



DEPARTMENT OF HOMELAND SECURITY

Coast Guard

46 CFR Parts 401 and 404

USCG-2021-0431

RIN 1625-AC70

Great Lakes Pilotage Rates – 2022 Annual Review and Revisions to Methodology

AGENCY: Coast Guard, DHS.

ACTION: Notice of proposed rulemaking; request for comments.

SUMMARY: In accordance with the statutory provisions enacted by the Great Lakes Pilotage Act of 1960, the Coast Guard is proposing new base pilotage rates for the 2022 shipping season. This proposed rule would adjust the pilotage rates to account for changes in district operating expenses, an increase in the number of pilots, and anticipated inflation. In addition, this proposed rule would make a policy change to always round up in the staffing model. The Coast Guard is also proposing methodology changes to factor in an apprentice pilot's compensation benchmark for the estimated number of apprentice pilots with a limited registration. The Coast Guard estimates that this proposed rule would result in a 12-percent increase in pilotage operating costs compared to the 2021 season.

DATES: Comments and related material must be received by the Coast Guard on or before [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may submit comments identified by docket number USCG-2021-0431 using the Federal Decision Making Portal at <https://www.regulations.gov>. See the “Public Participation and Request for Comments” portion of the **SUPPLEMENTARY**

INFORMATION section for further instructions on submitting comments.

FOR FURTHER INFORMATION CONTACT: For information about this document, call or email Mr. Brian Rogers, Commandant (CG-WWM-2), Coast Guard; telephone 202-372-1535, email *Brian.Rogers@uscg.mil*, or fax 202-372-1914.

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I. Public Participation and Request for Comments

The Coast Guard views public participation as essential to effective rulemaking, and will consider all comments and material received during the comment period. Your comment can help shape the outcome of this rulemaking. If you submit a comment, please include the docket number for this rulemaking, indicate the specific section of this document to which each comment applies, and provide a reason for each suggestion or recommendation.

Submitting comments. We encourage you to submit comments through the Federal Decision Making Portal at <https://www.regulations.gov>. To do so, go to <https://www.regulations.gov>, type USCG-2021-0431 in the search box and click "Search." Next, look for this document in the **Search Results** column, and click on it. Then click on the **Comment** option. If you cannot submit your material by using <https://www.regulations.gov>, call or email the person in the **FOR FURTHER INFORMATION CONTACT** section of this proposed rule for alternate instructions.

Viewing material in docket. To view documents mentioned in this proposed rule

as being available in the docket, find the docket as described in the previous paragraph, and then select “Supporting & Related Material” in the Document Type column. Public comments will also be placed in our online docket and can be viewed by following instructions on the <https://www.regulations.gov> Frequently Asked Questions webpage. We review all comments received, but we will only post comments that address the topic of the proposed rule. We may choose not to post off-topic, inappropriate, or duplicate comments that we receive.

Personal information. We accept anonymous comments. Comments we post to <https://www.regulations.gov> will include any personal information you have provided. For more about privacy and submissions in response to this document, see the Department of Homeland Security’s eRulemaking System of Records notice (85 **Federal Register** (FR) 14226, March 11, 2020).

Public meeting. We do not plan to hold a public meeting, but we will consider doing so if we determine from public comments that a meeting would be helpful. We would issue a separate **Federal Register** notice to announce the date, time, and location of such a meeting.

II. Abbreviations

APA	American Pilots’ Association
BLS	Bureau of Labor Statistics
CFR	Code of Federal Regulations
CPA	Certified public accountant
CPI	Consumer Price Index
DHS	Department of Homeland Security
Director	U.S. Coast Guard’s Director of the Great Lakes Pilotage
ECI	Employment Cost Index
FOMC	Federal Open Market Committee
FR	Federal Register
GLPA	Great Lakes Pilotage Authority (Canadian)
GLPMS	Great Lakes Pilotage Management System
LPA	Lakes Pilots Association
NAICS	North American Industry Classification System
NPRM	Notice of proposed rulemaking
OMB	Office of Management and Budget
PCE	Personal Consumption Expenditures
Q4	Fourth quarter

§	Section
SBA	Small Business Administration
SLSPA	Saint Lawrence Seaway Pilotage Association
U.S.C.	United States Code
WGLPA	Western Great Lakes Pilots Association

III. Executive Summary

Pursuant to 46 U.S.C. Chapter 93,¹ the Coast Guard regulates pilotage for oceangoing vessels on the Great Lakes and St. Lawrence Seaway — including setting the rates for pilotage services and adjusting them on an annual basis for the upcoming shipping season. The shipping season begins when the locks open in the St. Lawrence Seaway, which allows traffic access to and from the Atlantic Ocean. The opening of the locks varies annually depending on waterway conditions but is generally in March or April. The rates, which for the 2021 season range from \$337 to \$800 per pilot hour (depending on which of the specific six areas pilotage service is provided), are paid by shippers to the pilot associations. The three pilot associations, which are the exclusive U.S. source of registered pilots on the Great Lakes, use this revenue to cover operating expenses, maintain infrastructure, compensate apprentice pilots (previously referred to as applicants) and registered pilots, acquire and implement technological advances, train new personnel, and allow partners to participate in professional development.

In accordance with statutory and regulatory requirements, we have employed a ratemaking methodology which was introduced originally in 2016. Our ratemaking methodology calculates the revenue needed for each pilotage association (operating expenses, compensation for the number of pilots, and anticipated inflation), and then divides that amount by the expected demand for pilotage services over the course of the coming year, to produce an hourly rate. We currently use a 10-step methodology to calculate rates. We explain in detail in the **Discussion of Proposed Methodological and**

¹ Title 46 of the United States Code (U.S.C.), Sections 9301-9308.

Other Changes in section VI of the preamble to this notice of proposed rulemaking (NPRM).

As part of our annual review, in this NPRM we are proposing new pilotage rates for 2022 based on the existing methodology. The Coast Guard estimates that this proposed rule would result in a 12-percent increase in pilotage operating costs compared to the 2021 season. The result would be an increase in rates for all areas in District One, District Three, and the undesignated area of District Two. The rate for the designated area of District Two would decrease. These proposed changes are largely due to a combination of three factors: (1) the addition of apprentice pilots to step 3 with a target wage of 36 percent of pilot target compensation (36 percent of the increase), (2) adjusting target pilot compensation for both the difference in past predicted and actual inflation and predicted future inflation (23 percent of the increase), and (3) the net addition of two registered pilots at the beginning of the 2022 shipping season (22 percent of the increase), one for the undesignated area of District One and one for the undesignated area of District Two. The other 19 percent of the increase results from differences in traffic levels between the 2018, 2019, and 2020 shipping seasons. The Coast Guard uses a 10-year average when calculating traffic to smooth out variations in traffic caused by global economic conditions, such as those caused by the COVID-19 pandemic. The overall 12-percent increase in revenue needed is consistent with the increases from the 2019² and 2018³ rules, which increased rates by 11 percent and 13 percent respectively, though greater than the increases in the last 2 years.

The Coast Guard is also proposing one policy change and one change to the ratemaking methodology. First, the Coast Guard proposes to change the way we determine how many pilots are needed for the upcoming season in the staffing model

² 84 FR 20551, 20573 (May 10, 2019), <https://www.regulations.gov/document/USCG-2018-0665-0012>.

³ 83 FR 26162, 26189 (June 5, 2018), <https://www.regulations.gov/document/USCG-2017-0903-0011>.

(Volume 82 of the **Federal Register** (FR) at Page 41466, and table 6 at Page 41480, August 31, 2017), by always rounding up the final number to the nearest whole number. Second, we also propose to include in the methodology a calculation for a wage benchmark for apprentice pilots conducting pilotage on a limited registration issued by the Director. Although it is not a change to existing ratemaking policy, we are proposing to list apprentice pilot operating expenses within the approved operating expenses in § 404.2 “Procedure and criteria for recognizing association expenses,” used in step 1 of the rulemaking. These operating expenses have been included in past ratemakings and this is a codification of existing policy in order to distinguish apprentice pilot expenses from apprentice pilot wages.

Based on the ratemaking model discussed in this NPRM, we are proposing the rates shown in table 1.

Table 1 — Current and Proposed Pilotage Rates on the Great Lakes

Area	Name	Final 2021 Pilotage Rate	Proposed 2022 Pilotage Rate
District One: Designated	St. Lawrence River	\$800	\$818
District One: Undesignated	Lake Ontario	\$498	\$557
District Two: Designated	Navigable waters from Southeast Shoal to Port Huron, MI	\$580	\$574
District Two: Undesignated	Lake Erie	\$566	\$651
District Three: Designated	St. Marys River	\$586	\$685
District Three: Undesignated	Lakes Huron, Michigan, and Superior	\$337	\$375

This proposed rule would affect 56 U.S. Great Lakes pilots, 3 pilot associations, and the owners and operators of an average of 293 oceangoing vessels that transit the Great Lakes annually. This proposed rule is not economically significant under Executive Order 12866 and would not affect the Coast Guard's budget or increase Federal spending. The estimated overall annual regulatory economic impact of this rate change is a net increase of \$3,527,425 in estimated payments made by shippers during the 2022 shipping season. This NPRM establishes the 2022 yearly compensation for pilots on the Great Lakes at \$393,461 per pilot (a 3.8 percent increase over their 2021 compensation). Because the Coast Guard must review, and, if necessary, adjust rates each year, we analyze these as single-year costs and do not annualize them over 10 years. Section VIII of this preamble provides the regulatory impact analyses of this proposed rule.

IV. Basis and Purpose

The legal basis of this rulemaking is 46 U.S.C. Chapter 93,⁴ which requires foreign merchant vessels and U.S. vessels operating “on register” (meaning U.S. vessels engaged in foreign trade) to use U.S. or Canadian pilots while transiting the U.S. waters of the St. Lawrence Seaway and the Great Lakes system.⁵ For U.S. Great Lakes pilots, the statute requires the Secretary to “prescribe by regulation rates and charges for pilotage services, giving consideration to the public interest and the costs of providing the services.”⁶ The statute requires that rates be established or reviewed and adjusted each year, not later than March 1.⁷ The statute also requires that base rates be established by a full ratemaking at least once every 5 years, and, in years when base rates are not

⁴ 46 U.S.C. Sections 9301-9308.

⁵ 46 U.S.C. 9302(a)(1).

⁶ 46 U.S.C. 9303(f).

⁷ *Id.*

established, they must be reviewed and, if necessary, adjusted.⁸ The Secretary's duties and authority under 46 U.S.C. Chapter 93 have been delegated to the Coast Guard.⁹

The purpose of this NPRM is to propose new pilotage rates for the 2022 shipping season. The Coast Guard believes that the proposed new rates will continue to promote our goal as outlined in title 46 of the Code of Federal Regulations (CFR), section 404.1 of promoting safe, efficient, and reliable pilotage service in the Great Lakes by generating for each pilotage association sufficient revenue to reimburse its necessary and reasonable operating expenses, fairly compensate trained and rested pilots, and provide appropriate profit to use for improvements.

V. Background

Pursuant to 46 U.S.C. 9303, the Coast Guard, in conjunction with the Canadian Great Lakes Pilotage Authority (GLPA), regulates shipping practices and rates on the Great Lakes. Under Coast Guard regulations, all vessels engaged in foreign trade (often referred to as "salties") are required to engage U.S. or Canadian pilots during their transit through the regulated waters.¹⁰ U.S. and Canadian "lakers," which account for most commercial shipping on the Great Lakes, are not affected.¹¹ Generally, vessels are assigned a U.S. or Canadian pilot depending on the order in which they transit a particular area of the Great Lakes and do not choose the pilot they receive. If a vessel is assigned a U.S. pilot, that pilot will be assigned by the pilotage association responsible for the particular district in which the vessel is operating, and the vessel operator will pay the pilotage association for the pilotage services. The GLPA establishes the rates for Canadian registered pilots.

⁸ *Id.*

⁹ DHS Delegation 00170.1, Revision No. 01.2, paragraph (II)(92)(f).

¹⁰ See 46 CFR part 401.

¹¹ 46 U.S.C. 9302(f). A "laker" is a commercial cargo vessel especially designed for and generally limited to use on the Great Lakes.

The U.S. waters of the Great Lakes and the St. Lawrence Seaway are divided into three pilotage districts. Pilotage in each district is provided by an association certified by the Coast Guard’s Director of the Great Lakes Pilotage (“the Director”) to operate a pilotage pool. The Saint Lawrence Seaway Pilotage Association (SLSPA) provides pilotage services in District One, which includes all U.S. waters of the St. Lawrence River and Lake Ontario. The Lakes Pilots Association (LPA) provides pilotage services in District Two, which includes all U.S. waters of Lake Erie, the Detroit River, Lake St. Clair, and the St. Clair River. Finally, the Western Great Lakes Pilots Association (WGLPA) provides pilotage services in District Three, which includes all U.S. waters of the St. Marys River; Sault Ste. Marie Locks; and Lakes Huron, Michigan, and Superior.

Each pilotage district is further divided into “designated” and “undesignated” areas, depicted in table 2 below. Designated areas, classified as such by Presidential Proclamation, are waters in which pilots must be fully engaged in the navigation of vessels in their charge at all times.¹² Undesignated areas, on the other hand, are open bodies of water not subject to the same pilotage requirements. While working in undesignated areas, pilots must “be on board and available to direct the navigation of the vessel at the discretion of and subject to the customary authority of the master.”¹³ For these reasons, pilotage rates in designated areas can be significantly higher than those in undesignated areas.

Table 2 — Areas of the Great Lakes and St. Lawrence Seaway

District	Pilotage Association	Designation	Area Number¹⁴	Area Name¹⁵
One	Saint Lawrence Seaway Pilotage	Designated	1	St. Lawrence River
		Undesignated	2	Lake Ontario

¹² Presidential Proclamation 3385, *Designation of restricted waters under the Great Lakes Pilotage Act of 1960*, December 22, 1960.

¹³ 46 U.S.C. 9302(a)(1)(B).

¹⁴ Area 3 is the Welland Canal, which is serviced exclusively by the Canadian GLPA and, accordingly, is not included in the U.S. pilotage rate structure.

¹⁵ The areas are listed by name at 46 CFR 401.405.

	Association			
Two	Lakes Pilots Association	Designated	5	Navigable waters from Southeast Shoal to Port Huron, MI
		Undesignated	4	Lake Erie
Three	Western Great Lakes Pilots Association	Designated	7	St. Marys River
		Undesignated	6	Lakes Huron and Michigan
		Undesignated	8	Lake Superior

Each pilot association is an independent business and is the sole provider of pilotage services in the district in which it operates. Each pilot association is responsible for funding its own operating expenses, maintaining infrastructure, compensating pilots and apprentice pilots, acquiring and implementing technological advances, and training personnel and partners. The Coast Guard developed a 10-step ratemaking methodology to derive a pilotage rate, based on the estimated amount of traffic, which covers these expenses.¹⁶ The methodology is designed to measure how much revenue each pilotage association would need to cover expenses and provide competitive compensation goals to registered pilots. Since the Coast Guard cannot guarantee demand for pilotage services, target pilot compensation for registered pilots is a goal. The actual demand for service dictates the actual compensation for the registered pilots. We then divide that amount by the historic 10-year average for pilotage demand. We recognize that in years where traffic is above average, pilot associations will accrue more revenue than projected, while in years where traffic is below average, they will take in less. We believe that over the long term, however, this system ensures that infrastructure will be maintained and that pilots will receive adequate compensation and work a reasonable number of hours, with adequate rest between assignments, to ensure retention of highly trained personnel.

¹⁶ 46 CFR part 404.

Over the past 5 years, the Coast Guard has adjusted the Great Lakes pilotage ratemaking methodology per our authority in 46 U.S.C. 9303(f) to conduct annual reviews of base pilotage rates, and make adjustments to such base rates, in each intervening year in consideration of the public interest and the costs of providing the services. In 2016, we made significant changes to the methodology, moving to an hourly billing rate for pilotage services and changing the compensation benchmark to a more transparent model. In 2017, we added additional steps to the ratemaking methodology, including new steps that accurately account for the additional revenue produced by the application of weighting factors (discussed in detail in Steps 7 through 9 for each district, in section VII of this preamble). In 2018, we revised the methodology by which we develop the compensation benchmark, based upon U.S. mariners rather than Canadian working pilots. In 2020, we revised the methodology to accurately capture all of the costs and revenues associated with Great Lakes pilotage requirements and produce an hourly rate that adequately and accurately compensates pilots and covers expenses. The current methodology was finalized in the Great Lakes Pilotage Rates – 2021 Annual Review and Revisions to Methodology final rule (86 FR 14184, March 12, 2021). The 2021 ratemaking changed the inflation calculation in Step 4, § 404.104(b) for interim ratemakings, so that the previous year's target compensation value is first adjusted by actual inflation value using the Employment Cost Index (ECI). The 2021 final rule also excluded legal fees incurred in lawsuits against the Coast Guard related to our ratemaking and oversight from pilots associations' approved operating expenses. We summarize the proposed methodology in the section below.

Summary of the Ratemaking Methodology

As stated above, the ratemaking methodology, outlined in 46 CFR 404.101 through 404.110, consists of 10 steps that are designed to account for the revenues

needed and total traffic expected in each district. The result is an hourly rate, determined separately for each of the areas administered by the Coast Guard.

In Step 1, “Recognize previous operating expenses,” (§ 404.101) the Director reviews audited operating expenses from each of the three pilotage associations. Operating expenses include all allowable expenses minus wages and benefits. This number forms the baseline amount that each association is budgeted. Because of the time delay between when the association submits raw numbers and the Coast Guard receives audited numbers, this number is 3 years behind the projected year of expenses. Therefore, in calculating the 2022 rates in this proposal, we begin with the audited expenses from the 2019 shipping season.

While each pilotage association operates in an entire district (including both designated and undesignated areas), the Coast Guard tries to determine costs by area. With regard to operating expenses, we allocate certain operating expenses to designated areas, and certain operating expenses to undesignated areas. In some cases, we can allocate the costs based on where they are actually accrued. For example, we can allocate the costs for insurance for apprentice pilots who operate in undesignated areas only. In other situations, such as general legal expenses, expenses are distributed between designated and undesignated waters on a *pro rata* basis, based upon the proportion of income forecasted from the respective portions of the district.

In Step 2, “Project operating expenses, adjusting for inflation or deflation,” (§ 404.102) the Director develops the 2022 projected operating expenses. To do this, we apply inflation adjustors for 3 years to the operating expense baseline received in Step 1. The inflation factors are from the Bureau of Labor Statistics’ (BLS) Consumer Price Index (CPI) for the Midwest Region, or, if not available, the Federal Open Market Committee (FOMC) median economic projections for Personal Consumption

Expenditures (PCE) inflation. This step produces the total operating expenses for each area and district.

In Step 3, “Estimate number of registered pilots and apprentice pilots,” (§ 404.103) the Director calculates how many pilots are needed for each district. To do this, we employ a “staffing model,” described in § 401.220, paragraphs (a)(1) through (a)(3), to estimate how many pilots would be needed to handle shipping during the beginning and close of the season. This number is helpful in providing guidance to the Director in approving an appropriate number of pilots.

For the purpose of the ratemaking calculation, we determine the number of pilots provided by the pilotage associations (see § 404.103) and use that figure to determine how many pilots need to be compensated via the pilotage fees collected.

In Step 3, in this NPRM we propose adding an estimate for the number of apprentice pilots with limited registrations in each district. This number of apprentice pilots with limited registrations would be used in Step 4 to calculate an allowable wage benchmark for the districts to claim in the ratemaking. The Director would use the number of applications for apprentice pilots, traffic projections, information provided by the pilotage association regarding upcoming retirements, and any other relevant data input in determining the total number of apprentice pilots with limited registrations. See the **Discussion of Proposed Methodological and Other Changes** at section VI of this preamble for a detailed description of the changes proposed.

In the first part of Step 4, “Determine target pilot compensation benchmark and apprentice pilot wage benchmark,” (§ 404.104) the Director determines the revenue needed for pilot compensation in each area and district. In 2020, the Coast Guard updated the benchmark compensation model in accordance with § 404.104(b), switching from using the American Maritime Officers Union’s 2015 aggregated wage and benefit information to the 2019 compensation benchmark. Based on experience over the past

two ratemakings, the Coast Guard has determined that the level of target pilot compensation for those years provides an appropriate level of compensation for American Great Lakes pilots. Therefore, the Coast Guard will not seek alternative benchmarks for target compensation for future ratemakings at this time, and will instead simply adjust the amount of target pilot compensation for inflation. This benchmark has advanced the Coast Guard's goals of safety through rate and compensation stability while also promoting recruitment and retention of qualified U.S. pilots.

In the 2021 ratemaking, the Coast Guard changed the way we calculate inflation in Step 4 to account for actual inflation instead of predicted inflation. In § 404.104(b), the previous year's target compensation value is first adjusted by actual inflation using the ECI inflation value. If the ECI inflation value is not available, § 404.104(b)(1) and (2) specify the compensation inflation process the Director will use instead.

In the second part of Step 4, set forth in § 404.104(c), the Director determines the total compensation figure for each district. To do this, the Director multiplies the compensation benchmark by the number of pilots for each area and district (from Step 3), producing a figure for total pilot compensation.

This proposed rule would add an apprentice pilot wage benchmark to Step 4. The apprentice pilot wage benchmark would be set at 36 percent of individual target pilot compensation, as calculated in this section. The apprentice pilot wage benchmark would then be multiplied by the number of apprentice pilots with limited registrations for each district, producing a figure for total apprentice pilot wage. See the **Discussion of Proposed Methodological and Other Changes** at section VI of this preamble for a detailed description of the changes proposed.

In Step 5, "Project working capital fund," (§ 404.105) the Director calculates a value that is added to pay for needed capital improvements and other non-recurring expenses, such as technology investments and infrastructure maintenance. This value is

calculated by adding the total operating expenses (derived in Step 2) to the total pilot compensation and total target apprentice pilot wage (derived in Step 4), and multiplying that figure by the preceding year's average annual rate of return for new issues of high-grade corporate securities. This figure constitutes the "working capital fund" for each area and district.

In Step 6, "Project needed revenue," (§ 404.106) the Director simply adds up the totals produced by the preceding steps. The projected operating expense for each area and district (from Step 2) is added to the total pilot compensation, including apprentice pilot wage benchmarks, (from Step 4) and the working capital fund contribution (from Step 5). The total figure, calculated separately for each area and district, is the "needed revenue."

In Step 7, "Calculate initial base rates," (§ 404.107) the Director calculates an hourly pilotage rate to cover the needed revenue as calculated in Step 6. This step consists of first calculating the 10-year hours of traffic average for each area. Next, we divide the revenue needed in each area (calculated in Step 6) by the 10-year hours of traffic average to produce an initial base rate.

An additional element, the "weighting factor," is required under § 401.400. Pursuant to that section, ships pay a multiple of the "base rate" as calculated in Step 7 by a number ranging from 1.0 (for the smallest ships, or "Class I" vessels) to 1.45 (for the largest ships, or "Class IV" vessels). As this significantly increases the revenue collected, we need to account for the added revenue produced by the weighting factors to ensure that shippers are not overpaying for pilotage services. We do this in the next step.

In Step 8, "Calculate average weighting factors by Area," (§ 404.108) the Director calculates how much extra revenue, as a percentage of total revenue, has historically been produced by the weighting factors in each area. We do this by using a

historical average of the applied weighting factors for each year since 2014 (the first year the current weighting factors were applied).

In Step 9, “Calculate revised base rates,” (§ 404.109) the Director modifies the base rates by accounting for the extra revenue generated by the weighting factors. We do this by dividing the initial pilotage rate for each area (from Step 7) by the corresponding average weighting factor (from Step 8), to produce a revised rate.

In Step 10, “Review and finalize rates,” (§ 404.110) often referred to informally as “Director’s discretion,” the Director reviews the revised base rates (from Step 9) to ensure that they meet the goals set forth in 46 U.S.C. 9303(f) and 46 CFR 404.1(a), which include promoting efficient, safe, and reliable pilotage service on the Great Lakes; generating sufficient revenue for each pilotage association to reimburse necessary and reasonable operating expenses; compensating trained and rested pilots fairly; and providing appropriate profit for improvements.

After the base rates are set, § 401.401 permits the Coast Guard to apply surcharges. In previous ratemakings where apprentice pilot wages were not built into the rate, the Coast Guard used surcharges to cover applicant pilot compensation in those years to help with recruitment. In 2019, \$1,202,635 in surcharges were collected by the three districts. Consistent with the 2020 and 2021 rulemakings, we continue to believe that the pilot associations are now able to plan for the costs associated with retirements without relying on the Coast Guard to impose surcharges.

VI. Discussion of Proposed Methodological and Other Changes

For 2022, the Coast Guard is proposing one policy change to the ratemaking model and a methodological change to incorporate apprentice pilot wage benchmarks into the ratemaking methodology. The first proposed policy change is to always round up the pilot totals to the nearest whole number in the staffing model. We use the staffing model to determine how many pilots are needed in Step 3. Second, we are proposing to

introduce a wage benchmark calculation for apprentice pilots conducting pilotage while using a limited registration in Steps 3 and 4 of the methodology. While not a change to the ratemaking, this proposed rule would also codify the current practice of allowing pilot associations to include necessary and reasonable apprentice pilot benefits and expenses as operating expenses for the year they are incurred.

A. Proposed Changes to the Staffing Model

The Director uses the staffing model to estimate how many pilots would be needed to handle shipping from the opening through the closing of the season. The Coast Guard is proposing to always round up the final number in the staffing model in § 401.220(a)(2) to the nearest whole integer, instead of the current requirement to round to the nearest whole integer. The final number provides the maximum number of pilots authorized to be included in the ratemaking for a district.

The Coast Guard proposed a similar change to the staffing model in the 2021 proposed rule titled “Great Lakes Pilotage Rates – 2021 Annual Review and Revisions to Methodology” (85 FR 68210, October 27, 2020). We opted to forgo the proposed change to the rounding in the staffing model in the 2021 ratemaking final rule to more closely consider the alternatives and staffing issues mentioned by the commenters, posted in docket USCG-2020-0457.

After consideration of the comments and issues discussed further in this section, the Coast Guard has determined that rounding up in the staffing model is a necessary change, but we are proposing an additional modification. In addition to always rounding up from the staffing model, we also propose that when the rounding up results in an additional pilot that would not have been authorized if we rounded to the nearest whole integer, that additional pilot would be added to the number of pilots in the undesignated

area for that district.¹⁷ For example, if the total in a district is 17.25, we would round up to 18 under the proposed changes, and the additional pilot would be allocated to the undesignated area. If the total in a district is 17.55, we would authorize 18 pilots and we would not change existing allocations.

The purpose for placing the additional pilot in undesignated waters is to reduce the impact of the additional pilot on the final rates. Allocating additional pilots to the undesignated waters in the ratemaking methodology would result in only incremental changes, which promotes rate stability. Rate stability is in the public interest, because it provides greater predictability to both shipping companies and the pilots. Undesignated waters have lower rates for pilotage services than designated waters, because the average number of bridge hours is greater (denominator), which allows the operating expenses for those areas to be spread out over a greater number. Registered pilots in a district perform pilotage in both designated and undesignated waters. For ratemaking purposes, we assign pilots to either designated or undesignated waters to calculate the rates in each area. For ratemaking purposes, we assign pilots to either designated or undesignated waters to calculate the rates in each area.

In the 2021 proposed rule, the Coast Guard acknowledged that the staffing model used in the ratemaking could be improved to account for registered pilots who are not performing pilotage full time. As we noted in the 2021 proposed rule, pilot associations have made assertions that the pilot associations' presidents are spending more time at meetings, conferences, traveling, and facilitating communication between the pilots and Coast Guard. We continue to acknowledge that the pilot associations' presidents are not able to serve as pilots full-time due to their administrative duties and this continues to be the main reason for no longer rounding down the final number for some districts. The

¹⁷For a detailed calculation of the staffing model, see 82 FR 41466, table 6 at 41480 (August 31, 2017).

non-delegable administrative duties include attending meetings and conferences, providing additional financial and traffic information to increase transparency and accountability, overseeing and ensuring the integrity of their training program, evaluating technology, and coordinating with the American Pilots' Association (APA) to implement and share best practices. Rounding down to the nearest integer in the current staffing model could result in too few pilots allocated to a district which, when coupled with the president's spending less time serving as pilot, may adversely impact recuperative rest goals for registered pilots that are essential for safe navigation.

The staffing model addresses the historic traffic at the opening and closing of the season. During this time, the Director has historically authorized or imposed double pilotage in the designated waters due to ice conditions, a lack of aids to navigation, and violent and volatile weather conditions, because the transits are likely to exceed the Coast Guard's tolerance for safety with a single pilot. Pilotage demand reaches peaks during the opening and close of the seasons, which is also when pilot presidents are performing many nondelegable duties. The pilot association president's participation is required during various coordination meetings at the opening and closing of the shipping season, which reduces their availability to provide pilotage services. These meetings include coordination with the U.S. and Canadian Seaways, the GLPA, Shipping Federation of Canada, U.S. Great Lakes Shipping Association, and various U.S. and Canadian Great Lakes ports. Rounding up will ensure that the pilot president is free to participate in these meetings and the associations have sufficient strength to handle the burden of double pilotage.

One comment representing the shipping industry on the 2021 ratemaking proposed rule requested that we authorize an administrative position for each district to account for these increased duties. We rejected the proposal to add an administrative position in the 2021 ratemaking, because we thought it was inconsistent with industry

standards and insufficient to address the problems identified by the associations. Many of the presidential duties are non-delegable to administrative staff, and the president would still be pulled away from providing pilotage services. Authorizing an administrative person instead of additional pilot would not address the recuperative rest impacts and potential for lack of pilots when needed.

The APA comment¹⁸ and other commenters affirmed that there is always one pilot “off the roles” in each association. Similarly, in its comments, the SLSPA emphasized it is impossible to operate as a president and pilot a vessel at the same time and with no opportunity to rest. The APA comment urged the Coast Guard to consider authorizing an additional pilot for each district, whose principal duties would be to serve as an “operations pilot.” The comment said pilots on ships, as well as dispatchers and transportation coordinators, need operational support available in real time from a seasoned and experienced piloting professional. This professional is currently the association president or the suggested extra operations pilot. The APA comment expressed that piloting expertise is necessary to perform these duties, and that the associations’ president pilot should be replaced with a pilot, not administrative staff. The president is unable to delegate certain administrative duties that keep him from piloting a vessel. This comment was in alignment with responses we received from other pilot industry comments.

The Coast Guard agrees that, where the pilot associations’ presidents are spending an increased amount of their time on administrative issues, the staffing model should account for that time and allow for additional staff to assist by rounding up the final total for each district. However, the Coast Guard does not agree with some comments on the 2021 NPRM that an additional operational pilot is necessary in addition to rounding up in

¹⁸ <https://www.regulations.gov/document?D=USCG-2020-0457-0007>.

the staffing model. Authorizing an additional operational pilot, in addition to rounding up, would authorize two additional pilots in some cases. Two additional pilots would be more pilots than necessary to address the need presented by the association's president not performing pilotage services full-time.

Some comments from the 2021 ratemaking proposed rule included concerns that the staffing model could produce lower or fluctuating numbers in upcoming years, even with always rounding up, taking away previously authorized pilots. However, the staffing model does not change year-to-year, unless we make changes to the staffing model in a ratemaking. Based on the existing staffing model and the proposed change to always round up the final number, the number of pilots authorized would not decrease in future years, unless adjusted by ratemaking.

The staffing model takes into consideration trends in traffic demand, ensuring that the number of pilots is sufficient to meet demand. The existing staffing model is designed to provide sufficient pilots for the entire shipping season while taking into account the amount of traffic anticipated, restorative rest periods for the pilots, and additional capacity during surges at the opening and closing of the shipping season. During the opening and closing of the season, the weather tends to be more severe; ice conditions affect transit times; and the aids to navigation are not in place. During this time, double pilotage occurs in designated waters to mitigate external factors and to ensure safety. This is also a time that the pilot association presidents are performing non-delegable duties, coordinating with the Coast Guard, the GLPA, U.S. and Canadian Seaway, and numerous other Great Lakes shipping stakeholders to ensure safe, efficient, and reliable pilotage service. Always rounding up allows us to account for this time and promote safety and restorative rest, while minimizing delays in providing pilotage services, for districts where we previously would have rounded the final number down. We cannot continue to round down for some districts and undersupply pilots where the

staffing model indicates more are needed. By rounding up the staffing model final number, we ensure that we are always authorizing a sufficient number to cover the demand calculated according to the staffing model, which has been in place for many years. The purpose of always rounding up where we otherwise would have rounded down is to account for the association's president time spent away from pilotage duties, especially during the high demand for pilotage during the beginning and close of the shipping seasons. We believe this proposed rounding change will promote maritime safety by ensuring enough pilots are allocated to each district to cover the hours the association's president spends engaged in the non-pilot tasks and the administrative work discussed above.

B. Apprentice Pilots' Wage Benchmark for Conducting Pilotage while using a Limited Registration

In this NPRM, the Coast Guard is proposing to factor in the apprentice pilots wage benchmark in the ratemaking methodology, Steps 3 and 4. The wage benchmark would be applicable to apprentice pilots operating under a limited registration.

In Step 3, § 404.103, the Director would project the number of apprentice pilots with limited registrations expected to be in training and compensated. The Director would consider the number of persons applying under 46 CFR part 401 to become apprentice pilots, traffic projections, information provided by the pilotage association regarding upcoming retirements, and any other relevant data.

In Step 4, § 404.104, the Director would determine the individual apprentice pilot wage benchmark at the rate of 36 percent of the individual target pilot compensation, as calculated according to Step 4. The Director would determine each pilot association's total apprentice pilot wage benchmark by multiplying the apprentice pilot wage benchmark by the number of apprentice pilots with limited registrations projected under § 404.103. For example, if the projected number of apprentice pilots is 4, we would first

take 36 percent of individual target pilot compensation (example: $\$359,887 \times 0.36 = \$129,559$) and multiply that by 4 (example: $\$129,559 \times 4 = \$518,237$) to obtain the total apprentice pilot wage benchmark for each district. This process is based on the way we factor the fully registered pilot compensation into the ratemaking in existing Step 3 (§ 404.103) and Step 4 (§ 404.104) described in the Summary of the Ratemaking Methodology section above.

The Coast Guard proposes to set the apprentice pilot wage benchmark at a percentage of the target pilot compensation, rather than a specific dollar amount, to allow for inflation each year. We factor inflation into the target pilot compensation calculation during Step 4. We would take 36 percent of the inflated target pilot compensation to obtain the apprentice pilot wage benchmark value.

In ratemaking years 2016 through 2019, the Coast Guard authorized surcharges to cover the districts' apprentice pilot compensation. The Coast Guard never intended to use such surcharges as a permanent solution for compensating apprentice pilots, because the surcharge amounts were not derived from a formula that could take into consideration inflation and other reasonableness factors.

The purpose of the surcharges was to provide reimbursement to the associations so that they could immediately hire additional apprentice pilots, rather than waiting three years to be reimbursed in the rates. The Coast Guard used surcharges as a temporary method to help the districts with pilot hiring and retention issues. In those ratemaking years, the Coast Guard made many Director's adjustments to the authorized surcharges in order to ensure that the ratemaking reflected a reasonable amount in compensation.

In the 2020 and 2021 ratemakings, the Coast Guard acknowledged that the pilot associations were able to hire a sufficient number of apprentice pilots and fully registered pilots. In the 2020 and 2021 ratemakings, the Coast Guard authorized apprentice pilot salaries to be included in the association's operating expenses for 2017 and 2018,

respectively. We allowed the apprentice pilot wage expenses to be included in the operating expenses after the districts' operating expenses were fully audited. In the 2021 ratemaking final rule, the Coast Guard reduced the 2018 apprentice pilot salary operating expense (referred to as applicant pilot in the 2021 ratemaking) for District One and District Two to \$132,151 per apprentice pilot because they paid in excess of that amount (86 FR 14184, 14197, 14202, March 12, 2021). As District Three reported paying their apprentice pilots less than \$132,151 per apprentice pilot each, no Director's adjustment was made.

The Coast Guard is proposing to set the apprentice pilot wage benchmark at 36 percent of individual target pilot compensation based on reasonable amounts previously allowed in past ratemakings. In the 2019 rulemaking, we adjusted apprentice pilot salaries to approximately 36 percent of target pilot compensation. In the 2019 NPRM, the Coast Guard proposed to make an adjustment to District Two's request for reimbursement of \$571,248 for two applicant pilots (\$285,624 per applicant). Instead of permitting \$571,248 for two applicant pilots, we proposed allowing \$257,566, or \$128,783 per applicant pilot, based upon discussions with other pilot associations at the time. This standard went into effect in the final rule for 2019. In development of the 2021 proposed rule, we reached out to several of the pilot associations throughout the United States to see what percentage they pay their applicant pilots. We factored in the sea time and experience required to become an applicant pilot on the Great Lakes and discussed the percentage with each association to determine if it was fair and reasonable. For 2019, this was approximately 36 percent ($\$128,783 \div \$359,887 = 35.78$ percent). In the 2021 NPRM and final rule, the Coast Guard used the 36 percent benchmark for calculating each district's apprentice pilot compensation in its operating expenses.

The Coast Guard solicited comments in the 2021 ratemaking NPRM on setting apprentice pilot salaries at a percentage of the fully registered target pilot compensation

and including it in the ratemaking (85 FR 68210, October 27, 2020). We received one pilot comment and a user coalition comment requesting that we return to the use of surcharges. The Coast Guard used surcharges to immediately reimburse apprentice pilot salaries to make improvements in hiring and retention of pilots in the districts. Going forward, authorizing apprentice pilot wages in the ratemaking continues to support hiring and retention in a way that is better calibrated to generate the specific amount of revenue needed, than providing a surcharge. The associations would be funded for apprentice pilot wages in the same year they are incurred, and the amount would be adjusted for inflation, along with the target pilot compensation. We are also interested in building the apprentice pilot salaries into the ratemaking for predictability and stability purposes. We previously authorized \$150,000 per apprentice pilot when we used surcharges, but, in practice, that amount was reduced by Director's adjustments to reasonable amounts. The proposed apprentice pilot wage benchmark in the ratemaking would not be adjusted by Director's adjustments.

The other comments from the pilots were generally supportive of including the apprentice pilot salaries in the ratemaking, but urged the Coast Guard to consider setting the salaries at a higher percentage than 36 percent of the fully registered pilot compensation, or implementing a gradual percentage increase for additional years served. This 36 percent equation creates a number consistent with what some districts paid and were reimbursed for apprentice pilots in previous ratemaking years. It is also reasonable in amount, because it is only wages and would not include apprentice pilot benefits and travel reimbursements. Those additional benefits would be reimbursed in full as allowable operating expenses for the districts. In the 2021 ratemaking, District Three reported paying apprentice pilot salaries at an amount of \$132,151 per apprentice pilot, and we considered that amount reasonable. At 36 percent of registered pilot target compensation, the apprentice pilots would be authorized wages in the amount of

\$129,559, which is reasonable in consideration of the time in training, services provided, and past ratemakings. This number would be subject to inflation annually. Additionally, setting apprentice pilot salaries at one amount, irrespective of years in training, is consistent with our past practices and will help promote rate stability and predictability for all parties. In past ratemakings, we have historically used the term “applicant pilots” as a collective way of referring to both applicant trainees and apprentice pilots. In this proposed rule, we are distinguishing how we will incorporate apprentice pilot wages into the ratemaking methodology from how we incorporate applicant trainees wages. To help clarify this distinction, this proposed rule would also add definitions for the terms “apprentice pilot” and “limited registration” in the definition section in § 401.110. An apprentice pilot would be defined as a person, approved and certified by the Director, who is participating in an approved U.S. Great Lakes pilot training and qualification program and meets all the minimum requirements listed in 46 CFR 401.211. The apprentice pilot definition would not include applicant trainees, who are pilots in training who have not acquired the minimum service requirements in § 401.210(a)(1). Under this proposed rule, salaries for applicant trainees would continue to be included in the district’s operating expenses for the year they are incurred. The “apprentice pilot” definition would only be applicable in determining which pilots may be included in the apprentice pilot estimates, compensation, and operating expenses discussed in new §§ 404.2(b)(7), 404.103(b), and 404.104(d) and (e) of this proposed rule.

The apprentice pilot would be required to be operating with a limited registration to be eligible for inclusion in the wage benchmark calculations in Steps 3 and 4. A limited registration is currently used in the apprentice pilot training process in the districts, but it is not defined in the Great Lakes pilotage regulations. We propose adding a definition for “limited registration” that would align with the current use of the term in the industry. A limited registration would be defined as an authorization given by the

Director, upon the request of the respective pilot association, to an apprentice pilot to provide pilotage service without direct supervision from a fully registered pilot in a specific area or waterway.

Apprentice pilots with limited registrations are performing the services of a pilot for the shipping industry, often without a fully registered pilot onboard. These apprentice pilots are providing pilotage services to the shipping industry for the rates set by the Coast Guard for the waterway. Compensating the apprentice pilots for these services has historically been considered a reasonable and necessary cost included in the ratemakings as either surcharges or operating expenses. However, instead of evaluating the apprentice pilot wages annually for reasonableness in the operating expenses, the Coast Guard is proposing to include a specific and predictable apprentice pilot wage benchmark calculation into the ratemaking.

C. Apprentice Pilots' Expenses and Benefits as Approved Operating Expenses

In § 404.2 "Procedure and criteria for recognizing association expenses," we propose to insert the pilot association's expenses for apprentice pilots operating with limited registrations as approved operating expenses. These expenses have historically been allowed in previous ratemakings' operating expenses. We are proposing to specifically list apprentice pilot with limited registrations expenses in the regulations to codify current practices and distinguish these expenses from the apprentice pilot wage benchmark that we propose to include in Step 4 of the ratemaking methodology.

The associations would continue to include health care, travel expenses, training, and other expenses incurred on behalf of apprentice pilots with limited registrations, when determined to be necessary and reasonable by the Director. Associations currently fund travel and employment benefits for apprentice pilots with limited registrations in order to train pilots and provide pilotage services to the shipping industry. Apprentice pilots with limited registrations are expected to travel and be away from home while

performing these duties. It is reasonable and consistent with industry practice for the association to cover their travel expenses. These travel costs are also allowed for fully registered pilots operating on the Great Lakes performing substantially similar services.

The approved operating expenses could include health care and other necessary and reasonable employment benefits as well. Apprentice pilots are often offered benefits to help with retention and recruitment. Allowing associations to include necessary and reasonable expenses for apprentice pilots with limited registrations as operating expenses in the ratemaking would continue to promote adequate funding for apprentice pilot training and provision of pilotage services in the Great Lakes.

VII. Discussion of Proposed Rate Adjustments

In this NPRM, based on the proposed policy changes described in the previous section, we are proposing new pilotage rates for 2022. We propose to conduct the 2022 ratemaking as an “interim year,” as was done in 2021, rather than a full ratemaking, as was conducted in 2018. Thus, the Coast Guard proposes to adjust the compensation benchmark following the procedures for an interim ratemaking year pursuant to § 404.100(b) for this purpose, rather than the full ratemaking year procedures in § 404.100(a).

This section discusses the proposed rate changes using the ratemaking steps provided in 46 CFR part 404, incorporating the proposed changes discussed in section VI. We will detail all 10 steps of the ratemaking procedure for each of the 3 districts to show how we arrive at the proposed new rates.

District One

A. Step 1: Recognize Previous Operating Expenses

Step 1 in our ratemaking methodology requires that the Coast Guard review and recognize the previous year’s operating expenses (§ 404.101). To do so, we begin by reviewing the independent accountant’s financial reports for each association’s 2018

expenses and revenues.¹⁹ For accounting purposes, the financial reports divide expenses into designated and undesignated areas. For costs accrued by the pilot associations generally, such as employee benefits, for example, the cost is divided between the designated and undesignated areas on a *pro rata* basis. The recognized operating expenses for District One are shown in table 3.

Adjustments have been made by the auditors and are explained in the auditor's reports, which are available in the docket for this rulemaking where indicated under the **Public Participation and Request for Comments** portion of the preamble.

In the 2019 expenses used as the basis for this rulemaking, districts used the term "applicant" to describe applicant trainees and persons who would be called apprentices (applicant pilots) under the new definition proposed in this rulemaking. Therefore, when describing past expenses, we use the term "applicant" to match what was reported from 2019, which includes both applicant and apprentice pilots. We use "apprentice" to distinguish apprentice pilot wages and describe the impacts of the ratemaking going forward.

There was one Director's adjustment for District One, a deduction for \$282,015, the amount of surcharge collected in 2019. As this amount exceeds the reported 2019 applicant salaries of \$227,893, there is no further Director's adjustment. We continue to include applicant salaries as an allowable expense in the 2022 ratemaking, as it is based on 2019 operating expenses, when salaries were still an allowable expense. The apprentice salaries paid in the years 2019, 2020, and 2021 have not been reimbursed in the ratemaking as of publication of this proposed rule. Applicant salaries (including applicant trainees and apprentice pilots) will continue to be an allowable operating expense through the 2024 ratemaking, which uses operating expenses from 2021 where

¹⁹ These reports are available in the docket for this rulemaking.

the wages for apprentice pilots were still authorized as operating expenses. Starting in the 2025 ratemaking, apprentice pilot salaries would no longer be included as a 2022 operating expense, because apprentice pilot wages would have already been factored into the ratemaking Steps 3 and 4 in calculation of the 2022 rates. Starting in 2025, the applicant salaries' operating expenses for 2022 will consist of only applicant trainees (those who are not yet apprentice pilots).

Table 3 — 2019 Recognized Expenses for District One

	Designated	Undesignated	TOTAL
Reported Operating Expenses for 2019	St. Lawrence River	Lake Ontario	
<i>Applicant Pilot Salaries</i>			
Salaries	\$136,736	\$91,157	\$227,893
Employee Benefits	\$12,506	\$8,337	\$20,843
Applicant Subsistence/Travel	\$30,685	\$20,567	\$51,252
Applicant Payroll Tax	\$7,943	\$5,295	\$13,238
Total Applicant Pilot Salaries	\$187,870	\$125,356	\$313,226
<i>Other Pilot Cost</i>			
Subsistence/Travel – Pilots	\$667,071	\$444,714	\$1,111,785
License Insurance – Pilots	\$43,162	\$28,774	\$71,936
Payroll Taxes – Pilots	\$184,884	\$123,256	\$308,140
Other	\$136,178	\$90,784	\$226,962
Total other pilotage costs	\$1,031,295	\$687,528	\$1,718,823
<i>Pilot Boat and Dispatch Costs</i>			
Pilot Boat Expense (Operating)	\$360,276	\$240,184	\$600,460
Certified Public Accountant (CPA) Deduction (D1-19-01), (D1-19-02)	\$138,093	\$92,062	\$230,155
Dispatch Expense	\$82,722	\$55,148	\$137,870
Payroll Taxes	\$22,412	\$14,941	\$37,353
Total Pilot and Dispatch Costs	\$603,503	\$402,335	\$1,005,838
<i>Administrative Expenses</i>			
Legal – General Counsel	\$34,558	\$23,038	\$57,596
Legal – Shared Counsel (K&L Gates)	\$55,318	\$36,879	\$92,197
Legal – USCG Intervener Litigation	\$28,765	\$19,177	\$47,942
Office Rent			\$0
Insurance	\$27,753	\$18,502	\$46,255
Employee Benefits	\$7,056	\$4,704	\$11,760

Payroll Taxes	\$5,236	\$3,491	\$8,727
Other Taxes	\$61,822	\$41,215	\$103,037
Real Estate Taxes	\$22,787	\$15,191	\$37,978
Travel	\$34,617	\$23,078	\$57,695
Depreciation/Auto Leasing/Other	\$107,584	\$71,723	\$179,307
CPA Deduction (D1-19-01)	\$(52,291)	\$(34,861)	\$(87,152)
Interest	\$24,339	\$16,226	\$40,565
CPA Deduction (D1-19-01)	\$(24,339)	\$(16,226)	\$(40,565)
APA Dues	\$25,838	\$17,225	\$43,063
Dues and Subscriptions	\$4,080	\$2,720	\$6,800
Utilities	\$19,221	\$12,814	\$32,035
Salaries	\$164,453	\$109,636	\$274,089
Accounting/Professional Fees	\$7,980	\$5,320	\$13,300
Other	\$21,908	\$14,605	\$36,513
Total Administrative Expenses	\$576,685	\$384,457	\$961,142
Total Expenses (OpEx + Applicant + Pilot Boats + Admin + Capital)	\$2,399,353	\$1,599,676	\$3,999,029
Surcharge Collected	\$(169,209)	\$(112,806)	\$(282,015)
Total Directors Adjustments	\$ (169,209)	\$(112,806)	\$(282,015)
Total Operating Expenses (OpEx + Adjustments)	\$2,230,144	\$1,486,870	\$3,717,014

B. Step 2: Project Operating Expenses, Adjusting for Inflation or Deflation

Having identified the recognized 2019 operating expenses in Step 1, the next step is to estimate the current year's operating expenses by adjusting those expenses for inflation over the 3-year period. We calculate inflation using the BLS data from the CPI for the Midwest Region of the United States for the 2020 inflation rate.²⁰ Because the BLS does not provide forecasted inflation data, we use economic projections from the Federal Reserve for the 2021 and 2022 inflation modification.²¹ Based on that information, the calculations for Step 2 are as follows:

Table 4 — Adjusted Operating Expenses for District One

	District One		
	Designated	Undesignated	Total
Total Operating Expenses (Step 1)	\$2,230,144	\$1,486,870	\$3,717,014
2020 Inflation Modification (@1%)	\$22,301	\$14,869	\$37,170
2021 Inflation Modification (@2.4%)	\$54,059	\$36,042	\$90,101
2022 Inflation Modification (@2%)	\$46,130	\$30,756	\$76,886
Adjusted 2021 Operating Expenses	\$2,352,634	\$1,568,537	\$3,921,171

C. Step 3: Estimate Number of Registered Pilots and Apprentice Pilots

In accordance with the text in § 404.103, we estimate the number of fully registered pilots in each district. We determine the number of fully registered pilots based on data provided by the SLSPA. Using these numbers, we estimate that there will

²⁰ The 2020 inflation rate is available at <https://beta.bls.gov/dataViewer/view/timeseries/CUUR0200SA0>. Specifically the CPI is defined as “All Urban Consumers (CPI-U), All Items, 1982-4=100”. (Downloaded April 2021)

²¹ The 2021 and 2022 inflation rates are available at <https://www.federalreserve.gov/monetarypolicy/files/fomcprojtab120210317.pdf>. We used the PCE median inflation value found in table 1. (Downloaded March 24, 2021)

be 18 registered pilots in 2022 in District One. We determine the number of apprentice pilots based on input from the district on anticipated retirements and staffing needs. Using these numbers, we estimate that there will be two apprentice pilots in 2022 in District One. Based on the seasonal staffing model discussed in the 2017 ratemaking (see 82 FR 41466), and our proposed changes to that staffing model, we assign a certain number of pilots to designated waters and a certain number to undesignated waters, as shown in table 5. Without rounding up, there would be 7 pilots assigned to the undesignated area of District One (6.8 pilots which is rounded up to 7 pilots). These numbers are used to determine the amount of revenue needed in their respective areas.

Table 5 — Authorized Pilots

Item	District One
Proposed Maximum Number of Pilots (per § 401.220(a)) ²²	18
2022 Authorized Pilots (total)	18
Pilots Assigned to Designated Areas	10
Pilots Assigned to Undesignated Areas	8
2022 Apprentice Pilots	2

D. Step 4: Determine Target Pilot Compensation Benchmark and Apprentice Pilot Wage Benchmark

In this step, we determine the total target pilot compensation for each area. As we are issuing an “interim” ratemaking this year, we follow the procedure outlined in paragraph (b) of § 404.104, which adjusts the existing compensation benchmark by inflation. As stated in section VI.A of the preamble, we are proposing to use a two-step process to adjust target pilot compensation for inflation. First, we adjust the 2021 percent target compensation benchmark of \$378,925 by 1.8 percent for an adjusted value of \$385,746. The adjustment accounts for the difference in actual fourth quarter (Q4) 2020

²² For a detailed calculation, refer to the Great Lakes Pilotage Rates – 2017 Annual Review final rule, which contains the staffing model. See 82 FR 41466, table 6 at 41480 (August 31, 2017).

ECI inflation, which is 3.5 percent, and the 2020 PCE estimate of 1.7 percent.^{23,24} The second step accounts for projected inflation from 2021 to 2022, 2.0 percent.²⁵ Based on the projected 2022 inflation estimate, the proposed target compensation benchmark for 2022 is \$393,461 per pilot. The target apprentice pilot wage is 36 percent of the target pilot compensation, \$141,646 (= \$393,461 x 0.36).

Table 6 — Target Pilot Compensation

2021 Target Compensation from Final Rule	\$378,925
Difference between Actual 2021 ECI inflation (3.5%) and 2020 PCE Estimate (1.7%)	1.80%
Adjusted 2021 Compensation	\$385,746
2021 to 2022 Inflation Factor	2.00%
2022 Target Pilot Compensation	\$393,461
2022 Target Apprentice Pilot Wage	\$141,646

Next, we certify that the number of pilots estimated for 2021 is less than or equal to the number permitted under the proposed changes to the staffing model in § 401.220(a). The proposed changes to the staffing model suggest that the number of pilots needed is 18 pilots for District One, which is less than or equal to 18, the number of registered pilots provided by the pilot associations. In accordance with the proposed changes to § 404.104(c), we use the revised target individual compensation level to derive the total pilot compensation by multiplying the individual target compensation by the estimated number of registered pilots for District One, as shown in table 7. We estimate that the number of apprentice pilots with limited registration needed will be two for District One in the 2022 season. The total target wages for apprentices are allocated with 60 percent for the designated area, and 40 percent for the undesignated area, in

²³ Employment Cost Index, Total Compensation for Private Industry workers in Transportation and Material Moving, Series ID: CIU2010000520000A.

²⁴ CPI for All Urban Consumers, Series ID CUUR0200SA0.

²⁵ <https://www.federalreserve.gov/monetarypolicy/files/fomcproptabl20210317.pdf>

accordance with the way operating expenses are allocated.

Table 7 — Target Compensation for District One

	District 1		
	Designated	Undesignated	Total
Target Pilot Compensation	\$393,461	\$393,461	\$393,461
Number of Pilots	10	8	18
Total Target Pilot Compensation	\$3,934,610	\$3,147,688	\$7,082,298
Target Apprentice Pilot Wage	\$141,646	\$141,646	\$141,646
Number of Apprentice Pilots			2
Total Target Apprentice Pilot Wages	\$169,975	\$113,317	\$283,292

E. Step 5: Project Working Capital Fund

Next, we calculate the working capital fund revenues needed for each area. First, we add the figures for projected operating expenses, total pilot compensation, and total target apprentice pilot wage for each area. Next, we find the preceding year’s average annual rate of return for new issues of high-grade corporate securities. Using Moody’s data, the number is 2.4767 percent.²⁶ By multiplying the two figures, we obtain the working capital fund contribution for each area, as shown in table 8.

Table 8 — Working Capital Fund Calculation for District One

	District One		
	Designated	Undesignated	Total
Adjusted Operating Expenses (Step 2)	\$2,352,634	\$1,568,537	\$3,921,171
Total Target Pilot Compensation (Step 4)	\$3,934,610	\$3,147,688	\$7,082,298
Total Target Apprentice Pilot Wages (Step 4)	\$169,975	\$113,317	\$283,292
Total 2022 Expenses	\$6,457,219	\$4,829,542	\$11,286,761
Working Capital Fund (2.48%)	\$159,924	\$119,612	\$279,536

F. Step 6: Project Needed Revenue

²⁶ Moody’s Seasoned Aaa Corporate Bond Yield, average of 2020 monthly data. The Coast Guard uses the most recent year of complete data. Moody’s is taken from Moody’s Investors Service, which is a bond credit rating business of Moody’s Corporation. Bond ratings are based on creditworthiness and risk. The rating of “Aaa” is the highest bond rating assigned with the lowest credit risk. See <https://fred.stlouisfed.org/series/AAA>. (Downloaded March 26, 2021)

In this step, we add all the expenses accrued to derive the total revenue needed for each area. These expenses include the projected operating expenses (from Step 2), the total pilot compensation (from Step 4), total target apprentice pilot wage, (from Step 4) and the working capital fund contribution (from Step 5). We show these calculations in table 9.

Table 9 — Revenue Needed for District One

	District One		
	Designated	Undesignated	Total
Adjusted Operating Expenses (Step 2)	\$2,352,634	\$1,568,537	\$3,921,171
Total Target Pilot Compensation (Step 4)	\$3,934,610	\$3,147,688	\$7,082,298
Total Target Apprentice Pilot Wages (Step 4)	\$169,975	\$113,317	\$283,292
Working Capital Fund (Step 5)	\$159,924	\$119,612	\$279,536
Total Revenue Needed	\$6,617,143	\$4,949,154	\$11,566,297

G. Step 7: Calculate Initial Base Rates

Having determined the revenue needed for each area in the previous six steps, to develop an hourly rate we divide that number by the expected number of hours of traffic. Step 7 is a two-part process. In the first part, we calculate the 10-year average of traffic in District One, using the total time on task or pilot bridge hours.²⁷ Because we calculate separate figures for designated and undesignated waters, there are two parts for each calculation. We show these values in table 10.

Table 10 — Time on Task for District One (Hours)

Year	District One	
	Designated	Undesignated
2020	6265	7560
2019	8232	8405
2018	6943	8445
2017	7605	8679

²⁷ To calculate the time on task for each district, the Coast Guard uses billing data from the Great Lakes Pilotage Management System (GLPMS). We pull the data from the system filtering by district, year, job status (we only include closed jobs), and flagging code (we only include U.S. jobs). After downloading the data, we remove any overland transfers from the dataset, if necessary, and sum the total bridge hours, by area. We then subtract any non-billable delay hours from the total.

2016	5434	6217
2015	5743	6667
2014	6810	6853
2013	5864	5529
2012	4771	5121
2011	5045	5377
Average	6271	6885

Next, we derive the initial hourly rate by dividing the revenue needed by the average number of hours for each area. This produces an initial rate, which is necessary to produce the revenue needed for each area, assuming the amount of traffic is as expected. We present the calculations for each area in table 11.

Table 11 — Initial Rate Calculations for District One

	Designated	Undesignated
Revenue Needed (Step 6)	\$6,617,143	\$4,949,154
Average Time on Task (Hours)	6,271	6,885
Initial Rate	\$1,055	\$719

H. Step 8: Calculate Average Weighting Factors by Area

In this step, we calculate the average weighting factor for each designated and undesignated area. We collect the weighting factors, set forth in 46 CFR 401.400, for each vessel trip. Using this database, we calculate the average weighting factor for each area using the data from each vessel transit from 2014 onward, as shown in tables 12 and 13.²⁸

Table 12 — Average Weighting Factor for District One, Designated Areas

Vessel Class/Year	Number of Transits	Weighting Factor	Weighted Transits
Class 1 (2014)	31	1	31
Class 1 (2015)	41	1	41
Class 1 (2016)	31	1	31
Class 1 (2017)	28	1	28

²⁸ To calculate the number of transits by vessel class, we use the billing data from GLPMS and SeaPro, filtering by district, year, job status (we only include closed jobs), and flagging code (we only include U.S. jobs). We then count the number of jobs by vessel class and area. (SeaPro, used by all three pilot districts, is the approved dispatch and invoicing system that tracks pilot and vessel transits in place of the GLPMS.)

Class 1 (2018)	54	1	54
Class 1 (2019)	72	1	72
Class 1 (2020)	8	1	8
Class 2 (2014)	285	1.15	327.75
Class 2 (2015)	295	1.15	339.25
Class 2 (2016)	185	1.15	212.75
Class 2 (2017)	352	1.15	404.8
Class 2 (2018)	559	1.15	642.85
Class 2 (2019)	378	1.15	434.7
Class 2 (2020)	560	1.15	644
Class 3 (2014)	50	1.3	65
Class 3 (2015)	28	1.3	36.4
Class 3 (2016)	50	1.3	65
Class 3 (2017)	67	1.3	87.1
Class 3 (2018)	86	1.3	111.8
Class 3 (2019)	122	1.3	158.6
Class 3 (2020)	67	1.3	87.1
Class 4 (2014)	271	1.45	392.95
Class 4 (2015)	251	1.45	363.95
Class 4 (2016)	214	1.45	310.3
Class 4 (2017)	285	1.45	413.25
Class 4 (2018)	393	1.45	569.85
Class 4 (2019)	730	1.45	1058.5
Class 4 (2020)	427	1.45	619.15
Total	5,920		7,610
Average weighting factor (weighted transits/number of transits)		1.29	

Table 13 — Average Weighting Factor for District One, Undesignated Areas

Vessel Class/Year	Number of Transits	Weighting factor	Weighted Transits
Class 1 (2014)	25	1	25
Class 1 (2015)	28	1	28
Class 1 (2016)	18	1	18
Class 1 (2017)	19	1	19
Class 1 (2018)	22	1	22
Class 1 (2019)	30	1	30
Class 1 (2020)	3	1	3
Class 2 (2014)	238	1.15	273.7
Class 2 (2015)	263	1.15	302.45
Class 2 (2016)	169	1.15	194.35

Class 2 (2017)	290	1.15	333.5
Class 2 (2018)	352	1.15	404.8
Class 2 (2019)	366	1.15	420.9
Class 2 (2020)	358	1.15	411.7
Class 3 (2014)	60	1.3	78
Class 3 (2015)	42	1.3	54.6
Class 3 (2016)	28	1.3	36.4
Class 3 (2017)	45	1.3	58.5
Class 3 (2018)	63	1.3	81.9
Class 3 (2019)	58	1.3	75.4
Class 3 (2020)	35	1.3	45.5
Class 4 (2014)	289	1.45	419.05
Class 4 (2015)	269	1.45	390.05
Class 4 (2016)	222	1.45	321.9
Class 4 (2017)	285	1.45	413.25
Class 4 (2018)	382	1.45	553.9
Class 4 (2019)	326	1.45	472.7
Class 4 (2020)	334	1.45	484.3
Total	4,619		5,972
Average weighting factor (weighted transits/number of transits)		1.29	

I. Step 9: Calculate Revised Base Rates

In this step, we revise the base rates so that once the impact of the weighting factors is considered; the total cost of pilotage will be equal to the revenue needed. To do this, we divide the initial base rates calculated in Step 7 by the average weighting factors calculated in Step 8, as shown in table 14.

Table 14 — Revised Base Rates for District One

Area	Initial Rate (Step 7)	Average Weighting Factor (Step 8)	Revised Rate (Initial Rate ÷ Average Weighting Factor)
District One: Designated	\$1,055	1.29	\$818
District One: Undesignated	\$719	1.29	\$557

J. Step 10: Review and Finalize Rates

In this step, the Director reviews the rates set forth by the staffing model and ensures that they meet the goal of ensuring safe, efficient, and reliable pilotage. To establish this, the Director considers whether the proposed rates incorporate appropriate compensation for pilots to handle heavy traffic periods and whether there is a sufficient number of pilots to handle those heavy traffic periods. The Director also considers whether the proposed rates would cover operating expenses and infrastructure costs, including average traffic and weighting factors. Based on the financial information submitted by the pilots, the Director is not proposing any alterations to the rates in this step. We propose to modify § 401.405(a)(1) and (2) to reflect the final rates shown in table 15.

Table 15 — Proposed Final Rates for District One

Area	Name	Final 2021 Pilotage Rate	Proposed 2022 Pilotage Rate
District One: Designated	St. Lawrence River	\$800	\$818
District One: Undesignated	Lake Ontario	\$498	\$557

District Two

A. Step 1: Recognize Previous Operating Expenses

Step 1 in our ratemaking methodology requires that the Coast Guard review and recognize the previous year's operating expenses (§ 404.101). To do so, we begin by reviewing the independent accountant's financial reports for each association's 2019 expenses and revenues.²⁹ For accounting purposes, the financial reports divide expenses

²⁹ These reports are available in the docket for this 2022 ratemaking rulemaking (see Docket No. USCG-2021-0431).

into designated and undesignated areas. For costs accrued by the pilot associations generally, such as employee benefits, for example, the cost is divided between the designated and undesignated areas on a *pro rata* basis. The recognized operating expenses for District Two are shown in table 16.

Adjustments made by the auditors are explained in the auditors' reports (available in the docket where indicated in the **Public Participation and Request for Comments** portion of this document).

In the 2019 expenses used as the basis for this rulemaking, districts used the term "applicant" to describe applicant trainees and persons who would be called apprentices under the new definition proposed in this rulemaking. Therefore, when describing past expenses, we use the term "applicant" to match what was reported from 2019, but use "apprentice" to distinguish the impacts of the ratemaking going forward.

There are two Director's adjustments for District Two. The first deduction is \$173,818, the amount of surcharge collected in 2019 to recoup expenses of one applicant pilot, which is greater than the allowable surcharge of \$150,000 per applicant pilot. The second deduction of \$287,836 reduces the allowable expenses for applicant pilot salaries to 36 percent of target pilot compensation. District Two reported \$417,395 in expenses for the salary of a single applicant pilot, more than the salary of a fully registered pilot. Using the 36 percent target, the allowable applicant salary would have been \$129,559, meaning the district paid an excess of \$287,836 in applicant salaries ($\$417,395 - \$129,559 = \$287,836$). We continue to include applicant salaries as an allowable expense in the 2022 ratemaking as it is based on 2019 operating expenses, when salaries were still an allowable expense. The apprentice salaries paid in the years 2019, 2020, and 2021 have not been reimbursed in the ratemaking as of publication of this proposed rule. Applicant salaries (including applicant trainees and apprentice pilots) will continue to be an allowable operating expense through the 2024 ratemaking, which uses operating

expenses from 2021, where the wages for apprentice pilots were still authorized as operating expenses. Starting in the 2025 ratemaking, apprentice pilot salaries would no longer be included as a 2022 operating expense, because apprentice pilot wages would have already been factored into the ratemaking Steps 3 and 4 in calculation of the 2022 rates. Starting in 2025, the applicant salaries' operating expenses for 2022 will consist of only applicant trainees (those who are not yet apprentice pilots).

Table 16 — 2019 Recognized Expenses for District Two

	District Two		
	Undesignated	Designated	TOTAL
Reported Operating Expenses for 2019	Lake Erie	SES to Port Huron	
<i>Total Other Pilotage Costs</i>			
Subsistence/Travel – Pilots	\$140,909	\$211,363	\$352,272
Hotel/Lodging Cost	\$49,800	\$74,700	\$124,500
License Insurance	\$730	\$1,095	\$1,825
Payroll Taxes	\$90,091	\$135,137	\$225,228
Insurance	\$95,470	\$143,206	\$238,676
Training	\$6,428	\$9,642	\$16,070
Other	\$221	\$331	\$552
Total Other Pilotage Costs	\$383,649	\$575,474	\$959,123
<i>Total Applicant Pilotage Cost</i>			
Applicant Salaries	\$166,958	\$250,437	\$417,395
Applicant Health Insurance	\$80	\$120	\$200
Applicant Subsistence/Travel	\$5,729	\$8,593	\$14,322
Applicant Hotel/Lodging Cost	\$3,984	\$5,976	\$9,960
Applicant Payroll Tax	\$5,717	\$8,576	\$14,293
Total Applicant Cost	\$182,468	\$273,702	\$456,170
<i>Pilot Boat and Dispatch Costs</i>			
Pilot Boat Cost	\$210,948	\$316,422	\$527,370
Employee Benefits	\$96,959	\$145,438	\$242,397
Payroll Taxes	\$13,178	\$19,767	\$32,945
Total Pilot Boat and Dispatch Costs	\$321,085	\$481,627	\$802,712
<i>Administrative Expense</i>			
Legal – General Counsel	\$4,430	\$6,645	\$11,075
Legal – Shared Counsel (K&L Gates)	\$22,696	\$34,045	\$56,741
Office Rent	\$27,627	\$41,440	\$69,067
Insurance	\$11,085	\$16,627	\$27,712
Employee Benefits	\$34,093	\$51,139	\$85,232

Payroll Taxes	\$5,259	\$7,888	\$13,147
Other Taxes	\$36,484	\$54,726	\$91,210
Real Estate Taxes	\$7,905	\$11,858	\$19,763
Depreciation/Auto Lease/Other	\$12,248	\$18,371	\$30,619
Interest	\$320	\$481	\$801
APA Dues	\$14,698	\$22,048	\$36,746
Dues and Subscriptions	\$1,912	\$2,868	\$4,780
Utilities	\$18,910	\$28,366	\$47,276
Salaries – Admin Employees	\$49,924	\$74,885	\$124,809
Accounting	\$13,452	\$20,178	\$33,630
Other	\$18,322	\$27,483	\$45,805
Total Administrative Expenses	\$279,365	\$419,048	\$698,413
Total OpEx (Pilot Costs + Applicant Cost + Pilot Boats + Admin)	\$1,166,567	\$1,749,851	\$2,916,418
<i>Directors Adjustments - Applicant Surcharge Collected</i>	\$(69,527)	\$(104,291)	\$(173,818)
<i>Directors Adjustments - Excess Applicant Salary Paid</i>	\$(115,134)	\$(172,701)	\$(287,836)
TOTAL DIRECTOR'S ADJUSTMENTS	\$(184,661)	\$(276,992)	\$(461,654)
Total Operating Expenses (OpEx + Adjustments)	\$981,906	\$1,472,859	\$2,454,764

* Values may not sum due to rounding

B. Step 2: Project Operating Expenses, Adjusting for Inflation or Deflation.

Having identified the recognized 2019 operating expenses in Step 1, the next step is to estimate the current year's operating expenses by adjusting those expenses for inflation over the 3-year period.

We calculate inflation using the BLS data from the CPI for the Midwest Region of the United States for the 2020 inflation rate.³⁰ Because the BLS does not provide forecasted inflation data, we use economic projections from the Federal Reserve for the 2021 and 2022 inflation modification.³¹ Based on that information, the calculations for Step 2 are as follows:

Table 17 — Adjusted Operating Expenses for District Two

	District Two		
	Undesignated	Designated	Total
Total Operating Expenses (Step 1)	\$981,906	\$1,472,859	\$2,454,764
2020 Inflation Modification (@1%)	\$9,819	\$14,729	\$24,548
2021 Inflation Modification (@2.4%)	\$23,801	\$35,702	\$59,503
2022 Inflation Modification (@2%)	\$20,311	\$30,466	\$50,777
Adjusted 2022 Operating Expenses	\$1,035,837	\$1,553,756	\$2,589,592

C. Step 3: Estimate Number of Registered Pilots and Apprentice Pilots

In accordance with the text in § 404.103, we estimate the number of registered pilots in each district. We determine the number of registered pilots based on data provided by the LPA. Using these numbers, we estimate that there will be 16 registered pilots in 2022 in District Two. We determine the number of apprentice pilots based on

³⁰ The 2020 inflation rate is available at <https://beta.bls.gov/dataViewer/view/timeseries/CUUR0200SA0>. Specifically the CPI is defined as “All Urban Consumers (CPI-U), All Items, 1982-4=100.” (Downloaded April 2021)

³¹ The 2021 and 2022 inflation rates are available at <https://www.federalreserve.gov/monetarypolicy/files/fomcproptabl20210317.pdf>. We used the PCE median inflation value found in table 1. (Downloaded March 24, 2021)

input from the district on anticipated retirements and staffing needs. Using these numbers, we estimate that there will be two apprentice pilots in 2022 in District Two. Furthermore, based on the seasonal staffing model discussed in the 2017 ratemaking (see 82 FR 41466) and our proposed changes to that staffing model, we assign a certain number of pilots to designated waters and a certain number to undesignated waters, as shown in table 18. Without rounding up, there would be 8 pilots assigned to the undesignated area of District Two (8.6 pilots which is rounded up to 9 pilots). These numbers are used to determine the amount of revenue needed in their respective areas.

Table 18 — Authorized Pilots

Item	District Two
Proposed Maximum Number of Pilots (per § 401.220(a)) ³²	16
2022 Authorized Pilots (total)	16
Pilots Assigned to Designated Areas	7
Pilots Assigned to Undesignated Areas	9
2022 Apprentice Pilots	2

D. Step 4: Determine Target Pilot Compensation Benchmark and Apprentice Pilot Wage Benchmark

In this step, we determine the total pilot compensation for each area. As we are issuing an “interim” ratemaking this year, we follow the procedure outlined in paragraph (b) of § 404.104, which adjusts the existing compensation benchmark by inflation. As stated in section VI.A of the preamble, we are proposing to use a two-step process to adjust target pilot compensation for inflation. First, we adjust the 2021 percent target compensation benchmark of \$378,925 by multiplying by 1.8 percent for an adjusted value of \$385,746. The adjustment accounts for the difference in actual Q4 2020 ECI inflation, 3.5 percent, and the 2020 PCE estimate of 1.7 percent.^{33,34} The second step

³² For a detailed calculation refer to the Great Lakes Pilotage Rates – 2017 Annual Review final rule, which contains the staffing model. See 82 FR 41466, table 6 at 41480 (August 31, 2017).

³³ Employment Cost Index, Total Compensation for Private Industry workers in Transportation and Material Moving, Series ID: CIU2010000520000A.

³⁴ CPI for All Urban Consumers, Series ID CUUR0200SA0.

accounts for projected inflation from 2021 to 2022, which is 2.0 percent.³⁵ The proposed compensation benchmark for 2022 is \$393,461 per pilot, as calculated in table 6. The target apprentice pilot wage is 36 percent of the target pilot compensation, \$141,646 (= \$393,461 x 0.36).

Next, we certify that the number of pilots estimated for 2022 is less than or equal to the number permitted under the proposed changes to the staffing model in § 401.220(a). The proposed changes to the staffing model suggest that the number of pilots needed is 16 pilots for District Two, which is less than or equal to 16, the number of registered pilots provided by the pilot associations.³⁶

Thus, in accordance with § 404.104(c), we use the revised target individual compensation level to derive the total pilot compensation by multiplying the individual target compensation by the estimated number of registered pilots for District Two, as shown in table 19.

Table 19 — Target Compensation for District Two

	District Two		
	Undesignated	Designated	Total
Target Pilot Compensation	\$393,461	\$393,461	\$393,461
Number of Pilots	9	7	16
Total Target Pilot Compensation	\$3,541,149	\$2,754,227	\$6,295,376
Target Apprentice Pilot Wage	\$141,646	\$141,646	\$141,646
Number of Apprentice Pilots			2
Total Target Apprentice Pilot Wages	\$169,975	\$113,317	\$283,292

E. Step 5: Project Working Capital Fund

Next, we calculate the working capital fund revenues needed for each area. First, we add the figures for projected operating expenses, total pilot compensation, and total

³⁵ <https://www.federalreserve.gov/monetarypolicy/files/fomcprojt20210317.pdf>

³⁶ See table 6 of the Great Lakes Pilotage Rates – 2017 Annual Review final rule, 82 FR 41466 at 41480 (August 31, 2017). The methodology of the staffing model is discussed at length in the final rule (see pages 41476-41480 for a detailed analysis of the calculations).

target apprentice pilot wages for each area. Next, we find the preceding year’s average annual rate of return for new issues of high-grade corporate securities. Using Moody’s data, the number is 2.4767 percent.³⁷ By multiplying the two figures, we obtain the working capital fund contribution for each area, as shown in table 20.

Table 20 — Working Capital Fund Calculation for District Two

	District Two		
	Undesignated	Designated	Total
Adjusted Operating Expenses (Step 2)	\$1,035,837	\$1,553,756	\$2,589,592
Total Target Pilot Compensation (Step 4)	\$3,541,149	\$2,754,227	\$6,295,376
Total Target Apprentice Pilot Wages (Step 4)	\$169,975	\$113,317	\$283,292
Total 2022 Expenses	\$4,746,961	\$4,421,300	\$9,168,260
Working Capital Fund (2.48%)	\$117,566	\$109,501	\$227,067

F. Step 6: Project Needed Revenue

In this step, we add all the expenses accrued to derive the total revenue needed for each area. These expenses include the projected operating expenses (from Step 2), the total pilot compensation (from Step 4), total target apprentice pilot wages, and the working capital fund contribution (from Step 5). We show these calculations in table 21.

Table 21 — Revenue Needed for District Two

	District Two		
	Undesignated	Designated	Total
Adjusted Operating Expenses (Step 2)	\$1,035,837	\$1,553,756	\$2,589,592
Total Target Pilot Compensation (Step 4)	\$3,541,149	\$2,754,227	\$6,295,376
Total Target Apprentice Pilot Wages (Step 4)	\$169,975	\$113,317	\$283,292
Working Capital Fund (Step 5)	\$117,566	\$109,501	\$227,067
Total Revenue Needed	\$4,864,527	\$4,530,801	\$9,395,327

G. Step 7: Calculate Initial Base Rates

Having determined the revenue needed for each area in the previous six steps, to

³⁷ See footnote 22 for more information.

develop an hourly rate we divide that number by the expected number of hours of traffic. Step 7 is a two-part process. In the first part, we calculate the 10-year average of traffic in District Two, using the total time on task or pilot bridge hours.³⁸ Because we calculate separate figures for designated and undesignated waters, there are two parts for each calculation. We show these values in table 22.

Table 22 — Time on Task for District Two (Hours)

Year	District Two	
	Undesignated	Designated
2020	6232	8401
2019	6512	7715
2018	6150	6655
2017	5139	6074
2016	6425	5615
2015	6535	5967
2014	7856	7001
2013	4603	4750
2012	3848	3922
2011	3708	3680
Average	5701	5978

Next, we derive the initial hourly rate by dividing the revenue needed by the average number of hours for each area. This produces an initial rate, which is necessary to produce the revenue needed for each area, assuming the amount of traffic is as expected. The calculations for each area are set forth in table 23. The initial rate for the designated area is lower than last year’s rate because of the increase in bridge hours shown as the average time on task, making the denominator of the revenue needed divided by bridge hours larger, and therefore making the initial rate lower.

Table 23 — Initial Rate Calculations for District Two

Item	Undesignated	Designated
Revenue Needed (Step 6)	\$4,864,527	\$4,530,801
Average Time on Task (Hours)	5,701	5,978

³⁸ See footnote 23 for more information.

Initial Rate	\$853	\$758
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H. Step 8: Calculate Average Weighting Factors by Area.

In this step, we calculate the average weighting factor for each designated and undesignated area. We collect the weighting factors, set forth in 46 CFR 401.400, for each vessel trip. Using this database, we calculate the average weighting factor for each area using the data from each vessel transit from 2014 onward, as shown in tables 24 and 25.³⁹

Table 24 — Average Weighting Factor for District Two, Undesignated Areas

Vessel Class/Year	Number of Transits	Weighting Factor	Weighted Transits
Class 1 (2014)	31	1	31
Class 1 (2015)	35	1	35
Class 1 (2016)	32	1	32
Class 1 (2017)	21	1	21
Class 1 (2018)	37	1	37
Class 1 (2019)	54	1	54
Class 1 (2020)	1	1	1
Class 2 (2014)	356	1.15	409.4
Class 2 (2015)	354	1.15	407.1
Class 2 (2016)	380	1.15	437
Class 2 (2017)	222	1.15	255.3
Class 2 (2018)	123	1.15	141.45
Class 2 (2019)	127	1.15	146.05
Class 2 (2020)	165	1.15	189.75
Class 3 (2014)	20	1.3	26
Class 3 (2015)	0	1.3	0
Class 3 (2016)	9	1.3	11.7
Class 3 (2017)	12	1.3	15.6
Class 3 (2018)	3	1.3	3.9
Class 3 (2019)	1	1.3	1.3
Class 3 (2020)	1	1.3	1.3
Class 4 (2014)	636	1.45	922.2
Class 4 (2015)	560	1.45	812
Class 4 (2016)	468	1.45	678.6
Class 4 (2017)	319	1.45	462.55

³⁹ See footnote 24 for more information.

Class 4 (2018)	196	1.45	284.20
Class 4 (2019)	210	1.45	304.50
Class 4 (2020)	201	1.45	291.45
Total	4,574		6,012
Average weighting factor (weighted transits/number of transits)		1.31	

Table 25 — Average Weighting Factor for District Two, Designated Areas

Vessel Class/Year	Number of Transits	Weighting Factor	Weighted Transits
Class 1 (2014)	20	1	20
Class 1 (2015)	15	1	15
Class 1 (2016)	28	1	28
Class 1 (2017)	15	1	15
Class 1 (2018)	42	1	42
Class 1 (2019)	48	1	48
Class 1 (2020)	7	1	7
Class 2 (2014)	237	1.15	272.55
Class 2 (2015)	217	1.15	249.55
Class 2 (2016)	224	1.15	257.6
Class 2 (2017)	127	1.15	146.05
Class 2 (2018)	153	1.15	175.95
Class 2 (2019)	281	1.15	323.15
Class 2 (2020)	342	1.15	393.3
Class 3 (2014)	8	1.3	10.4
Class 3 (2015)	8	1.3	10.4
Class 3 (2016)	4	1.3	5.2
Class 3 (2017)	4	1.3	5.2
Class 3 (2018)	14	1.3	18.2
Class 3 (2019)	1	1.3	1.3
Class 3 (2020)	5	1.3	6.5
Class 4 (2014)	359	1.45	520.55
Class 4 (2015)	340	1.45	493
Class 4 (2016)	281	1.45	407.45
Class 4 (2017)	185	1.45	268.25
Class 4 (2018)	379	1.45	549.55
Class 4 (2019)	403	1.45	584.35
Class 4 (2020)	405	1.45	587.25
Total	4,152		5,461

Average weighting factor (weighted transits/number of transits)		1.32	
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I. Step 9: Calculate Revised Base Rates

In this step, we revise the base rates so that once the impact of the weighting factors is considered, the total cost of pilotage will be equal to the revenue needed. To do this, we divide the initial base rates calculated in Step 7 by the average weighting factors calculated in Step 8, as shown in table 26.

Table 26 — Revised Base Rates for District Two

Area	Initial Rate (Step 7)	Average Weighting Factor (Step 8)	Revised Rate (Initial Rate ÷ Average Weighting Factor)
District Two: Designated	\$758	1.32	\$574
District Two: Undesignated	\$853	1.31	\$651

J. Step 10: Review and Finalize Rates

In this step, the Director reviews the rates set forth by the staffing model and ensures that they meet the goal of ensuring safe, efficient, and reliable pilotage. To establish this, the Director considers whether the proposed rates incorporate appropriate compensation for pilots to handle heavy traffic periods, and whether there is a sufficient number of pilots to handle those heavy traffic periods. The Director also considers whether the proposed rates would cover operating expenses and infrastructure costs, and takes average traffic and weighting factors into consideration. Based on this information, the Director is not proposing any alterations to the rates in this step. The proposed 2021 rate for the designated area of District Two is lower than the 2020 final rate because of the increased traffic shown in Step 7. We propose to modify § 401.405(a)(3) and (4) to reflect the final rates shown in table 27.

Table 27 — Proposed Final Rates for District Two

Area	Name	Final 2020 Pilotage Rate	Proposed 2021 Pilotage Rate
District Two: Designated	Navigable waters from Southeast Shoal to Port Huron, MI	\$580	\$574
District Two: Undesignated	Lake Erie	\$566	\$651

District Three

A. Step 1: Recognize Previous Operating Expenses

Step 1 in our ratemaking methodology requires that the Coast Guard review and recognize the previous year’s operating expenses (§ 404.101). To do so, we begin by reviewing the independent accountant’s financial reports for each association’s 2018 expenses and revenues.⁴⁰ For accounting purposes, the financial reports divide expenses into designated and undesignated areas. For costs accrued by the pilot associations generally, such as employee benefits, for example, the cost is divided between the designated and undesignated areas on a *pro rata* basis. The recognized operating expenses for District Three are shown in table 28.

Adjustments made by the auditors are explained in the auditors’ reports (available in the docket where indicated in the **Public Participation and Request for Comments** portion of this document).

In the 2019 expenses used as the basis for this rulemaking, districts used the term “applicant” to describe applicant trainees and persons who would be called apprentices under the new definition proposed in this rulemaking. Therefore, when describing past

⁴⁰ These reports are available in the docket for this rulemaking (see Docket No. USCG-2019-0736).

expenses, we use the term “applicant” to match what was reported from 2019, but use “apprentice” to describe the impacts of the ratemaking going forward.

There are two Director’s adjustments for District Three. The first deduction is \$746,802, the amount of surcharge collected in 2019 to recoup expenses of four applicant pilots, which is greater than the allowable surcharge of \$150,000 per applicant pilot. The second deduction of \$1,921 reduces the allowable expenses for applicant pilots to 36 percent of target pilot compensation. District Three reported \$520,158 in expenses for the salary of four applicant pilots. Using the 36 percent target, the allowable applicant salary would have been \$129,559 per applicant for a total of \$518,237 for four applicant pilots, meaning the district paid an excess of \$1,921 in applicant salaries ($\$520,158 - \$518,237 = \$1,921$). Applicant salaries (including applicant trainees and apprentice pilots) will continue to be an allowable operating expense through the 2024 ratemaking, which uses operating expenses from 2021 where the wages for apprentice pilots were still authorized as operating expenses. Starting in the 2025 ratemaking, apprentice pilot salaries would no longer be included as a 2022 operating expense, because apprentice pilot wages would have already been factored into the ratemaking Steps 3 and 4 in calculation of the 2022 rates. Starting in 2025, the applicant salaries operating expenses for 2022 will consist of only applicant trainees (those who are not apprentice pilots).

Table 28 — 2019 Recognized Expenses for District Three

	District Three			
	Undesignated	Designated	Undesignated	TOTAL
Reported Operating Expenses for 2019	Lakes Huron and Michigan	St. Mary's River	Lake Superior	
<i>Other Pilotage Costs</i>				
Pilot Subsistence/Travel	\$274,911	\$114,586	\$144,207	\$533,704
Hotel/Lodging Cost	\$118,533	\$49,406	\$62,178	\$230,117
License Insurance – Pilots	\$16,171	\$6,740	\$8,483	\$31,394
Payroll Taxes				\$0
Payroll Tax (D3-19-01)	\$146,545	\$61,082	\$76,871	\$284,498
Pilot Training	\$40,017	\$16,680	\$20,991	\$77,688
Other	\$12,551	\$5,232	\$6,584	\$24,367
Total Other Pilotage Costs	\$608,728	\$253,726	\$319,314	\$1,181,768
<i>Applicant Cost</i>				
Applicant Salaries	\$267,933	\$111,678	\$140,547	\$520,158
Applicant Benefits	\$77,627	\$32,356	\$40,720	\$150,703
Applicant Payroll Tax	\$21,713	\$9,050	\$11,390	\$42,153
Total Applicant Cost	\$367,273	\$153,084	\$192,657	\$713,014
<i>Pilot Boat and Dispatch Costs</i>				
Pilot Boat Costs	\$415,908	\$173,356	\$218,168	\$807,432
Dispatch Costs	\$126,807	\$52,855	\$66,518	\$246,180
Employee Benefits	\$7,550	\$3,147	\$3,960	\$14,657
Payroll Taxes	\$10,534	\$4,391	\$5,526	\$20,451
Total Pilot Boat and Dispatch Costs	\$560,799	\$233,749	\$294,172	\$1,088,720
<i>Administrative Cost</i>				
Legal – General Counsel	\$9,453	\$3,940	\$4,958	\$18,351
Legal – Shared Counsel (K&L Gates)	\$26,858	\$11,195	\$14,089	\$52,142
Legal – USCG Intervener Litigation	\$19,050	\$7,940	\$9,993	\$36,983
Office Rent	\$3,369	\$1,404	\$1,767	\$6,540
Insurance	\$27,622	\$11,513	\$14,489	\$53,624
Employee Benefits	\$77,435	\$32,276	\$40,619	\$150,330

Payroll Tax	\$18,984	\$7,913	\$9,958	\$36,855
Other Taxes	\$480	\$200	\$252	\$932
Depreciation/Auto Leasing/Other	\$51,287	\$21,377	\$26,903	\$99,567
Interest	\$5,754	\$2,398	\$3,018	\$11,170
APA Dues	\$24,311	\$10,133	\$12,752	\$47,196
Dues and Subscriptions	\$4,198	\$1,750	\$2,202	\$8,150
Utilities	\$38,585	\$16,083	\$20,240	\$74,908
Salaries	\$75,200	\$31,344	\$39,447	\$145,991
Accounting/Professional Fees	\$19,865	\$8,280	\$10,420	\$38,565
Other Expenses	\$23,945	\$9,981	\$12,561	\$46,487
CPA Deduction (D3-18-01)	\$(4,117)	\$(1,716)	\$(2,160)	\$(7,993)
Total Administrative Expenses	\$422,279	\$176,011	\$221,508	\$819,798
Total Operating Expenses (Other Costs+ Applicant Cost + Pilot Boats + Admin)	\$1,959,079	\$816,570	\$1,027,651	\$3,803,300
<i>Directors Adjustments - Applicant Surcharge Collected</i>	\$(384,678)	\$(160,339)	\$(201,786)	\$(746,802)
<i>Directors Adjustments - Excess Applicant Salary Paid</i>	\$(989.36)	\$(412.38)	\$(518.98)	\$(1,921)
Total Directors Adjustments	\$(385,667)	\$(160,751)	\$(202,305)	\$(748,723)
Total Operating Expenses (OpEx + Adjustments)	\$1,573,412	\$655,819	\$825,346	\$3,054,577

B. Step 2: Project Operating Expenses, Adjusting for Inflation or Deflation

Having identified the recognized 2019 operating expenses in Step 1, the next step is to estimate the current year's operating expenses by adjusting those expenses for inflation over the 3-year period.

We calculate inflation using the BLS data from the CPI for the Midwest Region of the United States for the 2020 inflation rate.⁴¹ Because the BLS does not provide forecasted inflation data, we use economic projections from the Federal Reserve for the 2021 and 2022 inflation modification.⁴² Based on that information, the calculations for Step 2 are as follows:

Table 29 — Adjusted Operating Expenses for District Three

	District Three		
	Undesignated	Designated	Total
Total Operating Expenses (Step 1)	\$2,398,758	\$655,819	\$3,054,577
2020 Inflation Modification (@1%)	\$23,988	\$6,558	\$30,546
2021 Inflation Modification (@2.4%)	\$58,146	\$15,897	\$74,043
2022 Inflation Modification (@2%)	\$49,618	\$13,565	\$63,183
Adjusted 2022 Operating Expenses	\$2,530,510	\$691,839	\$3,222,349

C. Step 3: Estimate Number of Registered Pilots and Apprentice Pilots

In accordance with the text in § 404.104(c), we estimate the number of registered pilots in each district. We determine the number of registered pilots based on data provided by the WGLPA. Using these numbers, we estimate that there will be 22 registered pilots in 2022 in District Three. We determine the number of apprentice pilots

⁴¹ The 2020 inflation rate is available at <https://beta.bls.gov/dataViewer/view/timeseries/CUUR0200SA0>. Specifically the CPI is defined as “All Urban Consumers (CPI-U), All Items, 1982-4=100”. (Downloaded April 2021)

⁴² The 2021 and 2022 inflation rates are available at <https://www.federalreserve.gov/monetarypolicy/files/fomcprojt20210317.pdf>. We used the PCE median inflation value found in table 1. (Downloaded March 24, 2021)

based on input from the district on anticipated retirements and staffing needs. Using these numbers, we estimate that there will be five apprentice pilots in 2022 in District Three. Furthermore, based on the seasonal staffing model discussed in the 2017 ratemaking (see 82 FR 41466), and our proposed changes to that staffing model, we assign a certain number of pilots to designated waters and a certain number to undesignated waters, as shown in table 30. These numbers are used to determine the amount of revenue needed in their respective areas.

Table 30 — Authorized Pilots

Item	District Three
Proposed Maximum Number of Pilots (per § 401.220(a)) ⁴³	22
2022 Authorized Pilots (total)	22
Pilots Assigned to Designated Areas	4
Pilots Assigned to Undesignated Areas	18
2022 Apprentice Pilots	5

D. Step 4: Determine Target Pilot Compensation Benchmark and Apprentice Pilot Wage Benchmark

In this step, we determine the total pilot compensation for each area. As we are issuing an “interim” ratemaking this year, we follow the procedure outlined in paragraph (b) of § 404.104, which adjusts the existing compensation benchmark by inflation. First, we adjust the 2021 percent target compensation benchmark of \$378,925 by 1.8 percent for an adjusted value of \$385,746. The adjustment accounts for the difference in actual Q4 2020 ECI inflation, 3.5 percent, and the 2020 PCE estimate of 1.7 percent.^{44,45} The second step accounts for projected inflation from 2021 to 2022, 2.0 percent.⁴⁶ Based on the projected 2022 inflation estimate, the proposed compensation benchmark for 2022 is

⁴³ For a detailed calculation, refer to the Great Lakes Pilotage Rates – 2017 Annual Review final rule, which contains the staffing model. See 82 FR 41466, table 6 at 41480 (August 31, 2017).

⁴⁴ Employment Cost Index, Total Compensation for Private Industry workers in Transportation and Material Moving, Series ID: CIU2010000520000A.

⁴⁵ CPI for All Urban Consumers, Series ID CUUR0200SA0.

⁴⁶ <https://www.federalreserve.gov/monetarypolicy/files/fomcproptabl20210317.pdf>

\$393,461 per pilot as shown in table 6. The target apprentice pilot wage is 36 percent of the target pilot compensation, \$141,646 (= \$393,461 x 0.36).

Next, we certify that the number of pilots estimated for 2022 is less than or equal to the number permitted under the proposed changes to the staffing model in § 401.220(a). The proposed changes to the staffing model suggest that the number of pilots needed is 22 pilots for District Three, which is less than or equal to 22, the number of registered pilots provided by the pilot associations.⁴⁷

Thus, in accordance with § 404.104(c), we use the revised target individual compensation level to derive the total pilot compensation by multiplying the individual target compensation by the estimated number of registered pilots for District Three, as shown in table 31.

Table 31 — Target Compensation for District Three

	District Three		
	Undesignated	Designated	Total
Target Pilot Compensation	\$393,461	\$393,461	\$393,461
Number of Pilots	18	4	22
Total Target Pilot Compensation	\$7,082,298	\$1,573,844	\$8,656,142
Target Apprentice Pilot Wage	\$141,646	\$141,646	\$141,646
Number of Apprentice Pilots			5
Total Target Apprentice Pilot Wages	\$424,938	\$283,292	\$708,229.80

E. Step 5: Project Working Capital Fund

Next, we calculate the working capital fund revenues needed for each area. First, we add the figures for projected operating expenses, total pilot compensation, and total target apprentice pilot wages for each area. Next, we find the preceding year’s average annual rate of return for new issues of high-grade corporate securities. Using Moody’s

⁴⁷ See Table 6 of the Great Lakes Pilotage Rates – 2017 Annual Review final rule, 82 FR 41466 at 41480 (August 31, 2017). The methodology of the staffing model is discussed at length in the final rule (see pages 41476-41480 for a detailed analysis of the calculations).

data, the number is 2.4767 percent.⁴⁸ By multiplying the two figures, we obtain the working capital fund contribution for each area, as shown in table 32.

Table 32 — Working Capital Fund Calculation for District Three

	District Three		
	Undesignated	Designated	Total
Adjusted Operating Expenses (Step 2)	\$2,530,510	\$691,839	\$3,222,349
Total Target Pilot Compensation (Step 4)	\$7,082,298	\$1,573,844	\$8,656,142
Total Target Apprentice Pilot Wages (Step 4)	\$424,938	\$283,292	\$708,230
Total 2022 Expenses	\$10,037,746	\$2,548,975	\$12,586,721
Working Capital Fund (2.48%)	\$248,602	\$63,130	\$311,732

F. Step 6: Project Needed Revenue

In this step, we add all the expenses accrued to derive the total revenue needed for each area. These expenses include the projected operating expenses (from Step 2), the total pilot compensation (from Step 4), and the working capital fund contribution (from Step 5). The calculations are shown in table 33.

Table 33 — Revenue Needed for District Three

	District Three		
	Undesignated	Designated	Total
Adjusted Operating Expenses (Step 2)	\$2,530,510	\$691,839	\$3,222,349
Total Target Pilot Compensation (Step 4)	\$7,082,298	\$1,573,844	\$8,656,142
Total Target Apprentice Pilot Wages (Step 4)	\$424,938	\$283,292	\$708,230
Working Capital Fund (Step 5)	\$248,602	\$63,130	\$311,732
Total Revenue Needed	\$10,286,348	\$2,612,105	\$12,898,453

G. Step 7: Calculate Initial Base Rates

Having determined the revenue needed for each area in the previous six steps, to develop an hourly rate we divide that number by the expected number of hours of traffic.

⁴⁸ Moody’s Seasoned Aaa Corporate Bond Yield, average of 2020 monthly data. The Coast Guard uses the most recent year of complete data. Moody’s is taken from Moody’s Investors Service, which is a bond credit rating business of Moody’s Corporation. Bond ratings are based on creditworthiness and risk. The rating of “Aaa” is the highest bond rating assigned with the lowest credit risk. See <https://fred.stlouisfed.org/series/AAA>. (March 26, 2021)

Step 7 is a two-part process. In the first part, we calculate the 10-year average of traffic in District Three, using the total time on task or pilot bridge hours.⁴⁹ Because we calculate separate figures for designated and undesignated waters, there are two parts for each calculation. We show these values in table 34.

Table 34 — Time on Task for District Three (Hours)

Year	District Three	
	Undesignated	Designated
2020	24,178	3,682
2019	24,851	3,395
2018	19,967	3,455
2017	20,955	2,997
2016	23,421	2,769
2015	22,824	2,696
2014	25,833	3,835
2013	17,115	2,631
2012	15,906	2,163
2011	16,012	1,678
Average	21,106	2,930

Next, we derive the initial hourly rate by dividing the revenue needed by the average number of hours for each area. This produces an initial rate, which is necessary to produce the revenue needed for each area, assuming the amount of traffic is as expected. The calculations for each area are set forth in table 35.

Table 35 — Initial Rate Calculations for District Three

	Undesignated	Designated
Revenue Needed (Step 6)	\$10,287,977	\$2,612,550
Average Time on Task (Hours)	21,106	2,930
Initial Rate	\$487	\$891

H. Step 8: Calculate Average Weighting Factors by Area

In this step, we calculate the average weighting factor for each designated and undesignated area. We collect the weighting factors, set forth in 46 CFR 401.400, for

⁴⁹ See footnote 22 for more information.

each vessel trip. Using this database, we calculate the average weighting factor for each area using the data from each vessel transit from 2014 onward, as shown in tables 36 and 37.⁵⁰

Table 36 — Average Weighting Factor for District Three, Undesignated Areas

Vessel Class/Year	Number of Transits	Weighting Factor	Weighted Transits
Class 1 (2014)	45	1	45
Class 1 (2015)	56	1	56
Class 1 (2016)	136	1	136
Class 1 (2017)	148	1	148
Class 1 (2018)	103	1	103
Class 1 (2019)	173	1	173
Class 1 (2020)	4	1	4
Class 2 (2014)	274	1.15	315.1
Class 2 (2015)	207	1.15	238.05
Class 2 (2016)	236	1.15	271.4
Class 2 (2017)	264	1.15	303.6
Class 2 (2018)	169	1.15	194.35
Class 2 (2019)	279	1.15	320.85
Class 2 (2020)	395	1.15	454.25
Class 3 (2014)	15	1.3	19.5
Class 3 (2015)	8	1.3	10.4
Class 3 (2016)	10	1.3	13
Class 3 (2017)	19	1.3	24.7
Class 3 (2018)	9	1.3	11.7
Class 3 (2019)	9	1.3	11.7
Class 3 (2020)	4	1.3	5.2
Class 4 (2014)	394	1.45	571.3
Class 4 (2015)	375	1.45	543.75
Class 4 (2016)	332	1.45	481.4
Class 4 (2017)	367	1.45	532.15
Class 4 (2018)	337	1.45	488.65
Class 4 (2019)	334	1.45	484.3
Class 4 (2020)	413	1.45	598.85
Total for Area 6	5,115		6,559

⁵⁰ See footnote 23 for more information.

Area 8			
Class 1 (2014)	3	1	3
Class 1 (2015)	0	1	0
Class 1 (2016)	4	1	4
Class 1 (2017)	4	1	4
Class 1 (2018)	0	1	0
Class 1 (2019)	0	1	0
Class 1 (2020)	1	1	1
Class 2 (2014)	177	1.15	203.55
Class 2 (2015)	169	1.15	194.35
Class 2 (2016)	174	1.15	200.1
Class 2 (2017)	151	1.15	173.65
Class 2 (2018)	102	1.15	117.3
Class 2 (2019)	120	1.15	138
Class 2 (2020)	239	1.15	274.85
Class 3 (2014)	3	1.3	3.9
Class 3 (2015)	0	1.3	0
Class 3 (2016)	7	1.3	9.1
Class 3 (2017)	18	1.3	23.4
Class 3 (2018)	7	1.3	9.1
Class 3 (2019)	6	1.3	7.8
Class 3 (2020)	2	1.3	2.6
Class 4 (2014)	243	1.45	352.35
Class 4 (2015)	253	1.45	366.85
Class 4 (2016)	204	1.45	295.8
Class 4 (2017)	269	1.45	390.05
Class 4 (2018)	188	1.45	272.6
Class 4 (2019)	254	1.45	368.3
Class 4 (2020)	456	1.45	661.2
Total for Area 8	3,054		4,077
Combined total	8,169		10,636.05
Average weighting factor (weighted transits/number of transits)		1.30	

Table 37 — Average Weighting Factor for District Three, Designated Areas

Vessel Class/Year	Number of Transits	Weighting Factor	Weighted Transits
Class 1 (2014)	27	1	27
Class 1 (2015)	23	1	23

Class 1 (2016)	55	1	55
Class 1 (2017)	62	1	62
Class 1 (2018)	47	1	47
Class 1 (2019)	45	1	45
Class 1 (2020)	16	1	16
Class 2 (2014)	221	1.15	254.15
Class 2 (2015)	145	1.15	166.75
Class 2 (2016)	174	1.15	200.1
Class 2 (2017)	170	1.15	195.5
Class 2 (2018)	126	1.15	144.9
Class 2 (2019)	162	1.15	186.3
Class 2 (2020)	250	1.15	287.5
Class 3 (2014)	4	1.3	5.2
Class 3 (2015)	0	1.3	0
Class 3 (2016)	6	1.3	7.8
Class 3 (2017)	14	1.3	18.2
Class 3 (2018)	6	1.3	7.8
Class 3 (2019)	3	1.3	3.9
Class 3 (2020)	4	1.3	5.2
Class 4 (2014)	321	1.45	465.45
Class 4 (2015)	245	1.45	355.25
Class 4 (2016)	191	1.45	276.95
Class 4 (2017)	234	1.45	339.3
Class 4 (2018)	225	1.45	326.25
Class 4 (2019)	308	1.45	446.6
Class 4 (2020)	385	1.45	558.25
Total	3,469		4,526
Average weighting factor (weighted transits/number of transits)		1.30	

I. Step 9: Calculate Revised Base Rates

In this step, we revise the base rates so that once the impact of the weighting factors is considered, the total cost of pilotage will be equal to the revenue needed. To do this, we divide the initial base rates calculated in Step 7 by the average weighting factors calculated in Step 8, as shown in table 38.

Table 38 — Revised Base Rates for District Three

Area	Initial Rate (Step 7)	Average Weighting Factor (Step 8)	Revised Rate (Initial Rate ÷ Average Weighting Factor)
District Three: Designated	\$891	1.30	\$685
District Three: Undesignated	\$487	1.30	\$375

J. Step 10: Review and Finalize Rates

In this step, the Director reviews the rates set forth by the staffing model and ensures that they meet the goal of ensuring safe, efficient, and reliable pilotage. To establish this, the Director considers whether the proposed rates incorporate appropriate compensation for pilots to handle heavy traffic periods and whether there is a sufficient number of pilots to handle those heavy traffic periods. The Director also considers whether the proposed rates would cover operating expenses and infrastructure costs, and takes average traffic and weighting factors into consideration. Based on this information, the Director is not proposing any alterations to the rates in this step. We propose to modify § 401.405(a)(5) and (6) to reflect the final rates shown in table 39.

Table 39 — Proposed Final Rates for District Three

Area	Name	Final 2020 Pilotage Rate	Proposed 2021 Pilotage Rate
District Three: Designated	St. Marys River	\$586	\$685
District Three: Undesignated	Lakes Huron, Michigan, and Superior	\$337	\$375

VIII. Regulatory Analyses

We developed this proposed rule after considering numerous statutes and Executive orders related to rulemaking. A summary of our analyses based on these statutes or Executive orders follows.

A. Regulatory Planning and Review

Executive Orders 12866 (Regulatory Planning and Review) and 13563 (Improving Regulation and Regulatory Review) direct agencies to assess the costs and benefits of available regulatory alternatives and, if regulation is necessary, to select regulatory approaches that maximize net benefits (including potential economic, environmental, public health and safety effects, distributive impacts, and equity). Executive Order 13563 emphasizes the importance of quantifying costs and benefits, reducing costs, harmonizing rules, and promoting flexibility.

The Office of Management and Budget (OMB) has not designated this proposed rule a significant regulatory action under section 3(f) of Executive Order 12866. Accordingly, OMB has not reviewed it. A regulatory analysis (RA) follows.

The purpose of this proposed rule is to establish new base pilotage rates, as 46 U.S.C. 9303(f) requires that rates be established or reviewed and adjusted each year. The statute also requires that base rates be established by a full ratemaking at least once every 5 years, and in years when base rates are not established, they must be reviewed and, if necessary, adjusted. The last full ratemaking was concluded in June of 2018.⁵¹ For this ratemaking, the Coast Guard estimates an increase in cost of approximately \$3.53 million to industry, an approximate 12-percent increase, because of the change in revenue needed in 2022 compared to the revenue needed in 2021.

⁵¹ Great Lakes Pilotage Rates – 2018 Annual Review and Revisions to Methodology (83 FR 26162), published June 5, 2018.

Table 40 summarizes proposed changes with no cost impacts or where the cost impacts are captured in the proposed rate change. Table 41 summarizes the affected population, costs, and benefits of the proposed rate change.

Table 40 — Proposed Changes with No Costs or Cost Captured in the Proposed Rate Change

Change	Description	Affected Population	Basis for No Cost or Cost Captured in the Rate	Benefits
Add a definition of apprentice pilot.	Distinguishes between applicants who have not yet entered training and apprentices, persons approved and certified by the Director who are participating in an approved U.S. Great Lakes pilot training and qualification program and meet all the minimum requirements listed in 46 CFR 401.211.	Owners and operators of 293 vessels transiting the Great Lakes system annually, 56 U.S. Great Lakes pilots, 9 apprentice pilots, and 3 pilotage associations.	No cost, strictly a definitional change.	Provides clarity by distinguishing apprentice pilots from applicant trainees when calculating the apprentice pilot operating expenses, estimates and wage benchmark.

<p>Changes to staffing model.</p>	<p>The Coast Guard is proposing to modify the staffing model at 46 CFR 401.220(a)(3) to round up to the nearest integer, as opposed to the existing method, which rounds to the nearest integer. In total, this would increase the maximum number of allowable pilots by 2, adding one pilot to each of the undesignated areas of District One and District Two.</p>	<p>Owners and operators of 293 vessels transiting the Great Lakes system annually, 56 U.S. Great Lakes pilots, 9 apprentice pilots, and 3 pilotage associations.</p>	<p>The total number of pilots is accounted for in the base pilotage rates. For the 2022 ratemaking, this proposed change would allow for two additional pilots that would not have otherwise been allowed. This increases the total revenue needed by \$773,281.</p>	<p>Rounding up in the staffing model accounts for extra staff or extra time spent by the pilot associations presidents not performing pilotage service. Rounding up allows us to account for this time and promote safety and restorative rest, while minimizing delays in providing pilotage services.</p>
<p>Adding number of apprentice pilots to Step 3 and setting target apprentice pilot wage in Step 4.</p>	<p>The Coast Guard is proposing to modify the staffing model at 46 CFR 404.103 to predict the number of apprentice pilots each district would need for the next season. 46 CFR 404.103 would establish the target apprentice pilot wage at 36% of registered pilot compensation for that year.</p>	<p>Owners and operators of 293 vessels transiting the Great Lakes system annually, 56 U.S. Great Lakes pilots, 9 apprentice pilots, and 3 pilotage associations.</p>	<p>Total cost of \$1,274,814 for the wages of 9 apprentice pilots for the 2022 season. This amount is incorporated into the rate increase.</p>	<p>Setting a target wage of 36% of registered pilot compensation better matches changes in registered pilot compensation and inflation and more evenly distributes the additional cost of apprentice pilots compared to the surcharge method.</p>

Table 41 — Economic Impacts Due to Proposed Changes

Change	Description	Affected Population	Costs	Benefits
Rate and surcharge changes.	In accordance with 46 U.S.C. Chapter 93, the Coast Guard is required to review and adjust base pilotage rates annually.	Owners and operators of 293 vessels transiting the Great Lakes system annually, 56 U.S. Great Lakes pilots, 9 apprentice pilots, and 3 pilotage associations.	Increase of \$3,527,425 due to change in revenue needed for 2022 (\$33,860,077) from revenue needed for 2021 (\$30,332,652), as shown in table 42.	New rates cover an association's necessary and reasonable operating expenses. Promotes safe, efficient, and reliable pilotage service on the Great Lakes. Provides fair compensation, adequate training, and sufficient rest periods for pilots. Ensures the association receives sufficient revenues to fund future improvements.

The Coast Guard is required to review and adjust pilotage rates on the Great Lakes annually. See sections IV and V of this preamble for detailed discussions of the legal basis and purpose for this rulemaking and for background information on Great Lakes pilotage ratemaking. Based on our annual review for this rulemaking, we are proposing to adjust the pilotage rates for the 2022 shipping season to generate sufficient revenues for each district to reimburse its necessary and reasonable operating expenses, fairly compensate trained and rested pilots, and provide an appropriate working capital fund to use for improvements. The result would be an increase in rates for all areas in Districts One and Three and the undesignated area of District Two. The rate for the designated area of District Two would decrease. These changes would lead to a net increase in the cost of service to shippers. However, because the proposed rates would increase for some areas and decrease for others, the change in per unit cost to each individual shipper would be dependent on their area of operation, and if they previously paid a surcharge.

A detailed discussion of our economic impact analysis follows.

Affected Population

This rule would affect U.S. Great Lakes pilots, the 3 pilot associations, and the owners and operators of 293 oceangoing vessels that transit the Great Lakes annually. We estimate that there would be 56 registered pilots and 9 apprentice pilots during the 2022 shipping season. The shippers affected by these rate changes are those owners and operators of domestic vessels operating “on register” (engaged in foreign trade) and owners and operators of non-Canadian foreign vessels on routes within the Great Lakes system. These owners and operators must have pilots or pilotage service as required by 46 U.S.C. 9302. There is no minimum tonnage limit or exemption for these vessels. The statute applies only to commercial vessels and not to recreational vessels. U.S.-flagged vessels not operating on register and Canadian “lakers,” which account for most commercial shipping on the Great Lakes, are not required by 46 U.S.C. 9302 to have pilots. However, these U.S. and Canadian-flagged lakers may voluntarily choose to engage a Great Lakes registered pilot. Vessels that are U.S.-flagged may opt to have a pilot for varying reasons, such as unfamiliarity with designated waters and ports, or for insurance purposes.

The Coast Guard used billing information from the years 2018 through 2020 from the Great Lakes Pilotage Management System (GLPMS) to estimate the average annual number of vessels affected by the rate adjustment. The GLPMS tracks data related to managing and coordinating the dispatch of pilots on the Great Lakes, and billing in accordance with the services. As described in Step 7 of the methodology, we use a 10-year average to estimate the traffic. We used 3 years of the most recent billing data to estimate the affected population. When we reviewed 10 years of the most recent billing data, we found the data included vessels that have not used pilotage services in recent years. We believe using 3 years of billing data is a better representation of the vessel

population that is currently using pilotage services and would be impacted by this rulemaking. We found that 514 unique vessels used pilotage services during the years 2017 through 2019. That is, these vessels had a pilot dispatched to the vessel, and billing information was recorded in the GLPMS or SeaPro. Of these vessels, 465 were foreign-flagged vessels and 49 were U.S.-flagged vessels. As stated previously, U.S.-flagged vessels not operating on register are not required to have a registered pilot per 46 U.S.C. §9302, but they can voluntarily choose to have one.

Numerous factors affect vessel traffic, which varies from year to year. Therefore, rather than using the total number of vessels over the time period, we took an average of the unique vessels using pilotage services from the years 2018 through 2020 as the best representation of vessels estimated to be affected by the rates in this rulemaking. From 2018 through 2020, an average of 293 vessels used pilotage services annually.⁵² On average, 275 of these vessels were foreign-flagged vessels and 19 were U.S.-flagged vessels that voluntarily opted into the pilotage service.

Total Cost to Shippers

The proposed rate changes resulting from this adjustment to the rates would result in a net increase in the cost of service to shippers. However, the proposed change in per unit cost to each individual shipper would be dependent on their area of operation.

The Coast Guard estimates the effect of the rate changes on shippers by comparing the total projected revenues needed to cover costs in 2021 with the total projected revenues to cover costs in 2022, including any temporary surcharges we have authorized.⁵³ We set pilotage rates so pilot associations receive enough revenue to cover their necessary and reasonable expenses. Shippers pay these rates when they have a pilot

⁵² Some vessels entered the Great Lakes multiple times in a single year, affecting the average number of unique vessels utilizing pilotage services in any given year.

⁵³ While the Coast Guard implemented a surcharge in 2019, we are not proposing any surcharges for 2022.

as required by 46 U.S.C. 9302. Therefore, the aggregate payments of shippers to pilot associations are equal to the projected necessary revenues for pilot associations. The revenues each year represent the total costs that shippers must pay for pilotage services. The change in revenue from the previous year is the additional cost to shippers discussed in this rule.

The impacts of the rate changes on shippers are estimated from the district pilotage projected revenues (shown in tables 9, 21, and 33 of this preamble). The Coast Guard estimates that for the 2022 shipping season, the projected revenue needed for all three districts is \$33,860,077.

To estimate the change in cost to shippers from this rule, the Coast Guard compared the 2022 total projected revenues to the 2021 projected revenues. Because we review and prescribe rates for the Great Lakes Pilotage annually, the effects are estimated as a single-year cost rather than annualized over a 10-year period. In the 2021 rulemaking, we estimated the total projected revenue needed for 2021 as \$30,332,652.⁵⁴ This is the best approximation of 2021 revenues, as at the time of this publication the Coast Guard does not have enough audited data available for the 2021 shipping season to revise these projections.⁵⁵ Table 42 shows the revenue projections for 2021 and 2022 and details the additional cost increases to shippers by area and district as a result of the rate changes on traffic in Districts One, Two, and Three.

Table 42 — Effect of the Rule by Area and District (\$U.S.; Non-discounted)

Area	Revenue Needed in 2021	Revenue Needed in 2022	Change in Costs of this Proposed Rule
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⁵⁴ 85 FR 20088, see table 41.

⁵⁵ The proposed rates for 2021 do not account for the impacts COVID-19 may have had on shipping traffic and subsequently pilotage revenue, as we do not have complete data for 2020. The rates for 2022 will take into account for all and any pertinent impacts of COVID-19 on shipping traffic, because that future ratemaking will include 2020 traffic data. However, the Coast Guard uses 10-year average when calculating traffic in order to smooth out variations in traffic caused by global economic conditions, such as those caused by the COVID-19 pandemic.

Total, District One	\$10,620,941	\$11,566,297	\$945,356
Total, District Two	\$8,506,705	\$9,395,327	\$888,622
Total, District Three	\$11,205,006	\$12,898,453	\$1,693,447
System Total	\$30,332,652	\$33,860,077	\$3,527,425

The resulting difference between the projected revenue in 2021 and the projected revenue in 2022 is the annual change in payments from shippers to pilots as a result of the rate change imposed by this proposed rule. The effect of the rate change to shippers varies by area and district. After taking into account the change in pilotage rates, the rate changes would lead to affected shippers operating in District One experiencing an increase in payments of \$945,356 over the previous year. District Two and District Three would experience an increase in payments of \$888,622 and \$1,693,447, respectively, when compared with 2021. The overall adjustment in payments would be an increase in payments by shippers of \$3,527,425 across all three districts (a 12-percent increase when compared with 2021). Again, because the Coast Guard reviews and sets rates for Great Lakes pilotage annually, we estimate the impacts as single-year costs rather than annualizing them over a 10-year period.

Table 43 shows the difference in revenue by revenue-component from 2021 to 2022 and presents each revenue-component as a percentage of the total revenue needed. In both 2021 and 2022, the largest revenue-component was pilotage compensation (71 percent of total revenue needed in 2021 and 65 percent of total revenue needed in 2022), followed by operating expenses (26 percent of total revenue needed in 2021 and 29 percent of total revenue needed in 2022).

Table 43 — Difference in Revenue by Component

Revenue-Component	Revenue Needed in 2021	Percentage of Total Revenue Needed in 2021	Revenue Needed in 2022	Percentage of Total Revenue Needed in 2022	Difference (2022 Revenue - 2021 Revenue)	Percentage Change from Previous Year
Adjusted Operating Expenses	\$8,876,850	29%	\$9,733,112	29%	\$856,262	10%
Total Target Pilot Compensation	\$20,461,950	67%	\$22,033,816	65%	\$1,571,866	8%
Total Target Apprentice Pilot Wages	-	-	\$1,274,814	4%	\$1,274,814	-
Working Capital Fund	\$993,852	3%	\$818,335	2%	(\$175,517)	(18%)
Total Revenue Needed	\$30,332,652	100%	\$33,860,077	100%	\$3,527,425	12%

Note: Totals may not sum due to rounding.

As stated above, we estimate that there will be a total increase in revenue needed by the pilot associations of \$3,527,425. This represents an increase in revenue needed for target pilot compensation of \$1,571,866, the now-codified revenue needed for total apprentice pilot wages of \$1,274,814, and an increase in the revenue needed for adjusted operating expenses of \$856,262 and a decrease in the revenue needed for the working capital fund of (\$175,517).

The majority of the increase in revenue needed, \$1,571,866, is the result of changes to target pilot compensation. These changes are due to three factors: (1) The proposed changes to adjust 2021 pilotage compensation to account for the difference between actual ECI inflation (3.5 percent)⁵⁶ and predicted PCE inflation (1.7 percent)⁵⁷ for 2021; (2) the net addition of two additional pilots; and (3) inflation of pilotage compensation in step 2 of the methodology using CPI from 2019 and predicted inflation through 2022.

The proposed target compensation is \$393,461 per pilot in 2022, compared to \$378,925 in 2021. The proposed changes to modify the 2020 pilot compensation to account for the difference between predicted and actual inflation would increase the 2021 target compensation value by 1.8 percent. As shown in table 44, this inflation adjustment would increase total compensation by \$6,821 per pilot, and the total revenue needed by \$381,956 when accounting for all 56 pilots.

Table 44 — Change in Revenue Resulting from the Proposed Change to Inflation of Pilot Compensation Calculation in Step 4

2021 Target Compensation	\$378,925
Adjusted 2021 Compensation ($\$378,925 \times 1.018$)	\$385,746

⁵⁶ https://www.bls.gov/news.release/archives/eci_01292021.htm.

⁵⁷ <https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20201216.htm>.

Difference between Target 2021 Compensation and Adjusted Target 2021 Compensation (\$385,746 – \$378,925)	\$6,821
Increase in Total Revenue for 56 Pilots (\$6,821 × 56)	\$381,956

Adjusting rounding in the staffing model to always round up, rather than round to the nearest integer, would add an additional pilot to the undesignated areas of District One and District Two. The proposed addition of two fully registered pilots accounts for \$773,281 of the increase in needed revenue. As shown in table 44, to avoid double counting, this value excludes the change in revenue resulting from the proposed change to adjust 2021 pilotage compensation to account for the difference between actual and predicted inflation.

Table 45 — Change in Revenue Resulting From Adding Two Additional Pilots

2022 Target Compensation	\$393,461
Total Number of New Pilots	2
Total Cost of New Pilots (\$393,461 × 2)	\$786,922
Difference between Adjusted Target 2021 Compensation and Target 2021 Compensation (\$378,925 – \$385,746)	\$6,821
Increase in Total Revenue for 2 Pilots (\$6,821 × 2)	\$13,641
Net Increase in Total Revenue for 2 Pilots (\$786,922 – \$13,641)	\$773,281

Another proposed increase, \$432,060, is the result of increasing compensation for the 56 pilots to account for future inflation of 2.0 percent in 2022. This would increase total compensation by \$7,715 per pilot, as shown in table 46.

Table 46 — Change in Revenue Resulting from Inflating 2021 Compensation to 2022

Adjusted 2021 Compensation	\$385,746
2022 Target Compensation (\$385,746 × 1.02)	\$393,461
Difference between Adjusted 2021 Compensation and Target 2022 Compensation (\$393,461 – \$385,746)	\$7,715
Increase in Total Revenue for 56 Pilots (\$7,715 x 56)	\$432,060

Finally, the second-largest part of the increase in revenue needed would be to account for the target apprentice pilot wage, now incorporated into the rate. First, in Step 3, we estimate the need for 9 apprentice pilots for the 2022 shipping season. Based on the 2022 target pilot compensation of \$393,461, the target apprentice pilot wage would be \$141,646 ($\$393,461 \times 0.36 = \$141,646$). Setting the target in this manner, rather than through a surcharge, better allows apprentice pilot wages to match fluctuations in the pilot wage, which follows changes in traffic and better accounts for changes in inflation than the surcharge. Additionally, unlike a surcharge, this method will not need to be “turned off,” which makes rates throughout the season more predictable for shippers. The total cost of wages for the 9 apprentice pilots would be \$1,274,814, as shown in table 47.

Table 47 — Change in Revenue Resulting from Target Apprentice Pilot Wages

2022 Target Apprentice Pilot Wage	\$141,646
Total Number of Apprentice Pilots	9
Total Cost of Apprentice Pilots (\$141,646 x 9)	\$1,274,814

Table 48 presents the percentage change in revenue by area and revenue-component, excluding surcharges, as they are applied at the district level.⁵⁸

⁵⁸ The 2020 projected revenues are from the Great Lakes Pilotage Rate-2020 Annual Review and Revisions to Methodology final rule (85 FR 20088), tables 8, 20, and 32. The 2021 projected revenues are from tables 9, 21, and 33 of this NPRM.

Table 48 — Difference in Revenue by Component and Area

	Adjusted Operating Expenses			Total Target Pilot Compensation			Total Target Apprentice Pilot Wage	Working Capital Fund			Total Revenue Needed		
	2021	2022	Percent age Change	2021	2022	Percent age Change	2022	2021	2022	Percent age Change	2021	2022	Percent age Change
District One: Designated	\$2,328,981	\$2,352,634	1%	\$3,789,250	\$4,104,585	8%	\$169,975	\$207,255	\$159,924	(30%)	\$6,325,486	\$6,617,143	4%
District One: Undesignated	\$1,502,239	\$1,568,537	4%	\$2,652,475	\$3,261,005	19%	\$113,317	\$140,741	\$119,612	(18%)	\$4,295,455	\$4,949,154	13%
District Two: Undesignated	\$1,003,961	\$1,035,837	3%	\$3,031,400	\$3,711,124	18%	\$169,975	\$136,698	\$117,566	(16%)	\$4,172,059	\$4,864,527	14%
District Two: Designated	\$1,540,146	\$1,553,756	1%	\$2,652,475	\$2,867,544	8%	\$113,317	\$142,025	\$109,501	(30%)	\$4,334,646	\$4,530,801	4%
District Three: Undesignated	\$1,947,484	\$2,530,510	23%	\$6,820,650	\$7,507,236	9%	\$424,938	\$297,021	\$248,602	(19%)	\$9,065,155	\$10,286,348	12%
District Three: Designated	\$554,039	\$691,839	20%	\$1,515,700	\$1,857,136	18%	\$283,292	\$70,112	\$63,130	(11%)	\$2,139,851	\$2,612,105	18%

Benefits

This proposed rule would allow the Coast Guard to meet requirements in 46 U.S.C. 9303 to review the rates for pilotage services on the Great Lakes. The rate changes would promote safe, efficient, and reliable pilotage service on the Great Lakes by (1) ensuring that rates cover an association's operating expenses; (2) providing fair pilot compensation, adequate training, and sufficient rest periods for pilots; and (3) ensuring pilot associations produce enough revenue to fund future improvements. The rate changes would also help recruit and retain pilots, which would ensure a sufficient number of pilots to meet peak shipping demand, helping to reduce delays caused by pilot shortages.

B. Small Entities

Under the Regulatory Flexibility Act, 5 U.S.C. 601-612, we have considered whether this proposed rule would have a significant economic impact on a substantial number of small entities. The term "small entities" comprises small businesses, not-for-profit organizations that are independently owned and operated and are not dominant in their fields, and governmental jurisdictions with populations of less than 50,000.

For the proposed rule, the Coast Guard reviewed recent company size and ownership data for the vessels identified in the GLPMS, and we reviewed business revenue and size data provided by publicly available sources such as Manta⁵⁹ and ReferenceUSA.⁶⁰ As described in section VIII.A of this preamble, Regulatory Planning and Review, we found that 513 unique vessels used pilotage services during the years 2018 through 2020. These vessels are owned by 58 entities, of which 44 are foreign entities that operate primarily outside the United States and the remaining 14 entities are

⁵⁹ See <https://www.manta.com/>.

⁶⁰ See <https://resource.referenceusa.com/>.

U.S. entities. We compared the revenue and employee data found in the company search to the Small Business Administration’s (SBA) small business threshold as defined in the SBA’s “Table of Size Standards” for small businesses to determine how many of these companies are considered small entities.⁶¹ Table 49 shows the North American Industry Classification System (NAICS) codes of the U.S. entities and the small entity standard size established by the SBA.

Table 49 — NAICS Codes and Small Entities Size Standards

NAICS	Description	Small Entity Size Standard
211120	Crude Petroleum Extraction	1,250 employees
237990	Other Heavy and Civil Engineering Construction	\$39.5 million
238910	Site Preparation Contractors	\$16.5 million
483212	Inland Water Passenger Transportation	500 employees
487210	Scenic and Sightseeing Transportation, Water	\$8.0 million
488330	Navigational Services to Shipping	\$41.5 million
523910	Miscellaneous Intermediation	\$41.5 million
561599	All Other Travel Arrangement and Reservation Services	\$22.0 million
982100	National Security	Population of 50,000 People

Of the 14 U.S. entities, 7 exceed the SBA’s small business standards for small entities. To estimate the potential impact on the seven small entities, the Coast Guard used their 2020 invoice data to estimate their pilotage costs in 2022. Of the seven entities from 2018 to 2020, only three used pilotage services in 2020. We increased their 2020 costs to account for the changes in pilotage rates resulting from this proposed rule and the Great Lakes Pilotage Rates – 2021 Annual Review and Revisions to Methodology final rule (86 FR 14184). We estimated the change in cost to these entities resulting from this proposed rule by subtracting their estimated 2021 costs from their estimated 2022 costs

⁶¹ See <https://www.sba.gov/document/support--table-size-standards>. SBA has established a “Table of Size Standards” for small businesses that sets small business size standards by NAICS code. A size standard, which is usually stated in number of employees or average annual receipts (“revenues”), represents the largest size that a business (including its subsidiaries and affiliates) may be in order to remain classified as a small business for SBA and Federal contracting programs.

and found the average costs to small firms would be approximately \$16,072, with a range of \$607 to \$70,853.⁶² We then compared the estimated change in pilotage costs between 2021 and 2022 with each firm's annual revenue. In all cases, their estimated pilotage expenses were below 1 percent of their annual revenue.

In addition to the owners and operators discussed above, three U.S. entities that receive revenue from pilotage services would be affected by this proposed rule. These are the three pilot associations that provide and manage pilotage services within the Great Lakes districts. Two of the associations operate as partnerships, and one operates as a corporation. These associations are designated with the same NAICS code and small-entity size standards described above, but have fewer than 500 employees. Combined, they have approximately 65 employees in total and, therefore, are designated as small entities. The Coast Guard expects no adverse effect on these entities from this rule, because the three pilot associations would receive enough revenue to balance the projected expenses associated with the projected number of bridge hours (time on task) and pilots.

Finally, the Coast Guard did not find any small not-for-profit organizations that are independently owned and operated and are not dominant in their fields that would be impacted by this proposed rule. We also did not find any small governmental jurisdictions with populations of fewer than 50,000 people that would be impacted by this proposed rule. Based on this analysis, we conclude this rulemaking would not affect a substantial number of small entities, nor have a significant economic impact on any of the affected entities.

Based on our analysis, this proposed rule would have a less than 1 percent annual

⁶² One company had a particularly disproportionate impact because its vessel operated in all three districts. The impact for that company was more than 15 times greater than the next smallest company.

impact on three small entities; therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this proposed rule would not have a significant economic impact on a substantial number of small entities. If you think that your business, organization, or governmental jurisdiction qualifies as a small entity and that this proposed rule would have a significant economic impact on it, please submit a comment to the docket at the address listed in the **ADDRESSES** section of this preamble. In your comment, explain why you think it qualifies and how and to what degree this proposed rule would economically affect it.

C. Assistance for Small Entities

Under section 213(a) of the Small Business Regulatory Enforcement Fairness Act of 1996, Public Law 104-121, we want to assist small entities in understanding this proposed rule so that they can better evaluate its effects on them and participate in the rulemaking. If the proposed rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please call or email the person in the **FOR FURTHER INFORMATION** section of this proposed rule. The Coast Guard will not retaliate against small entities that question or complain about this proposed rule or any policy or action of the Coast Guard.

Small businesses may send comments on the actions of Federal employees who enforce, or otherwise determine compliance with, Federal regulations to the Small Business and Agriculture Regulatory Enforcement Ombudsman and the Regional Small Business Regulatory Fairness Boards. The Ombudsman evaluates these actions annually and rates each agency's responsiveness to small business. If you wish to comment on actions by employees of the Coast Guard, call 1-888-REG-FAIR (1-888-734-3247).

D. Collection of Information

This proposed rule would call for no new collection of information under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 3520.

E. Federalism

A rule has implications for federalism under Executive Order 13132 (Federalism) if it has a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have analyzed this proposed rule under Executive Order 13132 and have determined that it is consistent with the fundamental federalism principles and preemption requirements as described in Executive Order 13132. Our analysis follows.

Congress directed the Coast Guard to establish “rates and charges for pilotage services”. See 46 U.S.C. 9303(f). This regulation is issued pursuant to that statute and is preemptive of State law as specified in 46 U.S.C. 9306. Under 46 U.S.C. 9306, a “State or political subdivision of a State may not regulate or impose any requirement on pilotage on the Great Lakes.” As a result, States or local governments are expressly prohibited from regulating within this category. Therefore, this proposed rule is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132.

While it is well settled that States may not regulate in categories in which Congress intended the Coast Guard to be the sole source of a vessel’s obligations, the Coast Guard recognizes the key role that State and local governments may have in making regulatory determinations. Additionally, for rules with implications and preemptive effect, Executive Order 13132 specifically directs agencies to consult with State and local governments during the rulemaking process. If you believe this rule has implications for federalism under Executive Order 13132, please contact the person listed in the **FOR FURTHER INFORMATION** section of this preamble.

F. Unfunded Mandates

The Unfunded Mandates Reform Act of 1995, 2 U.S.C. 1531-1538, requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, 46 U.S.C. Chapter 93 addresses actions that may result in the expenditure by a State, local, or tribal government, in the aggregate, or by the private sector of \$100 million (adjusted for inflation) or more in any one year. Although this proposed rule would not result in such an expenditure, we do discuss the effects of this proposed rule elsewhere in this preamble.

G. Taking of Private Property

This proposed rule would not cause a taking of private property or otherwise have taking implications under Executive Order 12630 (Governmental Actions and Interference with Constitutionally Protected Property Rights).

H. Civil Justice Reform

This proposed rule meets applicable standards in sections 3(a) and 3(b)(2) of Executive Order 12988, (Civil Justice Reform), to minimize litigation, eliminate ambiguity, and reduce burden.

I. Protection of Children

We have analyzed this proposed rule under Executive Order 13045 (Protection of Children from Environmental Health Risks and Safety Risks). This proposed rule is not an economically significant rule and would not create an environmental risk to health or risk to safety that might disproportionately affect children.

J. Indian Tribal Governments

This proposed rule does not have tribal implications under Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), because it would not have a substantial direct effect on one or more Indian tribes, on the relationship between the Federal Government and Indian tribes, or on the distribution of power and responsibilities between the Federal Government and Indian tribes.

K. Energy Effects

We have analyzed this proposed rule under Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use). We have determined that it is not a “significant energy action” under that order because it is not a “significant regulatory action” under Executive Order 12866 and is not likely to have a significant adverse effect on the supply, distribution, or use of energy.

L. Technical Standards

The National Technology Transfer and Advancement Act, codified as a note to 15 U.S.C. 272, directs agencies to use voluntary consensus standards in their regulatory activities unless the agency provides Congress, through OMB, with an explanation of why using these standards would be inconsistent with applicable law or otherwise impractical. Voluntary consensus standards are technical standards (e.g., specifications of materials, performance, design, or operation; test methods; sampling procedures; and related management systems practices) that are developed or adopted by voluntary consensus standards bodies.

This proposed rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards. If you disagree with our analysis or are aware of voluntary consensus standards that might apply, please send a comment explaining your disagreement or identifying appropriate standards to the docket using one of the methods listed in the **ADDRESSES** section of this preamble.

M. Environment

We have analyzed this proposed rule under DHS Management Directive 023-01, Rev. 1, associated implementing instructions, and Environmental Planning COMDTINST 5090.1 (series), which guide the Coast Guard in complying with the National Environmental Policy Act of 1969 (42 U.S.C. 4321-4370f), and have made a preliminary determination that this action is one of a category of actions that do not

individually or cumulatively have a significant effect on the human environment. A preliminary Record of Environmental Consideration supporting this determination is available in the docket. For instructions on locating the docket, see the **ADDRESSES** section of this preamble.

This proposed rule meets the criteria for categorical exclusion (CATEX) under paragraphs A3 and L54 of Appendix A, Table 1 of DHS Instruction Manual 023-001-01, Rev. 1.⁶³ Paragraph A3 pertains to the promulgation of rules, issuance of rulings or interpretations, and the development and publication of policies, orders, directives, notices, procedures, manuals, advisory circulars, and other guidance documents of the following nature: (a) those of a strictly administrative or procedural nature; (b) those that implement, without substantive change, statutory or regulatory requirements; or (c) those that implement, without substantive change, procedures, manuals, and other guidance documents; and d) those that interpret or amend an existing regulation without changing its environmental effect. Paragraph L54 pertains to regulations, which are editorial or procedural.

This proposed rule involves adjusting the pilotage rates to account for changes in district operating expenses, an increase in the number of pilots, and anticipated inflation. In addition, the Coast Guard is proposing how apprentice pilots will be compensated in future rulemakings. All of these proposed changes are consistent with the Coast Guard's maritime safety missions. We seek any comments or information that may lead to the discovery of a significant environmental impact from this proposed rule.

List of Subjects

46 CFR Part 401

⁶³ https://www.dhs.gov/sites/default/files/publications/DHS_Instruction%20Manual%202023-01-001-01%20Rev%2001_508%20Admin%20Rev.pdf.

Administrative practice and procedure, Great Lakes; Navigation (water),
Penalties, Reporting and recordkeeping requirements, Seamen
46 CFR Part 404

Great Lakes, Navigation (water), Seamen

For the reasons discussed in the preamble, the Coast Guard proposes to amend 46
CFR parts 401 and 404 as follows:

PART 401—GREAT LAKES PILOTAGE REGULATIONS

1. The authority citation for part 401 is revised to read as follows:

Authority: 46 U.S.C. 2103, 2104(a), 6101, 7701, 8105, 9303, 9304; DHS
Delegation 00170.1, Revision No. 01.2, paragraphs (II)(92)(a), (d), (e), (f).

2. Amend § 401.110 by adding paragraphs (a)(18) and (19) to read as follows:

§401.110 Definitions.

(a) * * *

(18) *Apprentice Pilot* means a person approved and certified by the Director who is participating in an approved U.S. Great Lakes pilot training and qualification program. This individual meets all the minimum requirements listed in 46 CFR 401.211. This definition is only applicable to determining which pilots may be included in the operating expenses, estimates, and wage benchmark in §§ 404.2(b)(7), 404.103(b), and 404.104(d) and (e).

(19) *Limited Registration* is a certificate issued by the Director, upon the request of the respective pilots association, to an Apprentice Pilot to provide pilotage service without direct supervision from a fully registered pilot in a specific area or waterway.

3. Amend § 401.220 by revising the first sentence of paragraph (a)(3) to read as follows:

§ 401.220 Registration of pilots.

(a) * * *

(3) The number of pilots needed in each district is calculated by totaling the area results by district and rounding them up to a whole integer. * * *

* * * * *

4. Amend §401.405 by revising paragraphs (a)(1) through (6) to read as follows:

§ 401.405 Pilotage rates and charges.

(a) * * *

(1) The St. Lawrence River is \$818;

(2) Lake Ontario is \$557;

(3) Lake Erie is \$651;

(4) The navigable waters from Southeast Shoal to Port Huron, MI is \$574;

(5) Lakes Huron, Michigan, and Superior is \$375; and

(6) The St. Marys River is \$685.

* * * * *

PART 404 –GREAT LAKES PILOTAGE RATEMAKING

5. The authority citation for part 404 is revised to read as follows:

Authority: 46 U.S.C. 2103, 2104(a), 9303, 9304; DHS Delegation 00170.1, Revision No. 01.2, paragraphs (II)(92)(a), (f).

6. Amend § 404.2 by adding paragraph (b)(7) to read as follows:

§ 404.2 Procedure and criteria for recognizing association expenses.

* * * * *

(b) * * *

(7) *Apprentice Pilot Expenses.* The association's expenses for Apprentice Pilots with limited registrations, such as health care, travel expenses, training, and other expenses are recognizable when determined to be necessary and reasonable.

* * * * *

7. Amend § 404.103 as follows:

a. Revise the section heading;

b. Redesignate the introductory text as paragraph (a); and

c. Add new paragraph (b).

The revisions and additions read as follows:

§ 404.103 Ratemaking step 3: Estimate number of registered pilots and apprentice pilots.

* * * * *

(b) The Director projects, based on the number of persons applying under 46 CFR part 401 to become apprentice pilots, traffic projections, information provided by the pilotage association regarding upcoming retirements, and any other relevant data, the number of apprentice pilots with limited registrations expected to be in training and compensated.

8. Amend § 404.104 as follows:

a. Revise the section heading; and

b. Add new paragraphs (d) and (e).

The revisions and additions read as follows:

§ 404.104 Ratemaking step 4: Determine target pilot compensation benchmark and apprentice pilot wage benchmark.

* * * * *

(d) The Director determines the individual apprentice pilot wage benchmark at the rate of 36 percent of the individual target pilot compensation, as calculated according to paragraphs (a) or (b) of this section.

(e) The Director determines each pilot association's total apprentice pilot wage benchmark by multiplying the apprentice pilot compensation computed in paragraph (d) of this section by the number of apprentice pilots with limited registrations projected under §404.103(b).

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Dated: September 3, 2021.

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[FR Doc. 2021-19570 Filed: 9/13/2021 8:45 am; Publication Date: 9/14/2021]