

BEFORE THE STATE OF WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION

WASHINGTON UTILITIES AND
TRANSPORTATION COMMISSION,

Complainant,

v.

PUGET SOUND PILOTS,

Respondent.

Docket TP-220513

**PUGET SOUND PILOTS' GENERAL
RATE CASE EXECUTIVE
SUMMARY**

I. INTRODUCTION.

1. On June 29, the Puget Sound Pilots (“PSP”) filed a rate case before the Washington Utilities and Transportation Commission (“UTC”) seeking a 35.6% increase in pilotage rates supported by over 500 pages of written testimony from 22 witnesses and over 120 exhibits. This extensive body of evidence demonstrates that the pilotage system in Puget Sound, which by law requires elite mariners to take navigational control of 7,000 large ships annually – more than 130 times per week – is both understaffed and underpaid, ranking dead last for income and benefits among the 14 U.S. pilot groups for which 2021 compensation data is publicly available.
2. With just over 1,200 pilots in the U.S., these former vessel captains who board and disembark massive ships via pilot ladder and then direct a ship's every move into heavily trafficked and constricted waters from a bridge on which the pilot likely has never been are an extremely rare breed of maritime worker. In fact, the pinnacle profession of pilot is

achieved by just 3.7% of the 33,490 workers in the relevant Bureau of Labor Statistics category, “Captains, Mates and Pilots of Water Vessels.”¹

3. In general, U.S. labor statistics show that maritime workers are paid well above average. For example, among the more than 15,500 dockworkers at 29 West Coast ports who are members of the International Longshore and Harbor Workers Union (“ILWU”), average annual pay is nearly \$207,000, while foremen average \$311,656. ILWU benefits include a pension paying up to \$95,460 per year, a 401(k) plan and healthcare benefits averaging \$55,550 per worker.² The ILWU’s pay and benefits are characterized as “world-class” by the Pacific Maritime Association, the 68-member shipping industry consortium that includes all their employers.
4. In sharp contrast, since the UTC issued its first-ever pilotage rate order in late 2020, each PSP member has earned less net income than any other pilot group on the West Coast, a level that ranks last among the pilot groups listed on page 23, whose income levels are publicly verifiable and who constitute 42% of all licensed maritime pilots in the U.S., a clearly representative sample. In January 2023, each PSP pilot, again per UTC order, will for the first time completely lose tariff funding of their healthcare benefit, which the UTC cut to 50% in January 2022 and goes to zero in January 2023. This will make PSP one of just two state-licensed pilot groups for which data is publicly available that lack tariff-funded medical benefits. In short, PSP pilots under the current tariff are extreme negative outliers among their incredibly small and elite peer group with respect to both pilot income and benefits.
5. Puget Sound’s pilotage system is underfunded in another significant respect: despite being authorized by the Washington Board of Pilotage Commissioners for 56 licensees, the UTC funded only 52 pilots for 2022. As a result, the current PSP pilot corps must bear the cost of

¹ Lough, Exh. DL-01T at 5.

² *Id.* at 6-7.

the 53rd licensee admitted to PSP in June, two more trainees who are set for licensure in July and a projected 56th in the first quarter of 2023. In the meantime, PSP pilots continue to work more during their off-duty periods than any other West Coast pilot group. The San Francisco Bar Pilots, Columbia River Bar Pilots and Columbia River Pilots all experience annual levels of callbacks or off-duty work (required when no rested on-duty pilot is available) that are below 5% of total annual assignments. Except for the Covid-impacted years of 2020 and 2021, when PSP's callbacks were just below 13% in each year, callbacks in 2018, 2019 and 2022 to date have been extreme, registering 18.89%, 19.67% and 16.5% through May 31 of this year.³

6. These statistics reveal a dangerous level of understaffing. According to Dr. Charles Czeisler, this country's foremost fatigue risk expert and longtime head of Harvard Medical School's Department of Sleep Medicine, these levels of off-duty work are “unsafe from a fatigue risk management standpoint.” In his opinion, pilot groups like PSP should keep callbacks below 5% “in order to maximize the level of alertness and rest necessary to perform this challenging work.”⁴
7. Why is this? For the typical “9 to 5” land-based worker unfamiliar with the maritime professions, a pilot's work schedule is other-worldly. Fifteen days of work followed by 13 off sounds quite favorable until one learns that the on-duty pilot has no predictable schedule, works mostly at night and needs an extended number of off-duty days to recover “from the chronic sleep deficiency and disruption of circadian rhythms induced by... erratic and demanding schedules.”⁵ Citing a study conducted by the Sleep and Performance Research

³ Carlson, Exh. IC-01T at 27.

⁴ Czeisler, Exh. CAC-01T at 84.

⁵ *Id.*

Center at Washington State University, Dr. Czeisler opines that PSP pilots who work multiple times during their off-duty recovery intervals “will begin their next work-shift interval pre-loaded with fatigue, lacking resilience for coping with the very demanding schedule that each sequence of shifts requires,” thus increasing “the risk of a fatigue-related adverse safety event.”⁶

8. As demonstrated below, the body of evidence assembled by PSP in this general rate case is overwhelming on all major issues. However, by way of introduction, two points are worth emphasizing.
9. First, the importance of compulsory pilotage and its value to the State of Washington cannot be overstated: Puget Sound Pilots are the State's mission critical front line of defense against a catastrophic oil spill or other major marine casualty. According to a recent major study, “the safety benefits associated with pilotage are huge” because pilots play a direct role in preventing the two largest spill-producing vessel accident categories: collisions and powered groundings.⁷ It is worth noting that the Exxon Valdez oil spill in 1989 in Alaska's Prince William Sound was a powered grounding.
10. Second, with the West Coast's most diverse mix of vessel traffic (container, cruise, oil tanker, car carrier, bulk carrier and roll-on/roll-off), the risks to Puget Sound, its waters, fish and wildlife and recreational community are persistent and growing, driven by multiple factors. One is the huge volume of fuel carried by today's mega-cargo ships, ranging from over one million gallons on the average bulk carrier loading grain or cement to nearly five million gallons aboard the ultra-large container ships calling today at the ports of Seattle and Tacoma. For perspective, following the 11 million gallon Exxon Valdez oil spill in 1989,

⁶ *Id.* at 85 (emphasis in original).

⁷ Eriksen, Exh. KAE-03 at 71.

Congress passed the Oil Pollution Act of 1990 requiring all oil tankers plying U.S. waters to be double-hulled. In 1994, Washington lived up to its national leadership role in oil spill prevention by imposing a tug escort requirement for all oil tankers on Washington waters. Neither double hulls nor tug escorts are required for today's huge cargo ships carrying millions of gallons of crude oil fuel.

11. A second factor is the not insignificant percentage of foreign flag cargo ships sailing to and from Puget Sound ports and terminals that are cost-cutting, corner-cutting outlaws of the sea taking full advantage of the lawless character of flag of convenience registration in countries that maintain safety and other regulations in name only with no regular inspections or enforcement. These shipowners fail to train and sometimes abandon their long unpaid crews and regularly scrimp on the maintenance required to keep a ship seaworthy. A recent example occurred just this past April at the mouth of the Columbia River. The M/V Alexia, a foreign flag Panamanian bulk carrier loaded with grain suffered engine failure on the Columbia River Bar just as the ship was about to clear the south jetty. The Bar Pilot aboard was able to quickly anchor the ship within just one-half mile of the rocks at the end of the jetty and then repeatedly tried to bring the engine up to a speed sufficient to turn the ship to make way into the incoming seas, which were breaking over the ship's deck. But every time he gave the order for half ahead, the engine would fail. All this while, the ship's captain was uncooperative and refused to provide the operation and safety information requested by the pilot.⁸

12. Fearing that the heavy seas and the wind conditions would cause the vessel to run aground on the jetty or Clatsop Spit and spill over one million gallons of fuel, three assist tugs were

⁸ Jordan, DJ-01T at 20-21.

racing from Longview to the scene. A second Bar Pilot boarded the vessel via helicopter, assisted in anchoring the ship further offshore and ultimately a changing tide turned the ship into the sea and she was able to make enough headway into the ocean to avoid a potential disaster. Throughout this event, the U.S. Coast Guard was kept fully informed and, in collaboration with the Bar Pilots it was determined that it was safer to order the vessel to continue seaward and then transit south to Los Angeles for repairs, rather than attempt a return voyage across the Columbia River Bar in a storm. Inexplicably, but unfortunately par for the course for some unscrupulous shipowners, once she was underway southbound, the M/V Alexia not only refused to respond to repeated Coast Guard radio calls, but turned off her AIS (Automatic Identification System) and ignored the order to undergo repairs in LA.⁹ This close call with potential catastrophe is a good example of how state-licensed pilots are this country's first line of defense against the unsafe and unscrupulous practices of foreign flag ship owners and operators.

For the benefit of the Commission, the parties and the general public, this General Rate Case Executive Summary organizes and summarizes PSP's voluminous body of evidence into the following 10 issues:

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⁹ *Id.* at 21.

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In addition, for the convenience of the reader, at the end of each section addressing a rate case issue, there is a list of all witnesses who testify on that issue and the relevant page range for each witness.

II. KEY PSP RATE CASE ISSUES.

A. The Importance of the Pilotage System to Protecting Puget Sound.

13. The importance of pilotage cannot be overstated, because it is both extremely effective in terms of mitigating major casualties and highly cost effective. With respect to the three largest causes of casualties involving ocean-going vessels, a recent study shows that the risk of one of these incidents is reduced by 99.79% if a vessel is under pilotage and that this percentage drops to almost infinitesimal risk of 0.018% if pilots are combined with escort tugs. But what about the cost? This same study shows that the cost of the entire pilotage system in Canada delivers economic and safety benefits to the country at a ratio of 21.9 to 1. In other words, the cost of pilotage in Canada is dwarfed by the economic value of the benefits the system delivers to the citizenry.

14. This compelling data is found in a 2017 study entitled “*Marine Pilotage in Canada: A Cost Benefit Analysis,*” prepared by Transportation Economics & Management Systems, Inc.¹⁰

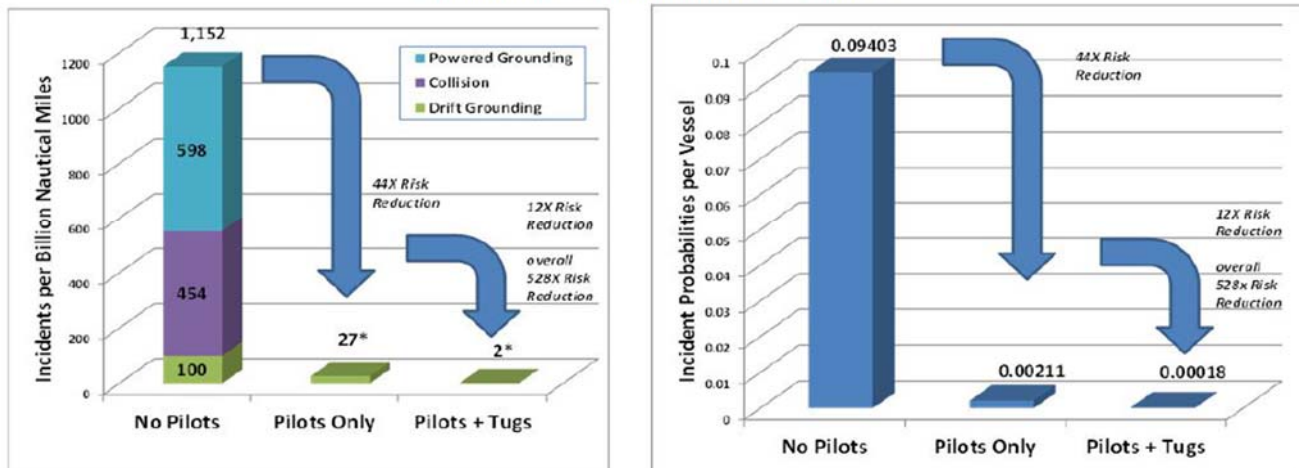
Based upon years of consistent vessel casualty data from the Great Belt of Denmark, one of

¹⁰ Eriksen, Exh. KAE-03.

the only places in the world where it is possible to scientifically collect data empirically that validates the effectiveness of pilotage, researchers were able to compare the statistical probabilities of a vessel grounding in the Great Belt under pilotage and without a pilot. Based upon nine years of data, vessels under pilotage had a 100% safety record compared to a 9.4% probability of grounding without a pilot.¹¹

15. Based on this data and historical accident rates showing powered groundings and collisions are by far the two largest categories of modern maritime casualties, the study concludes that pilotage “is the strongest single safety measure that can be employed to reduce the risk of maritime accidents,” reducing the accident risk “by a factor of at least 44 times.”¹² The dramatic risk reduction effect of pilots and tugs is graphically displayed in the charts below from this important study:

Exhibit 2-6: Risk Reduction Effect of Pilots and Tugs



16. In examining the cost benefits derived from a pilotage system, the Canadian study identified three categories: safety cost benefits; productivity and efficiency benefits; and reductions in the economic impacts of maritime accidents. Safety benefits are fairly obvious. The

¹¹ *Id.* at 13-14.

¹² *Id.* at 19.

productivity benefits are a function of the value that pilots add to the efficiency of shipping operations, particularly “through the introduction of improved navigational procedures.”¹³ On pilotage grounds throughout the U.S., when a new generation ultra-large cargo ship is planning a port call in that district, it is the pilots who utilize simulators and other data to determine whether those vessel calls can be safely executed and, if so, develop the navigational procedures to accommodate those larger ships. Third, in assessing the accident-avoidance benefit of pilotage, the Canadian study included two case studies, one of which estimated that the cost of a 30-day shutdown to the Port of St. John following a minor oil spill would cost the local economy \$4.2 million.¹⁴

17. According to shipping economist Ken Eriksen, a sophisticated cost-benefit analysis of the pilotage system serving Puget Sound would also show “very significant” cost benefits.¹⁵ In the confined waters of Puget Sound, the economic devastation resulting from a significant oil spill, which would likely shut down both commercial and recreational vessel traffic for months, would inflict huge losses on the regional economy.

18. Importantly, although a pilot is not a government employee, the pilot performs what is essentially a public service. The state-licensed pilot, including every member of PSP, exercises judgment that is independent of the economic interests of the shipowners, is answerable only to the State of Washington that licenses and regulates him/her and has as a sole objective to protect state waters by preventing ships from engaging in unsafe operations. In this respect, the principal customer of the pilot's service is not the shipowner or operator, but rather the state, its citizens and the public interest.

¹³ *Id.* at 33.

¹⁴ Eriksen, Exh. KAE-03 at 68.

¹⁵ Eriksen, Exh. KAE-01T at 42.

19. Considering the enormous cost benefits of the pilotage system to the citizens of Washington, and the economic insignificance of pilotage fees to the world's fleet of oceangoing vessels, it becomes critical to fund the Puget Sound pilotage system in order to maximize its accident prevention capability.

Pilotage Importance Witnesses.

1. Captain Ivan Carlson, Exh. IC-01T, 4-9.
2. Clayton L. Diamond, Exh. CLD-01T, 7-9.
3. Captain Dan Jordan, Exh. DJ-01T, 2-4.
4. Ken A. Eriksen, Exh. KAE-01T, 42-43.

B. The Substantial Risk to Puget Sound Posed by Multiple Unscrupulous Practices of the Shipping Industry.

20. Environmental protection and specifically oil spill prevention are Washington State policy priorities of the first order. Compulsory pilotage exists to uphold these values by providing the best achievable protection of Washington State waters. Pilots exercise independent judgment in the interest of safety that is unconflicted by commercial or economic concerns: pilots' unequivocal mission is to protect human life, property, and the natural environment. RCW 88.16.005. Critically, the massive and extremely well-heeled multinational shipping interests that comprise most of PSP's customers do not necessarily prioritize safety and environmental protection. Rather, this industry has a well-documented track record of using disreputable practices to maximize profit by limiting liability and externalizing the environmental cost and risk of their operations onto the public.

21. Approximately 80% of global container shipping is controlled by just three dominant carrier alliances made up of some of the world's largest transportation companies. During the Covid-19 pandemic, these foreign companies realized record profits while raising shipping

rates by as much as 1,000%, contributing to inflation and causing serious harm to American businesses and consumers. This conduct has drawn heavy criticism and congressional action in the form of the Ocean Shipping Reform Act of 2022 that is discussed in the testimony of PSP Executive Director Charles Costanzo. As President Biden put it in his State of the Union Address:

When corporations don't have to compete, their profits go up, your prices go up, and small businesses and family farmers and ranchers go under. We see it happening with ocean carriers moving goods in and out of America. During the pandemic, these foreign-owned companies raised prices by as much as 1,000% and made record profits. Tonight, I'm announcing a crackdown on these companies overcharging American businesses and consumers.¹⁶

22. Although the shipping industry's high-profile exploitation of an unprecedented global public health emergency has recently cast it in the spotlight, the unscrupulous and deeply problematic practices of large foreign ocean carriers are hardly a new development. Rather, these companies have long deployed controversial tactics designed specifically to externalize the cost and risk of their business and mask bad behavior from regulators and public watchdogs. For a data driven analysis of these tactics, PSP encourages the Commission to review a research paper authored by the French economist Dr. Guillaume Vuillemeys and published in 2021 by the Center for Economic Policy and Research titled *Evading Corporate Responsibilities: Evidence from the Shipping Industry*.¹⁷
23. In *Evading Corporate Responsibilities* – which is discussed at pages 41 through 49 of Mr. Costanzo's testimony – Dr. Vuillemeys addresses three disturbing tactics that are common within the foreign shipping industry: the use of single-vessel shell companies to shield ships' beneficial owners from environmental liability, reliance on open registries commonly known

¹⁶ Costanzo, Exh. CPC-01T at 39.

¹⁷ Costanzo, Exh. CPC-17.

as “flags of convenience” to evade regulation and corporate responsibility for environmental risk and mariner safety, and “last-voyage flags” that mask unsafe ship-breaking practices at the end of a vessel’s useful life.

24. As to the industry’s use of single-vessel entities to fragment assets, Dr. Vuillemeys explains that:

These [shipping] firms have increasingly dissociated legal and ultimate ownership, using parent-subsidiary structures, while minimizing the amount of assets in each subsidiary. Beyond global trends, microeconomic tests confirm that liability evasion is a dominant force behind these facts.¹⁸

25. International law requires that there be a “genuine link” (for example, the shipowner’s domicile) between a ship and her flag state. The term “flag of convenience” refers generally to a state that maintains an open ship registry that allows foreign ships to fly its flag while essentially ignoring the genuine link requirement. Dr. Vuillemeys explains the problem with the rising trend toward the use of these registries:

As ship quality drops with age, maintenance costs can become too large relative to the cost of time lost during inspections. Shipowners thus find it optimal to re-flag in jurisdictions with lower standards.¹⁹

Thus, the comprehensive data set used in *Evading Corporate Responsibilities* demonstrates that:

[A]t the end of their life (i.e., for the last two flags), shipping companies seek flag states that have ratified fewer conventions related to the global shipping context, to the protection of the environment and to the protection of workers.²⁰

26. Lastly, the rapid rise of so-called “last-voyage flags” is perhaps the most disturbing practice of all. Ship breaking is a very dangerous task that poses grave risks to human life and welfare and the environment. To dodge the high cost of safe ship breaking, carriers will sell an

¹⁸ *Id.* at 11.

¹⁹ *Id.* at 26.

²⁰ *Id.*

end-of-life ship to a “cash buyer” who reflags the ship to a flag of convenience of the lowest repute, thus enabling disposal of the ship in extraordinarily dangerous beaching yards located in Pakistan, India, and Bangladesh. Dr. Vuillemeey explains:

[S]hips change owners, names and flags specifically for their last-voyage to beaching yards. On the one hand, some flags of convenience have specialized in offering light flag registration standards for last voyages. On the other hand, some companies (so-called “cash buyers”) specialize in buying end-of-life ships from shipping companies. Beaching is thus outsourced from shipping companies facing public scrutiny to smaller limited liability companies that operate out-of-sight. Shipping companies dealing with these cash buyers can then claim they did not know ships would be beached. The market for outsourcing ships to cash buyers transforms a waste that would be a cost to its owner (due to high costs of clean recycling) into a source of profit (value of the raw materials), while externalizing environmental damages.²¹

According to the data relied on in *Evading Corporate Responsibilities*, the use of last voyage flags rose from being virtually non-existent less than 20 years ago to being the dominant practice today.²²

27. Critically, the lack of corporate responsibility that pervades the shipping industry regularly manifests in callous disregard of pilots’ safety. Far too often, PSP’s customers put pilots’ lives at risk by deploying pilot transfer arrangements that do not comply with international requirements and are extraordinarily dangerous. Pilot transfer is the process by which PSP pilots board ships at sea from a pilot boat via a ladder affixed to the ship’s side. A video showing PSP Vice President Captain Eric Klapperich boarding a TOTE ship via pilot transfer is Exhibit ECK-11 to his testimony.
28. Captain Sandy Bendixen, who is an international leader and advocate for improving pilot transfer safety, discusses in her testimony the myriad ways in which PSP’s customers fail to provide transfer arrangements that protect pilots.²³ Captain Bendixen concisely states the

²¹ *Id.* at 29.

²² *Id.*

²³ Bendixen, Exh. SB-01T at 9-29.

prevailing view among Puget Sound Pilots regarding the danger created by the negligence of a not-insignificant segment of PSP's customers:

As Puget Sound Pilots, putting our lives on the line to protect people and the Puget Sound environment is part of our job. We understand and accept the risks that are inherent in our work. But those risks should not be compounded by unsafe and illegal pilot transfer arrangements. I am proud of the work that I and my fellow pilots both in PSP and with pilot organizations around the world are doing to prevent and address these problems when they are identified.²⁴

29. The fact is that day and night, 365 days a year, pilots put their lives on the line on behalf of the citizens of Washington State. They do so under extraordinarily challenging conditions that too often are made worse by customers who prioritize profit to the exclusion of appropriate concern for their safety and the environment that pilots are charged to protect. There is no question that the shipping industry's opposition to appropriately funding a first-rate pilotage system is yet another example in a long list of practices designed to externalize their cost and risk of doing business.

Shipping Industry Risk Factor Witnesses.

1. Charles P. Costanzo, Exh. CPC-01T, 34-51.
2. Captain Sandy Bendixen, Exh. SB-01T at 9-29.

C. The Standard for Decision: the Puget Sound Pilotage District Should be Funded to Achieve "Best Achievable Protection."

30. The protection of Washington's ecology and natural resources through the prevention of oil spills is a bedrock principle of Washington law and policy in a state that for decades has assumed a national leadership role on this critically important subject. The State's duty to prevent oil spills arises from its fiduciary role as protector of the public trust. As the

²⁴ *Id.* at 29.

Legislature explained in Washington’s nation-leading Oil and Hazardous Substance Spill Prevention and Response Act (“OSPRA”):

Washington's navigable waters are treasured environmental and economic resources that the state cannot afford to place at undue risk from an oil spill.

Therefore:

The state has a fundamental responsibility, as the trustee of the state’s natural resources and the protector of public health and the environment to prevent the spill of oil.

RCW 90.56.005.

31. The Legislature has also rightly found that when it comes to oil spills, prevention is far more cost effective than cleanup:

The legislature finds that prevention is the best method to protect the unique and special marine environments in this state. The technology for containing and cleaning up a spill of oil or hazardous substances is at best only partially effective. Preventing spills is more protective of the environment and more cost-effective when all the response and damage costs associated with responding to a spill are considered. Therefore, the legislature finds that the primary objective of the state is to achieve a zero spills strategy to prevent any oil or hazardous substances from entering waters of the state.

Id. (emphasis added).

32. Nowhere is the superior cost-effectiveness of spill prevention to cleanup more obvious than in the decision to fund a best-in-class pilotage system. As explained in the testimony of Captain Mitchell Stoller, PSP Vice President Eric Klapperich and Mr. Costanzo, Puget Sound Pilots are directly responsible for the transport of enormous quantities of oil (both as cargo and bunker fuel) transiting Washington’s most ecologically sensitive waterways and are the state’s front line of defense against the ecological catastrophe that would result from a significant spill. In 2006, the Department of Ecology estimated that a significant oil spill could cost approximately \$10.8 billion, while adversely affecting about 165,000 jobs. *Oil*

Spill Prevention in Washington, Dept. of Ecology, <https://ecology.wa.gov/Spills-Cleanup/Spills/Oil-spill-prevention>. As PSP Executive Director Charles Costanzo explains in his testimony, adjusting the Department of Ecology’s estimate for inflation, the cost of a single significant oil spill could easily exceed the cost to fund PSP’s proposed tariff for more than 300 years.²⁵

33. The legal standard that Washington applies to laws intended to prevent oil spills is “best achievable protection,” which is defined as follows:

“Best achievable protection” means the highest level of protection that can be achieved through the use of the best achievable technology and those staffing levels, training procedures, and operational methods that provide the greatest degree of protection achievable. The director's determination of best achievable protection shall be guided by the critical need to protect the state's natural resources and waters, while considering: (a) The additional protection provided by the measures; (b) The technological achievability of the measures; and (c) The cost of the measures.

RCW 88.46.010(1). In 2019, the Pilotage Act was amended by the Reducing Threats to Southern Resident Killer Whales by Improving the Safety of Oil Transportation Act. The amendment incorporates the best achievable protection standard as defined above directly into the text of the Pilotage Act. RCW 88.16.260.

34. As Mr. Costanzo explains in his testimony, given the critical role of pilots in oil spill prevention, the Legislature’s clear “zero spill” policy mandate and the direct incorporation of the standard into the text of the Pilotage Act, there is no question that UTC must establish a tariff that is funded at a level that is sufficient to support a pilotage program that provides the best achievable protection of Washington’s state waters. The law is clear that failing to do so would be contrary to the state’s fiduciary duty to its citizens as trustee of the public trust.²⁶

²⁵ Costanzo, CPC-01T at 31.

²⁶ *Id.* at 11-19.

Best Achievable Protection Standard Witnesses.

1. Charles P. Costanzo, Exh. CPC-01T, 11-33.
2. Captain Ivan Carlson, Exh, IC-01T, 4-9.
3. Clayton L. Diamond, Exh. CLD-01T, 32-38.
4. Captain Dan Jordan, DJ-01T, 12-16.
5. Captain Deborah D. Dempsey, DDD-01T, 5-6.

D. The Substantial Danger and Legal Risks to Which All Pilots Are Exposed.

35. Pilots fulfill their mission to protect life, property and the Puget Sound environment at enormous personal risk. Clayton Diamond is a retired Coast Guard Commander and Judge Advocate General who currently serves as the Executive Director and General Counsel for the American Pilots' Association, which is a non-profit organization that has been the national association of the piloting profession since 1884. Mr. Diamond describes the physical dangers that pilots face in his testimony:

A career as a pilot is not just challenging and inconvenient, it can also be dangerous. Many who are not in and around the profession on a regular basis don't always appreciate the serious physical risks associated with piloting. In the United States eight pilots and a ninth person – a pilot boat operator – have died during pilotage operations in the past sixteen years. Pilots are also killed in the line of duty with alarming regularity all over around the world. While those of us in positions of responsibility in the piloting community, and those – like this commission, with a degree of regulatory oversight – must do everything we possibly can to ensure the best equipment and safety precautions are in place, the simple fact is piloting is a dangerous profession.²⁷

The primary physical risk to pilots is the pilot transfer, which occurs at sea, often in bad weather, via a pilot ladder affixed to the ship's side. As Captain Bendixen explains in her

²⁷ Diamond, CLD-01T at 11.

testimony, the physical risks that pilots face in the line of duty are made worse by their customers, who regularly fail to provide adequate pilot transfer arrangements that comply with international requirements.

36. In addition to risking life and limb, every pilot is acutely aware that a single mistake could mean financial ruin and an abrupt end to a career that he or she has committed well over a decade to pursue. As Mr. Diamond explains:

[T]he movement of large vessels carrying valuable or hazardous cargo within narrow and restricted waterways carries with it serious risk of accident and the potential for substantial damages, including the loss of the lives, damage or loss of cargo, and serious harm to the marine environment. The financial costs of such consequences can be tens of millions if not hundreds of millions of dollars and far exceeds the assets of a typical pilot.²⁸

Although there has traditionally been an “unspoken” reluctance of injured parties to look to pilots for financial recourse, the fact remains that “[i]t is well settled that ‘a pilot may be held liable to third parties for damages caused by his negligence’ and ‘may be held liable for damages to the vessel he was piloting,’ and sufficient liability insurance . . . is either not available at any price or available only at a price that is prohibitive in relation to the fee earned for a pilotage job.” *Id.* (quoting *Gulf Towing Co., Inc. v. Steam Tanker, Amoco*, NY, 648 F. 2d 242 (5th cir. 1981) and *Bethlehem Steel Corp. v. Yates*, 438 F.2d 798 (5th Cir. 1971), respectively).

37. The immense personal risk (physical and financial) inherent in piloting is one of many factors that distinguishes pilots from other mariners both in terms of their appropriate level of compensation and their elite status within the maritime profession.

²⁸ *Id.* at 21.

Pilotage Job Risk Witnesses.

1. Captain Sandy Bendixon, Exh. SB-01T, 9-29.
2. Dr. Charles A. Czeisler, CAC-01T, 1-85.
3. Clayton L. Diamond, Exh. CID-01T, 11, 21-23.
4. Captain Mitchell S. Stoller, Exh. MSS-01T, 5-20.
5. Captain Anne L. McIntyre, Exh. Exh. ACM-01T, 7-8.
6. Captain Jeremy Nielson, Exh. JN-01T, 4-8.
7. Captain Dan Jordan, Exh. DJ-01T, 4-11.

E. The Comparability of the Puget Sound Pilots to Other U.S. Pilot Groups.

38. When it comes to assessing the comparability of the Puget Sound Pilotage District to other pilotage grounds or districts throughout the United States, the place to start is an examination of the qualifications one needs to become a maritime pilot in the U.S. When asked whether the highly experienced mariners who compete for pilotage positions in the 24 U.S. states with pilotage statutes are comparable in terms of their maritime background and experience, maritime safety expert and former LA Harbor pilot Captain Mitchell Stoller gave the following answer:

Generally, that is true. To be successful in applying to become a trainee for a pilotage position, a mariner must meet the licensure requirements of the particular state or pilotage ground and have considerable ship handling experience. Where that particular experience is obtained is highly variable. Depending upon the pilotage ground, successful applicants will come from multiple segments of the maritime industry. These include the towboat industry, public ferry systems, Navy ship officers, large commercial vessels including oil tankers, bulk carriers, container ships, car ships, dredges, factory fish processors and others. Throughout the US, highly experienced and skilled mariners from any one of these different components of the US maritime transportation industry have been selected as pilot trainees, successfully completed that training and been issued a state pilot's license.²⁹

²⁹ Stoller, Exh. MSS-01T at 3.

39. The second key factor in assessing the comparability of the Puget Sound Pilotage District to other pilotage grounds is the nature of the grounds including pilot training requirements, traffic level, traffic mix and nature of the conditions encountered on pilotage district waterways. In this case, PSP has assembled considerable evidence comparing its pilotage ground to others on the West Coast, including the two grounds on the Columbia River, the San Francisco Bay and Sacramento River pilotage grounds and the high volume container-dominant import pilotage ground of Los Angeles Harbor. Examination of these West Coast grounds shows that Puget Sound's traffic is the most diverse, covers the largest geographic area and involves every category of assignment type that can be found on the West Coast.

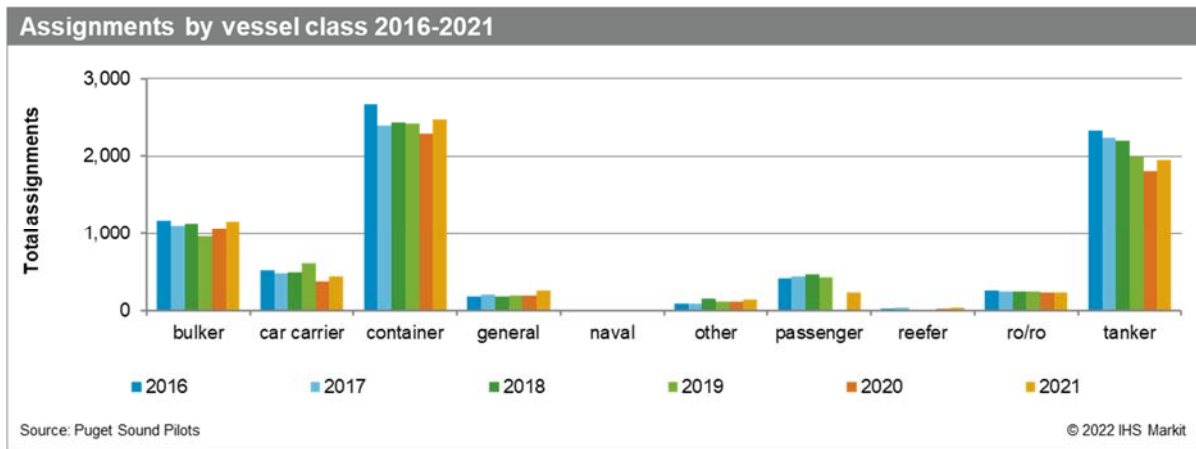
40. In his testimony, PSP Vice President Eric Klapperich describes the high level of skill and experience required of potential PSP trainees, the most common career paths to becoming a Puget Sound pilot and the extensive and difficult character of the 18-month training process. Captain Klapperich also devotes over 10 pages of his testimony to three examples of challenging pilotage assignments that, through the use of charts and video links, give the reader an opportunity to explore how extraordinarily difficult the job of a pilot in Puget Sound really is.³⁰

41. These examples include directing a container ship that is four football fields long through the Port of Seattle's West Waterway in extremely tight quarters where the pilot must choreograph the use of assist tugs to keep the vessel within the dredged channel, away from shore cranes and moved into a crowded berth space at the dock. The second example involves the undocking of an oil tanker at Cherry Point in adverse weather. In winter conditions, the wind and current forces at this terminal can change unpredictably and require extraordinary skill

³⁰ Klapperich, Exh. ECK-01T at 35-46.

on the part of the pilot in deciding how best to deploy the ship's engine and rudder in combination with multiple assist tugs in order to avoid an oil spill-producing casualty. The third example describes the transit of a bulk cargo carrier through the Port of Seattle's West Waterway and up the Duwamish River. To load a cargo of cement at one of two facilities some two miles up the river, these ships must be navigated backwards or stern first through powerful river currents. At the same time, the pilot must negotiate around shore cranes, a 150-foot wide railroad bridge and gillnets deployed by Native fishermen.

42. Compared to other pilotage grounds on the West Coast, the Puget Sound Pilotage District is the largest in terms of total square mileage and the most diverse in terms of types of vessel traffic. The chart below displays the pilotage assignments by vessel class for the six year period of 2016-2021.



43. Compared to the Columbia River, San Francisco Bay and LA Harbor, PSP has the most diverse traffic mix with significant volume in every category except naval vessels. In order, the top ranking PSP traffic categories by vessel class are container, oil tanker, bulk carrier, car carrier, cruise, roll-on/roll-off and general cargo. By comparison, Columbia River ports see predominantly bulk carrier traffic with some car carrier and tanker traffic, but very low volumes of container vessels, and virtually no cruise or ro/ro. In San Francisco, cruise ship

volume is quite low. And in LA Harbor, container ship traffic makes up over 90% of the vessel calls with modest representation in the other cargo categories and virtually no cruise volume.

44. The Columbia River Bar pilotage grounds is described by Captain Dan Jordan, the Columbia River pilotage grounds by Captain Jeremy Nielsen, the San Francisco Bar pilotage ground by Captain Anne McIntyre and the LA Harbor pilotage grounds by Captain Mitchell Stoller. A review of their testimony and that of PSP's Captain Eric Klapperich leads to a pair of conclusions. First, the work of a maritime pilot on any one of these grounds requires a unique skill set that is obtained only after 12 to 20 or more years of experience in a challenging maritime navigation setting and then honed in an extensive training process to develop the local knowledge necessary to serve as a licensed pilot on a particular pilotage ground. Second, the Puget Sound Pilotage District, like others on the West Coast, has its own unique set of pilotage challenges, not the least of which is the extraordinary diversity of vessel types and waterways.

Comparable Pilotage Grounds Witnesses.

1. Captain Mitchell S. Stoller, Exh. MSS-01T, 3-5, 28-29.
2. Captain Eric C. Klapperich, Exh. ECK-01T, 8-45.
3. Captain Dan Jordan, Exh. DJ-01T, 4-8, 16-17.
4. Captain Anne L. McIntyre, Exh. ALM-01T, 3, Exh. ALM-03, 04.
5. Captain Jeremy Nielsen, JN-01T, 2-8.

F. Pilot Compensation and Benefits Throughout the U.S.

45. When it comes to evaluating PSP's compensation and benefits, the place to start is the table below assembling the publicly available data regarding pilot income, medical insurance

benefits and pension benefits for 13 pilot groups (other than PSP) across the United States who represent 42% of U.S. pilots.³¹

PILOT GROUP INCOME & BENEFITS									
	PILOT GROUP	NO. OF PILOTS	DATE OF AUDIT/ORDER	NET INCOME	PROJ. NET INCOME 1/2023	MED. INS. IN TARRIF	PENSION ACCRUAL %	PENSION FUNDING	COLA
1	Crescent River Port Pilots	118	2021	\$586,019	\$621,693	Yes	2%	Farebox	Yes, LPFC 2021 Order
2	Port Everglades Pilots	18	2019	\$549,998	\$607,095	Yes	2.5% (50% Cap)	Farebox	Yes, 2.5% thru 2024
3	New Orleans-Baton Rouge Pilots (NOBRA)	119	2021	\$565,518	\$594,127	Yes	2% (50% Cap)	Farebox	Yes, per LPFC Order
4	Lake Charles Pilots	17	2020	\$533,436	\$550,000	Yes	Individual Pilots	Individual Pilots	Yes, per LPFC Order
5	Associated Branch Pilots	49	2021	\$521,232	\$547,619	Yes	2% (50% Cap)	Farebox	Yes, per LPFC Order
6	Columbia River Bar Pilots	16	2021	\$445,555	\$503,527	Yes	1.25%	Tariff	Yes, Western CPI
7	Columbia River Pilots	41	2021	\$445,555	\$503,527	Yes	1.25%	Tariff	Yes, Western CPI
8	Grays Harbor Pilots	2	2022	\$487,259	\$497,759	Yes	Washington PERS	Public Funding	Yes, Contract (3%-5%)
9	LA Harbor Pilots	16	2019	\$434,712	\$456,719	Yes	City of LA PERS	Public Funding	No
10	San Francisco Bar Pilots	51	2018	\$520,250		No	1.84%	Farebox	No
			2019	\$499,415	\$443,923				
			2020	\$428,539	(average)				
			2021	\$328,154					
11	Great Lakes Pilots	49	2022	\$399,266	\$419,229	No	Individual Pilots	Pilot Group	Yes, 5.0% CPI (Fed Reserve)
12	Puget Sound Pilots	52	2021 DNI	\$400,855	Unknown	No	1.50%	Farebox	2.3% in 2022
			2021 Actual	\$295,616					

46. PSP's compensation expert is David Lough, who has over 40 years' experience as an executive and management level compensation consultant including 23 years with two of the largest compensation consulting firms in the world. Mr. Lough uses the 2023 projected net income figures from the above table to analyze the pay differentials between the Seattle/Tacoma Puget Sound region and the locations of the 11 other pilot groups listed on the table. Using Salary.com, which in his opinion is the “most widely used and most highly regarded compensation survey aggregator,”³² the 2023 net income amounts from the above

³¹ Line 11 on the table above aggregates the three Great Lakes Pilot groups regulated by the U.S. Coast Guard.

³² Lough, Exh. DL-01T at 17.

table are re-expressed to incorporate the pay differential by location compared to Seattle/Tacoma in percentage terms. This generates the pay differential table below:

PAY DIFFERENTIALS FROM LOCATION TO SEATTLE

Pilot Group	Office Location		Differential (source: Salary.com)
1 Crescent River Port Pilots' Association	Metairie	LA	10.5%
2 Port Everglades Pilots' Association	Ft. Lauderdale	FL	12.3%
3 Lake Charles Pilots	Lake Charles	LA	20.7%
4 New Orleans Baton Rouge Steamship Pilots Association (NOBRA)	Metairie	LA	10.5%
5 Associated Branch Pilots/BAR	Metairie	LA	10.5%
6 Columbia River Pilots	Astoria	OR	6.3%
7 Columbia River Bar Pilots	Portland	OR	5.3%
8 Pilotage Division of the Port of Grays Harbor	Aberdeen	WA	9.1%
9 Great Lakes Pilots Associations	Port Huron	MI	8.4%
10 Los Angeles Pilot Service	Los Angeles	CA	-3.3%
11 San Francisco Bar Pilots	San Francisco	CA	-12.5%

Mr. Lough then uses the pay differential data to show a location-based adjustment tied to pay differential by pilot group and generates the median level of pilot income for 2023 for the 11 pilot groups other than the Puget Sound Pilots. This is displayed in the table below:

Pilot Group	Projected 2023 Net Income	Location Adjustment to Seattle Metro	Adjusted Projected 2023 Net Income
1 Crescent River Port Pilots' Association	621,693	10.5%	686,971
2 Port Everglades Pilots' Association	607,095	12.3%	681,768
3 Lake Charles Pilots	550,000	20.7%	663,850
4 New Orleans Baton Rouge Steamship Pilots Association (NOBRA)	594,127	10.5%	656,510
5 Associated Branch Pilots/BAR	547,619	10.5%	605,119
6 Pilotage Division of the Port of Grays Harbor	497,759	9.1%	543,055
7 Columbia River Pilots	503,055	6.3%	534,747
8 Columbia River Bar Pilots	503,055	5.3%	529,717
9 Great Lakes Pilots Associations	419,229	8.4%	454,444
10 Los Angeles Pilot Service	456,719	-3.3%	441,647
11 San Francisco Bar Pilots	443,923	-12.5%	388,433
50th Percentile (Median)	503,055	8.0%	543,055

As explained by Mr. Lough, the compensation profession “has generally adopted use of the median as best practice when representing the middle of a compensation market for a

particular job.”³³ Using this methodology, the median income for these 11 pilot groups in 2023 is \$543,055 while the arithmetic mean is \$562,387. Mr. Lough's opinion regarding the level of net income or DNI that is necessary for PSP to be competitive nationally in attracting a fair share of the best pilot trainee candidates in the United States is clear and succinct:

In my opinion, PSP must offer net income levels comparable to the premier U.S. pilot groups as listed in the table above. Analysis performed to the highest standards prescribed by the compensation profession indicates this falls within a range of \$540,000-\$545,000. Failure to match DNI to competitively-aligned net income will, in my opinion, create undue and undesirable risk to PSP's ability to attract a share of the best pilot trainee candidates in the U.S. and achieve the workforce diversity needed for success. This is especially so considering the significant cost-of-living difference between PSP and the pilot groups in the Midwest and U.S. South where the cost of living is significantly lower than that of the Seattle/Tacoma area. As described earlier, this situation drives significant observed positive pay differentials across between the Puget Sound region and most other areas of the country. To establish pay rates that are competitively aligned and follow both common and best practices, pay rates for PSP pilots should be established with full consideration of the Seattle area's geographic pay differentials from where comparable pilot groups are located.³⁴

Pilot Compensation Witnesses.

1. David Lough, Exh. DL-01T, 1-24.
2. Clayton Diamond, Exh. CLD-01T, 38-41.
3. Captain Ivan Carlson, Exh. IC-01T, 6-11.
4. Bruce J. McNeil, BJM-01T at 1-10.
5. Christopher R. Wood, CRW-01T, 1-7.
6. Walter S. Tabler, WST-01T, 1-6.
7. Captain Sandy Bendixen, SB-01T, 4-9.
8. Captain Deborah D. Dempsey, Exh. DDD-01T, 6-8.
9. Captain Anne L. McIntyre, Exh. ALM-01T, 5-8.

³³ *Id.* at 19.

³⁴ *Id.* at 20.

10. Captain Jeremy Nielsen, Exh. JN-01T, 9-10.

11. Captain Dan Jordan, Exh. DJ-01T, 17-20.

12. Chief Mate Alysia Johnson, Exh. AJ-01T, 7-9.

G. PSP’s Nation-Leading Diversity, Equity and Inclusion Program.

47. Diversity, equity and inclusion is a critical priority in all industries, but in marine pilotage it is potentially a matter of life and death. As Puget Sound Pilot Captain Sandy Bendixen explains in her testimony:

Based on my experience, diversity of career background, maritime work experience, sailing experience, gender and racial background is critical to a pilot group's ability to make the best decisions in a safety-critical transportation role because diversity has been proven to enhance the decision-making process of business organizations, preventing “group think” and mitigating error chain trapping that is critical to promoting safety culture.³⁵

48. Captain Deborah Dempsey – who, among many other achievements, was first graduate of a U.S. maritime academy, first female master on international voyages, first female captain delivering military supplies in a war zone (Persian Gulf War), and first female pilot serving as a Columbia River Bar Pilot – shares Captain Bendixen’s perspective:

In my opinion and experience, the pilot group is also enhanced by gender and racial diversity because pilotage challenges such as how best to handle hypothetical emergency situations or challenging maneuvers in close quarters are vetted more thoroughly when the group examines the issue from a wide range of perspectives and analytical approaches to problem solving.³⁶

Where human life, property and the natural environment all depend on pilots’ decision-making and judgment for their preservation, there can be no question that diversity in the pilot corps is mission critical.

³⁵ Bendixen, Exh. SB-01T at 4.

³⁶ Dempsey, Exh. DDD-01T at 5.

49. It is no secret that, historically, the demographics of the merchant marine generally and pilotage profession in particular have not reflected the diversity of the communities they serve. From PSP's perspective, this is a serious shortcoming that PSP is taking affirmative and meaningful steps to address. As Captain Bendixen explains:

PSP and BPC are doing all we can to promote diversity on all fronts (be it gender, ethnicity or race, economic, education, or professional background) including by developing a DEI policy, an outreach team, working in the local schools and community, and supporting organizations through scholarships and community involvement.³⁷

50. Regarding gender diversity in the pilot corps, a significant barrier is the strain that the traditional seafarer's schedule places on balancing a family life that falls disproportionately on female mariners. Chief Mate Alysia Johnson, a standout mariner who graduated *summa cum laude* from the U.S. Merchant Marine Academy in Kings Point in 2015, has seen first-hand the attrition among her female colleagues in the maritime profession:

I have seen multiple women who are pursuing either a career as a deck officer or in the engine department who ultimately make the decision to terminate their careers at sea in order to have a family. I have also observed that this work cycle barrier to having a family causes some women not to pursue promotions beyond second mate because these women know that they will eventually be quitting their seagoing positions to go ashore and start a family.³⁸

51. To address this issue and encourage more women to pursue careers as pilots, PSP has adopted a nation-leading maternity leave policy that affords pilots as much as six months of pregnancy-related paid time off. This policy is addressed in the testimony of PSP Executive Director Charles Costanzo.³⁹ As Chief Mate Johnson confirms, there is no question that word regarding this policy will spread within the maritime community and will attract exceptionally well qualified female mariners such as herself:

³⁷ Bendixen, Exh. SB-01T at 4.

³⁸ Johnson, AJ-01T at 8.

³⁹ Costanzo, CPC-01T at 6-7.

First, the adoption of this type of progressive family-friendly policy will become known throughout the industry fairly quickly. This is because, in my experience, mariners commonly share information back and forth about the details of their compensation and benefits packages and compare those to what is available through other companies or union contracts. Second, if it became widely known that there were several pilot groups in the United States that offered a similar maternity leave benefit, I believe it would cause a significant number of the women who are currently dropping out of their deck department careers to pursue them for the 10 to 15 years necessary to be qualified to apply for a maritime pilot position. This is because, compared to the extended work-cycle time served on the vessel for seagoing deck careers, a maritime pilot is living at home and traveling during their on-duty work cycle to and from the pilotage assignments within their pilotage district.⁴⁰

52. To attract and maintain a diverse pilot corps from within a very small national pool of the most highly qualified candidates, PSP's efforts must be supported by a compensation package that is competitive. As Captain Dempsey explains in her testimony, it is no coincidence that the U.S. pilot group with the most female pilots (Houston Pilots) earn relatively high pay as compared to other pilot groups.⁴¹ With the UTC having slashed pilots' medical benefits and approved a tariff in the last rate case that has left PSP ranked dead last in distributable net income among the 14 pilot groups for which data is publicly available, there can be no doubt that UTC's underfunding of the pilotage program is directly undermining PSP's DEI advancement efforts. Captain Bendixen – who ranked first on her trainee exam, has taken on a leadership role within PSP and the international pilot community particularly on matters of pilot safety and is an inspiring figure to any young mariner regardless of his or her background – sums up in clear terms why this completely unacceptable state of affairs should be an affront to every member of this Commission:

On a personal level, I find it deeply upsetting that at this time I cannot honestly and in good conscience mentor and encourage an interested female captain to pursue a career with Puget Sound Pilots when I know full well that the

⁴⁰ Johnson, AJ-01T at 8-9.

⁴¹ Dempsey, DDD-01T at 7.

financial benefits of almost any other pilotage district in the country are superior to Puget Sound, and that for the first time in my and most of my colleagues' professional maritime careers we are soon to be entirely without funded medical benefits.⁴²

53. DEI matters to PSP precisely because a diverse pilot corps is a better, safer pilot corps that provides better protection to the State, its citizens, and its ecology. PSP's efforts to improve the association through inclusive policies and outreach should not be undermined by compensation that is simply not competitive. The Commission should correct its mistake in the prior rate case and fund PSP to a level that is sufficient to attract the most highly qualified candidates from the national pool such as Chief Mate Johnson and her peers.

DEI Witnesses.

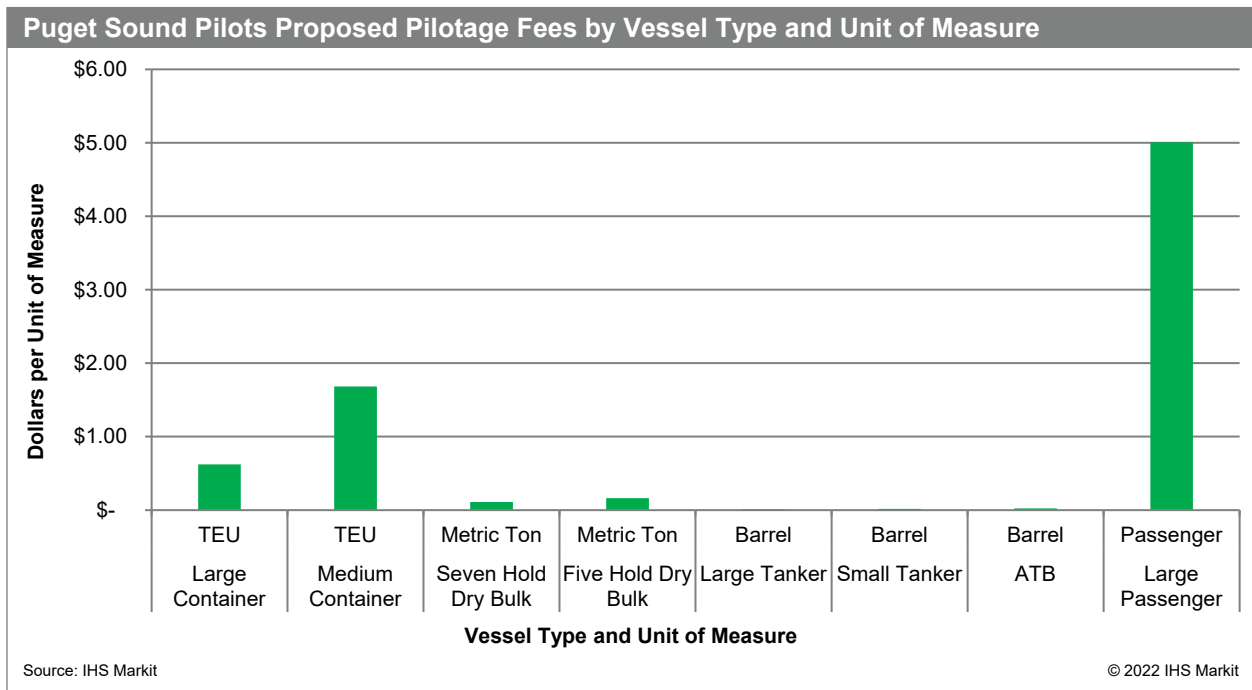
1. Captain Sandy Bendixen, Exh. SB-01T, 4-9.
2. Charles P. Costanzo, Exh. CPC-01T, 4-7.
3. David Lough, Exh. DL-01T, 21-23.
4. Captain Mitchell S. Stoller, Exh. MSS-01T, 20-22, 30.
5. Captain Anne L. McIntyre, Exh. ALM-01T, 7-8.
6. Captain Deborah R. Dempsey, Exh. DDD-01T, 3-9.
7. Chief Alysia Johnson, Exh. AJ-01T, 7-9.

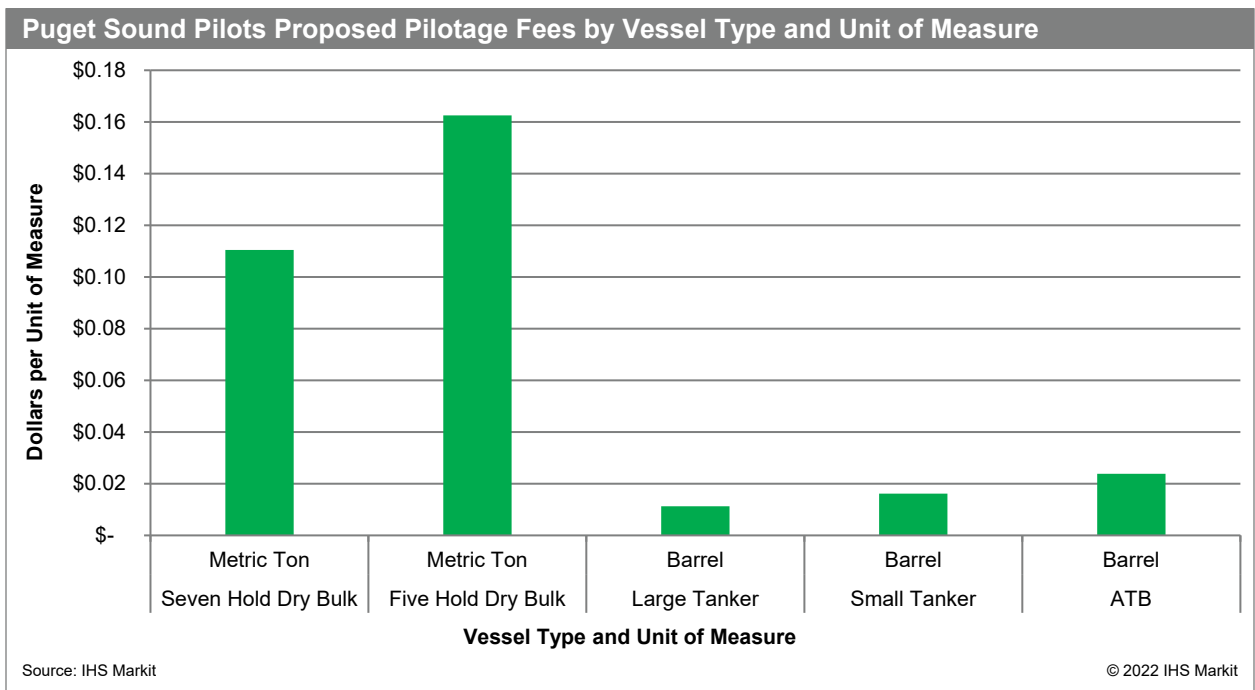
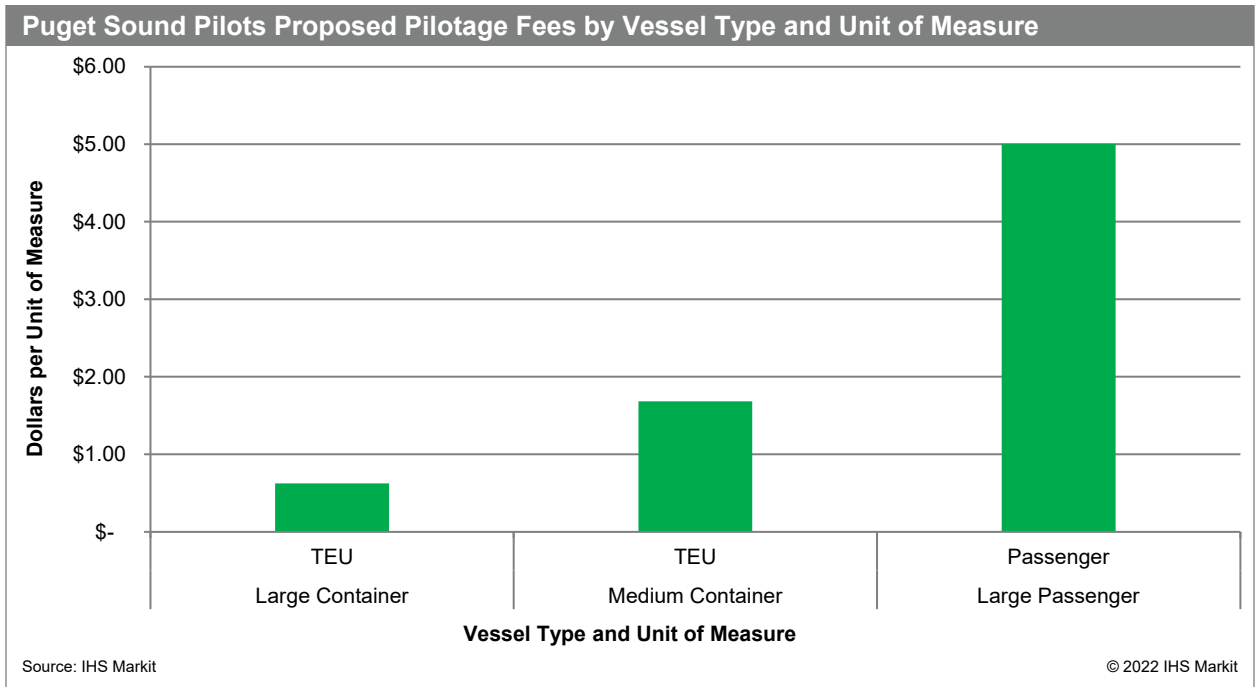
H. The Absolute Insignificance of Pilotage Costs to Where Ships Call.

When it comes to the question of funding the pilotage system serving Puget Sound, three points should be emphasized. First, just like in Oregon where safety is the "primary consideration" of the pilotage system, Washington law clearly requires the funding of the Puget Sound Pilots at the level necessary to achieve "best achievable protection" against oil spills and other marine casualties. Second, not a dime of pilotage costs is collected through taxation of Washington

⁴² Bendixen, SB-01T at 5-6.

residents: 100% of the system is funded by the ships presenting the risk to Puget Sound waters in the form of their operating condition, fuel stores and at times hazardous cargo. Third, as demonstrated below, pilotage costs on a per voyage basis are absolutely insignificant from the standpoint of maritime economics and do not drive where ships make their ports of call in the U.S. The insignificance of pilotage fees to the world's shipping fleet is demonstrated by the three charts below showing the effect of PSP's proposed rates by vessel type and unit of measure:





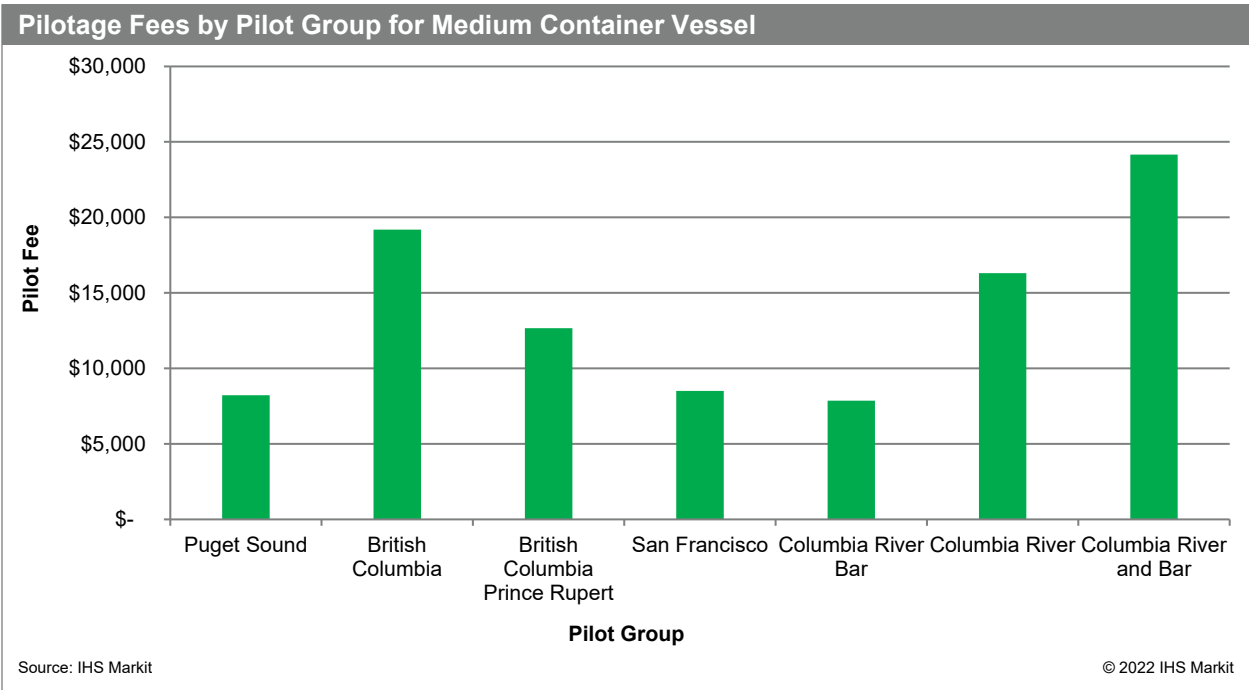
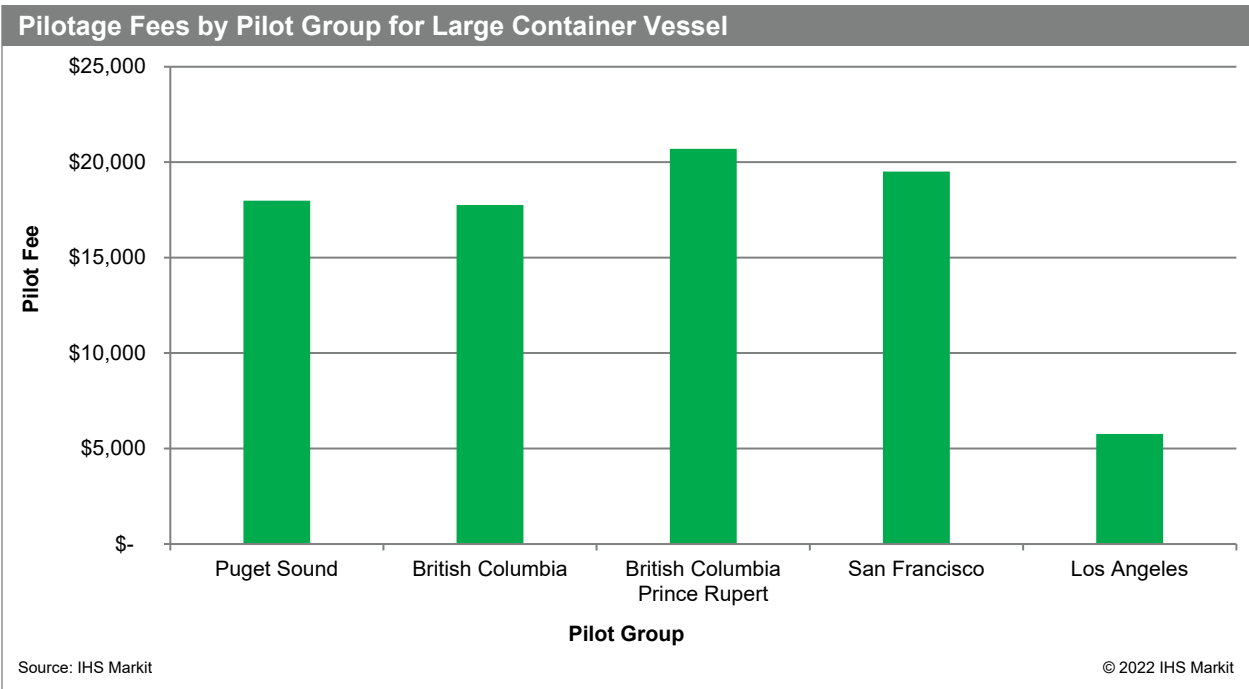
54. Shipping economist Ken Eriksen puts these proposed rates in context based upon his examination of the relationship between the current revenue being earned by large container vessels and the value of the crude oil on a large oil tanker in the pilotage fees proposed by PSP in this rate case:

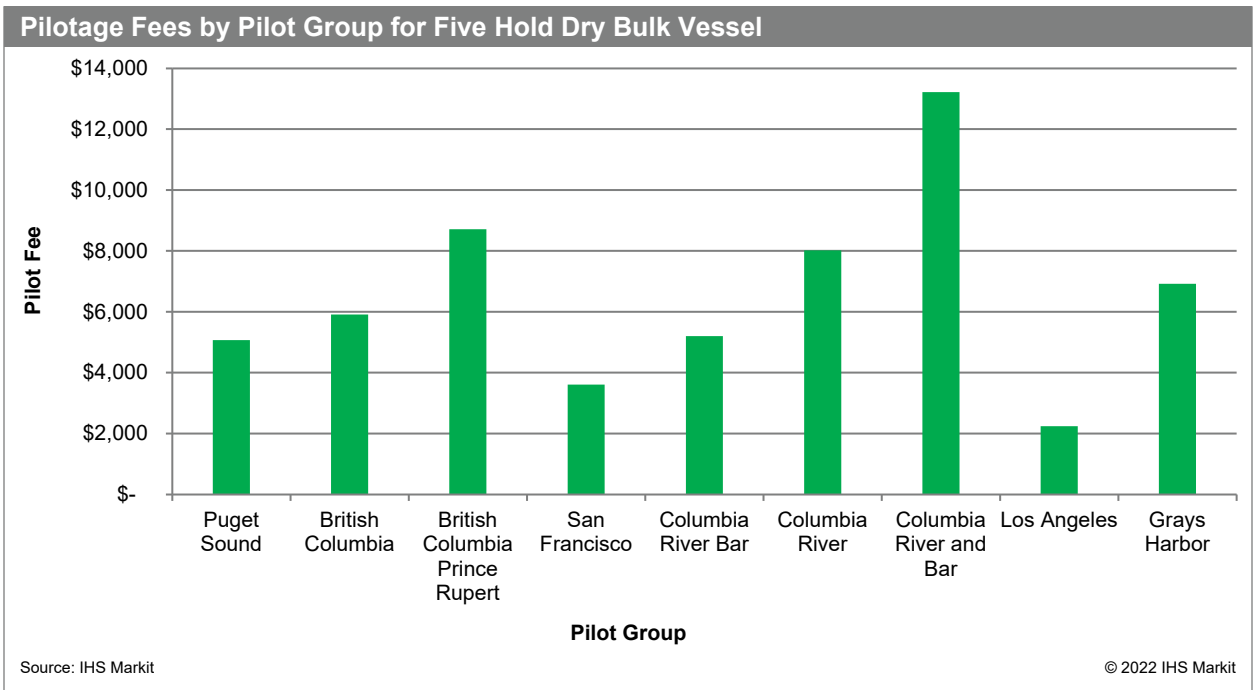
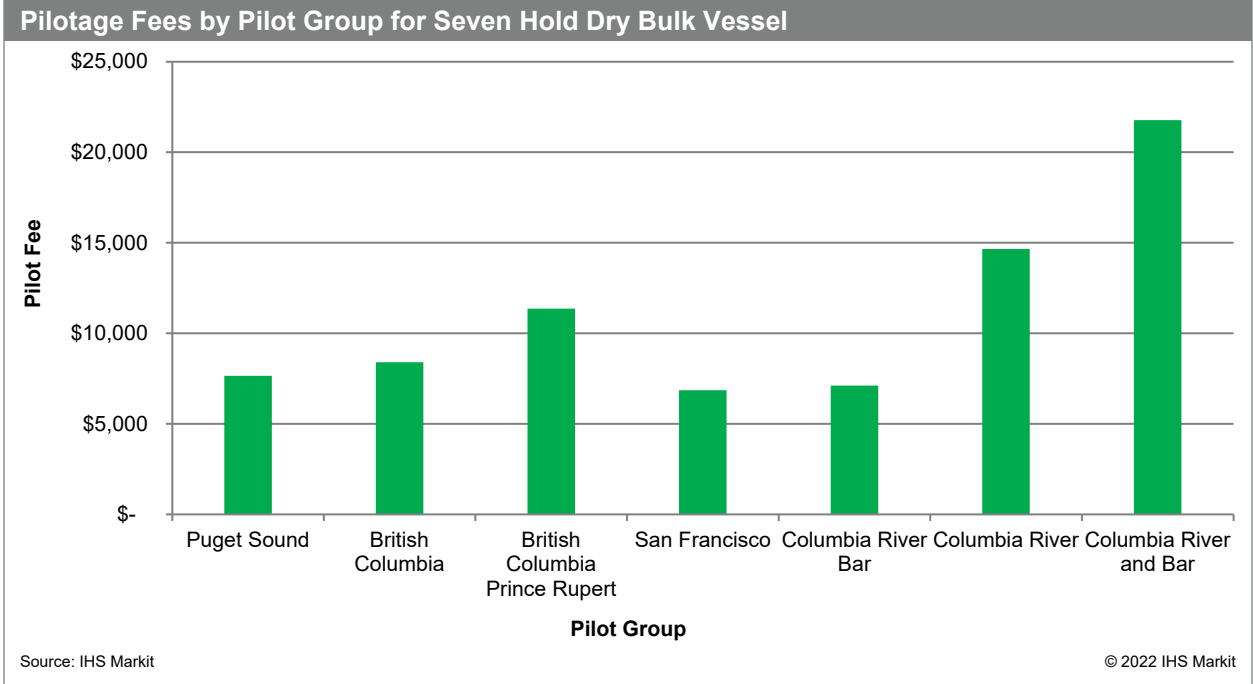
The clear insignificance of these fees to the owners or operators of ultra-large container vessels is demonstrated by a comparison of the revenues earned using current freight rates and the ultimate cost per container (TEU or 20-foot equivalent). For the ultra-large container vessel with 13,200 TEUs, the gross revenue at current freight rates from Asia to the West Coast totals \$79 million. This compares with a cost per TEU of less than one dollar per TEU to pay the rates proposed by PSP, specifically 62 cents per TEU. In a different example using value of the cargo, for the large tanker carrying one million barrels of crude oil, the gross value of the cargo at current market rates is \$114 million. This compares to a PSP pilotage cost per gallon (42 gallons per barrel) of a tiny fraction of a cent per gallon on the oil tanker, specifically 4/100s of a cent.⁴³

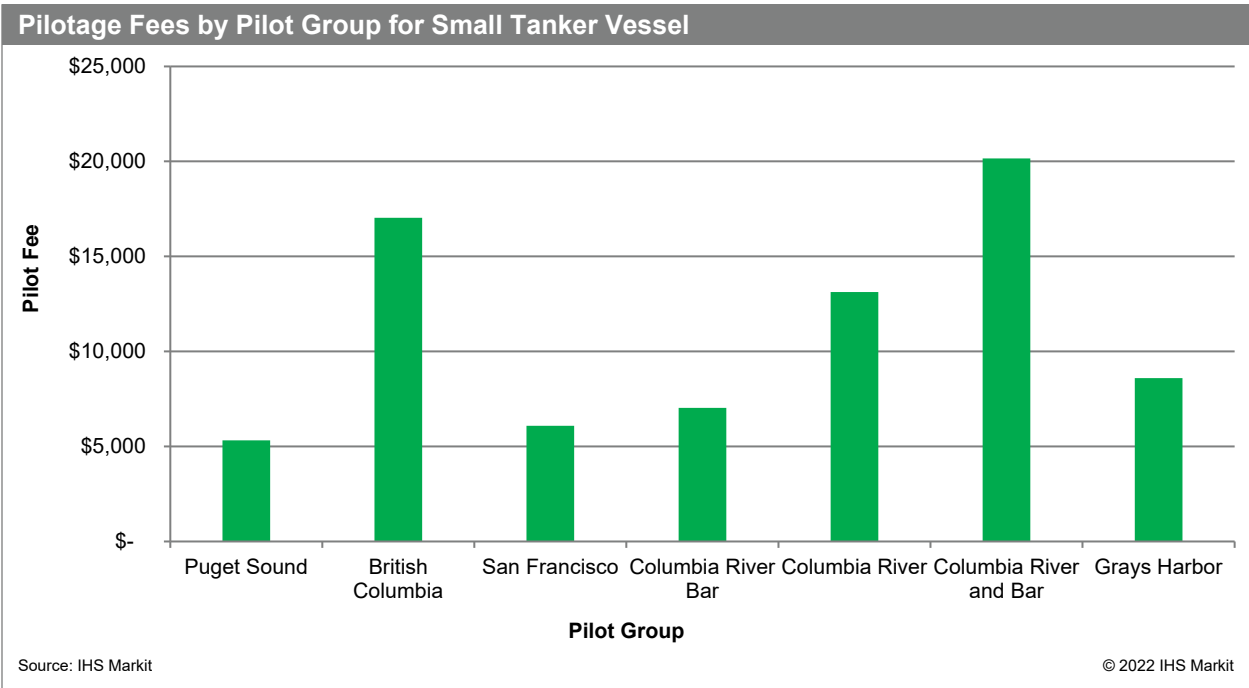
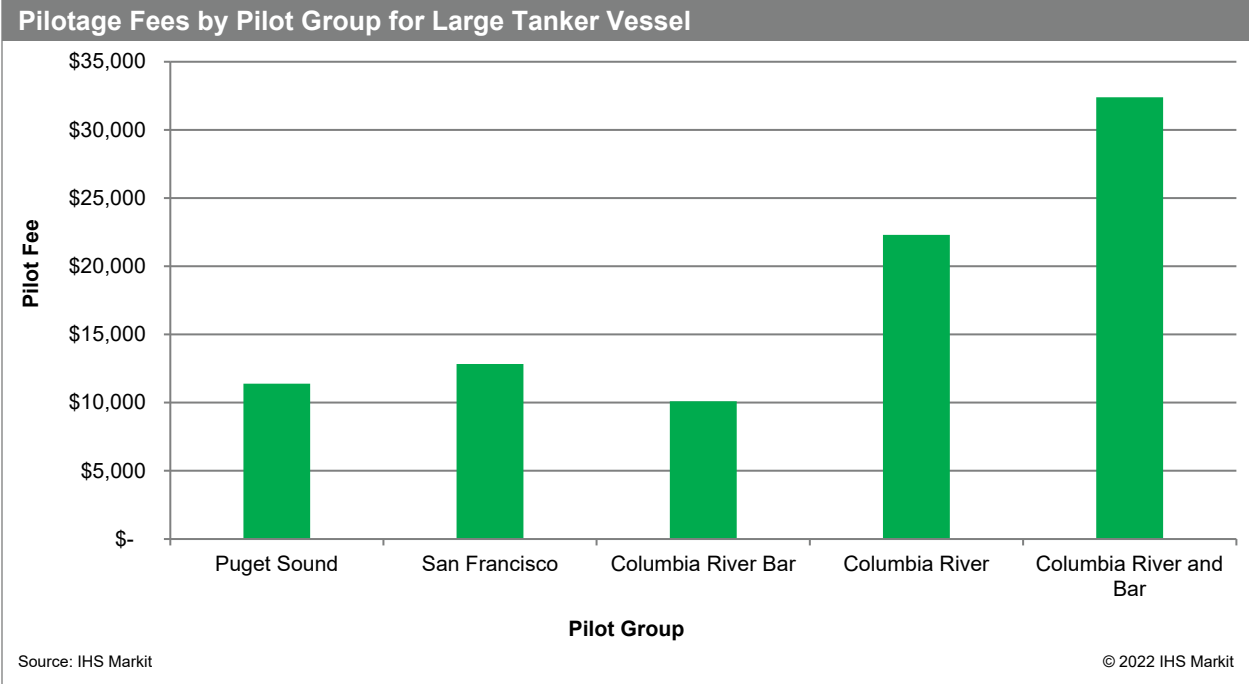
55. Another relevant question is how PSP's proposed pilotage rates compare to the rates charged to various vessel types in the other major ports on the West Coast. Mr. Eriksen prepared multiple rate comparison charts using PSP's proposed pilotage rates as of 2024, which incorporate not only the 35.6% increase that would be effective in early 2023, but also the added \$4.86 million necessary to transition PSP's unfunded pension plan to a fully funded defined-benefit plan. The charts below compare those rates to multiple West Coast ports for large and medium container vessels, two common sizes of bulk cargo vessel, large and small oil tankers, ATBs (articulated tug and barge) and cruise ships. As these charts demonstrate, there is not a single category of vessel type where Puget Sound's 2024 pilotage rates (if approved by the UTC) would be the highest on the West Coast. As shipping economist Ken Eriksen states in his testimony, PSP's proposed rates “are a good value.”⁴⁴

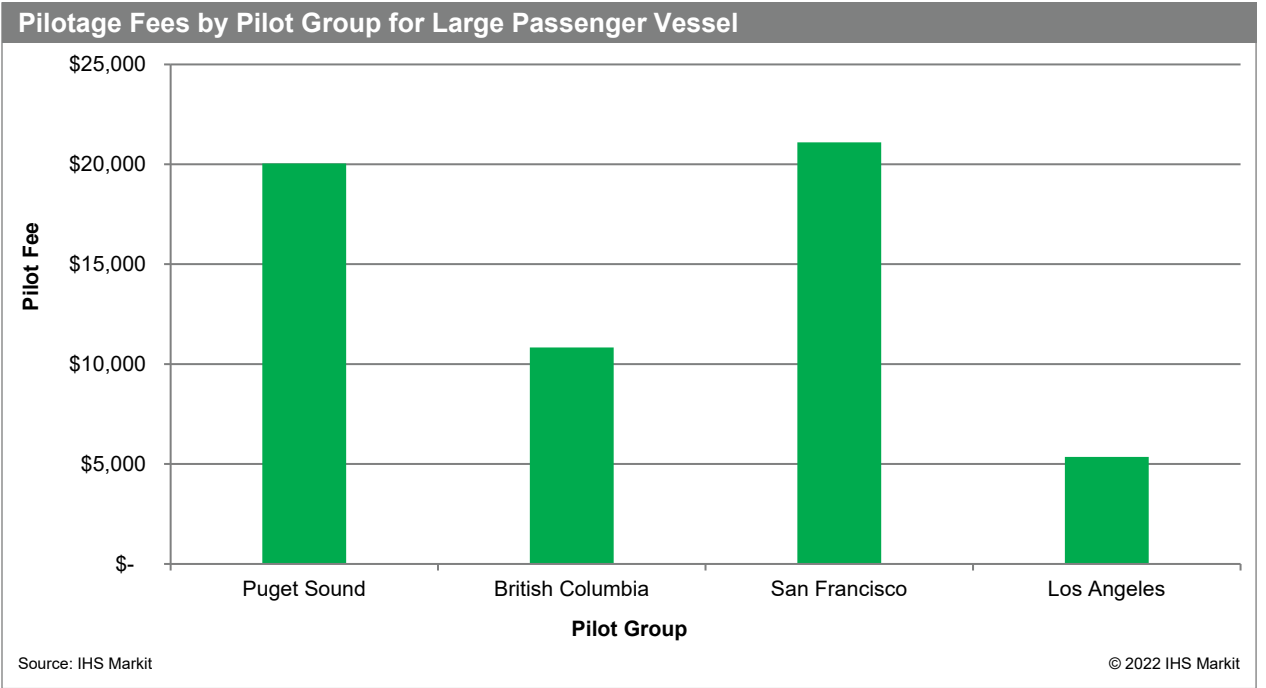
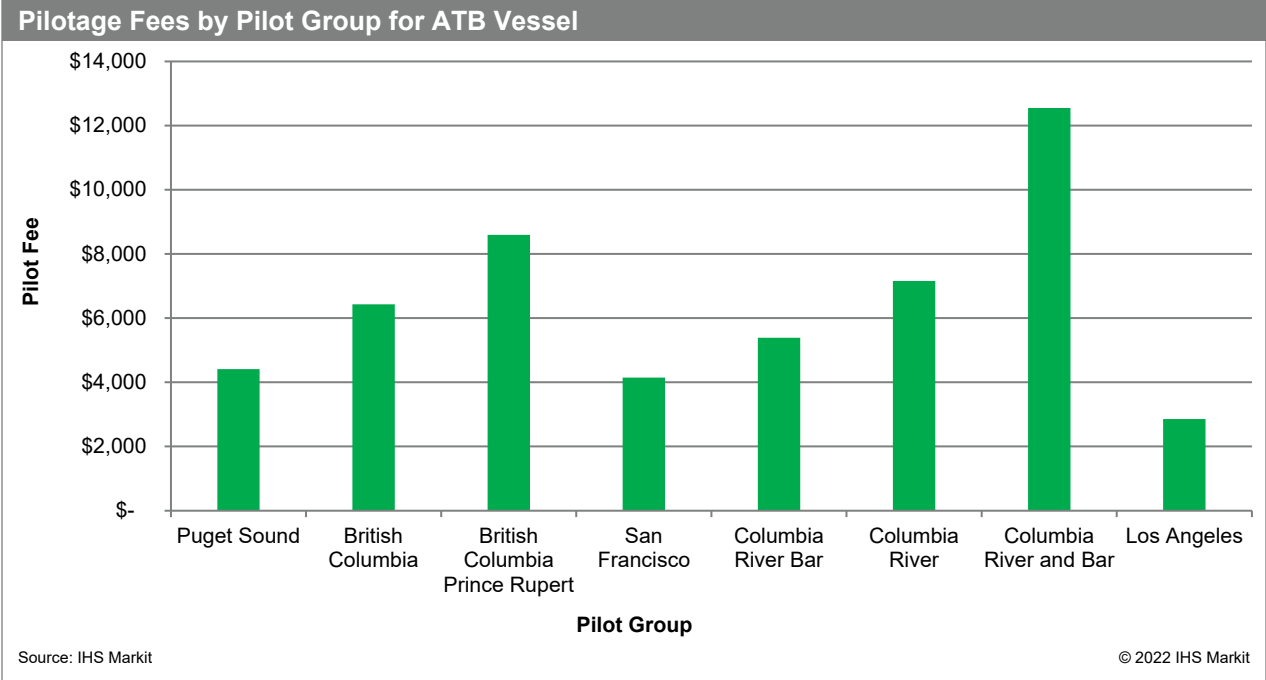
⁴³ Eriksen, Exh. KAE-01T at 41.

⁴⁴ *Id.* at 39.









56. Mr. Eriksen also notes that pilotage fees “are only an incidental component of a minor category of the cost of an oceangoing voyage for a cargo carrier.” In his opinion, the pilotage fee increase proposed by PSP is “completely insignificant” to ocean carriers, a view that is strongly supported by treatises authored by well-regarded maritime industry academics focused on shipping economics. Indeed, in his opinion, even a doubling or tripling of PSP’s pilotage fees “would have no effect on the number of oceangoing vessels calling Puget Sound.”⁴⁵

Maritime Economics Witnesses.

1. Ken A. Eriksen, Exh. KAE-01T, 2-43.
2. Clayton L. Diamond, Exh. CLD-01T, 38.

I. PSP’s Proposed Tariff and Automatic Adjusters.

57. PSP's proposed tariff, which seeks a 35.6% increase in the existing \$35.4 million revenue requirement to \$48 million, is described in the testimony of PSP President Captain Ivan Carlson. The supporting calculations by tariff item, whether increased, reduced or unchanged, are detailed in the extraordinarily large spreadsheet submitted as Captain Carlson's workpapers. As those calculations reveal, fully 71.5% of the requested increase is necessary to fund the increase in pilot DNI and benefits to a competitive national level. Specifically, PSP proposes that DNI be increased from from \$410,075 per FTE pilot to \$543,055 and that PSP's medical insurance benefit be restored to full funding.

58. In response to the UTC directive that PSP plan for a transition from its unfunded pay-as-you-go pension plan to a fully funded defined-benefit pension plan, PSP convened stakeholder sessions that ultimately produced agreement with two of the three major stakeholders,

⁴⁵ *Id.* at 42.

Northwest Marine Trade Association (the largest recreational boating organization in the U.S.) and Pacific Yacht Management. These two parties agree with PSP that its pension system provides an appropriate level of benefits to retirees and should transition to full funding beginning on January 1, 2024. Over a 15-year timeframe, pilotage rates will have to increase by approximately \$6 million per year to achieve full funding, but in the 16th year and all following years, a fully funded PSP pension plan will deliver both long-term rate stability and significantly lower costs. Despite these clear benefits, PMSA opposes continuation of the PSP pension plan in any form that resembles the current plan.

59. In addition, in order to modernize PSP's tariff to incorporate the best practices utilized in other states regulating compulsory pilotage systems, PSP proposes seven automatic tariff adjusters designed to tailor tariff increases or decreases to actual rather than predicted data. This is especially important given the current and predicted future volatility of vessel traffic in Puget Sound as detailed in the testimony of shipping economist Ken Eriksen, who presents 10 pages of charts and data supporting his opinion that continued vessel traffic volatility “is likely and that it is not realistic to predict with any degree of certainty the volume of vessel traffic annually in Puget Sound.”⁴⁶

60. PSP presents two major arguments in support of an annual cost-of-living adjustment. First, it is a predominant practice throughout the maritime states as revealed in a comprehensive memorandum that is an exhibit to the testimony of compensation expert David Lough.⁴⁷ Second, as experience in other maritime states demonstrates, the use of an annual COLA that adjusts for inflation significantly reduces the need for expensive and time-consuming general rate cases.

⁴⁶ *Id.* at 16.

⁴⁷ Lough, Exh. DL-24.

61. The seven automatic tariff adjusters proposed by PSP include the following:

1. An annual traffic-based tariff adjuster truing up the tariff to actual traffic on a trailing annual basis;
2. An annual cost-of-living increase tied to the Consumer Price Index for the Seattle Tacoma-Bellevue area;
3. A quarterly adjuster increasing the tariff for the cost of new pilot FTEs above the FTE level funded in the final order and decreasing the tariff by the same cost for new retirees;
4. Beginning in 2024, adopting an annual pension adjuster to cover the cost of retirees being paid retirement benefits under PSP's pay-as-you-go unfunded pension plan based upon an actuarial report that determines the amount of the pension surcharge;
5. Beginning in 2024, adopting an annual pension adjuster to fund the transition of PSP's unfunded pension plan to a fully funded defined-benefit plan within 15 years and remaining fully funded thereafter based upon annual actuarial reports that determine the amount of the pension surcharge;
6. An annual pilot station/pilot boat expense tariff adjuster that collects the audited amount of these costs in a calendar year in the third calendar year following PSP incurring those costs, which are determined by audit in the second calendar year following PSP incurring those costs; and
7. An annual pilot station/pilot boat capital cost tariff adjuster which establishes a capital cost surcharge that becomes effective following submission of a contract by the proposed builder or supplier, the proposed financing package with a financial institution and approval by the UTC.

PSP Tariff Proposal Witnesses.

1. Captain Ivan Carlson, Exh. CI-01T, 28-31.
2. Magen Brooks, Exh. MB-01T, 2-6 (2022, 2023 expenses).
3. Weldon T. Burton, Exh. WTB-01T, 1-3 (2021 expenses).
4. Jessica J. Norris, Exh. JJN-01T, 1-5 (2021 Audit).
5. Bruce J. McNeil, Exh. BJM-01T, 1-10 (Pension).
6. Christopher R. Wood, Exh. CRW-01T, 1-7 (Pension).

7. Walter S. Tabler, Exh. WST-01T, 1-6 (Pension).
8. Ken A. Eriksen, Exh. KAE-01T, 6-16 (Traffic Adjuster).
9. Clayton L. Diamond, Exh. CLD-01T, 38-41.
10. Captain Dan Jordan, Exh. DJ-01T, 18-20 (COLA).
11. Captain Jeremy Nielsen, Exh. JN-01T, 9-10 (COLA).
12. Captain Joe Semler, Exh. JS-01T, 1-4 (Pilot Boat expenses).

J. TOTE Maritime’s Request for Special Treatment.

62. In a motion for reconsideration of the Commission's Order 9, TOTE Maritime, Inc. (“TOTE”) seeks a preferred lower pilotage rate compared to other large cargo vessels. Prior to the UTC's adoption in Order 9 of the 1969 International Convention on Tonnage Measurement of Ships, (referred to as “GT ITC”), as the uniform metric for determining PSP's pilotage rates, TOTE by historical accident was the only PSP customer benefiting from an antiquated and inaccurate tonnage metric based on a ship's gross registered tonnage or “GRT.” Due to a confusing record and lack of evidence on this issue, the UTC in February 2022 ordered PSP to establish a regulatory differential account for the difference in charges to TOTE based on GT ITC compared to charges based on GRT and to present the issue for resolution in this general rate case.
63. To address this highly technical question, PSP engaged Phil Essex, an expert with over 30 years of experience as a vessel tonnage measurer who provides technical support for tonnage design for U.S. flagged vessels. By “tonnage design,” Mr. Essex means the “design strategies and methods” that are used to limit or reduce a ship's gross registered tonnage or GRT. By using these techniques, which Mr. Essex candidly refers to as “gimmicks,” a vessel owner

can legally reduce a ship's GRT well below what one would expect relative to the vessel's actual size. Indeed, Mr. Essex is regularly hired by shipowners and naval architecture firms “to develop strategies to reduce a vessel’s GRT below key U.S. regulatory thresholds.”⁴⁸

64. TOTE’s roll-on/roll-off Orca class vessels provide an excellent example of how use of GRT gimmicks will artificially reduce the cargo capacity and thus the GRT of that vessel. Because GRT allows for the subtraction of cargo space on decks with openings, the difference between GT ITC's consistent tonnage measurement and that of the gimmick-riddled GRT can be dramatic. The image below circles in blue the apparent tonnage openings on the stern and port side of one of TOTE’s Orca class vessels. GRT allows both of these cargo-holding decks to be excluded from the GRT measurement.

⁴⁸ Essex, Exh. PE-01T at 1.



65. Contrary to the statement in TOTE’s motion, these two decks regularly hold substantial quantities of roll-on/roll-off cargo. There is simply no reasonable basis on which to grant TOTE the special exemption that the company requests. The Essex testimony and the literature it cites unequivocally establish the fact that GT ITC is the most accurate means of measuring a ship's size, which corresponds closely with its relative pilotage difficulty and risk plying the waters of Puget Sound.

Tonnage Measurement Witnesses.

1. Phillip Essex, Exh. PE-01T, 1-18.
2. Captain Eric Klapperich, Exh. ECK-01T, 48-51.

Respectfully submitted this 2nd day of August, 2022.

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