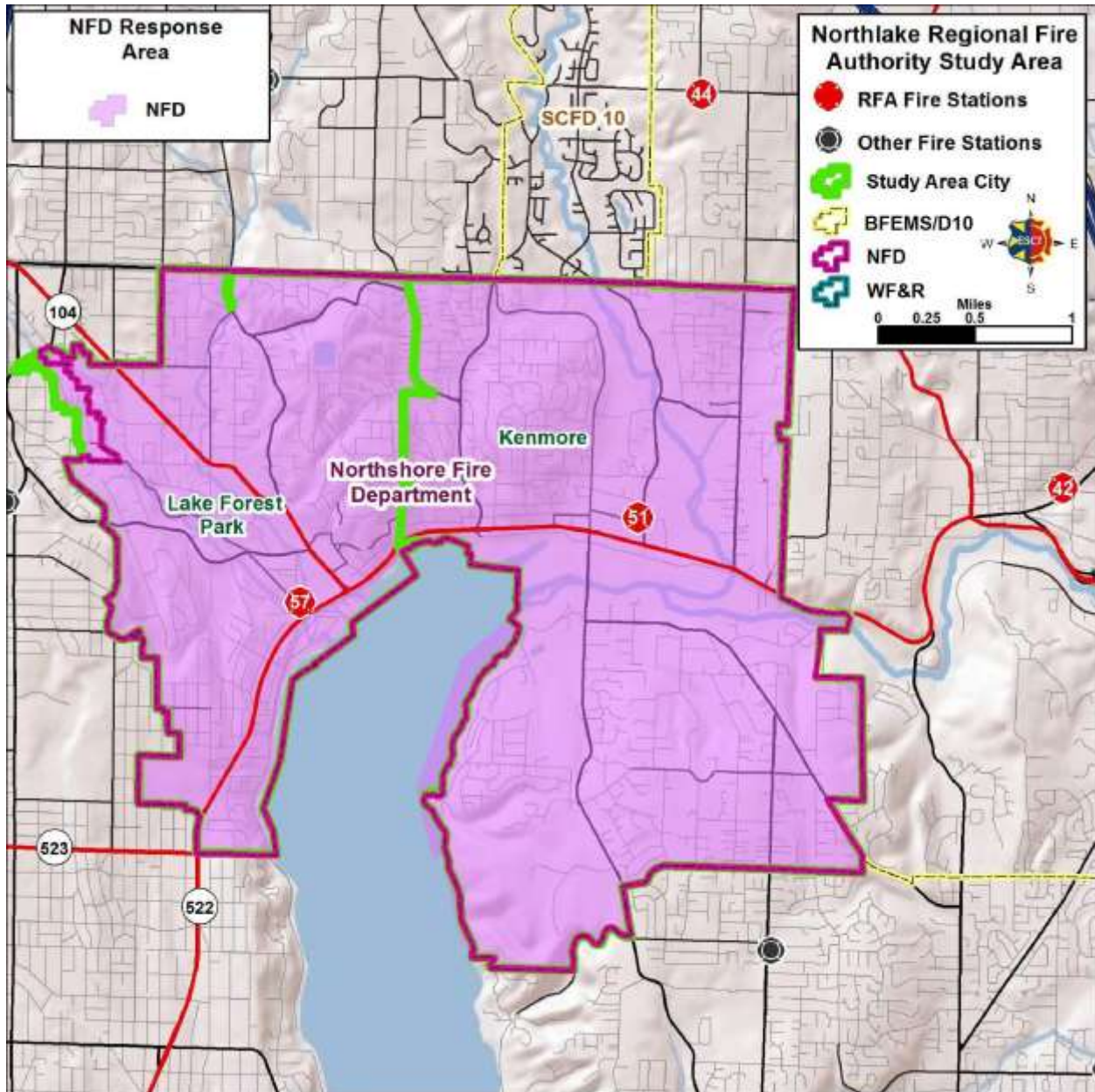


The mathematical density of 2013 incidents is calculated in this figure. The majority of incidents used to calculate incidents per square mile are EMS related. Incidents coded as a fire (NFIRS Category 1) are pinpointed and placed on top of the overall incident density. The highest density of incidents occurs in Kenmore-on either side of Highway 522. Other areas of high incident density occur around Station 57 in Lake Forest Park along Highway 522. Fire incidents are distributed throughout the NFD service area.

Distribution

Analysis of distribution of resources presents an overview of the current deployment of fire department facilities, equipment, and personnel within the NFD service area.

Figure 26: NFD Response Area



NFD operates two stations serving the incorporated cities of Kenmore and Lake Forest Park. Station 51 is located in Kenmore and Station 57 is located in Lake Forest Park. The service area encompasses approximately 9.6 square miles.



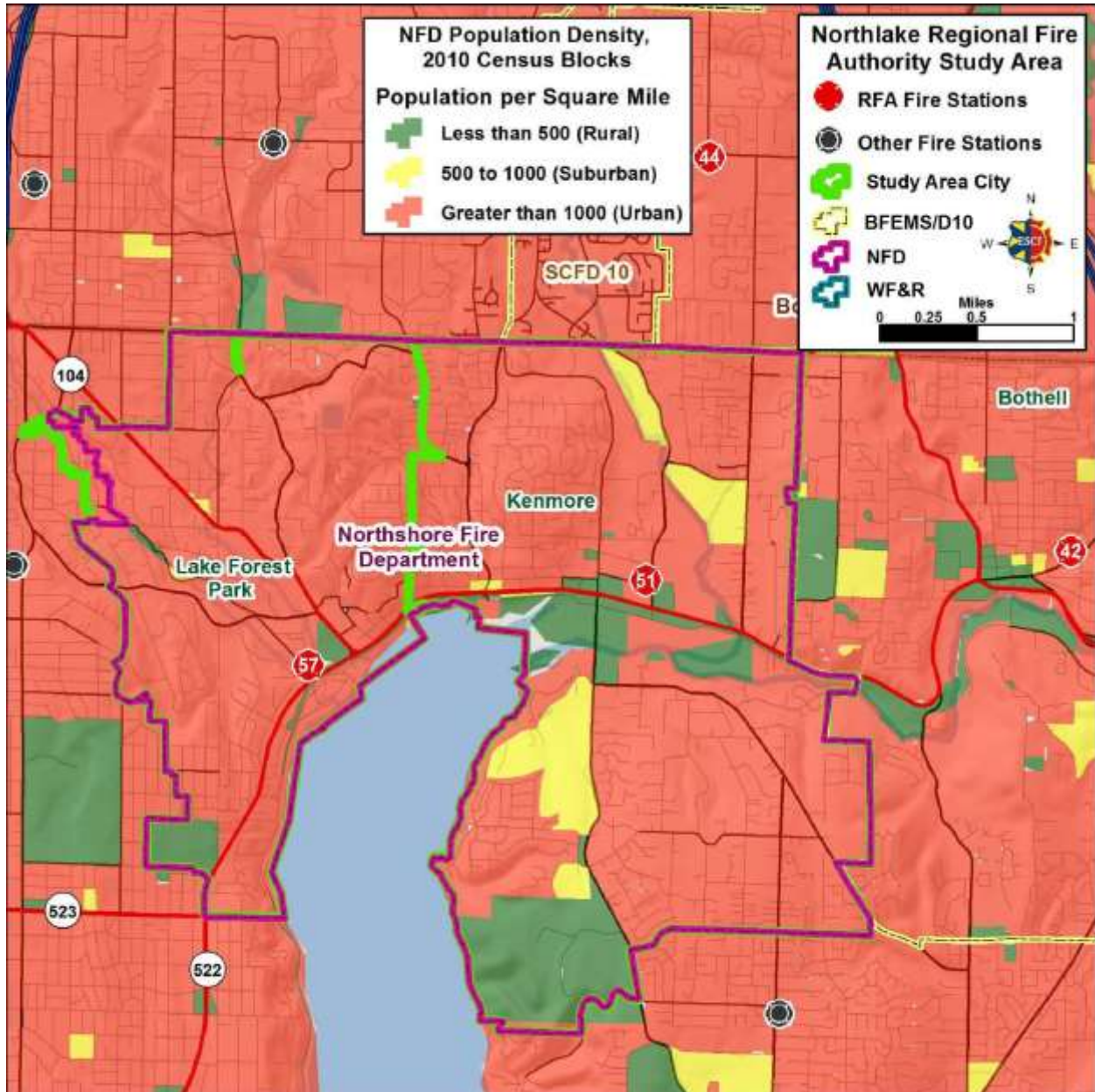
The two NFD stations are staffed with 24 hour career staff. A battalion chief, an engine company, and a BLS aid car are staffed at Station 51. Station 57 operates (cross staffed) an engine company or a BLS aid car. A Shoreline Fire Department ALS Medic unit is deployed at Station 57 and staffed with Shoreline FD personnel as part of the King County Medic One program.

Figure 27: NFD Career Minimum Staffing

NFD Stations	
Station	Minimum Staffing
51	6
57	3

Minimum daily staffing for career personnel is nine, distributed as displayed in the preceding **Figure 27**.

Figure 28: NFD Population Density, 2010 Census Blocks

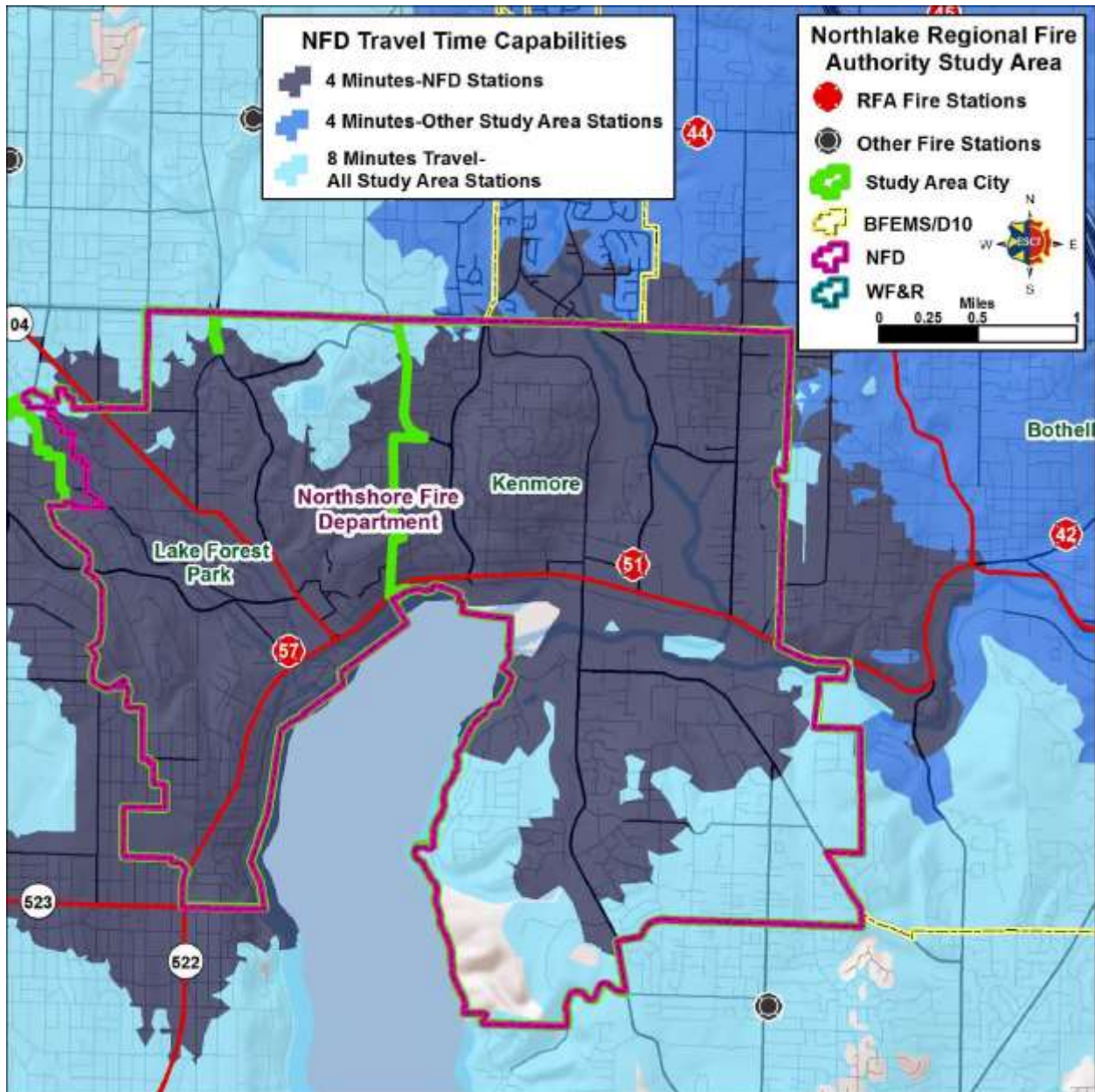


2010 US Census data is utilized to display population density throughout NFD. National Fire Protection Association (NFPA) population classifications summarize population density as Urban, Suburban, and Rural. The majority of the district is characterized as urban; with small areas classified as suburban or rural. The NFD stations appear well placed to serve the majority of NFD population. The figure below displays the service area population, square miles, and overall population density.

Figure 29: NFD Demographics

NFD Demographics		
Population	Square Miles	Population Density
32,252	9.6	3,360 per square mile

Figure 30 NFD Travel Time Capabilities, Current Station Locations

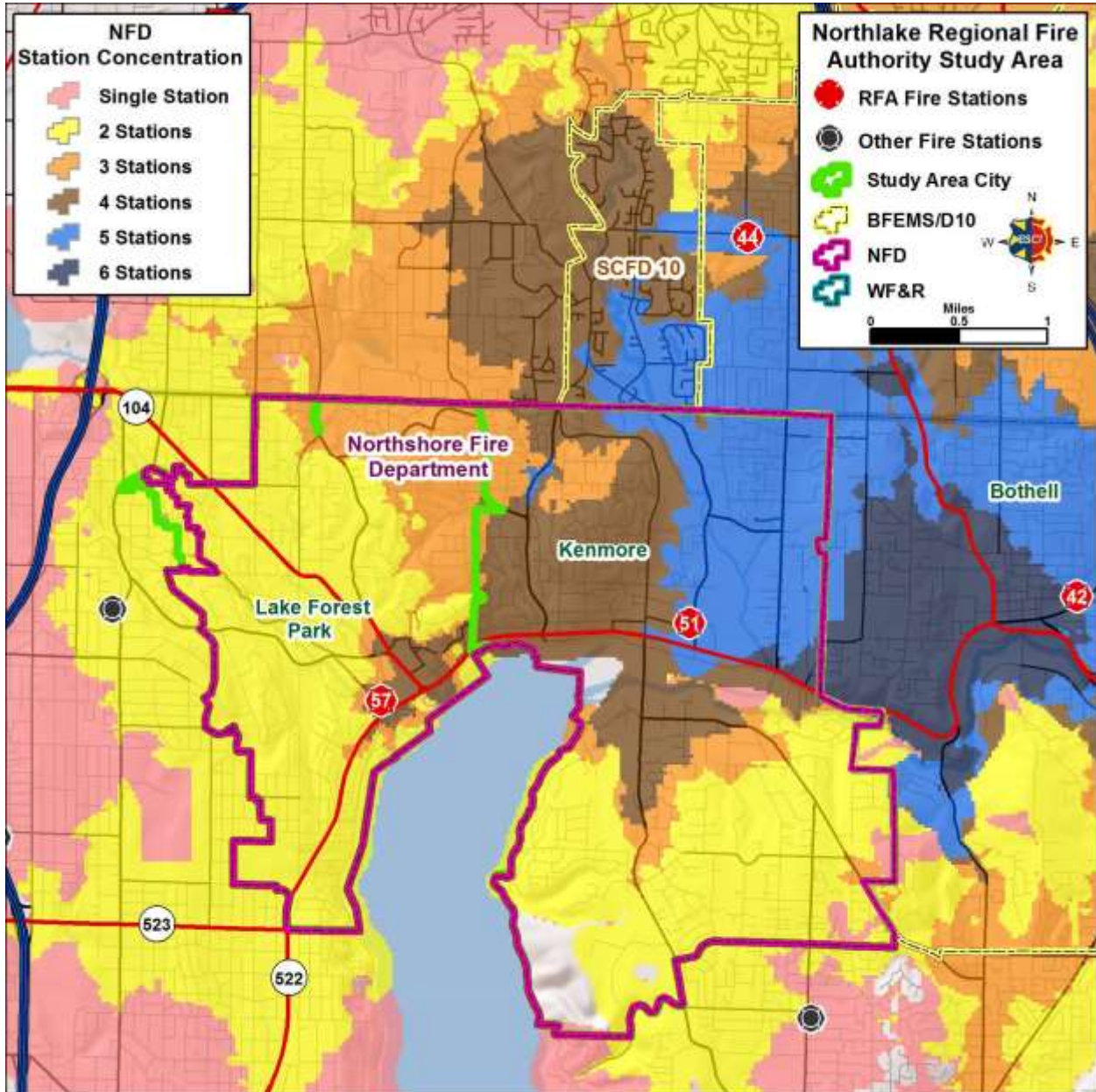


Street network data provided by NORCOM is used to calculate travel time capabilities from the current NFD stations. Travel time over the street network is adjusted for posted speeds and to account for negotiating intersections and turns. The majority of the NFD service area is within 4 minutes travel of a NFD station. However, Highway 522 and the Sammamish River limit north south access to some portions of Kenmore. King County fire jurisdictions utilize GPS technology and automatic vehicle location (AVL) to dispatch the closest available unit to emergency responses, regardless of jurisdictional boundaries. The Kirkland FD station just south of the NFD boundary is within 4 minutes travel of much of the southern portions of NFD. However, this Kirkland station is currently only staffed during the evenings with volunteers who are limited by the City of Kirkland in their response to out of jurisdiction incidents.

Concentration

The concentration analysis examines the number of study area resources that can reach any portion of the NFD service area in 8 minutes travel time from a current study area fire station. The figure below illustrates station concentration.

Figure 31: NFD Station Concentration, 8 Minutes Travel Time

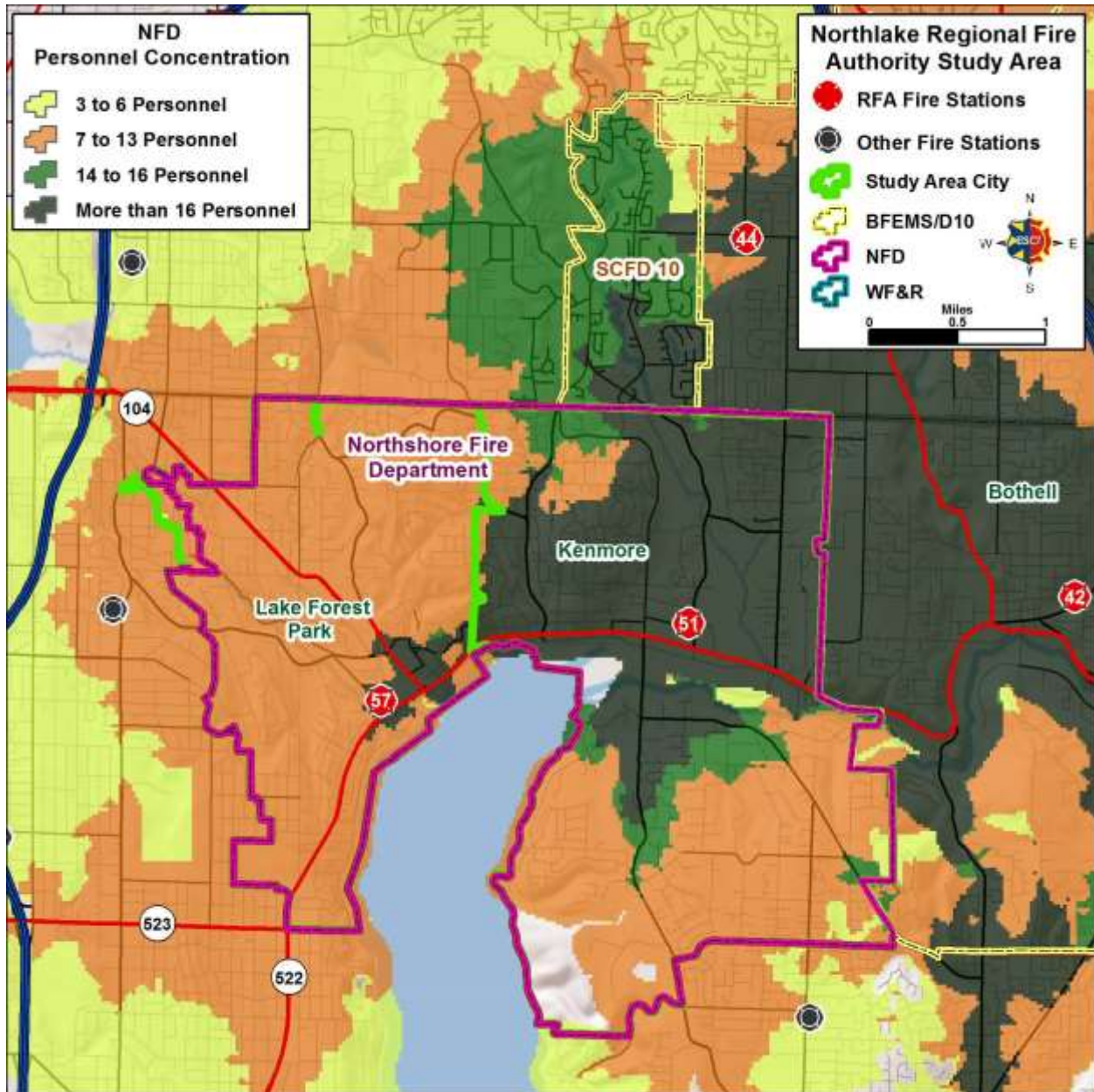


In the NFD service area portions of Kenmore, north of Bothell Way (Highway 522), are within 8 minutes travel of four to six study area fire stations. Lake Forest Park is served by two to four stations in 8 minutes travel. Two to four study area fire stations are within 8 minutes travel of NFD south of Bothell Way and the Sammamish River. Using the current minimum staffing data for each study area fire



station, the next figure depicts the concentration of personnel within 8 minutes travel within the NFD service area.

Figure 32: NFD Personnel Concentration, 8 Minutes Travel Time

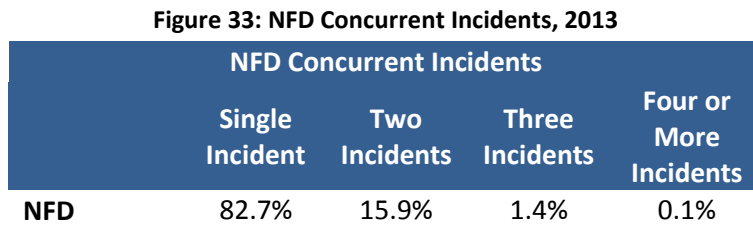


Fire service best practices documents suggest that 14 to 16 personnel are required to safely and effectively mitigate a moderate risk fire.⁷ In the previous figure the portions of the NFD service area displaying the highest concentration of study area personnel also demonstrates the highest incident density within the NFD service area. The use AVL technology and closest unit dispatch within King County increases the resources and personnel available to the study area fire jurisdictions.

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.

The following figure displays the percentage of concurrent (simultaneous) incidents in the NFD service area in 2013.



Nearly 83 percent of NFD service demand occurred as a single incident in 2013. Approximately 17 percent of service demand occurred while another incident was in progress somewhere in the NFD service area.

Unit hour utilization (UHU) describes the amount of time that an apparatus is not available for response because it is already committed to another incident. UHU rates are expressed as a percentage of the total hours in a year. The following figure displays the amount of time NFD primary response apparatus were committed to an incident and the UHU rate in 2013.

⁷ See: National Fire Protection Association, *Standard for Organization and Deployment of Fire Suppression Operations, EMS Operations, and Special Operations (NFPA 1710)*; and the Commission on Fire Accreditation (CFAI) *Standards of Cover, 5th Edition*.



Figure 34: NFD Unit Hour Utilization, 2013

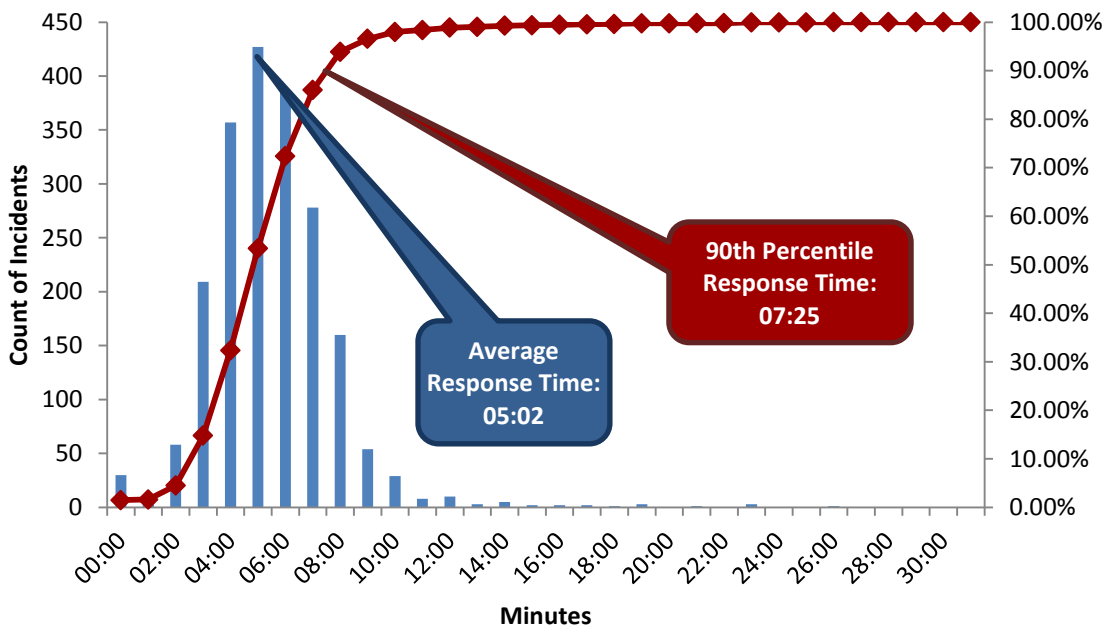
NFD Unit Hour Utilization (UHU)		
Unit	Total Time Committed	UHU
Aid 51	858:47:08	9.8%
BC 51	127:49:28	1.5%
Engine 51	318:51:33	3.6%
Engine 57	507:19:56	5.8%
Rescue 51	46:55:01	0.5%

Not surprisingly, the Aid unit at Station 51 demonstrates the highest utilization rate for NFD apparatus. 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 negatively affect response performance and lead to personnel burnout issues. Currently, the percentage of concurrent calls and the unit hour utilization rate of NFD apparatus does not appear to negatively affect response performance within the NFD service area.

Response Performance

NFD emergency response performance is analyzed using NORCOM dispatch center data. Non-emergency incidents, mutual or automatic aid incidents outside of the NFD service area, data outliers, and invalid data points are removed from the data set whenever possible.

Figure 35: NFD Response Frequency, 2013 Emergency Responses



This figure displays overall emergency response time frequency throughout the NFD service area. The most frequently recorded response time for emergency calls is within the fifth minute. The average for

all emergency responses is 5 minutes 2 seconds. Ninety percent (90th percentile) of all emergency incidents in 2013 were answered in 7 minutes 25 seconds or less. The figure above measures total response time. Total response time is comprised of several different components:

- Call Processing Time – The amount of time between when a dispatcher answers the 911 call and resources are dispatched.
- Turnout Time – The time interval between when units are notified of the incident and when the apparatus are en route.
- Travel Time – The amount of time the responding unit actually spends travelling to the incident.
- Total Response Time – Total Response Time equals the combination of “Call Processing Time,” “Turnout Time,” and “Travel Time.”

Figure 36: NFD Total Emergency Response Time Performance, 2013

Total Response Time Continuum					
	Call Processing	Turnout Time	Travel Time	Total Response Time	Response Time-Dispatch to Arrival
90th Percentile	00:51	02:00	05:27	07:25	06:53

Figure 36 displays NFD 90th percentile response performance for the various components of the response time continuum. NFD total response performance for all emergency incidents for 2013 was 1 minute 25 seconds longer than the overall response time goal published in the 2013 RCW 52.33.030 Compliance Report. It is common for fire jurisdictions to measure response performance from the time apparatus are notified to the time the first apparatus arrives on scene. This measure of response performance shows NFD response performance is within 53 seconds of the stated goal of 6 minutes for all emergencies. The next figure displays response performance summarized as Fire or EMS emergencies.

Figure 37: NFD Emergency Response Performance by Incident Type, 2013

Emergency Response Performance by Incident Type, Fire or EMS				
90th Percentile	Turnout Time	Travel Time	Total Response Time	Response Time-Dispatch to Arrival
Fire	02:09	04:59	07:42	06:26
EMS	01:58	05:05	07:21	06:31

NFD has adopted an emergency response performance goal of 6 minutes for the arrival of the first unit on scene of Fire and EMS emergency incidents. The response performance displayed in the figure above does not meet the NFD response goal.

Note that the response performance calculations presented in the figures above differ somewhat from the data presented in the NFD 2013 RCW 52.33.030 Compliance Report. Differences in the way the data was compiled and filtered, or the data points collected; are the most likely causes of the discrepancies.



The value of monitoring and reporting the various components of response performance is in allowing fire departments to identify and correct deficiencies.

The following figure displays response performance by unit in the NFD service area.

Figure 38: NFD Response Performance by Apparatus, 2013 Emergency Responses

NFD Response Performance by Stations and First Due Apparatus @ 90%				
Unit	Turnout	Travel	Total Response Time	Dispatch to Arrival
Station 51				
A51	01:58	05:26	07:26	06:55
B51	01:59	04:29	06:29	06:05
E51	02:01	05:20	07:14	06:46
R51	02:29	05:03	08:56	07:31
Station 57				
E57	02:01	05:19	07:13	06:40

WOODINVILLE FIRE AND RESCUE (WF&R)

Demand

Woodinville Fire and Rescue (WF&R) answered 3,822 calls for fire department services in 2013.

Figure 39: WFR Incidents by NFIRS Category, 2013

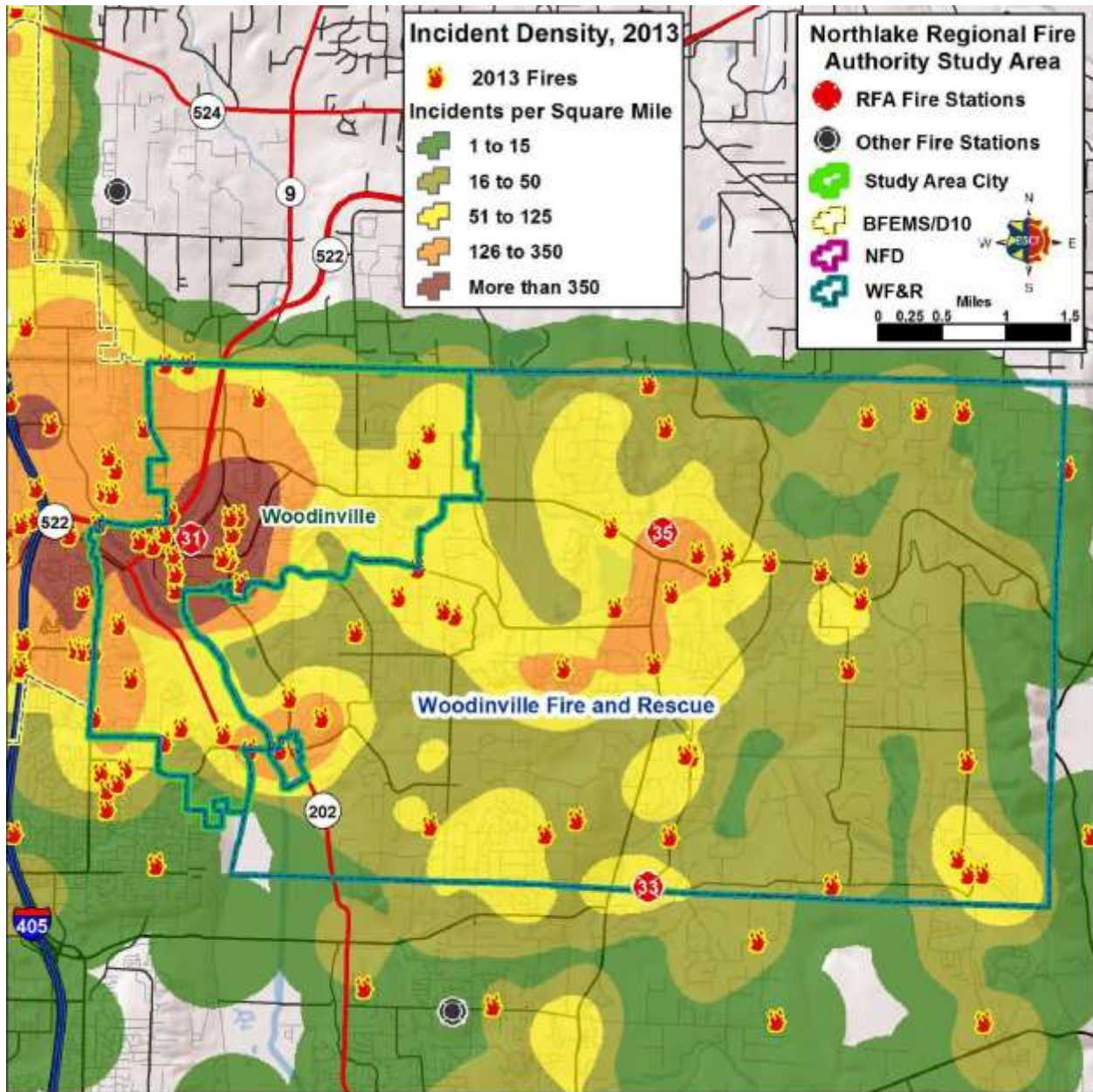
WF&R Incidents by NFIRS Category, 2013	
NFIRS Category	Percent of Incidents
Fires	3.17%
Rupture/Explosion	0.08%
EMS	61.54%
Hazmat	2.15%
Service Call	5.05%
Good Intent	13.50%
False Alarm	10.83%
Weather/Natural Disaster	0.24%
Other	0.13%
Blank	3.32%

EMS incidents represent over 61 percent of current service demand, with 3.17 percent of incidents in 2013 service demand as actual fires. The percentage of EMS incidents in WF&R is lower than that of neighboring jurisdictions and the percentage of fire incidents is higher than that of neighboring jurisdictions.

The demand is illustrated graphically in the following figure, focusing on WF&R's service area in 2013.

Geographic Demand

Figure 40: WF&R Geographic Demand, 2013

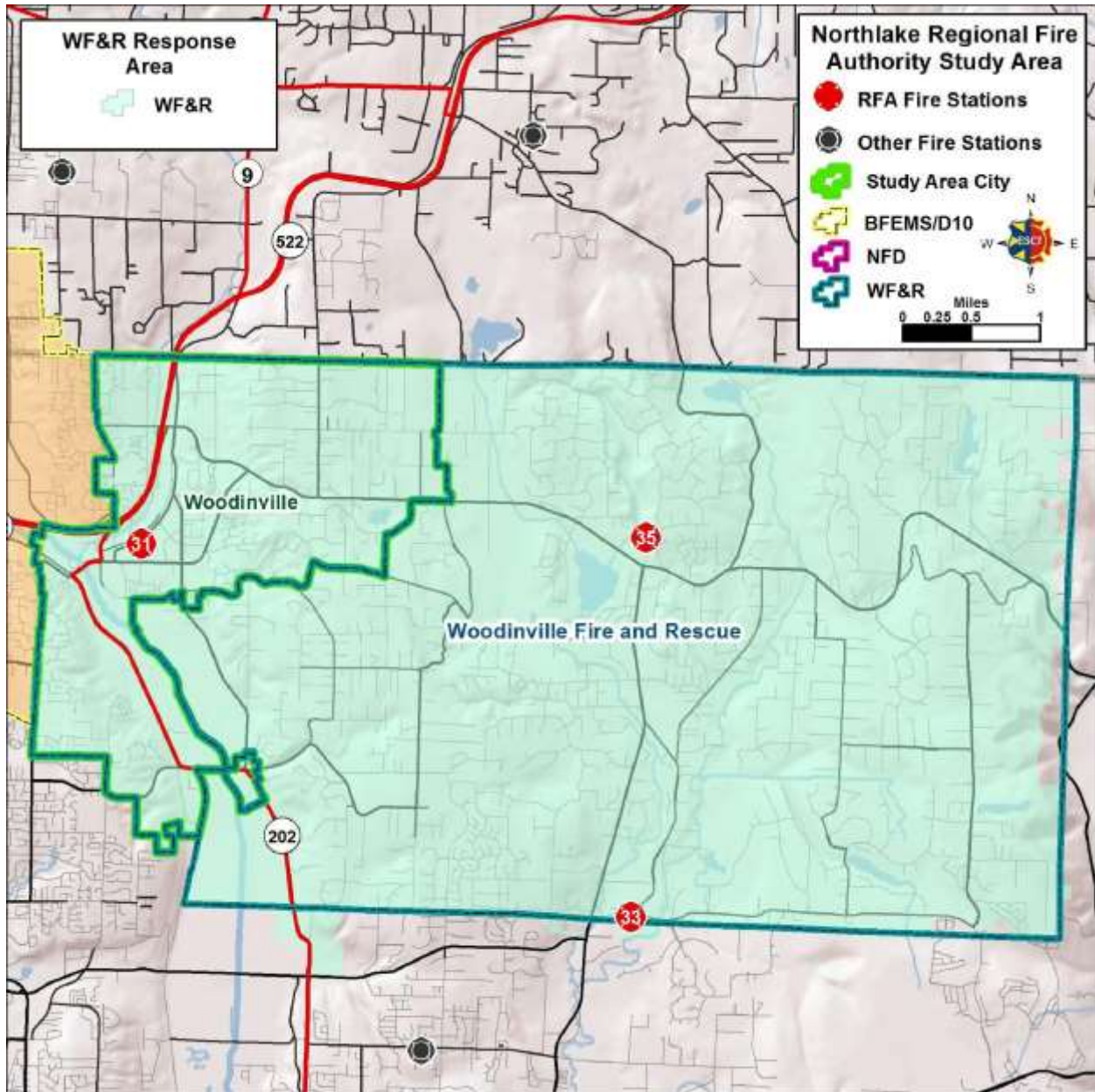


The mathematical density of 2013 incidents is calculated in this figure. The majority of incidents used to calculate incidents per square mile are EMS related. Incidents coded as a fire (NFIRS Category 1) are pinpointed and placed on top of the overall incident density. WF&R experiences the highest density of incidents inside the city limits of Woodinville. Incidents are distributed throughout the rural portions of the WF&R service area, but at a lower overall density. Fires reflect a similar distribution throughout the service area.

Distribution

Analysis of distribution of resources presents an overview of the current deployment of fire department facilities, equipment, and personnel within the WF&R service area.

Figure 41: WF&R Distribution, 2013



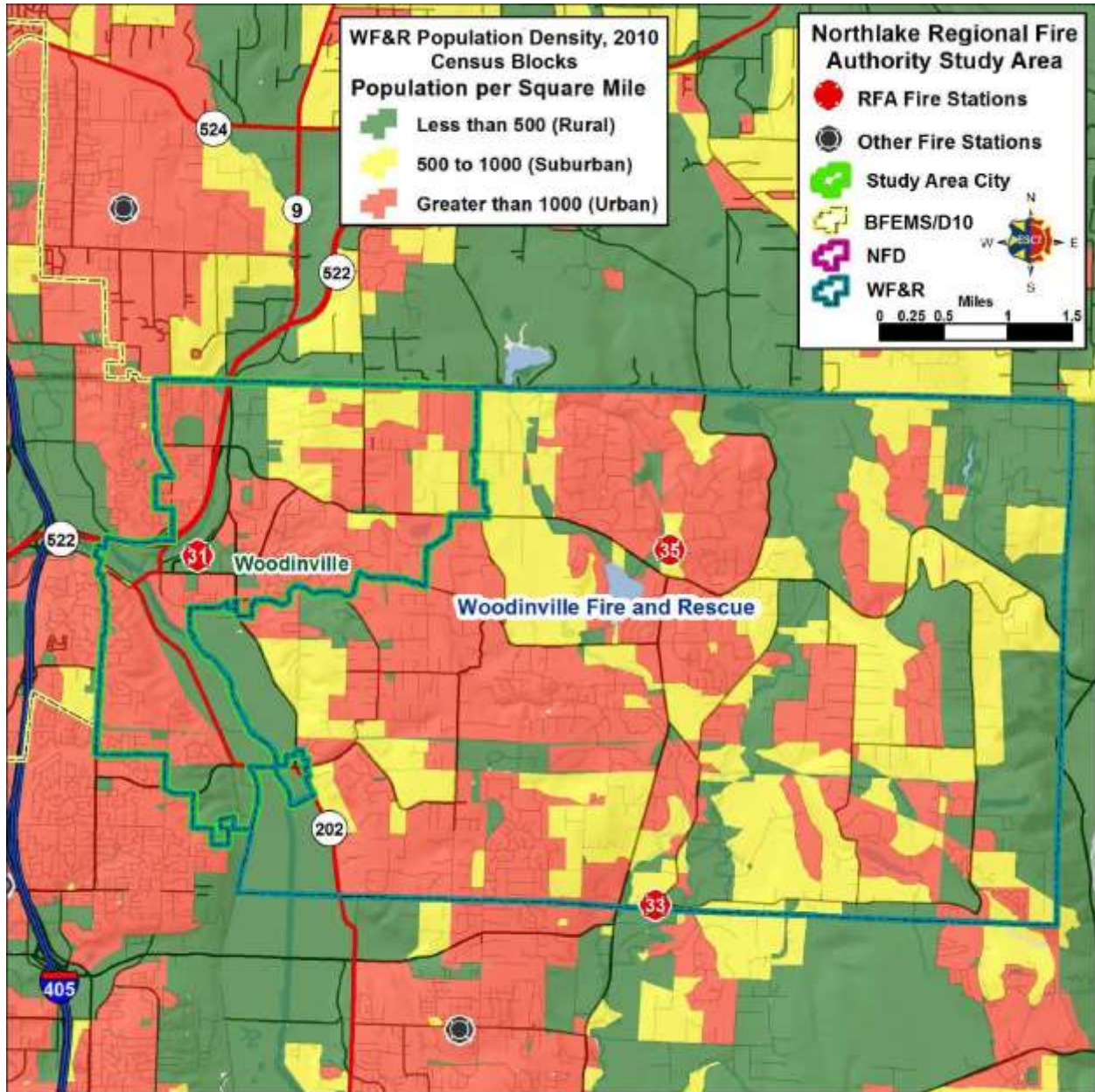
The WF&R service area includes the City of Woodinville and the more rural area to the east of Woodinville. The district encompasses approximately 29.6 square miles. A portion of the response area northwest of Woodinville was included in the recent annexation into Bothell. WF&R operates three 24 hour staffed stations. Station 31 staffs a quint (engine/ladder) and BLS aid car, Stations 34 and 35 both cross staff an engine or a BLS aid car.

Figure 42: WFR Career Minimum Staffing

WFR Stations	
Station	Minimum Staffing
31	6
33	3
35	3

Minimum daily staffing for career personnel is 12, distributed as displayed in the preceding Figure 42.

Figure 43: WF&R Population Density, 2010 Census Blocks

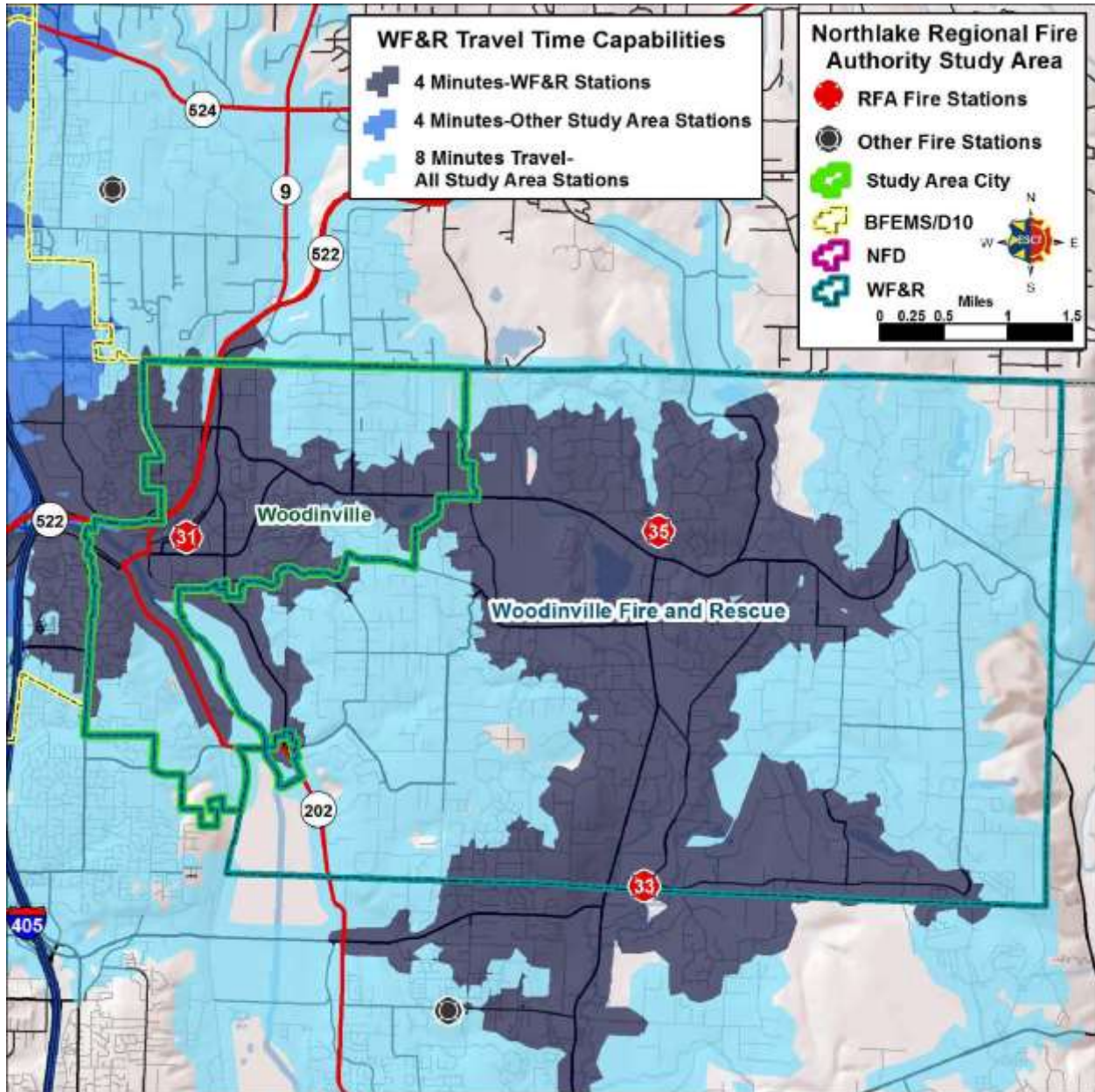


2010 US Census data is utilized to display population density throughout WF&R. National Fire Protection Association (NFPA) population classifications summarize population density as Urban, Suburban, and Rural. The WF&R service area is much more rural than either BF&EMS/D10 or NFD. Population is concentrated in Woodinville and the area just to the east of Woodinville. Although the service area is less densely populated, the overall population density of the district is over 1,000 per square mile. The figure below displays the WF&R service area population, square miles, and overall population density.

Figure 44: WF&R Demographics

WF&R Demographics		
Population	Square Miles	Population Density
39,103	29.6	1,321 per square mile

Figure 45: WF&R Response Capabilities, Current Station Locations



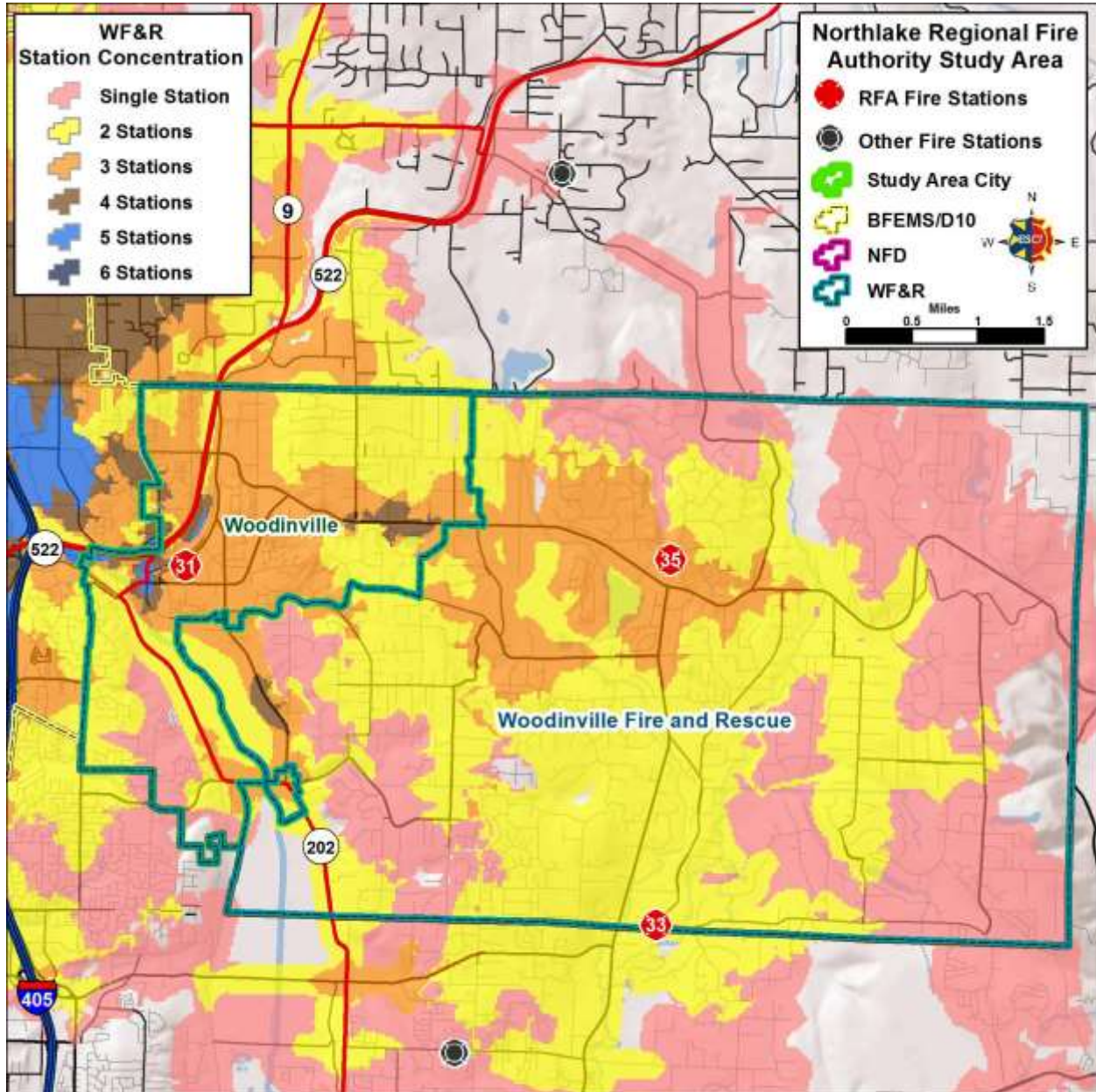
Street network data provided by NORCOM is used to calculate travel time capabilities from the current WF&R stations. Travel time over the street network is adjusted for posted speeds and to account for negotiating intersections and turns. Although good portions of Woodinville are within 4 minutes travel of a WF&R Station; much of the rural portion of the district is beyond 4 minutes but within 8 minutes travel of a WF&R station. King County fire jurisdictions utilize GPS technology and automatic vehicle location (AVL) to dispatch the closest available unit to emergency responses, regardless of jurisdictional boundaries. WF&R does have automatic aid or mutual aid partners that provide coverage to some portions of the district.



Concentration

The concentration analysis examines the number of study area resources that can reach any portion of the WF&R service area in 8 minutes travel time from a current study area fire station. The figure below illustrates station concentration.

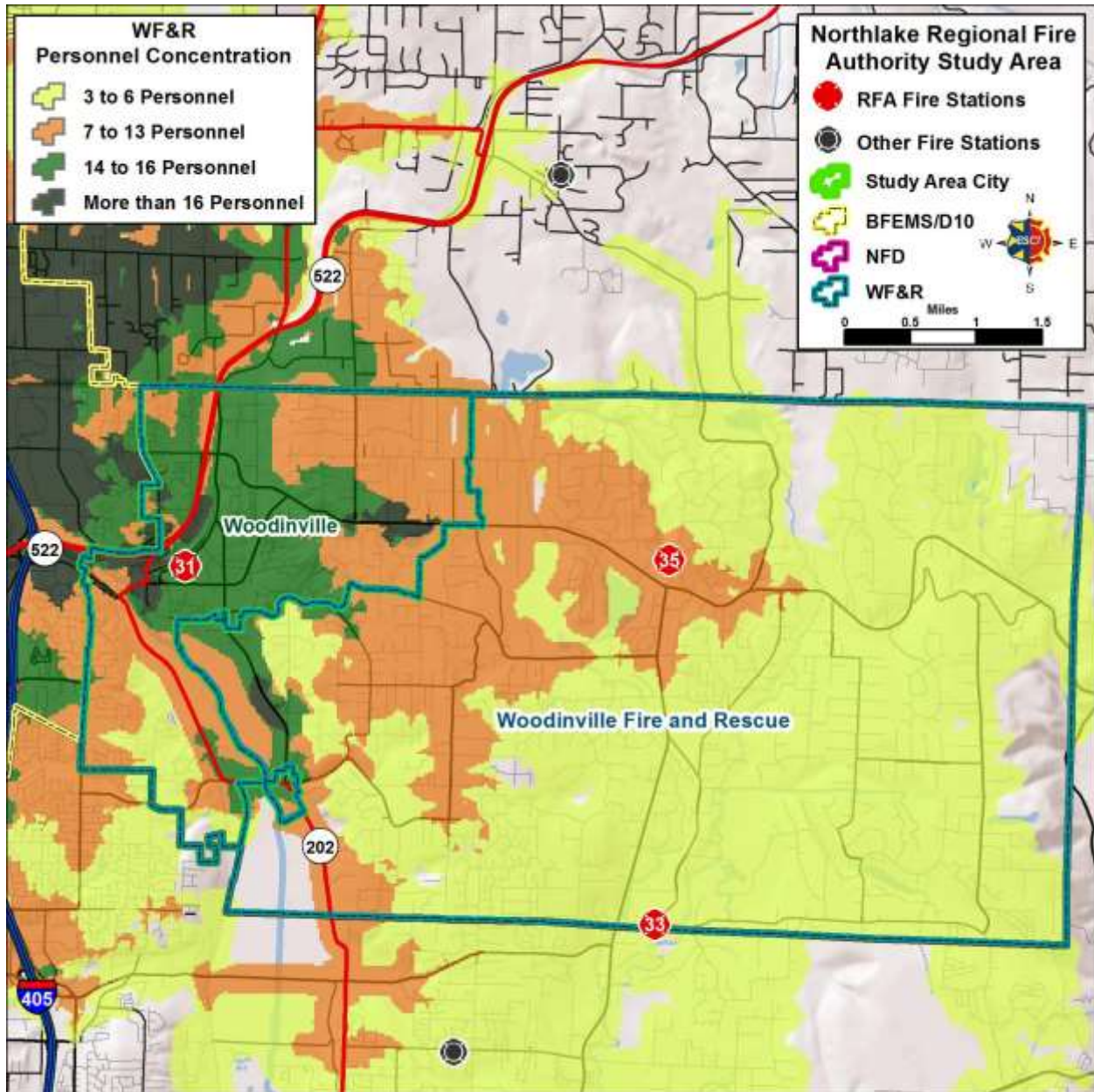
Figure 46: WF&R Station Concentration, 8 Minutes Travel Time



The size, geography, and rural nature of the WF&R service area affects the ability of the study area fire jurisdictions to assemble multiple resources within WF&R. The area around Station 31 inside the City of Woodinville demonstrates a concentration of three to five stations in 8 minutes travel. This area also experiences the highest service demand within WF&R. However, large portions of the service area to

the east of Woodinville are served by just one to two WF&R stations. The next figure demonstrates the concentration of personnel available in 8 minutes travel in the WF&R service area.

Figure 47: WF&R Personnel Concentration, 8 Minutes Travel Time



Personnel and apparatus from BF&EMS/D10 Station 42 augment WF&R resources in the portions of the Woodinville service area displaying a personnel concentration of 14 or more personnel. The area on either side of Woodinville-Duvall Road, between Stations 31 and 35; is within 8 minutes travel of 12 personnel. Six WF&R personnel from Stations 33 and 35 serve the area east of these two fire stations. Again, mutual and automatic aid resources from outside the study area are discussed in another section of this report.

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.

The following figure displays the percentage of concurrent (simultaneous) incidents in the WF&R service area in 2013.

Figure 48: WF&R Concurrent Incidents, 2013

WF&R Concurrent Incidents				
	Single Incident	Two Incidents	Three Incidents	Four or More Incidents
WF&R	77.6%	19.9%	2.2%	0.3%

In the WF&R service area, over 77 percent of incidents occurred as a single incident. Approximately 22 percent of the time two or more incidents were in progress at the same time.

Unit hour utilization (UHU) describes the amount of time that an apparatus is not available for response because it is already committed to another incident. UHU rates are expressed as a percentage of the total hours in a year. The following figure displays the amount of time WF&R primary response apparatus were committed to an incident and the UHU rate in 2013.

Figure 49: WF&R Unit Hour Utilization, 2013

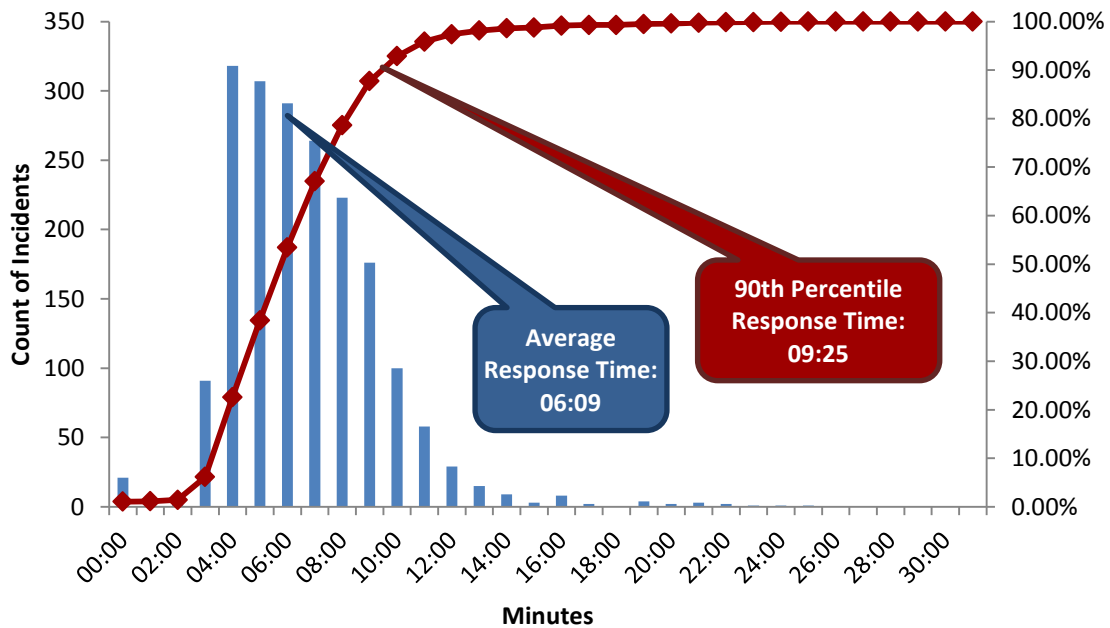
WF&R Unit Hour Utilization		
Unit	Total Time Committed	UHU
Aid 31	901:26:19	10.3%
Aid32	72:29:38	0.8%
Aid 33	250:59:27	2.9%
Aid 35	475:39:11	5.4%
BC 31	157:46:23	1.8%
Engine 31	32:23:06	0.4%
Engine 33	158:13:32	1.8%
Engine 35	144:09:31	1.6%
Ladder 31	230:53:03	2.6%

As with both BF&EMS/D10 and NFD the staffed Aid unit at Station 31 demonstrates the highest utilization rate for WF&R apparatus. Also, similar to the other study area jurisdictions; concurrent incidents and unit utilization rates do not appear to negatively affect response performance in the WF&R service area. However, ESCI encourages all of the Northlake RFA Study Area jurisdictions to monitor these workload metrics.

Response Performance

WF&R emergency response performance is analyzed using NORCOM dispatch center data. Non-emergency incidents, mutual or automatic aid incidents outside of the NFD service area, data outliers, and invalid data points are removed from the data set whenever possible.

Figure 50: WFR Response Frequency, 2013 Emergency Incidents



This figure displays overall emergency response time frequency throughout the WF&R service area. The most frequently recorded response time for emergency calls is within the sixth minute. The average for all emergency responses is 6 minutes 9 seconds. 90 percent (90th percentile) of all emergency incidents in 2013 were answered in 9 minutes 25 seconds or less. The figure above measures total response time. Total response time is comprised of several different components:

- Call Processing Time – The amount of time between when a dispatcher answers the 911 call and resources are dispatched.
- Turnout Time – The time interval between when units are notified of the incident and when the apparatus are en route.
- Travel Time – The amount of time the responding unit actually spends travelling to the incident.
- Total Response Time – Total Response Time equals the combination of “Call Processing Time,” “Turnout Time,” and “Travel Time.”



Figure 51: WF&R Total Emergency Response Time Performance, 2013

Total Response Time Continuum					
	Call Processing	Turnout Time	Travel Time	Total Response Time	Response Time-Dispatch to Arrival
90th Percentile	01:00	02:20	07:05	09:25	08:55

The above displays WF&R 90th percentile response performance for the various components of the response time continuum. The WF&R 2011 Standard of Cover (SOC) document establishes response goals of 8 minutes or less for Fire emergencies and 7 minutes or less for EMS emergent incidents. WF&R does not track call processing time, but includes the NORCOM standard of 30 seconds to their response data to calculate emergency response performance at the 90th percentile.

Figure 52: WF&R Emergency Response Performance by Incident Type, 2013

Emergency Response Performance by Incident Type, Fire or EMS				
90th Percentile	Turnout Time	Travel Time	Total Response Time	Response Time-Dispatch to Arrival
Fire	02:51	06:08	10:08	09:05
EMS	02:19	07:04	09:21	08:55

The WF&R 2013 Response Time Report (RCW 35.103 compliance report) shows 90th percentile response performance of 9 minutes 9 seconds for Fire incidents; and 8 minutes 50 seconds for EMS Incidents. Neither the response performance calculated by ESCI, or the data from the WF&R report, meet the response performance goals set in the SOC.

Note that the response performance calculations presented by ESCI differ somewhat from the data presented in the WF&R 2013 Response Time Report. Differences in the way the data was compiled and filtered, or the data points collected; are the most likely causes of the discrepancies. The value of monitoring and reporting the various components of response performance is in allowing fire departments to identify and correct deficiencies.

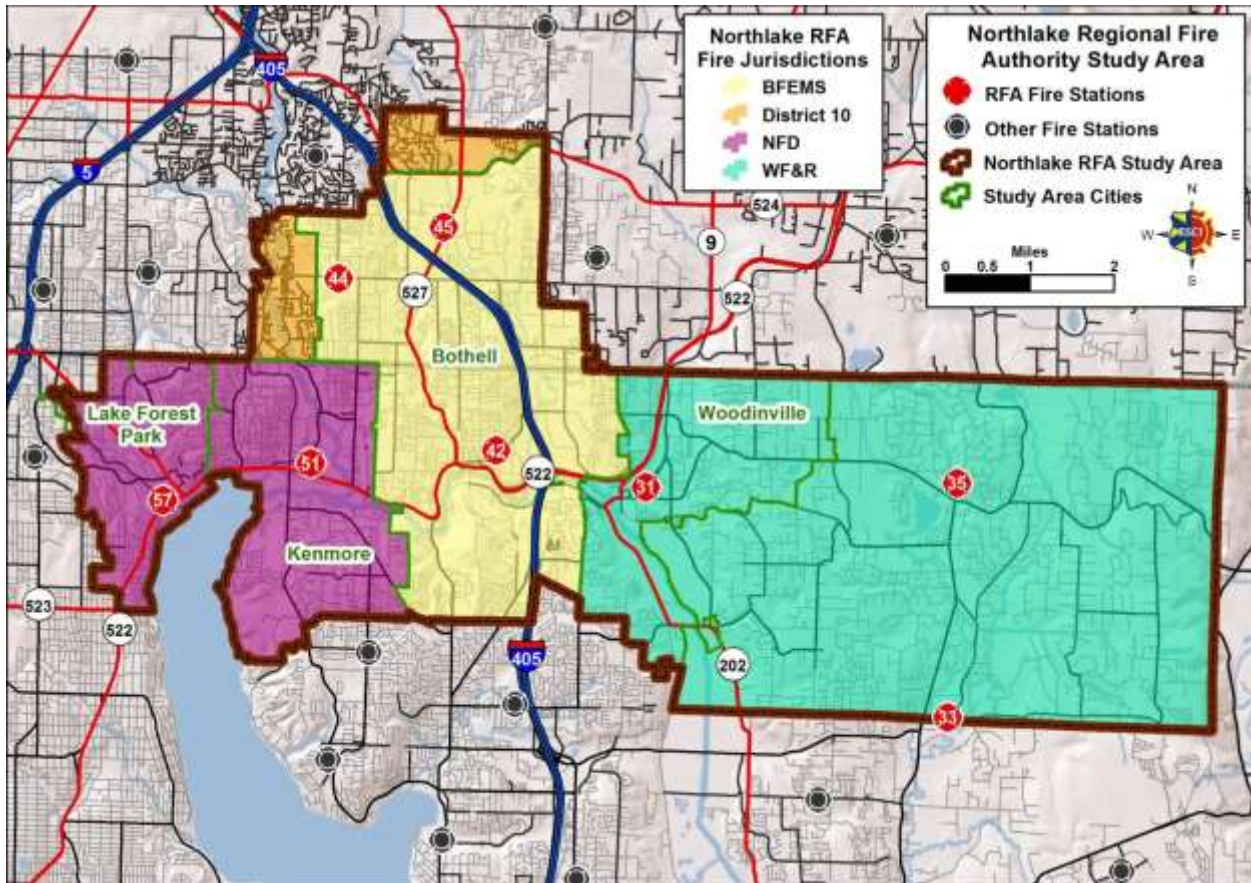
The figure above, which follows displays response performance by unit in the WF&R service area.

Figure 53: WFR Response Performance by Apparatus, 2013 Emergency Responses

WF&R Response Performance by Stations and First Due Apparatus				
Unit	Turnout	Travel	Total Response Time	Dispatch to Arrival
Station 31				
A31	01:59	06:31	08:26	07:57
B31	01:51	07:01	09:20	08:22
L31	02:12	05:58	08:40	07:59
Station 33				
A33	02:31	08:07	10:12	09:58
E33	02:42	05:17	08:48	07:25
Station 35				
A35	02:41	07:32	09:47	09:21
E35	02:48	07:18	10:31	09:51

COMBINED SERVICE AREA – PROPOSED RFA

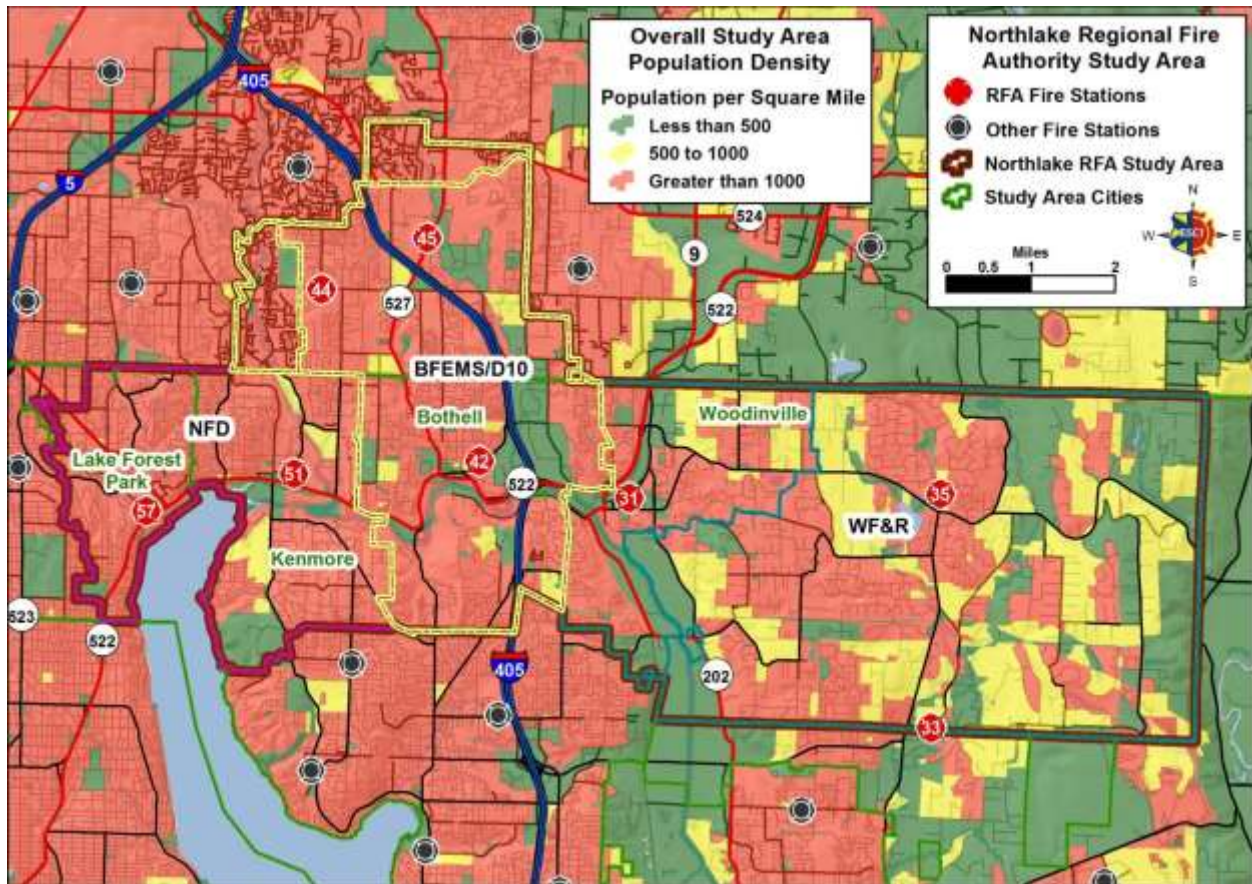
Figure 54: Northlake RFA Study Area



The “Northlake RFA” service area is approximately 54.2 square miles. The total estimated population of the overall study area is over 121,000 with an overall average population density of 2,237 per square mile.

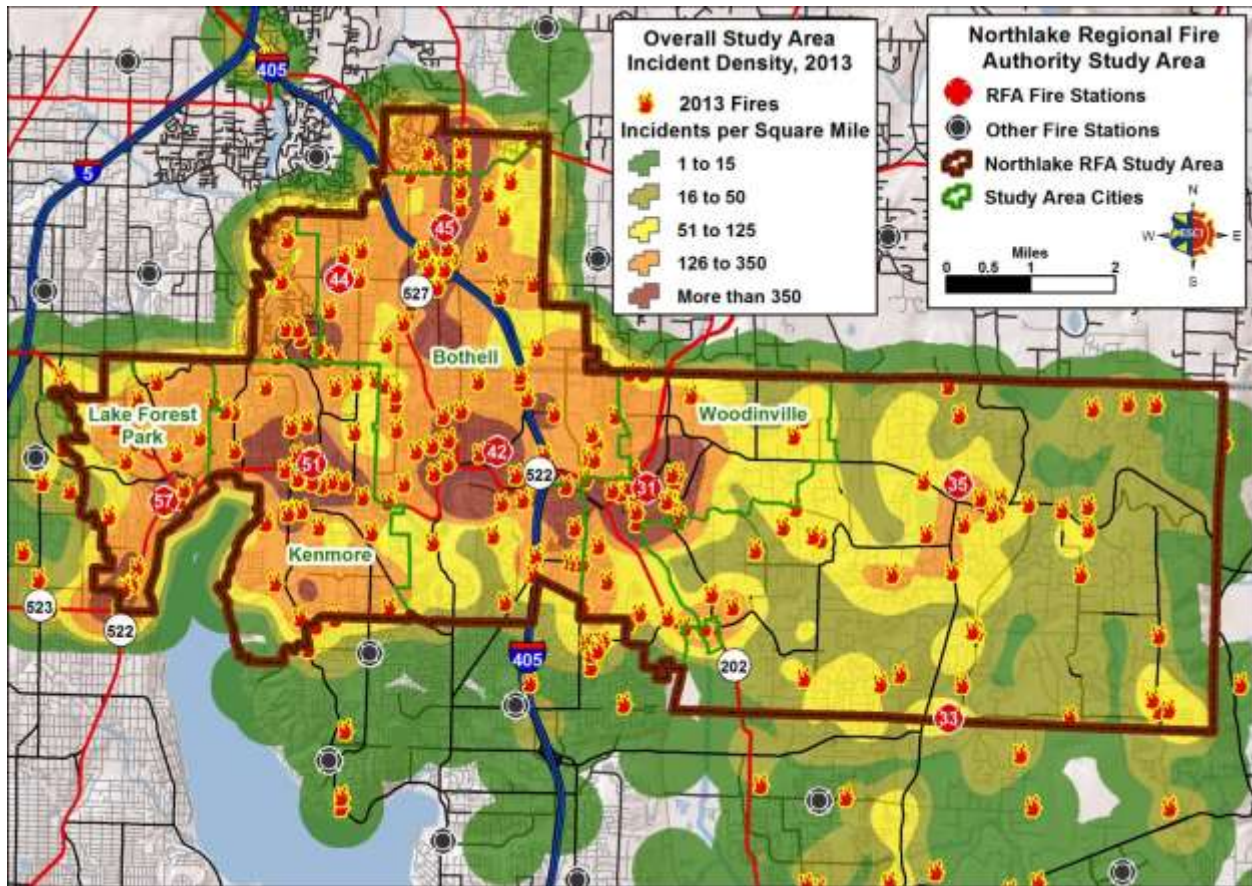


Figure 55: Study Area Population Density, 2010 Census Data



Demand for services among the combined agencies (2013 data) is graphically displayed in following figure.

Figure 56: Study Area Incident Density, 2013



The travel time capability from existing facilities is graphically illustrated in the following figure.

Figure 57: Study Area Travel Time Model

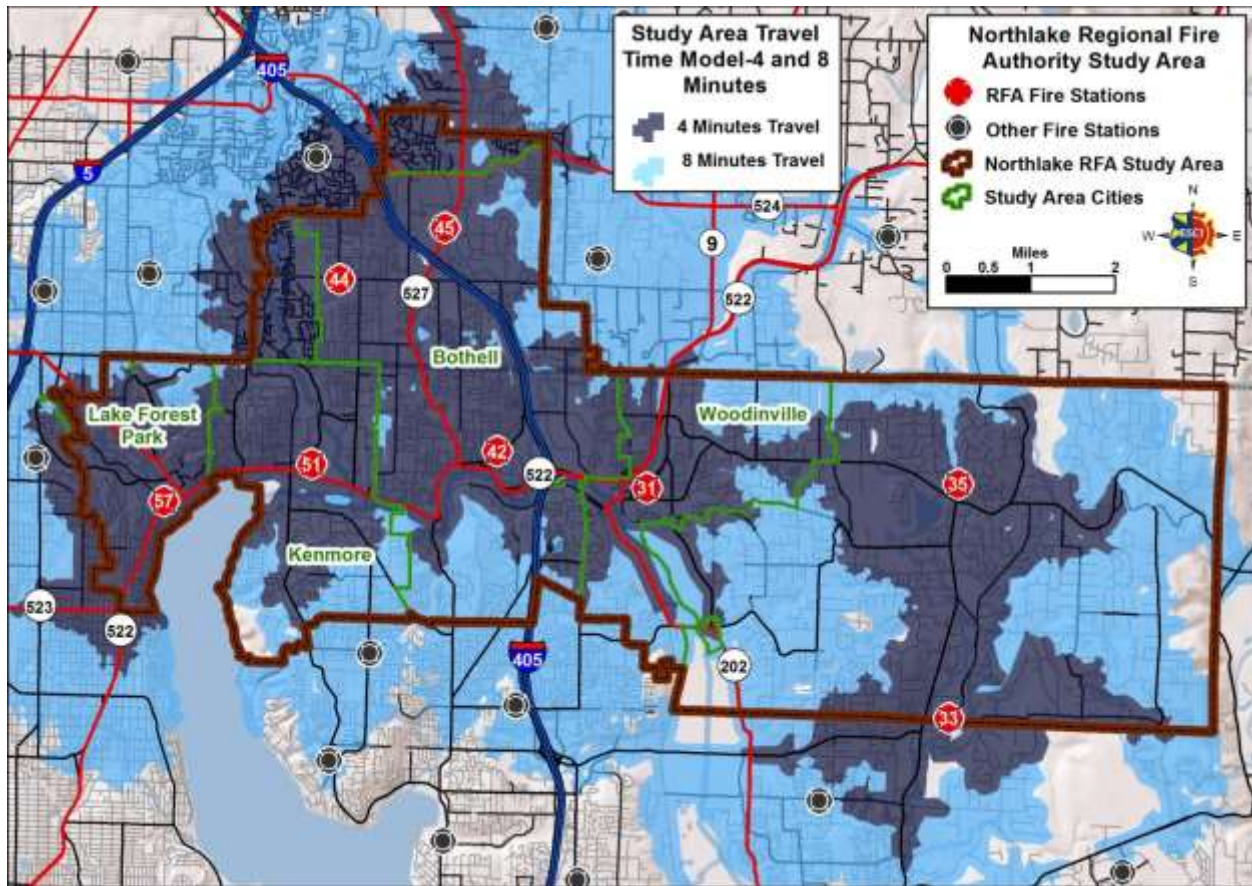
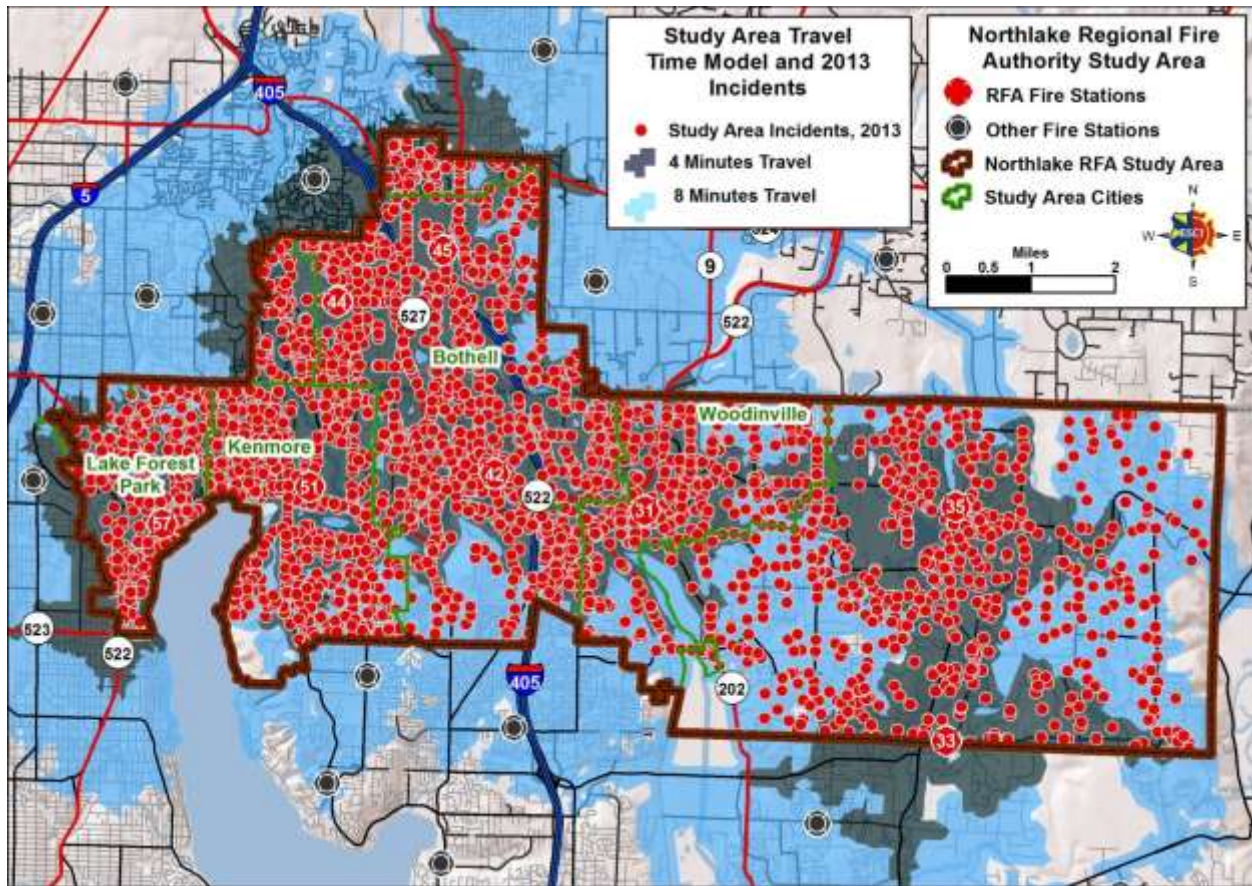
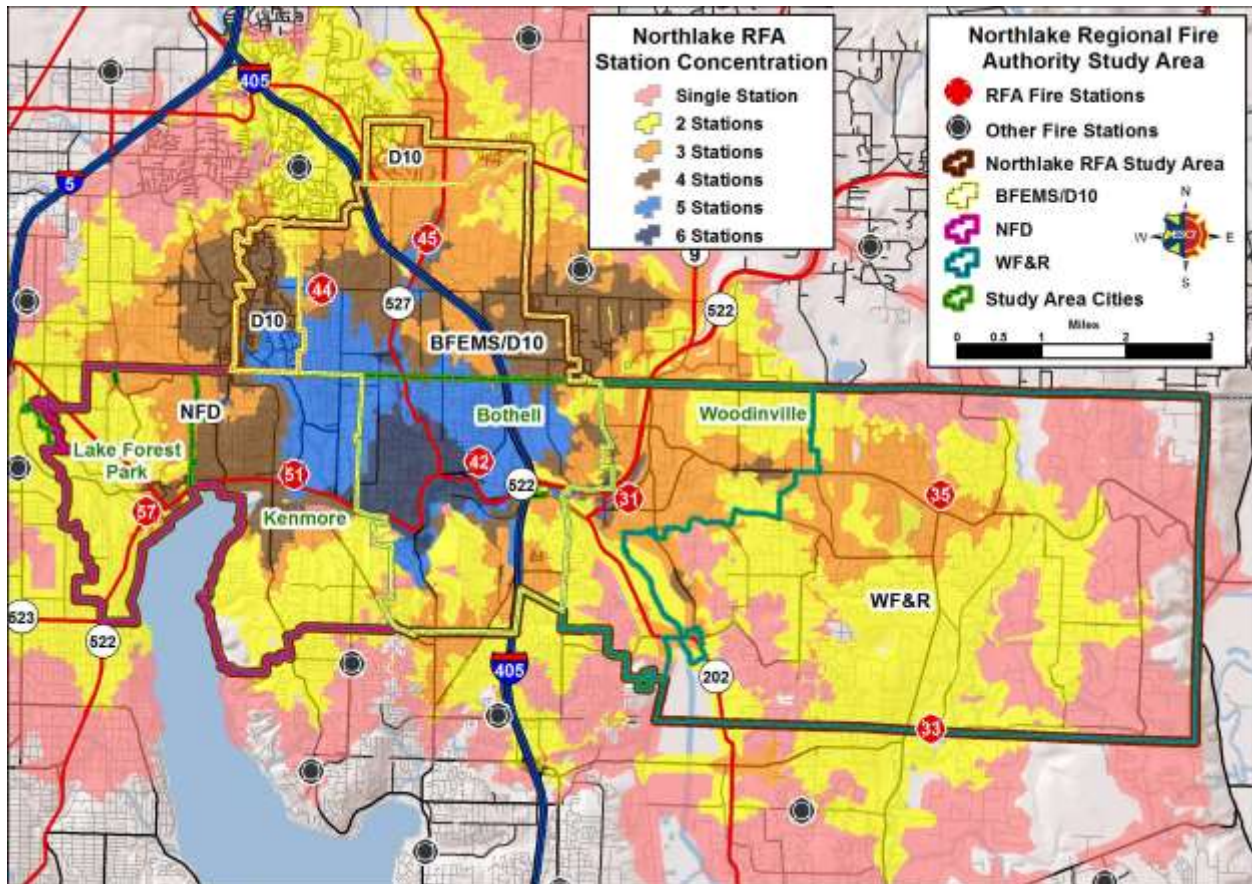


Figure 58: Study Area Travel Time Model and 2013 Incidents



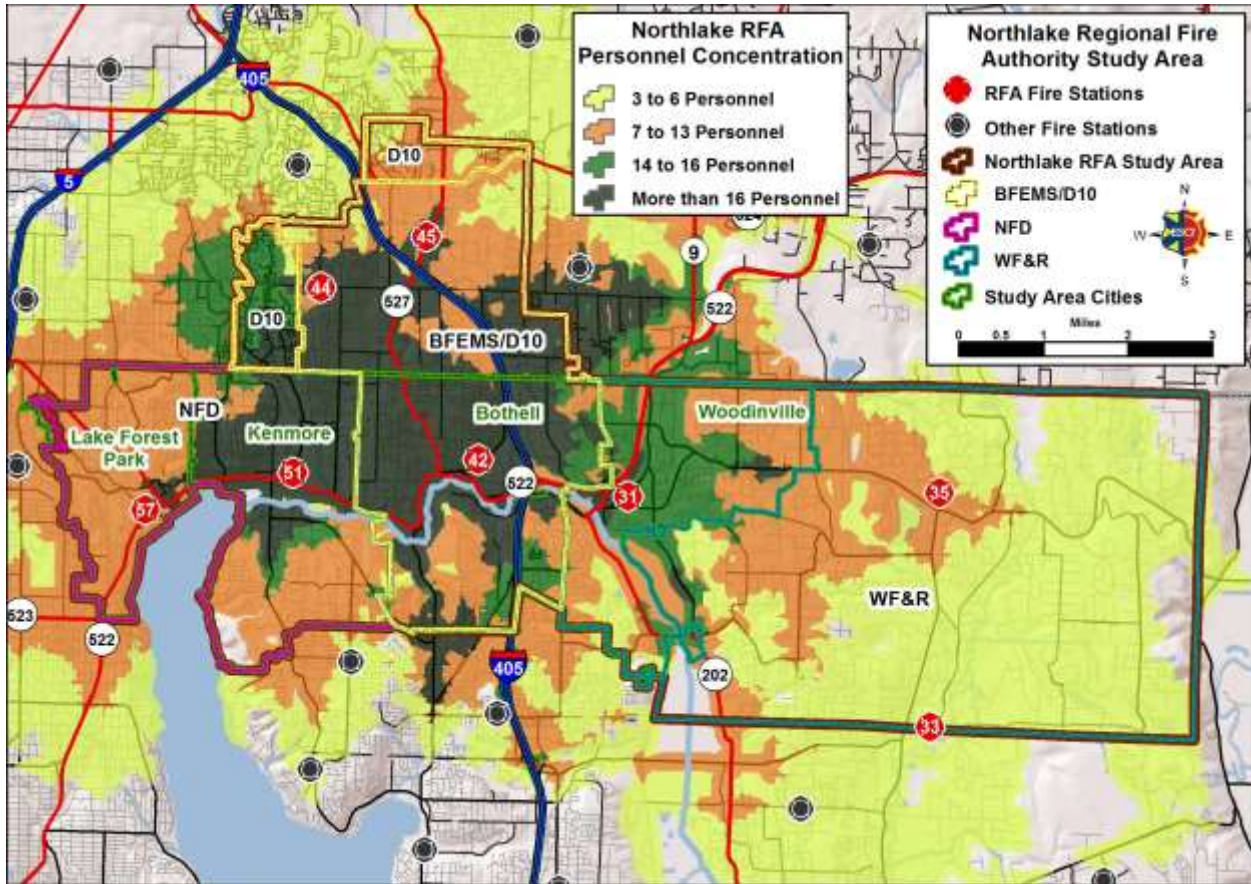
Approximately 88.7 percent of the 2013 service demand in the study area occurred within 4 minutes of a Northlake RFA study area fire station.

Figure 59: Study Area Station Concentration, 8 Minutes Travel



Given current staffing throughout the study area, it generally requires three to four study area stations' resources to assemble 14 to 16 personnel, which is a recommended baseline for an effective response force (ERF) to effectively and safely mitigate a typical risk fire (single story residence, less than 2000 square feet). The figure below demonstrates the concentration of personnel available in 8 minutes within the study area.

Figure 60: Study Area Personnel Concentration, 8 Minutes Travel



Study area fire stations are located such that an ERF of 14 or more personnel are within 8 minutes travel of the portions of the study area that experience the highest population density (risk) and the highest service demand. The participating agencies utilize mutual/automatic aid resources to provide additional resources in the portions of the study area not within 8 minutes travel multiple study area resources.

NORTHLAKE RFA STATION OPTIMIZATION

As part of the Northlake Regional Fire Authority Feasibility Study the Northlake Regional Fire Authority Planning Committee (NRFAPC) has requested that ESCI identify optimum locations for fire stations to improve or maintain current response performance capability within the combined RFA study area (BF&EMS/D10, NFD, and WF&R). The following analysis uses GIS software to display current travel time capability from the current station locations and identify alternative station locations for the NRFAPC to consider. The data used in this analysis is 2013 historical incident location data and a regional street network dataset, provided by NORCOM, the regional dispatch center. Due to the size of the maps, the discussion for each map follows the group of figures.

Figure 61: Northlake RFA Study Area Station Optimization Model

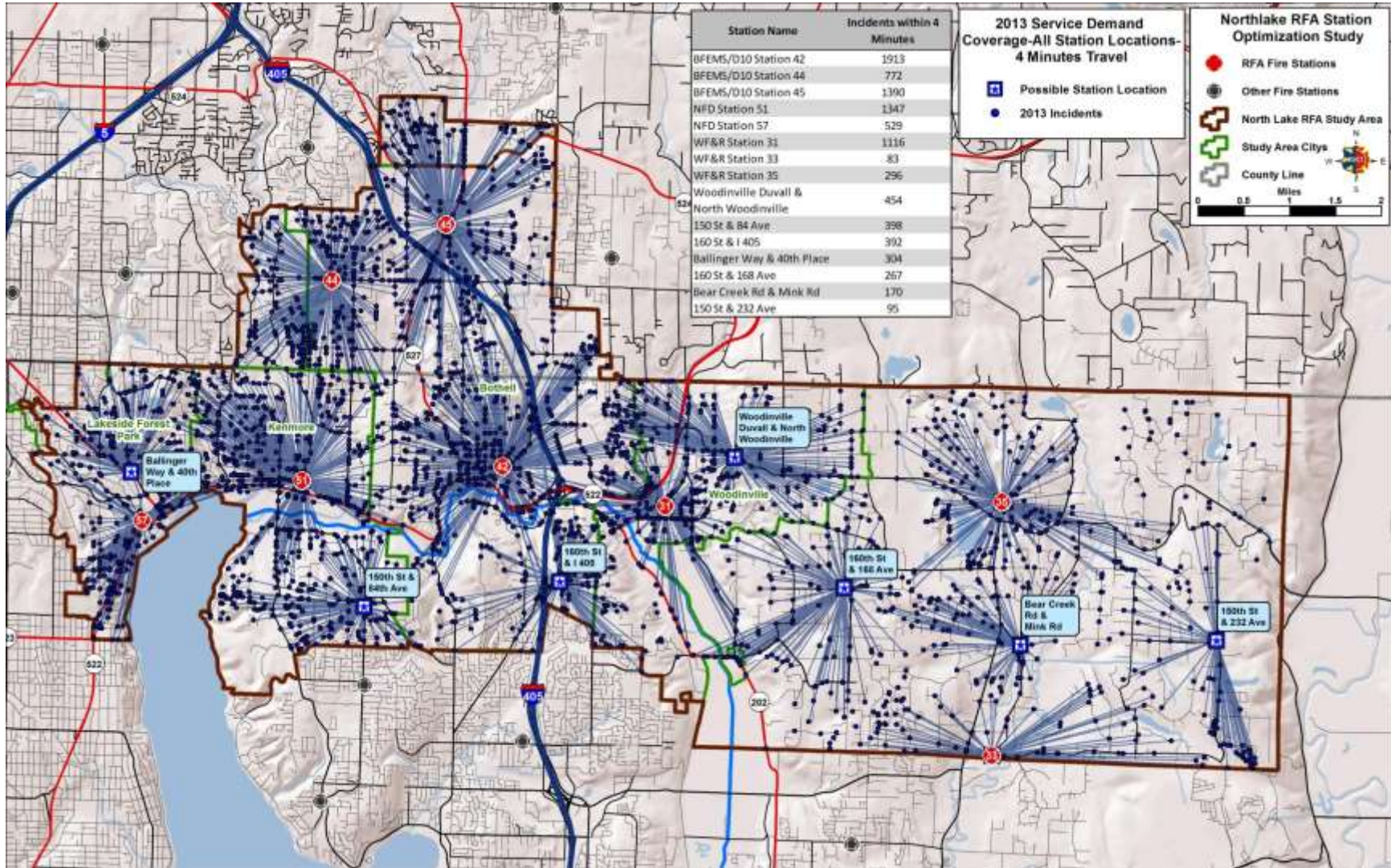


Figure 62: Northlake RFA Study Area Travel Time Model and 2013 Service Demand

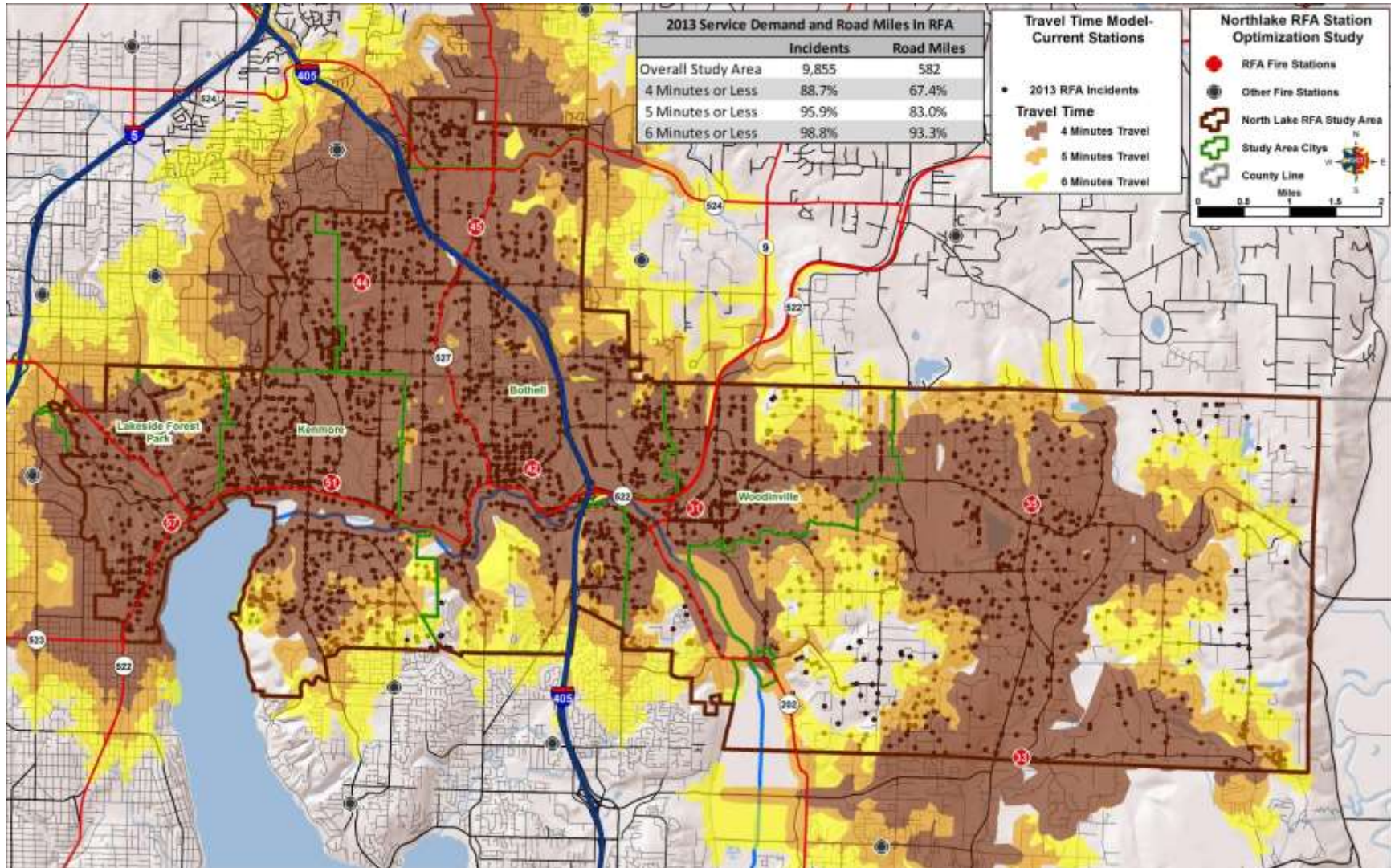


Figure 63: Northlake RFA Study Area 7 Station Travel Time Model

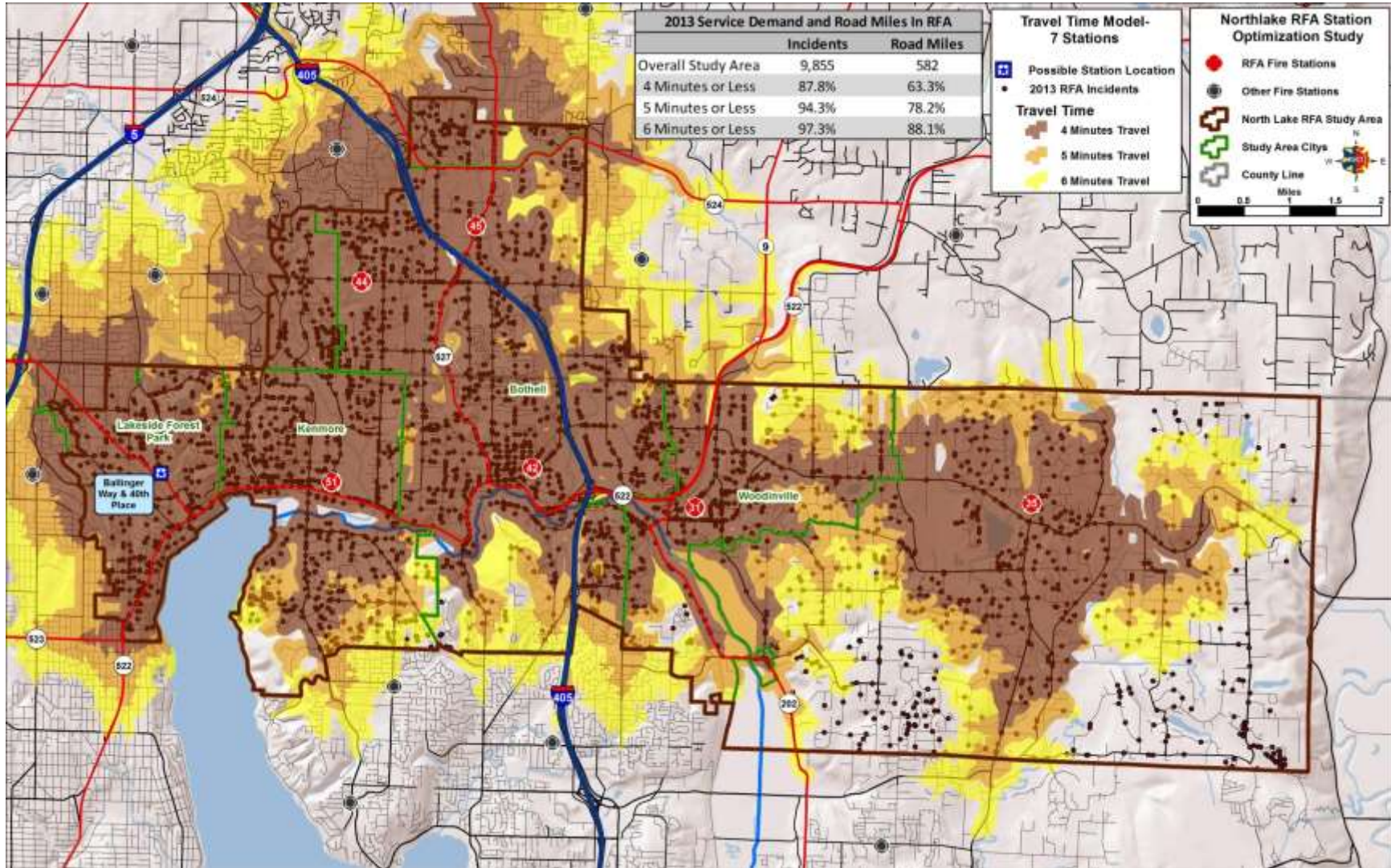


Figure 64: Northlake RFA Study Area 8 Station Travel Time Model

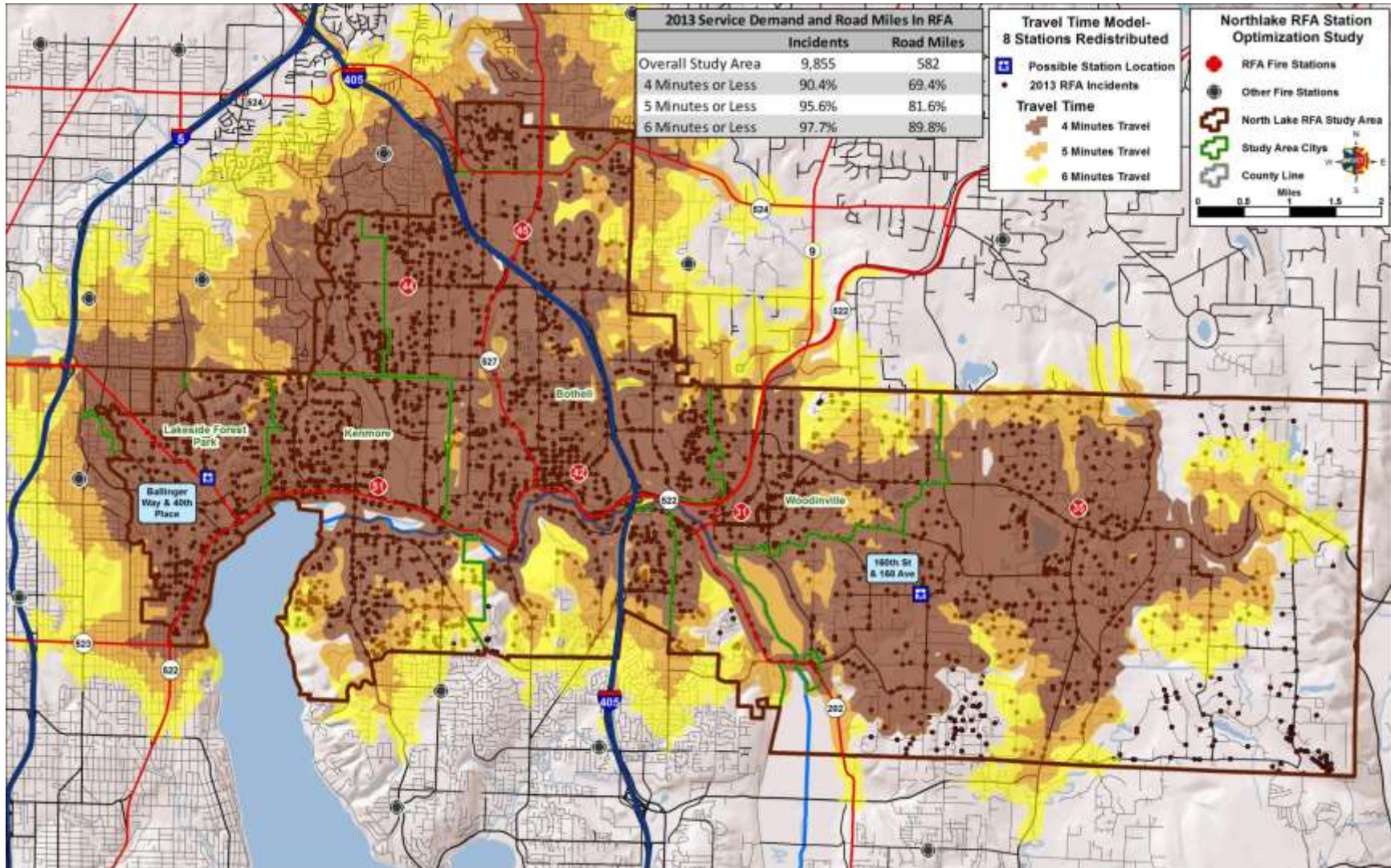


Figure 65: Northlake RFA Study Area 9 Station Travel Time Model

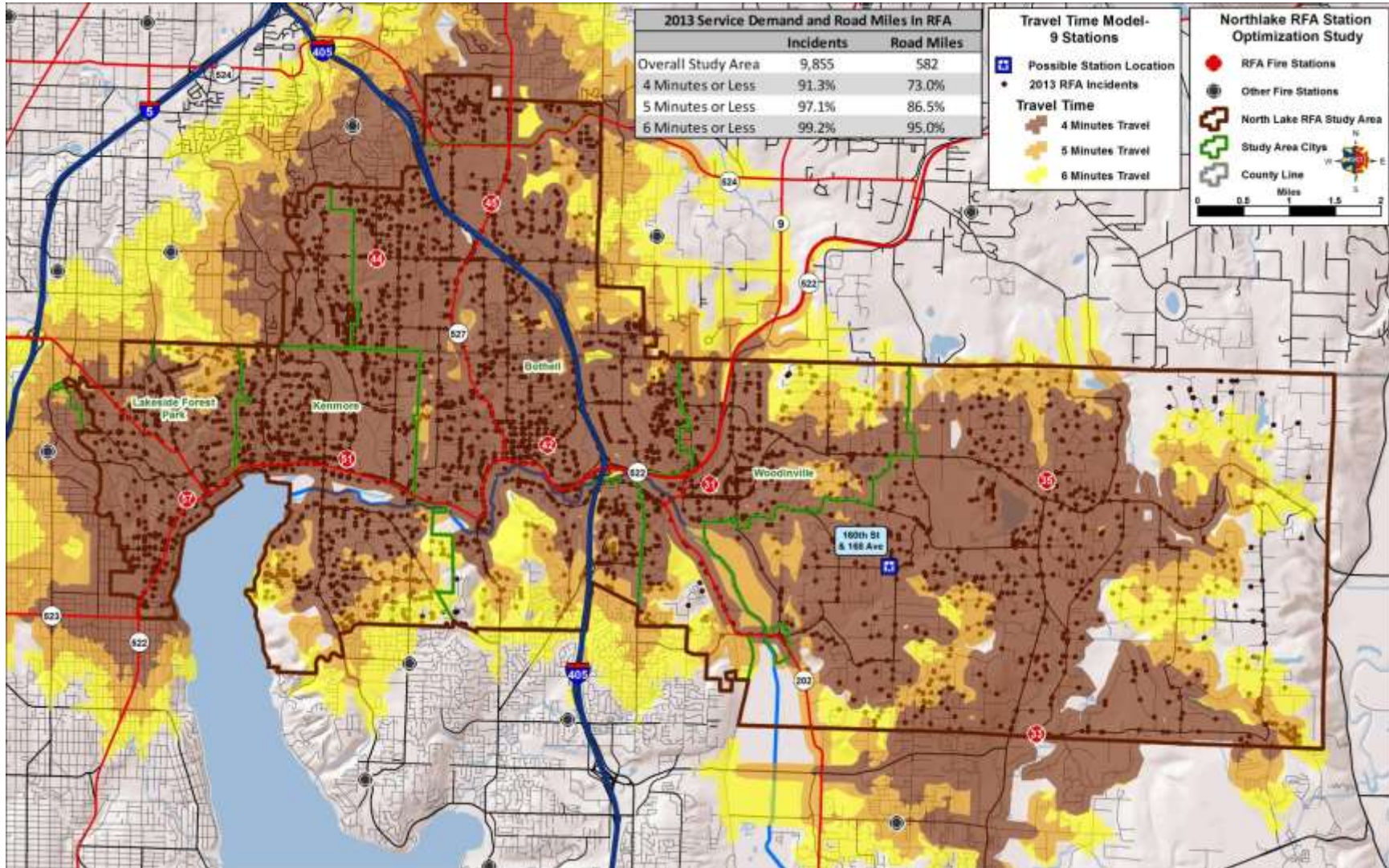


Figure 66: Northlake RFA Study Area Computer Optimized 8 Station Travel Time Model

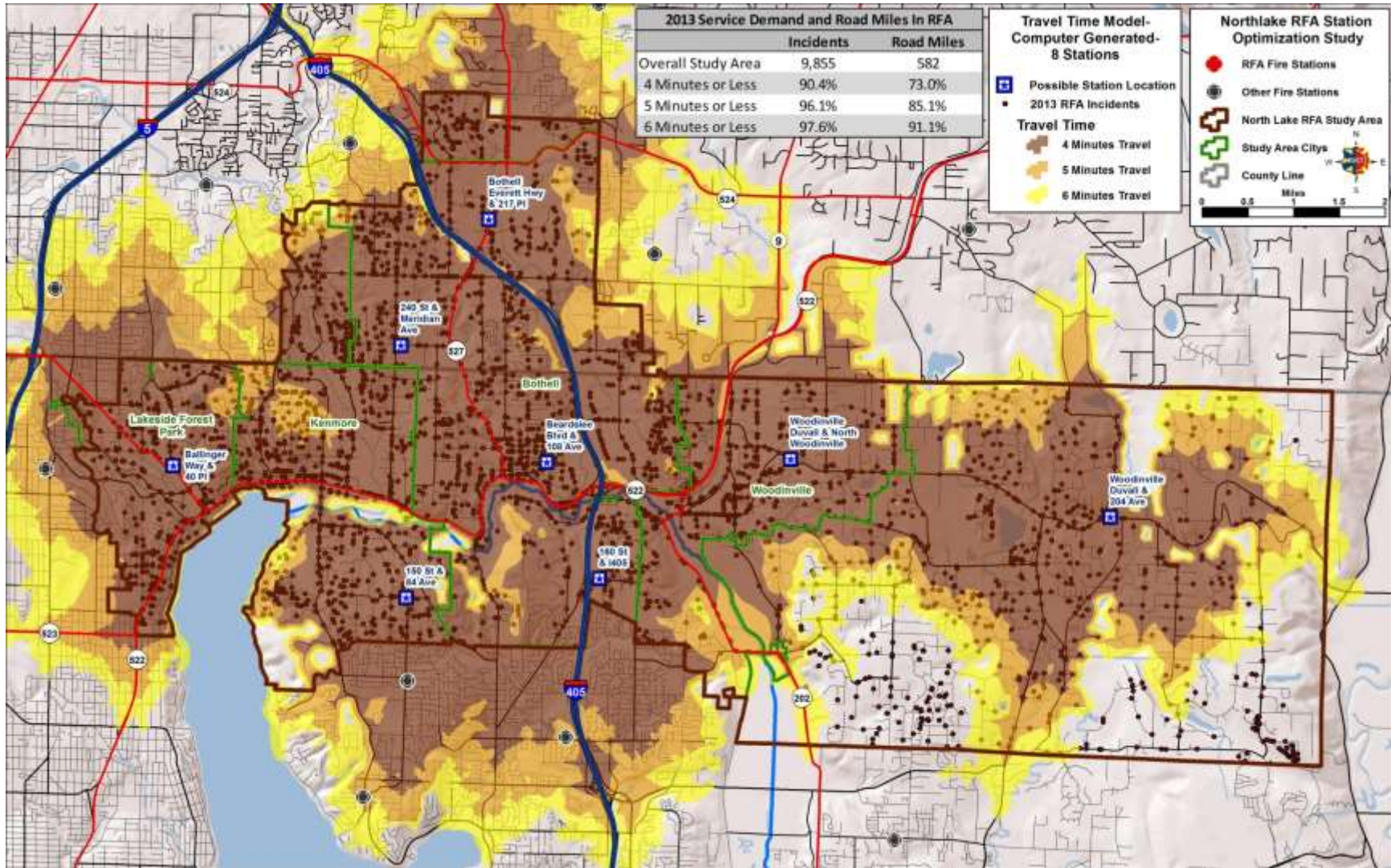


Figure 67: Northlake RFA Study Area Automatic Aid Travel Time Model

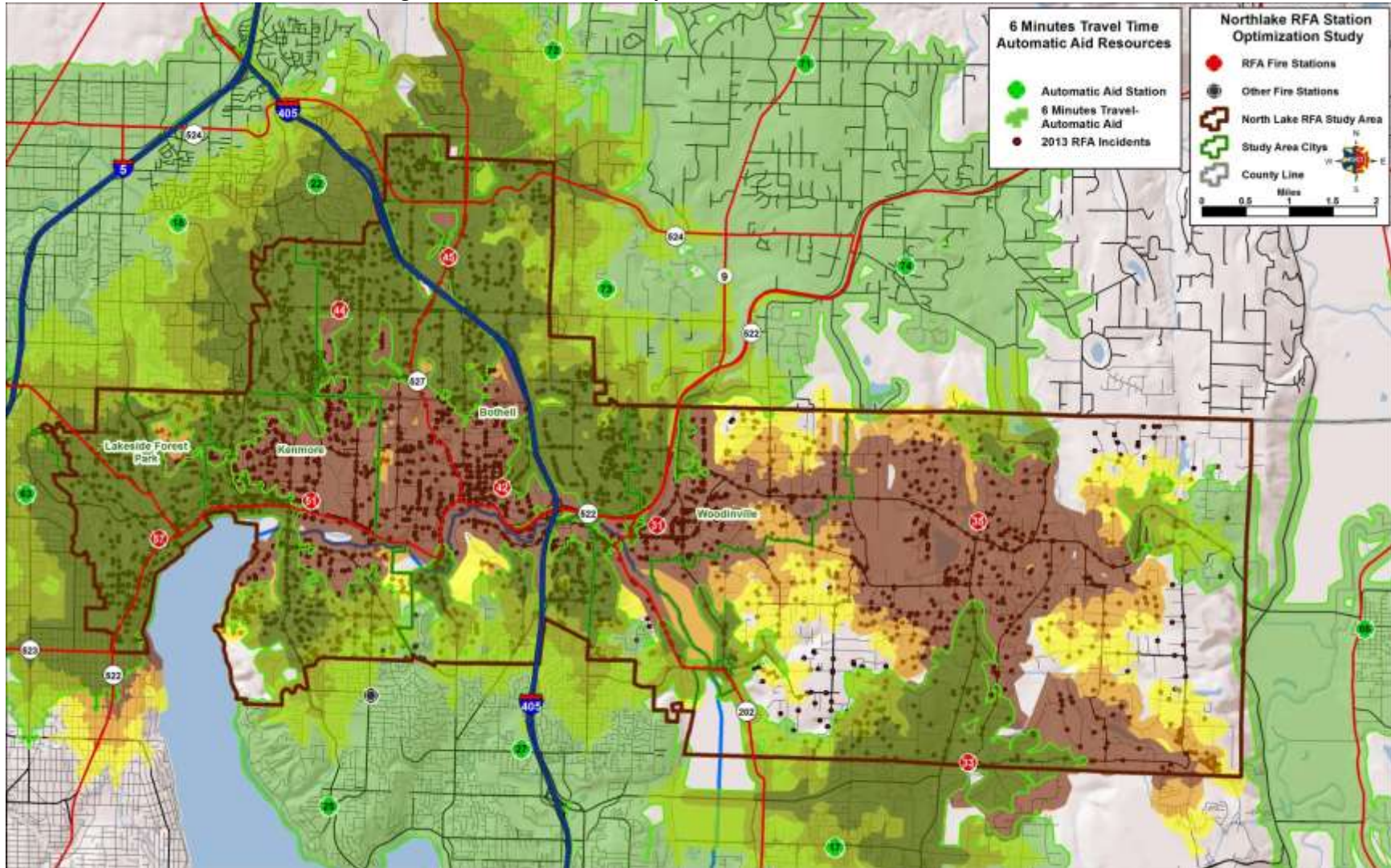


Figure 6161 displays the current station locations and seven additional potential station locations. Using the 2013 incident data, ESCI plots the closest station to each of the incident locations. Incidents beyond four minutes travel from any station are not assigned to a station. Each incident is only assigned to one station (the closest station). This provides the count of incidents by station location displayed in the table inset in the map. The additional possible station locations were placed by allowing the GIS software to attempt to assign a station location to the maximum number of incidents. Only incidents inside the RFA study area are included in this analysis. Note that the closest station to an incident is calculated by travel time over the existing road network. The straight lines radiating from each station are for symbolization purposes.

Figure 6262 displays travel time from the current RFA stations. Travel time is measured at four, five, and six minutes over the existing road network. Travel time is adjusted to account for negotiating corners, intersections, and the local speed limit. The 2013 incident data is displayed along with the travel time data and ESCI calculates the incidents within four, five, and six minutes travel from a study area fire station.

The NFPA 1710 standard calls for urban, primarily career staffed fire departments to distribute resources so that the first arriving apparatus is on the scene of an emergency incident in 4 minutes travel or less, 90 percent of the time. The current distribution of fire stations in the RFA study area is capable of reaching 88.7 percent of overall historical service demand in four minutes or less. The rural portions of the study area east of Station 31 demonstrate the largest gaps in travel time capability. However this area also experiences the lowest service demand.

Further GIS analysis reveals that approximately 92 percent of the service demand in the most urban portions of the study area (includes the incorporated cities of Lakeside Forest Park, Kenmore, Bothell, Woodinville, and the portions of District 10 served by BF&EMS) is within 4 minutes travel of a study area fire station. Over 80 percent of service demand in the area east of Woodinville is within 6 minutes travel of a current fire station. The current eight station deployment provides good coverage to the portions of the RFA study area that experience the highest service demand; and adequate coverage in the more rural portions of the study area.

Figure 63 examines travel time capability in the RFA study area with less than the current number of stations. This analysis displays a seven station configuration in the study area that moves one station and eliminates another station. Prior to eliminating a station from the deployment model, ESCI ran several different deployment models to ascertain if redundant or overlapping coverage existed anywhere in the study area. These models and the service demand table from Figure 61 show that the three BF&EMS/D10 stations, NFD Station 51, and WF&R Station 31 are the nearest fire stations to approximately 60 percent of total service demand and are appropriately located. The Ballinger Way and 40 Place location provides a slight increase in coverage over the current Station 57 location. Note that closing Station 33 does not maintain the current travel time capabilities within the study area. But only reduces the number of incidents within four, five, or six minutes of a fire station by approximately one percent (approximately 100 incidents) in the RFA study area. ESCI would not recommend this station deployment strategy unless mitigating circumstances required a reduction in the number of stations.

Figure 64 examines the effects of re-distributing the current eight stations within the study area. In this map, Station 57 is moved to the Ballinger Way and 40th Place location and Station 33 is moved to 160th St and 168 Ave - north and west of the current location. The table in the map demonstrates that travel time capability at four minutes improves to 90.4 percent of the 2013 service demand. However, at five and six minutes travel time; travel time coverage is slightly less than the current eight station deployment. Once again, ESCI ran several models in an effort to develop a strategy that would increase response capability enough to justify the expense of moving two fire stations. As with the previous analysis, ESCI would not recommend this strategy unless future circumstances dictated the move.

Figure 65 depicts a station deployment strategy which includes the construction of a new additional station. The deployment model that provides the greatest increase in travel time capability includes a new fire station between Stations 31 and 33, at 160th St and 168th Ave. As seen in table inset on the map, 91.3 percent of incidents are within 4 minutes travel of a study area fire station in this scenario. Over 99 percent of service demand is within 6 minutes travel.

Figure 66 removes all current station locations from consideration and identifies the optimum location for the fewest number of stations while maintaining response times. The two criteria used for the analysis are: Stations are located to maximize the number of incidents within four minutes travel of the station location; and the station must serve at least 7 percent of the current demand. These criteria insure that stations are located to provide the greatest coverage and are not placed in areas with little service demand within the study area. Note that this model locates stations in the same general area as the current Stations 42 and 45.

Comparison of the coverage tables between the current station locations and this model reveals that service demand coverage improves at 4 minutes travel by nearly 2 percent. However, there is little change in coverage at 5 minutes; and a negative change in coverage at 6 minutes.

Figure 67 reflects the influence of the mutual and automatic aid agreements throughout the areas surrounding the study agencies in King and Snohomish County. In many instances automatic aid agreements allow for closest unit dispatching regardless of jurisdiction. The map displays the six minute travel time service area of the fire jurisdictions that regularly respond as first responders within the RFA study area. Automatic aid resources are within 6 minutes travel of significant portions of the study area jurisdictions. Note that automatic aid from agencies dispatched by Snohomish County is delayed somewhat, due to the transfer of information between dispatch centers. GIS analysis reveals that over 15 percent of 2013 service demand was within four minutes travel of an automatic aid resource.

A summary of the effects of each of the foregoing models on response time is included in Figure 68:

Figure 68: Summary of the Effect of Various Station Configurations on Response Time

Stations & Travel Time 2013	Existing 8 Stations	7 Stations	% Change	9 Stations	% Change	8 Stations Optimized	% Change
≤ 4 Minutes	88.7%	87.8%	-0.9%	91.3%	2.6%	90.4%	1.7%
≤ 5 Minutes	95.9%	94.3%	-1.6%	97.1%	1.2%	96.1%	0.2%
≤ 6 Minutes	98.8%	97.3%	-1.5%	99.2%	0.4%	97.6%	-1.2%

1% change ≈ 100 incidents

ESCI believes that the benefit from relocating the stations, regardless of the model chosen, does not outweigh the cost of siting and constructing a new station. If an existing station is identified as in need of significant remodel or repair such that relocation is a reasonable alternative, then considering relocation may become a viable opportunity.

POTENTIAL ANNEXATION IMPACTS

Four cities are included in this study, three as components of their fire district service provider. They are Kenmore (NFD), Lake Forest Park (NFD), Bothell, and Woodinville (WF&R). As cities, they are each encouraged via the Washington State Growth Management Act to annex urbanized areas within their urban growth boundaries. The study fire districts are also subject to annexation by other neighboring cities which are not part of this study, which is encouraged by the same act to expand into their urban growth areas. These annexations can have financial and service implications to an RFA.

Cities are expected to identify the areas they intend to annex in the near term. In Snohomish County, these areas are referred to as Municipal Urban Growth Areas (MUGAs), and in King County they are referred to as Potential Annexation Areas (PAAs).

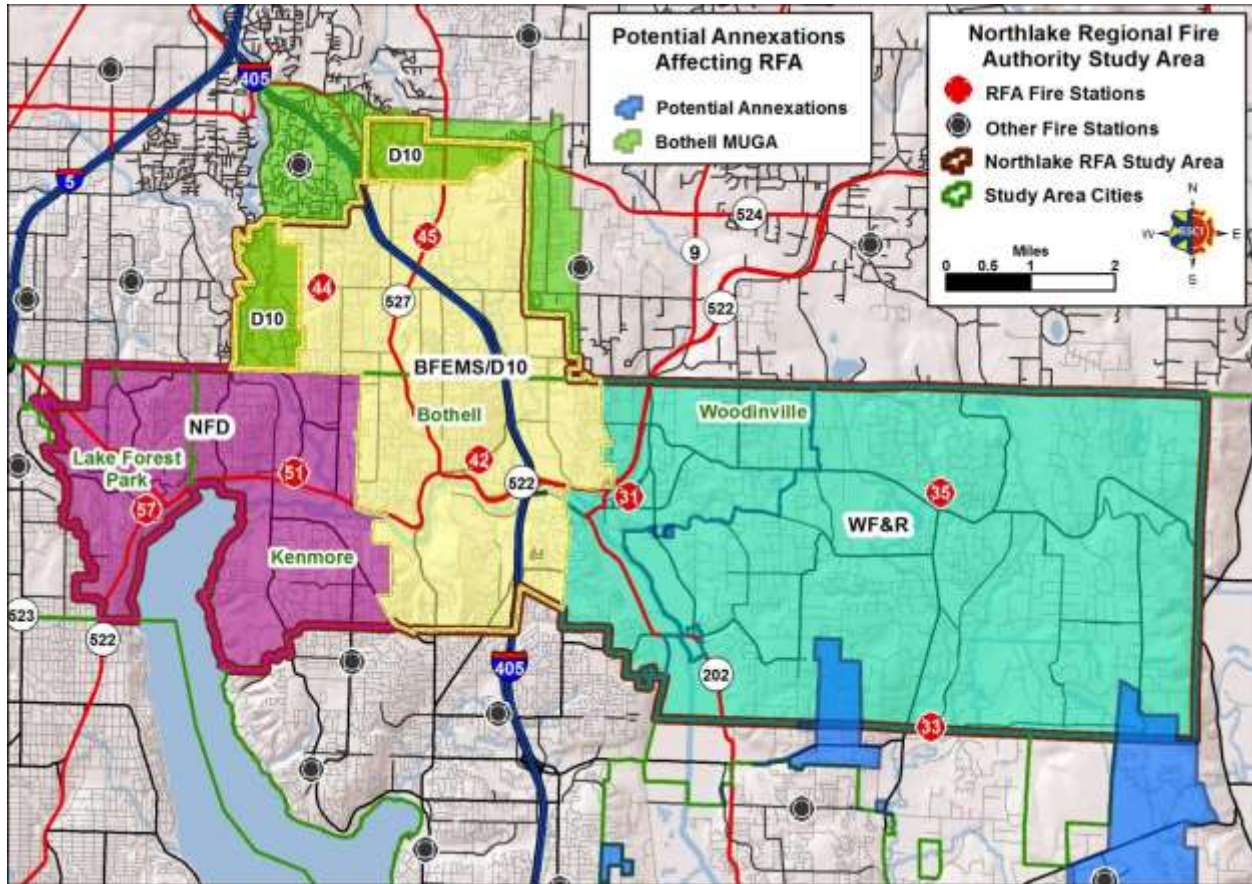
The following cities are listed along with their MUGA/PAA potential:

- Lake Forest Park -- landlocked with no potential for expansion.
- Kenmore -- landlocked with no potential for expansion.
- Bothell -- all King County PAA areas have been annexed, Bloomberg Hill Island in Snohomish County has been annexed, and the remainder of the Snohomish County MUGA is still unincorporated.
- Woodinville -- No PAA or MUGA areas designated, but UGA extends into Snohomish County.
- Redmond -- PAA extends into WF&R.
- Kirkland -- No PAA areas designated.

Figure 69 depicts the MUGAs /PAAs which could potentially impact an RFA operationally or financially.



Figure 69: Annexation Areas Potentially Impacting an RFA



Operationally, call volume would be expected to drop slightly in the WF&R area due to annexation by Redmond west of WF&R's station 33 and in WF&R's southeastern corner (Redmond Ridge and Trilogy annexations). The total area in the two potential Redmond annexations is approximately one square mile and approximately one percent of the 2013 service demand for WF&R occurred in the two potential annexation areas.

Call volume would be expected to grow in a MUGA annexation by Bothell, which extends beyond the 2.49 square miles of SCFD #10, encompassing an additional 3.15 square miles of service area. Further, Station 45 (SCFD #10) would likely be hard-pressed to provide the same response time as is currently enjoyed citywide or in the SCFD #10 service area, especially east of the current service boundary.

Financially, the Redmond annexation results in a net loss for an RFA going forward. In the Bothell annexations, the tax levy for SCFD #10 is replaced with the Bothell taxes. The areas extending beyond SCFD #10 are also replaced with Bothell's taxes. Figure 70 follows which lists the taxable property value of the areas either annexed into (in Bothell's case) or out of (in Redmond's case) an RFA.

Figure 70: Taxable Value of Annexation Areas

Taxable Value-Land and Improvements	
Bothell MUGA	\$1,505,591,340.00
Redmond PAA	\$460,867,848.00

TRAINING

Although the delivery of fire suppression and emergency medical services lies at the core of each department’s mission, it is necessary for every emergency services agency to be supported by other activities. These activities provide the basis for employee training and education, career development, public safety education, fire prevention, and code enforcement. In the following pages, ESCI reviews each agency’s training and fire prevention efforts.

Providing safe and quality fire and emergency services requires a well-trained workforce. Training and education of personnel are critical functions for each study agency. Without quality, comprehensive training programs, emergency outcomes are compromised and emergency personnel are at risk.

“One of the most important jobs in any department is the thorough training of personnel. The personnel have the right to demand good training and the department has the obligation to provide it.”⁸

Proper training of emergency services personnel starts prior to hire or joining an agency. Specific knowledge and skills must be obtained to achieve a basic understanding of the roles and responsibilities of an emergency responder. Personnel should be actively engaged in training and tested regularly to ensure that skills and knowledge are maintained. In order to accomplish this task, agencies must either have a sufficient number of instructors within their own organization or be able to tap those resources elsewhere. Training sessions should be formal and follow a prescribed lesson plan that meets specific objectives. In addition, a safety officer should be dedicated to all training sessions that involve manipulative exercises.

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.

⁸ Klinoff, Robert. *Introduction to Fire Protection*, Delmar Publishers, 1997. New York, NY.



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 participating agencies. Currently, Bothell, Woodinville, and Northshore Fire Departments are member agencies of the East Metro Training Group, made up of the training divisions of many of the Zone 1 fire departments in eastern King County. Each agency has its own training division, with slight differences in approach but little difference of substance.

Northshore Fire Department operates its own training program with a training director who is an external contractor. NFD is in the process of phasing out the contract director position and establishing a captain position whose primary duties will be managing the training function on a day to day basis. Bothell and Woodinville have combined their training divisions into a single program. A Bothell battalion chief serves as the training officer for both departments and training is fully blended.

All three agencies train and certify their personnel in the National Incident Management System (NIMS) and have up-to-date training policies and safety procedures in place. Valuable standardization has occurred and continues to occur as a result of their membership in the East Metro Training Group.

New recruits are assigned to a full twelve week academy for Firefighter I certification. At Bothell and Woodinville, if a new recruit already possesses Firefighter I certification and their Emergency Medical Technician certification, they are sent to an abbreviated orientation training course which takes about a month. Northshore recruits cannot bypass the recruit academy and continue for an additional nine months to complete a handbook which completes their probationary period and results in a Firefighter II certification.

All three agencies use the Passport Accountability System for incident safety and crew/assignment tracking. All three agencies have in-house expertise assigned to regional technical rescue teams, including high angle, confined space, collapse, and trench rescue personnel certified at the technician level. Each agency also has a certified rescue swimmer assigned to every shift. All other line personnel are trained to the operations level. Bothell and Woodinville have nine hazardous materials technicians within their ranks, who together serve on a regional haz-mat team. Northshore relies upon the regional team for such services. Bothell and Woodinville also receive red card training for wildland firefighting. Northshore does not.

Driver training is conducted for all three agencies following the Emergency Vehicle Incident Prevention (EVIP) course. Washington state compliant firefighter training is conducted for all three agencies,

meeting WAC 296-305 Firefighter Safety Standards and Washington Surveying and Rating Bureau (WSRB) training hour requirements.

Discussion:

ESCI's review of the general training competencies indicates that the agencies adequately address the basic topics that we expect to find in a quality training program. All three agencies have placed an appropriately high level of focus on training, recognizing its critical importance to the safety of their firefighters, as well as their ability to effectively intervene in emergency situations. They train actively, regularly, and interactively between their organizations.

Because of the high frequency of mutual aid responses in the region, the organizations find themselves on the same emergency scenes routinely. For this reason, it is important that the responders train together as often as possible. The organizations' participation in the East Metro Training Group (EMTG) has resulted in regular interaction with regional partners, standardizing approaches to incidents which may call for a high degree of interagency cooperation. The EMTG is a unique and beneficial program that should be continued.

Recommendations:

- Standardize approach to recruit training between the agencies.
- Continue and increase blending of training programs including active participation in the EMTG group.

Training Administration

To function effectively, a training program needs to be actively managed. Administrative program management and support is key to a training program's success. An additional element of effective administration is the development of program guidance in the form of training plans and goals.

As mentioned earlier, Northshore is transitioning from a contracted training director to an internal captain managing the training division and, thus, may be modified. Bothell and Woodinville have a combined, integrated training division with a battalion chief and a captain managing the division. Although some goals and objectives have been developed in Bothell and Woodinville's training division, they are not completely defined. The EMTG is currently developing a written training plan.

All three agencies maintain required training records, such as individual training files and company training files. Daily training activities and records are computerized on Firetrex software for all three agencies. Virtually any training record can be electronically searched using any number of variables, making specific training gaps easier to identify.

Pre-fire plans are included in training at Northshore, but not routinely at Bothell and Woodinville. All three agencies have the same broad training division objective; to maintain Firefighter I and II certifications, EMS certifications and specialty certifications.

Discussion:

A high level of commonality exists between the training programs. The agencies train together often, share similar training emphasis and priorities, use generally common standards and the same reporting software and record keeping practices.

Both training programs are well-developed and managed. Short-term planning is completed on a quarterly basis and scheduled accordingly. An on-line calendar is used to plan and organize class work in various categories. The approach is well developed. Long range program planning, specifically establishing long term program goals and objectives, could be enhanced.

Bothell/Woodinville and Northshore recognize the importance of training Woodinville and Northshore receive adequate funding to sustain their operations and have available funds for use in sending personnel to outside training and to bring in outside instructors. Bothell only has funding for Officer Development Academy and Technical Rescue Training.

If the agencies elect to combine in the future, administrative capacity will need to be considered. Overall workload will increase for the centralized training administrative staff, but opportunities to re-deploy program support staff will present themselves. It will be important to carefully re-evaluate program staffing and how workload will be distributed.

Professional Development

Beyond the regular training offered to general staff, certain individuals should be offered specific officer development training in order to prepare them for more responsibility as they progress through the agency's command structure. Placing individuals in positions of authority without first giving them the tools to succeed often ends in failure and discouragement by both the officer and their subordinates.

The study agencies have a passive approach to officer development by making the King County officer development program available to interested candidates. At Northshore, funding for outside education is provided and the King County officer development certificate is a prerequisite for promotion. Taking the initiative by sponsoring worthy candidates to the King County officer development program is a positive step and more assertive approach to investing in future leadership.

Recommendations:

- Develop a multi-year training plan with defined training goals and objectives as a shared initiative.
- Carefully evaluate the administrative workload that will result, should the agencies combine, to assure that sufficient resources are provided for training delivery, planning, and record keeping.
- Establish a process whereby worthy candidates are sponsored to attend the King County Officer Development program.

Training Resources and Methodology

To be able to deliver effective training to fire and EMS personnel, multiple resources are necessary to arm the trainer with the tools needed to provide adequate educational content. In addition to tools, effective methodologies must be employed if delivery is to be sufficient to meet needs.

All three agencies have adequate training facilities, props, and drill yards available to them. By virtue of its newness, Northshore's facility and training ground at Station 51 is state-of-the-art, complete with live fire props. The site facilitates multi-company evolutions without crowding. Bothell also has a training tower for evolutions, but no props. Bothell and Woodinville also use Northshore's facility and Redmond's Station 17 facility.

All three agencies have sufficient classroom space for didactic training. Each training room is well equipped with audio-visual aids to assist in classroom training.

Discussion:

All three agencies enjoy access to excellent training resources and strong management support for the training function.

Training manuals form the basis upon which ongoing training is structured. Both programs maintain manuals that contain performance standards, lesson plans, and subject-specific training directives. However they differ between organizations and, while appropriately developed, it will be beneficial in the future to establish a single, standardized training manual for use by both, whether as separate or combined organizations.

Recommendation:

- Begin collaboration on the development of a single, standardized training manual.



Periodic Skills Evaluation

It is important that a fire department adopt appropriate standards that set minimum physical capability levels and that demonstrate skills and competence periodically. Regular testing of hands-on skills must be performed to assure that personnel are not only receiving adequate training, but are also able to put their knowledge and skills into practice.

The generally accepted practice is to undergo skills testing on an annual basis, and an annual skills performance testing process is appropriately in place in Northshore. The Bothell/Woodinville program has taken a step further, conducting skills testing on a quarterly basis. All are commended for prioritizing this process and, again, considering the time and effort needed to complete the testing, it would be appropriate to combine the initiatives into a joint program.

Recommendation:

- Continue periodic skills testing initiatives and combine efforts to standardize approach.

FIRE PREVENTION

It is widely acknowledged that it is far more cost-effective to prevent fires than it is to fight them. The financial impact of a fire goes far beyond the cost of extinguishment, representing a far larger cost in the loss that is incurred by an individual building owner and that of lost revenue to a community. A strong fire prevention program, based on effective application of relevant codes and ordinances, reduces loss of property, life, and the personal disruption that accompanies a catastrophic fire.

The fundamental components of an effective fire prevention program are listed in the following table, accompanied by the elements needed to address each component.

Figure 71: Fire Prevention Program Components

Fire Prevention Program Components	Elements Needed to Address Program Components
Fire Code Enforcement	<ul style="list-style-type: none"> Proposed construction and plans review. New construction inspections. Existing structure/occupancy inspections. Internal protection systems design review. Storage and handling of hazardous materials.
Public Fire and Life Safety Education	<ul style="list-style-type: none"> Public education. Specialized education. Juvenile fire setter intervention. Prevention information dissemination.
Fire Cause Investigation	<ul style="list-style-type: none"> Fire cause and origin determination. Fire death investigation. Arson investigation and prosecution.

The participating agencies have varying degrees of fire prevention activity based on various authorities. Each has a healthy appreciation for the importance of fire prevention and public education; however they exercise these programs differently. In all three agencies (four jurisdictions), the 2012 Washington State Fire & Building Code is utilized as per the International Code Council (ICC). The King County Fire Marshal has jurisdiction in unincorporated King County and the Snohomish County Fire Marshal has jurisdiction in unincorporated Snohomish County. The cities each have their own authority, but rely upon the same codes (with local exceptions by council amendment).

Woodinville Fire & Rescue discontinued its fire prevention program within the City of Woodinville in 2011, turning the responsibility back to the City of Woodinville. Further, it relinquished activity in unincorporated King County, citing a lack of statutory authority for enforcing the fire code.

Fire Safety Code Enforcement and Inspection Programs

A fire department should actively promote fire resistive construction, built-in warning and fire suppression systems, and effective administration of applicable fire codes and ordinances. Doing so not only protects an individual property owner’s interests, but also community safety and economic viability overall.



Discussion:

In this study area, fire and life safety code enforcement efforts are addressed in various ways, both internal to the organizations and external. Bothell (including District 10) and Northshore have established fire marshal positions and staffed effective fire prevention functions within their organizations. The City of Woodinville has taken back its autonomous authority to enforce codes within the city limits from Woodinville Fire & Rescue. That responsibility now lies within the City of Woodinville. City staff is currently conducting operational (permitted) inspections. Outside of the city limits, code enforcement authority is held by the King County Fire Marshal.

All of the participating agencies have adopted the 2012 Washington State Fire and Building Code, which is founded on the International Code Council (ICC) model codes. The cities served by the agencies have also adopted the code, where applicable. It is the most current set of codes available and adoption is consistent with industry best practices. Further, similar local amendments have been established collaboratively between the participants. Adoption of common codes and amendments is advantageous in the context of combining the study agencies under an RFA, in that conflicting codes do not exist.

BF&EMS

Bothell's fire prevention efforts are addressed in a Community Risk Reduction Division (CRR) which is divided into three sections: Code Compliance, Public Education, and Safety and Support Services. The latter is a logistics function, addressing a variety of tasks including fleet maintenance, IT, facilities, communication equipment, and other roles. CRR fire inspections are supported by engine company personnel that review non-permitted, lower risk occupancies.

Bothell's CRR appropriately reviews plans for new construction building permits to assure fire and life safety concerns are addressed appropriately. In addition, inspections of existing occupancies are performed, with a goal of inspecting all buildings annually. Inspections are performed by CRR personnel in higher risk category structures.

Public education outreach is appropriately prioritized in Bothell. 1.5 FTE are assigned to the function. ESCI's review of the department's public education efforts finds that it is addressed well.

NFD

A "Fire Prevention Division" is also established in Northshore, staffed by a fire marshal and one fire inspector. There is no dedicated public education position in place and staffing of the function is relatively light.

The division actively participates in the building permit process in the cities of Lake Forest Park and Kenmore, completing fire and life safety reviews of applications to assure compliance with the adopted codes and ordinances. In addition, existing occupancy inspections are completed by a combination of Fire Prevention Division staff and engine company line personnel.

With regard to existing occupancy code enforcement, Northshore conducts inspections as follows: Occupancies that require an occupancy permit under the fire code (essentially, higher risk categories) are inspected annually by the Fire Prevention Division staff on an annual review schedule. Those that do not require a permit are inspected by engine company crews. Most of the latter are scheduled to be inspected annually, but a number are considered as lower risk categories and are visited on a biennial basis.

WF&R

Woodinville had a Community Risk Reduction Division that was dismantled in 2011 when the ILA between the City of Woodinville and the district was discontinued. The lack of direct involvement by the fire department in code enforcement and new construction review compromises the ability to assure the structures are constructed and maintained in a fire safe manner. The building official and county fire marshal staff are challenged in terms of workload and staffing capacity to provide the level of attention in this area that was previously in place. For that reason, it is recommended that Woodinville restore its community risk reduction presence, either independently or as a part of a larger based cooperative effort. The district is currently working with the City of Woodinville to increase the district's involvement in community risk reduction.

Recommendation:

- Prioritize the restoration of fire and life safety code enforcement in Woodinville, as either a stand-alone or a collaborative initiative.

Fire Safety and Public Education

One of the most effective ways to prevent the occurrence of fires is by effectively educating the public so that they can minimize their own exposure to fire and health issues and so that they can respond effectively when faced with an emergency.

Discussion:

Public education efforts are highly prioritized in Bothell, where 1.5 FTE public education/public information officers are dedicated to the program. Northshore and Woodinville do not have dedicated public education staff and provide services as an additionally assigned duty to other personnel.

All three agencies address the majority of the fundamental areas that are typically found in an appropriate public education outreach effort, though Bothell's program is more assertive, given the dedicated staff. Even so, the outreach need is considered a priority in all three agencies.

The programs are operated independently of each other and with limited personnel resources overall. This presents an opportunity to pursue a shared public education strategy between the participating agencies, and effort that is recommended.



Recommendation:

- Pursue efforts to collaborate on fire and life safety public education initiatives and take steps to establish a shared program.

Fire Investigation

A sometimes under-appreciated component of fire prevention programs overall is that of assuring that the cause of a fire that has occurred is effectively identified so that public education and code enforcement efforts can be targeted toward identified causes. Fire cause determination is not limited to intentionally caused incidents, but includes all forms of accidental fires, as well.

Discussion:

Community education can be targeted when the primary causes of fires in the community are accurately identified. Additionally, the need for code changes and modification of fire department deployment and training emphasis also benefit. Definition of the community's fire problem can be achieved via effective fire cause determination.

Fire cause and origin determination in the study agencies starts with the fire officer on the scene of a fire. At a small incident, it may be a company officer that determines whether a fire is accidental or suspicious. If on-scene personnel view a fire as one of suspicious origin, or are unsure about the fire's cause, in Bothell and Northshore, they will request assistance from their respective fire marshal's office. The investigator will process accidental fires and suspicious fires will be referred to the local police department or county sheriff's office for processing. The fire marshals are actively involved in and appropriately trained for fire cause and origin determination practices.

The exception is in Woodinville, where investigations are handled differently. The city contracts with the King County Fire Marshal's office for fire investigation services. The King County Fire Marshal's Office has jurisdictional authority in unincorporated King County as well. As with the other agencies, line personnel conduct a preliminary review, but refer further investigation to the county.

A regional Fire Investigation Team (FIT) has not been established in the study area. A FIT offers a valuable approach to assuring that fire cause, origin, and prosecution is fully effective by involving personnel from multiple disciplines, expanding the resource base from which investigators can draw. Development of a regional FIT is recommended.

Data collection and processing with regard to fire cause determination is appropriately completed and documented in the study area. Northshore and Woodinville periodically analyze the data regarding how fires are occurring for use in the development of community educational outreach, a practice that should be considered in Bothell, as well

Recommendation:

- Establish a joint agency Fire Investigation Team serving all study agencies.
- Complete periodic analysis of fire cause data in Bothell to identify trends and prioritize public education outreach needs.

EMERGENCY COMMUNICATIONS

Communication center operations are essential, directly affecting fire and EMS response times, service levels, overall service delivery, and customer satisfaction. Dispatch operations are integral to a successful emergency operation, starting with the initial “alarm” and continuing until units are available for redeployment.

The study area agencies are dispatched from a single 911 center, the *North East King County Regional Public Safety Communications Agency*, commonly identified as “NORCOM”. The dispatch center is configured as a secondary “Public Safety Answering Point” (PSAP) which means that, depending on the location from which an emergency call originates, it is transferred from the point of origin to NORCOM for processing. In this instance, fire and EMS calls are most often received initially by the city of Bothell Police Department or King County Sheriff’s Office, the primary PSAPs, and then relayed to NORCOM. ESCI interviewed NORCOM staff to review the operation.

Discussion

ESCI observed that NORCOM is a high quality, professionally managed dispatch center. Professional policies, standards, and operational practices that are expected in a modern 911 operation are found in this instance. Call processing times are appropriate and protocols are in place for handling requests for service.

Numerous best practices and standards are in place that can and should be incorporated into dispatch center operations, including:

- National Emergency Number Association (NENA)
- Associated Public Safety Communications Officials (APCO)
- National Fire Protection Association (NFPA)
- Commission on Fire Accreditation International (CFAI)
- Commission on Accreditation for Law Enforcement Agencies (CALEA)

Information developed in the course of ESCI’s interview indicated that the above standards are incorporated into the NORCOM operations with the exception of CALEA Accreditation. Accreditation is viewed as an important undertaking and ESCI was informed that the organization is in the process of completing the process. Continued pursuit of CALEA accreditation is recommended.

Recommendation:

- Complete the process of seeking accreditation at NORCOM.

FISCAL ANALYSIS OF CURRENT CONDITIONS

Budgeting and fiscal management are two key components to the health and stability of any organization. With the downturn in the national economy local government agencies have been challenged to provide the same high level of service while facing rising costs and reduced revenues. Many public entities have experienced a flattening, or downturn, in their revenue growth over the past several years. There are many factors that can affect governmental revenues but the most significant are the annual changes in property value assessments and the subsequent property taxes. The financial crisis of 2008 and resulting economic downturn saw home foreclosures and tight credit across the nation and throughout Washington State which resulted in dramatic reductions in property values. Moreover, new commercial and residential development slowed, further exacerbating the value losses.

Controlling expenses is vital to healthy fiscal management and it too has become more challenging to manage. When inflation outpaces revenue growth, as it has over the past several years, budgets have to be reduced or reserves (if available) have to be tapped to make up for the revenue shortfall. Because of the uncertainty of revenue and inflation long-range forecasting of operating expenses and capital assets are essential. Projecting the growth of salaries, wages, and benefits based on their historical inflation and known increases must be monitored and adjusted regularly. Forecasting long-range capital asset improvements and replacements is especially important for fire districts and fire departments because of the costs of apparatus, facilities, safety equipment, communications, and information technology.

From the financial standpoint, preserving and growing capital reserves (or fund balance), while providing the level of service and maintaining or growing existing assets, is the ultimate goal of financial management and planning. Having healthy capital reserves allows an organization to weather a financial downturn, or purchase capital assets without the need for capital bonds.

Economic Indicators

Overall, the national and local economies have shown slow but steady growth for the past three years. Worries of a double-dip recession have given way to an outlook of continued growth. Analyzing economic indicators inform the follow-on revenue and expense projections later in the study.

The three most significant and available indicators that affect local government revenues are **home sales, employment, and inflation**. Home sales can have the most direct impact by way of property taxes, but the two year delay between the changes in the home market and the time that the values are adjusted by the assessors has to be factored into projections. Currently all three indicators are showing positive signs; home sales in each of the local markets have shown stable growth since 2010, unemployment has been improving, and inflation is still well under control.

Historic Residential Property Sales

Each year county assessors analyze property sales data to establish the adjustments (based on the changes in the housing market) for each property's assessed value and to bring it to its "true and fair market value." This process of value adjustment analyzes a prior year's data in the year following when

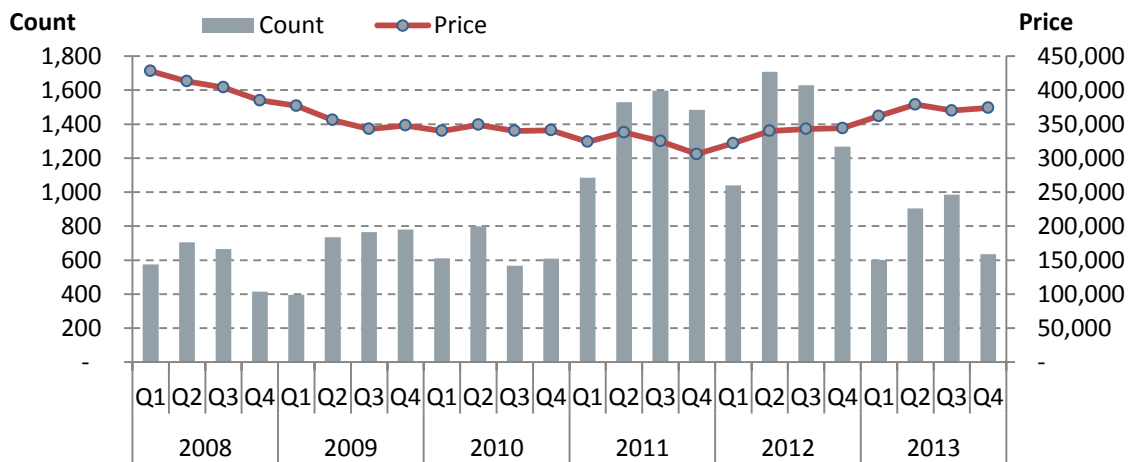
the sales occurred, but the adjustments are not effective until the year following that. Meaning any increases reported from home/property sales during 2013 will not be adjusted until the 2015 tax year.

This is important as both nationally and across Washington State 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, yet these increases were not realized by taxing districts until the 2014 tax year.

The following figures record the number (count) of home sales within the specific market areas of each agency in this study, as well as the median sales price (based on the sales in each related quarter reported). Each of the market's median home prices has been trending upward for six consecutive quarters, and the quantity (count) of total sales each quarter is returning to pre-downturn levels.

The following figure displays home sales and the median sales prices for the Bothell market (useful for both BF&EMS and Snohomish County 10 Fire's service areas) between Q1 2008 and Q4 2013. The median sale price bottomed out in Q4 2011 at ~\$305,000 but has been trending upward since. The volume of sales appears to be returning to 2008 levels while sales price was hovering around \$375,000 at the end of 2013, still below the high of ~\$440,000 in early 2008. The growth from 2012 was reflected in the 2014 tax roll values (the current year). But the growth seen in 2013 will not be reflected until the 2015 assessed valuation (the first year of our forecasts that follow).

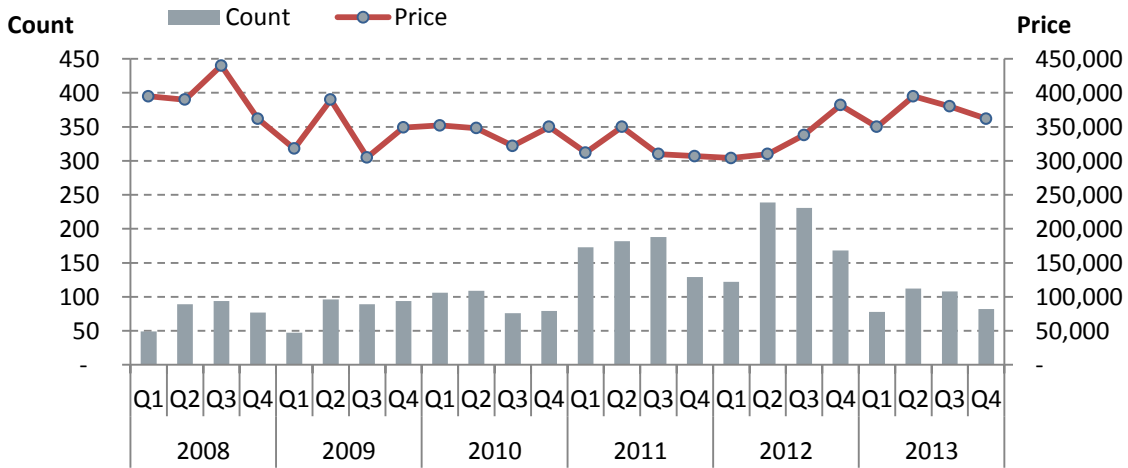
Figure 72: Bothell WA - Home Sales, 2008 - 2013



The next figure displays home sales and the median sales prices for the Kenmore market (Northshore Fire's service area) between Q1 2008 and Q4 2013. The median sales price bottomed out in Q4 2012 at ~\$300,000 but grew sharply through 2012 and leveled off during 2013. The volume of sales appears to be returning to 2008 levels while sales price was hovering around \$350,000 at the end of 2013, still below the high of ~\$450,000 in mid-2008. The growth from 2012 was reflected in the 2014 tax roll values (the current year). But the mild growth seen in 2013 will not be reflected until the 2015 assessed valuation (the first year of our forecasts that follow).

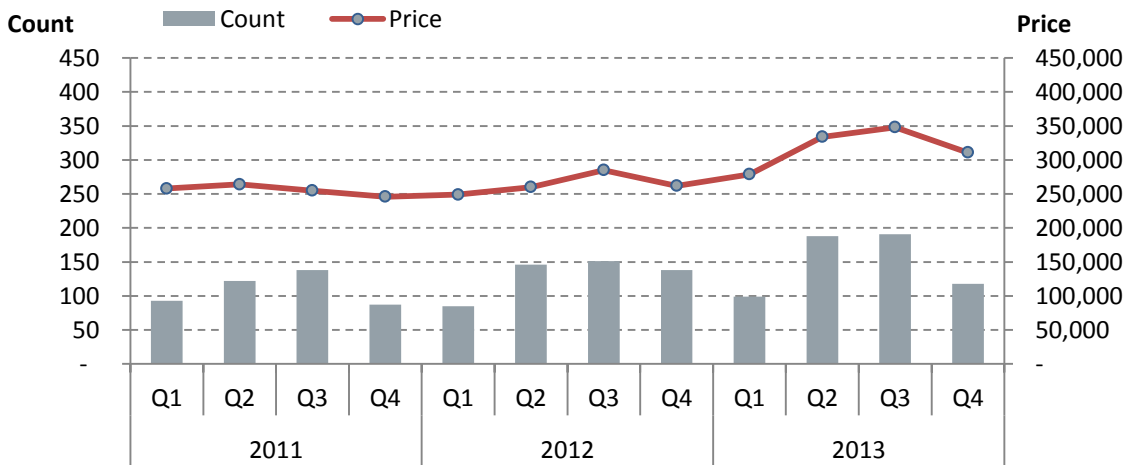


Figure 73: Kenmore, WA - Home Sales, 2008 - 2013



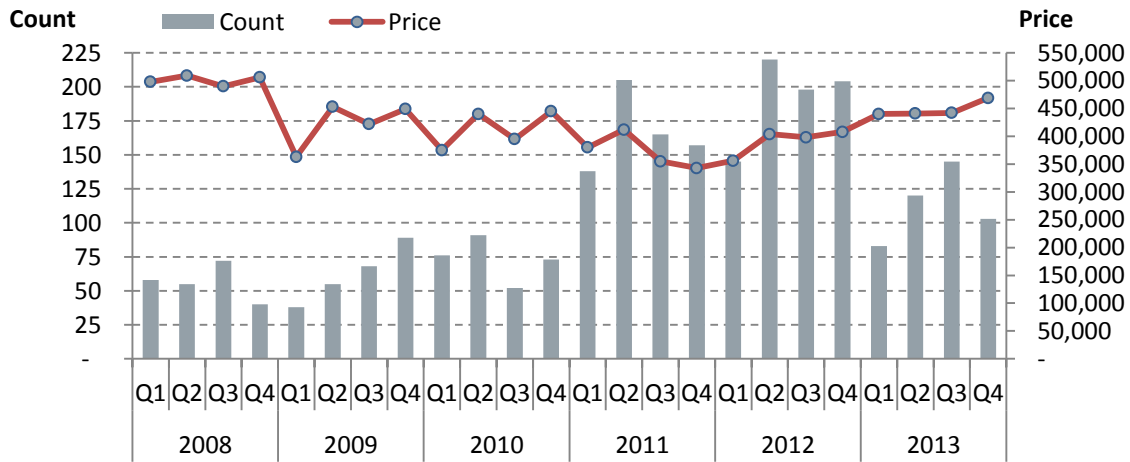
The figure below displays home sales and the median sales prices for the Lake Forest Park market (one of the markets served by Northshore Fire) between Q1 2011 and Q4 2013 (sales data prior to 2011 was not available). The median sales price was stable at ~\$250,000 to ~\$300,000 through 2011 and 2012. Since 2012 the median price has been trending upward. The mild growth from 2012 was reflected in the 2014 tax roll values (the current year). But the growth seen in 2013 will not be reflected until the 2015 assessed valuation (the first year of our forecasts that follow).

Figure 74: Lake Forest Park - Home Sales, 2011 - 2013



The next figure displays home sales and the median sales prices for the Woodinville market between Q1 2008 and Q4 2013. The median sales price bottomed out in Q4 2011 at ~\$245,000 and has grown steadily since. The volume of sales through 2013 was running historically high, still well above the 2008 levels. The strong growth from 2012 was reflected in the 2014 tax roll values (the current year). The continued solid growth seen in 2013 will not be reflected until the 2015 assessed valuation (the first year of our forecasts that follow).

Figure 75: Woodinville Home Sales, 2008 - 2013

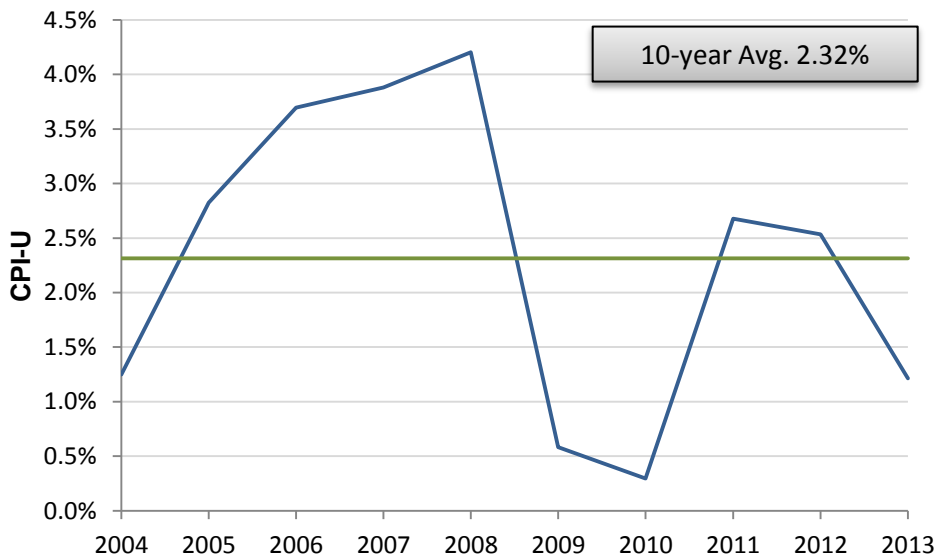


CPI/Inflation

Inflation is 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 2004 through the 2013 period for the Seattle-Tacoma-Bremerton, WA statistical area as compiled by the U.S. Department of Labor.

The figure below charts the historical and 10-year average CPI-U inflation rates from 2004 through 2013. The 2013 average rate was 1.22% running a little more than one point lower than the 10-year average of 2.32%. These low inflation rates should bode well for tight budgets over the coming years.

Figure 76: Historic and 10-Year Average CPI-U Chart, 2004-2013



The following table lists the average annual CPI-U rate by year with the 10-year average at the bottom.



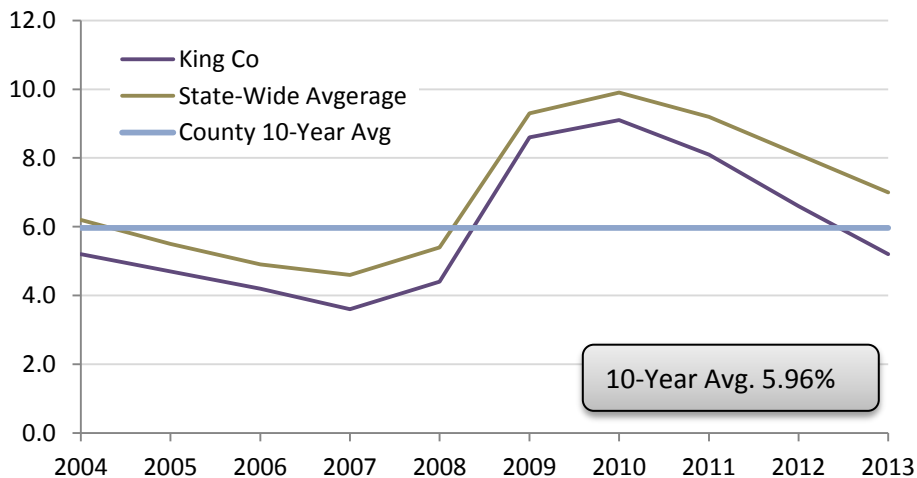
Figure 77: Historic and 10-Year Average CPI-U Table, 2004-2013

Year	CPI-U
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%
2013	1.22%
10-Year Avg.	2.32%

Unemployment Rate

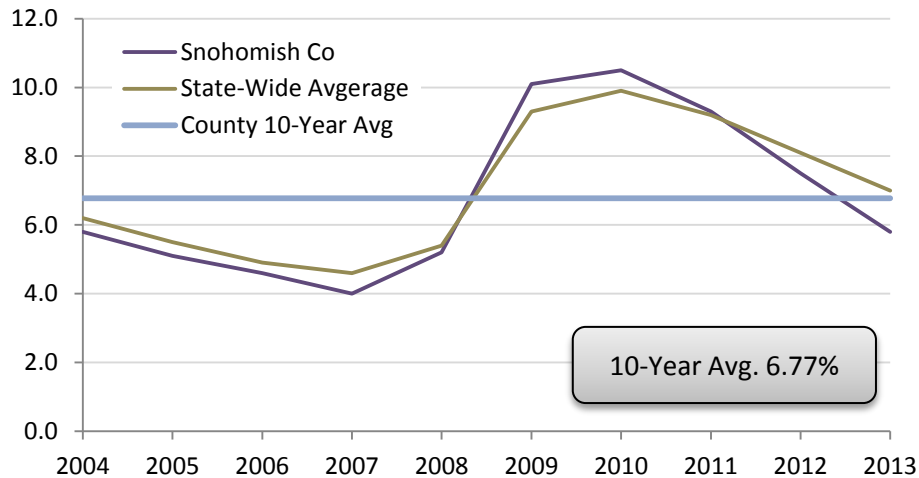
The level of employment in the region could potentially impact the number of homes sold and ultimately the sales price. The following figure displays the historical average unemployment rate in King County and the state-wide Washington average. Unemployment in King County has been trending down since 2010. In 2013 the rate fell below the 10-year average at 5.20%. It is anticipated that unemployment will continue to improve and that the downward trend will continue beyond 2014.

Figure 78: Historic King County and State-Wide Unemployment Rates, 2004-2013



The next figure displays the historical average unemployment rate in Snohomish County and the state-wide Washington average. Unemployment in King County has been trending down since its high of 10.50% in 2010. In 2013 the rate fell to 5.80% nearly a point below the 10-year average of 6.77%. It is anticipated that unemployment will continue to improve and that the downward trend will continue beyond 2014.

Figure 79: Historic Snohomish County and State-Wide Unemployment Rates, 2004-2013



Property Tax Considerations

In the State of Washington property tax is administered by local governments. County assessors value and assess the tax, and county treasurers are responsible for collecting and distributing it. Property tax revenue is typically a significant portion of taxing district operating budgets.

Washington Tax Limitations

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

- Levy limit (aka 101 percent)
- Taxing District 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 their budgetary limitations.

Second, taxing districts have **statutory limits** on their regular levy rates. Cities standard base limitation is \$2.875 per \$1,000 of assessed value. In addition, cities that have an old fire pension plan can increase the base limit by \$0.225 per \$1,000 of assessed value, or cities with annexations to a library district can increase the base limit by \$0.50 per \$1,000 of assessed value. The maximum combined city Current



Expense levy is \$3.60 per \$1,000 of assessed value. EMS levies are limited to \$0.50 per \$1,000 of assessed value.

Next, the **\$5.90 aggregate limit** for all senior and junior taxing districts (not including, state, port districts, and public utility districts, emergency medical levies, and conservation futures) cannot exceed \$5.90 total rate.

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.

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 King and Snohomish 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 data, and allowing for statistical testing. The assessors use local market data, based on actual property sales transactions, as one of the primary factors used to produce the yearly adjustments to assessed values.

Each year the appraisal process uses the prior year’s sales data as the basis for adjustments to the following year’s values. For example: 2010 sales data was not represented in assessed values until the 2012 tax year. This two year lag should be considered when relating market trends with the changes in assessed values, in addition to other variables such as exemptions and reductions (which are difficult to forecast).

The figure below lists the *Expense Levy Assessed Values (AV)* for each of the four agencies. All four saw dramatic losses between 2010 and 2013. In 2014 The City of Bothell annexed ~\$813M of AV into its service area. Of this ~\$620M was annexed from WF&R’s service area.

Figure 80: Historic Assessed Values, 2010 - 2014

	2010	2011	2012	2013	2014
Bothell	6,564,250,398	6,317,709,519	5,887,942,853	5,784,172,090	6,941,996,433
Northshore	5,116,354,907	4,994,054,235	4,661,040,518	4,617,034,865	4,909,399,732
Woodinville	8,516,178,357	8,193,289,838	7,139,766,111	6,945,111,363	6,893,766,642
Snohomish #10	1,054,967,158	969,533,334	868,841,400	843,579,780	935,558,568

The next figure displays the year-over-year (y/y) AV growth/loss percentages for each agency. Every agency saw y/y losses from 2011 through 2013. In 2014 all but Woodinville had growth; this was due to the annexation of ~\$620M of AV to Bothell.

Figure 81: Year-Over-Year Assessed Value Growth/Loss, 2010 - 2014

	2010	2011	2012	2013	2014
Bothell	0.0%	-3.8%	-6.8%	-1.8%	20.0%
Northshore	0.0%	-2.4%	-6.7%	-0.9%	6.3%
Woodinville	0.0%	-3.8%	-12.9%	-2.7%	-0.7%
Snohomish #10	0.0%	-8.1%	-10.4%	-2.9%	10.9%

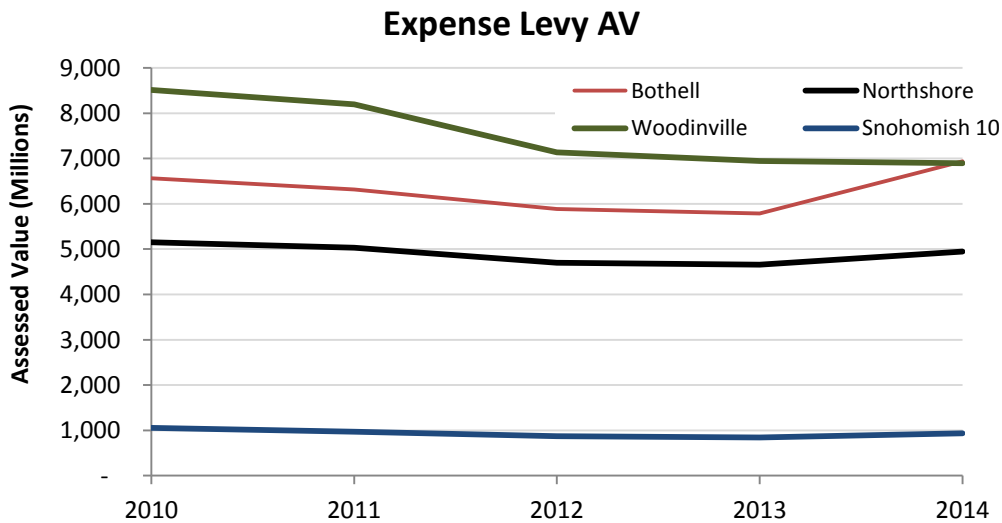
The following figure displays the cumulative AV growth/loss between 2010 and 2014. Bothell is the only agency to make up for the losses over the past five years, this was primarily due to the ~\$813M of annexed AV in 2014.

Figure 82: Cumulative AV Growth/Loss, 2010 - 2014

	2010	2011	2012	2013	2014
Bothell	0.0%	-3.8%	-10.3%	-11.9%	5.8%
Northshore	0.0%	-2.4%	-8.9%	-9.8%	-4.0%
Woodinville	0.0%	-3.8%	-16.2%	-18.4%	-19.1%
Snohomish #10	0.0%	-8.1%	-17.6%	-20.0%	-11.3%

The figure below charts each agencies AV by between 2010 and 2014 graphically.

Figure 83: Historic AV Chart, 2010 - 2014



New Construction

Washington property tax limitations exclude new construction in the first year that the property comes onto the tax roll. This can allow taxing district 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.

The figure below lists each agency’s new construction by year between 2010 and 2014.



Figure 84: New Construction, 2010 - 2014

	2010	2011	2012	2013	2014
Bothell	97,762,842	96,323,484	82,806,144	67,294,471	60,860,502
Northshore	43,200,350	37,093,309	35,902,152	34,679,257	41,754,062
Woodinville	30,710,648	30,393,193	24,258,219	26,831,554	36,989,229
Snohomish #10	7,800,755	5,865,415	15,368,100	13,619,300	15,779,000

Banked Capacity

Banked capacity is the difference between the highest prior total levied amount that was imposed in any given year compared to the actual amount levied in the years reported. The amount of banked capacity usually changes each year because the highest prior levy and the actual levy are recalculated each year. Having banked capacity in one year does not guarantee a banked capacity in future years.

If a taxing district levies less than their highest lawful levy, they will have banked capacity. If a district levies at their highest lawful levy, they will not have banked capacity.

However, the ability of a taxing district to “tap” their banked capacity is limited by the **statutory rate limits** (described above, mainly the \$1.50 Fire or \$0.50 EMS limitations).

The next figure lists each agency’s Expense Levy Banked Capacity between and 2010 and 2014.

Figure 85: Banked Capacity, 2010 – 2014

	2010	2011	2012	2013	2014
Bothell	3,934,024	-	4,029,824	4,164,381	4,173,786
Northshore	-	-	-	43,841	-
Woodinville	-	-	625,617	796,297	247,560
Snohomish #10	296,320	308,426	327,741	327,741	298,110

District and Department Review

In this section we will look at each of the fire districts and departments in this study. The review period includes the fiscal years from 2010 to 2014. In each table of the review the data in years 2010 through 2013 are “actuals” unless stated otherwise, whereas the 2014 amounts are budgeted amounts.

BF&EMS

BF&EMS is a department of the City of Bothell and largely funded by the City’s Expense/General Fund which draws from many sources other than property taxes which are distributed to its many departments. Because of this the City’s Expense levy is not directly applicable to the fire department. The fire department’s direct revenue sources such as: EMS services, transports, charges for fire services, fees and inspections, and miscellaneous sources combined have averaged approximately 30 percent of the department’s total resource needs over the five year period. The roughly 70 percent needed to fund the operating expenses and capital needs is funded via the City’s Expense/General Fund.

The figure below lists the City of Bothell’s AV and levy rate history. The AV (Expense), as well as the New Construction (Expense), amounts are the combination of property within both King and Snohomish

Counties. The 2014 AV amounts include the value from nine annexations totaling approximately \$813M. Of that, \$620,694,490 had been within WF&R’s service area. These annexations resulted in a 20.0 percent growth in AV from 2013 to 2014 for the City. Without the annexations the City would have seen 6.0 percent growth over 2013.

The AV (EMS) and New Construction (EMS) amounts are from Snohomish County only. This is because the City does not directly levy for EMS in King County. In King County the EMS revenue is distributed from the County, and not directly based on AV, so it hasn’t been listed with the Charges for Goods and Services below in the Revenue History table. The EMS Levy Rate listed below pertains only to Snohomish County. Also listed below is the Bond Levy Rate which is for the debt service of the City’s capital debt, none of which relates to the fire department.

Figure 86: City of Bothell AV and Levy Rate History, 2010 - 2014

	2010	2011	2012	2013	2014
Assessed Value (Expense)	6,564,250,398	6,317,709,519	5,887,942,853	5,784,172,090	6,941,996,433
New Construction (Expense)	97,762,842	96,323,484	82,806,144	67,294,471	60,860,502
Total AV (Expense)	6,662,013,240	6,414,033,003	5,970,748,997	5,851,466,561	7,002,856,935
Assessed Value (EMS)	3,259,610,183	3,073,475,024	2,783,336,543	2,782,171,373	3,013,833,447
New Construction (EMS)	26,413,987	43,741,100	29,620,820	22,006,434	24,207,215
Total AV (EMS)	6,590,664,385	6,361,450,619	5,917,563,673	5,806,178,524	6,153,203,648
Expense Levy Rate	1.294	1.369	1.484	1.541	1.491
Non-Voted Bond Levy Rate	-	-	-	-	-
EMS Levy Rate	0.250	0.266	0.403	0.419	0.400
M&O Levy Rate	-	-	-	-	-
Bond Levy Rate	0.222	0.247	0.265	0.252	0.214
Total Rate	1.766	1.882	2.152	2.212	2.105

The following figure lists BF&EMS’s direct revenues as well as the amount calculated to balance the revenues with the expenditures which is listed at the bottom of the table in the Transfers-In line. The EMS Levy revenue is from the Snohomish County levy only. The EMS revenue from King County is listed in the Charges for Goods/Services line along with the Snohomish #10 service contract amounts and the Woodinville Administrative ILA contract amounts.



Figure 87: BF&EMS Revenue History, 2010 - 2014

Revenue	Actuals				Budget
	2010	2011	2012	2013	2014
Current Expense Levy	-	-	-	-	-
EMS Levy	639,551	649,095	833,363	844,400	885,769
M&O Levy	-	-	-	-	-
Total Property Taxes	639,551	649,095	833,363	844,400	885,769
Licenses and Permits	-	-	-	-	-
Intergovernmental Revenues	43,728	34,263	26,175	36,861	20,000
Charges for Goods/Services	1,687,181	1,755,795	2,002,319	2,241,757	2,420,549
Fines and Penalties	1,860	1,471	10,244	7,256	3,000
Miscellaneous Revenues	4,314	17,568	8,103	100,120	-
Proprietary/Trust Income	-	-	-	-	-
Non-Revenues	-	-	-	-	-
Proceeds of Long-Term Debt	-	-	-	-	-
Total Other Revenues	1,737,083	1,809,096	2,046,840	2,385,995	2,443,549
Transfers In	6,804,688	6,692,233	6,534,946	6,667,848	6,518,429
Total Revenue	9,181,323	9,150,424	9,415,149	9,898,242	9,847,747

The figure that follows lists BF&EMS's expense history between 2010 and 2013 (actuals) and 2014 (budgeted). Over the five year period, Salary and Wages grew by only 5.0 percent while Personnel Benefits grew by 26.6 percent. The fire department was able to control Supplies and Services extremely well over the period. Supplies went down by 38.9 percent over the five years and Services was cut by 32.6 percent. In total expenses only grew by 7.3 percent over the years reviewed.

Unlike fire districts, BF&EMS does not incur administrative costs such as costs related to Finance/Accounting, Human Resources, Information Technology, and Facilities which are provided by the City's other departments. These costs are not reflected in the numbers below and need to be considered when comparing agencies existing costs.

Figure 88: BF&EMS Expense History, 2010 - 2014

Expenditures	Actuals				Budget
	2010	2011	2012	2013	2014
Salary and Wages	6,328,909	6,513,151	6,681,598	6,892,452	6,648,472
Personnel Benefits	1,596,894	1,764,571	1,812,656	1,787,055	2,022,043
Supplies	211,790	149,137	152,920	120,798	129,398
Services	173,246	93,217	118,312	143,908	116,725
Intergovernmental Services	542,926	531,294	542,942	647,277	622,500
Total Operating Expenses	8,853,766	9,051,370	9,308,428	9,591,490	9,539,138
Capital Outlays	-	-	-	-	-
Debt Service: Principal	-	-	-	-	-
Debt Service: Interest	-	-	-	-	-
Interfund Payments	327,557	99,054	106,721	306,752	308,609
Total Expenditure	9,181,323	9,150,424	9,415,149	9,898,242	9,847,747

The figure below lists each of the expenditures as a percentage of the total and by year. Salaries and Wages combined with Personnel Benefits has accounted for approximately 90 percent of the BF&EMS's total expenses throughout the five year period. Over the period, the total Operating Expenses have been between 96.4 percent and 98.9 percent of the total annual expenses.

Figure 89: BF&EMS Expenditure History (as percentage of total), 2010 - 2014

Expenditures	Actuals				Budget
	2010	2011	2012	2013	2014
Salary and Wages	68.9%	71.2%	71.0%	69.6%	67.5%
Personnel Benefits	17.4%	19.3%	19.3%	18.1%	20.5%
Supplies	2.3%	1.6%	1.6%	1.2%	1.3%
Services	1.9%	1.0%	1.3%	1.5%	1.2%
Intergovernmental Services	5.9%	5.8%	5.8%	6.5%	6.3%
Total Operating Expenses	96.4%	98.9%	98.9%	96.9%	96.9%
Capital Outlays	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Service: Principal	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Service: Interest	0.0%	0.0%	0.0%	0.0%	0.0%
Interfund Payments	3.6%	1.1%	1.1%	3.1%	3.1%
Total Expenditure	100.0%	100.0%	100.0%	100.0%	100.0%

The next figure is a hypothetical fund balance history over the five years reviewed and lists the revenues and expenditures. Being funded via the City's Expense/General Fund there essentially isn't a Beginning or Ending Fund Balance as would be associated with a fire district. This should also be considered in that BF&EMS ultimately doesn't have a designated fund balance or reserves as fire districts typically do.

Figure 90: BF&EMS Hypothetical Fund Balance History, 2010 - 2014

Current Expense / General Fund	Actuals				Budget
	2010	2011	2012	2013	2014
Beginning Fund Balance	-	-	-	-	-
Revenues	9,181,323	9,150,424	9,415,149	9,898,242	9,847,747
Expenditures					
Salary and Wages	6,328,909	6,513,151	6,681,598	6,892,452	6,648,472
Personnel Benefits	1,596,894	1,764,571	1,812,656	1,787,055	2,022,043
Supplies	211,790	149,137	152,920	120,798	129,398
Services	173,246	93,217	118,312	143,908	116,725
Intergovernmental Services	542,926	531,294	542,942	647,277	622,500
Capital Outlay & Transfers	327,557	99,054	106,721	306,752	308,609
Total Expenditures	9,181,323	9,150,424	9,415,149	9,898,242	9,847,747
Ending Fund Balance	-	-	-	-	-



NFD

The following figure depicts Northshore’s Assessed Value and Levy Rate history between 2010 and 2014. Due to the strong AV growth of 6.3 percent in 2014 the total combined loss of AV since 2010 was held to 4.0 percent overall over the five years. With the strong growth in 2014, continued stable growth is expected. Neither AV nor a Levy Rate pertains to or is listed below for Northshore’s EMS because King County distributes EMS service revenue directly to service providers. NFD accounts for their EMS service revenue, along with their Fire Benefit Charge, within Charges for Good and Services which is listed below in the Revenue History table.

Figure 91: NFD - AV and Levy Rate History, 2010 - 2014

	2010	2011	2012	2013	2014
Assessed Value (Expense)	5,116,354,907	4,994,054,235	4,661,040,518	4,617,034,865	4,909,399,732
New Construction (Expense)	43,200,350	37,093,309	35,902,152	34,679,257	41,754,062
Total AV (Expense)	5,159,555,257	5,031,147,544	4,696,942,670	4,651,714,122	4,951,153,794
Assessed Value (EMS)	-	-	-	-	-
New Construction (EMS)	-	-	-	-	-
Total AV (EMS)	-	-	-	-	-
Expense Levy Rate	0.87	0.92	0.99	1.00	0.97
Non-Voted Bond Rate	-	-	-	-	-
EMS Levy Rate	-	-	-	-	-
M&O Levy Rate	-	-	-	-	-
Bond Levy Rate	0.18	0.22	0.23	0.25	0.22
Total Rate	1.05	1.14	1.22	1.25	1.19

The next figure shows Northshore’s Fire Benefit Charge (FBC) and calculated Effective Rate based on the total AV. This has been done for comparison purposes and to evaluate the total Combined Effective Rate which includes the Northshore’s Expense Levy and Bond Levy Rate.

Figure 92: NFD - Fire Benefit Charge, 2010 - 2014

	2010	2011	2012	2013	2014
Fire Benefit Charge (FBC)	3,211,186	2,879,391	2,800,000	2,300,000	2,500,000
Effective FBC Rate	0.63	0.58	0.60	0.49	0.51
Combined Effective Rate	1.68	1.72	1.82	1.74	1.70

The following figure lists NFD’s Revenue History between 2010 and 2014. Compared to 2010, Northshore’s total revenue in 2014 was 8.8 percent lower than five years before. Over the five year period the combination of property tax revenue, EMS revenue from King County, and the FBC averaged 97.0 percent of Northshore Fire’s total revenue.

Figure 93: NFD - Revenue History, 2010 - 2014

Revenue	Actuals				Budget
	2010	2011	2012	2013	2014
Total Net Taxes	4,464,279	4,606,396	4,645,931	4,639,436	4,765,499
Licenses and Permits	31,829	33,278	31,865	40,715	35,000
Intergovernmental Revenues	29,512	32,718	26,255	32,501	28,400
Charges for Goods/Services	3,559,500	3,236,871	3,157,565	2,694,934	2,851,604
Fines and Penalties	36,300	42,900	53,600	25,400	20,000
Miscellaneous Revenues	62,145	37,873	63,964	44,949	37,000
Proprietary/Trust Income	-	-	-	-	-
Non-Revenues	81,806	118,682	219,965	2,628	-
Proceeds of Long-Term Debt	-	-	-	-	-
Total Other Revenues	3,801,092	3,502,322	3,553,214	2,841,128	2,972,004
Transfers In	-	-	-	-	-
Total Revenue	8,265,371	8,108,718	8,199,145	7,480,564	7,737,503

The figure below lists Northshore’s expense history between 2010 and 2013 (actuals) and 2014 (budgeted). Over the five year period Salary and Wages grew by only 4.1 percent while Personnel Benefits grew by 33.2 percent. The fire district’s total operating costs increased by 10.5 percent over the five years.

The amounts listed as Transfers-Out between 2010 and 2013 represent Northshore’s funding of their Reserve Funds listed in the earlier figure as well as their Capital Projects Fund.

Figure 94: NFD - Expenditure History, 2010 - 2014

Expenditures	Actuals				Budget
	2010	2011	2012	2013	2014
Salary and Wages	4,771,724	4,736,017	4,765,744	4,718,388	4,965,551
Personnel Benefits	1,128,243	1,111,845	1,111,461	1,327,968	1,503,099
Supplies	130,262	134,774	108,785	130,838	143,540
Services	858,732	812,023	779,983	764,934	975,470
Intergovernmental Services	22,763	4,742	55,914	77,454	46,800
Total Operating Expenses	6,911,724	6,799,401	6,821,886	7,019,582	7,634,460
Capital Outlays	313	-	-	-	-
Debt Service: Principal	-	-	-	-	-
Debt Service: Interest	-	-	-	-	-
Transfers-Out	2,286,286	1,024,081	1,039,927	350,084	1,426,000
Total Expenditure	9,198,323	7,823,482	7,861,813	7,369,666	9,060,460

The figure below lists each of NFD’s expenditures as a percentage of the total and by year. Salaries and Wages combined with Personnel Benefits has accounted for approximately 85.0 percent of NFD’s total expenses throughout the five year period. Over the period the total Operating Expenses have been between 75.1 percent and 100.0 percent of the total annual expenses.



Figure 95: NFD - Expenditure History (as percentage of total), 2010 - 2014

Expenditures	Actuals				Budget
	2010	2011	2012	2013	2014
Salary & Benefits	51.9%	60.5%	60.6%	64.0%	54.8%
Overtime	12.3%	14.2%	14.1%	18.0%	16.6%
Supplies	1.4%	1.7%	1.4%	1.8%	1.6%
Services/Charges	9.3%	10.4%	9.9%	10.4%	10.8%
Intergovernmental Services	0.2%	0.1%	0.7%	1.1%	0.5%
Total Operating Expenses	75.1%	86.9%	86.8%	95.2%	84.3%
Capital Outlays	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Service: Principal	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Service: Interest	0.0%	0.0%	0.0%	0.0%	0.0%
Transfers-Out	24.9%	13.1%	13.2%	4.8%	15.7%
Total Expenditure	100.0%	100.0%	100.0%	100.0%	100.0%

The figure below depicts NFD's Expense/General fund balance history which can serve as a useful indicator of whether the financial position of the district is improving or deteriorating. Over the five year period NFD's Expense/General Fund ending fund balance decreased by ~\$590,000, yet over that time NFD established and funded their Reserve funds with an estimated 2014 ending fund balance of \$7,253,772.

Months of ending fund balance (EFB) is a useful ratio for measuring each agency's ending fund balance in relation to the total expenditures, and in terms of the months of expenses that the ending balance represents. NFD has consistently grown its months of EFB over the five year period. Currently there is approximately 4.0 months of ending fund balance budgeted for 2014.

Figure 96: NFD - Fund Balance History, 2010 - 2014

Current Expense/General Fund	Actuals				Budget
	2010	2011	2012	2013	2014
Beginning Fund Balance	4,565,069	3,632,117	3,917,294	4,254,626	4,457,327
Revenues	8,265,371	8,108,718	8,199,145	7,480,564	7,737,503
Expenditures					
Salary and Wages	4,771,724	4,736,017	4,765,744	4,718,388	4,965,551
Personnel Benefits	1,128,243	1,111,845	1,111,461	1,327,968	1,503,099
Supplies	130,262	134,774	108,785	130,838	143,540
Services	858,732	812,023	779,983	764,934	975,470
Intergovernmental Srvc	22,763	4,742	55,914	77,454	46,800
Capital Outlay & Transfers	2,286,599	1,024,081	1,039,927	350,084	1,426,000
Total Expenditures	9,198,323	7,823,482	7,861,813	7,369,666	9,060,460
Ending Fund Balance	3,632,117	3,917,353	4,254,685	4,365,583	3,042,626
Months of EFB:	4.7	6.0	6.5	7.1	4.0

The figure below lists NFD's Reserve Fund and the breakdown of the amounts totaling \$7,253,772 that have been earmarked for different purposes. These funds are in addition to the health Expense/General fund balance that Northshore has protected and built over the past years.

Figure 97: NFD - Reserve Budgeted Fund Balance, 2014

Capital Reserves	Budgeted Ending 2014
Reserve Fund Sub-divided	
Natural Disaster Reserves	250,000
Insurance Fund Reserves	200,000
Employee Benefits Reserves	2,770,000
Loss of Revenue Reserves	1,922,644
Equipment Reserves	1,491,128
Facilities Reserves	200,000
2012 Board Designated Reserve	420,000
Ending Fund Balance	7,253,772



SCFD #10

The figure below lists SCFD #10's Assessed Value and Levy Rate History between 2010 and 2014. Despite the extremely strong growth between 2013 and 2014 of 10.9 percent, SCFD #10 lost 11.3 percent of their total AV over the five year period.

Figure 98: SCFD #10- AV and Levy Rate History, 2010 - 2014

	Type	2010	2011	2012	2013	2014
Assessed Value (Expense)	Expense	1,054,967,158	969,533,334	868,841,400	843,579,780	935,558,568
New Construction (Expense)	Expense	7,800,755	5,865,415	15,368,100	13,619,300	15,779,000
Total AV (Expense)	Expense	1,062,767,913	975,398,749	884,209,500	857,199,080	951,337,568
Assessed Value (EMS)	EMS	1,054,967,158	969,533,334	868,841,400	843,579,780	935,558,568
New Construction (EMS)	EMS	7,800,755	5,865,415	15,368,100	13,619,300	15,779,000
Total AV (EMS)	EMS	1,062,767,913	975,398,749	884,209,500	857,199,080	951,337,568
Expense Levy Rate		0.971	1.065	1.188	1.224	1.135
Non-Voted Bond Levy Rate		-	-	-	-	-
EMS Levy Rate		0.205	0.225	0.300	0.300	0.286
M&O Levy Rate		-	-	-	-	-
Bond Levy Rate		-	-	-	-	-
Total Rate		1.176	1.290	1.488	1.524	1.421

The figure below lists SCFD #10's Revenue History between 2010 and 2014. Compared to 2010, SCFD #10's total revenue in 2014 was 5.3 percent higher than five years before.

Figure 99: SCFD #10- Revenue History, 2010 - 2014

Revenue	Actuals				Budget
	2010	2011	2012	2013	2014
Total Net Taxes	1,261,448	1,252,026	1,030,235	1,285,346	1,329,892
Licenses and Permits	-	-	-	-	-
Intergovernmental Revenues	-	-	-	-	-
Charges for Goods/Services	562	551	606	500	500
Fines and Penalties	-	-	-	-	-
Miscellaneous Revenues	2,398	2,307	1,519	1,500	1,500
Proprietary/Trust Income	-	-	-	-	-
Non-Revenues	-	-	-	-	-
Proceeds of Long-Term Debt	-	-	-	-	-
Total Other Revenues	2,960	2,858	2,125	2,000	2,000
Transfers In	-	-	-	-	-
Total Revenue	1,264,408	1,254,884	1,032,360	1,287,346	1,331,892

The figure below lists SCFD #10's expense history between 2010 and 2013 (actuals) and 2014 (budgeted). Over the five year period Salary and Wages grew by 359 percent while Personnel Benefits

grew by 330 percent. The Fire District’s total operating costs increased by 117.5 percent over the five years. Along with the amounts paid to the City of Bothell for Fire and EMS services, SCFD #10 has also funded their related capital equipment needs as listed in the Capital Outlays displayed below which have averaged 25.0 percent of the fire district’s total expenses over the five years.

Figure 100: SCFD #10- Expenditure History, 2010 - 2014

Expenditures	Actuals				Budget
	2010	2011	2012	2013	2014
Salary and Wages	11,336	11,648	12,896	39,794	52,123
Personnel Benefits	867	891	987	1,127	3,731
Supplies	52,430	12,297	24,330	2,174	50,000
Services	19,670	24,327	20,998	18,929	82,900
Intergovernmental Srvc	491,523	498,810	521,614	522,446	1,063,914
Total Operating Expenses	575,826	547,974	580,825	584,469	1,252,668
Capital Outlays	219,362	216,367	21,041	728,983	162,000
Debt Service: Principal	-	-	-	-	-
Debt Service: Interest	-	-	-	-	-
Transfers-Out	-	-	-	-	-
Total Expenditure	795,188	764,341	601,865	1,313,453	1,414,668

The figure below lists each of SCFD #10’s expenditures as a percentage of the total and by year. Salaries and Wages combined with Personnel Benefits has accounted for approximately 1.3 percent of the district’s total expenses throughout the five year period. Over the period the total Operating Expenses have been averaged 74.7 percent of the total annual expenses.

Figure 101: SCFD #10- Expenditure History (as percentage of total), 2010 - 2014

Expenditures	Actuals				Budget
	2010	2011	2012	2013	2014
Salary & Benefits	1.4%	1.5%	2.1%	3.0%	3.7%
Overtime	0.1%	0.1%	0.2%	0.1%	0.3%
Supplies	6.6%	1.6%	4.0%	0.2%	3.5%
Services/Charges	2.5%	3.2%	3.5%	1.4%	5.9%
Intergovernmental Srvc	61.8%	65.3%	86.7%	39.8%	75.2%
Total Operating Expenses	72.4%	71.7%	96.5%	44.5%	88.5%
Capital Outlays	27.6%	28.3%	3.5%	55.5%	11.5%
Debt Service: Principal	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Service: Interest	0.0%	0.0%	0.0%	0.0%	0.0%
Transfers-Out	0.0%	0.0%	0.0%	0.0%	0.0%
Total Expenditure	100.0%	100.0%	100.0%	100.0%	100.0%

The figure below depicts SCFD #10’s Expense/General fund balance history which can serve as a useful indicator of whether the financial position of the district is improving or deteriorating. Over the five year



period the ending fund balance precipitously decreased by nearly one million dollars with a potential negative balance projected at the end of 2014 based on the budgeted amounts.

Months of ending fund balance (EFB) is a useful ratio for measuring each agency's ending fund balance in relation to the total expenditures, and in terms of the months of expenses that the ending balance represents. SCFD10 has depleted its months of EFB over the five year period. ESCI recommends agencies maintain at least three to five months of ending fund balance in their general funds ending balances.

Figure 102: SCFD #10– Expense/General Fund Balance History, 2010 - 2014

Current Expense / General Fund	Actuals				Budget
	2010	2011	2012	2013	2014
Beginning Fund Balance	1,441,046	971,826	481,283	50,788	41,356
Revenues	1,264,408	1,254,884	1,032,360	1,287,346	1,331,892
Expenditures					
Salary and Wages	11,336	11,648	12,896	39,794	52,123
Personnel Benefits	867	891	987	1,127	3,731
Supplies	52,430	12,297	24,330	2,174	50,000
Services	19,670	24,327	20,998	18,929	82,900
Intergov. Services	491,523	498,810	521,614	522,446	1,063,914
Capital Outlay & Transfers	219,362	216,367	21,041	728,983	162,000
Total Expenditures	795,188	764,341	601,865	1,313,453	1,414,668
Ending Fund Balance	971,826	481,283	50,788	41,356	(41,420)
Months of EFB:	14.7	7.6	1.0	0.4	(0.4)

WF&R

The figure below lists WF&R’s Assessed Value and Levy Rate history between 2010 and 2014. WF&R lost 19.1 percent of total AV over the five years. Because of the \$620,694,490 of AV that WF&R lost to Bothell in the 2014 annexation, Woodinville was not able to realize any of the growth seen by other area taxing agencies in 2014.

Like Northshore, WF&R’s EMS service revenue comes directly from King County who distributes the revenue directly to service providers. WF&R accounts for their EMS service revenue within Charges for Good and Services which is listed below in the Revenue History table.

Figure 103: WF&R - AV and Levy Rate History, 2010 - 2014

	2010	2011	2012	2013	2014
Assessed Value (Expense)	8,516,178,357	8,193,289,838	7,139,766,111	6,945,111,363	6,893,766,642
New Construction (Expense)	30,710,648	30,393,193	24,258,219	26,831,554	36,989,229
Total AV (Expense)	8,546,889,005	8,223,683,031	7,164,024,330	6,971,942,917	6,930,755,871
Assessed Value (EMS)	-	-	-	-	-
New Construction (EMS)	-	-	-	-	-
Total AV (EMS)	-	-	-	-	-
Expense Levy Rate	0.902	0.950	1.000	1.000	1.086
Non-Voted Bond Rate	-	-	-	-	-
EMS Levy Rate	-	-	-	-	-
M&O Levy Rate	-	-	-	-	-
Bond Levy Rate	-	-	-	-	-
Total Rate	0.902	0.950	1.000	1.000	1.086

The following figure shows WF&R’s Fire Benefit Charge (FBC) and calculated Effective Rate based on the total AV. This has been done for comparison purposes and to evaluate the total Combined Effective Rate which includes the Expense Levy.

Figure 104: WF&R - Fire Benefit Charge, 2010 - 2014

	2010	2011	2012	2013	2014
Fire Benefit Charge (FBC)	5,225,417	4,872,315	4,260,087	4,506,479	4,336,947
Effective FBC Rate	0.614	0.595	0.597	0.649	0.629
Combined Effective Rate	1.515	1.545	1.597	1.649	1.715

The following figure lists WF&R’s Revenue History between 2010 and 2014. Compared to 2010, WF&R’s total revenue in 2014 was 23.1 percent lower than five years before. Over the five year period the combination of property tax revenue, EMS revenue from King County, and the FBC averaged 96.1 percent of WF&R’s total revenue. Note that WF&R transfers the FBC revenue into the Expense/General Fund from the Fire Benefit Fund and is shown below in the Transfers In line.



Figure 105: WF&R - Revenue History, 2010 - 2014

Revenue	Actuals				Budget
	2010	2011	2012	2013	2014
Total Net Taxes	7,628,747	7,418,454	7,122,683	6,939,650	6,972,393
Licenses and Permits	269,253	-	-	-	-
Intergovernmental Revenues	-	-	-	-	-
Charges for Goods/Services	619,622	1,001,784	510,523	524,965	518,714
Fines and Penalties	-	-	-	-	-
Miscellaneous Revenues	1,574,230	306,173	382,049	272,526	50,000
Proprietary/Trust Income	-	-	-	-	-
Non-Revenues	-	-	-	-	-
Proceeds of Long-Term Debt	-	-	-	-	-
Total Other Revenues	2,463,105	1,307,957	892,572	797,491	568,714
Transfers In	5,253,867	5,215,468	6,028,071	4,506,481	4,262,172
Total Revenue	15,345,719	13,941,879	14,043,326	12,243,622	11,803,279

The next figure lists WF&R's expense history between 2010 and 2013 (actuals) and 2014 (budgeted). Over the five year period Salary and Wages shrunk by 20.0 percent while Personnel Benefits was reduced 7.1 percent. Some of the shift was due to the contract for fire chief services from Bothell, moving expenses from Salaries and Benefits to Services. The fire district's total operating costs were decreased by 10.4 percent over the five years. Overall the fire district was able to reduce the total expenses by 16.4 percent over the years reviewed, but was due to the reduced amounts of Transfers-Out in 2013 and 2014.

Figure 106: WF&R - Expenditure History, 2010 - 2014

Expenditures	Actuals				Budget
	2010	2011	2012	2013	2014
Salary and Wages	7,811,879	7,212,278	7,072,876	7,080,489	6,248,707
Personnel Benefits	2,837,855	2,599,012	2,561,935	2,753,321	2,635,500
Supplies	420,495	304,120	342,601	366,067	513,578
Services	1,237,490	1,190,968	1,216,430	1,374,000	1,659,143
Intergovernmental Services	114,342	10,091	48,535	85,000	69,750
Total Operating Expenses	12,422,061	11,316,469	11,242,377	11,658,877	11,126,678
Capital Outlays	19,904	99,430	-	-	166,880
Debt Service: Principal	-	-	-	-	-
Debt Service: Interest	-	-	-	-	-
Transfers-Out	1,570,838	2,937,958	2,109,190	-	425,000
Total Expenditure	14,012,803	14,353,857	13,351,567	11,658,877	11,718,558

The next figure lists each of WF&R's expenditures as a percentage of the total and by year. Salaries and Wages combined with Personnel Benefits has accounted for approximately 75.3 percent of the fire district's total expenses throughout the five year period. Over the period the total Operating Expenses have been between 84.2 percent and 100.0 percent of the total annual expenses.

Figure 107: WF&R - Expenditure History (as percentage of total), 2010 - 2014

Expenditures	Actuals				Budget
	2010	2011	2012	2013	2014
Salary & Benefits	55.7%	50.2%	53.0%	60.7%	53.3%
Overtime	20.3%	18.1%	19.2%	23.6%	22.5%
Supplies	3.0%	2.1%	2.6%	3.1%	4.4%
Services/Charges	8.8%	8.3%	9.1%	11.8%	14.2%
Governmental Agencies	0.8%	0.1%	0.4%	0.7%	0.6%
Total Operating Expenses	88.6%	78.8%	84.2%	100.0%	94.9%
Capital Outlays	0.1%	0.7%	0.0%	0.0%	1.4%
Debt Service: Principal	0.0%	0.0%	0.0%	0.0%	0.0%
Debt Service: Interest	0.0%	0.0%	0.0%	0.0%	0.0%
Interfund Payments	11.2%	20.5%	15.8%	0.0%	3.6%
Total Expenditure	100.0%	100.0%	100.0%	100.0%	100.0%

The figure below depicts WF&R's Expense/General fund balance history which can serve as a useful indicator of whether the financial position of the district is improving or deteriorating. Over the five year period WF&R's ending fund balance increased by ~\$950,000.

Months of ending fund balance (EFB) is a useful ratio for measuring each agency's ending fund balance in relation to the total expenditures, and in terms of the months of expenses that the ending balance represents. WF&R has consistently grown its months of EFB over the five year period. Currently the fire district has approximately 6.8 months of EFB budgeted for the 2014 year.

Figure 108: WF&R - Expense/General Fund Balance History, 2010 - 2014

Current Expense / General Fund	Actuals				Budget
	2010	2011	2012	2013	2014
Beginning Fund Balance	4,342,864	5,675,780	5,263,802	5,955,561	6,540,306
Revenues	15,345,719	13,941,879	14,043,326	12,243,622	11,803,279
Expenditures					
Salary and Wages	7,811,879	7,212,278	7,072,876	7,080,489	6,248,707
Personnel Benefits	2,837,855	2,599,012	2,561,935	2,753,321	2,635,500
Supplies	420,495	304,120	342,601	366,067	513,578
Services	1,237,490	1,190,968	1,216,430	1,374,000	1,659,143
Intergov. Services	114,342	10,091	48,535	85,000	69,750
Capital Outlay & Transfers	1,590,742	3,037,388	2,109,190	-	591,880
Total Expenditures	14,012,803	14,353,857	13,351,567	11,658,877	11,718,558
Ending Fund Balance	5,675,780	5,263,802	5,955,561	6,540,306	6,625,027
Months of EFB:	4.9	4.4	5.4	6.7	6.8

The figure which follows depicts WF&R's Reserve fund balance history. Over the five year period WF&R has utilized 57.1 percent of the reserves over the five year period.



Figure 109: WF&R – Reserve Fund Balance History, 2010 - 2014

Reserve Fund	Actuals				Budget 2014
	2010	2011	2012	2013	
Beginning Fund Balance	2,498,003	3,431,779	1,648,557	1,172,119	1,183,372
Revenues	1,374,135	22,440	618,886	11,252	436,360
Expenditures					
Salary and Wages	-	-	-	-	-
Personnel Benefits	-	-	-	-	-
Supplies	440,359	296	124	-	-
Services	-	-	-	-	-
Intergov. Services	-	-	-	-	-
Capital Outlay & Transfers	-	1,796,464	1,095,200	-	146,233
Total Expenditures	440,359	1,796,760	1,095,324	-	146,233
Ending Fund Balance	3,431,779	1,657,459	1,172,119	1,183,372	1,473,499

The figure below depicts WF&R’s Benefits Liability fund balance history. This fund represent amounts held and adjusted each year for the district’s employee accrued vacation and personal time.

Figure 110: WF&R – Benefits Liability Fund Balance History, 2010 - 2014

Benefits Liability	Actuals				Budget 2014
	2010	2011	2012	2013	
Beginning Fund Balance	-	-	1,797,459	1,294,252	1,306,677
Revenues	-	1,796,464	8,922	12,425	12,544
Expenditures					
Salary and Wages	-	-	-	-	-
Personnel Benefits	-	-	-	-	-
Supplies	-	-	142	-	-
Services	-	-	-	-	-
Intergov. Services	-	-	-	-	-
Capital Outlay & Transfers	-	-	511,988	-	-
Total Expenditures	-	-	512,130	-	-
Ending Fund Balance	-	1,796,464	1,294,252	1,306,677	1,319,221

The figure below depicts WF&R’s Capital Projects fund balance history. Over the five year period WF&R has grown the fund balance by ~\$380,000.

Figure 111: WF&R – Capital Projects Fund Balance History, 2010 - 2014

Capital Projects Fund	Actuals				Budget
	2010	2011	2012	2013	2014
Beginning Fund Balance	31,341	31,684	600,572	404,217	408,097
Revenues	500	903,792	303,693	3,880	3,918
Expenditures					
Salary and Wages	-	-	-	-	-
Personnel Benefits	-	-	-	-	-
Supplies	-	3,064	48	-	-
Services	-	-	-	-	-
Intergov. Services	-	-	-	-	-
Capital Outlay & Transfers	-	331,841	500,000	-	-
Total Expenditures	-	334,905	500,048	-	-
Ending Fund Balance	31,841	600,572	404,217	408,097	412,015



Future Opportunities for Collaborative Efforts

PROCESSES FOR COLLABORATION

The opportunities for closer collaboration between the participating agencies are explored and summarized using an escalating level of cooperation. Those general partnering options fall in a range from remaining autonomous to the creation of a new organization encompassing all of the participating agencies. Following the General Partnering Options are specific strategies for shared services which are examined in greater detail.

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 integration of the agencies into a new emergency service provider. The following alternatives will be evaluated and discussed:

- Maintain status quo
- Contract for services
- Merger (with annexation)
- Regional Fire Authority

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 certain issues will need to be addressed. The participating agencies remain as they are today, as neighboring agencies that respond collaboratively with each other for assistance, but remain independent. Issues which will need to be addressed include:

- Woodinville Fire & Rescue – How will CEO and Operations leadership continue to be provided?
- Bothell Fire & EMS – What will be done to address anticipated future revenue versus expense disparity?
- SCFD #10 – What position will the district take on Bothell’s annexation plan?
- Northshore FD – How will the district address its very lean administrative structure?

The advantages of this approach are that it is the easiest option to implement and creates the least amount of work or stress on the organizations, but does necessitate decision-making on the above listed issues. Most of these issues have been deferred in anticipation of the potential formation of an RFA. One additional factor is that maintaining status quo also maintains local control. That is, the currently elected boards and councils continue to oversee their individual agencies as their electorate’s desire, without the complication of considering the views of a different or expanded constituency.

The disadvantages of this approach are that the current fiscal difficulty facing some of 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 can also be one of the riskier decisions to make politically.

Contract for Services

A contract for services can be for limited, discreet functions, such as for administrative, clerical, HR, IT, or financial services; often referred to as an administrative consolidation. Or, it can be for large support elements, such as training, fire prevention, logistics, central purchasing, or vehicle maintenance; often referred to as a functional consolidation. The primary element of fire department function can also be contracted, i.e., service delivery, often referred to as an operational consolidation. These consolidations are not legal terms and differ only in the scope of the contract. The process is the same for all three types, which is an Interlocal Cooperation Agreement between the agencies.⁹ There are no limitations regarding crossing county lines.

For an administrative consolidation, 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; potentially less resistance to change by the rank and file in the operational elements than other 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, integrated 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.

For a functional consolidation, the advantages 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 collaboration 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 different after all”.

A disadvantage is that interaction by and between line personnel of different agencies increases the potential for friction. Numerous details must be worked out in advance of such a contract, including but not limited to, work rules, employee assignments, compensation, office location, logos, asset allocation,

⁹ RCW 39.34.030.



authority, and even the name of the consolidated function. Further, independence and autonomy are lost in the consolidated areas, spilling into other seemingly unaffected areas. In the case of training, all participating agencies participate in the East Metro Training Group, making the training function a less contentious area for collaboration.

For an operational consolidation, the advantages are that the greatest opportunity for efficiency (not necessarily cost reduction) 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 integration.

The disadvantage is that administrators and policy-makers must share power and gain consensus where they once had unilateral authority to control and implement. Bargaining unit agreements usually have to be aligned. Further, it becomes difficult to determine which agency would be the contractor.

Merger (with annexation)

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.

However, the merging fire districts must be adjacent to each other, which essentially means that the districts must touch each other. It is unlikely that the separation between WF&R, NFD, or SCFD #10 meets the legal definition of “adjacent”, but further legal review would be warranted if this option were to be pursued. The only exception to the “adjacent” problem is discussed in greater detail in the following section.

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.¹⁰

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

¹⁰ RCW 36.93.100.

petition, back to the merging district board. The merging district board then adopts a resolution requesting the county auditor to call a special election within 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 its own board members plus all of the fire commissioners of the merging district(s). The combined board will then be reduced by one 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.

Bothell Annexation (as part of a merger)

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. For the City of Bothell to be included as part of the merger discussion described above, it may either be annexed by one of the fire districts which subsequently merges with the other two districts (resolving the issue of “adjacent”, since all three districts physically connect through Bothell), or may contract with a district. If Bothell is annexed, it has no elected representation specifically reserved for Bothell. There is no reserved authority for the city on the governing board. However, once annexation occurs, city residents are eligible to run for office as a fire commissioner. Commissioner Districts can also be created, guaranteeing representation from within the city if the district were created accordingly.

A fire district cannot cross a county line to annex a city. Since the City of Bothell lies within two counties, whichever county contains eighty percent or more of the city residents can be annexed by a fire district adjacent to it but within the same county. The statute is unclear whether the portion remaining can be subsequently annexed by a fire district adjacent to it but within the same county. Legal counsel is advised on this issue. If it is determined that a subsequent annexation can occur by another fire district within the same county, effectively dividing the city between two separate fire districts, the two fire districts may then merge, since there is no prohibition of fire district mergers crossing county lines.

Annexation does not affect any other authority of the city. The city simply transfers its responsibility for fire protection and EMS services to the fire district. 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. See the following generic example:



Current Property Tax Levy Rates (Example):

City \$1.89	Maximum allowed	\$3.60
Fire District \$1.00	Maximum allowed	\$1.50

City Annexes into District (Example):

Fire District levy \$1.00
City tax capacity \$2.60 (\$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.

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. However, a debt may be restructured in forming an RFA, as long as the debt restructuring is included in the RFA proposal the voters receive. Further legal review on the issue of debt transfer or restructuring is highly advisable. The RFA statutes are silent on the issue of debt.

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 an agreement for different terms of transfer is reached between the collective bargaining representatives of the transferring employees and the participating fire protection jurisdictions, employees will retain the rights, benefits, and privileges that they had under their pre-existing collective bargaining agreements.¹¹

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 (up to a maximum of six years) 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 that started with twelve 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 be established with the fire chief reporting to the governing board.

¹¹ RCW 52.26.100 (6)



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:

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 an 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; retains (or has the potential to retain) the policy-makers of the participating agencies in a governing board (including Bothell), 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 for each participating agency; 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 no limitations regarding crossing county lines.

STRATEGIES FOR SHARED SERVICES

In the following section, strategies for shared services are detailed and their feasibility is evaluated.

The decision to establish a single regional agency can be a daunting task. When those agencies include three districts in two different counties and a city that spans two counties, the process becomes even more complex and challenging to accomplish. ESCI identified two key considerations that must be a litmus test for a strategy to be feasible.

Sustainability

The first factor to consider in evaluating the strategies is that of containing costs and/or reducing them. Any partnership should be evaluated by its positive or negative impact to the projected fiscal condition, avoiding future costs, improving efficiency, or eliminating redundancies. These criteria should be evaluated not just short term, where some transition costs may spike initially, but viewed into the foreseeable future.

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 may 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 non-participating agencies. Along with station locations, the staffing configuration at the facilities will impact response performance and reliability.

With the above in mind, the following strategies presented are analyzed for their impact on sustainability and/or service delivery while identifying opportunities for increased efficiency wherever possible. ESCI recognizes that service delivery and its future sustainability must be viewed with equal importance.

STRATEGY A: STATUS QUO

As described earlier, this is essentially a do-nothing option. However, all participating agencies have made temporary decisions or deferred decisions awaiting the result of this study. If the agencies ultimately decide to implement this strategy, there are numerous decisions that will have to be made to position the agencies in a steady-state position.

BF&EMS will need to develop alternative plans in anticipation of an unsustainable system as it currently exists. Bothell elected leaders have expressed concern over spiraling costs and a revenue base which will be quickly outpaced. Minor decisions will also need to be made, such as whether or not to convert a limited term support specialist to full time. If WF&R opts to discontinue the leadership contract with Bothell, the sudden loss of that revenue may impact what remains, even with the corresponding reduction of workload. For WF&R, a decision must be made to either extend (or renegotiate) the contract with Bothell or separate and fill their own fire chief and operations chief positions. Multiple other options are also a consideration for WF&R, such as contracting with another agency for leadership services or seeking a partnership with another agency.

Northshore has determined its administration is too lean to be sustainable. ESCI agrees with this determination. Northshore has adopted a succession plan to add a Deputy Chief to the administration if a status-quo strategy is taken. Options also exist for Northshore, such as competing with BF&EMS to provide fire chief services to WF&R and sharing the cost of an operations chief between the two agencies. SCFD #10 will need to address its future viability given Bothell's annexation plans. The district could continue the existing contract with Bothell until it is annexed by Bothell or could negotiate an agreement with other neighboring agencies until such time as the district is annexed. In either case, it is unlikely the district will survive long term since the Municipal Growth Management Area (MUGA) for Bothell incorporates all of SCFD #10 and beyond.

Level of cooperation

The level of cooperation is expected to continue, such as mutual and automatic aid agreements, as well as AVL dispatching of closest available unit, without regard for jurisdictional boundaries. Joint participation in the East Metro Training Group is also expected to continue.

Estimated timeline for completion

Immediate implementation is expected, since this is a status quo strategy. The issues raised in the beginning of this strategy will need to be address in a timely fashion, but should not hinder maintenance of the status quo.

Affected sections

The likely sections impacted by this strategy are BF&EMS administration and operations, NFD administration, SCFD #10 legislative/administration, and WF&R administration and operations.

Affected stakeholders

All four agencies' members and their constituencies will have either missed opportunities or are potentially impacted by the spin-off decisions by maintaining the status quo.

Summary/Objective of strategy

With a decision to maintain status quo, the agencies will maintain the value derived from existing shared services. There may be small, specific enhancements to existing collaboration, but no major new shared services are anticipated.

ESCI guidance

Elected officials and administrative staffs should ensure that discussions and decisions related to this strategy focus on the desired outcomes and best interests of the communities served. A decision to maintain status quo does not necessarily mean future collaborative efforts are off the table. Efficiency and enhancement of services should continue to drive decision-making. Participation in this study has undoubtedly increased the awareness of issues each agency has, and opportunities to address issues of mutual benefit should be explored.

Special considerations

This strategy continues to afford the elected officials with a high level of control. However, as described in the previous section, key decisions must be made by each of the agencies if this strategy is adopted.

WF&R will need to make a long term decision about their leadership going forward, specifically whether they continue to contract with BF&EMS, modify the contract or the contractor, or fill the fire chief position and the operations chief position as a completely independent agency.

The city of Bothell will have to determine how they will address escalating expenses outpacing anticipated revenues in BF&EMS. Policy-makers have repeatedly stated that the expense trend will require difficult decisions which will likely involve either revenue enhancement or expenditure reduction, which has service delivery implications.

SCFD #10 faces the potential of their entire district being annexed by the city of Bothell in the relatively near term. The Municipal Urban Growth Area reflects anticipated annexation by Bothell extending beyond SCFD #10's boundaries.

NFD will face less dramatic decisions, but nonetheless important ones. The administrative structure there is very lean with a supervisor-subordinate ratio of 1:8 for the fire chief which exceeds industry guidelines.

Policy actions

Other than the issues identified previously under special considerations, no other policy decisions must be made related to implementation of this strategy.

Fiscal analysis

The status quo represents no shift in cost or change in efficiency.

Issues & Impacts

The implementation of this strategy creates no additional issues or impacts other than those listed in special considerations.

STRATEGY B: CONTRACT FOR SERVICES

A contract for services, typically referred to as an interlocal cooperation agreement pursuant to the Interlocal Cooperation Act¹², is discussed in the previous section of this report. While the act does not segregate types of agreements, ESCI breaks them into three major subheadings for ease of discussion and understanding: administrative, functional, and operational or full service agreements.

Level of cooperation

A contracted services approach is applicable when agencies want to work more closely together but are either not ready, or are unable to unify or merge formally. This strategy may be applied to administrative functions including payroll, human resources, financial management, and others or may be configured so that a single administration is managing all of the participating agencies. Alternatively, the strategy may involve a functional unification for identified support services such as training, maintenance, or fire prevention.

The participating agencies maintain autonomy with separate governance and separate taxing authority, unchanged from current practices. Depending on the approach chosen, a single fire chief may provide the administrative services for the other contractually combined agencies or a single fire marshal may operate fire prevention programs, as just two examples. The district boards and city councils continue to govern the separate agencies independently, levying their own taxes at their own levy rates. This integration may be limited to the fire chief, or may include all administrative functions (and the personnel serving those functions) as well as support functions.

At its highest level, contracted service approaches may be expanded to include operational service delivery. That is, one entity contracts for the entirety of its fire protection, EMS, and related services, delivered exclusively by the other, or provider, agency. The contracting agency places full responsibility for all services, based on identified performance measures, on the provider and retains no service delivery function of its own.

Success of an administrative, functional, or operational consolidation strategy is built upon 1) an essential trust relationship between the partner agencies; 2) the thoroughness of the program agreement; 3) a collaborative approach to the management of the program(s); and 4) community understanding and support. Since the agencies already have a great deal of collaboration history, the foundation to build from has been created.

¹² RCW 39.34.030

The approach requires in-depth, multi-level, and multi-functional planning, review, external and internal discussions, collaboration, and agreement among the city councils, district boards, and the administrative staff members of all four agencies. This strategy does not require public approval at the ballot box, but is negotiated between the agencies.

ESCI notes that, although the existing governing bodies are preserved, the level of unilateral control is decreased. Also, the management teams of the contractually unified sections should regularly report to the individual boards and councils on the performance of these new agreements.

Estimated timeline for completion

Bothell and SCFD #10 have already taken advantage of opportunities to share services contractually. Further, all four of the agencies collaborate in multiple regards. As a result, this timeline is reduced due to the familiarity each agency has with the other and the collaborative working relationships that are already in place. New issues are likely to arise, however, so the process of careful planning should not be short-cut due to presumed familiarity. If trust is high and conflicts minimal, this strategy could be accomplished in as little as 6 months.

Affected sections

Depending on the type of contractual consolidation implemented, the affected sections may be limited to a specific position, an administrative function(s), a support function(s), or all services.

Affected stakeholders

While all agency members are affected in some manner, the district commissioners, city council members, and agency staff within the affected sections will realize the most significant impacts.

Summary/Objective of strategy

The objective should be seamless integration of the identified functions across the four jurisdictions by means of an Interlocal Cooperation Agreement, as provided for under RCW 39.34.

ESCI guidance

The four organizations face similar challenges given current conditions. While some potential consolidation areas are found to be duplicative in many instances, how those areas operate in each agency may vary significantly with the other agencies due to differing demographics, geography, and community culture that is found in this study area.

In preparation for such a direction, the fire chiefs must establish and conduct regular joint meetings for the purpose of establishing the parameters of the consolidation. This includes

workload analysis to ensure greatest effectiveness while maintaining proper balance. ESCI recommends that the fire chiefs convene an ad hoc steering committee for the purpose of developing proposed common policies, performance standards, and functional plans within the divisions targeted for consolidation.

Should the concept of contracted services be expanded into operational areas, the degree of collaboration between the chiefs is escalated substantially. Operational guidelines, dispatch procedures, and many additional factors will need to be compared and brought under a single, fully integrated operational strategy.

Special considerations

Commissioners and council members should understand that contractual consolidation is complex, labor-intensive, and challenging. As such, it is often a precursor to a more permanent consolidation, such as merger or regional fire authority.

Contractual consolidation can encounter inherent administrative rigidity resulting from political complexities of the arrangement. Given accountability to four political bodies, administrative leaders can be pulled in multiple directions; they may also be limited by contractual requirements in their ability to adjust to environmental changes. Consequently, conflicting policy directives may sometimes be troublesome in a contractually unified agency. These challenges underscore the importance of the founding political relationship, the contractual agreement and the skills of management to ensure success.

Internal staff in the affected sections will likely require some time to adjust to new processes and reporting relationships. The community may notice changes in who they deal with and different processes likely employed from this strategy.

Policy actions

The board of commissioners and city councils will need to develop, approve, and implement an interlocal cooperation agreement. Careful development and understanding of the agreement by all parties is critical. Many agencies exercising this option have had to revise the original agreement to address unforeseen issues. A detailed discussion prior to executing an agreement reduces the risk of early amendments.

Fiscal analysis

Depending on the selected approaches, the initiatives described above may result in actual cost reduction (going from three fire chiefs to one, for example) or cost avoidance (eliminating the need to hire one or more chiefs in the future), allowing those funds to be redirected toward other agency needs. The same may apply if the needed number of fire marshals, training officers or other individual positions decreases.

The costs for the combined activities, to the extent they are equal across all four agencies, should be split equally. This includes any fiscal windfall and any new costs incurred. To the extent there are weighted distribution of costs (and benefits) due to disproportionate cost or benefit, such distribution should be based on weight factors directly tied to the function shared and should follow guidance provided in the cost allocation options as outlined in the following.

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 service, the resulting intergovernmental agreement needs to address the formula chosen and the rationale behind it, as well as any exclusion, such as grant funded expenditures. 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 agencies represent about 55.88 square miles. The following figure displays the services area in square miles and the percentage for each jurisdiction, which represents the percentage of total cost share.

Figure 112: Cost Allocation by Service Area, (2014)

Jurisdiction	Service Area in Square Miles	Percentage of Total
BF&EMS	16.23	29.04%
NFD	9.65	17.27%
WF&R	30	53.69%
Total	55.88	100.00%

Apportionment founded on service area alone may work best in areas that are geographically and developmentally homogeneous. This is not the case in Woodinville, which has a rural section of its service area on the east side.

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 resources, assessed value and number of emergencies) to express a compound variable.

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. In this case, high valued buildings may pose a low risk to the community or to the fire department due to built-in fire protection features. Typically, AV is used to apportion cost of shared service by applying the percentage of each partner's AV to the whole.¹³ The following table illustrates the allocation of cost by the assessed value of the agencies, which represents the percentage of total cost share.

Figure 113: Cost Allocation by Assessed Value, (2014)

Jurisdiction	Assessed Valuation	Percentage of Total
BF&EMS	7,877,555,001	40.03%
NFD	4,909,399,732	24.95%
WF&R	6,893,766,642	35.03%
Total	19,680,721,375	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, allocation tied to property value has merit.

Con: AV may not reflect the risk associated with certain properties. Some high value properties present low risk. Some comparatively lower value properties may not always represent the life risk, 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.

Consider: Discount AV by factoring it into a multi-variable allocation formula. 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

¹³ AV used is the total assessed value of the service area.



deployment) or by stating the desired outcome of deployment (such as is contained in standards of cover). A strategic goal could specify the location of five stations, six engines, one ladder truck and twenty-one on-duty firefighters, for example. A standard of cover might state the desired outcome as three engine companies, one ladder company, and thirteen 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 specifically linked to the quality of service. This alternative however, is highly variable due to the independent desires of each community in regard to outcome goals.

This type of scoring system for each agency allows the ranking of each area based on the assigned apparatus and facilities required to deliver the staffing and required fire flow. 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 (not including reserve apparatus).

Figure 114: Cost Allocation by Resource Deployment, (2014)

Jurisdiction	Facilities	Engines and Aerials	Total	Percentage of Total
BF&EMS	3	3	6	37.50%
NFD	2	2	4	25.00%
WF&R	3	3	6	37.50%
Total	8	8	16	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: Deployment may not equate to better service because such goals are prone to be used for political reasons and may not be used 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 recognize that there is required infrastructure, such as administrative or overhead costs, as well as capital asset cost, depreciation, rent, and liability insurance. Thus, this allocation strategy is best used as part of a multi-variable allocation formula.

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 115: Cost Allocation by Service Demand, (2014)

Jurisdiction	Service Demand	Percentage of Total
BF&EMS	5,262	42.02%
NFD	3,474	27.74%
WF&R	3,786	30.23%
Total	12,522	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. Finally, 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.

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 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 116: Cost Allocation by Population, (2014)

Jurisdiction	Population	Percentage of Total
BF&EMS	50,011	41.21%
NFD	32,252	26.57%
WF&R	39,103	32.22%
Total	121,366	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 transient populations coming in (or going out) of an area can vary significantly, 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.

Transient populations 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 between the 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 117: Summary of Cost Allocation Factors by Percentage, (2014)

Jurisdiction	Area	Assessed Value	Resources	Service Demand	Population
BF&EMS	29.04%	40.03%	37.50%	42.02%	41.21%
NFD	17.27%	24.95%	25.00%	27.74%	26.57%
WF&R	53.69%	35.03%	37.50%	30.23%	32.22%
Total	100%	100%	100%	100%	100%

ESCI extrapolated the cost of emergency services using the most recent fiscal year budgeted amounts for Fire and EMS using a multiple variable formula. In addition to the individual funding alternatives, 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 and the weighted apportionment by percentage. The first allocates costs on the basis of assessed value (50 percent) and service demand (50 percent).

Figure 118: 50% Assessed Value and 50% Service Demand, (2014)

Jurisdiction	Assessed Value	Service Demand	Allocation
BF&EMS	40.03%	42.02%	41.02%
NFD	24.95%	27.74%	26.34%
WF&R	35.03%	30.23%	32.63%
Total	100.00%	100.00%	100.00%

The second example allocates the cost based on service demand (50 percent), resources (25 percent), and assessed value (25 percent).

Figure 119: 50% Service Demand, 25% Resources, 25% Assessed Value, (2014)

Jurisdiction	Service Demand	Resources	Assessed Value	Allocation
BF&EMS	42.02%	37.50%	40.03%	40.39%
NFD	27.74%	25.00%	24.95%	26.36%
WF&R	30.23%	37.50%	35.03%	33.25%
Total	100.00%	100.00%	100.00%	100%

Any or all of the variables can be used to develop the cost allocation formula, and the weights can be adjusted to emphasize or de-emphasize each variable. Below lists all of the variables as equally weighted and result in the following multiple variable formula:

Figure 120: All Variables at Equal Weights of 20% Each, (2014)

Jurisdiction	Area	Assessed Value	Resources	Service Demand	Population	Allocation
BF&EMS	29.04%	40.03%	37.50%	42.02%	41.21%	37.96%
NFD	17.27%	24.95%	25.00%	27.74%	26.57%	24.31%
WF&R	53.69%	35.03%	37.50%	30.23%	32.22%	37.73%
Total	100%	100%	100%	100%	100%	100%

Whatever formula is used, care should be taken to avoid identifying a cost and then developing a formula to achieve the desired cost. While affordability is an important factor, the developed formula should reflect an appropriately balanced approach to addressing the service needs of participating agencies and allocating costs based on the factors driving service decisions.

Issues & impacts

- No permanent organizational commitment is made since this is a contract.
- All final decision-making power is outlined in the agreement and can range from retaining individual authority to relinquishing authority to the contractor.
- Requires a collaborative approach to the management of the program(s) between the participating agencies.
- Does not require public approval at the ballot box.
- Existing governing boards and councils are preserved even in a contract for full services in order to levy taxes to pay for the contract.
- Administrative leaders can be pulled in multiple directions serving multiple masters if authorities are not carefully addressed in the contract.
- No net new FTEs required. May free up existing FTEs for reassignment.
- Prudent practice calls for taking the best of each agency's rules, regulations, and operating procedures to create a new set.
- Efficiencies can be gained in administration, fleet maintenance, training, fire prevention, shift command staff, and some operational elements by eliminating duplication or reassigning duplicate resources.



STRATEGY C: BOTHELL ANNEXATION & MERGER

As previously discussed, a merger can involve fire districts only. Cities are not able to merge with fire districts. In this instance, WF&R, NFD, and SCFD #10 could merge only if they were adjacent to each other. Given that the City of Bothell separates each of the districts from the others, it would be necessary to complete an annexation of Bothell by one of the fire districts, to be followed by a merger with the remaining districts in the study area. Any of the districts could annex Bothell for fire protection purposes since their boundaries are contiguous with Bothell.

In this case, a merger results in an assimilation of the participating districts and the annexed city into a single fire district. The agencies no longer maintain autonomy, like some of the other strategies discussed. The merger will also require careful planning and development of a clear vision and strategy for moving forward. One of the more challenging decisions may be that of determining which district will become the surviving district and which will become the merging district(s).

The administrative and operational configuration of the newly merged district will require careful evaluation of existing resources and decision making in regard to future deployment. Administrative positions will need to be modified and personnel reassigned to roles that will differ from their previous experience. Similarly, some operational (line) positions will likely change as decisions are made regarding station assignments based on the staffing needs of a much larger organization, rather than a single district, as it is currently.

Finally, it is important to remember that there are multiple services that are provided to the BF & EMS Department by city staff including human resources management, finance and accounting, and many others. Those services will no longer be provided by the city if annexed (unless specifically agreed to in an annexation agreement between the parties), so it will be necessary to determine how the workload will be addressed.

Level of cooperation

The merger strategy requires multiple and often complex decisions, necessitating a high level of cooperation from the involved district commissioners and the city council members. Administrative and line personnel in the organizations will also need to demonstrate a willingness to work together constructively if the initiative is to succeed.

Due to the complex nature of a merger and annexation, in-depth and multi-level assessment and planning will be critical, requiring an exceptional level of collaboration that must occur at all levels in the organizations. Open communication and transparency in discussions and decision making will be essential.

Estimated timeline for completion

The steps for completing a merger are detailed in the *General Partnering Options* section of this report. It is apparent from that discussion that while the process is straightforward, the planning steps are multiple and time consuming. Discussion, negotiation, and decision making can take a

year to 18 months before the matter is submitted to the electorate. Annexation of the City of Bothell must be a precursor to a merger, which may add an additional year.

Affected sections

All sections of all of the organizations will be affected by the initiative. This includes the elected officials, agency administrations, operations, training, and fire prevention components of each participating fire district/department. In addition, human resources, finance, and other sections that are currently providing services to BF&EMS may be impacted.

Affected stakeholders

All agency members are affected in varying degrees. The district commissioners, city council members, and administrative staffs will be the most heavily affected initially, due to the many implementation decisions that will be necessary. City council members will no longer have policy control as it relates to fire and EMS service provision as a result of the annexation.

Fire commissioners will initially continue serving on the expanded board, but will be reduced to a three or five (or possibly expanded to seven) member board through successive elections or mid-term vacancies, depending on which agency is the surviving entity. Voter approval can be sought to create commissioner districts to ensure balanced representation from the previously separate agencies.

Administrative staffs will be impacted depending on the organizational structure created, with the potential for redundant positions exposing some personnel to reductions or layoffs, unless otherwise agreed to in collective bargaining agreements. Line positions may also be exposed to excessive redundancy and therefore reassigned to other functions, although it is less likely than with their administrative counterparts.

Summary/Objective of strategy

This strategy combines all participating agencies into one. The objectives should be:

- A smooth transition from multiple organizations into a single, cohesive organization
- Obtaining balanced representation from the currently separate agencies
- To provide depth of resources, strength of service, financial sustainability and resiliency

This strategy incrementally combines all four agencies into a single fire district. Services would be provided by the existing resources of all four agencies, pooled, and reconfigured to provide optimum services and governed initially by the combined policy-makers representing the three fire districts. The policy-makers are reduced to three, five, or seven commissioners (depending on the merger agreement) as attrition eliminates positions, or from commissioner districts to ensure balanced representation, again as determined by the merger agreement.

ESCI guidance

ESCI again underscores the critical importance of developing a clear vision for the long term outcome of the merger process. The vision must be shared and fully agreed to by all effected agencies if the effort is to succeed. All decisions must be made openly and collaboratively, starting with a visioning session in which everything is “on the table” and personal agendas are set aside in the interest of achieving the common goal of unification.

In addition to the elected officials, the fire chiefs will need to meet regularly and also have discussions about how best to move forward. The sole consideration should be answering the question, “What is in the best interest of the people we serve.”

Special considerations

The merger initiative will be challenging and the commissioners and city council members need to understand that willingness to compromise will be essential. The first and perhaps the most challenging decision will be which agency will become the surviving district, and the commissioners need to prepare for those conversations and remain flexible in their decisions. The deliberations should be based on financial, administrative, and operational considerations, to determine which approach is most beneficial, setting aside historical and territorial concerns.

Policy actions

The board of fire commissioners and the Bothell city council will need to make the first changes, in the form of annexation. This process starts with the approval of an ordinance by the city council indicating the intent of the city to join the district. The issue then goes to the district board of commissioners for concurrence. Upon approval by the board of commissioners, the matter is submitted to the county boundary review board (in counties where one exists) or a special review board for approval.¹⁴ Once approved, the issue is submitted to the electorate of both jurisdictions. If the annexation receives a simple majority approval in both jurisdictions, the annexation will be deemed successful.

Upon completing the annexation, the next step is merger of the remaining fire districts. Along with the determination of which will be the surviving district, the governance changes explained earlier will have to be addressed by formal policy action of the participants. Once the path for moving forward is selected, each board will need to make policy decisions regarding the submission of petitions to merge the districts, as described earlier. Once agreed to, the boards will adopt resolutions to proceed. The merging district must submit the merger to the boundary

¹⁴ RCW 52.04.061

review board (in counties where one exists) for approval prior to calling for the election. The election is held only in the merging district(s) and a simple majority is required for approval. Once approved by the voters, an additional resolution by each agency to declare that the districts are merged finalizes the process.

Fiscal analysis

Annexation

Once a city is annexed into a fire district, the district's first tax levy after annexation would be determined by calculating what the district's tax rate would have been had the annexation not occurred, then multiplied by the current assessed value of the city. The combined numbers (pre-annexation tax rate plus the product of the assessed value multiplication) is the new combined tax rate across the entire jurisdiction.¹⁵ This means that the city area would be taxed by the district at the same rate that the district levies taxes within the district. The rate must be uniform within both the district and the city.

The taxpayers of the city will pay the district's tax levy in addition to the city tax levy. To prevent double taxation for fire protection, the city will be able to levy its regular property tax equal to 101% of its current tax levy, up to \$3.60/\$1,000 AV less the district's actual levy rate. The city's tax capacity is further reduced by a library tax levy as a result of the city annexing into the library district in 1986. In other words, the **ceiling** for the city's regular property tax is already lowered to accommodate the library tax and would be further lowered to accommodate the fire district tax.

Despite the annexation lowering the tax ceiling of the city, it does not necessarily reduce the city's actual tax levy. If the city is already taxing below the new lowered ceiling, annexation does not reduce the city's actual tax levy.

Merger

RCW 84.55.020 and WAC 458-19-030 govern the effects of a merger on the property taxes of a merging district. Under the general rules the tax levy for the merged districts is essentially based on a 101% increase over the combined tax levies of the preexisting districts. While the tax rate applied throughout the merged districts will be uniform, residents of the different districts may experience either an increase or a decrease in their former tax levy rates. It is common for districts to attempt to equalize tax levy rates between the jurisdictions prior to pursuing the merger.¹⁶

¹⁵ RCW 84.55.030

¹⁶ *Fire Service Consolidations, page 28.* Snure Seminars Handbook, Brian K. Snure, author. Snure Law Office, PSC



Issues & impacts

- Bothell must first be annexed by one of the districts before a merger between all districts can occur.
- Bothell has no representation on the governing board unless commissioner districts are created.
- The Bothell city council, if annexed, transfers all responsibility for fire and EMS service delivery to the annexing fire district.
- The district will have the authority to propose a property tax lid lift within the city limits.
- The district will have the opportunity to propose a special levy or general obligation bond proposal within the city limits.
- The assessed valuation of the district will be increased, thereby increasing its authorized debt limitation.
- The district will be authorized to exercise all of its powers within the area contained in the city limits.
- The autonomy that was previously enjoyed by each agency independently is not retained in a merger.
- A highly collaborative mindset is needed at the management levels of each agency administration.
- Simple majority voter approval of annexation in the city **and** in the annexing district is required.
- Simple majority voter approval in the merging districts is required for a merger to be successful. The merger district voters do not vote.
- Each fire commissioner of the merging districts joins the merger district board, reducing in number over successive elections until achieving the statutory number of board members (three, five, or seven, depending on board action).
- No net new FTEs are anticipated.
- Efficiencies may be realized in administration and support by eliminating duplication or reassigning duplicate resources.

STRATEGY D: REGIONAL FIRE AUTHORITY

Regional Fire Authorities (RFAs) are authorized by statute for both cities and fire districts.¹⁷ Essentially, an RFA operates in a very similar manner as a contract for services with shared governance, voter approval, and the creation of an independent municipal corporation with its own taxing authority and statutory framework.¹⁸ All of the participating agencies are eligible to be included in an RFA as they are adjacent to each other; there is no prohibition against crossing county lines. However, if Bothell decided not to participate in the RFA, none of the other agencies have contiguous borders and therefore would not collectively be able to form an RFA without Bothell's participation.

Level of cooperation

This strategy requires the highest degree of cooperation between agencies of any of the integration options. Statutorily, it starts with the formation of a planning committee.¹⁹ The planning committee is required to have three elected representatives from each participating agency. The RFA plan serves as the charter for the newly formed entity and outlines the services, service level standards, budget, funding mechanism(s), governance, and any other considerations deemed appropriate by the committee. It becomes the plan voters are asked to approve when voting on the formation of the RFA.

Estimated timeline for completion

While RFAs can be formed in as little as ninety days, it is more likely that the forming of an RFA planning committee, the forming of an RFA plan, educating the constituents of the affected agencies, holding an election, and transitioning from the current governance structure to the new governance structure will take at least eighteen months to two years.

Affected sections

All sections of each fire department or fire district are affected in this strategy. Implementation of this strategy creates a single fire agency.

Affected stakeholders

As in annexation and merger, the citizens of each agency are affected by this strategy, since the agency currently providing service will give way to the RFA.

¹⁷ RCW 52.26

¹⁸ *Fire Service Consolidations*, page 31. Snure Seminars Handbook, Brian K. Snure, author. Snure Law Office, PSC 612 S. 227th St. Des Moines, WA 98198-6836. Copyright © 2011.

¹⁹ RCW 52.26.030



The elected officials from both the city and the fire districts are also affected. Since the governing statutes do not require a specific number of governing board members to serve on an RFA, the RFA plan can call for as many or as few as the planning committee deems appropriate. The RFA can either select from their existing elected membership, or they can call for RFA commissioner districts, who will be elected from their respective districts by the RFA voters. This may impact the existing elected officials of each agency.

While conventional wisdom calls for an uneven number of governing board members to make up the governing board to avoid tie votes, ESCI is aware of two RFAs with an even number of members; one with six and one with twelve members.

Personnel from all three agencies are likely impacted since the fire agency will be redesigned to take advantage of efficiencies, develop a more effective deployment model (a two battalion response system), and the pooled resources are likely to modify the dynamics each of the separate agencies are used to operating within.

Summary/Objective of strategy

As in the annexation and merger strategy, this strategy combines all participating agencies into one. The objectives should be the same:

- A smooth transition from multiple organizations into a single, cohesive organization
- Obtaining balanced representation from the currently separate agencies
- To provide depth of resources, strength of service, financial sustainability and resiliency

This strategy combines all four agencies into a single regional fire authority. Services would be provided by the existing resources of all four agencies, pooled, and reconfigured to provide optimum services and governed by policy-makers representing all four agencies. The policy-makers come together from the four currently separate agencies as determined by the RFA plan, or from commissioner districts to ensure balanced representation, again as determined by the RFA plan.

ESCI guidance

If the parties agree to pursue this strategy, it requires the planning committee to adopt an RFA plan for action first by the elected officials of each participating agency, then by the voters served by those agencies as a homogenous group. It would also be prudent to obtain legal counsel as the planning committee formulates the RFA plan before submitting the finished product to the voters. It will also be necessary to communicate with existing constituencies, both internal and external, to educate them on the value and benefits of pursuing this option.

Transfer of personnel from a city to an RFA is outlined in statute. Under a Regional Fire Authority configuration, personnel from the agencies joining forces in the RFA become employees and members of the new organization. Unless an agreement for different terms of

transfer is reached between the collective bargaining representatives of the transferring employees and the participating fire protection jurisdictions, employees will retain the rights, benefits, and privileges that they had under their pre-existing collective bargaining agreements.²⁰ While silent in the same statute, this requirement likely also pertains to non-represented employees.

Special considerations

It is a requirement of the statute to establish an RFA plan which addresses all of the various services, services levels, governance, funding mechanisms, asset transfers, debt liabilities, and structure. The RFA planning committee must determine whether all changes to the plan are required to be submitted to the voters for approval, no changes require voter approval, or some sections require voter approval and some only require majority vote by the governing board. The difficulty is adopting a plan which makes clear the intent of the parties without tying the hands of future elected officials if circumstances change which necessitate modification. If those modifications are regarding the substance of the plan, it will require voter approval to make the changes. In no circumstance can the plan exceed statutory authority.

ESCI recommends that dynamic components of the plan, such as service levels and performance, be addressed in detail in a separate document by referral. In this way, the RFA plan addresses the specifics of service level by reference to the separate document, noting that it is periodically reviewed and modified as necessary by the governing board.

Policy actions

RFAs do not change the boundaries of the participating jurisdictions. The participating jurisdictions may continue to exist after the formation of the RFA (in the case of Bothell, it certainly continues to exist as a city, but without its own fire department). The fire districts would continue to exist for the sole purpose of providing elected officials for the governing board. RCW 52.26.120 provides a mechanism for dissolving the fire districts if RFA commissioner districts are created to serve on the governing board. RFA Commissioners are directly elected by the voters of the RFA and may be one or all of the governing board positions.²¹

ESCI's review and discussion of Washington State Law on this topic has been necessarily brief; only sufficient to ensure that basic provisions for RFA formation exist. As always, we emphasize

²⁰ RCW 52.26.100 (6)

²¹ RCW 52.26.080(3)

that we are not qualified to give legal advice. We recommend the participating agencies consult with legal counsel experienced in such matters before undertaking this strategy.

Fiscal analysis

Just as in the annexation/merger strategy, the city’s maximum allowed tax levy rate (ceiling) is reduced by the actual tax levy rate of the RFA. Although the city’s maximum tax capacity is reduced, depending on the city’s tax rate, this may or may not decrease the city’s actual tax levy. Example one illustrates this:

Figure 121: Example One – RFA Levy Impact on City Below Ceiling

Agency Type	Current Status		RFA Formation (assumes RFA levies at the district rate):		
	Maximum Tax Levy Rate	Current Tax Levy Rate	New Maximum Tax Levy Rate	New Tax Levy Rate	Change
City	\$3.60 (with pension fund)	\$1.49	\$2.60 (\$3.60-\$1.00)	\$1.49	\$0.00
Fire District	\$1.50	\$1.00	---	---	---
RFA	---	---	\$1.50	\$1.00	N/A

In example one, the city actual tax rate is unaffected since the reduced ceiling remains higher than the actual levy rate. The city is no longer responsible for providing fire protection (the RFA provides it). The revenue in this example is unchanged but the expenses for the city are reduced, creating a windfall for the city as a result. The impact to the city taxpayers, however, is that they will pay the same rate for the city (\$1.49/\$1,000 AV) plus the RFA tax of \$1.00/\$1,000 AV, for a total of \$2.49/\$1,000, or a net increase of \$1.00/\$1,000 AV. Since the city no longer has to fund the fire department in this scenario, the city will need to directly address the issue with its voters by either committing to reduce its property tax levy to offset or reduce the overall tax impact, or by convincing the voters that the tax increase will improve other services within the city. The tax impact in this scenario on residents of the fire district does not change, since they are exchanging the tax rate for the district with the tax rate for the RFA.

Figure 122: Example Two -- RFA Levy Impact on City Above Ceiling

Agency Type	Current Status		RFA Formation (assumes RFA levies at the district rate):		
	Maximum Tax Levy Rate	Current Tax Levy Rate	New Maximum Tax Levy Rate	New Property Tax Levy Rate	Change
City	\$3.60 (with pension fund)	\$2.89	\$2.60 (\$3.60-\$1.00)	\$2.60	(\$0.29)
Fire District	\$1.50	\$1.00	---	---	---
RFA	---	---	\$1.50	\$1.00	---

In example two, the example city is currently taxing at \$2.89 per one thousand dollars of assessed value, which is below their statutory ceiling of \$3.60 (including the firemen’s pension fund). With an RFA forming and charging \$1.00 per one thousand dollars of assessed value (\$1.00/\$1,000 AV), that amount is deducted from the city tax ceiling, which is \$.29 lower than the current rate, so the city must reduce its actual levy rate to at least the \$2.60 ceiling.

The impact to the city taxpayers, however, is that they will pay the new lower rate for the city (\$2.60/\$1,000 AV) plus the RFA tax of \$1.00/\$1,000 AV, for a total of \$3.60/\$1,000, or a net increase of \$.71/\$1,000 AV. Since the city no longer has to fund the fire department in this scenario, the city will need to directly address the issue with its voters by either committing to reduce its property tax levy to offset or reduce the overall tax impact, or by convincing the voters that the tax increase will improve other services within the city. The tax impact in this scenario on residents of the fire district does not change, since they are exchanging the tax rate for the district with the tax rate for the RFA.

A benefit charge can also be levied across an RFA. Further, if the benefit charge is used, it reduces the maximum taxing authority (ceiling) of the RFA from \$1.50/\$1,000 AV to \$1.00/\$1,000 AV, limiting the impact on the city’s taxing authority to \$1.00/\$1,000.²² A benefit charge is a service fee and not a tax and applies to improvements to real property and personal property and may provide up to 60% of the operating budget. Professional assistance is usually required to establish the formula and basis for assessing the charge. WF&R and NFD both assess a benefit charge to their residents. If the RFA plan submitted to the voters includes a benefit charge, the plan must be approved by a 60% vote (supermajority). If approved by the voters, the benefit charge can make up no more than 60% of the operating budget.

RFAs also have the authority to incur general indebtedness, issue bonds, and general obligation bonds in a manner similar to fire districts.

²² RCW 52.26.180 - .270



Issues & Impacts

- The City of Bothell will share in the governance of fire services by the city council appointing representatives to the RFA Governing Board as identified in the RFA Plan, unless commission districts are formed. If districts are formed, council members would likely still be appointed until commission seats are elected and seated on the RFA Governing Board.
- The tax levy set for the RFA extends over the city and all fire districts, reducing the city maximum tax capacity by that amount (but may not impact the current city tax levy).
- Outstanding bonds remain with originating properties unless restructured as per the RFA plan.
- All personnel are transferred to the RFA.
- City asset transfers are not required by statute, but are usually addressed in the RFA plan.
- District assets are transferred to the RFA since there is no need for the assets to be retained by the district.
- Unresolved claims, litigation, or threatened actions in each separate agency must be identified and coordinated to safeguard against any gaps in insurance coverage from being inadvertently created
- Make-up of the governing board should represent interests of the parties and ensure balance, such as formation of commissioner districts to ensure balanced representation.
- Legal analysis and review prior to implementation is highly advised.

Findings

Based on the evaluation of current conditions, the fiscal analysis of current conditions and fiscal analysis of a Regional Fire Authority, combined with our experience with other projects of similar character and scope, ESCI draws certain conclusions regarding BF&EMS, NFD, SCFD #10, and WF&R, and the opportunities for collaboration. A summary of those findings follow.

All Participating Agencies are Interdependent – The fire districts and departments depend upon each other and other neighbors for mutual aid and automatic aid assistance during emergency incidents routinely. As stand-alone agencies, each would be challenged to effectively combat a significant, multiple alarm fire or other major incident without assistance. SCFD #10 receives all emergency and support services from Bothell.

Each Agency Values Customer Service – During the work leading to this report, each agency 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.

Each Agency Advocates for its Constituency – Each agency demonstrates a strong value on the service provided to their communities and the cost of those services.

Each Agency has Needed Improvements Identified – Although the need varies, gaps were identified in each organization. These improvements are identified and called out in gray recommendation boxes located at the end of each section of this report.

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 fact that two of the three IAFF locals have combined and the elected and appointed officials have actively participated in this process has made the agencies less foreign to each other than they might otherwise be.

Most Integration Strategies are Feasible & Sustainable – Two of the three integration strategies evaluated in this study are feasible. The annexation with merger strategy (Strategy C – Annexation with Merger), appears to be statutorily prohibited due to population thresholds not being achieved. The remaining two strategies move across the spectrum of integration options from contracting for services while maintaining separate entities (Strategy B – Contract for Services) at the low end of the scale, to establishing a new entity (Strategy D – Regional Fire Authority) at the top of the integration scale.

The Agencies are Poised to Leverage Efficiency Opportunities – WF&R reduced their support services force by two in April 2013, and the fire chief position is currently vacant, with the district contracting for fire chief services from Bothell. The vacancies are being kept open in anticipation of potential regionalization. Bothell has hired a limited term office specialist, opting to keep the position flexible until the question of consolidation is answered. NFD has a very lean administration and is deferring any consideration of addressing additional administrative support to potentially take advantage of collaboration.

The context that ESCI judges the viability of an RFA is formed by the decisions of the RFA planning committee and their subcommittee's guidance. In summary, the guidance received from each of the three subcommittees is as follows:

Fiscal – The finance subcommittee recommended the following policies/principles upon which an RFA should be measured:

1. A General Fund Beginning Fund Balance equal to 35% of the Expense Budget (10% cushion plus three months of Labor and Operation & Maintenance costs)
2. A Loss of Revenue Reserve Fund equal to 25% of the Expense Budget.
3. An Apparatus Replacement Fund equal to 100% of the calculated replacement liability of front line apparatus. This liability was calculated in the equity model based on a replacement cost of \$750K and current service life. The equity model identified the level of reserve contribution each agency brought to a partnership.
4. An Equipment Replacement Fund equal to 100% of the calculated replacement liability of larger ticket equipment that has a defined service life. This liability was calculated in the equity model based on an estimated replacement cost and the current service life of each agency's equipment.
5. A Facilities Reserve Fund capable of providing funding for unforeseen repairs and upgrades.
6. An Employee Liability Fund that is equal to 100% of the calculated liability for other post-employment benefits (OPEB – such as LEOFF1 and Retirement Incentive) and 50% of sick leave and vacation accruals, both of which were quantified in the equity model.
7. A Health Retirement Account (HRA) Trust Fund that contains 100% of the HRA fund balances as reported in the equity model.

Service Level – The level of service subcommittee identified numerous areas of interest and recommendations for an RFA to go forward:

1. Since each agency handles patient transportation differently, transport revenues should not be included in the revenue projections.
2. RCW 52.26.040 prevents RFAs from providing ambulance service unless local private ambulance companies are deemed deficient (impact varies by participating agency – legal opinion should be sought).
3. Fire Prevention services be standardized and uniform across RFA as follows:
 - a. Both permitted and non-permitted structures be inspected uniformly, with permitted structures receiving inspection by certified fire inspectors and non-permitted structures receiving inspection by engine company crews.
 - b. Code enforcement responsibility remains with the cities and counties.
 - c. New construction plan reviews for the cities within the RFA (requires discussion with cities to accomplish this).
 - d. Public education services (two full time positions classified as appropriate by the Labor & Organization subcommittee).

4. Staffing on units to remain as is currently deployed, with the following considerations:
 - a. Maintain existing ladder truck response configuration, with consideration for a light force response model.
 - b. Peak activity units, possibly medical units and with alternative work force configuration.
 - c. Two battalion deployment configuration.
5. Analysis of optimum station locations was requested from ESCI, which was performed and reported on earlier in this report.

Labor and Organization – The Labor and Organization subcommittee identified several principles and considerations as follows:

1. For calculation purposes, a 50%-150% comparable class was chosen, which includes Everett FD, Kent RFA, Kirkland FD, Eastside F&R, Snohomish #1, Redmond FD, Renton FD, and Central Pierce F&R. The comparable range is consistent with the Public Employment Relations Commission (PERC) criteria.
 - a. Calculates the average wage of a firefighter on a 24 hour shift schedule, completion of 20 years of service, including an associate's degree or equivalent and any longevity pay. Average of the comparables is an hourly rate of \$46.50 and just under a 48 hour work week. Average of the client agencies is currently \$45.03.
2. An organization chart that is designed to reflect an optimum span of control, organizational effectiveness, and efficiency.
 - a. A transitional plan utilizes existing positions during the RFA start-up, adjusting toward the optimum organization chart over time.
3. Develop a conceptual collective bargaining agreement in the event an RFA is formed so all parties have assurances of the costs, benefits, and working conditions going forward. Legal counsel will be sought prior to these discussions.

Recommendations

In considering whether a regional fire authority (RFA) is a viable option for the agencies to pursue, ESCI identified two key questions which must be answered affirmatively for a strategy to be feasible. These two questions are as follows:

1. Is a given integration strategy sustainable over the long term?
2. Would the service level improve if the agencies integrated?

ESCI refers to these questions as the litmus test. These two concepts are further described as follows:

Sustainable - The first factor to consider in evaluating the strategies is that of containing costs and/or reducing them. Any partnership should be evaluated by its positive or negative impact to the projected fiscal condition, avoiding future costs, improving efficiency, or eliminating redundancies. These criteria should be evaluated not just short term where some transition costs may spike initially, but viewed into the foreseeable future.

Service - 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 may also fall under service delivery.

These two litmus test questions are answered in detail in the following sections.

Sustainability

To assess each agency's current effective rate against the projected RFA effective rate, an "apples to apples" comparison must be made. Thus, it is necessary to convert BF&EMS to an effective levy rate similar to the fire districts and similar to the mechanism used by an RFA. To estimate an effective tax rate for BF&EMS, ESCI compared its 2015 budget to the assessed value of the city. This does not mean that the fire department receives all of its funding from property taxes, but compares the financial expenses of the BF&EMS against the property values as the primary revenue stream to compute an effective tax rate. This calculation is illustrated in the figure below.

Figure 123: Bothell Fire & EMS Effective Levy Rate Calculation*

County	2015 AV	Rate	Levy
King	\$3,770,919,863	\$1.41	\$5,323,030
Snohomish	\$3,262,136,801	\$1.41	\$4,604,832
Total	\$7,033,056,664	\$1.41	\$9,927,862
EMS Snohomish	\$3,262,136,801	\$0.27	\$878,080
Fire Department Budget			
15-16 Biennium	\$21,401,260		
Half of Biennial Budget	\$10,550,630		
Less: Transport Fees	\$300,000	Estimate	
Subtotal (Annual Est.)	\$10,250,610		
Effective Levy Rate		\$1.46	

*Data Source: Washington State Dept. of Revenue

The impact of forming an RFA on the effective tax rates for each of the local governments and on the taxpayers of each agency is clearly illustrated in the following figure:

Figure 124: Impact of RFA on Effective Levy Rate by Agency

Agency (Stand-alone)	Effective Rate 2015
BF&EMS	1.46
NFD	1.56
WF&R	1.50
SCFD #10	1.27

RFA Taxes by Source	
RFA	2015
Property Tax	1.00
Benefit Charge	0.50
Total	1.50

Net Effect	2015
BF&EMS	0.04
NFD	(0.06)
WF&R	0.00
SCFD #10	0.23

The 2015 net effect of formation of an RFA as compared to the current independent status of the agencies illustrates an effective levy rate increase of \$0.23 for SCFD #10; an effective levy rate increase of \$0.04 for BF&EMS; no change for WF&R; and an effective levy rate decrease of \$0.06 for NFD. The effective levy rate for the RFA is further projected forward as follows.



Figure 125: RFA Effective Levy Rate Projection

RFA	2015	2016	2017	2018	2019	2020	2021	Notes
Property Tax	1.00	0.96	0.93	0.89	0.86	0.82	0.79	-3.85% rate of change
Benefit Charge	0.50	0.51	0.53	0.54	0.56	0.57	0.59	2.80% rate of change
								Total effective tax rate of RFA
Total	1.50	1.47	1.46	1.43	1.42	1.39	1.38	-1.38% net change

The starting rate for the RFA accounts for the cost of operation as designed by the RFA Planning Committee. This includes general fund contributions to reserve accounts to fully fund apparatus replacement, equipment, and facilities repair. If adequate reserves were put in place at the inception of the RFA, the levy rate would start approximately \$.05 per \$1,000 AV lower and decline from there.

The RFA Planning Committee also maintained personnel from redundant positions to address the transition workload associated with combining four agencies into one. This defers the savings that would accrue for the five identified redundant positions until such time as attrition eliminates these positions or on a date established by the RFA. ESCI recommends these redundant positions not be kept longer than three years.

Bothell has a non-dedicated reserve fund which addresses capital repair and replacement of a portion of the city's inventory across all disciplines. It is a council prerogative to determine which departments in the city will tap into those reserve funds. It is clear that BF&EMS has not benefitted by capital investments in facilities for some time with a great deal of deferred maintenance evident. Thus, BF&EMS would bring an unfunded capital liability to the RFA.

The city staff has stated that it cannot afford to transfer the necessary additional cash to match the cash contributions of NFD and WF&R and thereby fully fund the reserves, reducing the general fund contribution to reserves at the inception of the RFA. Bothell projects that their assessed valuation growth will make up for the lack of reserves in nine to ten years, outpacing the shortfall in the out years.

Efficiencies can be gained in eliminating the administrative duplication of positions. WF&R is currently contracting with Bothell for fire chief services and NFD has a very low administration-to-line ratio. Both circumstances are being tolerated to accommodate the potential for gained capacity and efficiency in an RFA. What this means is that integration may be simplified because many of the administrative parts fit neatly together, but some of the financial savings that would usually accrue may have already been factored into the existing financial picture. Should an RFA not go forward, these administrative circumstances will likely require additional infusion of funds to permanently rectify the disparity, thereby increasing individual agency costs.

Unlike fire districts, BF&EMS does not incur administrative costs to their budget for support services such as Finance/Accounting, Human Resources, Information Technology, and Maintenance which are provided by the city's other departments. These functions would be absorbed within the existing infrastructure of an RFA. The city would likely have more personnel in these support functions after

transferring fire protection to the RFA than the city would need to support the remaining smaller base. If the city implements a reduction in force as a result, this would reduce the city's personnel costs going forward. Any capacity gaps the RFA would have in these support areas could be contracted back to the City of Bothell to provide for the short- or long-term.

The agencies have prudently held off filling any but the most critical vacancies in anticipation of a possible RFA formation. If an RFA is formed, these vacancies can be permanently vacated, incorporating those savings to the benefit of the entire RFA budget and organizational structure. If an RFA is not formed and the agencies remain as currently configured, additional costs will be incurred by each agency as they move to fill positions held in abeyance until the issue of regionalization is answered.

Litmus Test Question 1: Is a given integration strategy sustainable over the long term? -- Yes

In short, the formation of an RFA is financially viable and sustainable. At inception, an RFA would cause a slight decrease for NFD if its bond debt is restructured and spread across the entire RFA, a break-even rate for WF&R, a modest increase for BF&EMS, and a more significant increase for SCFD #10.

Currently, the RFA statutes are silent regarding the transfer of bonded debt to an RFA. It is the desire of the RFA planning committee that the bonded debt of Northshore be spread across the entire RFA, and the bond is factored into the projected cost of the RFA. There are mechanisms which may facilitate absorbing this bond within the RFA, but legal council should be obtained before assuming the bond can legally be transferred to the RFA.

Addressing Bothell's capital facility needs through a bond levy across an RFA would increase the levy rate for the RFA, but significantly less so than if borne exclusively by Bothell taxpayers of an independent BF&EMS. The rate is subject to the amount of the bond and the bond terms negotiated. If new Bothell facilities are pursued, it does provide an opportunity to shift the stations toward optimum response time locations. This is made more complicated, however, due to SCFD #10 not owning the property their Queensborough station (Station 44) sits upon.

Service Level

The major forms of service levels were analyzed in this study, such as resource deployment, unit configuration, response time, workload balance, and support systems.

Individually, the fire stations are positioned to provide an appropriate response time to the communities they serve. When assimilated into an RFA, the system provides exceptionally well balanced coverage. Theoretical station configurations were analyzed against the current configuration to identify potential for response time improvement. That analysis is summarized below.



Figure 126: Response Time Impacts Based on Station Deployment (2013 Data)

Travel Time	Station Deployment Model						
	Existing 8 Stations	7 Stations	% Change	9 Stations	% Change	8 Stations Optimized	% Change
≤ 4 Minutes	88.70%	87.80%	-0.90%	91.30%	2.60%	90.40%	1.70%
≤ 5 Minutes	95.90%	94.30%	-1.60%	97.10%	1.20%	96.10%	0.20%
≤ 6 Minutes	98.80%	97.30%	-1.50%	99.20%	0.40%	97.60%	-1.20%

1% change ≈ 100 incidents

A reduction of one station to seven degrades travel time capability in all three travel time models and is therefore not recommended. A nine station configuration (a net increase of one fire station over current deployment) improves travel time in all three travel time models. Optimizing the current eight stations by relocating them to the most advantageous locations also improves travel time potential in two of the three travel time models. It is important to note that NFPA 1710 calls for urban, primarily career staffed fire departments to distribute resources so that the first arriving apparatus is on the scene of an emergency incident in 4 minutes travel or less, 90 percent of the time. The current configuration fails to meet that standard by 1.3%. The eight station (optimized) model and the nine station model both achieve this. Forming an RFA and taking advantage of future station replacements can allow phased implementation of the optimized model, facilitating achievement of that portion of NFPA 1710.

The opportunity to create a peak activity unit (PAU) is increased in an RFA. A PAU is intended to serve “hot spots” in the RFA by shifting to statistically busier locations during peak times of the day. It may also be used to cover scheduled activities such as routine training activities, covering for units engaged in such training. The unit may be in any configuration (typically an aid unit) and can be staffed as additional personnel are available or on a scheduled basis. The independent agencies do not have sufficient resources to be able to utilize PAUs because their use would degrade basic response capability. However, an RFA pools the resources of the combined agencies, facilitating the staffing of a two-person PAU during peak periods of the day when staffing is above minimums. This can have a very positive effect on response time and service levels for EMS calls, which represents the largest demand for emergency services.

Emergency medical transport services are provided by WF&R and BF&EMS/D10, but not by NFD. To further distinguish between the two transport systems, BF&EMS charges for the service and receives approximately \$300,000 of revenue per year (which is not calculated in the revenues for the RFA). WF&R does not charge for the service. This disparity would need to be addressed for an RFA to go forward. A statute provides a safeguard against competing for “ambulance transport services” with a

private ambulance company serving the area.²³ If transport services are ultimately provided by the RFA, it would presumably add a service that is not provided by NFD. The issue of charging for these services must be addressed by the RFA, which could create a revenue stream of nearly one million dollars over the current projections. Providing this service can also negatively impact response times and unit availability. A careful analysis must be performed before answering this question.

Fire prevention expertise drawn together as part of an RFA would improve the capability of the individual fire prevention programs. WF&R stands to gain the greatest benefit of this type of resource pooling as a result of significant curtailment of fire prevention activities in its service area. Public education is an area where forces joined together can have a powerful impact on education efforts throughout an RFA that would not be as likely as independent agencies.

Stand-alone specialty services can be developed in a larger agency, such as hazardous materials offensive capability (level A entry) or technical rescue services. However, the agencies currently contribute members to a consortium of agencies which provide these services regionally. It may not be necessary to provide these services in a stand-alone fashion.

Perhaps one of the greatest advantages to forming an RFA is expanded capacity (resource depth). As separate entities, their scale is relatively small and with limited resources. Combined, the resources facilitate an effective response force (ERF) of 14-16 within eight minutes in the highest densities of Bothell and the east end of Northshore (Kenmore); to a lesser extent the east side of Woodinville. This can be done without reliance upon mutual or automatic aid agencies. Further, the combined agencies could manage most simultaneous incidents without difficulty. As single entities, they each may be hard-pressed to perform one activity (a house fire, for example) without exhausting their resources or leaving their community vulnerable to delays from back-to-back emergencies.

Litmus Test Question 2: Would the service level improve if the agencies integrated? -- Yes

The level of service analysis identified that service would improve slightly. The agencies have individually done an excellent job of siting their existing fire stations, making only minimal gains in response performance possible. Staffing of response apparatus is balanced for each agency, which would continue in an RFA. The opportunity to staff PAUs with regularly assigned staff above minimum shift strength is substantially increased in an RFA. Dynamically deployed PAUs can have a significant positive impact on response times. Fire prevention programs can be more effective as a combined division, providing depth of expertise and capacity that each individual agency does not currently possess. Similarly, the depth of emergency response resources allows an RFA to handle simultaneous emergency incidents without reliance upon mutual or automatic aid from outside agencies. Currently, each agency relies on outside agencies for all structure fires.

²³ RCW 52.26.040



Policy-makers interviewed at the initiation of this study identified three acceptable outcomes of an RFA:

1. Maintains the existing level of services and reduces costs;
2. Improve services while maintaining costs;
3. Improves service with a slight increase in cost, as long as the improved services outweigh the increased costs.

Forming an RFA does not meet the first two criteria, with the third a judgment call. The degree to which the service level improvements outweigh the RFA's increased costs for some agencies is a political judgment the policy-makers of each individual agency and the RFA Planning Committee must determine. ESCI believes forming an RFA is a viable option and is in the long term best interest of all of the agencies and therefore recommends pursuing **Strategy D (Regional Fire Authority)**.

Alternatives were also evaluated in this report. **Strategy C (Bothell Annexation with Merger)** is a means of incrementally integrating into one agency. As described in detail in this report, Bothell would be annexed by fire district(s), followed by a merger with the remaining fire districts. However, an anomaly in the statutes limits the agencies that could annex Bothell because it straddles a county line with the population fairly evenly split. The statute specifically states:

“When a city or town is located in two counties, and at least eighty percent of the population resides in one county, all of that portion of the city lying in that county and encompassing eighty percent of the population may be annexed to a fire protection district if at the time of the initiation of annexation the proposed area lies adjacent to a fire protection district, and the population of the proposed area is greater than five thousand but less than ten thousand.”²⁴

The Washington State Office of Fiscal Management (OFM) estimated the 2014 population split in the City of Bothell as 59.1% residing in King County and 40.9% residing in Snohomish County. Neither portion of Bothell achieves the 80% threshold. Strictly interpreting this statute eliminates annexation as a potential strategy toward a subsequent merger. Legal counsel should be sought to verify ESCI's interpretation of this statute.

Strategy A (Status Quo) provides no net improvement as it represents no change over the current conditions, but it is always an option. **Strategy B (Contract for Services)** may provide for streamlining organizations, but only in certain circumstances, such as administrative services or some support services. It also adds a level of complexity in that each organization retains its individual taxing authority but most often operates as a single entity as it relates to those service areas being contracted. Cost

²⁴ RCW 52.04.061(2)

allocation becomes a complex challenge. Following the cost allocation formulas included in this report or using a variation of the approach can assist the agencies in determining the best option for each of the participants if this option is chosen.

If an integration strategy is chosen, it should be done as the result of a joint planning process, addressing the restructuring of the agencies as they integrate at the policy level, as well as at the operational, administrative, and support levels. Greater efficiency can be achieved if the collaboration is permanent, with one methodology, one set of work rules, one standardized level of service to the community, and one organizational structure to administer it.

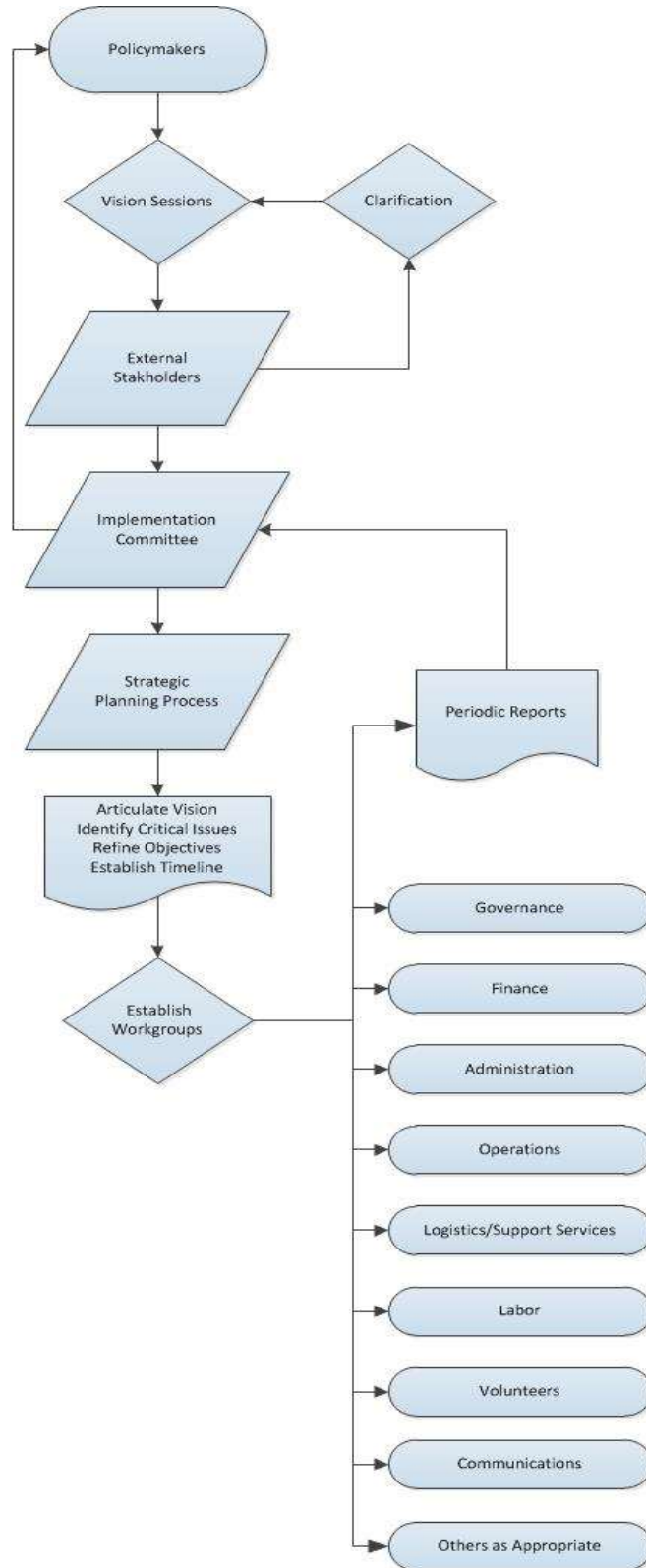
The process of considering and implementing any of these recommendations starts first with a shared vision by the policymakers of the participating agencies. From the vision, goals and objectives can be identified which, if accomplished, propel the agencies toward the vision. This process, in essence, is the framework of a strategic plan for integration. The process of implementing the above described process follows in the Implementation section of this report.

Implementation

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, fire chiefs and communities to 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 strategies can be further refined, other critical issues identified, timelines assigned, and specific tasks developed and implemented.

Figure 127: 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 both 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 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 study and complete any refinements or updates 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 management staff from the 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 Logistics/ Support Services Working Group. The membership of this group typically involves senior 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.

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 between the bargaining units on any unified agreement that would be proposed. 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 management and, as needed, legal counsel.

Communication 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 exclusively 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 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.

Appendices

APPENDIX A: TABLE OF FIGURES

Figure 1: Bothell Fire & EMS Organization Chart.....	33
Figure 2: Northshore Fire Department Organization Chart.....	34
Figure 3: Woodinville Fire & Rescue Organization Chart.....	35
Figure 4: Critical Issues	39
Figure 5: Bothell FD Apparatus Inventory	56
Figure 6: Northshore FD Apparatus Inventory	57
Figure 7: SCFD #10 Apparatus Inventory	57
Figure 8: Woodinville F&R Apparatus Inventory	58
Figure 9: BF&EMS/D10 Incidents by NFIRS Category, 2013	70
Figure 10: BF&EMS/D10 Geographic Demand, 2013	71
Figure 11: BF&EMS/D10 Response Area	73
Figure 12: BF&EMS Career Minimum Staffing.....	74
Figure 13: BF&EMS/D10 Population Density, 2010 Census Blocks	75
Figure 14: BF&EMS/D10 Demographics	76
Figure 15: BF&EMS/D10 Travel Time Capabilities, Current Station Locations	76
Figure 16: BF&EMS/D10 Station Concentration, 8 Minutes Travel Time	78
Figure 17: BF&EMS/D10 Personnel Concentration, 8 Minutes Travel Time	79
Figure 18: BF&EMS/D10 Concurrent Incidents, 2013.....	80
Figure 19: BF&EMS/D10 Unit Hour Utilization, 2013	80
Figure 20: BF&EMS Response Frequency, 2013 Emergency Incidents.....	81
Figure 21: BF&EMS/D10 Total Emergency Response Time Performance, 2013	82
Figure 22: BF&EMS/D10 Emergency Response Performance by Incident Type, 2013.....	82
Figure 23: BF&EMS/D10 Response Performance by Apparatus, 2013 Emergency Responses	83
Figure 24: NFD Incidents by NFIRS Category, 2013	84
Figure 25: NFD Geographic Demand, 2013	85
Figure 26: NFD Response Area	86
Figure 27: NFD Career Minimum Staffing.....	87
Figure 28: NFD Population Density, 2010 Census Blocks	88
Figure 29: NFD Demographics	88
Figure 30 NFD Travel Time Capabilities, Current Station Locations	89
Figure 31: NFD Station Concentration, 8 Minutes Travel Time	90
Figure 32: NFD Personnel Concentration, 8 Minutes Travel Time	91
Figure 33: NFD Concurrent Incidents, 2013.....	92
Figure 34: NFD Unit Hour Utilization, 2013	93
Figure 35: NFD Response Frequency, 2013 Emergency Responses	93
Figure 36: NFD Total Emergency Response Time Performance, 2013	94
Figure 37: NFD Emergency Response Performance by Incident Type, 2013.....	94
Figure 38: NFD Response Performance by Apparatus, 2013 Emergency Responses	95



Figure 39: WFR Incidents by NFIRS Category, 2013.....	95
Figure 40: WF&R Geographic Demand, 2013	96
Figure 41: WF&R Distribution, 2013	97
Figure 42: WFR Career Minimum Staffing	98
Figure 43: WF&R Population Density, 2010 Census Blocks	98
Figure 44: WF&R Demographics.....	99
Figure 45: WF&R Response Capabilities, Current Station Locations	100
Figure 46: WF&R Station Concentration, 8 Minutes Travel Time.....	101
Figure 47: WF&R Personnel Concentration, 8 Minutes Travel Time	102
Figure 48: WF&R Concurrent Incidents, 2013	103
Figure 49: WF&R Unit Hour Utilization, 2013.....	103
Figure 50: WFR Response Frequency, 2013 Emergency Incidents	104
Figure 51: WF&R Total Emergency Response Time Performance, 2013	105
Figure 52: WF&R Emergency Response Performance by Incident Type, 2013	105
Figure 53: WFR Response Performance by Apparatus, 2013 Emergency Responses.....	106
Figure 54: Northlake RFA Study Area	106
Figure 55: Study Area Population Density, 2010 Census Data	107
Figure 56: Study Area Incident Density, 2013.....	108
Figure 57: Study Area Travel Time Model	109
Figure 58: Study Area Travel Time Model and 2013 Incidents	110
Figure 59: Study Area Station Concentration, 8 Minutes Travel	111
Figure 60: Study Area Personnel Concentration, 8 Minutes Travel.....	112
Figure 61: Northlake RFA Study Area Station Optimization Model.....	113
Figure 62: Northlake RFA Study Area Travel Time Model and 2013 Service Demand	114
Figure 63: Northlake RFA Study Area 7 Station Travel Time Model	115
Figure 64: Northlake RFA Study Area 8 Station Travel Time Model	116
Figure 65: Northlake RFA Study Area 9 Station Travel Time Model	117
Figure 66: Northlake RFA Study Area Computer Optimized 8 Station Travel Time Model	118
Figure 67: Northlake RFA Study Area Automatic Aid Travel Time Model	119
Figure 68: Summary of the Effect of Various Station Configurations on Response Time	122
Figure 69: Annexation Areas Potentially Impacting an RFA	123
Figure 70: Taxable Value of Annexation Areas	124
Figure 71: Fire Prevention Program Components	130
Figure 72: Bothell WA - Home Sales, 2008 - 2013	136
Figure 73: Kenmore, WA - Home Sales, 2008 - 2013.....	137
Figure 74: Lake Forest Park - Home Sales, 2011 - 2013.....	137
Figure 75: Woodinville Home Sales, 2008 - 2013	138
Figure 76: Historic and 10-Year Average CPI-U Chart, 2004-2013.....	138
Figure 77: Historic and 10-Year Average CPI-U Table, 2004-2013.....	139
Figure 78: Historic King County and State-Wide Unemployment Rates, 2004-2013	139
Figure 79: Historic Snohomish County and State-Wide Unemployment Rates, 2004-2013	140
Figure 80: Historic Assessed Values, 2010 - 2014.....	141

Figure 81: Year-Over-Year Assessed Value Growth/Loss, 2010 - 2014	142
Figure 82: Cumulative AV Growth/Loss, 2010 - 2014.....	142
Figure 83: Historic AV Chart, 2010 - 2014.....	142
Figure 84: New Construction, 2010 - 2014	143
Figure 85: Banked Capacity, 2010 – 2014.....	143
Figure 86: City of Bothell AV and Levy Rate History, 2010 - 2014	144
Figure 87: BF&EMS Revenue History, 2010 - 2014.....	145
Figure 88: BF&EMS Expense History, 2010 - 2014.....	145
Figure 89: BF&EMS Expenditure History (as percentage of total), 2010 - 2014.....	146
Figure 90: BF&EMS Hypothetical Fund Balance History, 2010 - 2014.....	146
Figure 91: NFD - AV and Levy Rate History, 2010 - 2014.....	147
Figure 92: NFD - Fire Benefit Charge, 2010 - 2014	147
Figure 93: NFD - Revenue History, 2010 - 2014.....	148
Figure 94: NFD - Expenditure History, 2010 - 2014	148
Figure 95: NFD - Expenditure History (as percentage of total), 2010 - 2014.....	149
Figure 96: NFD - Fund Balance History, 2010 - 2014	149
Figure 97: NFD - Reserve Budgeted Fund Balance, 2014.....	150
Figure 98: SCFD #10- AV and Levy Rate History, 2010 - 2014	151
Figure 99: SCFD #10- Revenue History, 2010 - 2014	151
Figure 100: SCFD #10- Expenditure History, 2010 - 2014.....	152
Figure 101: SCFD #10- Expenditure History (as percentage of total), 2010 - 2014	152
Figure 102: SCFD #10– Expense/General Fund Balance History, 2010 - 2014	153
Figure 103: WF&R - AV and Levy Rate History, 2010 - 2014	154
Figure 104: WF&R - Fire Benefit Charge, 2010 - 2014.....	154
Figure 105: WF&R - Revenue History, 2010 - 2014	155
Figure 106: WF&R - Expenditure History, 2010 - 2014.....	155
Figure 107: WF&R - Expenditure History (as percentage of total), 2010 - 2014	156
Figure 108: WF&R - Expense/General Fund Balance History, 2010 - 2014	156
Figure 109: WF&R – Reserve Fund Balance History, 2010 - 2014	157
Figure 110: WF&R – Benefits Liability Fund Balance History, 2010 - 2014.....	157
Figure 111: WF&R – Capital Projects Fund Balance History, 2010 - 2014.....	158
Figure 112: Cost Allocation by Service Area, (2014).....	173
Figure 113: Cost Allocation by Assessed Value, (2014)	174
Figure 114: Cost Allocation by Resource Deployment, (2014)	175
Figure 115: Cost Allocation by Service Demand, (2014).....	176
Figure 116: Cost Allocation by Population, (2014)	177
Figure 117: Summary of Cost Allocation Factors by Percentage, (2014).....	179
Figure 118: 50% Assessed Value and 50% Service Demand, (2014).....	179
Figure 119: 50% Service Demand, 25% Resources, 25% Assessed Value, (2014).....	179
Figure 120: All Variables at Equal Weights of 20% Each, (2014)	180
Figure 121: Example One – RFA Levy Impact on City Below Ceiling	189
Figure 122: Example Two -- RFA Levy Impact on City Above Ceiling.....	190



Figure 123: Bothell Fire & EMS Effective Levy Rate Calculation*196
Figure 124: Impact of RFA on Effective Levy Rate by Agency196
Figure 125: RFA Effective Levy Rate Projection197
Figure 126: Response Time Impacts Based on Station Deployment (2013 Data)199
Figure 127: Process for Evaluating & Implementing Partnering Strategies.....204

APPENDIX B: SURVEY TABLES

Survey Table 12: Organization Overview

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Responsibilities & Authority				
Governing body	City Council	Board of Fire Commissioners	Board of Fire Commissioners	Board of Fire Commissioners
head of governing body	Joshua Freed, Mayor	Eric Adman, Chair	Mark Mitchell, Chair	Tim Osgood, Chair
key employee of governing body	Bob Stowe, City Manager	Jim Torpin, Fire Chief	No employee – Bothell FD provides staff support to board	Bob Van Horne, Fire Chief
meetings	1 st , 2 nd and 3 rd Tuesday @ 1800	1 st and 3 rd Tuesday @ 1700	2 nd and 4 th Tuesday @ 1830	1 st and 3 rd Monday @ 1700
Elected official authority defined	BMC & RCW 35A	RCW 52.14.100	RCW 52.14.100	RCW 52.14.100
Fire chief position	Bob Van Horne	Jim Torpin	Bob Van Horne	Bob Van Horne
hired by contract	No	Yes	Via service contract with Bothell	Via service contract with Bothell
term of contract	N/A	Six years	N/A – served by Bothell FD	May 31, 2015
periodic performance evaluation	Twice a year	Annually	N/A – served by Bothell FD	Annual with optional mid-year
Fire chief/authority defined	Yes – job description within a policy (check BMC)	Yes – job description within a policy	N/A – served by Bothell FD	See service contract for fire chief services from Bothell
Policy and administrative roles defined	No known documentation	Yes – in 1000 series policies	N/A – served by Bothell FD	Yes – in 1000 series of Policy/Procedure/Practice (3Ps)
Success Attributes				
Rules and regulations maintained	Policies & Procedures – not complete and in continuous revision	See disk from chief	N/A – served by Bothell FD	Manual of Ops and 3Ps – continual review and updates
process for revision provided	Yes – Policy exists on policy revision, but not on review cycle	Yes – Policy exists on policy revision	N/A – served by Bothell FD	Yes
Legal counsel maintained	City Attorney is primary	Kinnon Williams	Brian Snure	Jeff Ganson
consultation available	Yes	Yes	Yes – served by Bothell FD	Yes
labor counsel	City attorney and HR are consulted	Not on retainer – hire as need arises	N/A – served by Bothell FD	Sofia Mabee
Financial controls maintained	Finance Department has financial controls policies in place	Yes	Snohomish County levies & collects taxes, Bothell staff support processes payments & provides fiscal reports	Yes – in the Fiscal Management policy



Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Governing body minutes maintained	Yes, posted on website	Hard copies at HQ, plus kept on website	Minutes kept by Bothell staff support and approved minutes are posted at fire stations	Website and archived accordingly
Org. Structure				
Structure type	Typical hierarchy	Typical hierarchy	Contract for service with Bothell	Contract for administrative service with Bothell, typical hierarchy below fire chief
Descriptions of all jobs maintained	Yes – in HR job descriptions	Yes – in policies	Contract for service with Bothell	Yes, except for fire chief
job descriptions updated	When position being filled, job descriptions are reviewed by those competing. Could be obsolete JDs	Yes, updated last year	Contract for service with Bothell	As needed; some older JDs need updating
Employment agreements	No	Just fire chief	Contract for service with Bothell	No
Chain of Command				
Unity of command	Yes, see org chart	Yes, see org chart	Contract for service with Bothell	Yes, see org chart
Span of control	1:4 for fire chief, 1:5 when including WF&R	1:9 for fire chief	See Bothell	1:3 for deputy chief of admin
Hiring/Firing authority	Fire Chief	Fire Chief	Contract for service with Bothell	Board of Fire Commissioners
Formation				
Organization formed	1910 volunteer dept. formed	1942	1951	1948
History maintained	Not as well as could be	Not as well as could be	Not maintained	Not as well as could be
Individual or group responsible	Not formally managed	Informally managed	N/A	Informally managed
Agency Description				
Agency type	Municipality	Fire District	Fire District	Fire District
Area, square miles	Approximately 13.74 square miles + 2.49 square miles in SCFD #10	9.65 square miles	2.49 square miles	Approximately 30 square miles
Headquarters	10726 Beardslee Blvd. Bothell, WA	7220 NE 181st Street Kenmore, WA	330 228th Street SW, Bothell, WA	17718 Woodinville-Snohomish Rd NE, Woodinville, WA
Number of fire stations	2 + 1 (SCFD #10)	2	1	3

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Other facilities	0	2 (training tower & Station 54 – not operational)	0	1 Logistics center, Station 34 (vacant – used for storage), Station 37 (houses antique fire engine)
Emergency vehicles				
engine	2	2	1	2
engine, reserve	1	2	1	2
ladder truck	1	---	0	1
aid unit	2	1	2	3
aid unit, reserve		1	1	3
command	1	2	0	1
boat	0	0	0	Rigid hull inflatable
Tenders/Brush	1	0	0	1 brush
Rescue	0	1	0	1
Support Vehicle	2 (primary mover & decon trailer & F250)	0	0	2
WSRB rating	3	4	3	3 (currently under review)
date of most recent rating	2006	2012	2006	2014
Total fire department personnel, uniformed and civilian	64	48.5	0	61
administrative and support personnel, full-time	10	7	0	8
administrative and support personnel, volunteer	---	---	0	---
administrative and support personnel, part time	2	2 (includes part time contract training director)	0	---
operational personnel, full-time	51	41	0	53
Operational personnel, part time	1	---	0	---
operational personnel, volunteer	---	---	0	---
Demographics				
Population	40,540	32,252	9,471	39,103
urban/suburban & rural %	Not broken down, but approximately all suburban	Not broken down, but approximately all urban	Not broken down, but approximately all suburban	Not broken down, but approximately all suburban
Total residential units	Approximately 14,341	12,119	Not available	Approximately 14,585



Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Businesses	Approximately 4,474	367 Commercial Structures - many more businesses.	Not available	Approximately 1,200
Alarms				
Fire, 2013	123	88	Included in BF&EMS	121
value of property exposed to fire, 2013	Not tracked	Not tracked	Not tracked	Not tracked
value of property lost to fire, 2013	\$469,014	\$413,140	\$45,500	Unknown
Rupture or explosion	10	8	Included in BF&EMS	0
EMS/rescue	3,940	2,614	Included in BF&EMS	2,347
Number of EMS transports	Not separated from EMS/Rescue	--- (not routinely – not for fee)	Included in BF&EMS	Not separated from EMS/Rescue
Hazardous condition	51	51	Included in BF&EMS	82
Service call	163	100	Included in BF&EMS	193
Good intent call	444	376	Included in BF&EMS	516
False call	518	229	Included in BF&EMS	414
Severe weather	9	3	Included in BF&EMS	9
Other	4	5	Included in BF&EMS	84
Total	5,262	3,474	633	3,786
Mutual Aid				
Given	414	525	Included in BF&EMS	569
Received	321	250	Included in BF&EMS	568

Survey Table 13: Management Components

Survey Components	Bothell FD/D10	Northshore FD	Woodinville FD
Strategic Planning			
Mission statement adopted	Exists – not adopted	Exists and adopted	Exists and adopted
displayed	In Annual Report & policies	On website	In Annual Report
Vision established and communicated	In Annual Report & policies	On website	In Annual Report
Values of staff established	In Annual Report & policies	On website	In Annual Report
Strategic or master plan adopted by elected officials	No	No – plans to do this if RFA fails	No
published and available	N/A	N/A	N/A
periodic review	N/A	N/A	N/A
Agency goals and objectives established	Yes, through budget process and meeting councils adopted level of service	Yes, board sets goals annually – fire chief sets organizational goals	No, other than through the budgeting process
date developed	Annually	At the end of each year	N/A
periodic review	Annually	Part of chief’s evaluation is goal accomplishment from previous year	N/A
Code of ethics established	Within city policies	Code of Conduct Policy	Yes, in Policy 1021
Regulatory Documents			
Copies of rules provided	No	Yes, see disk	Policy guides conduct -- Not rules
last date reviewed	N/A	Three year review cycle	N/A
Copies of SOPs or guidelines available	See disk	Operational policies	Yes, all are posted on SharePoint site
regular update	Ongoing	N/A	Yes, ongoing review and updates
SOGs used in training evolutions	Yes	Yes	Yes
Policy manual available	Yes, see disk from fire chief	Yes, see disk from fire chief	Yes, all are posted on SharePoint site
reviewed for consistency	Not consistently	Yes, three year cycle	Yes
reviewed for legal mandates	As we become aware of any new case law, we update	Yes, HR works with attorney to review	Yes
training on policies provided	Nothing formal	Yes, operational policies as well as supervisor awareness, HR related policies	Yes, as needed/mandated
Critical Issues			
Critical issues are identified	*Note: see fourth critical issue		
first critical issue	Budget is anorexic	Revenue constraints	Long term sustainability (personnel costs manageable)



Survey Components	Bothell FD/D10	Northshore FD	Woodinville FD
second critical issue	Managing expectations for RFA	RFA – if it fails, then what? If it passes, lots of changes	Policy, admin, and labor all stay in their lanes
third critical issue	Annexation of north end may require significant infusion of infrastructure to serve it	Succession plan calls for deputy chief-ops/training	Have a plan if the RFA doesn't happen
Communication			
Internal communications			
regularly scheduled staff meetings (fire department)	Yes, every Monday	Every other month – B/C staff day with first hours with all officers, quarterly all hands meeting	Yes (executive staff meetings) – all officers quarterly, B/C-D/C meetings monthly
written staff meeting minutes	Talking points are shared with crews	No	Yes – distributed to attendees
memos	Yes and directives	Yes – special notices	Yes
member newsletter	Yes, quarterly	Monthly training bulletin internally	Yes, quarterly
member forums	No	Quarterly all hands meetings	No
open door policy	Yes	Yes	Yes
vertical communication path clearly identified (C of C)	An organization chart describes lines of authority and communication	An organization chart describes lines of authority and communication	An organization chart describes lines of authority and communication
External communications			
community newsletter	No – Bothell Bridge	Yes, not regularly	Yes, quarterly
website	Passively	Yes	Yes
advisory committee(s)	No	Not had the need	Yes, historically, not recently
complaint process	Yes, in policy	Not defined, but complainants are referred to fire chief	Yes, in policy
community survey	No – city does from time to time (customer satisfaction surveys)	Just initiating feedback for fire prevention inspections	Not regularly
Decision Making			
Preferred management methodology of the fire chief	Relational	Focus on providing quality services. Emphasis on customer service. Provide employees with outstanding training, sound operational practices and quality equipment. Evaluate performance, address performance concerns through training. Encourage organizational accountability.	Democratic-participative
Document Control			

Survey Components	Bothell FD/D10	Northshore FD	Woodinville FD
Process for public records access established	Yes – city and department policy	Yes – in policy	Yes – in policy
Hard copy files protected	Yes, locked file drawers	Yes, central records and stored at state, records retention room locked and sprinklered	Yes, locked file drawers
Computer files backed up	Yes, City does this automatically through IT	Yes, server with back-up off site	Yes, backed up off site and on site (transitioning)
Security			
Building security	Punch codes and keys	Yes, cameras, punch codes for doors	Punch codes and keys
Office security	Keyed locks	Keyed lock	Punch codes and keys
Computer security	Locked in offices, file server is in Police bldg.	Locked in offices, file server is in locked room	Locked in offices, file server is in locked room
Vehicle security	Locked or in secured bldg.	Apparatus is in locked facilities, apparatus is not unattended when out.	Locked or in secured bldg.
Capital inventory maintained	Yes	No – need to do this comprehensively	Yes
asset security system used	City of Bothell tags	Inventory tags	Transitioning to scannable bar codes
inventory interval	No	No	Infrequent
Monetary controls used			
cash access controls	Petty cash, with public educators and follows city policy	Yes – receipted when received, deposits occur as needed. Petty cash managed by finance. Petty cash is controlled and reconciled by finance, reviewed by chief.	Yes, addressed in policy
credit card controls	Yes, assigned to certain people & monthly reviews	Same as petty cash	Yes, see Fiscal Management policy
purchasing controls	Yes, finance manages this	Yes, separation of duties maintained – reviewed by state auditor	Yes, addressed in policy
Reporting and Records			
Records kept by computer operating system	Yes Windows XP	Yes Windows 7	Yes Windows 7
Periodic report to elected officials			
financial report	City Manager, monthly	Yes, quarterly	Yes, monthly
management report	Yes, to City Manager	Yes, twice a month	Yes, each board meeting
operational report	No	Yes, monthly	No, other than significant events
Annual report produced	Yes	No	Yes
distributed to others	City Manager and Council, SCFD #10, each station	N/A	Distributed via website, stations and staff
analysis of data provided	Yes	N/A	Yes
Required records maintained			
incident reports	Yes	Yes	Yes
patient care reports	Yes	Yes	Yes



Survey Components	Bothell FD/D10	Northshore FD	Woodinville FD
exposure records	Yes	Yes	Yes
SCBA testing	Yes	Yes – contracted	Yes – contracted
hose testing	Yes	Yes	Yes -- contracted
ladder testing	Yes	Yes	Yes -- contracted
pump testing	Yes, Redmond Fire performs maint.	Yes, Northshore Utility performs	Yes -- contracted
breathing air testing	Yes	Yes – contracted	Yes -- contracted
vehicle maintenance records	Yes, Redmond Fire performs maintenance	Northshore Utility	Yes -- contracted
gas monitors calibrated	Yes	Yes, daily	Yes
Planning			
Capital improvement plan	Source: Capital Facilities Plan	Source: Fire Chief memorandum and spreadsheet	Source: WF&R memo, Tab 11
plan period	2013-2019	Not specified	No current plan in place
periodic review	Annually	Annually	N/A
projects	Unspecified fire station facilities	Facilities are newer and bonded; currently funding annual maintenance	N/A
funding	\$5,000,000 unsecured funding need identified	Bonded new facilities; not anticipating new facilities	N/A
Apparatus & equipment replacement plan	Source: Asset replacement worksheet - COB	Source: Fire Chief memorandum and spreadsheet	Source: WF&R memo, Tab 11
plan period	2013-2019	2013-2033	2012-2019
periodic review	Annually	Annually	Annually
projects	All vehicles and equipment within planning period	All vehicles and equipment within planning period	All vehicles within planning period
funding	Expense identified, no source earmarked or reserved	Funded -- Reserve fund equipment replacement sub-account, annual contribution	Reserve funds; annual contribution

*BF&EMS fourth critical issues-- Succession plan and brain drain --

Survey Table 14: Capital Assets and Capital Improvement/Replacement Programs

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Fire Stations/Structures				
Plan maintained	No	No	No	No
period of plan (from – to)	N/A	N/A	N/A	N/A
funding mechanism	N/A	Maintain facility improvement fund with a 2014 goal of \$200,000	N/A	N/A
Apparatus				
Plan maintained	Yes	Yes	Included with Bothell	Yes
period of plan (from – to)	Rolling	2012-2018	Included with Bothell	Rolling

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
funding mechanism	General Fund	Property taxes and benefit charge	Property Taxes	Property taxes and benefit charge
Support Equipment				
Plan maintained	Yes	Yes	N/A	Yes
period of plan (from – to)	Biennial budget	2012-2018	N/A	On-going based upon life expectancy of gear
funding mechanism	General Fund	Property taxes and benefit charge	N/A	Property taxes and benefit charge
Purchase interval planned for by type:	Yes, according to category, including hose, SCBA, turnouts, radios, MDTs, defibrillators, and extrication equipment	Yes, according to category, including hose, SCBA, turnouts, radios, MDTs, defibrillators, and extrication equipment with the following annual estimates 2014 = \$117,562 2015 = \$117,562 2016 = \$92,299 2017 = \$91,316 2018 = \$91,316	N/A	

Survey Table 15: Staffing and Personnel Management

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Regulatory Documents				
Human resource manager	City HR	HR Administrator	Bothell HR	Chief Administrative Officer (CAO)
Personnel policy manual maintained	Yes	Yes--elect	N/A	Yes
manual provided at initial hiring	Yes	Handbook; key policies during 90 days training	N/A	On the intranet
training provided	Yes	Yes	N/A	Yes
periodic review & update		3-year interval	N/A	As Needed
Retention program established	Yes	Yes	N/A	Yes
Compensation, Point System, and Benefits				
Uniformed employee compensation, FT annual				
fire chief	10,325-13,128/month	12,400/month	N/A	Currently contracted from Bothell
deputy/asst. chief, Ops	9,354-11,893/month	N/A	N/A	10,889/month (WFR DFC, Admin)



Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
deputy/asst. chief, Support (Woodinville—CAO)		N/A	N/A	9,236/month
fire marshal	9,354-11,893/month	N/A	N/A	N/A
battalion chief	9,869/month	9,445/month	N/A	9,561/month
training lieutenant, nonexempt	N/A	8,404/month	N/A	N/A
deputy fire marshal, nonexempt	N/A	N/A	N/A	N/A
emergency management coordinator, exempt	N/A	N/A	N/A	N/A
field training officer, captain – nonexempt	N/A	N/A	N/A	9,188/month
EMS coordinator, nonexempt	N/A	N/A	N/A	N/A
captain	N/A	N/A	N/A	N/A
technical services coordinator, lieutenant	N/A	N/A	N/A	N/A
EMS field coordinator	N/A	N/A	N/A	N/A
fire lieutenant/fire investigator	N/A	N/A	N/A	N/A
fire plans examiner/inspector	N/A	N/A	N/A	N/A
lieutenant	8,595/month	7,987/month	N/A	8,389/month
engineer	N/A	N/A	N/A	N/A
firefighter/paramedic	N/A	N/A	N/A	N/A
public information specialist – exempt	N/A	N/A	N/A	N/A
firefighter II	7,474/month	6,945/month	N/A	7,294/month (WFR FF5)
firefighter I entry level	5,232/month	4,862/month	N/A	5,106/month
Firefighter trainee (not authorized to enter IDLH w/o supervision)	N/A	N/A	N/A	N/A
Additional compensation				
EMT premium pay	No	No	N/A	No
paramedic pay	No	No	N/A	No
clothing allowance	No	No	N/A	No
longevity pay	Yes 2%-12%	Yes 1%-12%	N/A	Yes 2% - 8%

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
other specialty pay	HazMat, TRT, and Special Response (1%); Special Projects Committee (5%); assigned to days (6%)	TRT (1.5%)	N/A	No
Non-uniformed employee compensation, FT annual				
administrative assistant	3,776-4922/month	3,840-4,732/month	N/A	4,120-5,389/month
staff assistant (Sr. Admin Assist)	4,273-5,432/month	N/A	N/A	N/A
management intern	N/A	N/A	N/A	N/A
Accounting Tech	N/A	N/A	N/A	N/A
Community Services/Admin		N/A	N/A	5,104-7,182/month
Community Response Permit Co-coordinator	N/A	N/A	N/A	N/A
Division Secretary	N/A	N/A	N/A	N/A
Facilities Maint Tech.	N/A	N/A	N/A	4,455-6,269/month
Payroll Tech	N/A		N/A	N/A
Special Projects Coordinator	N/A	N/A	N/A	N/A
Finance Manager	N/A	N/A	N/A	N/A
Exec. Asst.	5,046-6,415/month	N/A	N/A	5,232-6,234/month
Acct/Payroll (Woodinville)/Finance Specialist (Northshore)	N/A	4,456-5,493/month	N/A	4,762-5,673/month
HR Specialist	N/A	5,113-5,858/month	N/A	N/A
Career employee benefits				
social security	Yes/No	No	N/A	Yes/No
worker's compensation	Yes—L&I	Yes L&I	N/A	Yes—L&I
pension	LEOFF II/PERS II	LEOFF II	N/A	LEOFF II & PERS II/III
deferred compensation	Yes—ICMA & Nationwide	State Pension Option or Private provider	N/A	Yes—Washington State & Securities America (Employer paid contribution)
medical insurance	Northwest FF Benefits Trust & HRA (\$5500/yr)	Washington Counties Insurance Fund (WCIF)	N/A	Northwest FF Benefits Trust & Group Health & HRA (5478.40)
dental insurance	Association of Washington Cities	WCIF	N/A	Washington Dental Service
short and long term disability insurance	Standard	Standard	N/A	Cigna
life insurance	Standard	Standard	N/A	Cigna & Standard



Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
vision insurance	VSP	WCIF	N/A	Northwest FF Trust and VSP (Group Health)
survivor income benefit	No	No	N/A	No
additional life insurance	No	At employee's expense	N/A	No
other benefits/incentives	MEBT (paid by employee) (supplemental retirement benefit)	MERP (paid by employer)	N/A	MERP (paid by employee)
Reports and Records				
Personnel records maintained	Yes	Yes	N/A	Yes
application retained	Yes (at fire admin)	Yes	N/A	Yes
historical records archived	Yes	Yes	N/A	Yes
performance evaluations retained	Yes (at fire admin)	Yes	N/A	Yes
injury and accident records retained	Yes (in HR)	Yes	N/A	Yes
health and exposure records maintained	Yes (in HR)	Yes	N/A	Yes
Disciplinary Process				
Disciplinary policy established	Yes	Yes	N/A	Yes
Disciplinary process communicated	Yes	Yes	N/A	Yes
Appeal process provided	Yes	Yes	N/A	Yes
recent litigation	No	No	N/A	No
pending litigation	No	No	N/A	No
Counseling Services				
Critical incident stress debriefing	Through Chaplains Group	Through Chaplains Group	N/A	Through Chaplains Group, EAP and/or King County Sheriffs
Employee assistance program	Yes	Yes	N/A	Yes
Intervention program	Yes	Yes	N/A	Yes
Application and Recruitment				
Recruitment program	Neo-Gov & National Testing Network	National Testing Network	N/A	National Testing Network; Govjobstoday
Application process	Yes	Yes	N/A	Application
qualification check	Yes	Yes	N/A	Yes
reference check	Yes	Yes	N/A	Yes
background check	Yes	Yes	N/A	Yes
physical standards established	CPAT	No	N/A	CPAT
knowledge testing	Nationwide Testing Network	National Testing Network	N/A	Nationwide Testing Network

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
interview	Yes	Yes	N/A	Yes
medical exam required	Yes	Health Force Partners—NFPA 1582	N/A	Yes
psychological exam required	Yes	Yes	N/A	Yes
Testing, Measuring and Promotion				
Periodic competence testing	No	Basic Skills Assessment	N/A	Quarterly
Periodic physical competence testing	No	No Biannual Medical Exams (IAFF/IAFC)	N/A	Quarterly Competitions (Wellness/Fitness)
Periodic performance review	Yes	Yes	N/A	Yes
Promotional testing	Yes	Yes	N/A	Yes
Health and Safety				
Medical standards established				
periodic medical exam	Optional	Every 2 years	N/A	Annual Physical
		Yes	N/A	Yes
Safety committee established	City-wide (BC from fire dept. on committee)			
membership	All city departments	Training(union), HR	N/A	Chief, CAO, Training BC, 3 union, Admin Assistant
meetings	Monthly	Quarterly or more often when needed	N/A	Bimonthly
meeting minutes	Published on intranet	Yes	N/A	Yes—posted on Training website
Administration and Other Support Staff				
Fire chief,	1	1	N/A	0 (contracted from Bothell)
Deputy fire chief, administration or Operations	1	0	N/A	1
CAO (HR & Finance)	1 (PSAC)	0	N/A	1
BC or Captain, training/Safety	2 (BC)	1	N/A	1 (Working in Bothell office)
Support Services				
Fire Marshal	1	1	N/A	0
Facilities Maintenance	0 (City provided)	0	N/A	1
Training Lieutenant	0	0	N/A	0
Emergency Management coordinator	0 – will remain with city	0	N/A	0
Lieutenant, technical services coordinator	0	0	N/A	0
Fire lieutenant/fire investigator/inspector	1	0	N/A	0



Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Fire inspector-- Firefighter	2	0	N/A	0
Fire prevention specialist	0	1	N/A	0
Public information specialist, exempt	1	0	N/A	1 (WFR, non-exempt)
Public education specialist, exempt	.5	0	N/A	0
Administrative assistant	4.75	1 (Receptionist); .5 FTE training	See Bothell	2
Executive assistant/Office Manager	0	0	N/A	1
Accounting /Payroll Specialist	0	1	N/A	1
Administrator	0	1	0	0
Total administrative & support staff	15.25	7.5	0	9
Percent administrative & support to total	24.1%	15.78%	N/A	14.75%
Emergency Service Staff				
Battalion chief	3	4	N/A	3
Captain	0	0	N/A	0
EMS field coordinator	0	0	N/A	0
Lieutenant	9	8	N/A	9
Engineer	0	0	N/A	0
Firefighter, paramedic	0	0	N/A	0
Firefighter I and II	36	28	N/A	40
Total operational staff	48	40	N/A	52
Fire department total	63.25	47.5	N/A	61
Percent of operational officers to firefighters	33%	42.9%	N/A	30%
Use of Career and Volunteer Personnel				
Career schedule	48-96	24-72	N/A	48-96
length of normal duty period	48-hours	24-hours	N/A	48-hours
FLSA period	24 days	28 days	N/A	24 days
duty hours per week	50 hours	48 hrs	N/A	48.3 hrs
normal shift begins	0800	0800	N/A	0800
callback requirements	No	No	N/A	Yes
residency requirements	No	No	N/A	No
standby duty requirements	No	No	N/A	No
Operational career services				
fire suppression	Yes	Yes	N/A	Yes
EMS/rescue, first response	BLS	BLS	N/A	BLS
EMS, advanced life support	No	No	N/A	No

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
specialized rescue	TRT	TRT	N/A	TRT
fire prevention inspections	No	Company & Inspector	N/A	No
emergency management	No	No	N/A	No
public education	Yes	Yes	N/A	Yes
	Operations	Awareness	N/A	Operations (All line trained to Operations; 9 assigned to regional consortium)
hazardous materials response (level)				
Volunteer services				
chaplain	Yes	Yes	N/A	Yes
civilian administrative volunteer	No	No	N/A	No
Responsibilities and Activity Levels of Personnel				

Assignment of routine duties:

by position	Yes	Yes	N/A	Yes
by areas of personal interest	Yes	Yes	N/A	Yes

Special duties assigned by:

bid	No	No	N/A	No
duty assignment	Yes	Yes	N/A	Yes
areas of personal interest	Yes	Yes	N/A	No

Committees and work groups

EMS quality management	Through Shoreline Fire	Through Shoreline Fire	N/A	Through Shoreline Fire
chaplain	Yes	Through Bothell	N/A	Yes
training	City-wide Committee	With East Metro	N/A	With East Metro
safety	Yes	Yes	N/A	Yes
building development	No	No	N/A	No
standards	No	No	N/A	No

Survey Table: Service Delivery & Performance

Survey Components	Northshore	Bothell	Woodinville
Demand			
Current service demand			
tracked by incident type and temporal variation	Yes, it is tracked but not reviewed	Yes, it is tracked and reviewed annually	Yes, it is tracked and reviewed as necessary
geographical call distribution	Yes, it is tracked	Yes, it is tracked but not reviewed unless requested	Yes, it is tracked and reviewed as necessary
demand zones based on population	Analysis for 1756 compliance (Kenmore N, S., Lake Forest Park)	Commercial/residential demand zones. Also analysis for 1756 compliance.	Urban and rural. 1756 compliance document



Survey Components	Northshore	Bothell	Woodinville
Distribution			
Facilities			
total area protected	Response area identified, but calculated and sent via dispatch's CAD system	Response area identified, but calculated and sent via dispatch's CAD system	Response area identified, but calculated and sent via dispatch's CAD system
Number of fire stations	2	3	3
number of stations staffed	2	3	3
number of stations unstaffed	0	0	0
Apparatus			
apparatus appropriate to risk (fire, medical, special)	Yes	Yes	Yes, except possibly Ladder 31 (quint issues)
Staffing			
adequate for initial attack of predominant risk	13 ERF, residential (confirmed = 4 E, 2 L, 1 A or M, 2 BC)	13 ERF, residential (actually 22 for confirmed structure fire = 4 E, 2 L, 1 A or M, 2 BC)	13 ERF, residential (actually 22 for confirmed structure fire = 4 E, 2 L, 1 A or M, 2 BC) swap ladder for tender in rural east side
Concentration			
Effective response force	13	13	13 for reported structure fire, 18 for confirmed residential structure fire, 22 for commercial structure fire
defined by call type	Structure fires only	Structure fires only	Structure fires only
actual performance monitored	Yes, annually reported in 1756 compliance report	Yes, annually reported in 1756 compliance report	Yes, annually reported in 1756 compliance report
Reliability			
Workload Analysis			
unit hour utilization	No	No	No
failure rate by station area or response zone	No	Have run the report, but haven't done anything with the data	No
concurrent calls tracked	Not tracked, but data is compiled which would allow for that evaluation	Not tracked, but data is only compiled internally, not provided to council for action	Not tracked, but data is compiled which would allow for that evaluation
Performance			
Response Performance	Being compiled for 2013	Completed for 2013	Completed for 2013
call processing time	Yes, 90% of all calls dispatched in 1 minute	Yes, 90% of all calls dispatched in 1 minute	Yes, 90% of all calls dispatched in 1 minute
turnout time	Yes	Yes	Yes
travel time	Yes	Yes	Yes
total response time	Yes	Yes	Yes

Survey Components	Northshore	Bothell	Woodinville
Response time goals	Response Time Compliance Report, 2012	Emergency Operations 3219 – Level of Service	Contained in SOC – dated draft – not CFAI 5th Edition compliant
by response zone	By jurisdiction	By jurisdiction	By jurisdiction
by incident type	Yes	Yes	Yes
actual response times documented	Yes, by type as listed in Response Time Compliance Report, 2012	Yes, by type as listed in Response Time Compliance Report, 2013	Yes, by type as listed in Response Time Compliance Report, 2013
Mutual/Automatic Aid			
Given/Received balance	525/250	Receive more than we give	569/568
automatic aid incorporated in run cards/dispatch procedures	Yes – closest unit	Yes – closest unit	Yes – closest unit
inter-agency training and SOP's	Yes, best practices within training for most neighboring agencies (EMTG)	Yes, best practices within training for most neighboring agencies (EMTG)	Yes, best practices within training for most neighboring agencies (EMTG)
signed mutual aid agreements or county plan	Yes	Yes	Yes
Incident Control and Management			
Incident Command System	NIMS	NIMS	NIMS
incorporated in all emergency operations	Yes	Yes	Yes
addressed in SOP or SOG	Yes	Yes	Yes



Survey Table:16 Training

Survey Components	Northshore FD	Bothell and Woodinville FD
General Training Competencies		
Incident command system – cert levels defined?	NIMS Based ²⁵	NIMS Based
Accountability procedures	Passport system used	Passport system used
Policy and procedures	Yes	Yes
Safety procedures	Yes	Yes
Recruit academy	New personnel assigned to full 12 week academy for Firefighter 1 certification, even if previously trained. Internal probationary orientation and 9 month handbook completion process which achieves Firefighter II certification.	New personnel are either required to participate in a full fire academy or have Firefighter I and EMT certification prior to hire. Undergo an internal orientation and training course that typically takes a month to complete.
Special rescue (high angle, confined space, etc.)	In house technical rescue team as a part of a regional team. High angle, confined space, collapse and trench rescue @technician level. All non-team members at operations level for the above. Also rescue swimmer on each shift.	In house technical rescue team as a part of a regional team. High angle, confined space, collapse and trench rescue @technician level. All non-team members at operations level for the above. Also rescue swimmer on each shift.
Hazardous materials	Operations level. Regional team available.	9 Technician level personnel internally also members of the regional team. All others are trained to operations level.
Wildland firefighting	None	Receive red card training
Vehicle extrication	Yes	Yes
Defensive driving	EVIP course used actively	EVIP course used actively
Use and care of small tools	Yes	Yes
Radio communications & dispatch protocol?	Yes	Yes
EMS skills and protocol?	All personnel are at Basic Life Support level	All personnel are at Basic Life Support level
Training Administration		
Director of training program	Currently transitioning from a contract training director to a training captain position.	Bothell Battalion Chief and Woodinville Captain serve as training officers for Bothell and Woodinville
Goals and objectives identified	A written training plan is under development at EMTG	Some goals and objectives are in writing in specific areas. Not completely defined.
Recordkeeping		
Individual training files maintained	Yes	Yes
Records and files computerized	Yes	Yes
Daily training records	Yes	Yes
Company training records	Yes	Yes

²⁵ NIMS – National Incident Management System

Survey Components	Northshore FD	Bothell and Woodinville FD
Pre-fire planning included in training	Incorporated into the company inspection program	Not included in routine training
Personnel Trained		
Training objective (who, level, etc.)	Maintain all personnel at Firefighter I and II certification level plus EMS and specialty certifications	All personnel trained to Firefighter I, maintain specialty certifications and emergency medical certifications
Professional development program used	Funding for outside education is provided. Officer prerequisites require KC Officer Development Certificate	King County officer development program is made available to those interested
Administrative Priority		
Budget allocated to training	Well-funded	Generally adequately funded
Using certified instructors	Yes	Yes
Annual training report produced	Completed	Quarterly reporting as well as included in departmental annual report
Adequate training space/facilities/equipment	Yes	Yes
Maintenance of training facilities	Well maintained	Well maintained
Training Program Clerical Support		
Support Staff support	.5 FTE clerical support position	1 FTE clerical support position
Records computerized software used	Firetrex software	Firetrex software
Adequate office space, equipment, and supplies	Yes	Yes
Training Facilities and Resources		
Training facilities (tower, props, pits)	Training facility at Northshore Station 51 including tower, live fire props	Bothell has a training tower at Station 42. Also use Northshore training facility extensively as well as one at Redmond Station 17.
live fire prop	At training facility	At Northshore facility, not at Station 42.
fire and driving grounds	At training facility	Use road course on public streets and a rodeo course at a local church and speedway in Woodinville
Classroom facilities	Two classrooms at Station 51, well configured	Adequate facilities are located at Stations 31 and 42
Video, computer simulations	Well equipped	Well equipped
Books, magazines, instructional materials	Well equipped	Well equipped
Training Procedures Manual		
Manual developed and used	Departmental training manual is in place with performance standards	Manuals in place for defined areas (hose, rope, ladders, etc.) also Zone 1 lesson plans
Training Methodology		
Manipulative	Yes	Yes
Task performances/ frequency	Annual skills testing process completed	Quarterly skills testing process is completed
Annual training hours	Based on hours required by WAC 296-305 plus county required EMS continuing education	Based on hours required by WAC 296-305 and quarterly schedule plus county required EMS continuing education



Survey Components	Northshore FD	Bothell and Woodinville FD
Use of lesson plans	Combination of lesson plans and training manual performance standards	Lesson plans developed internally and available via EMTG and other sources
Night drills	Two per year	Complete one night drill per year
Multi-agency drills	Regular training interaction and exchange at least quarterly	Quarterly multi-company drills completed plus some additional
Inter-station drills	Routinely	Routinely
Interagency drills	redundant	
Disaster drills conducted	Participate in statewide disaster drill	Some via disaster coordinator. Not incorporated in to regular training program.
Annual performance evaluation conducted	“Fundamental skills challenge” annually. Annual “chief’s drill” Training Operation & Performance	Quarterly skills testing
Attention to safety	High	High
Post incident analysis	Completed on significant alarms	Completed on structure fires and other significant alarms
Priority by management toward training	Highly prioritized by management	Highly prioritized by management

Survey Table17: Prevention

Survey Components	Bothell FD/SCFD #10	Northshore FD	Woodinville FD
Code Enforcement			
Fire codes adopted	Washington State Fire and Building Code per International Code Council (ICC)	Washington State Fire and Building Code per International Code Council (ICC). Adopted in both cities.	Washington State Fire and Building Code per International Code Council (ICC) adopted by city and King County Fire Marshal
code used – year/version	2012	2012	2012
Local codes or ordinances adopted, amendments	Local “Zone 1” amendments adopted collaboratively between area agencies. Also several local amendments per the Bothell Municipal Code	Local “Zone 1” amendments adopted collaboratively between area agencies. Amendments also adopted by the cities of Kenmore and Lake Forest Park.	Local “Zone 1” amendments also adopted by city of Woodinville and County.
ordinance in place	No, but may be required based on access, water supply or other issues.	Kenmore has adopted a residential fire sprinkler requirement for new construction. Not currently in Lake Forest Park.	Not in the city. In the unincorporated areas, KCFM requires sprinklers over 5,000 sq. feet and relative to access and water supply issues
New Construction Inspections and Involvement			
Consulted in proposed new construction	Within the city only	Yes	Handled exclusively by the city. FD is recently being included in the process to some extent.
Perform fire and life safety plan review	Completed in the city. The County Fire Marshal conducts in unincorporated portion of the service area.	Conducts plan reviews for Kenmore and Lake Forest Park	Not formally but is able to provide comment/input on submitted plans
Sign-off on new construction	In the City, County Fire Marshal outside of the city	Required for building permit issuance	No, advisory only
Charges for inspections or reviews	Fee schedule used based on building size and review time	Included into the building permit fees, charged back to the cities	No
Perform existing occupancy inspections	Addressed via a combination of company inspections and CRR staff	Yes	Fire department performs no existing occupancy inspections. Permitted occupancies only are inspected by the city building official. Those outside the city are completed by KCFM.
Special risk inspections	Yes	Yes	Completed by the city building official
Storage tank inspections	Yes	Yes	Completed by city building official



Survey Components	Bothell FD/SCFD #10	Northshore FD	Woodinville FD
Key-box entry program in place	Knox Box system in place	Knox Box system in place	Knox Box system in place
Hydrant flow records maintained	City Public Works Department in the city	Maintained by area water districts (4 in the jurisdiction)	By Woodinville Water District
General Inspection Program			
Self-inspection program in place	No	No	No
Frequency of inspections	Target of annual inspection of all occupancies. Have fallen back some due to demand recently.	Annual	Annual by the city for permitted occupancies only. Occupancies outside of the city are inspected annually by KCFM.
Inspection program	Community Risk Reduction Code Compliance staff complete all inspections in permitted occupancies. Line crews inspect all non-occupancies.	IFC permit occupancies inspected annually by prevention division. Non-permitted occupancies annually by suppression crews. About 125 low-risk are on a biennial basis.	The fire department no longer completes existing occupancy inspections. Fire code permitted occupancies are inspected by the city building official. Non-permitted occupancies are not being inspected.
Citation process in place and formally documented/adopted	None. Processed by Code Compliance Officer in Community Development Department	None. Fire code violations processed via the city compliance officer	City and KCFM have a process in place
court cited to	N/A	Municipal	Municipal or County
Inspections computerized	Completed on paper, then put in Firehouse Software	Yes. Code Pal software	N/A
Number of personnel devoted to program	1 fire marshal oversees CRR Division. 3 in code compliance, 1.5 FTE in Public Education, 1 in Safety and Support Services and .5 FTE administrative support	1 Fire Marshal and 1 Fire Inspector	No staffing in the Community Risk Reduction Division
Fire Safety and Public Education			
Public education/information officer in place	1.5 FTEs are both titled public education/public information officers. Conduct school programs, DUII drills, car seat inspections, fall protection, etc.	No dedicated public education officer	No dedicated public education officer. A Community Service Officer conducts some public education outreach. Line personnel also conduct some outreach, station tours, etc.
Public education in the following areas:			
calling 9-1-1	Yes	Yes	Yes

Survey Components	Bothell FD/SCFD #10	Northshore FD	Woodinville FD
EDITH (exit drills in the home)	Yes	Yes	Yes
smoke alarm program	No	Yes	Yes
fire safety (heating equipment, chimney, electrical equipment, kitchen/cooking, etc.)	Yes	Yes	Yes
injury prevention (falls, burns/scalding, bike helmets, drowning, etc.)	Yes	Injury prevention flyers provided to students during school outreach	Bike helmet program, fall prevention addressed
fire extinguisher use	Yes	Yes. For businesses and as a part of CERT program	Yes
fire brigade training	No	No	No
elderly care and safety	Yes	Limited, on request	CSO completes blood pressure checks and educational outreach in senior facilities
curriculum used in schools	Use internally developed lesson plans and NFPA materials	Internally developed lesson plans modeled after NFPA standards	Use annual NFPA fire prevention week theme and materials
baby-sitting classes offered	Yes	No	No
CPR courses, blood pressure checks offered	CPR and AED classes offered	Yes	Blood pressure, CPR, public access AED programs
Publications available to public	Yes	Yes	Yes
Bilingual information available	Yes	Yes	Limited
Annual report distributed to community	Monthly report developed	General division report annually includes public education report	Included in departmental annual report on a limited basis
Juvenile fire setter program offered	Intervention trained	Access neighboring intervention resources	Not actively
Wildland interface education offered	No	No	Yes
Fire Investigation			
Fire origin and cause determination	Company officer completes initial evaluation. If in question, referred to one of CRR staff that is trained in cause and origin determination. Referred to law enforcement is criminal in nature.	Incident commander completes initial evaluation. If in question, referred to the fire marshal of fire inspector. Large loss fires referred to county sheriff fire investigation unit.	City of Woodinville contracts with the King County Fire Marshal for investigation. Line crews conduct initial review, call KCFM as needed based on flow chart matrix.
Arson investigation and prosecution	By Bothell Police or County Sheriff depending on location	Via county sheriff office	KCFM



Survey Components	Bothell FD/SCFD #10	Northshore FD	Woodinville FD
Arson investigation training provided	3 CRR personnel are trained and certified	Fire Marshal is certified investigator. Inspector is in the process.	KCFM investigators are also commissioned law enforcement officers
Person responsible for investigations	Fire Marshal	Fire Marshal	Deputy Chief
Local FIT membership (fire investigation team)	No FIT team	No FIT team. County Fire Marshal	No FIT team. County Fire Marshal
Process for handling juvenile suspects	County Juvenile Department	Processed via county juvenile department	Processed via county juvenile department
Liaison with law enforcement	Fire Marshal	Fire Marshal	Deputy Chief
Scene control practices in place	Yes	Yes	Yes
Adequate and appropriate equipment issued/supplied	Yes	Yes	Yes
Evidence collection process in place	Yes	Processed by KCFM personnel	Processed by KCFM personnel
Reports and records of all incidents made	Yes	Yes	Yes
File, record, and evidence security	In ATF provided software, very secure	Electronic and hard copy, properly secured	Electronic and hard copy, properly secured
Statistical Collection and Analysis			
Records kept by computer	Collected in Bomb Arson Tracking System software, available from ATF	Code Pal used for inspection related records. Internally developed data base for permits, plan reviews and related records.	Incident report only in the state NFIRS system
Information collected in the following areas:			
fire incidents	Yes	Yes	Yes
time of day and day of week	Yes	Yes	Yes
method of alarm (how received)	Yes	Yes	Yes
dispatch times	Yes	Yes	Yes
response times	Yes	Yes	Yes
Information analyzed & used for planning	No	Reviewed annually to identify trends	Reviewed annually to identify trends
Reports made & distributed	Departmental annual report includes incident numbers only	Departmental annual report	Departmental annual report
FTEs used in data collection & analysis	Assigned to 1 FTE in Safety and Support Services and an additional duty	Division staff only	1 FTE administrative assistant position also carries some prevention duties

Survey Table:18 Emergency Communications

Survey Component	Emergency Communications – Observations
	NORCOM
Emergency Dispatch Agency population served	North East King County Regional Public Safety Communication Agency (NORCOM) 700,000
9-1-1 PSAP – (public safety answering point)	Secondary PSAP, fire department calls are transferred from King County or City of Bothell Police Department
surrounding bordering PSAPs	Snocom(Snohomish County), Snopac(Snohomish County), Bothell Police, Redmond Police, Issaquah Police, Kitcom, ValleyCom(Seattle south) Rivercom, State Patrol, King County Sheriff, University of Washington Police
participating fire departments served	Bothell, Northshore, Woodinville
Organizational structure	
mission statement, goals, and objectives	Executive Director reports to the NORCOM Governing Board
Authorized communications staffing	88 total FTE. 62 FTE are telecommunicators
work schedule	40 hour work week, ten hour work days
minimum staffing policy	7 minimum. 12 minimum at peak times
state requirements for public safety dispatchers	Continuing education requirements based on state wide voluntary program. Training based on APCO standards.
union representation	Yes
Communications Facility & Equipment	
Facility	
security	Card lock secured
Computer aided dispatch (CAD)	Tri-Tech CAD system for fire
geo data base	Yes
Emergency power	Yes
Telephone equipment	Positron
Radio system	800 mhz. Motorola
Radio control	Motorola Centracom Elite consoles
Recording equipment	Digital logging equipment
Workstations	17 plus 2 in training room
Mobile communications devices	Multiple 800 mhz. portable and mobile radios. A few VHF radios in use.
Fire/EMS notification system	Alpha digital paging and digital voice systems in stations
Alarm monitoring/fire systems	No
Back-up plan/center operations	Redmond PSAP serves as backup
Communications/Dispatch Operations	
Availability of performance standards and/or benchmarks	
call answering time standard	90% in 10 seconds in 90% of the hours of each calendar quarter
call processing/dispatch time standards adopted	90% in 60 seconds per NFPA 1221 Standard
Evaluation of dispatch activities	
by time/day/month	Tracked
by incident type	Tracked



Survey Component	Emergency Communications – Observations NORCOM
Standard operating procedures	Detailed Standard Operating Procedures in place
Quality assurance program	QA program is in place. 1 FTE fully dedicated to QA.
Training program	12 week academy training program is completed, followed by training on the floor under a Communications Training Officer, testing process before approval to work as a call taker. Followed by separate law enforcement and fire radio training programs. Typically a 15 – 16 month process.
Emergency medical dispatch (EMD)	King County medical priority dispatch system is used
Position descriptions	For all positions
Evaluations	Annual, ongoing during probationary period
Workload activity (2013)	
9-1-1 calls	150,728
7 – digit incoming calls	82,798
average speed of answer	98.59% answered within 10 seconds (2013)
average telephone processing times	2 minutes, 19 seconds
law enforcement calls	123,474
fire/EMS calls initiated	55,888

Communications Center Funding

Funding sources	King County 911, call for service fees levied for participating agencies
Capital facilities & equipment plans/upgrades	None currently
Current operating budget	Approximately \$11 million
Current reserves	Capital replacement fund in place

Survey Table: Fiscal

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Finance Overview				
Designated fiscal year	January-December	January-December	January-December	January-December
Assessed property value, FY 2013	\$5,784,172,090	\$4,616,655,461	\$843,579,780	\$6,945,111,636
2013 Expense/Operating Fund Total Expenditures, fire department	\$9,898,242	\$7,027,440	\$1,313,453	Budget: \$11,797,289 Actual: \$10,740,289
General fund property tax, District levy FY 2013	\$8,917,584	\$4,616,656	\$1,032,268	\$6,939,650
	Year - Rate*	Year - Rate*	Year - Rate*	Year - Rate*
levy rate (5 year history)	2009 1.182	2009 0.740	2009 0.887	2009 0.788
	2010 1.294	2010 0.871	2010 0.971	2010 0.902
*Expense Levy	2011 1.369	2011 0.924	2011 1.065	2011 0.950
	2012 1.484	2012 1.000	2012 1.188	2012 1.000
	2013 1.541	2013 1.000	2013 1.224	2013 1.000
general fund levy collection rate FY 2013				
when prior year collections are included with current year levies	100%	100%*	100%*	100%*
Bonds, fire department				

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
levy rate	No (the city has a bond but it doesn't include fire related capital purchases)	Have a voter approved General Obligation bonds for headquarters fire station levy rate is 0.2503 (2013)	None	None
Other tax levies/fees				
levy rate	EMS Levy 0.30 (2013) + King Co EMS Shared (no direct rate)	King County has its own EMS levy which is distributed to each EMS provider	EMS Levy 0.30 (2013)	King County has its own EMS levy which is distributed to each EMS provider
Budgetary Controls				
Budget officer	Budget Coordinator Cathy Farrell	Chief Torpin	One Commissioner is assigned the responsibility each budget year.	CAO Joan Montegary
Budget development process				
role of electeds	City Council provides direction on the overall budget focus and the desired budget outcomes	The Fire Commissioners provide input and guidance setting the basic direction and goals throughout the process. Legally responsible for budget and funding approvals.	The Fire Commissioners provide input and guidance to the assigned budget officer and are legally responsible for budget and funding approvals.	The Fire Commissioners provide input and guidance through collaboration with staff early in the budget cycle and throughout the process. Legally responsible for budget and funding approvals.
role of administration	Cathy (the budget coordinator) pulls together all the program manager's budgets and coordinates the development of the final budget	Active throughout the budgeting process building, modifying, modeling, and developing the final budget	Current financial data is gathered by the District Secretary and used with capital needs/costs projections provided by Bothell to build each budget	Program mangers gather needs and costs related to their programs and submit budget request to the internal budget admin team
role of management	Program managers (chief officers) are responsible for 48 various programs and responsible for the requests related to their programs	Budget managers or program managers analyze their program needs for the budget year and submit requests	The organization doesn't directly have this level of staff	Help the program managers prioritize budget requests based on needs and impact



Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
role of staff	Program coordinators (LT or FF), the individuals that typically do the purchasing, supply input to program managers regarding the changing needs of their programs	Not directly involved	The organization doesn't directly have this level of staff	Staff enters budget request data into finance software; confirms BARS codes; proofreads, removes duplicates entries, etc.
role of community	The community is invited to attend public budget meetings/hearings.	The community is invited to attend public budget meetings/benefits charge hearings.	The community is invited to attend public budget meetings/hearings.	The community is invited to attend public budget and benefit charge meetings/hearings
Budget adoption process				
budget approval	City Council	Board of Commissioners	Board of Commissioners	Board of Commissioners
funding approval	City Council	Board of Commissioners	Board of Commissioners	Board of Commissioners
Financial control officer				
financial report	Monthly program expenditure reports are distributed to program managers and summaries are created for City Council. Complete financial audits of the city are conducted annually.	Standard Financial reports that track expenses by program and fund are monitored internally by administration weekly and Monthly. Quarterly all expenses are reviewed by an outside accountant and the Board as well as the standard Fiscal audits.	Monthly financial statements reconciled with Snohomish Co Trial balance to ensure cash and balances are monitored. The Board is prepared summaries of expenses and balances quarterly.	AP Specialist (Biggerstaff) posts and reconciles monthly financial data, standard (Monthly, Quarterly, and Fiscal) reports are prepared by contracted accountant and CAO (Montegary) and reviewed by CAO (Montegary), and then distributed to Board.
financial review	Cathy provides monthly report to the Chief. Finance Dept. staff provide quarterly report to council. Cathy and program managers review budgets-to-actual reports on a normal monthly basis.	Chief Torpin and Andrea review spending weekly and monthly financial summaries. The financials are completely reviewed quarterly by the Board.	Financial reports provided to Fire commissioners on a monthly basis for review and direction.	The District utilizes an independent financial consulting (CFO Solutions) agency which reviews financial data and provides feed-back and direction. CAO, Chiefs, and Board reviews standard financial reports monthly.
auditor	State Auditor	State Auditor	State Auditor	State Auditor

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Basis of accounting	GAAP / GASB	Cash Basis (standard WA Fire District basis)	Cash Basis (standard WA Fire District basis)	Cash Basis (standard WA Fire District basis)
Purchasing				
purchasing policy	The City has an existing city policy and guidelines published and in-place. Each program coordinator has \$5,000 limits for budget approved purchases. Electronic approval and workflow are utilized to track compliance.	Do not currently have a written policy but plan to publish a policy in the future. However, the practice in place requires multiple approvals for any standard budget purchase, any item greater than \$1,000 requires the Chief's approval	Shadow the City policy but approved by Fire commissioners	Starting to use credit cards for Operations related purchases. The credit cards have limits and restrictions in place. Admin has utilized credit cards for purchases for several years and limits and restrictions are in-place. Approval is required for all purchases.
central supplies/logistics	No central supplies, it is decentralized and purchases handled independently by each program manager.	No central supply system in place, purchases are typically made through local vendors using existing business accounts.	Handled by city of Bothell	Logistics center located in Annex building adjacent to Headquarters building.
joint agreements/ventures	King County EMS	King County EMS	Handled by city of Bothell	King County EMS
JPAs	Have teamed with other local agencies on small-cap and large-cap purchases in past when it has been timely and beneficial	Partnered with other Fire Districts on small-cap and apparatus purchases in past when it has been timely and beneficial	Handled by city of Bothell	Partnered with other Fire Districts on small-cap and apparatus purchases in past when it has been timely and beneficial
bidding	Follow State Guidelines and have an enhanced policy in place within the city policy.	Follow the State Guidelines	Handled by city of Bothell	Follow State Guidelines
leases	None	None	None	Copiers
Budget				
Operating budgetary funds organized by program or category (BARS)	Yes	Yes	Yes	Yes
sub accounts	Yes (48 programs)	Yes	No	No



Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Reserve funds	City-wide not fire specific	Reserve Fund sub divided Funds: <u>2014 budget EFB</u> Natural Disaster: \$250,000 Insurance: 200,000 Emp Benefits: 2,770,000 Loss of Rev: 1,922,644 Equipment: 1,491,128 Facilities: 200,000 2012 Board Designated Reserve: 420,000 Total Forecast: \$7,253,772	No	Reserve Fund sub divided Funds: <u>2014 budget EFB</u> Reserve Fund: \$1,473,499 Capital Projects: 412,015 Emp Benefits: 1,319,221 Total Forecast: \$3,204,735
Revenue funds	No (city general fund)	Fire Benefit Charge Fund	No	Fire Benefit Charge Fund
Enterprise funds	No	No	No	No
Adopted budget FD Revenue, 2014 Expense (General) Fund	\$9,847,747	\$7,537,503	\$1,329,892	\$11,803,279
Adopted budget FD Expenditures, 2014 Expense (General) Fund	\$9,847,747	\$7,634,460	\$1,414,668	\$11,718,558
Personnel Services	\$8,483,841	\$6,468,650	\$55,854	\$8,884,207
Materials & Services	\$980,449	\$240,250	\$1,063,914	\$2,242,471
Debt Service	\$0	\$925,560	\$132,900	\$0
Capital Outlay	\$341,938	\$0	\$162,000	\$591,880
Municipal overhead				
reserve fund contributions	Yes (fleet)	None	None	None
fleet rental charges	No	None	None	None
fleet maintenance charges	Billed directly through budget	None	None	None
motor fuel charges	No	None	None	None
property/casualty insurance	Within Dept Budget	None	None	None
medical and dental insurance	Within Dept Budget	None	None	None
workers' compensation	Within Dept Budget	None	None	None
workers' compensation mod rate		None	None	None
employee pension plan	Within Dept Budget	None	None	None
city administrative overhead	No	None	None	None
Debt				

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Bonded debt	No, not related to Fire	The District authorized the issuance of \$18,295,000 of voter approved general obligation bonds to pay off a previous line of credit and to construct a headquarters fire station and training facility that were being serviced via a councilmanic bond. The Bonds were sold and then issued on 8/5/2009, and will mature within 20 years. The District levies annual excess property taxes to pay and retire these bonds. At the end of fiscal 2014 the total outstanding (principle and interest) is \$22,489,723	None	None
Capital lease	None	None	None	None
Unfunded liability	None	No, fully funded	None	No, fully funded
pension fund	LEOFF 1 (7 individuals) funded through the Fireman's pension reserve fund	LEOFF 1 (7 individuals) funded to 100% of recommended amount of State Actuarial	None	LEOFF1 (only 1) funded to recommended amount of \$250K
workers' compensation claims	None	None	None	None
OPEB	None	None	None	None
5. Revenue				
Tax levy				
limitations	WA state City limitations and EMS limitations	WA state Fire District limitation: \$1.00 (not \$1.50 due to Benefit Charge) and EMS limitation: \$0.50	WA state Fire District limitation: \$1.50 and EMS limitation: \$0.50	WA state Fire District limitation: \$1.00 (not \$1.50 due to Benefit Charge) and EMS limitation: \$0.50
Service contracts	SCFD #10	None	None	None



Bothell, Northshore, Snohomish #10, Woodinville, Washington
Regional Fire Authority Feasibility Study

Survey Components	Bothell FD	Northshore FD	Snohomish #10	Woodinville FD
Benefit Charge	None	Yes \$2,299,999 in 2013	None	Yes \$4,506,479 in 2013
Grants				
recent awards	EMS (usually less than \$5,000 per year)	EMS & Training (usually less than \$8,000 per year combined)	None	None
outstanding applications	None	None	None	Technology Grant (Tablets) through King County
Fundraising				
Foundation	Union has donation/fundraisers	Firefighters have a foundation, District has a Donation fund which is used for special/community based needs	None	Benevolent Fund (WF&R Firefighters)
Volunteer Association	None	None	None	None
Fees for service				
billing for fire response	Transports MDC	None	None	None
inspection fee	Plan Reviews and Permits	Plan Reviews and Permits	None	Woodinville City Building Department handles them
hazardous materials recovery outside of jurisdiction	None	None	None	None
airport/port fee(s)	None	None	None	None
event stand-by charges	None	None	None	None
Ambulance service collection(s)				
percentage collected (2013)	The City uses System Designs for their transport and MVC billings. The 2013 collection rate was approximately 94%	AMR provides services, when the District transports there are no fees charged.	They receive a contract amount from the City of Bothell	Woodinville Fire doesn't bill for transports, they only transport BLS at no charge
collection fee(s)	System Design charges \$22.00 flat fee per transport	N/A	N/A	N/A

APPENDIX C: RFA FINANCIAL MODEL

The Northlake Regional Fire Authority Finance Model (Model) is an overview of the organizational and financial attributes of the proposed regional fire authority consisting of the City of Bothell Fire Department, Northshore Fire District, Woodinville Fire District, and Snohomish County Fire District 10.

The time span of the Model is seven years: January 1, 2014 through December 31, 2020. The scope of the Model encompasses all identifiable sources of revenue in specified amounts by year, all taxing and fee rates, all identifiable objects of expense, and all transfers of funds into clearly defined reserve accounts. The Model is divided into five sections, each with its own sub-models:

Overview

- Dashboard
- Cash Flow
- Burn Rate

Resources

- Property Taxes and Benefit Charges
- Operating Revenues

Operating Programs

- Governance
- Office of the Fire Chief
- Administration
- Fire Marshal
- Community Outreach
- Organizational Expenses
- Operations
- Training
- Facilities Maintenance
- Apparatus Maintenance
- Transitional Operations

Reserves

- Reserve Summary
- Emergency Reserve
- Apparatus Reserve
- Equipment Reserve
- Facility Projects Reserve
- Employee Benefits Reserve
- HRA Trust Reserve

Labor Database

- Staffing Matrix
- Wage Summary
- Benefits Summary
- Overtime Summary
- Position Headcount Summary
- Position Cost Database

Generally the objective of each sub-section is to highlight a narrowly-defined financial issue of interest and to analyze that issue in a way that gives the observer an opportunity to explore multiple options, assumptions, or alternatives framed within the context of a phrase beginning with “What if...?”:

What if the tax rates are X?



What if the RFA hires X more firefighters beginning in 2017?

What if the benefit charge started at X rate and then increased (or decreased) by a specific percentage each year?

What if the RFA Emergency Reserve was targeted to achieve and maintain a funding goal of 25% of the annual operating budget by 2018?

What if a goal was established to never allow the general fund cash balance (Working Capital) to fall below 10% of the operating budget at any time over the seven-year span of the Model?

What if the RFA is managed with the goal to fully fund all apparatus replacements with cash purchases rather than through the very costly alternative of issuing bonds and incurring large interest charges?

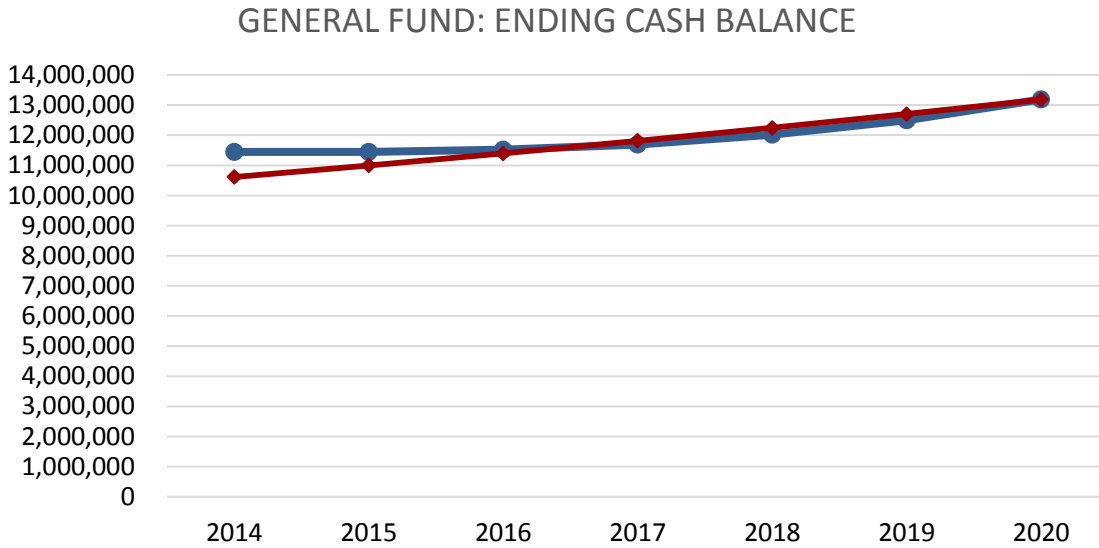
The Model was designed specifically to respond to these types of “What if...?” questions from the various committee members, other elected officials, fire administrative staff, and all other interested observers. For every “What if...?” question, the Model will display a number of outcomes or results.

The Model results are not presented as the sole solution to any given challenge. Rather, the observer will note that there will always be multiple solutions possible, each with its own advantages and disadvantages. It is left to the policy and governance leaders of the RFA to consider the optional solutions and to select one that moves the organization forward along a path that exhibits the most effective use of the resources entrusted to them by the taxpayers of the RFA. The Model will assist in evaluating the final decision by studying the likely outcome over seven years.

OVERVIEW

Dashboard - The Dashboard displays key data collected from throughout the detailed model and presents it in summary form. All of this data is displayed in a series of tables each of which is a component of an overall cash flow representation that culminates in a chart showing the expected year-end cash balances of the RFA general fund for each of the first seven years of operations.

THE RFA GENERAL FUND



PROPERTY DATA: The key data includes assessed property values along with an estimated annual growth rate from *re-valuation*, as well as the growth in total property value with the addition of *new construction*. The central importance of property data stems from the fact that the majority of revenue to support the RFA is derived from the assessment of property values.

GENERAL FUND							
	2014	2015	2016	2017	2018	2019	2020
Property Assessed Value (Billions)	19.462	20.569	21.734	22.959	24.249	25.607	27.035
Annual Growth in Assessed Value		5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Value of New Construction (Millions)		133.8	136.5	139.2	142.0	144.8	147.7
Growth in Value of New Construction		2.0%	2.0%	2.0%	2.0%	2.0%	2.0%

INITIAL CAPITALIZATION FOR THE GENERAL FUND: The RFA is programmed to begin its first day of operations backed by an initial contribution of cash from its four agency members. The amounts shown are the only cash inflow from the original agencies. No other cash contributions in the following years are envisioned from any of the members.



INITIAL CAPITALIZATION	
Bothell	768,000
Northshore	4,457,327
Woodinville	5,917,465
District 10	-
General Fund Beginning Cash Balance	11,506,336

CURRENT REVENUES: During the annual fiscal cycle, January through December, the RFA is empowered to generate revenues from a variety of sources which are identified below, such as a bond levy, a fire operations levy, and Emergency Medical Services Levy, a Fire Benefit Charge, and general operating charges and fees from sources such as plan checking, permits, and the like. Each of the rates associated with these revenues and the resulting level of revenue is shown in the table below.

CURRENT REVENUES							
	2014	2015	2016	2017	2018	2019	2020
Excess Bond Levy	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144
Bond Levy Rate	0.081	0.076	0.072	0.068	0.065	0.061	0.058
Fire Levy Property Taxes	19,461,758	19,790,175	20,119,386	20,449,446	20,780,406	21,112,320	21,445,241
Fire Levy Rate	1.00	0.962	0.926	0.891	0.857	0.824	0.793
Snohomish Co. EMS Levy	1,184,818	1,204,291	1,224,037	1,244,060	1,264,363	1,284,949	1,305,822
Snohomish Co. EMS Levy Rate	0.300	0.289	0.278	0.267	0.257	0.247	0.238
Benefit Charges	9,730,879	10,570,812	11,483,245	12,474,435	13,551,181	14,720,869	15,991,519
Benefit Charge Levy Rate Equivalent	0.50	0.51	0.53	0.54	0.56	0.57	0.59
All Other Revenues	1,398,718	1,416,213	1,433,989	1,452,050	1,470,404	1,489,056	1,508,013
TOTAL CURRENT REVENUE	33,347,316	34,552,635	35,831,801	37,191,135	38,637,498	40,178,338	41,821,739

TOTAL RESOURCES: The next table summarizes all forms and amounts of income available to the RFA on an annual basis.

TOTAL RESOURCES							
	2014	2015	2016	2017	2018	2019	2020
TOTAL FUNDS AVAILABLE	44,853,652	46,004,169	47,282,234	48,713,015	50,328,120	52,194,491	54,323,620

CURRENT EXPENSES: RFA expenses include funds that are in support of operations, such as payroll, utilities, fuel, station maintenance, and the like, as well as contributions made to reserve accounts for the acquisition and replacement of apparatus, equipment, and capital improvements and projects. These outlays of cash are summarized in the table below.

CURRENT EXPENSES							
	2014	2015	2016	2017	2018	2019	2020
Amount Transferred to Reserves	3,068,331	3,130,578	3,194,579	3,260,385	3,327,227	3,395,938	3,466,572
Budgeted Labor Expenses	25,223,497	26,201,520	27,229,155	28,306,644	29,406,740	30,592,013	31,836,569
Budgeted M&O Expenses	5,110,291	5,221,637	5,336,620	5,455,365	5,577,999	5,704,658	5,835,479
Amount Spent on Operations	30,333,788	31,423,157	32,565,775	33,762,009	34,984,739	36,296,671	37,672,048

TOTAL CURRENT RESERVE TRANSFERS AND OPERATING EXPENSES: The following table depicts the total cash outlay of the RFA on an annual percentage basis along with a view of the percent of revenues that are currently utilized with the balance carried forward in support of operations in the following year.

TOTAL CURRENT RESERVE TRANSFERS & OPERATING EXPENSES							
	2014	2015	2016	2017	2018	2019	2020
	33,402,118	34,553,735	35,760,354	37,022,394	38,311,967	39,692,609	41,138,620
Percent of Current Revenue Transferred or Expended	100.2%	100.0%	99.8%	99.5%	99.2%	98.8%	98.4%
Percent of Total Resources Transferred or Expended	74.5%	75.1%	75.6%	76.0%	76.1%	76.0%	75.7%

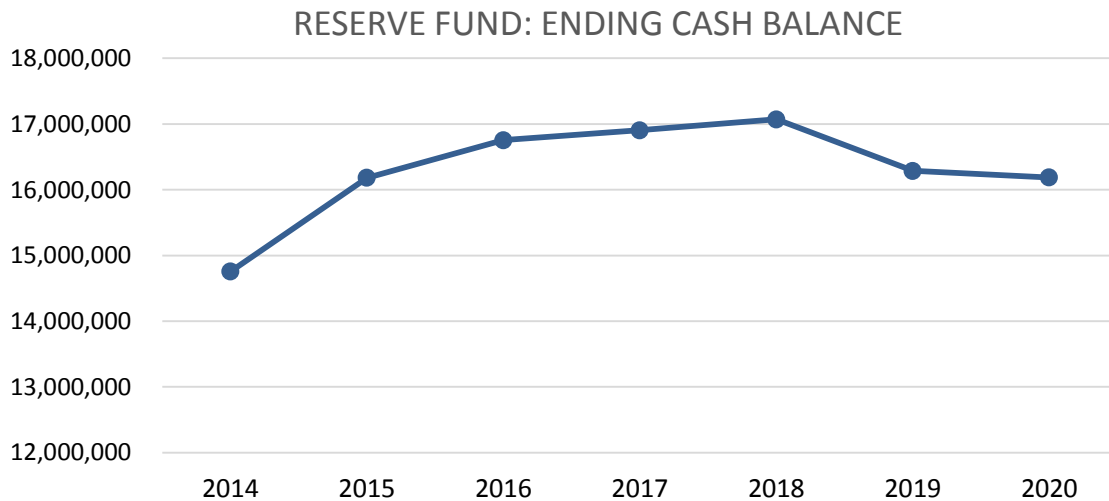
YEAR-END CASH BALANCE: At the end of each fiscal period, the RFA specifically identifies a specific amount of cash to remain from operations and to be carried forward to begin the ensuing year of operations. The cash balance and some of its attributes are depicted in the following table.



YEAR-END CASH ATTRIBUTES							
	2014	2015	2016	2017	2018	2019	2020
Cash Balance Percent of Total Current Expenses	34.3%	33.1%	32.2%	31.6%	31.4%	31.5%	32.1%
Cash Balance Increase (Decrease)		(1,100)	71,447	168,741	325,532	485,728	683,119
Monthly Budgeted Expenses	2,783,510	2,879,478	2,980,030	3,085,199	3,192,664	3,307,717	3,428,218
Months of Operating Cash	4.1	4.0	3.9	3.8	3.8	3.8	3.8
Minimum Cash Bal. Target	10,616,826	10,998,105	11,398,021	11,816,703	12,244,659	12,703,835	13,185,217

THE RFA RESERVE FUND

RESERVE FUND: One of the most significant features of the RFA is the fundamental design feature that envisions and programs a reserve fund that is capitalized on its first day of operations, rather than the option of beginning with virtually nothing set aside for future vehicle and equipment purchases, and then relying on costly bond issues to provide up-to-date replacements. The following chart displays the expected cash balances that will be initiated and maintained over the first seven years of RFA operations.



RESERVE CASH SOURCES AND AMOUNTS: The cash sources and amounts generated on an annual balance include an initial capital contribution from the four member agencies along with a single annual contribution from the RFA general fund. Expenses from each reserve account are depicted along with an expected year-end cash balance that is programmed to remain in the reserve fund to be carried forward for utilization in future years.

RESERVE FUND							
	2014	2015	2016	2017	2018	2019	2020
Reserve Fund Beginning Cash Balance	14,461,378	14,755,951	16,181,891	16,754,041	16,905,479	17,070,062	16,287,873
Property Taxes Transferred into Reserve Accounts	3,068,331	3,130,578	3,194,579	3,260,385	3,327,227	3,395,938	3,466,572
Revenues from Asset Sales	0	0	0	0	0	0	0
Bond Proceeds	0	0	0	0	0	0	0
Bond Payments	0	0	0	0	0	0	0
Amount Spent from the Emergency Reserve	0	0	0	0	0	0	0
Amount Spent from the Apparatus Reserve	1,587,812	379,181	1,050,356	1,263,060	1,479,245	2,625,059	1,574,600
Amount Spent from the Equipment Reserve	176,959	287,804	455,795	554,510	246,943	531,036	875,081
Amount Spent from Facility Projects Reserve	0	10,000	69,500	225,000	350,000	0	74,000
Amount Spent from the Employee Benefits Reserve	425,949	432,859	439,990	447,350	454,945	377,783	385,873
Amount Spent from the HRA Trust Reserve	583,038	594,794	606,789	619,026	631,511	644,249	657,244
Reserve Expenses	2,773,757	1,704,638	2,622,430	3,108,946	3,162,644	4,178,128	3,566,798
Transfer Back to the General Fund	0	0	0	0	0	0	0
Reserve Fund Ending Cash Balance	14,755,951	16,181,891	16,754,041	16,905,479	17,070,062	16,287,873	16,187,647
Percent of Current Revenue Expended	90.4%	54.5%	82.1%	95.4%	95.1%	123.0%	102.9%
Percent of Total Resources Expended	18.8%	10.5%	15.7%	18.4%	18.5%	25.7%	22.0%



GENERAL RFA STATISTICS AND ASSUMPTIONS

The RFA can be characterized by a brief summary of the key components of its forecasting assumptions of revenue, expense, and fund balance profiles summarized in the following table.

TOTAL EXPENSES						
2014	2015	2016	2017	2018	2019	2020
33,402,118	34,553,735	35,760,354	37,022,394	38,311,967	39,692,609	41,138,620

EXPENSE AMOUNT TRANSFERRED TO RESERVES							
	2014	2015	2016	2017	2018	2019	2020
	3,068,331	3,130,578	3,194,579	3,260,385	3,327,227	3,395,938	3,466,572
Reserve Transfers as a Percent of Total Expenses	9.2%	9.1%	8.9%	8.8%	8.7%	8.6%	8.4%

EXPENSE AMOUNT SPENT ON LABOR							
	2014	2015	2016	2017	2018	2019	2020
	25,223,497	26,201,520	27,229,155	28,306,644	29,406,740	30,592,013	31,836,569
Labor as a Percent of Total Expenses	75.5%	75.8%	76.1%	76.5%	76.8%	77.1%	77.4%
Number of Commissioners	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Number of Uniformed Employees	156.00	156.00	156.00	156.00	156.00	156.00	156.00
Number of Support Employees	21.00	21.00	21.00	21.00	21.00	21.00	21.00
TOTAL STAFFING	177.00	177.00	177.00	177.00	177.00	177.00	177.00
Annual Change in Labor Cost		3.88%	3.92%	3.96%	3.89%	4.03%	4.07%

EXPENSE AMOUNT SPENT ON M&O							
	2014	2015	2016	2017	2018	2019	2020
	5,110,291	5,221,637	5,336,620	5,455,365	5,577,999	5,704,658	5,835,479
M&O as a Percent of Total Expenses	15.3%	15.1%	14.9%	14.7%	14.6%	14.4%	14.2%

PROPERTY TAXES LEVIED FOR BOND PAYMENTS							
	2014	2015	2016	2017	2018	2019	2020
	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144
Amount Paid For Debt Service	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144

LABOR COST GROWTH STATISTICS							
	2014	2015	2016	2017	2018	2019	2020
CPI-W COLA		3.20%	3.20%	3.20%	3.20%	3.20%	3.20%
Medical Premiums Growth Rate		8.00%	8.00%	8.00%	8.00%	8.00%	8.00%
Total Benefits Growth Rate		5.80%	5.88%	5.96%	6.02%	6.11%	6.18%
Total Wages Growth Rate		3.19%	3.20%	3.20%	3.05%	3.20%	3.20%
Total Cost of Compensation Growth Rate		3.91%	3.96%	4.00%	3.92%	4.07%	4.11%

OVERVIEW

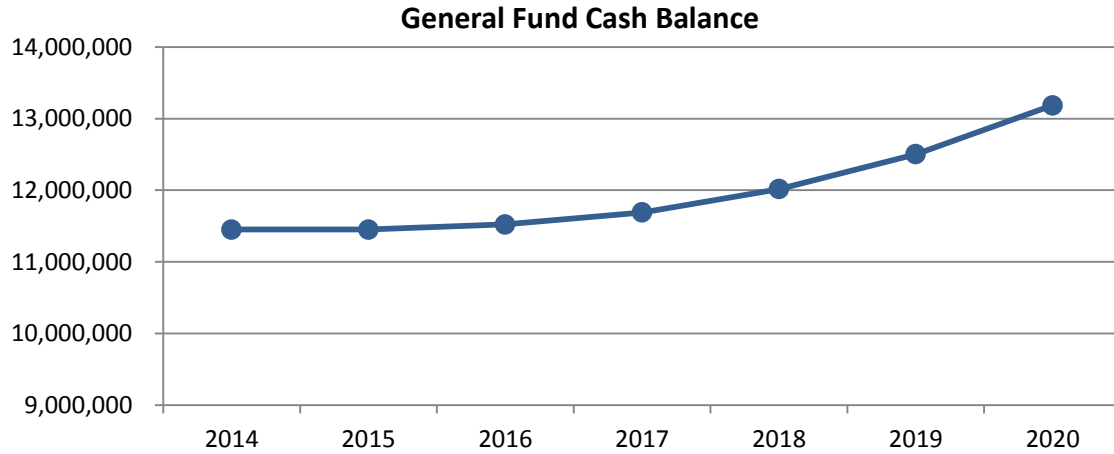
Cash Flow - The Cash Flow model collects key data specifically about revenue, transfers, expenses, and cash balances for the general fund and the reserve fund.

DISTRIBUTION OF INITIAL CAPITALIZATION: The four member agencies of the RFA have pledged to contribute a specific amount of start-up capital as shown in the table below. The cash is distributed between the RFA general fund and specifically targeted RFA reserve accounts.

DISTRIBUTION OF AGENCY CASH								
	General Fund	Reserve	Emergency Resv.	Apparatus Resv.	Equipment Resv.	Facilities Resv.	Empl Ben Resv.	HRA Trust
BF&EMS	768,000	2,034,532		899,617	608,807	-	526,108	0
NFD	4,457,327	6,833,772	1,848,644	1,000,000	471,000	200,000	2,899,128	415,000
WF&R	5,917,465	4,343,074	1,500,000	425,000	500,000	464,468	984,755	468,851
SCFD #10	363,544	1,250,000	500,000	500,000	150,000	100,000	0	0
Total	11,506,336	14,461,378	3,848,644	2,824,617	1,729,807	764,468	4,409,991	883,851



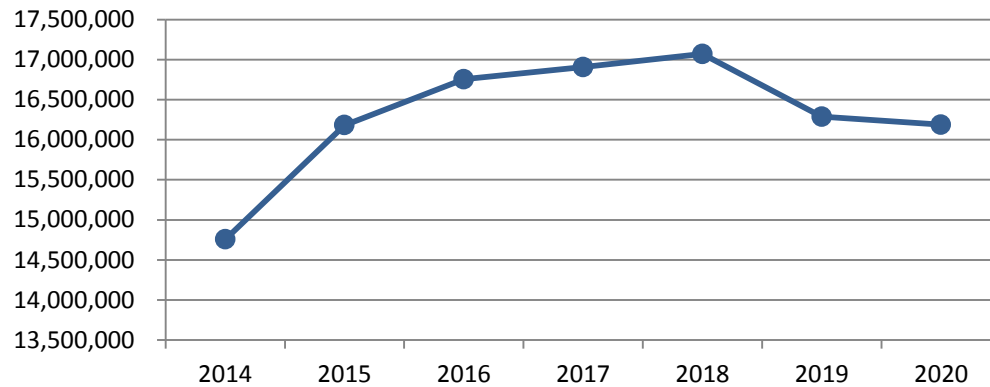
CASH UTILIZATION: Cash, in the form of initial capital contributions and the form of current revenues, is deposited with the RFA and then disbursed in the form of contributions to reserves, maintenance and operations expenses, and retained as year-end cash balances shown in the following table.



GENERAL FUND							
	2014	2015	2016	2017	2018	2019	2020
Agency Contributions:	11,506,336						
Start-Up Capital							
January 1, Beginning Cash	11,506,336	11,451,534	11,450,434	11,521,880	11,690,621	12,016,153	12,501,881
Fire Levy Property Taxes	19,461,758	19,790,175	20,119,386	20,449,446	20,780,406	21,112,320	21,445,241
EMS Levy Property Taxes	1,184,818	1,204,291	1,224,037	1,244,060	1,264,363	1,284,949	1,305,822
Excess Levy Property Taxes	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144
Total Property Taxes	22,217,719	22,565,610	22,914,567	23,264,650	23,615,913	23,968,413	24,322,206
Fire Benefit Charge	9,730,879	10,570,812	11,483,245	12,474,435	13,551,181	14,720,869	15,991,519
Programmed Operating Revenues	1,398,718	1,416,213	1,433,989	1,452,050	1,470,404	1,489,056	1,508,013
Periodic Revenue	-	-	-	-	-	-	-
General Fund Interest Earnings	-	-	-	-	-	-	-
Transfers Back From Reserve Accounts	-	-	-	-	-	-	-
Total Annual Revenues	33,347,316	34,552,635	35,831,801	37,191,135	38,637,498	40,178,338	41,821,739

		3.6%	3.7%	3.8%	3.9%	4.0%	4.1%
Transfers to Reserves	3,068,331	3,130,578	3,194,579	3,260,385	3,327,227	3,395,938	3,466,572
Labor Expenses	25,223,497	26,201,520	27,229,155	28,306,644	29,406,740	30,592,013	31,836,569
Program M&O Expenses	5,110,291	5,221,637	5,336,620	5,455,365	5,577,999	5,704,658	5,835,479
Total Gen Fund Annual Expenditures	30,333,788	31,423,157	32,565,775	33,762,009	34,984,739	36,296,671	37,672,048
December 31, Ending Cash	11,451,534	11,450,434	11,521,880	11,690,621	12,016,153	12,501,881	13,185,000

Reserve Fund Cash Balance

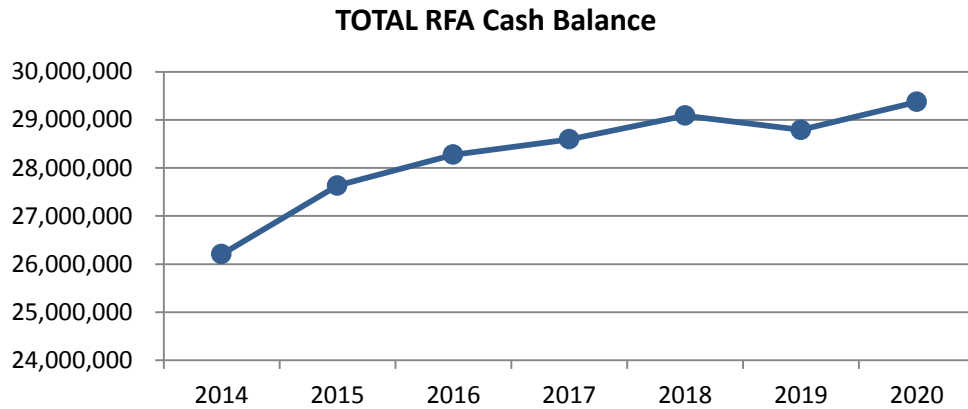


RESERVE FUND							
	2014	2015	2016	2017	2018	2019	2020
January 1, Beginning Cash	14,461,378	14,755,951	16,181,891	16,754,041	16,905,479	17,070,062	16,287,873
Transfers From the General Fund	3,068,331	3,130,578	3,194,579	3,260,385	3,327,227	3,395,938	3,466,572
Bond Proceeds	-	-	-	-	-	-	-
Asset Sales	-	-	-	-	-	-	-
Total Annual Revenues	3,068,331	3,130,578	3,194,579	3,260,385	3,327,227	3,395,938	3,466,572
Reserve Expenses	2,773,757	1,704,638	2,622,430	3,108,946	3,162,644	4,178,128	3,566,798
Debt Service on Councilmanic Debt	-	-	-	-	-	-	-
Transfers Back to the General Fund	-	-	-	-	-	-	-
Total	2,773,757	1,704,638	2,622,430	3,108,946	3,162,644	4,178,128	3,566,798



Expenditures

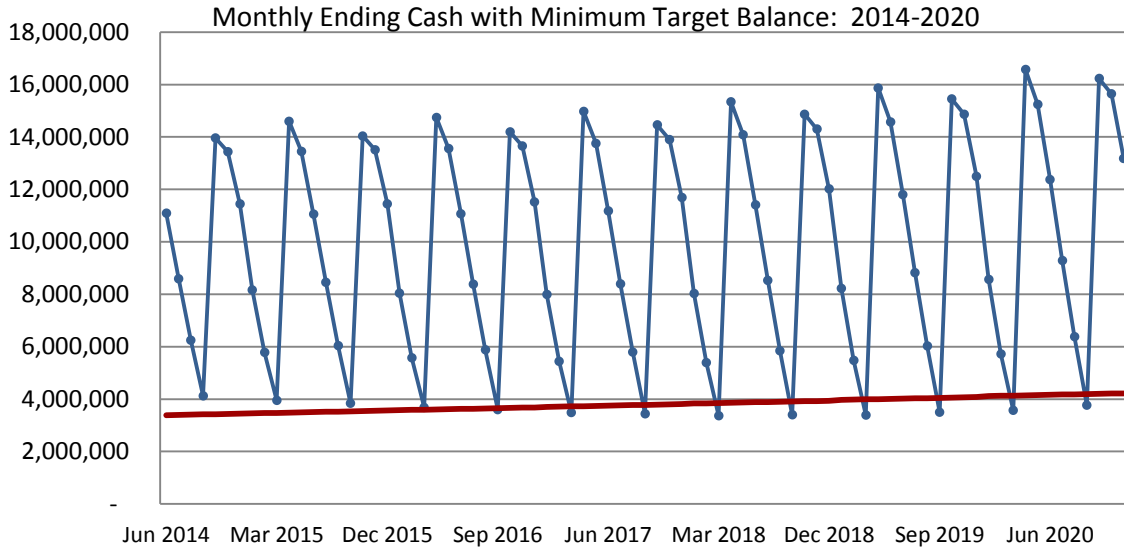
December 31, Ending Cash	14,755,951	16,181,891	16,754,041	16,905,479	17,070,062	16,287,873	16,187,647
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TOTAL ENDING CASH						
2014	2015	2016	2017	2018	2109	2020
26,207,485	27,632,325	28,275,921	28,596,100	29,086,215	28,789,754	29,372,647

OVERVIEW

Burn Rate - The Burn Rate model displays a pattern of how revenues are collected and how the funds are expended on a monthly basis over a period of 84 months, the timeframe of the Model, 2014 through 2020. A chart identifies the monthly ending cash balance, along with a minimum working capital target. The minimum cash target represents 10% of the available revenue programmed for each of the seven annual fiscal periods.



MONTHLY CASH BALANCE							
	2014	2015	2016	2017	2018	2019	2020
Beginning Balance	11,506,336	11,451,535	11,450,435	11,521,882	11,690,624	12,016,157	12,501,886
Annual Revenue	33,347,316	34,552,634	35,831,800	37,191,134	38,637,498	40,178,337	41,821,738
Annual Transfers	3,068,329	3,130,577	3,194,578	3,260,383	3,327,226	3,395,937	3,466,571
Annual Expenses	30,333,788	31,423,157	32,565,775	33,762,009	34,984,739	36,296,671	37,672,048
End Balance	11,451,535	11,450,435	11,521,882	11,690,624	12,016,157	12,501,886	13,185,005
10% Target	3,340,212	3,455,373	3,576,035	3,702,239	3,831,197	3,969,261	4,113,862



RESOURCES

Property Taxes & Fire Benefit Charges - The Tax and Charges model identifies the assessed value of the RFA and the levy rates that generate revenues for the RFA.

EFFECTIVE TAX RATE (FIRE LEVY + BC)							
	\$1.50	\$1.48	\$1.45	\$1.43	\$1.42	\$1.40	\$1.38
FBC	9,730,879	10,570,812	11,483,245	12,474,435	13,551,181	14,720,869	15,991,519
		8.63%	8.63%	8.63%	8.63%	8.63%	8.63%
Excess Levy Proceeds	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144
Fire Levy	19,461,758	19,790,175	20,119,386	20,449,446	20,780,406	21,112,320	21,445,241
		1.69%	1.66%	1.64%	1.62%	1.60%	1.58%
EMS Levy	1,184,818	1,204,291	1,224,037	1,244,060	1,264,363	1,284,949	1,305,822
		1.64%	1.64%	1.64%	1.63%	1.63%	1.62%
Prop Tax	22,217,719	22,565,610	22,914,567	23,264,650	23,615,913	23,968,413	24,322,207
		1.57%	1.55%	1.53%	1.51%	1.49%	1.48%
Total Levy & FBC	31,948,598	33,136,421	34,397,812	35,739,085	37,167,094	38,689,282	40,313,725
Growth Rate		3.72%	3.81%	3.90%	4.00%	4.10%	4.20%
Other Revenue	1,398,718	1,416,213	1,433,989	1,452,050	1,470,404	1,489,056	1,508,013
Total Current Revenue	33,347,316	34,552,635	35,831,801	37,191,135	38,637,498	40,178,338	41,821,739

Operating Revenues - The Operating Revenues model focuses on the origin, amount, and growth rate of programmed and periodic income from sources other than property taxes.

PROGRAMMED REVENUES							
	2014	2015	2016	2017	2018	2019	2020
Bothell							
King Co EMS Contribution	353,000	356,530	360,095	363,696	367,333	371,007	374,717
Northshore							
License/Permits	35,000	36,050	37,132	38,245	39,393	40,575	41,792
Intergov Revenues	28,400	29,252	30,130	31,033	31,964	32,923	33,911
Chgs Goods/Services							
Fines/Forfeitures	20,000	20,600	21,218	21,855	22,510	23,185	23,881
Misc Revenue	37,000	38,110	39,253	40,431	41,644	42,893	44,180
King Co EMS Contribution	351,604	355,120	358,671	362,258	365,881	369,539	373,235

WF&R

Miscellaneous	50,000	51,500	53,045	54,636	56,275	57,964	59,703
King Co EMS Contribution	518,714	523,901	529,140	534,432	539,776	545,174	550,625
SCFD #10							
Chgs Goods/Services	500	515	530	546	563	580	597
Misc Revenue	1,500	1,545	1,591	1,639	1,688	1,739	1,791
Total Programmed Revenues	1,398,718	1,416,213	1,433,989	1,452,050	1,470,404	1,489,056	1,508,013

PROGRAMS

Operating Programs: The RFA as an organization is divided into a number of areas of responsibility and accountability under the supervision of chief officers as delegated by the fire chief. The Programs model identifies 10 organizational units each with its own staffing configuration and its own operating budget. All programs are overseen under the managerial authority of the fire chief or as designated. The complement of programs as depicted in this report is not considered as final or all-inclusive. As the RFA is formed and under the direction of a new chief and a new governance board, the program configuration will change to meet current needs. This panoply of 10 programs is represented as an example of how the RFA may be programmed to offer a full spectrum of services envisioned by the Planning Committee in their guiding Goals Statement including basic and advanced life emergency medical services, fire suppression, hazardous materials response, and technical rescue capabilities.

TOTAL PROGRAM EXPENSES							
	2014	2015	2016	2017	2018	2019	2020
PROGRAM 101-Commission	234,161	242,534	251,261	260,360	269,850	279,753	290,090
PROGRAM 105-Office of the Fire Chief	374,848	388,704	403,177	418,302	419,031	435,088	451,896
PROGRAM 110-Administration	1,649,430	1,710,202	1,773,693	1,840,053	1,909,442	1,982,030	2,057,998
PROGRAM 115-Fire Marshal	1,067,142	1,106,871	1,148,395	1,191,813	1,237,233	1,284,767	1,334,535
PROGRAM 120-Community Outreach	497,287	515,250	533,998	553,573	574,021	595,390	617,730
PROGRAM 125-Oganizational Expenses	2,638,291	2,675,477	2,714,075	2,754,143	2,795,742	2,838,933	2,883,781
PROGRAM 130-Operations	21,227,087	22,048,609	22,909,362	23,811,631	24,757,858	25,750,653	26,792,804
PROGRAM 135-Training	784,133	812,195	841,453	871,968	903,807	937,041	971,745
PROGRAM 140-Facilities	1,034,846	1,068,397	1,103,153	1,139,167	1,176,491	1,215,184	1,255,304
PROGRAM 145-Apparatus	200,000	206,000	212,180	218,545	225,102	231,855	238,810



Maintenance

PROGRAM 150- Transitional Positions	626,564	648,919	675,029	702,453	716,162	745,979	777,353
TOTAL BUDGET	30,333,788	31,423,157	32,565,775	33,762,009	34,984,739	36,296,671	37,672,048
Annual Change		3.6%	3.6%	3.7%	3.6%	3.8%	3.8%

Labor Expenses by Program: The cost of labor assigned to each program is shown in the following table. The cost of labor includes base pay, all federal and state payroll mandated added costs, all locally-negotiated collective bargaining agreement costs, and outside determined costs for other medical, dental, and other insurance benefits.

LABOR EXPENSES							
	2014	2015	2016	2017	2018	2019	2020
PROGRAM 101-Commission	184,161	191,034	198,216	205,723	213,575	221,789	230,387
PROGRAM 105-Office of the Fire Chief	324,848	337,204	350,132	363,666	362,756	377,124	392,193
PROGRAM 110- Administration	1,234,430	1,282,752	1,333,419	1,386,571	1,442,356	1,500,931	1,562,467
PROGRAM 115-Fire Marshal	917,142	952,371	989,260	1,027,904	1,068,407	1,110,876	1,155,427
PROGRAM 120-Community Outreach	297,287	309,250	321,818	335,028	348,919	363,535	378,919
PROGRAM 125-Oganizational Expenses							
PROGRAM 130-Operations	20,812,087	21,621,159	22,469,088	23,358,149	24,290,772	25,269,555	26,297,273
PROGRAM 135-Training	554,133	575,295	597,446	620,641	644,940	670,408	697,113
PROGRAM 140-Facilities	272,846	283,537	294,748	306,509	318,854	331,817	345,436
PROGRAM 145-Apparatus Maintenance							
PROGRAM 150-Transitional Positions	626,564	648,919	675,029	702,453	716,162	745,979	777,353
TOTAL LABOR BUDGET	25,223,497	26,201,520	27,229,155	28,306,644	29,406,740	30,592,013	31,836,569
Annual Change		3.9%	3.9%	4.0%	3.9%	4.0%	4.1%
Labor Percentage of Total Budget	83%	83%	84%	84%	84%	84%	85%

M&O Expenses by Program: Each program has, in addition to labor costs, a lump sum allotment for operating expenses. These program expenses are a best guess subject to refinement and alteration following the formation of the RFA.

MAINTENANCE & OPERATIONS EXPENSES							
	2014	2015	2016	2017	2018	2019	2020
PROGRAM 101-Commission	50,000	51,500	53,045	54,636	56,275	57,964	59,703
PROGRAM 105-Office of the Fire Chief	50,000	51,500	53,045	54,636	56,275	57,964	59,703
PROGRAM 110-Administration	415,000	427,450	440,274	453,482	467,086	481,099	495,532
PROGRAM 115-Fire Marshal	150,000	154,500	159,135	163,909	168,826	173,891	179,108
PROGRAM 120-Community Outreach	200,000	206,000	212,180	218,545	225,102	231,855	238,810
PROGRAM 125-Oganizational Expenses	2,638,291	2,675,477	2,714,075	2,754,143	2,795,742	2,838,933	2,883,781
PROGRAM 130-Operations	415,000	427,450	440,274	453,482	467,086	481,099	495,532
PROGRAM 135-Training	230,000	236,900	244,007	251,327	258,867	266,633	274,632
PROGRAM 140-Facilities	762,000	784,860	808,406	832,658	857,638	883,367	909,868
PROGRAM 145-Apparatus Maintenance	200,000	206,000	212,180	218,545	225,102	231,855	238,810
TOTAL M&O BUDGET	5,110,291	5,221,637	5,336,620	5,455,365	5,577,999	5,704,658	5,835,479
Annual Change		2.2%	2.2%	2.2%	2.2%	2.3%	2.3%
M&O Percentage of Total Budget	17%	17%	16%	16%	16%	16%	15%

Staffing Count by Position: The RFA is initially programmed to employ a specific headcount by position or job title as shown in the following table.

PROGRAM STAFFING COUNT BY POSITION							
	2014	2015	2016	2017	2018	2019	2020
Commissioner	7.00	7.00	7.00	7.00	7.00	7.00	7.00
UNIFORMED							
Fire Chief	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Asst Chief	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Dep Chief	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Fire Marshal	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Deputy Fire Marshal	1.00	1.00	1.00	1.00	1.00	1.00	1.00



Bothell, Northshore, Snohomish #10, Woodinville, Washington
Regional Fire Authority Feasibility Study

Inspector II	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Inspector I	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Bat Chief	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Training Captain	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Lieutenant	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Firefighter	104.00	104.00	104.00	104.00	104.00	104.00	104.00
	156.00	156.00	156.00	156.00	156.00	156.00	156.00

SUPPORT STAFF							
	2014	2015	2016	2017	2108	2019	2020
Mgr-Fin	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Mgr-HR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Mgr-SupSvc	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Mgr-Purchasing	-	-	-	-	-	-	-
Comm Svc Off	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Specialist-Finance	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Specialist-HR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Specialist-IT	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Specialist-Administrative	7.50	7.50	7.50	7.50	7.50	7.50	7.50
Specialist-Pub Educ	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Technician-Maintenance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Assistant-Exec	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Assistant-HR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Support Staff	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Total Staffing	177.00	177.00	177.00	177.00	177.00	177.00	177.00

Staffing Count by Program: Each program has been assigned a specific cadre of employees for planning purposes subject to review and re-assignment by the RFA administration.

STAFFING COUNT BY PROGRAM							
	2014	2015	2016	2017	2018	2019	2020
PROGRAM 101-Commission	8.00	8.00	8.00	8.00	8.00	8.00	8.00
PROGRAM 105-Office of the Fire Chief	2.00	2.00	2.00	2.00	2.00	2.00	2.00
PROGRAM 110-Administration	9.00	9.00	9.00	9.00	9.00	9.00	9.00
PROGRAM 115-Fire Marshal	6.00	6.00	6.00	6.00	6.00	6.00	6.00
PROGRAM 120-Community Outreach	4.50	4.50	4.50	4.50	4.50	4.50	4.50
PROGRAM 125-Organizational Expenses							
PROGRAM 130-Operations	146.00	146.00	146.00	146.00	146.00	146.00	146.00
PROGRAM 135-Training	3.50	3.50	3.50	3.50	3.50	3.50	3.50
PROGRAM 140-Facilities							
PROGRAM 145-Apparatus Maintenance							
PROGRAM 150-Transitional Positions	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Total Staffing	177.00	177.00	177.00	177.00	177.00	177.00	177.00
Commissioners	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Total Elected Officials	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Uniformed	156.00	156.00	156.00	156.00	156.00	156.00	156.00
Civilian Support	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Total Employed Staff	177.00	177.00	177.00	177.00	177.00	177.00	177.00



Commissioners Program

The Commissioners program is initially programmed to reflect seven elected or appointed positions to fulfill the governance role of the RFA. The Commissioners program is staffed with one executive board secretary.

COMMISSIONERS PROGRAM STAFFING							
Position	2014	2015	2016	2017	2018	2019	2020
Commissioner	7.00	7.00	7.00	7.00	7.00	7.00	7.00
	72,916	75,250	77,658	80,143	82,707	85,354	88,085
Assistant-Exec	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Board Secretary	111,244	115,784	120,558	125,581	130,868	136,435	142,302
PROGRAM 101- Commission STAFFING	8.00	8.00	8.00	8.00	8.00	8.00	8.00
PROGRAM 101- Commission LABOR COST	184,161	191,034	198,216	205,723	213,575	221,789	230,387
Annual Labor Cost Change		104%	104%	104%	104%	104%	104%

MAINTENANCE & OPERATIONS (M&O) BUDGET							
	2014	2015	2016	2017	2018	2019	2020
M&O Budget	50,000	51,500	53,045	54,636	56,275	57,964	59,703
PROGRAM 101- Commission M&O COST	50,000	51,500	53,045	54,636	56,275	57,964	59,703
Annual Change		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
TOTAL PROGRAM BUDGET	234,161	242,534	251,261	260,360	269,850	279,753	290,090
Annual Change		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

Office of the Fire Chief Program

The Office of the Fire Chief is proposed to be staffed with the chief who is supported by an executive secretary.

OFFICE OF THE FIRE CHIEF STAFFING							
Position	2014	2015	2016	2017	2018	2019	2020
Fire Chief	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fully Loaded Labor Cost	213,604	221,419	229,574	238,085	231,888	240,689	249,891
Assistant-Exec	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Exec Asst to the Fire Chief	111,244	115,784	120,558	125,581	130,868	136,435	142,302
PROGRAM 105-Office of the Fire Chief STAFFING	2.00	2.00	2.00	2.00	2.00	2.00	2.00
PROGRAM 105-Office of the Fire Chief LABOR COST	324,848	337,204	350,132	363,666	362,756	377,124	392,193
Annual Labor Cost Change		104%	104%	104%	100%	104%	104%

MAINTENANCE & OPERATIONS (M&O) BUDGET							
	2014	2015	2016	2017	2018	2019	2020
M&O Budget	50,000	51,500	53,045	54,636	56,275	57,964	59,703
PROGRAM 105-Office of the Fire Chief M&O COST	50,000	51,500	53,045	54,636	56,275	57,964	59,703
TOTAL PROGRAM BUDGET	374,848	388,704	403,177	418,302	419,031	435,088	451,896
Annual Change		3.7%	3.7%	3.8%	0.2%	3.8%	3.9%



Administration Program

The Administrative Program encompasses the cadre of chief officers and administrative personnel in support of accounting, payroll, records, data systems, and other general office duties.

ADMINISTRATION PROGRAM							
Position	2014	2015	2016	2017	2018	2019	2020
Deputy Chief	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Administrative CAO	189,652	196,701	204,064	211,759	219,804	228,217	237,021
Specialist-Administrative	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Records Officer	106,084	110,459	115,062	119,909	125,014	130,395	136,068
Manager-Finance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Finance	151,419	157,245	163,345	169,737	176,437	183,463	190,834
Manager-HR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HR	151,419	157,245	163,345	169,737	176,437	183,463	190,834
Specialist-Finance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Payroll	138,160	143,562	149,224	155,164	161,398	167,943	174,817
Specialist-HR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HR General	131,885	137,086	142,541	148,267	154,280	160,597	167,237
Specialist-Finance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Accountant-Procurement	138,160	143,562	149,224	155,164	161,398	167,943	174,817
Assistant-HR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HR	95,764	99,808	104,071	108,566	113,308	118,314	123,601
Specialist-IT	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Data Analyst	131,885	137,086	142,541	148,267	154,280	160,597	167,237
PROGRAM 110-Administration STAFFING	9.00	9.00	9.00	9.00	9.00	9.00	9.00
PROGRAM 110-Administration LABOR COST	1,234,430	1,282,752	1,333,419	1,386,571	1,442,356	1,500,931	1,562,467
Annual Labor Cost Change		104%	104%	104%	104%	104%	104%

MAINTENANCE & OPERATIONS (M&O) BUDGET							
	2014	2015	2016	2017	2018	2019	2020
M&O Budget	415,000	427,450	440,274	453,482	467,086	481,099	495,532
PROGRAM 110- Administration M&O COST	415,000	427,450	440,274	453,482	467,086	481,099	495,532
TOTAL PROGRAM BUDGET	1,649,430	1,710,202	1,773,693	1,840,053	1,909,442	1,982,030	2,057,998
Annual Change		3.7%	3.7%	3.7%	3.8%	3.8%	3.8%

Fire Marshal Program

The fire marshal’s program encompasses the fire marshal supported by fire inspectors and administrative assistance. Duties include plan checking and reviews, fire code enforcement, and fire investigations.

FIRE MARSHAL PROGRAM							
Position	2014	2015	2016	2017	2018	2019	2020
Fire Marshal	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	189,652	196,701	204,064	211,759	219,804	228,217	237,021
Specialist- Administrative	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	106,084	110,459	115,062	119,909	125,014	130,395	136,068
Deputy Fire Marshal	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	168,827	175,210	181,885	188,870	196,182	203,840	211,864
Inspector II	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	158,047	164,084	170,404	177,021	183,954	191,221	198,840
Inspector I	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	294,532	305,917	317,844	330,345	343,452	357,203	371,634
PROGRAM 115-Fire Marshal STAFFING	6.00	6.00	6.00	6.00	6.00	6.00	6.00
PROGRAM 115-Fire Marshal LABOR COST	917,142	952,371	989,260	1,027,904	1,068,407	1,110,876	1,155,427



MAINTENANCE & OPERATION BUDGET							
	2014	2015	2106	2017	2018	2019	2020
M&O Budget	150,000	154,500	159,135	163,909	168,826	173,891	179,108
PROGRAM 115-Fire Marshal M&O COST	150,000	154,500	159,135	163,909	168,826	173,891	179,108
TOTAL PROGRAM BUDGET	1,067,142	1,106,871	1,148,395	1,191,813	1,237,233	1,284,767	1,334,535
Annual Change		3.7%	3.8%	3.8%	3.8%	3.8%	3.9%

Community Outreach Program

The Community Outreach Program includes a community service officer and specialists in public education to conduct public information and education missions as well as a focus on emergency management education, preparation, response, and mitigation.

COMMUNITY OUTREACH PROGRAM							
Position	2014	2015	2016	2017	2018	2019	2020
Community Service Officer	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PIO	138,160	143,562	149,224	155,164	161,398	167,943	174,817
Specialist-Public Education	1.50	1.50	1.50	1.50	1.50	1.50	1.50
	159,126	165,688	172,593	179,864	187,522	195,592	204,102
PROGRAM 120-Community Outreach STAFFING	2.50	2.50	2.50	2.50	2.50	2.50	2.50
PROGRAM 120-Community Outreach LABOR COST	297,287	309,250	321,818	335,028	348,919	363,535	378,919
Annual Labor Cost Change		104%	104%	104%	104%	104%	104%

MAINTENANCE & OPERATION BUDGET							
	2014	2015	2016	2017	2018	2019	2020
M&O Budget	200,000	206,000	212,180	218,545	225,102	231,855	238,810
PROGRAM 120-Community Outreach M&O COST	200,000	206,000	212,180	218,545	225,102	231,855	238,810
TOTAL PROGRAM BUDGET	497,287	515,250	533,998	553,573	574,021	595,390	617,730
Annual Change	-----	3.6%	3.6%	3.7%	3.7%	3.7%	3.8%

Organizational Expenses Program

The Organizational Expenses program is designated to budget for costs not otherwise within the administrative focus of the other operating programs, and which reflect commissioner-budgeted expenses not subject to administrative discretion.

ORGANIZATIONAL EXPENSES PROGRAM							
	2014	2015	2016	2017	2018	2019	2020
Northshore Voted Bond	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144
Apparatus Maintenance							
General Policies	250,000	262,500	275,625	289,406	303,877	319,070	335,024
IT Management	250,000	257,500	265,225	273,182	281,377	289,819	298,513
ALS Services-Shoreline	217,147	225,833	234,866	244,261	254,031	264,193	274,760
Legal Advisor	150,000	154,500	159,135	163,909	168,826	173,891	179,108
Elections Costs	200,000	204,000	208,080	212,242	216,486	220,816	225,232
PROGRAM 125-Organizational Expenses M&O COST	2,638,291	2,675,477	2,714,075	2,754,143	2,795,742	2,838,933	2,883,781
TOTAL PROGRAM BUDGET	2,638,291	2,675,477	2,714,075	2,754,143	2,795,742	2,838,933	2,883,781
Annual Change		1.4%	1.4%	1.5%	1.5%	1.5%	1.6%

Operations Program

The Operations Program reflects the majority of RFA expenses in terms of labor costs, M&O costs, commensurate with the majority of the services delivery goals of this program which includes suppression, emergency medical provisions, and response to emergencies involving hazardous materials or technical rescues. The program reflects an “East” and “West” battalion structure for the department.

OPERATIONS PROGRAM							
Position	2014	2015	2016	2017	2018	2019	2020
Deputy Chief	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Operations	189,652	196,701	204,064	211,759	219,804	228,217	237,021
Specialist-Administrative	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Operations	106,084	110,459	115,062	119,909	125,014	130,395	136,068
Battalion Chief	6.00	6.00	6.00	6.00	6.00	6.00	6.00
WEST Battalion	1,045,304	1,084,634	1,125,756	1,168,768	1,213,778	1,260,899	1,310,252
Lieutenant	14.00	14.00	14.00	14.00	14.00	14.00	14.00



Bothell, Northshore, Snohomish #10, Woodinville, Washington
Regional Fire Authority Feasibility Study

WEST Battalion	2,137,188	2,219,299	2,305,280	2,395,355	2,489,762	2,588,754	2,692,603
Firefighter	52.00	52.00	52.00	52.00	52.00	52.00	52.00
WEST Battalion	7,097,244	7,375,318	7,666,908	7,972,815	8,293,893	8,631,057	8,985,284
Battalion Chief	4.00	4.00	4.00	4.00	4.00	4.00	4.00
EAST Battalion	696,870	723,089	750,504	779,179	809,185	840,599	873,501
Lieutenant	16.00	16.00	16.00	16.00	16.00	16.00	16.00
EAST Battalion	2,442,501	2,536,341	2,634,606	2,737,549	2,845,442	2,958,576	3,077,260
Firefighter	52.00	52.00	52.00	52.00	52.00	52.00	52.00
EAST Battalion	7,097,244	7,375,318	7,666,908	7,972,815	8,293,893	8,631,057	8,985,284
PROGRAM 130- Operations STAFFING	146.00	146.00	146.00	146.00	146.00	146.00	146.00
PROGRAM 130- Operations LABOR COST	20,812,087	21,621,159	22,469,088	23,358,149	24,290,772	25,269,555	26,297,273
Annual Labor Cost Change		104%	104%	104%	104%	104%	104%

MAINTENANCE & OPERATION BUDGET

	2014	2015	2016	2017	2018	2019	2020
M&O Budget	415,000	427,450	440,274	453,482	467,086	481,099	495,532
PROGRAM 130- Operations M&O COST	415,000	427,450	440,274	453,482	467,086	481,099	495,532
TOTAL PROGRAM BUDGET	21,227,087	22,048,609	22,909,362	23,811,631	24,757,858	25,750,653	26,792,804
Annual Change		3.9%	3.9%	3.9%	4.0%	4.0%	4.0%

Training Program

The Training Program is charged with the responsibilities of developing and accomplishing a training regimen to keep all line personnel current with fire and life-safety processes and in compliance with both federal and state proficiency standards.

TRAINING PROGRAM							
Position	2014	2015	2016	2017	2018	2019	2020
Bat Chief	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Training	174,217	180,772	187,626	194,795	202,296	210,150	218,375
Specialist-Administrative	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Training	53,042	55,229	57,531	59,955	62,507	65,197	68,034
Training Captain	2.00	2.00	2.00	2.00	2.00	2.00	2.00
	326,874	339,294	352,289	365,891	380,136	395,061	410,704
PROGRAM 135- Training STAFFING	4.00	4.00	4.00	4.00	4.00	4.00	4.00
PROGRAM 135- Training LABOR COST	554,133	575,295	597,446	620,641	644,940	670,408	697,113
Annual Labor Cost Change		103.82%	103.85%	103.88%	103.92%	103.95%	103.98%

MAINTENANCE & OPERATION BUDGET							
	2014	2015	2016	2017	2018	2019	2020
M&O Budget	230,000	236,900	244,007	251,327	258,867	266,633	274,632
PROGRAM 135- Operations M&O COST	230,000	236,900	244,007	251,327	258,867	266,633	274,632
TOTAL PROGRAM BUDGET	21,227,087	22,048,609	22,909,362	23,811,631	24,757,858	25,750,653	26,792,804
Annual Change		3.9%	3.9%	3.9%	4.0%	4.0%	4.0%



Facilities Program

The Facilities Program is responsible for the maintenance and up-keep of the stations, training tower, and other real property assets of the RFA.

FACILITIES PROGRAM							
Position	2014	2015	2016	2017	2018	2019	2020
Mgr-SupSvc	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Facilities	166,762	173,078	179,685	186,600	193,839	201,422	209,368
Technician-Maintenance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Facilities	106,084	110,459	115,062	119,909	125,014	130,395	136,068
PROGRAM 140-Facilities STAFFING	2.00	2.00	2.00	2.00	2.00	2.00	2.00
PROGRAM 140-Facilities LABOR COST	272,846	283,537	294,748	306,509	318,854	331,817	345,436
Annual Labor Cost Change		104%	104%	104%	104%	104%	104%

MAINTENANCE & OPERATION BUDGET							
	2014	2015	2016	2017	2018	2019	2020
M&O Budget	762,000	784,860	808,406	832,658	857,638	883,367	909,868
PROGRAM 140-Operations M&O COST	762,000	784,860	808,406	832,658	857,638	883,367	909,868
TOTAL PROGRAM BUDGET	1,034,846	1,068,397	1,103,153	1,139,167	1,176,491	1,215,184	1,255,304
Annual Change		3.2%	3.3%	3.3%	3.3%	3.3%	3.3%

Apparatus Maintenance Program

The Apparatus Program is charged with maintaining all rolling stock under ownership of the RFA. The program envisions using outside contract services rather than employ in-house personnel for this task.

MAINTENANCE & OPERATION BUDGET							
	2014	2015	2016	2017	2018	2019	2020
M&O Budget	200,000	206,000	212,180	218,545	225,102	231,855	238,810
PROGRAM 145- Operations M&O COST	200,000	206,000	212,180	218,545	225,102	231,855	238,810
TOTAL PROGRAM BUDGET	200,000	206,000	212,180	218,545	225,102	231,855	238,810
Annual Change		3.0%	3.0%	3.0%	3.0%	3.0%	3.0%

Transition Program

The Transition program identifies selected positions that may be targeted for transition to other duties or that may be left unfilled during the first seven years of the RFA. The program currently costs out and retains all five positions, thus no savings are calculated.

TRANSITION PROGRAM							
Position	2014	2015	2016	2017	2018	2019	2020
Asst Chief	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	202,228	207,084	214,779	222,817	216,104	224,400	233,081
Specialist- Administrative	4.00	4.00	4.00	4.00	4.00	4.00	4.00
	424,336	441,835	460,249	479,636	500,057	521,579	544,272
PROGRAM 150- Transitional Positions STAFFING	5.00	5.00	5.00	5.00	5.00	5.00	5.00
PROGRAM 150- Transitional Positions LABOR COST	626,564	648,919	675,029	702,453	716,162	745,979	777,353
Annual Labor Cost Change		104%	104%	104%	102%	104%	104%



MAINTENANCE & OPERATION BUDGET							
	2014	2015	2016	2017	2018	2019	2020
TOTAL PROGRAM BUDGET	626,564	648,919	675,029	702,453	716,162	745,979	777,353
Annual Change		3.6%	4.0%	4.1%	2.0%	4.2%	4.2%

RESERVES

Reserve Summary - The RFA has recognized the importance of setting aside some operating funds each year into clearly-defined reserve accounts which are programmed for the replacement of apparatus, equipment, capital improvements, and benefit liabilities in future years. Many organizations fund the replacement obligations with bond issues which entail the extra expense for interest payments for as long as twenty years. By prefunding reserve accounts the RFA gains the opportunity to tailor the annual contributions unlike debt service payments which become mandatory drains on the general fund for many years.

Exactly how much the RFA elects to contribute to the reserve accounts can be reviewed and altered every year to accommodate fluctuations in revenue or as the needs for replacements or new acquisitions may vary over time. The following examples demonstrate different strategic budgeting decisions as to the planning horizon for each reserve account.

The Reserve Accounts are displayed in six individual models that identify initial cash contributions from the participating agencies, the annual appropriations from the general fund, the reserve expenses, and the accumulated cash balances over seven years.

BEGINNING RESERVE CASH: The reserve accounts begin with cash infusions starting with direct deposits from the four RFA member agencies. Then each year additional cash contributions are made from the RFA general fund in specified amounts to maintain a positive fund balance and meeting other specified goals of the account as formulated by the Board of Commissioners. These contributions are shown in the following two tables.

BEGINNING RESERVE CASH							
	2014	2015	2016	2017	2018	2019	2020
Emergency Reserve	3,848,644	4,644,268	5,439,892	6,235,516	7,031,140	7,826,764	8,622,388
Apparatus Reserve	2,824,617	2,256,805	2,928,224	2,959,987	2,811,508	2,480,282	1,037,682
Equipment Reserve	1,729,807	1,867,848	1,904,494	1,782,883	1,572,581	1,680,174	1,514,309
Capital Projects Reserve	764,468	839,468	906,718	916,786	773,740	507,334	592,599

Employee Benefits Reserve	4,409,991	4,199,991	3,989,991	3,779,991	3,569,991	3,359,991	3,234,991
HRA Trust Reserve	883,851	947,571	1,012,572	1,078,879	1,146,518	1,215,518	1,285,903
Total	14,461,378	14,755,951	16,181,891	16,754,041	16,905,479	17,070,062	16,287,873

GENERAL FUND CONTRIBUTIONS							
	2014	2015	2016	2017	2018	2019	2020
Emergency Reserve	795,624	795,624	795,624	795,624	795,624	795,624	795,624
Apparatus Reserve	1,020,000	1,050,600	1,082,118	1,114,582	1,148,019	1,182,460	1,217,933
Equipment Reserve	315,000	324,450	334,184	344,209	354,535	365,171	376,126
Capital Projects Reserve	75,000	77,250	79,568	81,955	83,594	85,265	86,971
Employee Benefits Reserve	215,949	222,859	229,990	237,350	244,945	252,783	260,873
HRA Trust Reserve	646,758	659,795	673,096	686,666	700,510	714,634	729,045
Total	3,068,331	3,130,578	3,194,579	3,260,385	3,327,227	3,395,938	3,466,572

ANNUAL RESERVE EXPENSES: Each reserve account has its own designated expense profile that identifies each expense item and its cost amount as shown in the following table and in specific detail below.

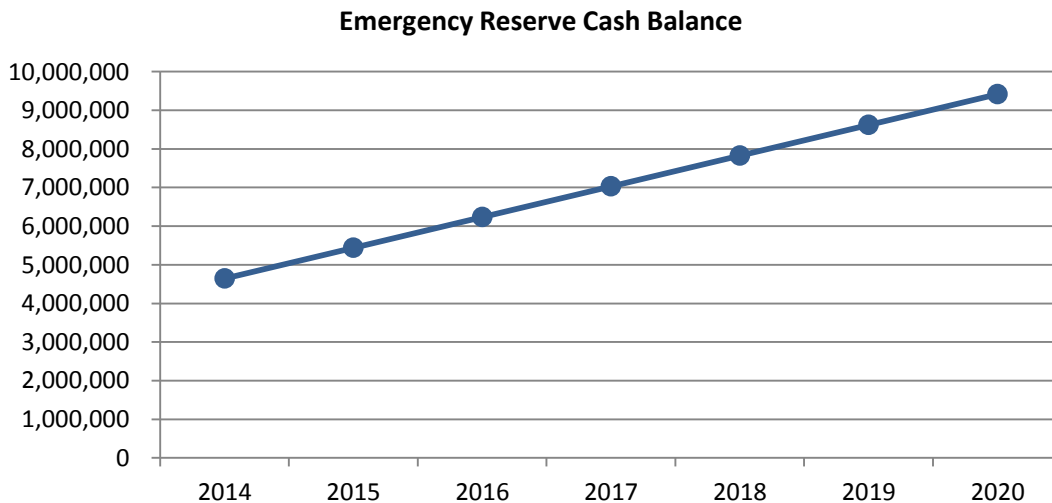
ANNUAL RESERVE EXPENSES							
Emergency Reserve							
Apparatus Reserve	1,587,812	379,181	1,050,356	1,263,060	1,479,245	2,625,059	1,574,600
Equipment Reserve	176,959	287,804	455,795	554,510	246,943	531,036	875,081
Capital Projects Reserve	-	10,000	69,500	225,000	350,000	-	74,000
Employee Benefits Reserve	425,949	432,859	439,990	447,350	454,945	377,783	385,873
HRA Trust Reserve	583,038	594,794	606,789	619,026	631,511	644,249	657,244
Total	2,773,757	1,704,638	2,622,430	3,108,946	3,162,644	4,178,128	3,566,798



ENDING RESERVE CASH: At the end of the year, each reserve account is examined to determine its adherence to the programmed cash target set by the Commissioners as part of the annual budget process.

ENDING RESERVE CASH							
Emergency Reserve	4,644,268	5,439,892	6,235,516	7,031,140	7,826,764	8,622,388	9,418,012
Apparatus Reserve	2,256,805	2,928,224	2,959,987	2,811,508	2,480,282	1,037,682	681,016
Equipment Reserve	1,867,848	1,904,494	1,782,883	1,572,581	1,680,174	1,514,309	1,015,355
Capital Projects Reserve	839,468	906,718	916,786	773,740	507,334	592,599	605,570
Employee Benefits Reserve	4,199,991	3,989,991	3,779,991	3,569,991	3,359,991	3,234,991	3,109,991
HRA Trust Reserve	947,571	1,012,572	1,078,879	1,146,518	1,215,518	1,285,903	1,357,704
Total	14,755,951	16,181,891	16,754,041	16,905,479	17,070,062	16,287,873	16,187,647

EMERGENCY RESERVE: Every organization discovers the need to accumulate an emergency reserve account, a “rainy day fund” that sets aside a specific annual amount for unforeseen emergencies or for unexpected and unbudgeted expenses. The target amount identified for the RFA is to sequester 25% of its operating budget, a target to be achieved after 7 years of operations. The four member agencies capitalize the account with 61% of the target funding with the balance reaching 100% from annual general fund contributions.

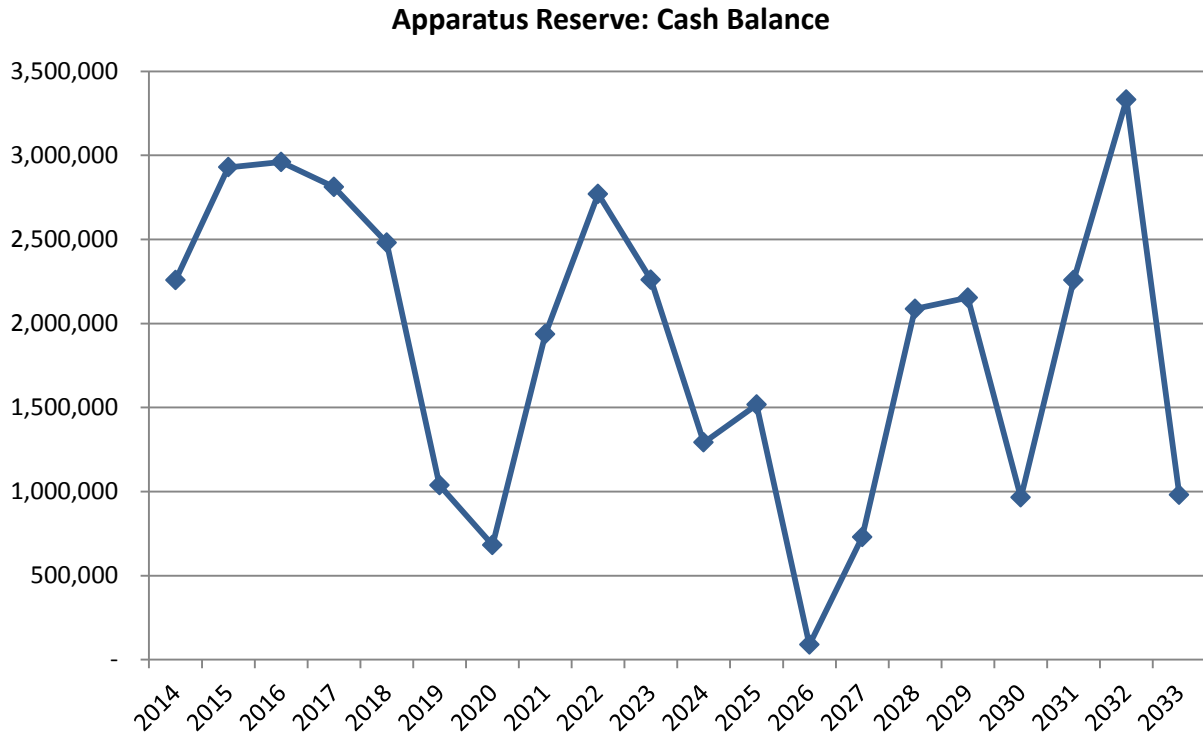


BEGINNING EMERGENCY RESERVE CASH	
Bothell	
Northshore	1,848,644
Woodinville	1,500,000
District 10	500,000

EMERGENCY RESERVE							
	2014	2015	2016	2017	2018	2019	2020
January 1, Beginning Cash	3,848,644	4,644,268	5,439,892	6,235,516	7,031,140	7,826,764	8,622,388
General Fund							
Operating Budget	30,333,788	31,423,157	32,565,775	33,762,009	34,984,739	36,296,671	37,672,048
25% of Operating Budget	7,583,447	7,855,789	8,141,444	8,440,502	8,746,185	9,074,168	9,418,012
Annual Revenues	795,624	795,624	795,624	795,624	795,624	795,624	795,624
Annual Expenses	0	0	0	0	0	0	0
Transfer Back to General Fund	0	0	0	0	0	0	0
December 31, Ending Cash	4,644,268	5,439,892	6,235,516	7,031,140	7,826,764	8,622,388	9,418,012
Percent of Target Balance	61.2%	69.2%	76.6%	83.3%	89.5%	95.0%	100.0%



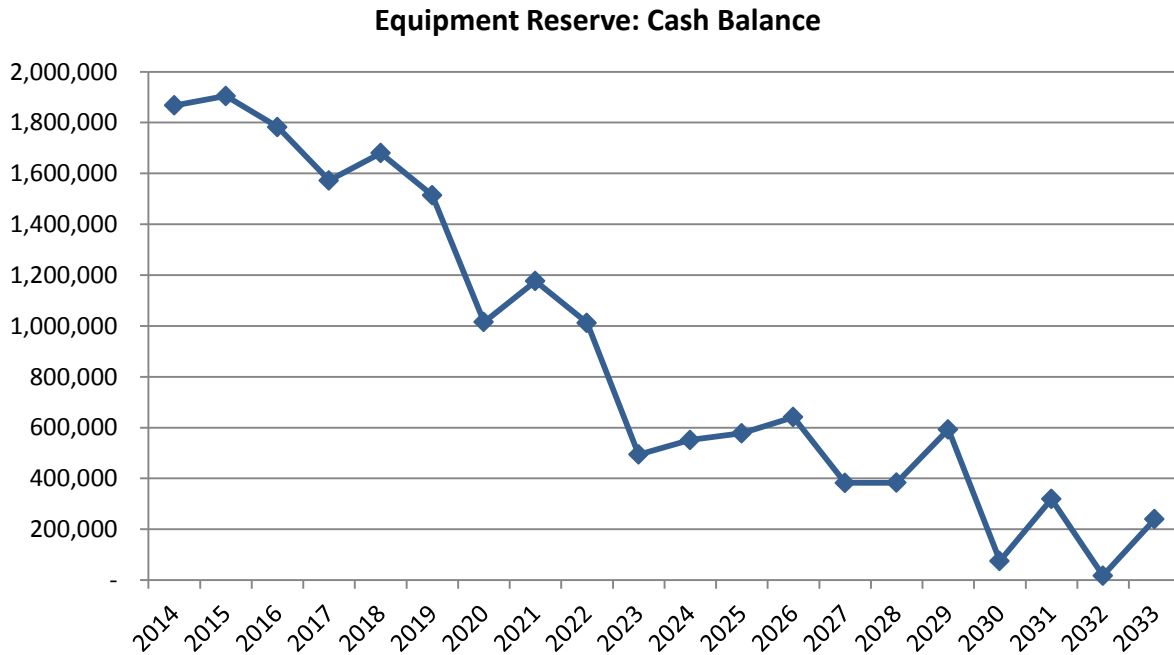
APARATUS RESERVE: The Apparatus Reserve accounts for the replacement or the new acquisition of all rolling stock on a programmed schedule covering a 25-year planning horizon. The basic requirement is specified that the account be funded sufficiently to avoid any deficit by transferring sufficient annual contributions from the general fund to assure solvency.



BEGINNING APPARATUS RESERVE CASH	
Bothell	899,617
Northshore	1,000,000
Woodinville	425,000
District 10	500,000

APPARATUS RESERVE							
	2014	2015	2016	2017	2018	2019	2020
Beginning Cash Balance	2,824,617	2,256,805	2,928,224	2,959,987	2,811,508	2,480,282	1,037,682
Property Tax Contributions	1,020,000	1,050,600	1,082,118	1,114,582	1,148,019	1,182,460	1,217,933
		3%	3%	3%	3%	3%	3%
Cashflow OUT	1,587,812	379,181	1,050,356	1,263,060	1,479,245	2,625,059	1,574,600
	1,587,812	379,181	1,050,356	1,263,060	1,479,245	2,625,059	1,574,600
ENDING FUND BALANCE	2,256,805	2,928,224	2,959,987	2,811,508	2,480,282	1,037,682	681,016

EQUIPMENT RESERVE: The Equipment Reserve accounts for the replacement or the new acquisition of all equipment on a programmed schedule covering a 25-year planning horizon. The basic requirement is specified that the account be funded sufficiently to avoid any deficit by transferring sufficient annual contributions from the general fund to assure solvency.

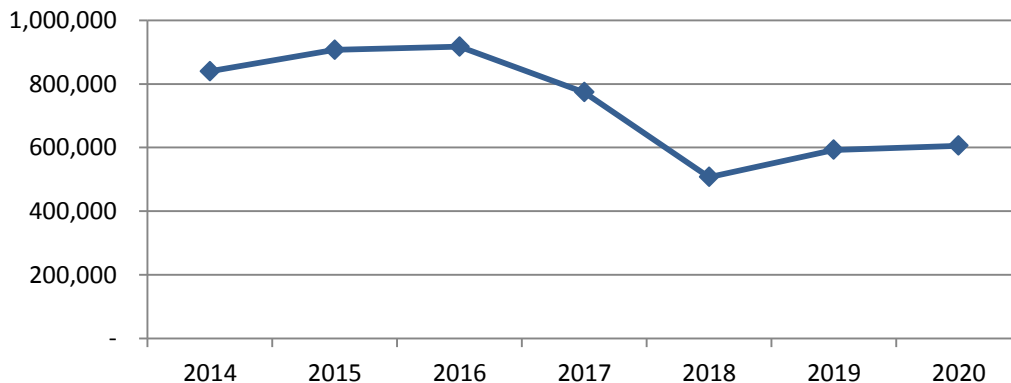


BEGINNING EQUIPMENT RESERVE CASH	
Bothell	608,807
Northshore	471,000
Woodinville	500,000
District 10	150,000

EQUIPMENT RESERVE							
	2014	2015	2016	2017	2018	2019	2020
Beginning Cash Balance	1,729,807	1,867,848	1,904,494	1,782,883	1,572,581	1,680,174	1,514,309
Property Tax Contributions	315,000	324,450	334,184	344,209	354,535	365,171	376,126
		3%	3%	3%	3%	3%	3%
Cashflow OUT	176,959	287,804	455,795	554,510	246,943	531,036	875,081
	176,959	287,804	455,795	554,510	246,943	531,036	875,081
ENDING FUND BALANCE	1,867,848	1,904,494	1,782,883	1,572,581	1,680,174	1,514,309	1,015,355

FACILITY PROJECTS RESERVE: The Facility Projects Reserve accounts for the capital projects and improvements to the general real property facilities of the RFA over a long-term planning horizon. The basic requirement is specified that the account be funded sufficiently to avoid any deficit by transferring sufficient annual contributions from the general fund to assure solvency. As of the publication of this report a specific capital plan has not been formulated for the RFA. The amounts shown in the following table represent placeholder values pending the development of a final capital plan.

Facility Project Reserve: Cash Balance

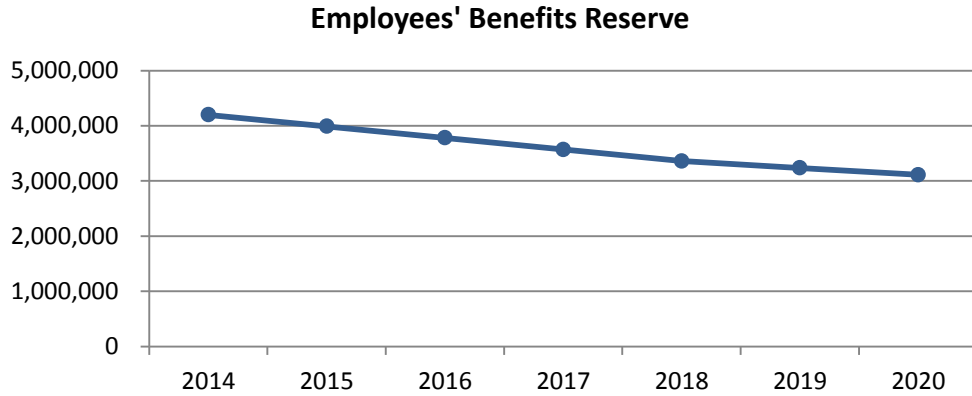


BEGINNING FACILITY RESERVE CASH	
Bothell	
Northshore	200,000
Woodinville	464,468
District 10	100,000

FACILITY RESERVE							
	2014	2015	2016	2017	2018	2019	2020
Beginning Cash Balance	764,468	839,468	906,718	916,786	773,740	507,334	592,599
Property Tax Contributions	75,000	77,250	79,568	81,955	83,594	85,265	86,971
		3%	3%	3%	2%	2%	2%
Cashflow OUT		10,000	69,500	225,000	350,000		74,000
		10,000	69,500	225,000	350,000		74,000
ENDING FUND BALANCE	839,468	906,718	916,786	773,740	507,334	592,599	605,570

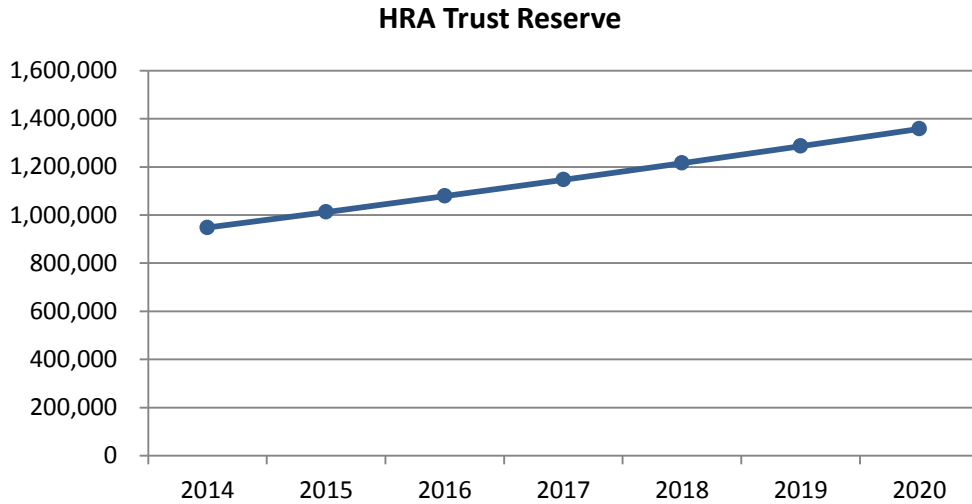


EMPLOYEE BENEFITS RESERVE: The Employee Benefits Reserve accounts for the self-insured medical benefits, the accumulated retirement payments for LEOFF 1 retirees as specified by state law, and potential payouts for accumulated vacation and sick leave of future retirees from the RFA.



EMPLOYEE BENEFITS RESERVE							
	2014	2015	2016	2017	2018	2019	2020
January 1, Beginning Cash	4,409,991	4,199,991	3,989,991	3,779,991	3,569,991	3,359,991	3,234,991
Annual Revenues	215,949	222,859	229,990	237,350	244,945	252,783	260,873
Annual Expenses	425,949	432,859	439,990	447,350	454,945	377,783	385,873
Transfer Back to the General Fund	0	0	0	0	0	0	0
December 31, Ending Cash	4,199,991	3,989,991	3,779,991	3,569,991	3,359,991	3,234,991	3,109,991

HRA TRUST RESERVE: The Health Reimbursement Account is a trust fund to hold employee contributions to be used exclusively for medically related expenses.



HRA TRUST RESERVE							
	2014	2015	2016	2017	2018	2019	2020
January 1, Beginning Cash	883,851	947,571	1,012,572	1,078,879	1,146,518	1,215,518	1,285,903
Annual Revenues	646,758	659,795	673,096	686,666	700,510	714,634	729,045
Employee Medical Expenses	573,480	584,950	596,649	608,582	620,753	633,168	645,832
Administrative Fees	9,558	9,845	10,140	10,444	10,758	11,080	11,413
Transfer Back to the General Fund	0	0	0	0	0	0	0
December 31, Ending Cash	947,571	1,012,572	1,078,879	1,146,518	1,215,518	1,285,903	1,357,704



LABOR DATABASE

Staffing Matrix-The Staffing Matrix table identifies all staffing titles to be created within the RFA, along with a range of base wage pay points.

LABOR POSITIONS							
	2014	2015	2016	2017	2018	2019	2020
Title	Pay Point						
Commissioner	0.12	0.12	0.12	0.12	0.12	0.12	0.12
UNIFORMED							
Fire Chief	1.85	1.85	1.85	1.85	1.85	1.85	1.85
Asst Chief	1.73	1.70	1.70	1.70	1.70	1.70	1.70
Dep Chief	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Fire Marshal	1.60	1.60	1.60	1.60	1.60	1.60	1.60
Deputy Fire Marshal	1.30	1.30	1.30	1.30	1.30	1.30	1.30
Inspector II	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Inspector I	1.10	1.10	1.10	1.10	1.10	1.10	1.10
Bat Chief	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Training Captain	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Lieutenant	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Firefighter	1.00	1.00	1.00	1.00	1.00	1.00	1.00
SUPPORT STAFF							
Mgr-Fin	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Mgr-HR	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Mgr-SupSvc	1.35	1.35	1.35	1.35	1.35	1.35	1.35
Mgr-Purchasing	1.20	1.20	1.20	1.20	1.20	1.20	1.20
Comm Svc Off	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Specialist-Finance	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Specialist-HR	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Specialist-IT	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Specialist-Administrative	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Specialist-Pub Educ	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Technician-Maintenance	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Assistant-Exec	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Assistant-HR	0.65	0.65	0.65	0.65	0.65	0.65	0.65

Wage Summary-The Wage Summary table assembles the pay attributes that make up the wage portion of compensation by employee title.

WAGES PER POSITION							
	2014	2015	2016	2017	2018	2019	2020
Commissioner	10,417	10,750	11,094	11,449	11,815	12,193	12,584
UNIFORMED							
Fire Chief	170,718	176,181	181,819	187,637	178,558	184,272	190,169
Asst Chief	159,183	161,896	167,077	172,423	164,080	169,331	174,749
Dep Chief	147,648	152,373	157,249	162,281	167,474	172,833	178,363
Fire Marshal	147,648	152,373	157,249	162,281	167,474	172,833	178,363
Deputy Fire Marshal	119,964	123,803	127,765	131,853	136,072	140,427	144,920
Inspector II	110,736	114,280	117,936	121,710	125,605	129,625	133,773
Inspector I	101,508	104,756	108,108	111,568	115,138	118,823	122,625
Bat Chief	124,578	128,564	132,679	136,924	141,306	145,828	150,494
Training Captain	115,350	119,041	122,851	126,782	130,839	135,026	139,346
Lieutenant	106,122	109,518	113,022	116,639	120,372	124,224	128,199
Firefighter	92,280	95,233	98,280	101,425	104,671	108,020	111,477
SUPPORT STAFF							
Mgr-Fin	110,736	114,280	117,936	121,710	125,605	129,625	133,773
Mgr-HR	110,736	114,280	117,936	121,710	125,605	129,625	133,773
Mgr-SupSvc	124,578	128,564	132,679	136,924	141,306	145,828	150,494
Mgr-Purchasing	110,736	114,280	117,936	121,710	125,605	129,625	133,773
Comm Svc Off	92,280	95,233	98,280	101,425	104,671	108,020	111,477
Specialist-Finance	92,280	95,233	98,280	101,425	104,671	108,020	111,477
Specialist-HR	92,280	95,233	98,280	101,425	104,671	108,020	111,477
Specialist-IT	92,280	95,233	98,280	101,425	104,671	108,020	111,477
Specialist-Administrative	69,210	71,425	73,710	76,069	78,503	81,015	83,608
Specialist-Pub Educ	69,210	71,425	73,710	76,069	78,503	81,015	83,608
Technician-Maintenance	69,210	71,425	73,710	76,069	78,503	81,015	83,608
Assistant-Exec	73,824	76,186	78,624	81,140	83,737	86,416	89,182
Assistant-HR	59,982	61,901	63,882	65,927	68,036	70,213	72,460



Benefits Summary-The Benefits table assembles the pay attributes that make up the benefits portion of compensation by employee title.

BENEFITS PER POSITION							
	2014	2015	2016	2017	2018	2019	2020
Commissioner							
UNIFORMED							
Fire Chief	42,886	45,238	47,755	50,448	53,330	56,417	59,723
Asst Chief	43,045	45,188	47,703	50,394	52,024	55,069	58,331
Dep Chief	42,004	44,328	46,816	49,479	52,330	55,385	58,658
Fire Marshal	42,004	44,328	46,816	49,479	52,330	55,385	58,658
Deputy Fire Marshal	39,506	41,750	44,155	46,733	49,496	52,460	55,640
Inspector II	38,673	40,891	43,268	45,817	48,552	51,485	54,634
Inspector I	37,840	40,031	42,381	44,902	47,607	50,511	53,628
Bat Chief	39,922	42,180	44,598	47,190	49,969	52,948	56,143
Training Captain	39,090	41,320	43,712	46,275	49,024	51,973	55,137
Lieutenant	38,257	40,461	42,825	45,360	48,079	50,998	54,131
Firefighter	37,008	39,172	41,494	43,987	46,663	49,536	52,622
SUPPORT STAFF							
Mgr-Fin	40,683	42,965	45,409	48,027	50,832	53,838	57,062
Mgr-HR	40,683	42,965	45,409	48,027	50,832	53,838	57,062
Mgr-SupSvc	42,184	44,513	47,007	49,676	52,533	55,595	58,874
Mgr-Purchasing	40,683	42,965	45,409	48,027	50,832	53,838	57,062
Comm Svc Off	38,683	40,900	43,278	45,828	48,562	51,496	54,645
Specialist-Finance	38,683	40,900	43,278	45,828	48,562	51,496	54,645
Specialist-HR	38,683	40,900	43,278	45,828	48,562	51,496	54,645
Specialist-IT	38,683	40,900	43,278	45,828	48,562	51,496	54,645
Specialist-Administrative	36,182	38,320	40,615	43,079	45,726	48,569	51,624
Specialist-Pub Educ	36,182	38,320	40,615	43,079	45,726	48,569	51,624
Technician-Maintenance	36,182	38,320	40,615	43,079	45,726	48,569	51,624
Technician-	25,320	27,218	29,265	31,474	33,857	36,428	39,202
Technician-	25,320	27,218	29,265	31,474	33,857	36,428	39,202
Assistant-Exec	36,682	38,836	41,148	43,629	46,293	49,155	52,228

BENEFITS PER POSITION							
Assistant-HR	35,182	37,288	39,550	41,980	44,591	47,398	50,416
Assistant-	25,320	27,218	29,265	31,474	33,857	36,428	39,202

Position Headcount Summary-The Position Headcount table counts the number of employee assigned to the operating programs by employee title.

HEADCOUNT BY POSITION							
	2014	2015	2016	2017	2018	2019	2020
Commissioner	7	7	7	7	7	7	7
UNIFORMED							
Fire Chief	1	1	1	1	1	1	1
Asst Chief	1	1	1	1	1	1	1
Dep Chief	2	2	2	2	2	2	2
Fire Marshal	1	1	1	1	1	1	1
Deputy Fire Marshal	1	1	1	1	1	1	1
Inspector II	1	1	1	1	1	1	1
Inspector I	2	2	2	2	2	2	2
Bat Chief	11	11	11	11	11	11	11
Training Captain	2	2	2	2	2	2	2
Lieutenant	30	30	30	30	30	30	30
Firefighter	104	104	104	104	104	104	104
SUPPORT STAFF							
Mgr-Fin	1	1	1	1	1	1	1
Mgr-HR	1	1	1	1	1	1	1
Mgr-SupSvc	1	1	1	1	1	1	1
Comm Svc Off	1	1	1	1	1	1	1
Specialist-Finance	2	2	2	2	2	2	2
Specialist-HR	1	1	1	1	1	1	1
Specialist-IT	1	1	1	1	1	1	1
Specialist-Administrative	8	8	8	8	8	8	8
Specialist-Pub Educ	2	2	2	2	2	2	2
Technician-	1	1	1	1	1	1	1



HEADCOUNT BY POSITION							
Maintenance							
Assistant-Exec	2	2	2	2	2	2	2
Assistant-HR	1	1	1	1	1	1	1
Total Headcount	177	177	177	177	177	177	177
Headcount Growth		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Total Cost of Compensation (TCC) Database-The TCC Database assembles the pay attributes that make up the wage, benefit, and overtime TCC by employee title.

TOTAL PAYROL: WAGES, BENEFITS, OVERTIME							
	2014	2015	2016	2017	2018	2019	2020
Commissioner	72,916	75,250	77,658	80,143	82,707	85,354	88,085
UNIFORMED							
Fire Chief	213,604	221,419	229,574	238,085	231,888	240,689	249,891
Asst Chief	202,228	207,084	214,779	222,817	216,104	224,400	233,081
Dep Chief	379,304	393,402	408,129	423,518	439,607	456,435	474,042
Fire Marshal	189,652	196,701	204,064	211,759	219,804	228,217	237,021
Deputy Fire Marshal	168,827	175,210	181,885	188,870	196,182	203,840	211,864
Inspector II	158,047	164,084	170,404	177,021	183,954	191,221	198,840
Inspector I	294,532	305,917	317,844	330,345	343,452	357,203	371,634
Bat Chief	1,916,391	1,988,496	2,063,885	2,142,742	2,225,260	2,311,648	2,402,128
Training Captain	326,874	339,294	352,289	365,891	380,136	395,061	410,704
Lieutenant	4,579,689	4,755,640	4,939,886	5,132,904	5,335,204	5,547,330	5,769,863
Firefighter	14,194,488	14,750,636	15,333,817	15,945,630	16,587,787	17,262,114	17,970,568
SUPPORT STAFF							
Mgr-Fin	151,419	157,245	163,345	169,737	176,437	183,463	190,834
Mgr-HR	151,419	157,245	163,345	169,737	176,437	183,463	190,834
Mgr-SupSvc	166,762	173,078	179,685	186,600	193,839	201,422	209,368
Comm Svc Off	138,160	143,562	149,224	155,164	161,398	167,943	174,817
Specialist-Finance	276,321	287,123	298,449	310,329	322,796	335,885	349,635
Specialist-HR	131,885	137,086	142,541	148,267	154,280	160,597	167,237
Specialist-IT	131,885	137,086	142,541	148,267	154,280	160,597	167,237

TOTAL PAYROL: WAGES, BENEFITS, OVERTIME							
Specialist-Administrative	795,630	828,441	862,967	899,318	937,608	977,961	1,020,510
Specialist-Pub Educ	159,126	165,688	172,593	179,864	187,522	195,592	204,102
Technician-Maintenance	106,084	110,459	115,062	119,909	125,014	130,395	136,068
Assistant-Exec	222,489	231,568	241,116	251,161	261,735	272,871	284,604
Assistant-HR	95,764	99,808	104,071	108,566	113,308	118,314	123,601
Total Payroll	25,223,497	26,201,520	27,229,155	28,306,644	29,406,740	30,592,013	31,836,569
Payroll Growth		3.88%	3.92%	3.96%	3.89%	4.03%	4.07%

Summary

Agency Initial Capitalization-Each of the four member agencies has committed to capitalize the RFA with an infusion of cash contributions to be distributed between the General Fund and the Reserve Fund into specific Reserve Accounts.

AGENCY FUNDS			
Agency	Total Cash	General Fund	General Fund
BF&EMS	2,802,532	768,000	2,034,532
NFD	11,291,099	4,457,327	6,833,772
WF&R	10,260,539	5,917,465	4,343,074
SCFD #10	1,613,544	363,544	1,250,000
Total	25,967,714	11,506,336	14,461,378

General Fund Cash Flow - The RFA General Fund accounts for the collection, investment, budgeting, disbursement, and transferring of funds throughout the fiscal cycle. The RFA is programmed to begin each with the following amounts on deposit on January 1 of each fiscal cycle during each of its first seven years of operations.

GENERAL FUND CASHFLOW							
	2014	2015	2016	2017	2018	2019	2020
TOTAL Beginning Cash	11,506,336	11,451,534	11,450,434	11,521,880	11,690,622	12,016,153	12,501,882

RFA Property Taxes - The expected property tax collections are programmed for each of the first seven years of operations. Property taxes are based on the value of the house, building, or structure plus the



value of the land or real property. (Compare this with the Benefit Charges which follows.) Property tax rates are expected to decrease to 79-cents per 1,000 from an initial rate of \$1.00 per 1,000, a reduction of 21-cents per 1,000.

RFA PROPERTY TAXES							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Rate	1.00	0.96	0.93	0.89	0.86	0.82	0.79
Amount	19,461,758	19,790,175	20,119,386	20,449,446	20,780,406	21,112,320	21,445,241

RFA Benefit Charges - The benefit charges are programmed for each of the first seven years of operations. The rate is expected to increase to .59-cents in the seventh year from an initial .50-cents.

RFA BENEFIT CHARGES							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Rate	0.50	0.51	0.53	0.54	0.56	0.57	0.59
Amount	9,730,879	10,570,812	11,483,245	12,474,435	13,551,181	14,720,869	15,991,519

RFA Total Effective Rates - The expected property tax collections combined with the Benefit Charge are expected to decrease to \$1.38 from the starting rate of \$1.50.

TOTAL EFFECTIVE OPERATING TAX LEVY AND CHARGE RATES PER 1K PROPERTY VALUE							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Rate	1.50	1.48	1.45	1.43	1.42	1.40	1.38
Amount	29,192,637	30,360,986	31,602,631	32,923,881	34,331,588	35,833,189	37,436,759

Snohomish County EMS Levy Rate - A portion of the property within the jurisdiction of the RFA lies within Snohomish County which has a separate property tax for Emergency Medical Services, whose rate is expected to decrease by 6-cents per 1,000, declining to .24-cents from an initial .30-cents.

SNOHOMISH COUNTY EMS LEVY							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Rate	0.30	0.29	0.28	0.27	0.26	0.25	0.24
Amount	1,184,818	1,204,291	1,224,037	1,244,060	1,264,363	1,284,949	1,305,822

Fire Station and Training Tower Bonds - Bonds for life for a fire station and training tower still have approximately 10 years (out of 20) to be paid by the member agencies of the RFA. Property taxes will be assessed over the entire RFA property base.

VOTER-APPROVED EXCESS BOND LEVY							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Rate	0.08	0.08	0.07	0.07	0.06	0.06	0.06
Amount	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144

RFA Operating Revenues - Specific fees are generated from RFA services such as plan checking, inspections, safety and life-savings classes, and the like.

OPERATING REVENUE							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Total Revenue	1,398,718	1,416,213	1,433,989	1,452,050	1,470,404	1,489,056	1,508,013

TOTAL FUNDS AVAILABLE - The total funds available to the RFA for public safety, fire suppression, medical responses, and others is programmed for the first seven years.

TOTAL FUNDS AVAILABLE							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
TOTAL RESOURCES	44,853,652	46,004,169	47,282,234	48,713,015	50,328,120	52,194,491	54,323,620

How Are the Total Funds Available to the RFA to be Used?

The RFA has programmed its expenses over all of its service programs and capital expense projects for seven years. Highlights of these uses are outlined as follows:

Contributions to Reserves - The RFA has created a number of reserve accounts to accumulate and disburse in the future a series of fund transfers for apparatus, equipment, capital programs and projects, and mandated personnel liabilities that are programmed as far out as 25 years. Each year the RFA general fund contributes a clearly-defined amount for well-documented future needs.

GENERAL FUND CONTRIBUTION TO RESERVES							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Reserve Funding	3,068,331	3,130,578	3,194,579	3,260,385	3,327,227	3,395,938	3,466,572



Bonded Debt Service - The RFA is expected to assume the final annual payments of bonds issued to finance a fire station and a training tower. The amount collected annually is only enough to make the annual bond payments.

BOND DEBT SERVICE							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Annual Collection	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144	1,571,144

RFA Labor Costs - The RFA incurs an annual labor cost that accounts for the majority of its expenditures. Labor costs encompass wages, federal-mandated and state-mandated charges, and contract-negotiated benefits.

PAYROLL							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Total Labor	25,223,497	26,201,520	27,229,155	28,306,644	29,406,740	30,592,013	31,836,569

Operating Expenses - The RFA incurs annual operating costs for the maintenance and operations of its stations, apparatus, and equipment, and other facilities.

OPERATING EXPENSES							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Annual Expenses	3,539,147	3,650,493	3,765,476	3,884,221	4,006,855	4,133,514	4,264,335

Total RFA Funds Used - The RFA has programmed all of its expected initial capitalization, all revenues, all transfers, and all expenses. All funds transferred and expended is identified below.

TOTAL FUNDS EXPENDED OR TRANSFERRED INTERNALLY TO RESERVES							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Annual Funds	33,402,118	34,553,735	35,760,354	37,022,394	38,311,966	39,692,609	41,138,620

RFA General Fund Year-end Cash Balances - The RFA budgets not only its revenue and expenses on an annual basis but also its expected ending cash balances as shown below. Because the majority of its revenues is collected only twice per year, in May and November, the RFA must end the year with sufficient funds to operate for the first four months of the year prior to its receipt of property taxes, not

due until April 30th. This requires careful attention of cash flow and the ability to plan for a beginning ash balance that is sufficient to avoid deficits between January and May.

RFA GENERAL FUND CASH BALANCES							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Annual Balance	11,451,534	11,450,434	11,521,880	11,690,621	12,016,153	12,501,881	13,185,000



APPENDIX D: RFA ORGANIZATIONAL CHART

