

May 17, 2022

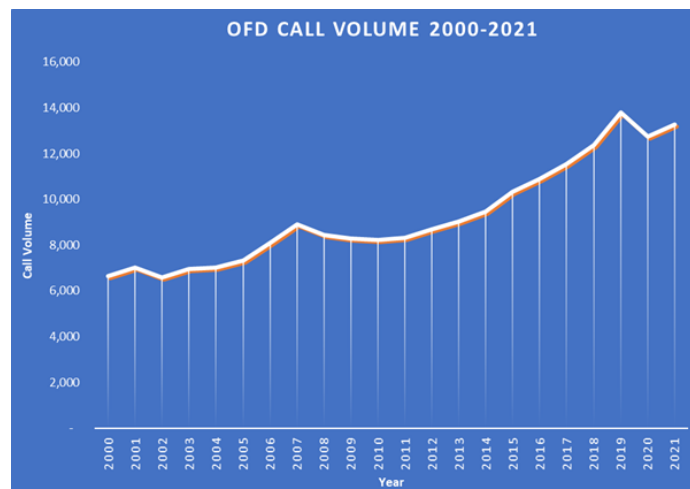
To: Chief Mark John, City of Olympia Fire Department
 From: Martin Chaw, Project Manager
 CC: Todd Chase, Principal
 Subject: **City of Olympia Financial Feasibility Analysis – BLS and CARES**

The City of Olympia serves as the Washington State capitol city and includes a total residential population of 55,960 in 2021. City services are delivered from seven departments and approximately 600 FTEs.

The City’s Fire Department (Department) includes 88 firefighters and responds to nearly 14,000 calls for service each year. The Department operates 4 fire stations and 8 emergency medical response units. The City of Olympia is presently served by two private ambulance services – *American Medical Response (AMR)* and *Olympia Ambulance Services*, although the vast majority of ambulance transport calls for service is provided by AMR.

Over the past 20 years, the number of Department calls for service increased from about 6,500 in 2000 to nearly 14,000 calls in 2019, an average increase of 4.0% annually. The following chart illustrates the growth in the annual number of calls for service between 2000 and 2021.

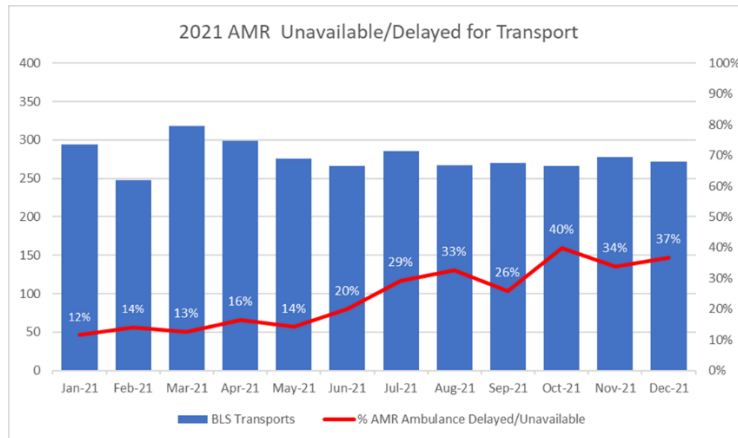
Figure 1: 20-Year Historical OFD Call Volume



In 2021, there were approximately 3,400 ambulance transports. During this same year, the City experienced decreasing availability by private ambulance providers. As shown in the chart below, the percentage of time that AMR has been unavailable or delayed to transport patients to local hospitals or emergency rooms increased from 12% at the beginning of 2021 to 37% by the end of 2021.

This has resulted in either increased on-scene times by City emergency response staff while awaiting arrival of BLS units or the necessity of using the City’s emergency response vehicles to transportation patients to the hospital. In either case, it means that the City’s emergency response units are unavailable to respond to other emergencies while they either await an AMR unit or the emergency response unit is transiting a patient to the local hospital or emergency room.

Figure 2: AMR Delayed or Unavailability to Transport



Source: City of Olympia Fire Department

FCS GROUP Scope of Work

In 2021, the City of Olympia Fire Department contracted with FCS GROUP to evaluate the financial feasibility of establishing a city-owned and operated Basic Life Support transport program and a city-owned and operated CARES program.

BLS: RCW 35.21.766 authorizes a city to establish a publicly financed ambulance service if the city determines that it is not being adequately served by existing private ambulance services. The ambulance service may be financed through either establishment of a public ambulance utility, or financed through the City’s general fund.

Citizen Advocates for Referral and Education Services (CARES): CARES is a para-medicine approach to provide non-emergency care to low-acuity patients. For example, instead of dispatching an emergency medical response unit, a CARES program dispatches a field team that could consist of a social worker and an emergency medical technician. The team is trained to provide field care to the low-acuity patient, and refer the patient to local social services for care, thereby reducing demand on the hospital and emergency room healthcare system, reducing demand on a city’s emergency medicine resources, and thus allowing emergency medicine resources to be deployed more efficiently and effectively.

Study Methodology

FCS GROUP prepared a 10-year financial forecast of BLS and CARES operating expenses and revenues. Key assumptions included:

- BLS:
 - Calls for service continue growing at 3.0%/yr from present levels (vs 4.0%/yr growth in total Departmental calls for service).
 - Per-unit revenue for BLS transports, mileage reimbursement and Washington State Ground Emergency Medicine Transport (GEMT) Medicaid reimbursement were conservatively forecasted with no growth over the study period
 - Operations include either a one-unit configuration or a two-unit configuration, and would require 11.0FTEs or 20.0FTEs, respectively, and were forecasted to grow by general and wage/benefit inflation over the study period.
- CARES:
 - Calls for service average about 800 calls for service and would grow at 3.0%/yr
 - Per-unit revenues for transports and clinical care services were conservatively forecasted with no growth over the study period
 - Operating expenses include 3.0FTEs, and were forecasted to grow by general and wage/benefit inflation over the study period.

To test the financial sensitivity of the BLS program (one-unit and two-units) and CARES programs, four alternative revenue collection scenarios were prepared and evaluated against the forecasted expenses. These four scenarios included the following assumptions on revenue collectability:

- *Scenario 1*: Initial revenue collection level of 50% gradually increasing to 80% by the end of the 10 year planning period.
- *Scenario 2*: Initial 60% revenue collection, gradually increasing to 80%
- *Scenario 3*: Initial 40% revenue collection, gradually increasing to 70%
- *Scenario 4*: Initial 30% revenue collection, gradually increasing to 70%

Scenario 4 was designed to be the most pessimistic scenario; *scenario 2* the most optimistic; and *scenario 3* was considered the best guess based on discussions with Department staff.

Study Results

FCS GROUP's analysis concludes that creating and operating a city-owned BLS and CARES program is financially feasible and that the optimal BLS configuration is a two-unit BLS program.

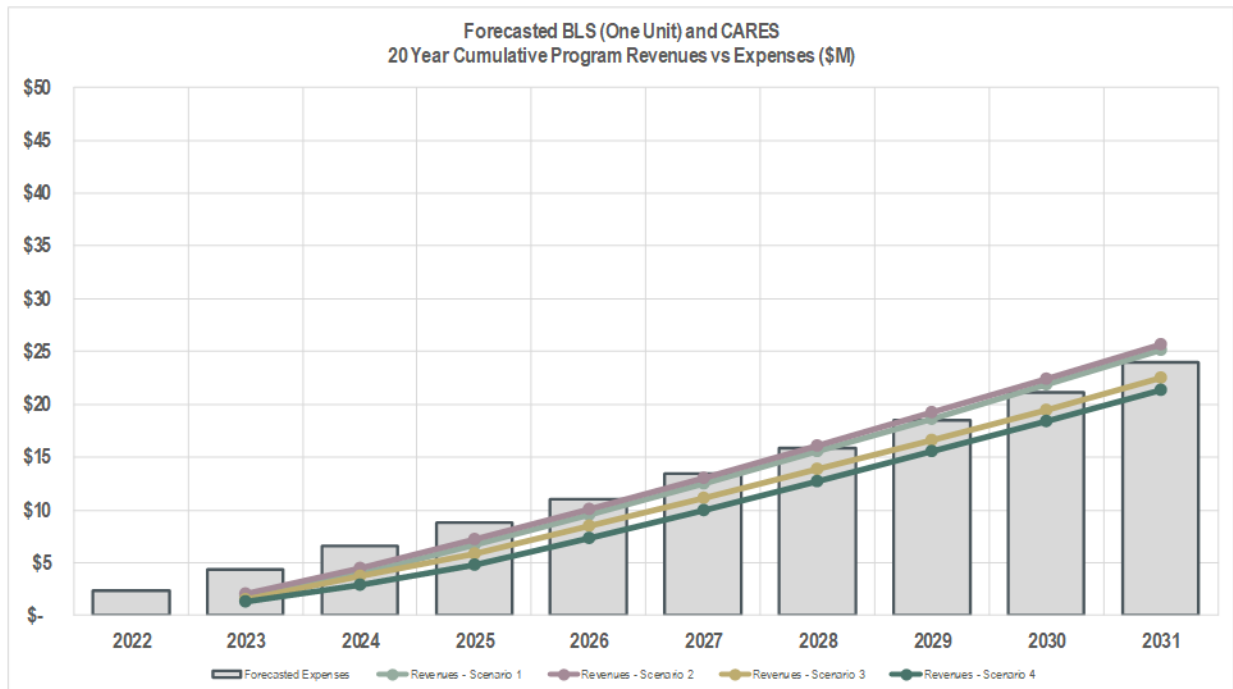
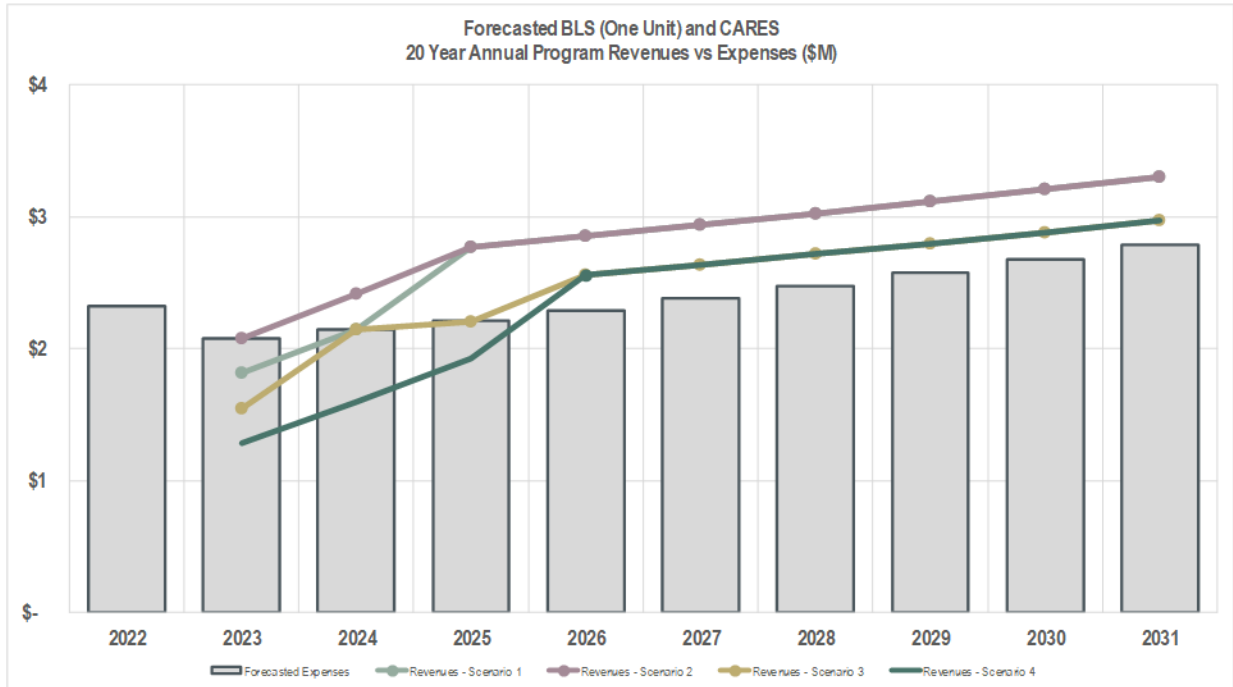
It is expected that revenue volatility due to insurance reimbursements and State GEMT reimbursements present the largest areas of financial risk. The following table highlights the key findings from our analysis.

Table 1: BLS and CARES Forecasted Calls for Service, Staffing and Operating Expenses

	BLS One-Unit Configuration	BLS Two-Unit Configuration
Average Annual No. of BLS Transports over 10-years	3,200 – 3,900	3,200-3,900
Average Annual No. of CARES incidents over 10-years	800-990	800-990
BLS Staffing Assumed	11FTEs. <ul style="list-style-type: none"> ● Program Supervisor (1.0FTE) ● Program Assistant (1.0FTE) ● Firefighters (9.0FTEs) 	20 FTEs. <ul style="list-style-type: none"> ● Program Supervisor (1.0FTE) ● Program Assistant (1.0FTE) ● Firefighters (18.0FTEs)
CARES Staffing Assumed	3 FTEs. Includes: <ul style="list-style-type: none"> ● Program Supervisor (1.0FTE) ● Behavioral Health Specialist/Social Worker (1.0FTE) ● EMT (1.0FTE) 	3 FTEs. Includes: <ul style="list-style-type: none"> ● Program Supervisor (1.0FTE) ● Behavioral Health Specialist/Social Worker (1.0FTE) ● EMT (1.0FTE)
BLS Equipment / Supplies	1 Ambulance and associated equipment	2 Ambulances and associated equipment
CARES Equipment / Supplies	No additional vehicle needed; operating supplies only	No additional vehicle needed; operating supplies only
Forecasted Operating Costs – 10 Year Total	\$25.4 million	\$42.7 million

The following graphics summarize the annual and cumulative financial performance under a one-unit and a two-unit configuration.

**Figures 3 and 4: Annual and Cumulative Financial Performance
 Combined BLS and CARES (One Unit BLS Configuration)**



**Figures 5 and 6: Annual and Cumulative Financial Performance
 Combined BLS and CARES (Two Unit BLS Configuration)**

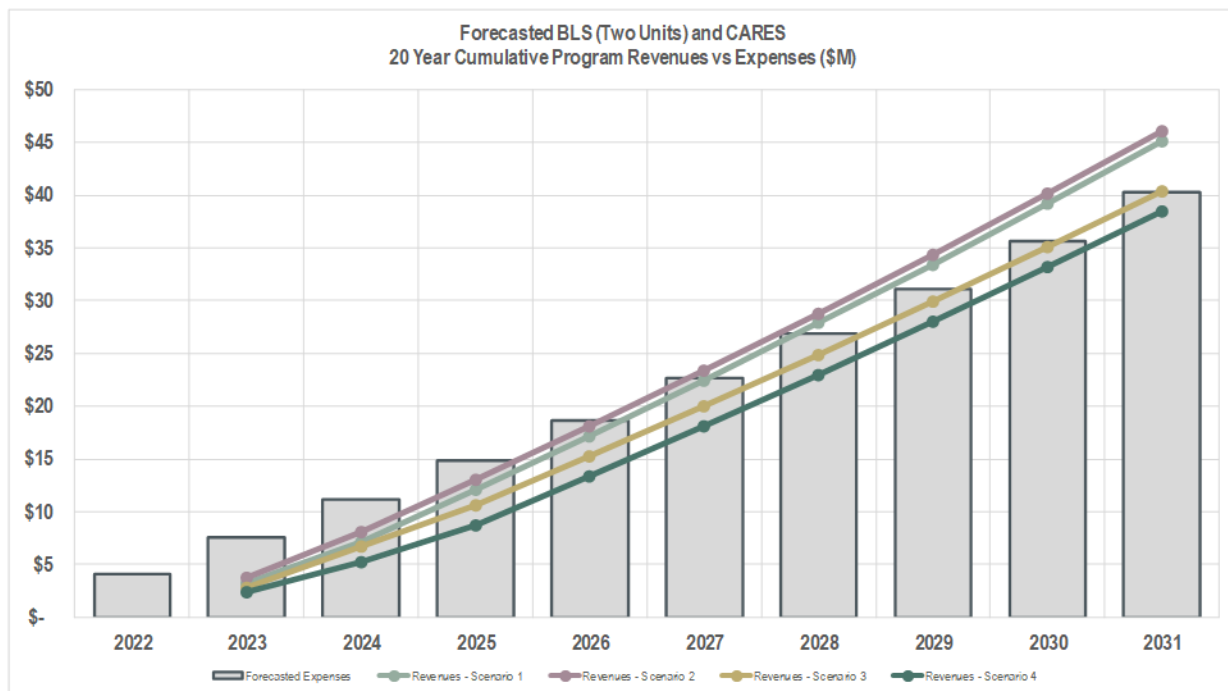
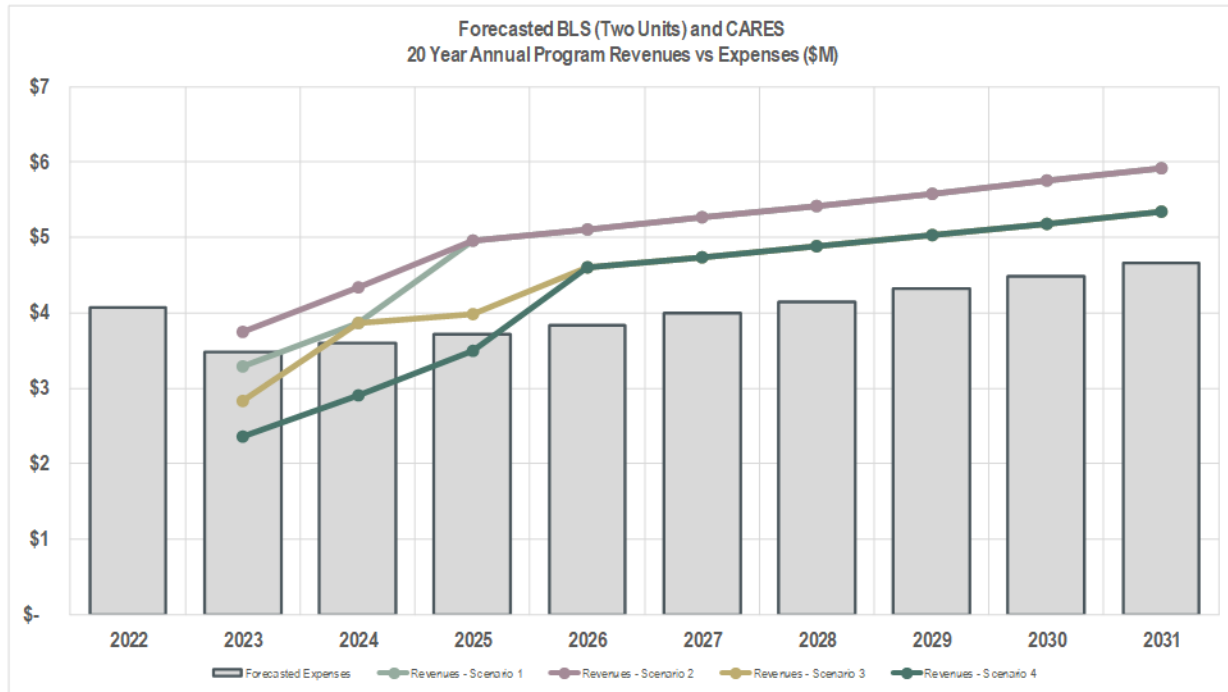


Table 2: BLS and CARES Forecasted Financial Performance

	BLS One-Unit Configuration	BLS Two-Unit Configuration
BLS and CARES Forecasted Expenses – 10 Year Total	\$25.4 million	\$42.7 million
BLS and CARES Forecasted Revenues – 10 Year Total	\$21.4 million - \$25.7 million	\$38.5 million - \$46.1 million
Ability to respond to current BLS calls for service	Limited, unless the City eventually moves to a two-unit configuration.	City should be able to respond to all BLS calls for service.
Conclusion and considerations	Long-term financially feasible, but the operating margin is very small due to the relatively limited number of BLS responses under a one-unit configuration.	Long-term financially feasible. The likelihood of positive operations is greater due to the relatively larger number of BLS responses under a two-unit configuration.
Considerations	<p>City could start with one unit, but should add a second unit in the near future.</p> <p>Staffing up to a one-unit configuration will take time, and the City should begin planning as soon as possible.</p>	<p>Two-unit configuration enable the Department to fully respond to current calls for service</p> <p>Staffing up to a one-unit configuration will take time, and the City should begin planning as soon as possible.</p>

Conclusions.

A city-owned and operated BLS program and CARES program can be financially self sufficient in the long term. A two-unit BLS configuration is the more optimal configuration. Both a one-unit and two-unit configuration would result in the following community benefits:

- Improved services to the community.
- Fully address present level of ambulance transport demands (two-unit BLS only).
- In the long term, overall positive financial operations is forecasted (two-unit BLS likely to have a greater likelihood of achieving positive financial performance).

In summary, creating city-owned and operated BLS and CARES programs can augment the City’s existing emergency response services. This three-pronged approach would result in a holistic approach to providing health care services to the community while simultaneously deploying emergency medical resources more efficiently and effectively.

APPENDIX A

CITIZEN ADVOCATES FOR REFERRAL AND EDUCATION SERVICES (CARES)

Summary

The CARES program is a community paramedic model of delivering health care services to low-acuity patients. Services and community benefits of CARES include referral to primary and preventive care; provide wellness interventions within the medical home model; decrease emergency department utilization; healthcare cost savings; and improve patient outcomes using emergency medical service providers in an expanded role.

Several CARES program is presently in operation in Washington State. These include the cities of Bellevue, Tacoma, Spokane, and Poulsbo. Providers from these four cities shared the following program startup tips:

- Work with community partners early (social service providers and hospitals).
- Be mindful of the capacity of community services that are downstream.
- Proper additional staff training is a must.
- Consider having a multi-disciplinary response team.
- Staff must have exceptional field communication skills (with patient and health care providers).
- Leverage expertise of other CARES programs.

Based on discussions with the City of Olympia Fire Department, a 3.0FTE team is envisioned for the Olympia CARES program. This includes 1.0FTE Program Administrator, 1.0FTE Social Worker and 1.0FTE Emergency Medical Technician.

Washington State Cares Programs – Profile

The following tables summarize operations for each of the aforementioned CARES programs.

City of Bellevue, WA

Description provided by the City	<p>In recent years, a number of fire agencies throughout the country have established community outreach and assistance programs often known by the acronym CARES (Citizen Advocates for Referral and Education Services). This internal referral service, utilized by the Bellevue Fire and Police departments, is a truly innovative way to reach residents in our community outside of the 911 emergency system. Bellevue firefighters and police officers frequently respond to incidents where additional needs are identified that are outside their scope of responsibilities; for example, a frequent fall patient who would benefit from grab bars, a homeless person needing a gateway to housing, or an elderly woman overwhelmed by caring for her ailing husband at home.</p> <p>In cases like these, firefighters or police can notify the Bellevue Fire CARES team for intervention. CARES advocates meet with residents in their homes, identify their needs and connect them to community resources that will better meet those needs than a call to 911.</p>
Staffing	<p>Total 6.5FTEs.</p> <ul style="list-style-type: none"> • 4.0FTE Social Workers (MSW). • 1.0FTE Field Education Supervisor (MSW). • 1.0FTE Case Management Specialist (MSW). • 0.5 FTE Admin. Assistant. • Unpaid: 12-16 CARES Student Advocates.
Annual Budget	\$970,000.

City of Tacoma, WA

Description	<p>Tacoma Fire Department and Tacoma Police Department have partnered to coordinate a crisis response team to support first responders and community interactions with a patient suffering from acute behavioral and/or substance abuse needs. This team is equipped with licensed Designated Crisis Responders and behavioral health case management who are able to assess acute needs and determine and execute plans for the individuals moving forward.</p> <p>Services include:</p> <ul style="list-style-type: none"> • Assist individuals in making healthy choices and connect with needed health services. Health services include physical health (chronic illnesses, etc.), mental health and well being, chemical dependency (opioid, alcohol, etc.), and social (food, transportation). • Partner with multi-family addresses to generate strategies to assist residents with health and social needs. • Partner with local community health and social services to support community-wide efforts to ensure the safety of our citizens and improve the health of our community.
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Staffing	<p>Total 14FTEs.</p> <ul style="list-style-type: none"> • 1.0FTE Program Director. • 3.0FTE Behavioral Health Specialists. • 3.0FTE Registered Nurse Practitioner. • 2.0FTE Office Assistants. • 1.0FTE Management Analyst. • 4FTE Case Managers (including 2 that work part time).
Annual Budget	\$2.5 million.
Cited Benefits	<p>5,000 911 calls reduced.</p> <p>2,500 reduced ER visits.</p>

City of Spokane, WA

Description	<p>The primary goal of the CARES Team is to improve quality of life and reduce unnecessary use of the emergency health care system by addressing a client’s needs based on the social determinants of health.</p> <p>Many times, Fire Department personnel encounter an individual who has significant needs apart from their physical health needs. When they encounter these situations, Fire Department EMS providers make a referral to the CARES Team requesting a follow-up visit. The CARES Team Manager then assigns team members, comprised of Eastern Washington University School of Social Work students, to visit the client referred by the firefighters. The Team makes contact with the client and completes a thorough social service needs assessment. The Team develops a plan for connecting the client with community resources that address his or her needs.</p>
Staffing	<p>1.0FTE.</p> <p>Volunteers from Eastern Washington University, School of Social Work.</p>
Annual Budget	Salary for 1.0FTE.
Cited Benefits	<p>70% Reduction in use of emergency room.</p> <p>428 Referrals to social services (51% increase since 2017).</p> <p>341 Connected individuals to community resources and support.</p>

City of Poulsbo, WA

Description	<p>Launched in January 2021, CARES responds to individuals struggling with behavioral health issues and helps them navigate the situation — whether they need medical attention, mental health care, substance use disorder services, or other kinds of care. Staffed by a firefighter/EMT trained in crisis intervention and a behavioral health professional, the CARES unit is a multidisciplinary team aiming to prevent crisis by being proactive in the field.</p>
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	<p>The goal of the CARES program is to connect individuals to appropriate care and services and to reduce the impact of non-emergency calls on fire and police departments.</p> <p>Poulsbo Fire CARES accepts fire and police referrals across North Kitsap communities — including Poulsbo, Suquamish, and Bainbridge. During this challenging time, many of our most vulnerable don't know where to turn. Getting help can feel overwhelming. We're here to help community members take the first step.</p> <p>The Poulsbo CARES program is operated under a 3-way relationship – County fire department, City of Poulsbo, and the Olympic Peninsula Community Clinic.</p>
Staffing	<p>1.0FTE (KCFD#18).</p> <p>0.8FTE Social Worker (Olympic Peninsula Community Clinic).</p>
Annual Budget	<p>\$470,000</p>
Cited Benefits	<p>No formal report, but City is seeing less use of emergency room resources and the program receives strong support by the community, which they feel is a key part of their success.</p>