

HANDOUT MATERIALS



Camas-Washougal Fire Department
East County Fire & Rescue
Clark County, Washington

**Presentations to the
Camas & Washougal City Councils**

ASSESSMENT OF THE EMS DELIVERY SYSTEM

Washougal: June 17, 2017
Camas: June 19, 2017



Emergency Services Consulting International
Providing Expertise and Guidance that Enhances Community Safety

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EMERGENCY MEDICAL TRANSPORT OPTIONS (Draft—Not for Distribution)

The following is a summary of some of the features of the various transport options.

Option A: Status Quo

Option C: Contracted Medic & Transport Services

Option B: In-House Medic w/Contracted Transport

Option D: Combined In-House/Contracted Transport

DESCRIPTION	EMERGENCY MEDICAL TRANSPORT OPTIONS			
	Option A	Option B	Option C	Option D
Deployment & Staffing				
CWFD operations personnel	No change	FF layoffs	FF layoffs	FF layoffs
CWFD medic units (minimum)	4	0	0	0
CWFD engines	3	3	3	3
ECFR engines	2	2	2	2
CWFD minimum daily staffing ¹	11	9 or 10	9 or 10	9 or 10
CWFD minimum daily paramedics	4	0	3	3
ECFR minimum daily staffing	2 ²	3 ³	3 ³	3 ³
Service Features				
Transport-unit response times	No change	Longer	Longer	Longer
Camas/Washougal transport-unit performance criteria	Urban	Likely suburban (possibly urban)	Likely suburban (possibly urban)	Likely suburban (possibly urban)
ECFR transport-unit performance criteria	Urban & suburban	Rural & some suburban	Rural & some suburban	Rural & some suburban
Camas/Washougal access to ALS	No change	No change	Longer	No change
ECFR community access to ALS	No change	Longer	Much longer	Longer
Overall emergency services capabilities	No change	Service decline	Significant decline	Service decline
Financial Impacts				
CWFD operations	No change	Lose transport & ECFR funds	Lose transport & ECFR funds	Lose transport & ECFR funds
ECFR	No change	Retain EMS levy	Retain EMS levy	Retain EMS levy
Net operating cost to CWFD	None	\$850,000–\$1.35 mil. loss	\$640,000–\$1.27 mil. loss	\$850,000–\$1.35 mil. loss
Net operating cost to ECFR	None	\$450,000 gain	\$450,000 gain	\$450,000 gain
Capital replacement	No change	Lower	Lower	Lower
Firefighter salaries, benefits, etc. ⁴	No change	\$500,000–\$1.0 million gain	\$600,000–\$1.2 million gain	\$500,000–\$1.0 million gain

¹Minimums include firefighters and one Battalion Chief ²Four firefighters daily when using part-time and volunteer personnel

³Represents an additional full-time firefighter using retained EMS levy funds ⁴Estimated; assumes layoffs, if transport is contracted

Details of the Transport Options

The following section is a detailed review of each of the four alternative service-delivery options described in the RFP. Since any changes to the system could impact service to ECFR, it has been included in the descriptions.

Option A: Maintain Status Quo

This option assumes that CWFD continues with its current operational, deployment, and financial model, but may include some modifications. This maintains the operation of two ALS medic units operating 24 hours daily from Stations 41 and 43. A third medic unit continues to be cross-staffed with an engine at Station 42, operating 24 hours daily. The Engine 41 crew cross-staffs a fourth medic unit deployed from Station 41 if it is the next closest unit. ECFR continues to provide medical first-response at the BLS level.

Advantages/Disadvantages of Option A

The following entails a description of the potential advantages and disadvantages of Option A:

Advantages

- Communities on the east side of Clark County maintain uninterrupted emergency services, medical first-response, emergency medical transport, and early prehospital patient care at the ALS level.
- City maintains direct operational and administrative control of EMS delivery system.
- Citizens of East County Fire & Rescue continue to receive ALS emergency medical transport in a timely manner.
- City continues current minimum staffing, maintaining CWFD's capability to mitigate some (but not all) of the larger incidents, such as residential fires, major motor vehicle accidents, and multi-casualty incidents.
- No firefighter layoffs.

Disadvantages

- At minimum staffing, two-person engine crews at Stations 41 and 43 are not ideal. A two-person engine limits the crew's ability to conduct fire suppression, rescues, and other typical engine company operations. In addition, this potentially endangers both the firefighters and public.
- As described above, the same is true at Station 42, with a two-person cross-staffed engine/medic unit. This may be more critical due its location from other CWFD resources and mutual aid.
- The current staffing and deployment model can only maintain the status quo for a limited time. EMS call-volume will increase due to an aging population and population growth, and eventually require additional resources.

Financial Impact

- Option A represents the status quo, and has no financial impact over the baseline forecast presented earlier in this report (only model in which City collects transport revenue).

Option B: In-House Medic Services with Contracted Transport

The following represents the basic configuration of Option B as described in the RFP:

- CWFD continues to provide ALS using paramedics in a medical first-response capacity.
- ECFR provides medical first-response at the basic life support level using EMT-Basics.
- All emergency and non-emergency transport would be provided by an external ALS-level ambulance service (e.g., private ambulance provider) through a contractual arrangement with the cities of Camas, Washougal, and the ECFR fire district.

Operations & Deployment Details

- Emergency and non-emergency ambulance service would be provided by an external provider operating at the ALS level.
- All CWFD first-due engine companies would be equipped with a full complement of advanced life support equipment.
- The closest engine would be dispatched in a medical first-response capacity to provide BLS and ALS until arrival of the ambulance transport provider.
- CWFD would no longer provide emergency medical transport to ECFR (although they could provide ALS medical first-response on high-acuity patients until arrival of the ALS ambulance).
- ECFR would continue to provide BLS medical first-response until arrival of the ambulance transport provider.

Staffing Details

- This option assumes a minimum staffing level of three firefighters per station and engine company. However, the city would have the option of reducing staffing levels further.
- A minimum of one paramedic would be assigned to each engine company.
- Daily minimum staffing in operations of nine firefighters and one Battalion Chief (total of 10 minimum daily staffing).
- Increased staffing coverage by 3–4 firefighters at ECFR (see “Option B Advantages”).

Financial Impact

- Reduction in CWFD expenses associated with the potential elimination of four firefighters and their associated salaries, benefits, and other operating costs. This reduction in expenditures assumes CWFD deploys a minimum staffing of nine firefighters and a Battalion Chief.
- A revenue reduction for CWFD equivalent to the current and projected revenue from ambulance billing, including the projected increase in revenue from the Washington State implementation of the Medicaid supplemental reimbursement program.
- A revenue loss for CWFD equivalent to the ECFR EMS levy funds currently paid to Camas for EMS and transport services.
- An operating revenue increase for ECFR due to retention of its EMS levy funds.

A summary of the estimated financial impacts of Option B to CWFD is provided in the following figure (assumes a minimum staffing of 10 per day; nine firefighters and one Battalion Chief):

Figure 1: Option B Reductions—Three-Person Staffing at Station 42 (2018–2021)

Reductions	2018	2019	2020	2021
Revenue Reduction	(\$1,849,000)	(\$1,882,000)	(\$2,042,000)	(\$2,079,000)
Expense Reduction	\$498,000	\$528,000	\$560,000	\$594,000
Net Financial Gain/(Loss)	(\$1,351,000)	(\$1,354,000)	(\$1,482,000)	(\$1,485,000)

If CWFD elected to keep the current two-person minimum staffing at Station 42, instead of three, an additional four firefighter positions could be eliminated, and the estimated financial impact to CWFD would be as shown in the following figure (assumes a minimum staffing of nine per day; eight firefighters and one Battalion Chief):

Figure 2: Option B Reductions—Two-Person Staffing at Station 42 (2018–2021)

Reductions	2018	2019	2020	2021
Revenue Reduction	(\$1,849,000)	(\$1,882,000)	(\$2,042,000)	(\$2,079,000)
Expense Reduction	\$996,000	\$1,056,000	\$1,120,000	\$1,188,000
Net Financial Gain/(Loss)	(\$853,000)	(\$826,000)	(\$922,000)	(\$891,000)

Advantages/Disadvantages of Option B

The following entails a description of the potential advantages and disadvantages of Option B:

Advantages

- Reduction in annual maintenance and operation costs of providing emergency medical transport.
- Elimination of capital equipment replacement costs (e.g., medic units, stretchers, etc.).
- Reduction in firefighter salaries and benefit costs if firefighter positions are eliminated through layoffs.
- Reduced staff time devoted to EMS and transport-related administrative and logistical functions.
- Additional space available for other apparatus in fire station bays.
- Decrease in CWFD EMS service-demand due to discontinuing medic-unit responses to ECFR.
- ECFR could increase its staffing by 4–5 career firefighters (or one additional minimum staffing position) through the retention of their EMS levy funds currently paid to the City of Camas.

Disadvantages

- A net loss of ambulance transport revenue exceeding potential cost savings (from possible firefighter lay-offs) by up to approximately \$1.4 million annually.
- Operational management and control of ambulance transport would be minimized (e.g., no ability for on-duty BC to move ambulances or add transport resources during times of increased service-demand).
- Ambulance response times to Camas, Washougal, and ECFR may increase substantially if a commercial provider is utilized (assuming they are assigned as suburban and rural areas).
 - CWFD currently operates two medic units with 24-hour dedicated staffing, and another two medic units that are cross-staffed with engines. In contrast, a commercial ambulance provider would have to weigh the operating costs versus revenues for each additional ambulance deployed.
 - If the contracted ambulance-service provider is only required to meet the suburban and rural response-time standard in accordance with the existing ILA, this could result in longer response times.
- The potential of longer ambulance response times would result in extended on-scene times of CWFD and ECFR first-response apparatus while waiting for patient transport. This would also contribute to the inability of these apparatus to respond to other incidents.
- The opportunity for CWFD paramedics to perform complex advanced life support skills would decline, since patient care would be transferred to the contracted ambulance paramedics upon their arrival at the scene. This could impact long-term skills proficiency among the firefighter/paramedics.
 - Continuing medical education, clinical skills practice, and scenario-based training may need to be increased beyond the minimums, so as to ensure competency among the paramedics.
- Potential firefighter layoffs.
 - In the event of firefighter layoffs and reduced minimum daily staffing, diminished capability to mitigate the more frequently occurring daily incidents, as well as other more significant events.
- In times of excessive EMS system demand or major events occurring in Vancouver or other areas on the west side of Clark County, ambulance resources may be drawn from the east side—resulting in delays in acquiring ambulance service to Camas, Washougal, and ECFR.
- Potentially more incidents in which first-response is delayed due to multiple responses from the same station.
- Would require additional staff time to monitor contract compliance of the ambulance service provider, and address any incidents, complaints, and interactions between the contractor and CWFD.

Option C: Contracted Medic & Transport Services

The following represents the basic configuration of Option C as described in the RFP:

- CWFD eliminates the provision of patient-care at the advanced life support level.
- CWFD provides basic life support in a medical first-response capacity.
- ECFR continues to provide medical first-response at the basic life support level.
- All emergency and non-emergency transport would be provided by an external ALS-level ambulance service through a contractual arrangement with the cities of Camas, Washougal, and the ECFR fire district.
- Advanced life support would be provided solely by the medical transport provider.

Operations & Deployment Details

This option assumes a similar configuration as Options B, but CWFD would no longer provide advanced life support services utilizing paramedics.

- Emergency and non-emergency ambulance service would be provided by an external provider operating at the ALS level.
- The closest engine would be dispatched in a medical first-response capacity to provide basic life support until arrival of the ambulance transport provider.
- CWFD would discontinue response to ECFR.
- ECFR would continue to provide BLS medical first-response until arrival of the ambulance transport provider.

Staffing Details

- This option assumes a minimum staffing level of three firefighters per station and engine company. However, the city would have the option of reducing staffing levels further.
- All firefighters trained and certified to at least the EMT-Basic level. Daily minimum staffing in operations of nine firefighters and one Battalion Chief (total of 10 minimum daily staffing).

Financial Impact

- An expense reduction for CWFD associated with the elimination of four Firefighter/Paramedic positions, and the reclassification of 14 Firefighter/Paramedic positions to Firefighter, with a reduction equivalent to the related salaries, benefits, and associated operating costs. This expense reduction assumes CWFD deploys a minimum staffing of nine plus a Battalion Chief.
- A revenue reduction for CWFD equivalent to the current and projected revenue from ambulance billing, including the projected increase in revenue from the Washington State implementation of the Medicaid supplemental reimbursement program.
- A revenue loss for CWFD equivalent to the ECFR EMS levy funds currently paid to Camas for EMS and transport services.
- An operating revenue increase for ECFR, due retaining its EMS levy.

A summary of the estimated financial impacts of Option C to CWFD is provided in the following figure (assumes a minimum staffing of 10 per day; nine firefighters and one Battalion Chief):

Figure 3: Option C Reductions—Three-Person Staffing at Station 42 (2018–2021)

Reductions	2018	2019	2020	2021
Revenue Reduction	(\$1,849,000)	(\$1,882,000)	(\$2,042,000)	(\$2,079,000)
Expense Reduction	\$583,000	\$618,000	\$655,000	\$694,000
Net Financial Gain/(Loss)	(\$1,266,000)	(\$1,264,000)	(\$1,387,000)	(\$1,385,000)

If CWFD elected to keep the current two-person minimum staffing at Station 42, instead of three, an additional five firefighter positions could be eliminated, and the estimated financial impact to CWFD would be as shown in the following figure (assumes a minimum staffing of nine per day; eight firefighters and one Battalion Chief):

Figure 4: Option C Reductions—Two-Person Staffing at Station 42 (2018–2021)

Reductions	2018	2019	2020	2021
Revenue Reduction	(\$1,849,000)	(\$1,882,000)	(\$2,042,000)	(\$2,079,000)
Expense Reduction	\$1,206,000	\$1,278,000	\$1,355,000	\$1,436,000
Net Financial Gain/(Loss)	(\$643,000)	(\$604,000)	(\$687,000)	(\$643,000)

ECFR's retention of its EMS levy would provide an additional \$450,000 in 2018, increasing to \$600,000 in 2021. This would enable the District to pay for an additional 4–5 new firefighter positions. In turn, this would increase minimum daily staffing by one full-time firefighter.

Advantages/Disadvantages of Option C

The following entails a description of the various advantages and disadvantages of Option C as identified by ESCI.

Advantages

- Elimination of the cost of ALS supplies and durable equipment.
- Reduction in costs to provide CME and skills maintenance at the ALS level, including overtime required to attend classes mandated by the Clark County Medical Program Director.
- Elimination of capital equipment replacement costs (e.g., medic units, stretchers, etc.).
- Reduction in annual maintenance and operation costs of providing emergency medical transport.
- Reduction in annual firefighter overtime costs.

- Reduction in firefighter salaries and benefit costs if firefighter positions are eliminated through layoffs.
- Reduction in salary costs resulting from the elimination of paramedic pay differentials.
- Reduced staff time devoted to EMS and transport-related administrative and logistical functions (even more than with the other options, as CWFD would no longer provide ALS).
- Additional space available for other apparatus in fire station bays.
- Decrease in CWFD EMS service-demand due to discontinuing medic-unit responses to ECFR.
- ECFR could increase its staffing by 4–5 career firefighters (or one additional minimum staffing position) through the retention of their EMS levy funds currently paid to the City of Camas.

Disadvantages

- A net loss of ambulance transport revenue exceeding potential cost savings (from possible firefighter lay-offs) by approximately \$1.4 million annually.
- Operational management and control of ambulance transport would be minimized (e.g., no ability for on-duty BC to move ambulances or add transport resources during times of increased service-demand).
- Ambulance response times to Camas, Washougal, and ECFR may increase substantially if a commercial provider is utilized (assuming they are assigned as suburban and rural areas).
 - CWFD currently operates two medic units with 24-hour dedicated staffing, and another two medic units that are cross-staffed with engines. In contrast, a commercial ambulance provider would have to weigh the operating costs versus revenues for each additional ambulance deployed.
 - If the contracted ambulance-service provider is required to meet the suburban and rural response-time standard in accordance with the existing ILA, this could result in longer response times.
- The potential of longer ambulance response times would result in extended on-scene times of CWFD and ECFR first-response apparatus while waiting for patient transport. This would also contribute to the inability of these apparatus to respond to other incidents.
- Potential firefighter layoffs.
 - In the event of firefighter layoffs and reduced minimum daily staffing, diminished capability to mitigate the more frequently occurring daily incidents, as well as other more significant events.
- In times of excessive EMS system demand or major events occurring in Vancouver or other areas on the west side of Clark County, ambulance resources may be drawn from the east side—resulting in delays in acquiring ambulance service to Camas, Washougal, and ECFR.
- Would require additional staff time to monitor contract compliance of the ambulance service provider, and address any incidents, complaints, and interactions between the contractor and CWFD.
- Potentially more incidents in which first-response is delayed due to multiple responses from the same station.

- Would require additional staff time to monitor contract compliance of the ambulance service provider, and address any incidents, complaints, and interactions between the contractor and CWFD.
- Patients would *not* receive immediate first-response advanced life support, since CWFD apparatus would only be equipped to provide basic life support. ALS would not be initiated until the arrival of the ambulance service provider.
 - Potential increase in mortality and morbidity among high-acuity patients (strokes, STEMI, major trauma, critical respiratory/airway, etc.) requiring immediate ALS intervention.

Option C Discussion

Decreasing CWFD's service-level from ALS to BLS would produce a variety of challenges. In Washington State, paramedics are certified by the Department of Health (DOH). Paramedics (as well as EMTs) are obligated to practice in accordance with local protocols at the level of their certification. Employers do not own or control the "licenses" of its EMS providers. That authority remains only with the Washington State DOH in association with the Medical Program Director. A paramedic does have the option of re-certification at a lower level, should they choose to do so.

In the event that CWFD were to provide BLS-only, it would be necessary for the department to remove all ALS equipment and supplies from its apparatus. Otherwise, firefighters who remain as certified paramedics would be obligated to practice at the ALS level.

The current agreement between the City of Camas and the bargaining unit includes salary differentials between paramedics and non-paramedics. Should CWFD discontinue ALS, undoubtedly this would bring about issues concerning paramedic pay. It is beyond the scope of this report to address this in detail, but changes in working conditions may need to be bargained with the union. It would be appropriate to seek legal counsel to determine a proper course.

Option D: Combined In-House/Contracted ALS Service & Transport

The following entails the basic description of Option D as described in the RFP:

- CWFD continues to provide ALS using paramedics in a medical first-response capacity.
- In cases of high-acuity patients (Priority 1 and Priority 2 cases), CWFD paramedics would retain management of patient-care and accompany the patient during transport to the hospital. In cases of low-acuity patients, the CWFD paramedics would relinquish patient-care to the transport paramedics.
- ECFR provides medical first-response at the basic life support level using EMT-Basics.
- All emergency and non-emergency transport would be provided by an external ALS-level ambulance service (e.g., private ambulance provider) through a contractual arrangement with the cities of Camas, Washougal, and the ECFR fire district.

Operations & Deployment Details

This option assumes a similar configuration as Option B, but with one exception.

- All CWFD first-due engine companies would be equipped with a full complement of advanced life support equipment.
- The closest engine would be dispatched in a medical first-response capacity to provide BLS and ALS until arrival of the ambulance transport provider.
- In cases of Priority 1 and 2 patients (high-acuity), a CWFD paramedic would retain the responsibility for patient care for high-acuity patients, and accompany patients through transport to the hospital.
- CWFD would discontinue response to ECFR.
- ECFR would continue to provide BLS medical first-response until arrival of the ambulance transport provider.

Staffing Details

- This option assumes a minimum staffing level of three firefighters per station and engine company. However, the city would have the option of reducing staffing levels further.
- A minimum of one paramedic would be assigned to each engine company.
- Daily minimum staffing in operations of nine firefighters and one Battalion Chief (total of 10 minimum daily staffing).

Financial Impact

- An expense reduction for CWFD associated with the elimination of four firefighters with a reduction equivalent to the related salaries, benefits, and associated operating costs. This expense reduction assumes CWFD deploys a minimum staffing of nine and a Battalion Chief.
- A revenue reduction for CWFD equivalent to the current and projected revenue from ambulance billing, including the projected increase in revenue from the Washington State implementation of the Medicaid supplemental reimbursement program.

- A revenue reduction for CWFD equivalent to the ECFR EMS levy currently paid by ECFR for EMS and transport services.
- An operating revenue increase for ECFR due retaining its EMS levy funds.

Figure 5: Option D Reductions—Three-Person Staffing at Station 42 (2018–2021)

Reductions	2018	2019	2020	2021
Revenue Reduction	(\$1,849,000)	(\$1,882,000)	(\$2,042,000)	(\$2,079,000)
Expense Reduction	\$498,000	\$528,000	\$560,000	\$594,000
Net Financial Gain/(Loss)	(\$1,351,000)	(\$1,354,000)	(\$1,482,000)	(\$1,485,000)

If CWFD elected to keep the current two-person minimum staffing at Station 42, instead of three, an additional five firefighter positions could be eliminated, and the estimated financial impact to CWFD would be as shown in the following figure (assumes a minimum staffing of nine per day; eight firefighters and one Battalion Chief):

Figure 6: Option D Reductions—Two-Person Staffing at Station 42 (2018–2021)

Reductions	2018	2019	2020	2021
Revenue Reduction	(\$1,849,000)	(\$1,882,000)	(\$2,042,000)	(\$2,079,000)
Expense Reduction	\$996,000	\$1,056,000	\$1,120,000	\$1,188,000
Net Financial Gain/(Loss)	(\$853,000)	(\$826,000)	(\$922,000)	(\$891,000)

ECFR's retention of its EMS levy would provide an additional \$450,000 in 2018, increasing to \$600,000 in 2021. This would enable the District to pay for an additional 4–5 new firefighter positions. In turn, this would increase minimum daily staffing by one full-time firefighter.

Advantages/Disadvantages of Option D

The following entails a description of the various advantages and disadvantages of Option D as identified by ESCI.

Advantages

- Reduction in annual maintenance and operation costs of providing emergency medical transport.
- Some reduction in some capital equipment replacement costs (e.g., medic units, stretchers, etc.).
- Reduction in firefighter salaries and benefit costs if firefighter positions are eliminated through layoffs.
- Reduced staff time devoted to EMS and transport-related administrative and logistical functions.

- Additional space available for other apparatus in fire station bays.
- Decrease in CWFD EMS service-demand due to discontinuing medic-unit responses to ECFR.
- ECFR could increase its staffing by 4–5 career firefighters (or one additional minimum staffing position) through the retention of their EMS levy funds currently paid to the City of Camas.

Disadvantages

- A net loss of ambulance transport revenue exceeding potential cost savings (from possible firefighter lay-offs) by up to approximately \$1.4 million annually.
- Operational management and control of ambulance transport would be minimized (e.g., no ability for on-duty BC to move ambulances or add transport resources during times of increased service-demand).
- Ambulance response times to Camas, Washougal, and ECFR may increase substantially if a commercial provider is utilized (assuming they are assigned as suburban and rural areas).
 - CWFD currently operates two medic units with 24-hour dedicated staffing, and another two medic units that are cross-staffed with engines. In contrast, a commercial ambulance provider would have to weigh the operating costs versus revenues for each additional ambulance deployed.
 - If the contracted ambulance-service provider is required to meet the suburban and rural response-time standard in accordance with the existing ILA, this could result in longer response times.
- The potential of longer ambulance response times would result in extended on-scene times of CWFD and ECFR first-response apparatus while waiting for patient transport. This would also contribute to the inability of these apparatus to respond to other incidents.
- The opportunity for CWFD paramedics to perform complex advanced life support skills would decline, since patient care would be transferred to the contracted ambulance paramedics upon their arrival at the scene. This could impact long-term skills proficiency among the firefighter/paramedics.
 - Continuing medical education, clinical skills practice, and scenario-based training may need to be increased beyond the minimums, so as to ensure competency among the paramedics.
- Potential firefighter layoffs.
 - In the event of firefighter layoffs and reduced minimum daily staffing, diminished capability to mitigate the more frequently occurring daily incidents, as well as other more significant events.
- In times of excessive EMS system demand or major events occurring in Vancouver or other areas on the west side of Clark County, ambulance resources may be drawn from the east side—resulting in delays in acquiring ambulance service to Camas, Washougal, and ECFR.
- Potentially more incidents in which first-response is delayed due to multiple responses from the same station.
- Would require additional staff time to monitor contract compliance of the ambulance service provider, and address any incidents, complaints, and interactions between the contractor and CWFD.

- Would likely meet resistance from the external ambulance service provider, who maintains responsibility and liability for patients being transported in their vehicles.
- Challenges in having CWFD paramedics (and EMTs) working in another agency's ambulance. Would require advanced "training" sessions to familiarize all firefighters with different equipment and supplies, as well as where they are located in the ambulance.
- The availability of first-response ALS in east Clark County would be diminished more often.
 - Unnecessarily takes the CWFD paramedic out-of-service in cases of high-acuity patients. If an engine company is staffed with a single paramedic, it cannot provide ALS service until the paramedic returns.
 - Demand would increase on the other engine companies.
 - In critical cases, a CWFD firefighter (sometimes two), would likely need to accompany the patient during transport. However, this would not necessarily always require a paramedic.
- No clinical advantage to patients, as paramedics practicing in Clark County have the same training and continuing medical education requirements, and operate in accordance with the same prehospital care protocols.

PROJECT TEAM BACKGROUNDS & QUALIFICATIONS

John A. Stouffer

Project Manager/Associate Consultant



Summary of Qualifications

Mr. Stouffer began his career in public safety in 1976 as a firefighter/EMT with Yakima County (WA) Fire District #10, where he established the first EMS program in the department. In 1980, he attended the Paramedic Program at Central Washington University and obtained a position with Yakima (WA) Medic One becoming a field paramedic and the organization's first Training Officer. In 1988, he was offered the position of the Director of the Yakima County (WA) Department of Emergency Medical Services. After holding that position for nine years, he took a position with Gresham (OR) Fire & Emergency Services as the EMS Coordinator, occasionally serving as the acting Chief of the Training Division, until his retirement in 2009. Since 1992, in addition to his other employment, Mr. Stouffer has been providing a wide variety of public safety consulting services to clients throughout the U.S. and Canada.

Professional Experience

- Project Manager/Associate Consultant, Emergency Services Consulting International
- Technical Advisor/Program Developer, Vision 20/20 & Institution of Fire Engineers
- EMS Research Investigator/Coordinator, Oregon Health & Science University
- EMS Coordinator (Captain), Gresham Fire & Emergency Services
- Senior Consultant, Pacific Northwest Associates, LLC
- Director, Yakima County Department of Emergency Medical Services
- Training Officer/Paramedic, Yakima Medic One
- Firefighter/EMT-Paramedic/Medical Services Officer | Yakima County Fire District #10
- More than 40 years diverse experience in fire and emergency medical services

Educational Background & Certifications

- Central Washington University
- Yakima Valley Community College
- Western Oregon University
- National Fire Academy Incident Command for EMS
- Seattle/King County Resuscitation Academy Fellowship
- Multiple instructor certifications (NFPA I & II, ACLS, PHTLS, WSFST Instructor II, EZ-IO Instructor)
- Numerous advanced-level EMS certifications
- More than 250 hours fire service education, Washington State Fire Service Training

Associated Professional Accomplishments

- Project Manager and consultant on a number of fire and EMS projects around the U.S. and Canada
- Co-authored and published a number of international prehospital studies (available on request)
- Authored two guides on Community Risk Reduction for Vision 20/20 (available on request)
- Project Co-Director, King LT Airway Implementation Project for Multnomah County (OR)
- Author, Phases I & II of the Yakima County EMS Master Plan
- Earned fourteen professional awards during his career (available on request)

Russell A. McCallion

Associate Consultant



Summary of Qualifications

Mr. McCallion started his public safety career working as an EMT and paramedic for 9-1-1 private ambulance providers. The S.F. Department of Public Health Paramedic Division hired Mr. McCallion in 1983. He worked as a field paramedic, field training officer, field supervisor, and finally, director of training. He was a key figure in the implementation of a merger of the Paramedic Division into the San Francisco Fire Department in 1997. After the merger, he served as the SFFD EMS Operations Chief, supervising 300 paramedics working in the field and in the 9-1-1 dispatch center. Mr. McCallion is passionate about EMS education and training and was the founding director of the San Francisco Paramedic Association, a large, 501(c)3 non-profit educational organization which provided BLS, ACLS, PALS, and EMT courses to fire departments, hospitals and individuals throughout the Bay Area.

In 2003, Mr. McCallion became an assistant chief for East Pierce Fire & Rescue, a combination fire department providing ALS and BLS transport to a community of 90,000 located east of Tacoma, Washington. In the past 13 years, he has overseen the Finance, Operations, Training, and EMS Divisions. Mr. McCallion serves on a number of regional and state EMS and healthcare committees, and was the lead in developing statewide EMS Key Performance Indicators used by agencies to benchmark performance. He also chairs the WA State Mobile Integrated Healthcare Committee which is developing “best practice” models for program implementation.

Professional Experience

Assistant Chief, Emergency Medical Services & Public Education—East Pierce Fire & Rescue (WA)

- EMS Operations Section Chief—San Francisco Fire Department (CA)
- Director of Education & Training—San Francisco Department of Public Health, Paramedic Division (CA)
- Paramedic Captain/Field Supervisor—San Francisco Department of Public Health, Paramedic Division (CA)
- Field Paramedic—San Francisco Department of Public Health, Paramedic Division (CA)

Educational Background & Certifications

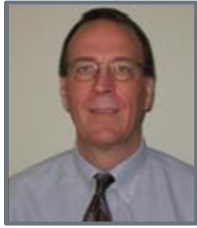
- Daniel Freeman Hospital Paramedic Training Program, Los Angeles
- California State University, San Luis Obispo
- U. S. Naval Academy, Annapolis, MD
- American Heart Association ECC Committee Member and Regional Faculty for BLS, ACLS and PALS

Associated Professional Experience & Accomplishments

- Chair, WA State Mobile Integrated Healthcare/Community Paramedic Committee
- Chair, WA State Dept. of Health Prehospital Technical Advisory Committee (TAC)
- WA Fire Chiefs representative, WA State EMS & Trauma Steering Committee
- WA Fire Chiefs representative, WA State Cardiac & Stroke Technical Advisory Committee (TAC)
- Chair, Pierce County EMS Quality Improvement Committee
- Chair, Pierce County EMS Operations Committee
- Member, EMS Section Conference Planning Committee, Fire-Rescue Med IAFC
- Executive Director, San Francisco Paramedic Association (SFPA)
- Member, International Association of Fire Chiefs (IAFC), Washington Fire Chiefs (WFC) Association

Paul N. Lewis

Associate Consultant/Financial Analyst



Summary of Qualifications

Mr. Lewis has over 24 years' experience providing financial analysis and consulting services to state and local governments and not-for-profit organizations. Paul's primary practice areas include financial planning, feasibility studies, and fiscal impact analyses. Prior to returning to consulting in 2004, Paul worked in local government in Clark County, Washington for more than ten years, most recently serving as the City of Vancouver's Finance Director. He has also worked in the State and Local Government consulting practice of Deloitte & Touche in Seattle before moving to Clark County.

Mr. Lewis has extensive experience analyzing and forecasting revenues and expenses for local governments including special purpose districts. Many of Paul's engagements include using scenarios and alternative assumptions to better understand the potential risks and returns associated with major policy decisions. He works with the various stakeholders to set key assumptions, establish scenarios and review results. Recent and relevant experience includes a financial assessment of a proposed merger of the fire departments in the cities Camas and Washougal in Southwest Washington. Project tasks included working with Fire Department staff, city administrators, and others to review organization and staffing proposals, project operating costs, and estimate potential revenue sources associated with consolidation options. Assessment results were presented to elected officials, union representatives, fire chiefs, and city administrators. Additionally, Paul drafted the interlocal agreement formalizing the merger which was approved by both city councils. Other relevant projects include organization, operations, and performance reviews for special purpose districts, and government programs and departments.

Educational Background

- Master's Degree in Business Administration, Public Policy and Management from the Wharton School of Business at the University of Pennsylvania
- Bachelor's Degree in Economics from Carleton College
- Cascade Public Executive Program, University of Washington, Graduate School of Public Affairs

Professional Experience

- Independent Management Consultant: 2004 to present
- Finance Director/Budget and Planning Manager, City of Vancouver: 1999–2004
- Operations Review Manager, Clark County Auditor's Office: 1994–1998
- Manager, Public Sector Consulting, Deloitte & Touche Seattle, WA: 1989–1994

Community Activities

- Board Member, Clark County Public Facilities District: 2007–present
- President, Ridgefield Public Schools Foundation: 2009–present

Note: This is a brief summary of Mr. Lewis' CV. A complete version can be made available on request.

Melissa Northey

GIS Analyst/Associate Consultant



Summary of Qualifications

Ms. Northey's GIS career focuses on governmental applications. She is currently the GIS Coordinator for the City of Ocala, Florida, where she applies over 17 years of experience ranging from technical analysis, programming, database administration, and project management.

She has worked on projects for departments such as water utilities, growth management, property appraiser, E-911 Addressing, and the fire service. She has managed small teams and given trainings and presentations to other local governments, as well as at GIS trade conferences. She is well versed in ESRI's Local Government Information Model, ArcGIS Online solutions, Python Scripting, and GIS Database management (SQL, Postgres, and Oracle).

While at the Alachua County Property Appraiser's Office in Gainesville, Florida, Melissa was an integral part of the team that received a SAG (Special Achievement in GIS) award from Jack Dangermond, President of ESRI. The award-winning project was a combination of utilizing ESRI's software in the Amazon cloud to overcome hurdles faced with sharing GIS data between government agencies. The cloud implementations were innovative and successful; saving Alachua County tax dollars and enhancing communications throughout the county's agencies.

Ms. Northey worked with the fire service in Marion County, Florida on many projects including: hydrant inventory, locating new fire stations, hurricane preparedness maps, and determining coverage areas based on travel time. She has an Associate's Degree in Information Technology, as well as an A+ and GISP (Geographic Information Systems Professional) certifications.

Note: This is a brief summary of Ms. Northey's CV. A complete version can be made available on request.

Rob Strong

Project Associate—GIS Specialist



Summary of Qualifications

Rob Strong has been involved in emergency services in Oregon over 30 years. Mr. Strong has 13 years of experience performing geographic information system (GIS) analysis and cartography work while serving as a fire captain/paramedic with the Bend Fire Department in Bend, Oregon. Rob retired as a fire captain/paramedic in 2006 after 26 years with the Bend Fire Department. He continues to work part time as a GIS and statistical analyst for the Department.

Mr. Strong's GIS duties at the Bend Fire Department have included developing a GIS data set to replace hand drawn map books, integrating fire department GIS data with a regional 911 communication center's data, and GIS analysis of the local road network to support a proposed fire station location. He performed GIS analysis as part of a deployment plan written by the Bend Fire Department and adopted by the Bend city council. Additionally, he has worked with a private vendor—Alsea Geospatial, Inc.—to develop a mobile mapping GIS data set that is used on both fire and police department mobile data terminals. Mr. Strong is responsible for GIS analysis of incident data and makes recommendations concerning staff and apparatus placement to insure compliance with department response goals.

Educational Background

- Data Analysis & Presentation for the fire service using Microsoft Excel, Center for Public Safety Excellence
- Associate of Applied Science—Structural Fire Science, Central Oregon Community College, Bend Oregon
- 35 quarter credit hours course work—GIS, Central Oregon Community College, Bend Oregon
- GIS Specialist for Incident Management Teams, National Wildfire Coordination Group – Department of Public Safety Standards and Training, Salem Oregon
- EMT-Paramedic, Central Oregon Community College, Bend Oregon

Professional Experience

- Associate Consultant, Emergency Services Consulting International
- GIS Analyst, Bend Fire Department
- Fire Department Consultant, Alsea Geospatial, Inc., Corvallis Oregon
- Fire captain/Paramedic, Bend Fire Department
- Flight Medic, Air Life of Oregon, Bend Oregon
- Fire engineer/Paramedic, Bend Fire Department
- Volunteer Firefighter, Hoodland Fire Protection District, Welches Oregon

Professional Accomplishments

- GIS Specialist, Oregon State Fire Marshal-Incident Management Teams
- Successful Department of Homeland Security Grant Process—resulted in the purchase of mobile data terminals and software for Bend Fire Department.
- Implementation of GIS position and purchase of GIS software and hardware for Bend Fire Department

Melissa Swank

Technical Proofer & Quality Assurance Manager



Summary of Qualifications

Melissa Swank joined the ESCI team in 2013 as a Project Assistant. Responsibilities included support in administrative functions of project-related assignments including overall planning, tracking, and documentation of several projects from the project proposal (RFP) phase to project closeout.

Ms. Swank's professional experience, keen eye for detail, and training qualify her to provide the highest level of project support. She has a passion for accuracy and fact-checking that permeates all aspects of her professional tasks.

Experience

- Adjunct Research Assistant at Portland State University, December 2015–Present
- Technical Proofer and Quality Assurance Manager at ESCI, March 2015–Present
- Freelance Virtual Assistant, December 2014–Present
- Project Assistant at Emergency Services Consulting International, September 2013–June 2014
- Project Assistant/Fact Checker at Oregon Encyclopedia Project, September 2011–June 2013
- Project Assistant at "The Confluence Project," June 2012–November 2012
- Project Assistant at "Chinook Oral History Project," October 2011–April 2012

Education

- Portland State University MA, Public History/Native American History, 2010–2013
- Portland State University BA, History, 2007–2009