



TRANSMITTAL MEMORANDUM

TO: The Honorable Mayor and City Council

FROM: Lacey G. Simpson, Acting City Manager

DATE: September 7, 2022

RE: **Fire Department Fire Boat Needs Assessment Update**

In adopting the 2022 General Government Operating and Capital Budget, the City Council appropriated \$15,000 to the Fire Department's Replace Vessel No. 52-741 (Fire Boat) capital account. As the City Council will recall, at its meeting of October 7, 2021, the City Council authorized the surplus and disposal of the previous and no longer operational fire boat M/V *Harry Newell*. At this meeting the City Council also directed staff to undertake a Determination of Needs Study to establish the community's marine firefighting needs.

The attached informational memorandum from Fire Chief Rick Hines provides an update on the status of the needs assessment and additional information on the assessment process. As Chief Hines states, the City has contracted with ESCI to perform the assessment. ESCI is a knowledgeable and reputable consulting firm that the City has used previously to perform the Fire Department's apparatus assessment study, which serves as the guide for the Department's apparatus replacement and improvement program. As the project takes shape in the coming months, staff will apprise the City Council accordingly.

Should City Councilmembers have any questions or concerns, staff will attempt to respond accordingly.



KETCHIKAN FIRE DEPARTMENT

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Memorandum

TO: Lacey Simpson, Acting City Manager
FROM: Rick Hines, Fire Chief
DATE: September 6, 2022
SUBJECT: Fire Boat Needs Assessment

Acting Manager Simpson,

The Ketchikan Fire Department has entered into a contract with ESCI. This agreement is for a needs assessment to begin replacing the fireboat, Harry Newell. The Harry Newell entered service into Ketchikan in 1986. It is currently out of the water and in Air Marine Harbor. It is in a state of disrepair, and it would be cost-prohibitive to attempt to bring it up to modern standards.

ESCI is a familiar company to the Ketchikan Fire Department as they most recently completed an apparatus needs assessment and helped establish a long-term apparatus replacement plan that is fiscally responsible and makes the best use of capital expenditures. They have assigned a project manager with extensive experience completing marine-based needs assessments. The agreed-upon subject matter expert (SME) establish the Miami, Florida, fire boat program. He has significant experience working with the cruise line industry and comes with experience with needs assessments and developing alternative funding sources.

I have attached a copy of the ESCI plan and a description of the work to be completed on this short three-month timeline. As we move forward and look to replace the Harry Newell, we will reach out to our local SMEs to work in conjunction with ESCI to ensure our community needs are being met in both the overall design and usage plans of a future fire boat.

Recommendation: I would like to invite any interested council member to participate in helping with the needs assessment and design of the future Ketchikan Fire Boat.

Project Understanding

The City of Ketchikan, Alaska, is a major port and the first port of entry at the southern end of the Inside Passage connecting the Gulf of Alaska with Puget Sound. While commercial fishing and various marine industrial services are significant economic drivers, much of Ketchikan's economy is based on its tourist industry. In the summer months, cruise ships make over several hundred stops delivering thousands of tourists to the community. Commercial air travel, including a large seaplane component, is also a significant contributor to the swelling summer population. The city operates five public harbor facilities along with numerous private commercial harbor operations and facilities. While the US Coast Guard has a significant presence and can assist with various local marine emergencies, the Ketchikan Fire Department provides primary local marine fire protection, rescue, and medical services.

The Ketchikan Fire Department (KFD) is a combination department with fifteen career firefighters and approximately 15-25 volunteers operating from three fire stations. KFD is an all-hazards fire department providing traditional fire, rescue, and emergency medical services at the advanced life support level (ALS), including patient transport. KFD has historically offered emergency services to the port using a fireboat cross-staffed with crew members from fire station one. The existing fireboat has been judged no longer seaworthy due to hull issues, and three of its four fire pumps are no longer operational. Therefore, the city has requested a fireboat needs assessment to include an evaluation of the current and future mission and the development of specifications appropriate to mission needs.

ESCI proposes a **Fireboat Needs Assessment** to review historical workload, document current, and future marine risks, and develop a mission design and appropriate specifications to meet proposed mission requirements. This project provides a gap analysis between the current fireboat specification, staffing, and other operational requirements and those needed to accomplish the recommended mission well into the future. ESCI will compare the conditions found to national standards, best practices, and the experience of ESCI's consultants. ESCI will survey other fireboat programs in similar communities as part of the best practices review.

Fireboat Needs Assessment Scope of Work

Phase I: Project Preparation

Task 1-A: Project Initiation & Work Plan Development

ESCI will develop a project work plan based on the scope of work and converse with the KFD project team to understand the background, goals, and expectations for this project. This work plan will be developed, identifying:

- Primary tasks to be performed
- Person(s) responsible for each task
- Timetable for each task
- Method of evaluating results
- Resources to be utilized
- Possible obstacles or problem areas associated with the accomplishment of each task

This exchange will also help to establish working relationships, make logistical arrangements, determine appropriate lines of communication, and finalize contractual arrangements.

Task 1-B: Acquisition & Review of Background Information

ESCI will request pertinent information and data from KFD's assigned project manager. This data will be used extensively in the analysis and development of the agency evaluation document. The documents and information relevant to this project will include, but not be limited to, the following:

- Past or current fire department studies or research related to marine fire protection, rescue, and EMS
- Ketchikan Comprehensive Plan documents, including current and future land use information (specifically harbor/marine services related)
- Zoning maps and zoning code
- Department administrative policies and procedures
- Department Standard Operating Guidelines (SOGs) and service delivery practices related to marine operations
- Current fireboat service delivery objectives and targets
- Current fireboat specifications
- Automatic and mutual aid agreements
- Records management data, including National Fire Incident Reporting System (NFIRS) incident data
- Computer-Aided Dispatch (CAD) incident records for all marine- or harbor-based incidents
- Local Geographic Information Systems (GIS) data, where available

Task 1-C: Stakeholder Input

The ESCI project team will identify key stakeholders in the maritime response environment and conduct remote interviews with and gather information from key personnel, including:

- Elected or appointed officials
- Fire department managers and other key staff
- Ketchikan Harbor Master
- City planning staff
- US Coast Guard
- Tug resources
- External fire and EMS agencies within the region
- Medical Director
- Environmental regulatory/response agencies
- Seatow or TowBoat US
- Individual fire department employees and volunteer members, as appropriate
- Commercial fishing, charter, and other maritime businesses
- Others as they may contribute to this project

The project team may interview key stakeholders of any organization associated with but not explicitly listed as part of this study. ESCI will obtain additional perspectives on administrative, operational, economic, and policy issues facing the KFD from these interviews.

Phase II: Fireboat Needs Assessment

The needs assessment will provide a baseline assessment of the current conditions and current service performance of the Ketchikan Fire Department. ESCI will conduct an organizational analysis of the department based on the elements included in the following objectives. The purpose of this evaluation is to assess the agency's operations in comparison to industry standards and best practices, as well as to create a benchmark for which future improvements can be measured.

Task 2-A: Organizational Overview

An overview of the KFD will be developed by discussing:

- Marine service area population and demographics
- History, formation, and general description of the KFD Marine Program
- Description of the current service delivery infrastructure
- Governance and lines of authority
- Foundational policy documents
- Organizational design and current mission profile
- Staffing
- Maintenance
- Training
- Operating budget

Task 2-B: Historical Marine Service Delivery and Performance

ESCI will review and make observations in areas specifically involved in, or affecting, marine service levels and performance. Areas to be reviewed shall include, but not necessarily be limited to:

- Service Demand Study
 - Analysis and geographic display of current service demand by incident type and temporal variation
- Resource Distribution Analysis
 - Overview of the current facility and apparatus deployment strategy, analyzed through Geographic Information Systems software, with identification of service gaps and redundancies
- Resource Concentration Study
 - Analysis of response time to achieve full effective response force
 - Analysis of company and staff distribution as related to effective response force assembly
- Response Reliability Review
 - Analysis of current workload, including unit hour utilization of individual companies (to the extent data is complete)
 - Review of actual or estimated failure rates of individual companies (to the extent data is complete)
 - Analysis of call concurrency and impact on effective response force assembly
- Response Performance Summary
 - Analysis of actual system reflex time performance, analyzed by individual components (to the extent data is available)
- Mutual and Automatic Aid Systems

Task 2-C: Marine Risk Assessment

ESCI will analyze marine-related risks, growth projections, and harbor-related land/water uses and interpret their impact on marine emergency service planning and delivery. Land use, zoning classifications, parcel data, ISO fire flow data, marine traffic patterns, maritime commercial/industrial planning, economic value, occupancy data, and demographic information may be used, along with specific target hazard information, to analyze and classify marine fire protection, rescue, and EMS risk. ESCI will evaluate the current marine workload of the KFD and relate that analysis to the projected maritime risk profile. Items to be considered in the risk assessment include but are not limited to:

- Consideration of fire versus non-fire risk and service demand
- What activities and/or critical gaps are the fireboat expected to fill (for example, if the ferry is out-of-service)
- Level of medical rescue/evacuation for cruise ships
- Level of maritime medical response (ALS/BLS)
- Search and rescue operations
- Hazardous materials response (fuel spills, etc.)
- The maritime command post for a multi-agency response

- Dive/Water rescue capability
- Law enforcement support
- The economic value of commercial, private, and government facilities and operations in the event of a catastrophic event

ESCI will analyze and develop a matrix for the expected and predictable marine risk types, identifying staffing and resource needs. The matrix will be developed with consideration given to:

- Risk-specific staffing levels to meet the critical tasking analysis for the identified risks
- Apparatus assignments to accommodate the anticipated fire flows, rescue, EMS, and other critical functions of the identified risks

Phase III: Recommended Fireboat Mission and Specification

Task 3-A: Fireboat Benchmark Study

ESCI will survey three to five similar maritime communities with fire departments that operate one or more fireboats. The comparison will provide a benchmark against which the City of Ketchikan can measure both the mission and necessary specifications of a fireboat program.

Task 3-B: Recommended Mission Parameters

Using the information from the risk analysis and benchmark study, ESCI will work with the KFD team to develop a recommended mission template for the marine program. This will include types of emergencies to which the KFD marine unit will respond, response guidelines, staffing, and general procedures. Items to be considered in developing the mission include but are not limited to:

- Is this a fireboat, or is the majority of the mission non-fire-related?
- Should the boat be designed with sufficient capacity to transport people and equipment for rescue missions?
- Should the boat be capable of providing backup harbor pilot services?
- Should the boat be utilized to transport critical personnel for commercial shipping?
- Will the boat be required to house sick patients in isolation?
- Can the response plan be tiered, and how should the boat's mission fit into a tiered response plan?

Task 3-C: Generalized Fireboat Specifications

ESCI will develop a generalized specification for the KFD fireboat based on the recommended mission profile and benchmark study.

Phase IV: Development, Review, and Delivery of Fireboat Needs Analysis

Task 4-A: Development and Review of Draft Project Report

ESCI will develop and produce an electronic version of the draft report for review by the KFD team. Client feedback is a critical part of this project, and adequate opportunity will be provided for review and discussion of the draft report before finalization. The report will include:

- Detailed narrative analysis of each report component structured in easy-to-read sections and accompanied by explanatory support to encourage understanding by both staff and civilian readers
- Clearly designated recommendations that are highlighted for easy reference and cataloged as necessary in a report appendix
- Supportive charts, graphs, and diagrams, where appropriate
- Supportive maps, utilizing GIS analysis, as necessary

Task 4-B: Delivery and Presentation of Final Project Report

ESCI will complete any necessary revisions of the draft and produce five publication-quality bound, final versions of the written report, along with an electronic version in PDF file format. A virtual presentation of the project report will be made by ESCI project team member(s) to staff, elected officials, and/or the public as necessary and will include the following:

- A summary of the nature of the report, the methods of analysis, the primary findings, and critical recommendations
- Supportive audio-visual presentation
- Review and explanation of primary supportive charts, graphs, diagrams, and maps, where appropriate
- Opportunity for questions and answers, as needed
- All presentation materials, files, graphics, and written material will be provided to the client at the conclusion of the presentation(s)

Fireboat Needs Analysis Project Completion Timelines

ESCI offers the following project timeline, which is subject to change based on the mutual agreement between KFD and ESCI. The timeline will not begin until ESCI has been provided with *all* information and data necessary for the successful completion of the project.

Project Phase	Month 1	Month 2	Month 3
Phase I: Project Preparation			
Phase II: Fireboat Needs Assessment			
Phase III: Recommended Fireboat Mission and Specification			
Phase IV: Develop, Review, and Delivery of Final Project Report			

Fireboat Needs Analysis Proposed Project Fee

Emergency Services Consulting International is pleased to present the following formal cost proposal for the Fireboat Needs Analysis outlined in the Scope of Work.

Project Phase	Consulting Fees	Expenses	Total
Phase I: Project Preparation	\$2,068	\$0	\$2,068
Phase II: Fireboat Needs Assessment	\$3,689	\$0	\$3,689
Phase III: Recommended Fireboat Mission and Specification	\$2,757	\$0	\$2,757
Phase IV: Develop, Review and Delivery of Final Project Report	\$1,486	\$0	\$1,486
Total Cost (Not to exceed):			\$10,000

Proposed Payment Schedule

- 10% payment due upon signing of the contract.
- Monthly invoicing thereafter as work progresses.

Status of the Fire Boat *M/V Harry Newell* and Recommendation to Declare Surplus

Moved by Flora, seconded by Gage pursuant to Section 3.12.070 of the Ketchikan Municipal Code, the City Council declare the fire boat *M/V Harry Newell* surplus; authorize the Acting City Manager to dispose of such property by sale at a public auction; and direct staff to undertake a Determination of Needs Study to establish the community's marine firefighting needs.

There was quite a bit of discussion among the Council relating to the needs of the community for a fireboat.

Motion passed with Gass, Kiffer, Gage, Bradberry and Flora voting yea; Zenge and Bergeron absent.

Offer of Employment and Budget Transfer – Finance Controller

Moved by Flora, seconded by Gage the City Council authorize the Acting City Manager to offer the Controller position to Shawn Hart of Pewaukee, Wisconsin based on compensation level of Grade 774, Step S, which provides an annual salary of \$115,650; authorize vacation accrual of fifteen (15) days per year; and authorize a budget transfer of \$15,000 from within the Finance Department's 2021 Salaries and Wages Account No. 500.01 to the Department's Allowances – Moving Expense (Taxed) Account No. 509.07.

Motion passed with Gass, Kiffer, Gage, Bradberry and Flora voting yea; Zenge and Bergeron absent.

Resolution No. 21-2824 – A Joint Resolution of the Assembly of the Ketchikan Gateway Borough, Council of the City of Ketchikan, and Council of the City of Saxman, Opposing the Imposition of a Statewide Sales Tax

Moved by Bradberry, seconded by Gage the City Council defer Resolution No. 21-2824 indefinitely in regards to the imposition of a statewide sales tax.

[Clerk's Note: As a point of order, the motion should have been a motion to table the resolution indefinitely, as there was no motion on the table to defer. However, the intent of the Council was to table the subject indefinitely.]

Motion to defer indefinitely passed with Gass, Kiffer, Gage, Bradberry and Flora voting yea; Zenge and Bergeron absent.

Award of Contract No. 21-01 – Raw Water Transmission Main Replacement - BAM, LLC

Moved by Kiffer, seconded by Gage the City Council accept the bid of BAM, LLC in the amount of \$5,998,495 for Contract No. 21-01, Raw Water Transmission Main Replacement; establish a ten percent contingency in the amount of \$599,849.50, bringing the total project cost to \$6,598,344.50; authorize a budget transfer in the amount of \$176,817 from Appropriated Reserves of the KPU Enterprise Fund to the Water Division's 2021 Schoenbar Water Mains (Charter School – Middle School) capital account; authorize funding from the Water Division's 2021 Schoenbar Water Mains (Charter School – Middle School) capital account in the amount of \$6,598,344.50, and direct the Acting General Manager to execute the contract documents on behalf of the City Council.