

A Report on the State of the Harbor

***Seward Small Boat Harbor
January 2000***



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Preface

This paper was drafted as a vehicle to communicate the state of Seward's Municipal Small Boat Harbor to the City Administration and Council, their boards and commissions for their use in formulating policy and directing the course of the harbor. It is not intended to be a published article and as such, a formal bibliography and footnote process was not used in researching the points of this report. I have included a reference list from which I have drawn information supplementing my experience and opinions. Most of the information is based on personal knowledge, first-hand inspection, seminars, presentations, training and City internal documents.

Some of the ideas and methodology presented in the report are not new concepts; they are just new to the state of Alaska and her harbors.

The "Action Items" presented are recommendations to the City Administration and City Council. They are, in my professional opinion, critical to the success and health of the harbor. Failure to act in some fashion on the issues presented and thereby charting a course for the future will leave the harbor in the unenviable position, as it has been for the last ten years, somewhere between a business enterprise and a city department.

History - How We Got Here

"WHEREAS, the proposed Seward Small Boat Harbor, Alaska, will result in a material benefit to the City of Seward by improvement of health, welfare and economic status of the community and the residents thereof.

NOW THEREFORE, be it solemnly resolved by the Council of the City of Seward assembled:

That the City of Seward does hereby agree and assure the Secretary of the Army that by and through its mayor, or other authorized City Officials, said City shall, (c)onstruct, in accordance with plans approved by the Secretary of the Army, maintain and operate without profit, adequate moorage facilities, utilities, and a public landing with suitable service and supply facilities open to all on equal and reasonable terms..."

Excerpt from City of Seward, Alaska Resolution Number 4-12, of September 8, 1964

Alaska's 140 port and harbor locations are the State's gateway for consumer goods, tourists and construction materials. They are the industrial hubs that support our oil, fishing, timber, coal and other resource related industries. Alaska depends on its ports and harbors to export these valuable resources to Pacific Rim nations and other world markets. All Alaskans benefit from ports and harbors through direct or indirect employment, lower consumer costs and recreational opportunities.(State of Alaska DOT&PF report, 1991)

Alaska is unique in its dependence on major waterways. Over ninety per cent of all Alaskans live within ten miles of the coast or along a major river. Alaska's 33,000 miles of coastline include some of the most beautiful yet hostile environments in the world. Its ports and harbors are vulnerable to winds, tides, ice, waves, temperature extremes, currents and earthquakes. Vessels using these facilities range from supertankers to skiffs, each with their own needs and each benefiting from the facilities they use. Ports and harbors were jointly constructed using local, state, federal and private financial resources. Over \$500 million in public funding has been expended since statehood to develop Alaska's system of ports and harbors. Private funding has financed several hundred million dollars in commercial waterside and upland facilities. (DOT&PF, 1991)

- 1930 - Authorization for the original harbor via the River and Harbor Act of July 3, 1930.
- 1931 - Original south breakwater constructed.
- 1932 - Basin dredging completed.
- 1935 - River and Harbor Act of August 30, 1935 authorized improvements.
- 1937 - North breakwater constructed.
- 1952 - Maintenance dredging.
- 1953 - Added main approach float and gangway.
- 1954 - River and Harbor Act of September 3, 1954 authorized north breakwater restoration with placement of 1482 cubic yards of rock.
- 1956 - Two pile breakwater constructed to improve entrance and elevation of south breakwater increased.
- 1961 - Added 335 lineal ft of 10' wide floats, installed 50' gangway.
- 1962 - Added 3750sqft of float, added 5629sqft of float
- 1962 - Maintenance dredging of over 61,000 cubic yards of material.
- 1964 - Original project destroyed March 27, 1964. Restoration of basin and breakwater construction begins in August.
- 1965 - Breakwaters completed in June, basin in November. A, B, C and south D floats and slips connected by G float completed.
- 1966 - Added 14120sqft of floats, which include north D and south E slips.
- 1967 - 7522sqft of floats which includes 1/2 of north E slips, S float and slips and S float approach ramp.
- 1970 - Added 17248sqft of floats including remaining E float slips, F float and slips, H float and slips, F float approach and ramp and connecting G float. Reconstructed boat launch ramp.
- 1972 - Beach slope repair and protection in north area of harbor.

- 1973 - Added water and fire protection, constructed 15764sqft of float including J float and slips, K float, L float and J Float approach and ramp. Reconstructed grid.
- 1974 - Added ramps and repairs to existing ramps.
- 1978 - Added 7750sqft of float including X float and approach and gangway, launch ramp reconstruction.
- 1986 - Post flood survey reveals little impact in basin.
- 1994 - Condition survey.
- 1996 - New X Float constructed after catastrophic failure of old X Float.
- 1999 - February, Transfer of Responsibility Agreement signed, turning ownership of float system over to city.
- November, U. S. Army Corps of Engineers quitclaim deeds tidal basin back to City.

In 1975, the harbor consisted of approximately 300 slips, had a full time Harbormaster, one part time maintenance person, one office staff and had approximately \$75,000 in revenue. This has changed considerably.

Initial Philosophy

The general philosophy of a port or harbor entity is to create an interface between marine and land industries. Seward continues to operate within this philosophical concept. In order to chart a successful course through the rocks and shoals of the future, a thorough investigation of the Harbor's role in the economic health of the city is required. Based on that investigation and some definitive and difficult decisions by the leadership of the city, an operating philosophy will emerge that truly reflects the direction we must proceed for the benefit of the community and further defines the relationship between marine and land industries.

The Present - What is Happening Now

The Seward Small Boat Harbor in existence today is a functionally diverse corporation in an advance state of disrepair. The design limit of approximately 565 permanent slips and 100 transient boat moorage has long since been exceeded. The old wooden float design has not been upgraded nor substantially improved since the original drawings of 1964. On any given day in the peak season, there are over 800 boats using the Small Boat Harbor. Boats have gradually grown in length and breadth, making the float system largely obsolete. Extremely large and heavy water craft with large sail area (barges, M/V E. L. BARTLETT, R/V ALPHA HELIX) and other craft exceeding 150 feet in length routinely use, and expect access to, a harbor which was never designed or envisioned to accommodate water craft of this size. Larger boats require sturdier floats and docks and deeper mooring basins. These oversized boats using existing facilities are causing an accelerated rate of deterioration by over-stressing inner harbor floats and docks. (DOT&PF, 1991) Wait lists have been in effect for over a decade and have at times included over 800 names. The average wait time for a slip exceeds seven years. Peak user periods continue to expand into early Spring and early Fall. These times see clogged boat launching ramps, competing uses for fixed facilities such as the City wharves and docks, compressed Travelift activity, conflicts between user groups at approach ramps and fish cleaning stations and increasing demand for automobile and boat trailer parking. The electrical system, originally an old trailer park system, is inefficient, not designed for the marine environment and does not meet user demands. Harbor staff are continually challenged to meet the growing demands of operationally and administratively managing a facility used by over 300,000 people each year. City Code and Harbor Rules are out of date and require extensive and costly revision. The database management system requires replacement and the fixed facilities demand increasing maintenance and repair. Nearly all of the previously vacant uplands adjacent the harbor have been leased to hotels, restaurants, tour operators and various other types of vendors. Customers do not agree on the true cost of operating and management the harbor facilities, largely in part because these operations have been subsidized from their inception and continue to be subsidized today. Customers desire the modern, state of the industry float systems yet are unwilling to accept the true cost of these improvements. Improvements to the float system will undoubtedly make a rate increase more acceptable, however, funds are necessary to make these improvements.

Harbor Operating Revenue

Budgeted revenues for FY2000 are summarized below.

<i>Revenue Source</i>	<i>Amount</i>	<i>Per Cent of Total</i>
Assessments	\$5,000	0.3%
Moorage	\$912,000	60.8%
Wharfage	\$45,500	3.0%
Boat Lift Fees	\$90,000	6.0%
Power Sales	\$150,000	10.0%
Rents and Leases	\$190,000	12.7%
Miscellaneous	\$98,700	6.6%
Interest Income	\$9,000	0.6%
<i>Total</i>	<i>\$1,500,200</i>	

(City of Seward FY2000 Operating Budget)

- ◆ ***Recommended Action Items.*** Cost centers should generate enough revenue to support the facility in the cost center. A detailed maintenance and deferred maintenance schedule for each facility needs to be developed and a plan adopted for meeting maintenance and improvement costs. Until a pricing policy for moorage is adopted, the funds generated by these individual cost centers will continue to subsidize the moorage facility and not address maintenance concerns of the cost center itself.

This Action Item is dependent upon the financial philosophy adopted by the City Council. This policy will directly translate into fee schedules for each cost center based on the pricing philosophy. It is possible to apply a different pricing philosophy for different cost centers, i. e. choosing to subsidize a particular cost center. If this approach is chosen, the subsidy source must be clearly identified and the subsidy amount determined. This amount should not be to the detriment of the subsidy source cost center or the pricing philosophy and financial structure fails.

Harbor Operating Costs

- ◆ ***Seward Harbor Costs.*** Since Seward Harbor uses the lineal foot standard, the costs below, based on the FY2000 budget, will be compared with that standard. There is 18,383 lineal feet of moorage available within the small boat harbor.

<i>Expense Category</i>	<i>Cost</i>	<i>Per Cent of Total</i>
Salaries	\$360,000	24.0%
Benefits	\$162,500	10.8%
Purchased Services	\$277,500	18.5%
Power for Resale	\$120,000	8%
Supplies and Maintenance	\$84,500	5.6%
General and Administrative	\$374,000	24.9%
Interest Expense	\$10,000	0.7%
Operating Transfers (Leases)	\$113,000	7.5%
<i>Total</i>	<i>\$1,501,500</i>	

(FY2000 Operating Budget)

The costs for basic harbor services include wages and benefits, purchased services, supplies and maintenance and general and administrative. The traditional thinking is that moorage fees offset these costs, with a portion set aside for capital improvements. As shown below, reality differs

markedly from the perception. (Electrical costs are not included since the revenues generated from power sales, not moorage revenue, is applied to these expenses.)

<i>Expense Category</i>	<i>Cost</i>	<i>Cost/Lineal Foot</i>
Wages and Benefits	\$522,500	\$28.42
Purchased Services	\$277,500	\$15.10
Supplies and Maintenance	\$84,500	\$4.60
General and Administrative	\$374,000	\$20.34
Total	\$1,258,500	\$68.46

The charge per lineal foot of moorage today is \$30.83. Since the budget is "balanced" and involves no cash transfers from other funds, this indicates subsidies in excess of \$37 per foot exist within the fund. The source of some of these subsidies is identified below.

<i>Subsidy Source</i>	<i>Amount</i>	<i>Amount/Lineal Foot</i>
Leases	\$100,000	\$5.44
Wharfage	\$45,500	\$2.48
TraveLift	\$26,000	\$1.41
Waitlist	\$10,000	\$.54
Fuel License	\$15,000	\$.82
Showers	\$15,000	\$.82
Launch Ramp	\$25,000	\$1.36
Transient Moorage	\$240,000	\$13.06
Total	\$476,500	\$25.92

The remaining subsidy of \$215,000 or approximately \$11.70 per lineal foot comes from other miscellaneous revenue sources such as late fees, interest, collection on doubtful accounts, and fees for services. Premiums on quarterly (45% of annual) and semi-annual (60% of annual) moorage fees also generate extra revenue for moorage versus annual moorage payments.

- ◆ **General.** Expenses for a harbor generally fall into three categories; construction or replacement, operations and maintenance. Construction or replacement costs cover the expense of harbor expansion or, in the case of a new harbor, the initial construction of the basin and protective barriers such as breakwaters. Replacement costs involve renewing the infrastructure, typically a float system and, less frequently, barrier replacement or repair. This category of expense usually involves large capital replacement or investment projects. Operational costs include wages, benefits, some contracted services, office supplies and administrative services. Maintenance costs are the cost of supplies and equipment required to maintain the floats, buildings, vehicles and utility distribution systems.

Seward Harbor, as a result of the financial accounting philosophy of the City, has identified and maintains a detailed record of most of the real costs associated with operating a harbor facility. As a result, it is a fairly simple exercise to relate the actual cost of supplying a given unit of service. The traditional benchmark for a unit of service is one lineal foot of moorage. This standard is also the traditional, and somewhat obsolete, basis of revenue generation. As the process for identifying true facility costs is refined and becomes more sophisticated, we find the lineal foot basis does not equitably distribute the real costs of operating, maintaining and improving a harbor facility. The lineal foot basis puts more of the facility costs on the smaller boats and thus favors the larger boats, while the larger boats generally have a larger impact on the infrastructure. (Donald Williams Olmsted, 1997) Several in depth studies have been conducted concerning application of rates on a fair and equitable basis. Generally, the results of these studies favor a modified square foot charge, which includes shared costs of associated fairways, adjacent slip fingers and portions of main floats. This method distributes costs equally and proportionally based on the size of the boat and the facility actually occupied and used.

- ◆ **Pricing Policy.** As a public enterprise, ports and harbors are focused on stimulating business growth, creating jobs and generating tax revenue. Public harbors generally fall in to three main categories of pricing policy; subsidized, cost recovery and revenue producing. This is where operating a *public* harbor as a *business* stimulates the most debates. (Olmsted, 1997)

Alaskan harbors were created using the subsidized approach. They were generally funded and built to stimulate economic development that was not occurring privately. Pricing was kept low to maximize facility use when commercial fishing and transportation of goods by sea were important to the local economies. Since public dollars were used in construction and for a time in maintaining the facilities, all harbors were heavily subsidized. Most Alaskan harbors maintain this subsidized method, whether they recognize it or not.

Seward Harbor more closely identifies with the cost recovery approach. With detailed accounting and direct and indirect cost allocation methods in place, a truer cost of operating and maintaining the harbor facilities is identified. This method seeks to "break even" on revenue versus expenses of the facility. Although most costs are identified, the rate schedule is not tied to "full" cost recovery, that is, funding asset replacement and capital objects such as breakwaters.

Profit pricing is normally adopted when there is sufficient demand in the market. This method of pricing includes fixed and variable costs in addition to a set rate of return. The approach normally includes an automatic price adjustment based on the Consumer Price Index for the preceding year. Two scenarios develop under this policy; market clearing (price creates vacancies) and revenue maximization (price approaches market clearing). (Olmsted, 1997)

- ◆ **Public versus Private Facilities.** Public facility managers are constrained from operating in a business-like manner and in setting rates that yield a profit by public and political pressure to keep rates steady and low. In contrast, private facility managers set their pricing based on what the market will bear. Such is the case with the Puget Sound area, our nearest competitor for moorage. The users in that area are accustomed to this philosophy and have both public and private facilities from which to choose. Private facilities in that market drive the market rate and force public facilities to match pricing in order to fairly compete. Similarly, when geographically adjacent harbors within this state have vastly different pricing policies, unfair competition and pricing occurs. Seward attempts to move from the cost recovery approach to full cost recovery and even revenue producing, while nearby harbors maintain the subsidized approach. As an example, Kodiak Island Borough contributes one per cent of their sales taxes to capital improvements in their port and harbor, a cost normally passed on to the user. Whittier and Homer have had much lower rates until recent rate studies have shown a need for dramatic price increases, bringing them more in line with Seward pricing.

Unfortunately, the price of moorage still bears little resemblance to actual pricing required for full cost recovery, even when we exclude capital improvement costs. More than 50% of the harbors surveyed in a State report indicated their annual revenue was less than annual expenses and an average increase of \$21 per lineal foot was necessary. (DOT&PF, 1994) Earlier in this report, actual costs per lineal foot were compared to today's price per lineal foot. There is a large disparity between cost and pricing, yet Seward Harbor maintains a "balanced" budget. This would indicate subsidies from within the fund, which contribute to low moorage pricing. The sources of some of these subsidies were identified earlier.

As a business enterprise, harbors should seek to recover costs and retain earnings for future development. The desired return on investment, including actual cost recovery and operating costs, is what should drive the pricing. The level of profit is generally determined by four philosophies, depending upon adopted public policy. These are:

- 1) a set rate of return on investment that includes capital expenses
- 2) rates based on replacement value
- 3) rates set at market clearing rates
- 4) rates set to maximize revenue

As a gross example of return on investment pricing, the following hypothetical scenario is given. Using today's estimated construction costs for breakwaters, floats and basin dredging, the value of the harbor would be \$20 million (\$2 million dredging, \$4 million breakwaters, \$10 million for floats, \$2 million for uplands and tidelands and \$2 million for boat ramps and other facilities). An investor would theoretically purchase the harbor, replace the float system, conduct deferred maintenance and set a return on investment of about 15%, a business standard. This means pricing would have to return at least \$3 million per year. Using the available moorage (18,383 feet) and lineal pricing system, this would dictate the price per foot of moorage to be at least \$164 per lineal foot compared to today's price of \$31.

- ◆ **Recommended Action Items.** Adoption of a clear financial objective is required in order to efficiently and effectively operate the harbor. This policy decision must be made at the City Council level and directed by a policy statement to the administration and harbor department. This policy decision must be clear on pricing philosophy and the desired result. If a subsidized philosophy is adopted, it must be clear at what level and from what source the subsidies will be derived and how capital improvements will be funded. If the decision is to adopt a cost recovery philosophy, the policy decision must identify and allow for capital improvements and their funding from other sources, since cost recovery does not provide for major improvements. This funding must be specific and time-oriented and an improvement schedule followed in order to be successful. If a full cost recovery or revenue generating philosophy is adopted, a determination is required whether the rates will be market based or market clearing. Since the market rate in Alaska is unknown, a phased increase in moorage rates over time is required until the full cost recovery rate is attained. Then, if desired, a market rate can be established. This phased plan should be no less than five years and no longer than ten and should include coinciding facility renewal to improve services and facilities used by the customer. An automatic Consumer Price Index adjustment should be included in the rate plan.

Re-defining how to fairly distribute the costs and profit of the facility is paramount to the financial success of the harbor. The time-honored standard of the lineal foot basis worked well in its time, but no longer meets the test of fairness. A modified fee schedule based on square foot and other factors is becoming the standard of the industry. This method of assessment distributes costs evenly to all users, regardless of boat size or location. This method should be fully studied and implemented in conjunction with the pricing policy adopted by the City Council.

Infrastructure and Equipment

- ◆ **Basin.** The harbor basin and entrance channel does not have a history of silting and has not had a need for maintenance dredging. The entrance channel combines with the natural steepness of the fjord bottom contour and any eroded or abraded material sloughs in to the deep water. The basin itself has excellent flushing characteristics and does not have stagnation or silting problems. A minor dredging project occurred in 1986 when flooding and encroachment from upland water sources brought material in to the northeast portion of the basin. During this flood event, the grid was destroyed and not replaced and some imported river material had to be removed. No other maintenance dredging has occurred since the construction of the new harbor in 1964. reconstruction project after the earthquake.



- ◆ ***Floats, Pilings, Approaches and Utilities.*** The overall design of the float system uses polystyrene flotation billets under a wooden support and deck structure. It was not designed to integrate water, sewer and electrical supply systems, yet those have been retrofitted into the float system. Some customers have, with and without harbor department approval, modified or constructed additions to the float system, contributing to float deterioration. With few exceptions, the floats, piling and approaches in the harbor are over 25 years old and in fair to poor condition. Some reconstruction has occurred on A, B and C Floats and X Float was replaced by the state at a cost of nearly \$900,000 after a catastrophic failure in 1996. Nearly all of the 500+ piling in the harbor are in fair condition, but will require replacement in ten years. In general, the float system is overloaded and is servicing wider and heavier boats than it was designed to accommodate. E Float sees the heaviest foot traffic since most of the major tour boat operators berth there. Steady growth in the industry of about 5% per year over the last ten years has placed tremendous demands on that float alone. In 1998, approximately 250,000 people used E Float. The relatively light construction design of floats in the northern section of the harbor combined with larger boats contributes to rapid deterioration of the float system. F Float is heavily used, especially during the summer season and is nearly always rafted 3 to 4 boats deep for the entire length. This puts added stress and damage on the system and accelerates the deterioration of that float. (DOT&PF, 1991) Floats A, B, C and D have 10-15 years useful life remaining. E Float, at its present use, may last 5-7 more years. Floats F, H, J, K, and L may have 7-10 years life remaining, with some of the floats and fingers failing already. This section of the harbor will be replaced in the Fall/Winter of 2000/2001. X Float, depending upon the allowed use in the future and loading considerations, is essentially new and has approximately 30 years useful life remaining.



The approaches or trestles that hold the access ramps are in fair to good condition. Some top planking and x-bracing need replacement and the roofs need repair, but the underlying structures are solid. The trestles at B, D, F and J Floats have 15-20 years service remaining. They will be modified and repaired during float upgrades to accommodate new and longer access ramps as funding permits. The trestles will be shortened and fish cleaning stations eventually moved to separate structures to eliminate conflicting use of the access areas.



Most of the electrical system was originally installed using an upland trailer park system and worked for a short time. It was not a marine grade system and has gradually deteriorated to the point where it is unreliable and, in some areas, unsafe. Patches have been made over the years where feasible and in some cases service has been abandoned where economical repair could not be made. Customers have, with and without the harbor department's approval, installed electrical

services of their own, adding to the support and maintenance problems already present. There is significant line loss to some portions of the float system causing failures and interrupted service. The submarine cable used to supply the floats is heavy and expensive. Gang meter services weigh down the side of the float and cause it to list from side to side. Power cables run for long distances and cross the main float system creating hazards and obstructions. Approximately half of the harbor slips do not have power.



Most of the supply side of the electrical distribution system on shore has been upgraded and/or replaced to accommodate future upgrades. It is in good condition and should require only minor modification when float and electrical distribution systems are replaced or upgraded in the future.



The water distribution system is adequate and supplies water to most parts of the float system during the boating season, (May to October). D and F approach trestles have water all year and use 1/4 inch bleeder valves that run constantly to prevent the water line from freezing. (The harbor uses approximately 10,000,000 gallons of water per year) The remaining system is shut down and winterized from October to early May. Every faucet had an EPA approved backflow preventer installed in 1998, but the users have removed many of them. There are main backflow preventers installed at the shore connection to maintain the integrity of the city water system. Firefighting water is provided by the potable water system, but segregation must occur before the firefighting system is charged and used. This system has never been used in fighting a fire, yet is a significant investment in the float system.

Sewer systems are installed at F Float for the U. S Coast Guard ship and at the Northeast Launch Ramp for general use. The "Pump-a-Head" system at the launch ramp services all manners of small craft and is a free service to the user. It is the only sewage disposal system available for general use in the harbor and not sufficient to meet the growing needs of the harbor user. Use of the system is limited to a narrow user group because of the location and capacity of the system. It is not available during the winter months. Individual slip sewage connections may be a federally mandated standard within the next ten years.



- ◆ ***Piers, Wharves, Docks and Launch Ramps.*** The T-Pier, Travelift Pier and the City Wharf, commonly referred to as docks, comprise the fixed mooring structures of the harbor. The underlying support structure is in good condition, with some x-bracing and tiebacks requiring replacement and/or maintenance. The decking is in poor condition and requires replacement. Most of the planking is worn beyond 30% of the original thickness and the nail spikes are exposed or protruding. A few of the planking at the Travelift area have failed and are patched. The ladders in all areas need to be replaced and must be brought up to Occupational Safety and Health Administration (OSHA) standards. Cleats and bollards in all areas need attention. A few of the fender/facing piling need repair or replacement. Bullrails are in fair condition. These fixed structures have approximately 5 years life remaining unless significant repairs are made.



The electrical service on these fixed structures is failing. In fact, as services fail, we are abandoning the service entirely. The meter pedestals on the T-dock and lift dock areas have been damaged or destroyed over time and repairs are too costly to perform. Completely new services have been installed at several locations, at the customer's cost. In less than 5 years, the entire electrical distribution system on the fixed structures will be abandoned and removed owing to maintenance costs and safety concerns.



The Southwest (SW) and Northeast (NE) launch ramps are in good condition. The SW launch ramp was substantially repaired in 1970 and is the older of the two. The NE ramp was built in 1995-96 and is in excellent condition. Both ramps have erosion problems at the base where the concrete tiles end, creating a significant drop at low or extreme low tides. These areas have been

filled to lessen the drop, but it remains an ongoing maintenance issue. The SW ramp had 15 yards of concrete poured into the end of the ramp in 1999 to slow the erosion down. The problems at the SW ramp are compounded by the existence of an underground water source running under the ramp itself and exiting at the last concrete tile. The adjacent ramp floats are in fair condition and will require replacement in 5-7 years.



- ◆ **Building.** The Harbormaster Building was built in 1966 and is 34 years old. It has been modified several times in the past, including addition of public restrooms and showers, office space renovation and shop modification. It is a steel frame "butler" style building and is in fair condition. The building does not meet some of the current Fire and Building code requirements, although efforts have been made to comply with safety requirements where possible. The building does not have an installed alarm system or fixed firefighting system. The electrical wiring, especially the add-ons, need updating and attention. In 1999, a new meter service was installed, segregating the gang meter bases across the fire lane at the National Parks Service Building. The building is not energy efficient and is cold and drafty during the winter months. The layout is inefficient and has changed depending upon the needs at the time. To save costs, Harbor personnel performed most of the changes and construction. A used oil burning furnace was installed in the mid 1980s, which reduces the cost of heating during the winter, but adds to the cost of a recycling program and used oil handling. Employee parking is a growing concern especially in the summer months. The employee parking has gradually been squeezed out with upland business development and increased visitor traffic. It is difficult at times to get the work vehicles in and out of the building area owing to the congestion and foot traffic. The building has approximately 15-20 years useful life, depending upon certain maintenance and habitability upgrades.



- ◆ **Vehicles.** The harbor department has 12 "vehicles" in inventory, not including the SMIC heavy equipment. "Vehicles" does not necessarily mean an automobile or truck. Trailers, tractors and heavy equipment are included as well. The vehicles and their uses are:

1) **Harbormaster Vehicle**
1999 ¾ ton 4WD Pick Up, #65

Incident Command Vehicle
Travel (SMIC inspection, meetings)
Equipment transport (Pumps, welder, compressors)
Trailer transport
On Call response
Administrative use



2) **Deputy Harbormaster Vehicle**
1995 ¾ ton 4WD Pick Up, #62A

Alternate Incident Command Vehicle
Equipment transport (Pumps, welder, compressors)
Trailer transport
On Call response
Light industrial uses (small equipment transport)
Administrative use



3) **All Purpose Utility Vehicle**
1988 1/2 ton 2WD Pick Up, #61

Equipment transport (Pumps, welder, compressors)
Sanding
SMIC utility and vessel logging



4) **Fuel Truck**
1993 1/2 ton 2WD, #62

Boat lift vehicle (transport operators, line, equipment for lifts)
Fuels travel lifts and harbor department boats
Maintenance truck for lifts



5) **Crane and Utility Truck**
1987 1 ton 2WD, #67

Maintenance vehicle
Heavy equipment transport
Trailer transport (Boats, used oil tank)
Heavy material transport (timber, oil drums, SMIC heavy industrial/maintenance)
250 ton heavy maintenance (cable spools, slings, sheaves)
Shared with City Shop (pump removal, heavy industrial)



6) **Flatbed**
1999 1 Ton 4WD, #66

Travel (SMIC inspection, meetings)
Heavy industrial (heavy transport)
Snow plowing
Shared with other departments, major events, heavy hauling.



7) **John Deere Tractor**
#63

Snow removal, sweeping



8) **50 Ton Travelift**
1978, #60

Boat haul outs and launches.



9) **Boston Whaler**
1988 21', #68

Emergency response
Boat tows
Float servicing
Search and rescue
Garbage and debris removal



10) **25' Boston Whaler**
1988, #64

Emergency response
Boat tows
Float servicing
Search and rescue



10) **Lely-Vacuum Trailer**
1996, #59

Used oil disposal.



12) **Caulkins Boat Trailer**
1988, #64A

Boat haul outs and launches, #64 and #68.



The vehicle inventory is in fair to good condition, with the exceptions of vehicles #67, #62, #60 and #61. #67 has had over \$12,000 in maintenance and repairs in the last 18 months. It has over 91,000 hard miles and is a 2WD vehicle. It also tows the 1000 gallon used oil tanker and is the only vehicle suited for that purpose because of the weight of the tanker. Near miss incidents involving this vehicle when combined with the oil tanker make its replacement a significant safety issue. #61 is an older 2WD pick up and is serviceable, but a liability in the winter months. Employees use this vehicle to travel to work sites at SMIC and other places when the conditions dictate a 4WD vehicle. #62 is a serviceable vehicle with some value, but is also a 2WD vehicle and it serves as the gasoline tanker. In the winter months, this vehicle is a liability issue when hauling fuel to the Travelift and general use around the harbor. #60 is the 50 ton Travelift and is in need of replacement within the next 5 years. Replacing this machine will cost approximately \$150,000 today. The lift has been in service since 1978 and is showing its age. The lift has been downgraded to 45 tons maximum lift for safety reasons. It would not be prudent to attempt to operate this lift more than five more years.

Efforts are being made to consolidate vehicle uses and reduce rolling stock. In the last two years, the vehicle inventory has been reduced by two. With two new vehicles replacing three older ones, one more vehicle can be eliminated from the inventory and the work trucks upgraded to a safe and effective level for 5-7 years. Ideally, vehicle #67 would be replaced by a new 1 ton 4WD extended cab pick up and combined use with vehicle #62. A new 3/4 ton 4WD extended cab pick up would replace vehicle #62A and #62A would replace #61 in service. So, with the addition of two new vehicles, #67, #62 and #61 would be retired and eliminated from the fleet and no new vehicles would be required for 5-7 years, including the trailers and tankers currently in use.

- ◆ **Recommended Action Item.** It is clear that capital improvements are necessary for the health of the harbor. A capital improvement plan for harbor infrastructure is needed to identify and map the process. This plan should include funding sources and is integrally connected with the recommended financial Action Items. Funding must be based on decisions about the financial philosophy of the harbor and rates tied to improvements. If rates are to remain at the present levels, capital construction costs and plans must be funded from outside the fund. The plan must clearly identify the source and amount of available funding in order to progress towards renewing the aging infrastructure of the harbor. If capital replacement does not begin now, a larger problem will develop in 5-10 years and a crisis in the harbor will ensue.

Administration

The administration of the harbor is becoming increasingly more complex. With the City's financial policy of direct and indirect cost allocation, and actual administrative control of the harbor administration outside of the department, it will be a difficult task to make efficiencies in the organization. Redundant services and tasks build a certain level of duplicative overhead and creates inefficiencies in administration.

In one sense, the harbor department is treated and administered like any other non-revenue-generating department. In the other sense, the department is expected to collect enough revenues to cover all the costs of operating the business and providing a service. In theory and in practice the past couple of budget cycles, user fees pay for *all* the expenses of the harbor department.

Tax dollars do not support the operations or administration of the harbor, yet administration of the department is handled with the same philosophy. For instance, a fee increase to cover expenses or fund improvements is viewed as a "tax" increase; proposed projects are viewed as a drain on the taxpayer. This is a fundamental misunderstanding of the enterprise fund concept. The relationship of funding and administration should be similar to that of the general fund. Expenses must match revenue. In some years that means fees have to increase; in others it may decrease. The two funds are separate and distinct entities and should be treated as individual budgets on an individual basis, not as separate parts of one budget. If they are to continue to be one budget, the enterprise fund expenditures

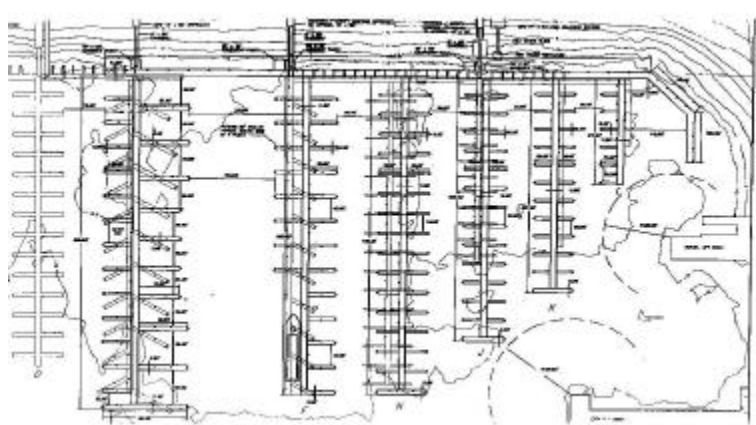
will continually be associated with tax dollars and not user fees and proactive change is not possible. It is a paradigm shift that can and must occur in order for the harbor to progress and move forward. Information resources management (IRM) will continue to be a large and growing issue for the harbor. The "Information Age" is rapidly changing and advancing, requiring ever more sophisticated data processing and information management needs. Huge volumes of information are processed on a daily basis and will be used to identify trends, reallocate resources and in general administer the needs of the department and meet the needs of the customer. The general rule in the industry is one full time System Manager for every ten computers and an additional one for network management. This means the harbor should have a full time IRM position supporting the computing needs of the department. An IRM staff allows other employees to fully realize their working potential by freeing up time and effort spent on routine and complex IRM issues. These become the responsibility of the IRM staff. System manager responsibilities are a full time job and should be assigned to trained, capable individuals. A standard for operating systems, databases, maintenance, accounting, point-of-sale and so forth could eliminate many problems faced by individual departments, including the harbor. Every major company and many state and local governments have an IRM staff. Their duties explicitly include training, maintenance of systems and networks, software and hardware updates, system architecture and user support.

Safety programs and standards required by the Occupational Safety and Health Administration are comprehensive and extensive. They are an essential element in creating and maintaining a safe working environment for everyone. As these programs are developed and instituted, the maintenance and training requirements of the program are nearly a full time job. Since the department is not staffed for a Safety Officer position, current employees share these duties. A full time Safety Officer position will be required to effectively meet the requirements of OSHA standards and to ensure employees and contractors have a safe working environment and to minimize Worker's Compensation issues.

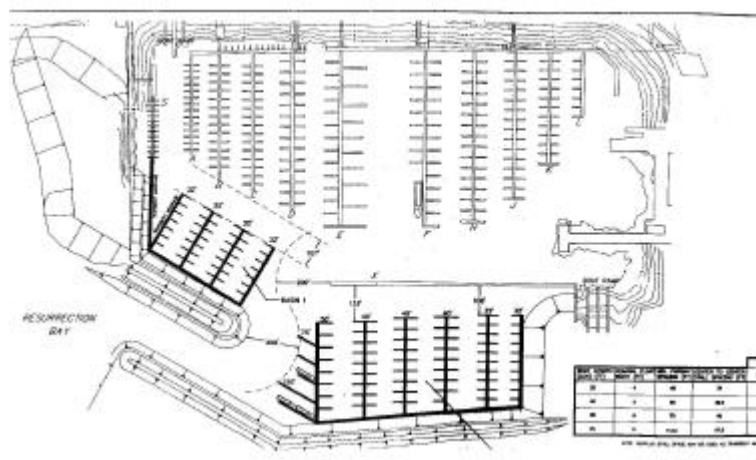
Used oil recycling in the harbor was a State of Alaska mandate. This program has grown from collecting a few gallons of used oil to collecting over 30,000 gallons of product, filters, sorbent pads and other miscellaneous oiled substances. There are six collection sites, a large tank farm for storage, a separator system, a vehicle and vacuum trailer in the inventory for this program. It is not funded through user fees and is becoming a larger task each year. Harbor personnel maintain used oil burners within city departments. The safety, training and maintenance requirements of this task are nearly a full time job. Since the harbor is not staffed for a used oil recycling position, current employees share these duties. This is a program that must be evaluated critically to determine the viability of continuing it in its present form.

Planned Major Projects and Funding Sources

- ◆ ***North Harbor Renovation Project.*** This project will renew nearly all of the floats in the northern end of the harbor and, with outside assistance, E Float. The entire project will cost on the order of \$4 million, with \$3.1 million funded by the deferred maintenance money supplied by the State of Alaska. Approximately \$1 million may be supplied by private and other sources. The project is scheduled for Fall/Winter 2000/2001



- ◆ **East Harbor Expansion Project.** This project will expand the limits of the existing harbor east to the coal terminal and add approximately 360 slips of various sizes. This \$13 million project will be funded \$4 million from the U. S. Army Corps of Engineers, \$2.5 million from State of Alaska Department of Transportation, \$1.5 million from the Economic Development Administration, \$1 million from surplus land sales and \$4 million from other sources. This project is scheduled for Spring 2001 through Summer 2002.



- ◆ **Wharves and Docks Upgrades.** This project will redeck and repair the fixed dock structures of the harbor and cost approximately \$750,000. Licensed users of the facilities will share the cost of repair along with approximately \$200,000 from other sources. This project should be completed in FY2001-02.
- ◆ **Loading Dock.** This is a planned new structure for the northwest end of the harbor to fill a need of both commercial and recreational users. A loading dock structure either in three stages to facilitate loading, or with cranes, or a combination of both, is needed for loading and offloading operations. This structure is estimated to cost \$1.5 million and is planned for FY2003, FY2004, or FY2005.
- ◆ **Dry Stack Storage.** With the growing demand for wet moorage, an alternative to maximizing the basin available for moorage is dry stack moorage. This essentially involves a covered, heated building for 100-200 boats, 32 feet long and smaller, stacked in two tiers. Many of the West Coast harbors and marinas are going to this efficient, compact storage alternative, freeing premium basin acreage for larger boats. The system involves a launcher and two forklifts and a building at a cost of approximately \$2 million. This project could be funded with a revenue bond and is a potential project for beyond FY2005.



- ◆ **Recommended Action Item.** An approved capital improvement plan and timeline is necessary to accomplish goals and objectives related to infrastructure improvement. Without a blueprint to follow, a logical, ordered, structured improvement process cannot be attained. The plan should identify projects, their priorities and the funding sources.

The Future - What Can We Expect?

- ◆ **General.** As the population of Alaska grows, so will the demand for wet moorage, especially in the Kenai Peninsula Borough. Whittier expansion will be a consideration in 10-15 years, but not in the near future. Most of this demand will be seasonal in nature, owing to the severe environmental conditions encountered during the winter months. Boats will continue to grow in size and sophistication, requiring larger (wider) slips. These sophisticated boats will include more luxuries associated with homes, such as computers, television, satellite appliances, telephones and so forth as standard features. Supplying the desired services associated with this market will be ever the moving target and will require creative thinking and problem solving. Supplying the customer will become more of a team (city) effort, further obscuring the line between a business enterprise and a public entity and require a change in operating philosophy. It will become increasingly more difficult to separate services provided to and services provided by the harbor. Maintenance responsibilities may also change and cross traditional boundaries of municipal government, requiring a significant paradigm shift in the way a city provides services to specific customers such as harbor users. Traditional management and allocation of effort may evolve into a blended effort in order to reduce costs and eliminate redundancy in government. The corporate structure of the municipality may de-centralize into several individual subsidiaries in order to provide the best service and customer focus. "One-Stop" shopping has been the recent trend, yet in all market places we are seeing another trend toward specialty services aimed at capturing that market share dissatisfied with "one-size-fits-all" consumption. Government subsidies and revenue sharing will continue to decrease at the federal, state and local levels for the foreseeable future, requiring proactive positioning of service related industries in order to survive.
- ◆ **Tourism.** Forecasts from the tour industry indicate a sustained growth of approximately 2.5% per year for the foreseeable future. In 1998, nearly 350,000 people visited Kenai Fjords National Park (source), most of which come through the small boat harbor.
- ◆ **Commercial Fishing.** Commercial fishermen are continually facing challenges within their industry. Limited entry programs, Individual Fishing Quotas, increasing state and federal scrutiny of the industry will result in a modest to no growth state of the industry. No new infrastructure will be built, meaning Seward will continue to be a key offload and processing point for Halibut, black cod, pollock and salmon, with an increasing trend towards centralization of industry offload/processing points in order to reduce costs associated with resource duplication and shipping. Shore-side resources will continue to be limited owing to space limitations and cost of acquisition, construction and repair.
- ◆ **Recreational Boating.** The fastest growing fleet in the harbor is the recreational fleet, which spans the entire length spectrum of the harbor. Kenai Peninsula Borough claims the largest recreational boat populations in the state, with every harbor maintaining significant wait lists for slips. Anchorage's population continues to grow and without a convenient place for boaters to use, Seward will continue to be a destination of choice for recreational boaters. Most trailerable boats are below 30 feet in length. As the recreational segment of Alaskan boaters matures, the trend towards larger, wider boats experienced in Puget Sound will materialize. We can expect boats to grow in size and sophistication for the next decade.
- ◆ **Charter Boat Operators.** There approximately 100 Charter Boat operators that routinely use Seward Small Boat Harbor. During the Annual Silver Salmon Derby, this number doubles or, by some estimates, triples. Most operators target halibut and salmon. With recent halibut stock decline and increased commercial fishing quotas, this industry is facing severe challenges of their own. Proposed reductions on bag limits and proposed institution of a quota system similar to the commercial fishing industry make the future of this industry uncertain. Modest growth in the charter boat operator fleet is expected throughout the next decade, with increasing emphasis on

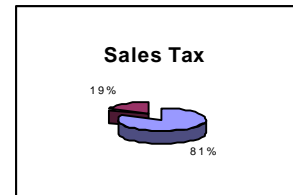
salmon. As stocks of other species are depleted or more strongly regulated, increase in transient charter boat operators from other areas is expected, making management of the industry a significant challenge for city resources.

- ◆ **Administrative.** Harbor operations and administration will become increasing more complex and diverse, responding to the needs and desires of the ever-increasing sophistication of the customer. E-Business will dominate the industry as it will other service oriented industries. On-line billing, accounting, slip assignments and management will be the standard. A sophisticated electronic business service will be required in order to keep pace with the customer and other industries and services.

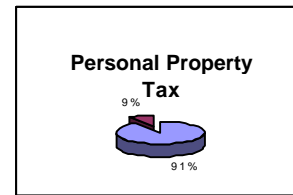
Benefits of Having the Harbor

Some of the benefits of having the harbor are tangible and are directly convertible to dollars in to the economy. Some are not so tangible but are very real nonetheless. All harbor services, unless exempted for resale purposes, are taxable including moorage, boat lifts, towing, and boat pumping. The Harbor Enterprise Fund contributes to the General Fund budget through a cost allocation plan and payments in lieu of taxes.

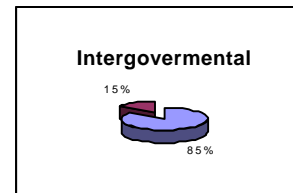
- ◆ **Sales Tax.** The Kenai Peninsula Borough Finance Department reported charter and tour businesses in the Small Boat Harbor collected approximately \$350,000 in sales taxes for the City in FY1998. Sales taxes on harbor services provided approximately \$80,000 in FY1998. Total sales taxes for FY1998 were \$1,820,230 (Seward 1998 CAFR). Using these figures, the harbor directly contributed 19% of the sales tax revenue stream for the General Fund.



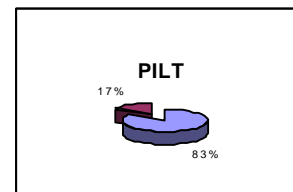
- ◆ **Personal Property Tax.** The Kenai Peninsula Borough Finance Department reported that the City of Seward's share of personal property taxes on boats in FY1998 was \$51,965. The total amount of personal property taxes collected in FY1998 was \$518,788 (Seward 1998 CAFR). Nearly 10% of the personal property tax revenue stream for the General Fund come from the harbor.



- ◆ **Intergovernmental (Cost Allocation Plan).** The Harbor Enterprise Fund transferred to the General Fund approximately \$200,000 in FY1998 for indirect costs associated with administrative support of the harbor. This is over 15% of the \$1,105,212 (Seward 1998 CAFR) total revenue for this source.



- ◆ **Payments in Lieu of Taxes.** The Harbor Enterprise Fund paid approximately \$160,000 in PILT for FY1998, which is 17% of the FY1998 total of \$799,978 (Seward 1998 CAFR).



- ◆ **Permanent Payroll; Jobs.** The business industry associated with the harbor pays an annual payroll to Seward residents of between \$5 million and \$10 million. These businesses employ over 300 full-time positions and many more seasonal positions. These businesses are those directly associated with the harbor such as tour companies, charter boat operators and boat repair

businesses. It does not include hotels, processors, hardware stores or similar upland businesses that may be operating with or without a harbor nearby. The true impact of this benefit must be identified through a detailed economic benefits study.

- ◆ **Visitors.** The National Parks Service reports that nearly 350,000 visitors came to Kenai Fjords National Park in 1998. Of these, over 80,000 were recorded at Exit Glacier with the remaining numbers visiting through the harbor and related businesses. This means approximately 250,000 visitors to the Park came through the harbor facilities. Tour industry studies have determined that each visitor spends approximately \$100 each in a destination city. Alaska SeaLife Center surveys show visitors spend \$150 on other than bay tour items. There is some discussion as to whether the tour industry figure can be accurately used to relate visitor spending in Seward. If we use the \$150 figure from ASLC surveys, an additional \$1,575,000 in sales tax revenue is tied directly to harbor activities. Since this figure, when combined with the above sales tax figures exceeds the total sales tax receipts for 1998, the \$150 figure is probably high or duplicative in nature. It is safe to say the City of Seward receives most of the sales tax revenue from visitors and most of those visitors are drawn to Seward by harbor activities.
- ◆ **Recommended Action Item.** A detailed Economic Benefits Study must be completed to identify and quantify the local and regional benefits provided by harbors. This information is essential to creating an awareness of the tremendous benefits enjoyed by every citizen as a direct result of having a harbor to anchor the economy. The study is a key element in facilitating the paradigm shift necessary to meet the challenges and to make the changes required in the next 20 years.

Critical Harbor Needs and Their Costs

◆ North Harbor Renovation	\$ 4,000,000
◆ East Harbor Expansion	\$13,000,000
◆ South Harbor Renovation	\$ 5,000,000
◆ Harbor Business Software Upgrade/Internet Access	\$ 100,000
◆ Americans with Disabilities Act Compliant Access Ramps	\$ 2,000,000
◆ 50 ton Travelift replacement	\$ 200,000
◆ Loading Dock	\$ 1,500,000
◆ Re-deck Fixed Facilities	\$ 750,000

Recovery - A Joint Investment or Solo Journey?

Key in the recovery process is a paradigm shift from focusing on costs of the enterprise to a balanced view of cost compared to benefit. City Official and citizen education with respect to the benefits enjoyed by everyone, not just boat harbor customers, as a result of a thriving, prosperous small boat harbor is the essential first step in planning for recovery. From this recognition must develop the supportive policy decisions of the City Council and implementation through the Administration. The pricing and operating philosophy adopted will dictate whether this journey to recovery and prosperity is shared or borne entirely by the enterprise fund. It is clear, however, without assistance from state, federal or other sources, the road to recovery will be a long one. As demonstrated previously, \$27 million is needed to completely rebuild the infrastructure of the harbor and add necessary elements to support the customer base. Other paradigm shifts are necessary in service delivery. There almost certainly needs to be a blending of services and support activities, including decentralization of administrative services with a proactive agenda towards meeting the customers needs and desires. Greatly expanded use of computer technology and E-business activities will result in highly effective, responsive service to the customer while saving resources. The public sector of the future will be a leaner, faster, cleaner, more effective structure than the one we are accustomed to today.