DEPARTMENT OF HOMELAND SECURITY

Coast Guard

46 CFR Parts 401 and 404

[Docket No. USCG–2021–0431]

RIN 1625–AC70

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

AGENCY: Coast Guard, DHS.

ACTION: Final rule.

SUMMARY: In accordance with the statutory provisions enacted by the Great Lakes Pilotage Act of 1960, the Coast Guard is issuing new base pilotage rates for the 2022 shipping season. This rule will 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 rule will make a policy change to round up in the staffing model. The Coast Guard is also making methodology changes to factor in an apprentice pilot's compensation benchmark for the estimated number of apprentice pilots. The Coast Guard estimates that this rule will result in a 7-percent increase in pilotage operating costs compared to the 2021 season.

DATES: This final rule is effective April 29, 2022.

ADDRESSES: To view documents mentioned in this preamble as being available in the docket, go to *https://www.regulations.gov,* type USCG–2021–0431 in the search box and click ''Search.'' Next, in the Document Type column, select ''Supporting & Related Material.''

FOR FURTHER INFORMATION CONTACT: For information about this document, call or email Mr. Brian Rogers, Commandant, Office of Waterways and Ocean Policy—Great Lakes Pilotage Division (CG–WWM–2), Coast Guard; telephone 202–372–1535, email *Brian.Rogers@uscg.mil,* or fax 202–372–1914.

SUPPLEMENTARY INFORMATION:

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I. Abbreviations

APA American Pilots' Association
BLS Bureau of Labor Statistics
CFR Code of Federal Regulations
Coalition Shipping Federation of Canada, American Great Lakes Ports Association, and United States Great Lakes Shipping Association
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
GAO United States Government Accountability Office
GLPA Great Lakes Pilotage Authority (Canadian)
GLPAC Great Lakes Pilotage Advisory Committee
GLPMS Great Lakes Pilotage Management System
Great Lakes Pilots' comment The comment filed jointly by the Lakes Pilots Association, Saint Lawrence Seaway Pilotage Association, and Western Great Lakes Pilots Association
IRS Internal Revenue Service
LPA Lakes Pilots Association
NAICS North American Industry Classification System
NPRM Notice of proposed rulemaking
NTSB National Transportation Safety Board
OMB Office of Management and Budget
PCE Personal Consumption Expenditures
Q4 Fourth quarter
§ Section
SBA Small Business Administration
SLSDC St. Lawrence Seaway Development Corporation
SLSMC St. Lawrence Seaway Management Corporation
SLSPA Saint Lawrence Seaway Pilotage Association
U.S.C. United States Code
WGLPA Western Great Lakes Pilots Association

II. Executive Summary

Pursuant to Title 46 of the United States Code (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

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

waterway conditions but is generally in March or April. The rates for the 2022 season, which range from $342 to $834 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 source of United States 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 pilots to participate in professional development.

In accordance with statutory and regulatory requirements, we employed a ratemaking methodology that was introduced originally in 2016.[2] 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 that we explain in detail in the Discussion of Methodological and Other Changes, in section V of the preamble to this rule.

As part of our annual review, in this rule we are establishing new pilotage rates for 2022 based on the existing methodology. The Coast Guard estimates that this rule will result in a 7-percent increase in pilotage operating costs compared to the 2021 season. There will be an increase in rates for all areas of District One and District Three, and for the undesignated area of District Two. The rate for the designated area of District Two will decrease.

These changes are largely due to a combination of three factors: (1) The addition of apprentice pilots to Step 3, ''Estimate Number of Registered Pilots and Apprentice Pilots,'' with a target wage of 36 percent of pilot target compensation (60 percent of the increase in revenue needed), (2) adjusting target pilot compensation for both the difference in past predicted and actual inflation and predicted future inflation (48 percent of the increase in revenue needed), and (3) a net reduction of 3 registered pilots at the beginning of the 2022 shipping season, representing the addition of 1 pilot for the undesignated area of District One due to rounding, the reduction of 2 pilots, and the addition of 1 pilot for the undesignated area due to rounding in District Two, and 3 retirements in District Three (an offsetting decrease representing −54 percent of the increase in revenue needed).[3] The other 46 percent of the increase in revenue needed 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 caused by global economic conditions, such as those caused by the COVID–19 pandemic.

The Coast Guard is also making one policy change and one change to the ratemaking methodology. First, in the staffing model (Volume 82 of the **Federal Register** (FR) at Page 41466, and table 6 at Page 41480, August 31, 2017), the Coast Guard will change the way we determine the maximum number of pilots needed for the upcoming season by always rounding up the final number to the nearest whole number. Second, we will also include in the methodology a calculation for a wage benchmark for apprentice pilots. Although it is not a change to existing ratemaking policy, we are listing apprentice pilot operating expenses within the approved operating expenses in title 46 of the Code of Federal Regulations (CFR), section 404.2, ''Procedure and criteria for recognizing association expenses,'' used in Step 1 of the ratemaking. 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 wage benchmark.

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

TABLE 1—EXISTING AND NEW PILOTAGE RATES ON THE GREAT LAKES

Area	Name	Final 2021 pilotage rate	Final 2022 pilotage rate
District One: Designated	St. Lawrence River	$800	$834
District One: Undesignated	Lake Ontario	498	568
District Two: Designated	Navigable waters from Southeast Shoal to Port Huron, MI	580	536
District Two: Undesignated	Lake Erie	566	610
District Three: Designated	St. Marys River	586	662
District Three: Undesignated	Lakes Huron, Michigan, and Superior	337	342

This rule will affect 51 United States Great Lakes pilots, 9 apprentice pilots, 3 pilot associations, and the owners and operators of an average of 293 oceangoing vessels that transit the Great Lakes annually. This rule is not economically significant under Executive Order 12866 and will 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 $2,154,342 in estimated payments made by shippers during the 2022 shipping season. This rule establishes the 2022 yearly compensation for pilots on the Great Lakes at $399,266 per pilot (a 5.37 percent increase over their 2021 compensation), adjusted for changes in inflation since the September 14, 2021 notice of proposed rulemaking (NPRM) for this final rule (*see,* 86 FR 51047). 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 VII of this preamble provides the regulatory impact analyses of this rule.

III. Basis and Purpose

The legal basis of this rulemaking is 46 U.S.C. Chapter 93,[4] which requires foreign merchant vessels and United States vessels operating ''on register'' (meaning United States vessels engaged in foreign trade) to use United States or Canadian pilots while transiting the

[2] 81 FR 11907, March 7, 2016.

[3] The increase of two pilots from rounding is an increase of 36 percent, and the decrease of five pilots from retirements and attrition is −90 percent, for a net effect of a decrease of 54 percent.

[4] 46 U.S.C. 9301–9308.

United States waters of the St. Lawrence Seaway and the Great Lakes system.[5] For United States 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, no 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 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 rule is to issue new pilotage rates for the 2022 shipping season. The Coast Guard believes that the new rates will continue to promote our goals, as outlined in 46 CFR 404.1, of promoting safe, efficient, and reliable pilotage service; facilitating commerce throughout the Great Lakes and St. Lawrence Seaway; protecting the marine environment; and generating sufficient revenue for each pilotage association to reimburse its necessary and reasonable operating expenses, recruit qualified mariners, retain experienced United States Registered Pilots, support staffing model goals in accordance with National Transportation Safety Board (NTSB) recommendations regarding pilot fatigue, and provide appropriate revenue to use for improvements.

IV. Discussion of Comments and Changes

In response to the NPRM for this ratemaking, the Coast Guard received six comment submissions. These submissions include one comment filed jointly by the Lakes Pilots Association, the Saint Lawrence Seaway Pilotage Association, and the Western Great Lakes Pilots Association (the Great Lakes Pilots' comment); one filed jointly by the Shipping Federation of Canada, the American Great Lakes Ports Association, and the United States Great Lakes Shipping Association (collectively, the Coalition); one from the president of the St. Lawrence Seaway Pilots' Association (SLSPA); one from the president of the Lakes Pilots Association (LPA); one from the president of the Western Great Lakes Pilot Association (WGLPA); and one from a retired United States Registered Pilot who provided pilotage service in District Three. As each of these commenters touched on numerous issues, for each response below we note which commenter raised the specific points addressed. In situations where multiple commenters raised similar issues, we provide one response to those issues.

A. Staffing Model

The retired United States Registered Pilot in District Three commented that, while it is necessary to have enough staffing for association presidents to perform administrative duties without impairing pilotage service, he believes that doing so by always rounding up in the staffing model lacks a rational basis. He characterized the adjustment as essentially a random adjustment from +0.01 to +0.99 pilots, and while figures at the higher end of that range may result in enough additional staffing being available, figures at the lower end of that range would not.

The SLSPA commented that it believes the Coast Guard's decision to always round up the pilot numbers in the staffing model is a good step toward mitigating the impact of non-piloting duties on association presidents' workload. The WGLPA also supported the decision to always round up in the staffing model. They characterized the practice of always rounding up as providing some relief for the non-pilot responsibilities of presidents and providing a cushion for adequate staffing when unexpected injuries or illnesses occur, while rounding down would always leave the associations short-staffed. In support of rounding up, the WGLPA characterized it as ''ridiculous'' to acknowledge that a district has more demand for pilotage services than can be met by a specific number of pilots, and then round down to authorize that same inadequate number. The LPA also supported rounding up the number of pilots in the staffing model. The LPA were of the opinion that this approach still undercounts the need for staff, especially when the rounding is a small fraction, but does assist in addressing the need.

The Great Lakes Pilots' comment similarly noted that always rounding up the number of pilots in the staffing formula helps address the associations' staffing needs, but undercounts the need, especially when the rounding is a small fraction. It suggested that a dedicated position, in addition to rounding up, would be a better solution.

We disagree that rounding up the staffing model's final number to the nearest integer leads to an inadequate result or is a random adjustment. We also considered and rejected the alternative request to add a dedicated position. The Coast Guard's reasoning for always rounding up in the staffing model is as follows.

The staffing model focuses on the opening and closing of the shipping season. Weather conditions, ice coverage and formation, and the lack of aids to navigation have historically made it necessary to require double pilotage. Pilot association presidents do conduct a significant amount of piloting assignments and will continue to do so in the future, but during the opening and closing of the shipping season the pilot association presidents must coordinate with United States and Canadian agencies and numerous other stakeholders to facilitate commerce. Rounding up the pilot numbers in the staffing model is essential to provide some relief to accommodate the important non-piloting duties of the presidents.

Rounding up ensures that the Great Lakes and St. Lawrence Seaway have sufficient pilotage strength to safely and efficiently facilitate commerce at the opening and closing of the season. When a pilot president is not able to pilot full-time because of their facilitative role, they are essentially acting as a pilot on a less than full-time basis. However, the associations do not staff part-time pilots. In addition, when we round down the staffing model final number decimal as much as 0.49, we undercount the piloting needs for half a pilot. The part-time pilotage of the presidents, combined with the undercounted need of half a pilot from rounding down in the staffing model, could result in understaffing equivalent to the need for a full pilot. Rounding up to a whole pilot also provides added capacity when the association is short-staffed for unexpected reasons, such as a pilot's illness. It also ensures that the partial pilot indicated by the staffing model is actually provided to the district to satisfy the traffic demand.

The result of rounding up to the nearest integer is not random, as one commenter suggested, because the staffing model already shows a need for a partial pilot. Rounding up in the staffing model already occurs when the result for the number of pilots needed for the district has a decimal of 0.5 or greater, as with District Three's result of 21.55, which would round up to 22 pilots in any event.[10] Always rounding up to the nearest integer only creates a

[5] 46 U.S.C. 9302(a)(1).

[6] 46 U.S.C. 9303(f).

[7] *Id.*

[8] *Id.*

[9] Department of Homeland Security (DHS) Delegation 00170.1, Revision No. 01.2, paragraph (II)(92)(f).

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

change from current practice when the result of a district is greater than 0.00 and less than 0.50, not between 0.01 and 0.99, as the commenter suggested.

Therefore, we believe that rounding up to a whole integer should sufficiently cover the need presented by the staffing model and pilot association presidents. In the staffing model calculations that we were already using, the demand for half of a pilot or more (0.50+) is rounded up to a whole integer. Rounding up the decimals incorporates some margin to account for the president who serves as pilot less than full-time due to their other oversight responsibilities.

We disagree that a dedicated position in addition to rounding up, as proposed, would be a better solution. Allowing an additional dedicated position for a pilot, in addition to rounding up, would surpass the need presented. The cost of adding an additional pilot slot for each of the three pilot associations, in addition to rounding up, would add three additional target pilot compensations (one in each district) to the operating expense base. We do not believe always allowing an additional pilot for each of the three pilotage associations is a reasonable expense, because we have determined that the need presented is satisfied by rounding up. Adding three permanent additional pilots to the ratemaking annually, in addition to rounding up, would overcount the need presented by the staffing model and the less than full-time pilotage provided by presidents. Therefore, we have determined that adding an additional slot for a pilot is not a necessary and reasonable cost to include in the ratemaking. We expect to include this topic and the staffing model as agenda items for a future Great Lakes Pilotage Advisory Committee (GLPAC) meeting.

The Coalition commented that it believes the decision to always round up in the staffing model is arbitrary and unsupported by evidence, as there is no data regarding the extent of the administrative burden on association presidents. It commented that the Coast Guard put off a decision on always rounding up in the 2021 final rule, pending additional research, but has not presented the results of that research. The Coalition suggested that the Coast Guard evaluate the real demand for administrative services, both in terms of the total hours required and the skills required to perform those tasks (so that a highly skilled pilot is not wasted on administrative work not requiring pilotage experience), and do so by district, in case the need is not consistent from district to district. The Coalition also asserted that, by always rounding up, the Coast Guard will effectively always provide one additional pilot in each of the three Great Lakes pilotage districts.

We disagree with the Coalition's comment. In the 2021 final rule, the Coast Guard did not adopt the proposed change to round up in the staffing model, noting we would ''gather more information on the best way to address this issue, based on concerns raised by the commenters.'' (86 FR 14190). The Coast Guard considered the concerns, information, and constraints discussed in the comments, as well as discussions with the interested parties, and believes the best way to address the pilot president being ''off the roles'' part of the time is by rounding up in the staffing model, based on the following facts and information.

The Coast Guard acknowledges that pilot presidents are still performing pilotage duties, as well as their nondelegable administrative oversight, and are essentially providing pilotage services on a less than full-time basis. During the annual GLPAC meeting on September 1, 2021, the association presidents discussed in detail their non-piloting duties and their piloting schedules. Attendees of the GLPAC meeting included the three association presidents, a representative for the shipping industry, a representative for the port operators, the Director of Great Lakes Pilotage, and several other members of the public, including pilots, industry representatives, and Coast Guard employees. The agenda topics for this meeting included stakeholder outreach and the staffing model used in the ratemaking methodology. The association presidents responded to inquiries regarding their stakeholder engagements over the last couple of years.

On pages 174–177 of the GLPAC transcript (available in the docket where indicated under the **ADDRESSES** section of the preamble), the presidents' discussion validates our assertion that they are often pulled away for nondelegable meetings and responsibilities that require the president's knowledge, authority, and piloting expertise, which results in them not being able to pilot full-time. The GLPAC transcript indicates the presidents' piloting time competes with attending conferences and meetings, outreach, serving on other advisory committees, and assisting with special projects and issues. These tasks require an experienced pilot to provide advice and solutions for issues facing pilotage in the Great Lakes. A non-pilot manager would not have the necessary piloting expertise to advise agencies and stakeholders in lieu of the association president. For these reasons, the Coast Guard determined that a reasonable approach to covering time spent performing tasks other than piloting was to round up, where we would have otherwise rounded down, rather than allow expenses for an additional administrative position.

Rounding up avoids the very real issue of understaffing where the staffing model already indicates that there is traffic demand and a need for pilots above the rounded-down integer. Adequate staffing is especially critical during the double-pilotage requirements that often occur during the opening and closing of the shipping season, when navigation is particularly challenging. During double pilotage, association presidents may be tasked with coordinating with agencies to facilitate commerce rather than providing pilotage. Because the staffing model focuses on the opening and closing season shipping demands, it could be detrimental to the Great Lakes shipping industry to provide fewer pilots than the number indicated by the staffing model.

In further response to the Coalition's comment, rounding up does not allocate pilot compensation costs toward the work of an administrative role. It is intended to cover the need for a partial pilot already demonstrated by the staffing model and the need presented by the president being off the rolls part of the time in order to perform tasks that cannot be delegated to a non-pilot. The Coast Guard may review the staffing model in a future rulemaking, and we would consider the factors suggested by the Coalition. By rounding down (up to .49 of a pilot), combined with the part-time service provided by the presidents, there is a clear discrepancy in how many pilots the staffing model says are needed and what is actually available to assist the shipping industry. Further, when compared with the prior staffing model, always rounding up to a whole integer only adds two additional pilots in this ratemaking, one in District One and one in District Two. In District Three, there is no additional pilot as a consequence of our change to the staffing model, because the prior staffing model would also have rounded up to a whole integer.[11]

The general concerns raised by the Coalition in response to the previous 2021 NPRM were that an additional pilot was not necessary and could be filled by a lower-cost administrative assistant. We considered that

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

alternative. In evaluating the duties described in the GLPAC transcript, pages 174–177, we determined that only a pilot could supplement the piloting duties of a president only providing part time pilotage. Therefore, we determined that rounding up to allow for an additional pilot was necessary, versus hiring administrative staff.

In addition, the Coast Guard took into consideration additional cost factors, such as where any additional pilots would be factored into the ratemaking if an extra pilot was authorized. The Coast Guard reviewed the options of placing that pilot in either the designated waters or undesignated waters for ratemaking purposes. Where the pilot would be allocated was not a consideration proposed in the 2021 ratemaking NPRM proposal for rounding up in the staffing model. In the interest of maintaining rate stability, while also considering the shipping industry's projections for pilotage demands, the 2022 ratemaking NPRM proposed placing the additional pilot in undesignated waters. Based on the alternatives considered, information provided to us by the commenters, and the information presented at the GLPAC meeting, the Coast Guard believes this is the best solution to ensuring there are enough pilots allocated to the districts at this time.

B. Apprentice Pilot Wage Benchmark and Applicant Trainee Compensation

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 each districts' operating expenses, the line item for applicant pilot salaries includes salaries for both apprentice pilots and applicant trainees. Beginning with the year 2022, we are adopting an apprentice pilot wage benchmark for funding all apprentices' salaries and will leave applicant trainees' salaries in the operating expenses. To help clarify this distinction, this rule adds definitions for the terms ''apprentice pilot'' and ''limited registration'' to the definition section in § 401.110.

An apprentice pilot is defined as a person, approved and certified by the Director, who is participating in an approved United States Great Lakes pilot training and qualification program and meets all the minimum requirements listed in 46 CFR 401.211. The apprentice pilot definition will not include applicant trainees, who are pilots in training who have not acquired the minimum service requirements in § 401.210(a)(1). Under this rule, salaries for applicant trainees will continue to be included in the district's operating expenses for the year they are incurred. The ''apprentice pilot'' definition will only be applicable in determining which pilots may be included in the apprentice pilot estimates, wage benchmark, and operating expenses discussed in new §§ 404.2(b)(7), 404.103(b), and 404.104(d) and (e) of this rule.

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 are adding a definition for ''limited registration'' that will align with the current use of the term in the industry. A limited registration is 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.

The SLSPA commented that it believed that apprentice pilot compensation should not be restricted to apprentices with limited registration, because this creates a gap in compensation until the apprentices receive limited registration. The SLSPA suggested that this compensation should be given to ''trainees'' as soon as they enter training, for the purpose of attracting experienced mariners.

The Coast Guard agrees that apprentice pilots should be included in the compensation wage benchmark as soon as they achieve apprentice pilot status, which is as soon as they enter apprentice pilot training. In the initial proposal to apply this wage benchmark to apprentice pilots with limited registrations, we assumed that all apprentice pilots would have a limited registration. But the comments and additional information we received indicate that there is a potential for a few months to pass before the apprentice pilot actually receives the limited registration. We do not intend for there to be a gap before the wage benchmark becomes applicable. This wage benchmark was always intended to apply to all apprentice pilots, as applicants who progress through the training program will typically receive a limited registration. As a result, for ratemaking purposes, apprentice pilots with and without limited registrations will be considered equivalent. In this final rule, apprentice pilots with or without limited registration are included in Step 3 of the methodology, with a compensation of 36 percent of pilot target compensation. The projected number of apprentices needed for each district estimated in Step 3 of the methodology will not change. We estimated these numbers under the assumption that the apprentices would receive their limited registrations within the season.

The districts will continue to be reimbursed for all necessary and reasonable costs associated with applicant pilots (''trainees'' as the commenter refers to them), via the operating expenses portion of the methodology, 3 years after the costs have been incurred. The Coast Guard intends to keep costs associated with applicant pilots under the heading of recognized expenses in recognition of the fact that it is harder to accurately predict the number of applicants newly joining a program as opposed to apprentices, who must have already applied, been accepted, and started their training. To ensure the accuracy of this estimate going forward, the Coast Guard will continue to track the progress of applicants as they are accepted into programs and shift into apprentice roles, as well as the progress of apprentices toward becoming fully registered pilots.

A retired U.S. Registered Pilot in District Three commented that the Coast Guard made an incorrect statement when it said that the previous use of the 36-percent benchmark for apprentice pilots compensation was not opposed in the 2019 ratemaking. He also commented that he believed the administrative record does not support the decision to only allow 36 percent of target compensation. The LPA also disagreed with the 36-percent benchmark for apprentice pilots with limited registration, characterizing it as inadequate. The LPA's comment further stated that they consistently pay 75 percent of target pilot compensation for first-year apprentice pilots, 85 percent for second-year apprentice pilots, and 95 percent for third-year apprentice pilots; that this amount allows them attract and retain the most qualified mariners; and that they have operated this way for over 30 years.

We disagree with the retired pilot commenter and the LPA and respond to these comments with a recount of the 2019 administrative record and a discussion of why we determined that the 36-percent figure is reasonable.

In years prior to the 2019 ratemaking, we authorized a $150,000 surcharge to cover apprentice pilot compensation. The surcharge included both apprentice pilot wage benchmarks and expenses. In the 2019 ratemaking final rule, we explained that there was no cap on the apprentice pilot surcharges allowed to be collected in the operation expense year for 2016, and that the amounts actually collected totaled more than the 2016 surcharge percentage was anticipated to collect (84 FR 20551, 20557, May 10, 2019). Therefore, in the 2019 final rule, the Coast Guard used a Director's adjustment to bring the 2016 surcharge expense for apprentice pilot compensation for District Two to a reasonable level in comparison to other districts. District Two has historically reported higher expenses for apprentice pilots, in comparison to the other districts, which they recently confirmed in a comment on the NPRM for this final rule.

When determining what is a necessary and reasonable apprentice pilot wage benchmark, the Director considers many factors, including past practices and a comparison of the expenses incurred by other districts for similar services. In developing the 2019 ratemaking, the Coast Guard reduced District Two's expenses to align with those of the other districts, which also closely aligned with the amount of the surcharges authorized in the years 2016 through 2018. Although we previously authorized $150,000 per apprentice pilot, two of the districts did not have actual apprentice pilot wage expenses above $128,000. Setting the apprentice pilot wage benchmark at 36 percent is both consistent with what we have authorized in the past 4 years and reasonable in consideration of what the districts actually paid.

Although the average compensation per apprentice for District Two exceeded the apprentice pilot salaries in the other districts, we have never allowed a district to claim more in apprentice pilot salaries simply because they have paid more than other districts. The Coast Guard will continue this practice of allowing up to a certain amount, using the 36-percent target for all districts. In any case, we believe it would be unfair to allow each district to claim a different amount of apprentice pilot salaries in the ratemaking. Similarly, we do not set different target pilot compensation amounts for each district. Doing so could disproportionately affect the ratemaking, lead to significant changes in the rates, and set a precedent that is unpredictable for all parties. It is consistent with past ratemakings to authorize the same apprentice pilot compensation in each district, because the $150,000 per apprentice previously authorized with the surcharge was the same for all districts, which is one reason why we adjusted District Two's apprentice pilot salaries in 2019 to the 36 percentage mark. Since then, we have determined that 36 percent is reasonable, based on actual expenses and the predictability it provides.

In addition, the Director also considers the associations' success with pilot retention and recruitment of qualified mariners. As noted above, the 36 percent apprentice pilot wage benchmark is consistent with what we have authorized in expenses in the past several ratemakings. The comments from the pilot associations did not present any actual inability to recruit and retain qualified apprentice pilots based on the past 4 years of allowable expenses. This is why we believe continuing this rate would be sufficient to ensure adequate apprentice pilot recruitment and retention, as long as the associations are able to recruit and retain apprentices.

The Great Lakes Pilots' comment noted that apprentice pilots and applicant trainees are highly trained mariners and, however their compensation is accounted for, they cannot be expected to work for significant periods of time without adequate compensation. The Great Lakes Pilots' comment supported establishing a clear understanding ahead of time as to what amounts the Coast Guard will approve for pilotage services, and requested that the approved amounts be accurate and not subject to after-the-fact adjustments.

The Great Lakes Pilots' comment suggested that the proposed apprentice pilot wage benchmark would be a better model for funding salaries for applicant trainee pilots than currently provided, and that the apprentice pilot wage benchmark should be structured in a manner more akin to the fully registered pilot target compensation. It further suggested that the wage benchmark should reflect the difference between an applicant trainee accumulating time and training trips and an apprentice pilot who is actually moving the vessel and generating revenue as the pilot of record.

As indicated above, we have determined that the 36-percent figure is a reasonable wage benchmark for apprentice pilots, based on actual expenses, historic data that indicates adequate apprentice pilot recruitment and retention, and the predictability it provides all parties involved. This wage benchmark is meant to cover wage expenses for apprentices that cannot otherwise be recouped. In instances where the apprentice pilot is operating as the pilot of record, shippers are being charged the rate of a registered pilot and, therefore, the district is able to recoup earnings to compensate the apprentice over the wage benchmark. By building the target apprentice pilot wage benchmark into the rate, the Coast Guard ensures that apprentice pilot wage benchmark will be appropriate and predictable moving forward and eliminates the need to adjust past expenses (once expenses are based on years where apprentices are built into the rate). The Coast Guard will only adjust past recognized apprentice pilot expenses for years that preceded the implementation of including apprentice pilots in Step 3 of the methodology. Adjustments will continue to be made through the 2025 ratemaking, which will use 2021 operating expenses as the basis.

The Coast Guard will continue to classify the necessary and reasonable applicant trainee salaries and benefits as recognized operating expenses going forward. The Coast Guard has opted not to use a wage benchmark approach for funding applicant trainee salaries because it could result in inaccurate compensation to the districts. Applicant trainees may only be training for part of a shipping season, because they can be brought on at any point or they may be promoted to apprentice pilots. Continuing to rely on the districts' actual operating expenses for applicant trainee salaries will ensure the Coast Guard allows a necessary and reasonable amount to be included in the ratemakings.

The WGLPA indicated that it supported the compensation methods for applicant and apprentice pilots proposed in the NPRM, noting that it is unreasonable to expect applicant and apprentice pilots to endure financial and personal hardship to join the pilot associations, and that these compensation methods are required to ensure that the best mariners continue to join the piloting ranks. The WGLPA requested that the applicant trainee compensation methods be implemented beginning with the 2022 rates, and criticized the 3-year lag in recouping those apprentice pilot wage operating expenses under the previous method.

The Coast Guard confirms that the apprentice pilot wage benchmark process in Steps 3 and 4 will start with this 2022 ratemaking. This was our intent when we proposed the change in the NPRM. As we stated in the NPRM, necessary and reasonable apprentice pilot salaries incurred in years 2019 through 2021 will also be reimbursed in the operating expenses included in ratemakings 2022 through 2024, because they have not yet been reimbursed in any way in the ratemakings.[12]

The Coalition's comment requested that we set the apprentice pilot wage benchmark at a flat $150,000 surcharge for wages, benefits, and expenses, rather

[12] 86 FR at 51056.

than 36 percent of target compensation, for a simple and transparent approach.

We disagree. Under the surcharge scheme, during periods of high traffic and pilotage demand, the apprentice would receive less money for wages because the costs associated with transportation, lodging, and other per diem expenses would increase. Conversely, during slow periods, the opposite would occur. The surcharge wage scheme would likely have a negative impact on apprentice retention because wages would be lowest during the highest demand periods.

The Coast Guard believes that the 36-percent wage benchmark for apprentice pilots is equally transparent because the calculations will be included in every ratemaking, and the percentage will not change year to year. Furthermore, in past years, the districts have collected more surcharge proceeds than intended, requiring subsequent Director's adjustments. The apprentice pilot benefits and expenses will continue to be line items in the expense reports, which are made available in the docket for this rulemaking. We also believe that setting the wage benchmark as a percentage of target pilot compensation is a better approach, because it captures the inflation adjustment that is performed on the target pilot salaries. A set surcharge would not take inflation into account as easily and would need adjusting year to year.

C. Timing of Annual Audit

The Great Lakes Pilots' comment requested that the Coast Guard conduct the third-party expense and revenue review earlier in the year, because holding the audit in October and November results in it being scheduled during their busiest shipping months, which is also when comments are generally due on the annual ratemaking NPRM. The SLSPA and LPA both made similar requests individually.

The annual audit is performed to ensure the Coast Guard can obtain accurate operating expenses and revenues for ratemakings. The timing of the audit is not specified in the regulatory text of the ratemaking methodology. Although shipping is cyclical, and no one can be certain which months will be busy due to the dynamic nature of commodity demand, the Coast Guard will work with the association presidents to find a timeframe to conduct the third-party reviews that best suits all parties involved.

D. Exclusion of Legal Expenses From Operating Expenses

The Great Lakes Pilots' comment argued that disallowing legal expenses for claims against the federal government arbitrarily and capriciously excludes expenses that are regularly allowed to all businesses under Internal Revenue Service (IRS) regulations.

The Coast Guard did not propose any changes to the treatment of legal expenses as operating expenses in the NPRM. The 2021 ratemaking final rule excluded legal fees against the Coast Guard related to our ratemaking responsibilities, and our response in that rule (46 FR at 14193, March 12, 2021) still applies here. We distinguished the IRS regulation from the pilotage associations' expenses, as the Equal Access to Justice Act and settlement terms often provide for reimbursement of the pilots' legal fees when the pilots prevail. In those cases, a court can determine a reasonable amount of legal fees to reimburse the pilot association. When a pilot association does not prevail on the merits, the legal fees associated with that lawsuit are, arguably, per the court's determination, not necessary for the safeguarding or production of its income. If allowed, those legal fees would inflate the pilot associations' operating expenses and, subsequently, the shipper's rates. Unlike other businesses and jurisdictions, shippers on the Great Lakes do not have the option to purchase service from another firm if they disagree with a firm's business practices, and may not have the choice to not purchase the service, because pilotage service is required for all foreign vessels and domestic vessels operating on register.

On the other hand, the Coalition's comment asserted that all pilot association legal fees related to rate setting should be excluded, including cases where the pilots intervene on behalf of the Coast Guard. The Coalition asserted that including the intervener legal fees means industry may have to pay the pilots' legal fees if the pilots challenge a Coast Guard decision, no matter how the challenge turns out, which discourages legal challenges from industry and unfairly favors the Coast Guard.

As we mentioned above, we did not propose any changes to the treatment of legal fees in determining pilot association operating expenses in the NPRM to this final rule. Necessary and reasonable legal fees that are not incurred in cases against the Coast Guard are still permitted as operating expenses, because we did not have the same basis to remove them from the operating expenses. As we stated in the 2021 final rule (86 FR 14193), pilots often have a legitimate interest in the outcome of lawsuits initiated by the shippers against the Coast Guard. Thus, the court may allow the pilots to intervene in the case to protect their own interests. The Coast Guard does not have the same justification to exclude these intervener legal expenses, because these expenses are not eligible for reimbursement under the Equal Access to Justice Act or via settlement with the Coast Guard. These legal fees incurred by pilot associations are not otherwise reimbursed by a more responsible party, so we must consider these costs of providing services in the rates per our statutory mandate. The exclusion of legal fees for pilots' cases against the Coast Guard is effectively a small benefit to the shippers, because it removes that financial responsibility from the ratemaking and places it on the responsible regulatory agency. We do not intend or predict that exclusion of legal fees will incentivize pilots to intervene in the Coast Guard's defense.

E. Correction of Recognized Expenses for District Two

The LPA commented that they did not agree with the 2019 license insurance total ($1,825) included in Other Pilotage Costs or the applicant health insurance total ($200) included in Applicant Pilotage Costs. These totals were included in table 16—2019 Recognized Expenses for District Two in the NPRM (86 FR at 51061). In its comment (and in an attached letter from its certified public accountant), LPA said these numbers should be $21,267 for license insurance total and $31,763.96 for applicant health insurance total.

CohnReznick, an independent accounting firm, reviewed the letter LPA's accountant provided with the comment and the association's expense reports provided in 2019. CohnReznick's official conclusion is available in the docket for this rulemaking. With that independent accountant review, the Coast Guard determines that the license insurance total of $1,825 is correct but was labeled incorrectly, so that the additional amount claimed in the comment was included in another line item. LPA is aware of this conclusion and concurs with it. After review of the applicant health insurance total, the Coast Guard determines that the figure of $200 for applicant health insurance in the NPRM was incorrect. We have updated the recognized expenses to reflect $31,764 for applicant health insurance, in accordance with CohnReznick's conclusion.

F. Changes to the NPRM's Estimate for District Two Pilot Numbers

The Coast Guard estimated in the 2022 NPRM that District Two would have 16 fully working pilots based on the information we had at that time. The staffing model allows for a maximum of 16 working pilots after rounding up. In this final rule, we now estimate the number of fully working pilots in District Two to be 14. As a result, we are reducing the number of estimated fully working pilots in Step 3. Section 404.103 requires the Director to project the number of pilots expected to be fully working and compensated, based on the number of persons applying to become United States Registered Pilots and on information provided by the district's pilotage association. Only pilots who are expected to be fully working and compensated are permitted to be included in this estimate. Our justifications for removing two pilots from District Two's NPRM's projected numbers are as follows.

One of the pilots serving under a temporary registration performed part-time pilotage for the year of 2021. One pilot performed substantially less than the average assignments per pilot projected in the 2017 staffing model (82 FR 41466, table 5) for District Two, according to the official piloting trip records used by the pilotage association and the Coast Guard. Based on the information available to the Coast Guard at the time of this final rule, and information provided by the association, there is no indication that the pilot will perform pilotage on a full-time basis in the 2022 shipping season. Therefore, based on the information available to us now, we cannot authorize this pilotage position because we do not expect the pilot to be fully working and compensated in 2022.

Additionally, based on a statement from District Two that one apprentice pilot would be brought on as a fully registered pilot at the end of 2021, we estimated in the NPRM that there would be a 16th pilot in District Two for the 2022 shipping season. However, after the NPRM was published, the Director was made aware that the apprentice pilot will not be brought on as a registered pilot.[13] Therefore, the Director does not expect this position to be filled by a working pilot. While the staffing model allows for 16 pilots in District Two, the total estimates in Step 3 should only fund the amount of pilots that are expected to be fully working. We cannot justify funding positions that are not expected to be filled at this time. Based on the information discussed above, the Coast Guard estimates there will be 14 registered pilots fully working and compensated in District Two for the 2022 season. This is a net decrease of one pilot from the 2021 final rule, which authorized 15 working pilots in District Two for the 2021 shipping season.

G. Changes to the NPRM's Estimate for District Three Pilot Numbers

The WGLPA commented that, in 2019, they had 6 pilots assigned to designated waters, 13 pilots assigned to undesignated waters, 5 applicant pilots for the entire season, and another applicant pilot beginning September 23, 2019. They expressed concern that the expenses for the five applicant pilots do not flow through the ratemaking process. Further, the WGLPA questioned the Director's adjustment of $746,802 (surcharge collected in 2019 for applicant pilots), stating that they were unsure where that number came from and if it was correct.

After review, the Coast Guard has determined that, although District Three was allowed four applicant pilots for the 2019 season, it actually had five. This fifth applicant was approved by the Director. This additional pilot removes the need for the Director's adjustment of $1,921 for excess applicant salaries paid. District Three reported $520,158 in expenses for the salary of five applicant pilots, meaning the district paid an average of $104,032 per applicant, which is below the $129,559 target for 2019.

Additionally, the WGLPA commented that the Coast Guard should work with WGLPA to determine the need for additional pilots in the fiscal year 2022 rate because of an expected increase in the number of cruise ships (possibly in excess of 6,000 bridge hours in District Three) that may or may not materialize due to COVID–19 impacts on the cruise industry, the retirement of three pilots, and the unexpected retirement of another three pilots due to COVID–19.

While we were developing the NPRM, WGLPA stated that they would have a need for 22 pilots in 2022. This is the same number of pilots they had in the 2021 ratemaking. However, our current records, and pages 154 and 155 of the transcript of the September 1, 2021 GLPAC meeting (available in the docket for this rulemaking), indicate that District Three will not have 22 pilots for the beginning of the 2022 shipping season. Based on our numbers, which we track routinely, and the statements made by the WGLPA president during the GLPAC meeting, this group will have 19 pilots and 5 apprentice pilots at the beginning of the 2022 shipping season. If the district plans to hire additional pilots, we expect that these additional pilots will start as applicants, and their salaries will be reimbursable as operating expenses 3 years from the time of hire. The Coast Guard will continue to monitor pilotage demands and consult with WGLPA during the 2022 shipping season.

H. Request for Cost-Effectiveness Study

The Coalition's comment requested the Coast Guard begin a safety and efficiency study of pilotage on the Great Lakes to identify measures to improve cost-effectiveness. The Coalition observed that, during five of the last seven years, the Coast Guard has proposed a double-digit percentage increase for pilot services, and the cost-per-pilot has gone from $352,777 to $543,615.

We disagree with the Coalition's suggestion regarding the study. The United States Government Accountability Office (GAO) completed a comprehensive review of the United States Coast Guard Great Lakes Pilotage Program in 2019. The GAO's final report, "Stakeholders' Views on Issues and Options for Managing the Great Lakes Pilotage Program," is available in the docket for this rulemaking.

We plan to evaluate the staffing model in a future rulemaking, per GLPAC's recommendation at its September 1, 2021 annual meeting. We are currently reviewing the regulations in 46 CFR part 400 to make necessary updates and enhance efficiency. The Coast Guard will consider measures to improve cost effectiveness within those future actions. We welcome information that could improve the regulations, ratemaking, and staffing model via comments or GLPAC meetings.

With regard to the substantial increases noted by the Coalition over the past 7 years, these increases have been due to the reimbursement of operating expenses, the need to account for inflation, the hiring of additional pilots, the need to address the problem of pilot retention, and deficiencies resulting from the past methodology. The deficiencies in the older methodology created issues with retaining pilots; unnecessary delays to vessel traffic; significant revenue shortfalls for necessary improvements to property, pilot boats, and assets; and reduced maritime safety. In recent years, the Coast Guard has increased the

[13] Email from Anthony Brandano, Lakes Pilots Association, to Vincent F. Berg, Marine Transportation Specialist, United States Coast Guard, January 25, 2022.

number of United States Registered Pilots, so that the pilot associations have sufficient personnel available to provide needed pilotage services while also being able to implement scientifically-based hours of service programs, in accordance with NTSB recommendations regarding pilot fatigue and Hours of Service Rules.[14] The methodology and staffing model take into account the NTSB recommendation for Hours of Service Rules, including limits on hours of service, providing predictable work and rest schedules, and human sleep and rest requirements. The NTSB report generally concluded, on page 58 of the report, that at the time of the accident, the first pilot was subject to the fatiguing effects of insufficient sleep from extended wakefulness, which adversely effected his ability to prevent the vessel from sheering. The methodology ensures funding for a sufficient number of registered pilots in consideration of preventing pilot fatigue and promoting maritime safety. We have also increased staffing to correct work-life balances to recruit and retain United States Registered Pilots. In addition, recent ratemakings have allowed for structural improvements to associations' docks and the purchase of newer pilot boats and property with on-site accommodations for pilots to rest between piloting. These allowances in the ratemaking improve the efficiencies and safety of the pilotage program and help reduce delays to vessel traffic.

In recent years, demand for pilotage service has increased and diversified. Historically, international dry-bulk commodity shippers accounted for nearly 95 percent of pilotage demand. More recently, the Canadian domestic fleet has voluntarily employed United States Registered Pilots, including during the winter months when the locks are closed. Additionally, petroleum tankers and cruise ships have consumed significant pilotage service. At least one foreign trade vessel has remained in the Great Lakes and required pilotage service throughout the year. This increase in pilotage demand has increased operating expenses and required the Coast Guard to increase staffing. These staffing levels are necessary to promote safe, efficient, and reliable pilotage service in order to facilitate commerce and protect the marine environment.

I. Public Disclosure of Pilot Compensation

The Coalition submitted a comment asserting that, in the interest of transparency and good governance, the Coast Guard should require pilot associations to make compensation levels of individual pilots public. The Coalition noted that one district voluntarily released this information prior to 2016, suggesting there is no reason why this information could not be released. The Coalition further suggested that public disclosure of individual pilot compensation is necessary to determine whether the Coast Guard's changes to the methodology in 2016 to address recruitment and retention concerns were successful.

The Coast Guard disagrees with the Coalition's recommendation to make compensation levels of individual pilots available to the public. The Coast Guard does not include the compensation of individual pilots in the expense base or methodology and, therefore, declines to add a regulatory requirement for pilot associations to publicly report the compensation of individual pilots. The Coast Guard does not use the actual earnings or even average earnings; we use a target pilot compensation, described in Step 3 of the existing methodology, which we have determined to be reasonable and necessary. Because actual salary values are not used in the ratemaking, we believe that a requirement to report pilot compensation is not in the public interest or necessary to provide for the costs of services. Progress toward pilot retention can be reviewed through other means, such as pilot turnover and the association's ability to promptly fill pilot vacancies for fully registered pilots and apprentice pilots.

The Coast Guard has solved the recruitment and retention challenges. We believe the Coalition's proposal would unnecessarily discourage qualified mariners from applying to, and experienced United States Registered Pilots from staying with, the United States Great Lakes pilot associations. The pilots have stated on numerous occasions that they do not want this personal information shared with the public. The Coalition has not identified the maritime safety issue their proposal would address or improve.

As the Coalition noted, the release of this information prior to 2016 was entirely voluntary on the part of one association. We do not intend to deviate from our precedent and require the associations to publish a list of their salaries.

V. Discussion of Methodological and Other Changes

For 2022, the Coast Guard is making one policy change to the ratemaking model, and a methodological change to the ratemaking methodology. First, we are instituting a practice of always rounding up the pilot totals to the nearest whole number in the staffing model. We use the staffing model in Step 3 to determine how many pilots are needed. Second, in Steps 3 and 4 of the methodology, we are introducing a wage benchmark calculation for apprentice pilots conducting pilotage. This rule will 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.

Table 2 summarizes the changes between the NPRM and this final rule. In the NPRM we proposed to only apply the wage benchmark to apprentice pilots with limited registration, but in this final rule will apply it to all apprentice pilots, with or without limited registration. Doing so will avoid a potential gap in compensation before an apprentice pilot receives a limited registration. This will not change the projected number of apprentice pilots compensated in each district, because, in the NPRM rate calculation, we assumed that all apprentice pilots would receive limited registration within the season.

TABLE 2—CHANGES BETWEEN PROPOSED RULE AND FINAL RULE

Change	Reasoning
Remove Director's adjustment for excess applicant salaries paid in District Three.	Coast Guard confirmed that District Three had five applicants in 2019, not four, as stated in the NPRM, meaning the average compensation for applicants was under the 36-percent target.

[14] See Section 2.4, ''Fatigue,'' in ''Marine Accident Report: Collision of Tankship *Eagle Otome* with Cargo Vessel *Gull Arrow* and Subsequent Collision with the *Dixie Vengeance* Tow, Sabine-Neeches Canal, Port Arthur, Texas, January 23, 2010'' (adopted by the NTSB on September 27, 2011), *www.ntsb.gov/investigations/AccidentReports/Reports/MAR1104.pdf.*

TABLE 2—CHANGES BETWEEN PROPOSED RULE AND FINAL RULE—Continued

Change	Reasoning
Revise number of pilots in District Three from 22 to 19	District Three reported that they would have three retirements ahead of the 2022 season.
Revise number of pilots in District Two from 16 to 14	District Two reported that one apprentice pilot would not become fully registered as planned, and our records indicate one pilot with a temporary registration was not performing full-time services.
Revise figure for applicant health insurance for District Two	District Two commented on the NPRM that the applicant health insurance figure listed was incorrect. The Coast Guard verified the correct figure and includes it in this final rule.
Add language clarifying that the 36-percent target will apply to apprentice pilots and apprentice pilots with a limited registration.	Several commenters noted confusion on the language using "limited registration."
Update inflation figures • Updates 2021 Employment Cost Index (ECI) inflation from 3.5% listed in the NPRM to 4.8%. • Updates 2021 Personal Consumption Expenditures (PCE) inflation from 2.4% listed in the NPRM to 5.1% CPI inflation. • Updates 2022 PCE inflation from 2% listed in the NPRM to 2.2%	More recent figures were published since we conducted the analysis for the NPRM.

A. Changes to the Staffing Model

The Director uses the staffing model to estimate how many pilots are needed to handle shipping from the opening through the closing of the season. The Coast Guard is changing the staffing model in § 401.220(a)(3) to always round up the final number 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.

In addition to always rounding up from the staffing model, we also specify 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 will be added to the maximum number of pilots in the undesignated area for that district.[15] For example, if the total in a district were 17.25, we would round up to 18, and the additional pilot would be allocated to the undesignated area. If the total in a district were 17.55, we would authorize 18 pilots and we would not change existing allocations.

The reason 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 will 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 (denominator) is greater, 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.

Based on the existing staffing model, and the change to always round up the final number, the number of pilots authorized will not decrease in future years, unless the staffing model is adjusted by ratemaking. We 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 nondelegable administrative duties that require pilotage expertise include attending meetings and conferences with stakeholders, 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 because the transits are likely to exceed the Coast Guard's tolerance for safety with a single pilot due to ice conditions, a lack of aids to navigation, and severe winter weather conditions. 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 SLSDC in the United States and the St. Lawrence Seaway Management Corporation (SLSMC) in Canada, the Canadian Great Lakes Pilotage Authority (GLPA), the Shipping Federation of Canada, the United States Great Lakes Shipping Association, various United States and Canadian Great Lakes ports, and other stakeholders. 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.

We cannot continue to round down for some districts and undersupply pilots where the staffing model indicates more pilots 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 staffing model takes into account the high demands during the open and close of the shipping season, where weather and ice conditions may result in double-pilotage requirements and higher demand for pilot services. 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

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

seasons. We believe this rounding change will promote maritime safety by ensuring enough pilots are allocated to each district to cover the shipping demands and promote recuperative rest.

B. Apprentice Pilot Wage Benchmark for Conducting Pilotage

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

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

In Step 4, § 404.104, the Director will 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 will determine each pilot association's total apprentice pilot wage benchmark by multiplying the apprentice pilot wage benchmark by the number of apprentice pilots and apprentice pilots with limited registrations projected under § 404.103. For example, if the projected number of apprentice pilots is 4, we first take 36 percent of individual target pilot compensation (example: $359,887 × 0.36 = $129,559) and multiply that by 4 (example: $129,559 × 4 = $518,237) to obtain the total apprentice pilot wage benchmark for the 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).

The Coast Guard will 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 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 3 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, and 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 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 the development of the 2021 proposed rule, we reached out to several pilot associations throughout the United States to see what percentage they pay their apprentice pilots. We factored in the sea time and experience required to become an apprentice 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 ÷ $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 wage benchmark in its operating expenses.

Going forward, we will authorize an apprentice pilot wage benchmark in the ratemaking to support hiring and retention in a way that is better calibrated to generate the specific amount of revenue needed than by assessing a surcharge. The associations will be funded for apprentice pilot wage benchmarks in the same year they are incurred, and the amount will be adjusted for inflation along with the target pilot compensation. We are also interested in building the apprentice pilot wage benchmark 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 and necessary amounts when compared to what others paid in the maritime industry per § 404.2(a). The apprentice pilot wage benchmark in the ratemaking will not be adjusted by Director's adjustments.

Some comments urged the Coast Guard to consider setting the apprentice pilot wage benchmark 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 will cover only a wage benchmark and will not include apprentice pilot benefits and travel reimbursements. Those additional benefits will be reimbursed in full as allowable operating expenses for the districts. In the 2021 ratemaking, District Three reported paying apprentice pilot wages at an amount of $132,151 per apprentice pilot. At a wage benchmark of 36 percent of registered pilot target compensation, the apprentice pilots will 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 will be subject to inflation annually. Additionally, setting the apprentice pilot wage benchmark 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. We earlier explained that, on some trips, apprentice pilots will be the pilot and, therefore, generating revenue from which they can be compensated. This 36-percent figure ensures they can receive compensation for trips where they are strictly in a training mode and another pilot has to be assigned to the trip.

Compensating the apprentice pilots for performing pilotage services has historically been considered a reasonable and necessary cost included in the ratemakings as either surcharges or operating expenses. Instead of evaluating the apprentice pilot salaries annually for reasonableness in the operating expenses, the Coast Guard will 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 insert the pilot association's expenses for apprentice pilots and apprentice pilots operating with limited registrations as approved operating expenses. These expenses have historically been allowed in previous ratemakings' operating expenses. With this final rule, we specifically list apprentice pilots' and apprentice pilots' with limited registrations expenses in the regulations to codify current practices and distinguish these expenses from the apprentice pilot wage benchmark that we include in Step 4 of the ratemaking methodology.

The associations will continue to include necessary and reasonable health care, travel expenses, training, and other expenses incurred on behalf of apprentice pilots and 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 in order to train pilots and provide pilotage services to the shipping industry. Apprentice pilots 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 and apprentice pilots with limited registrations as operating expenses in the ratemaking will continue to promote adequate funding for apprentice pilot training and provision of pilotage services in the Great Lakes.

VI. Discussion of Rate Adjustments

In this final rule, based on the policy changes described in the previous section, we will implement new pilotage rates for 2022. We will 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 will adjust the compensation benchmark following the procedures for an interim ratemaking year in § 404.100(b), rather than the full ratemaking year procedures in § 404.100(a).

This section discusses the rate changes using the ratemaking steps provided in 46 CFR part 404, incorporating the changes discussed in section V of this preamble. We will detail all 10 steps of the ratemaking procedure for each of the 3 districts to show how we arrived at the 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 2019 expenses and revenues, which are available in the docket for this rulemaking. 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.

In the 2019 expenses used as the basis for this rulemaking, districts used the term ''applicant'' to describe applicant trainees and persons who are called apprentices (applicant pilots) under the new definition in this rulemaking. Therefore, when describing past expenses, we use the term ''applicant'' to match what was reported from 2019, which includes both applicant trainees and apprentice pilots. We use ''apprentice'' to distinguish the apprentice pilot wage benchmark 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 rule. Applicant salaries (including applicant trainees and apprentice pilots) will continue to be an allowable operating expense through the 2024 ratemaking, which will use operating expenses from 2021, when the salaries for apprentice pilots were still authorized as operating expenses. Starting in the 2025 ratemaking, apprentice pilot salaries will no longer be included as a 2022 operating expense, because the apprentice pilot wage benchmark will 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

Reported Operating Expenses for 2019	Designated	Undesignated	Total
	St. Lawrence River	Lake Ontario	
Applicant Pilot Salaries:			
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
Other Pilot Costs:			
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
Pilot Boat and Dispatch Costs:			
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
Administrative Expenses:			
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

* All figures are rounded to the nearest dollar and may not sum.

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 Bureau of Labor Statistics (BLS) data from the Consumer Price Index (CPI) for the Midwest Region of the United States for the 2020 and 2021 inflation rates.[16] Because the BLS does not provide forecasted inflation data, we use economic projections from the Federal Reserve for the 2022 inflation modification.[17] Based on that information, the calculations for Step 2 are as shown in table 4.

[16] The 2020 and 2021 inflation rates are available at *https://beta.bls.gov/dataViewer/view/timeseries/CUUR0200SA0.* Specifically, the CPI is defined as ''All items in Midwest urban, all urban consumers, not seasonally adjusted (Series ID CUUR0200SA0) (CPI–U), All Items, 1982–4=100'' (downloaded March 2022). In the NPRM we used the PCE estimate of 4.3 percent for 2021, but now use the available interim CPI figure of 5.1 percent.

[17] For the 2022 inflation rate, we used the PCE median inflation value found in table 1 at *https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20211215.pdf* (Federal Reserve Board, Summary of Economic Projections, dated December 15, 2021, downloaded March 2022). This figure is updated to 2.2 percent from 2 percent in the NPRM.

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 (@5.1%)	114,875	76,589	191,464
2022 Inflation Modification (@2.2%)	52,081	34,723	86,804
Adjusted 2022 Operating Expenses	2,419,401	1,613,051	4,032,452

* All figures are rounded to the nearest dollar and may not sum.

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. With rounding, the maximum number of pilots increases to 18 (17.25 rounding up to 18), with the additional pilot allocated to the maximum for the undesignated area of District One, for a maximum of 8 pilots in the undesignated area and a maximum of 10 pilots in the designated area. We determine the number of fully registered pilots based on data provided by the SLSPA. Using these numbers, we estimate that there will be 18 registered pilots in 2022 in District One, meeting the increased maximum proposed in the NPRM. 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 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. These numbers are used to determine the amount of revenue needed in their respective areas.

TABLE 5—AUTHORIZED PILOTS

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

* 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).

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 for inflation. As stated in section V.A of the preamble, we are using a two-step process to adjust target pilot compensation for inflation. First, we adjust the 2021 target compensation benchmark of $378,925 by 3.1 percent for an adjusted value of $390,672. The adjustment accounts for the difference in actual fourth quarter (Q4) 2021 ECI inflation, which is 4.8 percent, and the 2021 PCE estimate of 1.7 percent.[18] [19] The second step accounts for projected inflation from 2021 to 2022, 2.2 percent.[20] Based on the projected 2022 inflation estimate, the target compensation benchmark for 2022 is $399,266 per pilot. The apprentice pilot wage benchmark is 36 percent of the target pilot compensation, or $143,736 ($399,266× 0.36).

TABLE 6—TARGET PILOT COMPENSATION

2021 Target Compensation from Final Rule	$378,925
Difference between Actual 2021 ECI inflation (4.8%) and 2021 PCE Estimate (1.7%)	3.10%
Adjusted 2021 Compensation	$390,672
2021 to 2022 Inflation Factor	2.20%
2022 Target Compensation	$399,266
2022 Apprentice Pilot Wage Benchmark	$143,736

* All figures are rounded to the nearest dollar and may not sum.

Next, we certify that the number of pilots estimated for 2022 is less than or equal to the number permitted under the changes to the staffing model in § 401.220(a). The 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

[18] In the NPRM we used a figure of 3.5 percent, the most recently available at the time. Employment Cost Index, Total Compensation for Private Industry workers in Transportation and Material Moving, Series ID: CIU2010000520000A.

[19] CPI for All Urban Consumers, Series ID CUUR0200SA0.

[20] Table 1, 2022 PCE Inflation, *https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20210922.htm.*

the pilot associations.[21] In accordance with the 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 two apprentice pilots will be needed for District One in the 2022 season. The apprentice pilots will work under a fully registered pilot and receive training in both the designated and undesignated waters, but their target compensation will not differ depending on which area they are training in. The total wages of $287,472 for two apprentice pilots are allocated as 60 percent for the designated area ($172,483) and 40 percent for the undesignated area ($114,989), in accordance with the way operating expenses are allocated in Step 1, and later in Step 6.

TABLE 7—TARGET COMPENSATION FOR DISTRICT ONE

	District One		
	Designated	Undesignated	Total
Target Pilot Compensation	$399,266	$399,266	$399,266
Number of Pilots	10	8	18
Total Target Pilot Compensation	$3,992,660	$3,194,128	$7,186,788
Apprentice Pilot Wage Benchmark	$143,736	$143,736	$143,736
Number of Apprentice Pilots	....	....	2
Total Apprentice Pilot Wages	$172,483	$114,989	$287,472

* All figures are rounded to the nearest dollar and may not sum.

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 apprentice pilot wage benchmark 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.[22] 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)	$2,419,401	$1,613,051	$4,032,452
Total Target Pilot Compensation (Step 4)	3,992,660	3,194,128	7,186,788
Total Apprentice Pilot Wage Benchmark (Step 4)	172,483	114,989	287,472
Total 2022 Expenses	6,584,544	4,922,168	11,506,712
Working Capital Fund (2.48%)	163,077	121,906	284,983

* All figures are rounded to the nearest dollar and may not sum.

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 apprentice pilot wage benchmark (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)	$2,419,401	$1,613,051	$4,032,452
Total Target Pilot Compensation (Step 4)	3,992,660	3,194,128	7,186,788
Total Apprentice Pilot Wage Benchmark (Step 4)	172,483	114,989	287,472
Working Capital Fund (Step 5)	163,077	121,906	284,983
Total Revenue Needed	6,747,621	5,044,074	11,791,695

* All figures are rounded to the nearest dollar and may not sum.

[21] 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).

[22] 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.)

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. To calculate the time on task for each district, the Coast Guard uses billing data from the Great Lakes Pilotage Management System (GLPMS) and SeaPro.[23] We pull 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. 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
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)	$6,747,621	$5,044,074
Average Time on Task (Hours)	6,271	6,885
Initial Rate	$1,076	$733

* All figures are rounded to the nearest dollar and may not sum.

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.

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
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

[23] 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.

TABLE 12—AVERAGE WEIGHTING FACTOR FOR DISTRICT ONE, DESIGNATED AREAS—Continued

Vessel class/year	Number of transits	Weighting factor	Weighted transits
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	$1,076	1.29	$834
District One: Undesignated	733	1.29	568

* All figures are rounded to the nearest dollar.

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 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 rates will cover operating expenses and infrastructure costs, including average traffic and weighting factions. Based on the financial information submitted by the pilots, the Director is not making any alterations to the rates in this step. We will modify § 401.405(a)(1) and (2) to reflect the final rates shown in table 15.

TABLE 15—FINAL RATES FOR DISTRICT ONE

Area	Name	Final 2021 pilotage rate	2022 Pilotage rate
District One: Designated	St. Lawrence River	$800	$834
District One: Undesignated	Lake Ontario	$498	$568

* All figures are rounded to the nearest dollar.

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, which are available in the docket for this rulemaking. For accounting purposes, the financial reports divide expenses into designated (60 percent) and undesignated areas (40 percent). 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, which are available in the docket for this rulemaking.

In the 2019 expenses used as the basis for this rulemaking, districts used the term ''applicant'' to describe applicant trainees and persons who are called apprentices (applicant pilots) under the new definition in this rulemaking. Therefore, when describing past expenses, we use the term ''applicant'' to match what was reported from 2019, which includes both applicant trainees and apprentice pilots. We use ''apprentice'' to distinguish the apprentice pilot wage benchmark and describe 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 for both apprentices and applicant trainees 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 rule. Applicant salaries (including applicant trainees and apprentice pilots) will continue to be an allowable operating expense through the 2024 ratemaking, which will use operating expenses from 2021, when the salaries for apprentice pilots were still authorized as operating expenses. Starting in the 2025 ratemaking, apprentice pilot salaries will no longer be included as a 2022 operating expense, because apprentice pilot wages will 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).

As discussed above, in a public comment on the NPRM for this rulemaking, the LPA commented that the expenses listed in the NPRM for license insurance and applicant health insurance were incorrect. An independent accounting firm reviewed the expenses LPA claimed as the correct figures and determined that the license insurance expense figure of $1,825 originally proposed in the NPRM was correct, and that the amount the LPA claimed was missing was accounted for in another line item. The independent accountant further determined that the applicant health insurance expense of $200 originally proposed was incorrect. In this final rule, Coast Guard corrects the applicant health insurance to a total of $31,764, with $12,706 allocated to the undesignated area and $19,058 allocated to the designated area.

TABLE 16—2019 RECOGNIZED EXPENSES FOR DISTRICT TWO

Reported operating expenses for 2019	District Two		
	Undesignated	Designated	Total
	Lake Erie	Southeast Shoal to Port Huron	
Total Other Pilotage Costs:			
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

TABLE 16—2019 RECOGNIZED EXPENSES FOR DISTRICT TWO—Continued

Reported operating expenses for 2019	District Two		
	Undesignated	Designated	Total
	Lake Erie	Southeast Shoal to Port Huron	
Total Other Pilotage Costs	383,649	575,474	959,123
Total Applicant Pilotage Costs:			
Applicant Salaries	166,958	250,437	417,395
Applicant Health Insurance	12,706	19,058	31,764
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 Costs	195,094	292,640	487,734
Pilot Boat and Dispatch Costs:			
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
Administrative Expense:			
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)	1,179,193	1,768,789	2,947,982
Directors Adjustments – Applicant Surcharge Collected	(69,527)	(104,291)	(173,818)
Directors Adjustments – Excess Applicant Salary Paid	(115,134)	(172,701)	(287,836)
Total Director's Adjustments	(184,661)	(276,992)	(461,654)
Total Operating Expenses (OpEx + Adjustments)	994,531	1,491,797	2,486,328

* All figures are rounded to the nearest dollar and may not sum.

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 and 2021 inflation rates.[24] Because the BLS does not provide forecasted inflation data, we use economic projections from the Federal Reserve for the 2022 inflation modification.[25] Based on that information, the calculations for Step 2 are as shown in table 17.

[24] The 2020 and 2021 inflation rates are available at *https://beta.bls.gov/dataViewer/view/timeseries/CUUR0200SA0*. Specifically, the CPI is defined as ''All items in Midwest urban, all urban consumers, not seasonally adjusted (Series ID CUUR0200SA0)(CPI–U), All Items, 1982–4=100'' (downloaded March 2022). In the NPRM we used the PCE estimate of 4.3 percent for 2021, but now use the available interim CPI figure of 5.1 percent.

[25] For the 2022 inflation rates, we used the PCE median inflation value found in table 1 at *https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20211215.pdf* (Federal Reserve Board, Summary of Economic Projections, dated December 15, 2021, downloaded March 2022). This figure is updated to 2.2 percent from 2 percent in the NPRM.

TABLE 17—ADJUSTED OPERATING EXPENSES FOR DISTRICT TWO

	District Two		
	Undesignated	Designated	Total
Total Operating Expenses (Step 1)	$994,531	$1,491,797	$2,486,328
2020 Inflation Modification (@1%)	9,945	14,918	24,863
2021 Inflation Modification (@5.1%)	51,228	76,842	128,070
2022 Inflation Modification (@2.2%)	23,225	34,838	58,063
Adjusted 2022 Operating Expenses	$1,078,929	$1,618,395	$2,697,324

* All figures are rounded to the nearest dollar and may not sum.

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. With rounding, the maximum number of pilots for District Two increases to 16 pilots (15.41 rounding up to 16), with the additional pilot allocated to the maximum for the undesignated area of District Two, resulting in a maximum of 7 pilots for the designated area and a maximum of 9 pilots for the undesignated area. In the NPRM, the Coast Guard estimated that District Two would fill the new maximum of 16 registered pilots, but has since been made aware that a temporary pilot performed substantially fewer trips than the average number of assignments per pilot projected in the staffing model, and that an apprentice pilot previously projected to join as a registered pilot will not do so, as noted in section IV. F. of the discussion of public comments and changes. Therefore, in this final rule, we estimate that there will be 14 registered pilots in 2022 in District Two. 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 Two. Furthermore, based on the seasonal staffing model discussed in the 2017 ratemaking (see 82 FR 41466), and our 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. These numbers are used to determine the amount of revenue needed in their respective areas.

TABLE 18—AUTHORIZED PILOTS

Item	District Two
Maximum Number of Pilots (per § 401.220(a)) *	16
2022 Authorized Pilots (total)	14
Pilots Assigned to Designated Areas	6
Pilots Assigned to Undesignated Areas	8
2022 Apprentice Pilots	2

* 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).

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 V.A of the preamble, we using a two-step process to adjust target pilot compensation for inflation. First, we adjust the 2021 target compensation benchmark of $378,925 by multiplying by 3.1 percent for an adjusted value of $390,672. The adjustment accounts for the difference in actual Q4 2021 ECI inflation, 4.8 percent, and the 2020 PCE estimate of 1.7 percent.[26] [27] The second step accounts for projected inflation from 2021 to 2022, which is 2.2 percent.[28] The compensation benchmark for 2022 is $399,266 per pilot, as calculated in table 6. The apprentice pilot wage benchmark is 36 percent of the target pilot compensation, or $143,736 ($399,266 × 0.36).

Next, we certify that the number of pilots estimated for 2022 is less than or equal to the number permitted under the changes to the staffing model in § 401.220(a). The changes to the staffing model suggest that the number of pilots needed is 14 pilots for District Two, which is less than or equal to 16, the maximum number of registered pilots provided by staffing model.[29] We estimate that two apprentice pilots will be needed for District Two in the 2022 season. The apprentice pilots will work under a fully registered pilot and receive training in both the designated and undesignated waters, but their target compensation will not differ depending on which area they are training in. The $287,472 in total wages for two apprentice pilots is allocated 60 percent for the designated area ($172,483) and 40 percent for the undesignated area ($114,989), in accordance with the way operating expenses are allocated in Step 1 and later in Step 6.

Thus, in accordance with § 404.104(c), we use the revised target

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

[27] CPI for All Urban Consumers, Series ID CUUR0200SA0.

[28] For the 2022 inflation rates, we used the PCE median inflation value found in table 1 at *https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20211215.pdf* (Federal Reserve Bank, Summary of Economic Projections, dated December 15, 2021, downloaded March 2022). This figure is updated to 2.2 percent from 2 percent in the NPRM.

[29] 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).

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	$399,266	$399,266	$399,266
Number of Pilots	8	6	14
Total Target Pilot Compensation	$3,194,128	$2,395,596	$5,589,724
Apprentice Pilot Wage Benchmark	$143,736	$143,736	$143,736
Number of Apprentice Pilots			2
Total Apprentice Pilot Wage Benchmark	$172,483	$114,989	$287,472

* All figures are rounded to the nearest dollar and may not sum.

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 apprentice pilot wage benchmarks 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.[30] 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)	$1,078,929	$1,618,395	$2,697,324
Total Target Pilot Compensation (Step 4)	3,194,128	2,395,596	5,589,724
Total Apprentice Pilot Wage Benchmark (Step 4)	172,483	114,989	287,472
Total 2022 Expenses	4,445,540	4,128,980	8,574,520
Working Capital Fund (2.48%)	110,101	102,261	212,362

* All figures are rounded to the nearest dollar and may not sum.

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 apprentice pilot wage benchmarks, 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)	$1,078,929	$1,618,395	$2,697,324
Total Target Pilot Compensation (Step 4)	3,194,128	2,395,596	5,589,724
Total Apprentice Pilot Wage Benchmark (Step 4)	172,483	114,989	287,472
Working Capital Fund (Step 5)	110,101	102,261	212,362
Total Revenue Needed	4,555,641	4,231,241	8,786,882

* All figures are rounded to the nearest dollar and may not sum.

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 Two, using the total time on task or pilot bridge hours. To calculate the time on task for each district, the Coast Guard uses billing data from the GLPMS and SeaPro. 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

[30] 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)

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. 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.

TABLE 23—INITIAL RATE CALCULATIONS FOR DISTRICT TWO

Item	Undesignated	Designated
Revenue Needed (Step 6)	$4,555,641	$4,231,241
Average Time on Task (Hours)	5,701	5,978
Initial Rate	$799	$708

* All figures are rounded to the nearest dollar and may not sum.

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.

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

TABLE 24—AVERAGE WEIGHTING FACTOR FOR DISTRICT TWO, UNDESIGNATED AREAS—Continued

Vessel class/year	Number of transits	Weighting factor	Weighted transits
Class 4 (2017)	319	1.45	462.55
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	

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	$708	1.32	$536
District Two: Undesignated	799	1.31	610

* All figures are rounded to the nearest dollar.

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 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 rates will cover operating expenses and infrastructure costs, and takes average traffic and weighting factors into consideration. Based on this information, the Director is not making any alterations to the rates in this step. The 2022 rate for the designated area of District Two is higher than the 2021 final rate, despite the increased traffic shown in Step 7, because of increased inflation. We modify § 401.405(a)(3) and (4) to reflect the final rates shown in table 27.

TABLE 27—FINAL RATES FOR DISTRICT TWO

Area	Name	Final 2021 pilotage rate	2022 Pilotage rate
District Two: Designated	Navigable waters from Southeast Shoal to Port Huron, MI	$580	$536
District Two: Undesignated	Lake Erie	566	610

* All figures are rounded to the nearest dollar.

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 2019 expenses and revenues, which are available in the docket for this rulemaking. For accounting purposes, the financial reports divide expenses into a designated area (21 percent) and two undesignated areas (52 and 27 percent). 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, which are available in the docket for this rulemaking.

In the 2019 expenses used as the basis for this rulemaking, districts used the term ''applicant'' to describe applicant trainees and persons who are called apprentices (applicant pilots) under the new definition in this rulemaking. Therefore, when describing past expenses, we use the term ''applicant'' to match what was reported from 2019, which includes both applicant trainees and apprentice pilots. We use ''apprentice'' to distinguish the apprentice pilot wage benchmark and 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 five applicant pilots. In the NPRM, the Coast Guard proposed a second deduction of $1,921 to reduce the allowable expenses for applicant pilots to 36 percent of target pilot compensation. In this final rule, Coast Guard removes this deduction because we confirmed that the fifth apprentice reported was approved by the Director, meaning that the average per-apprentice compensation was below the 36-percent benchmark. District Three reported $520,158 in expenses for the salary of five applicant pilots. Using the 36-percent target, the allowable applicant salary would have been $129,559 per applicant, for a total of $647,797 for five applicant pilots, meaning the district paid an average of $104,032 per applicant, which is below the $129,559 target. Applicant salaries (including applicant trainees and apprentice pilots) will continue to be an allowable operating expense through the 2024 ratemaking, which will use operating expenses from 2021, when the wages for apprentice pilots were still authorized as operating expenses. Starting in the 2025 ratemaking, apprentice pilot salaries will no longer be included as a 2022 operating expense, because apprentice pilot wage benchmark will 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

Reported Operating Expenses for 2019	District Three			
	Undesignated	Designated	Undesignated	Total
	Lakes Huron and Michigan	St. Marys River	Lake Superior	
Other Pilotage Costs:				
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 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
Applicant Costs:				
Applicant Salaries	267,933	111,678	140,547	520,158
Applicant Benefits	77,627	32,356	40,720	150,703

TABLE 28—2019 RECOGNIZED EXPENSES FOR DISTRICT THREE—Continued

Reported Operating Expenses for 2019	District Three			
	Undesignated	Designated	Undesignated	Total
	Lakes Huron and Michigan	St. Marys River	Lake Superior	
Applicant Payroll Tax	21,713	9,050	11,390	42,153
Total Applicant Costs	367,273	153,084	192,657	713,014
Pilot Boat and Dispatch Costs:				
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
Administrative Costs:				
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
Directors Adjustments – Applicant Surcharge Collected	(384,678)	(160,339)	(201,786)	(746,802)
Total Directors Adjustments	(384,678)	(160,339)	(201,786)	(746,802)
Total Operating Expenses (OpEx + Adjustments)	1,574,401	656,231	825,865	3,056,498

* All figures are rounded to the nearest dollar and may not sum.

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 and 2021 inflation rates.[31] Because the BLS does not provide forecasted inflation data, we use economic projections from the Federal Reserve for the 2022 inflation modification.[32] Based on that information, the calculations for Step 2 are as shown in table 29.

TABLE 29—ADJUSTED OPERATING EXPENSES FOR DISTRICT THREE

	District Three		
	Undesignated	Designated	Total
Total Operating Expenses (Step 1)	$2,400,266	$656,231	$3,056,498
2020 Inflation Modification (@1%)	24,003	6,562	30,565
2021 Inflation Modification (@5.1%)	123,638	33,802	157,440
2022 Inflation Modification (@2.2%)	56,054	15,325	71,379
Adjusted 2022 Operating Expenses	2,603,961	711,920	3,315,882

* All figures are rounded to the nearest dollar and may not sum.

[31] The 2020 and 2021 inflation rates are available at *https://beta.bls.gov/dataViewer/view/timeseries/CUUR0200SA0*. Specifically, the CPI is defined as ''All items in Midwest urban, all urban consumers, not seasonally adjusted (Series ID CUUR0200SA0)(CPI–U), All Items, 1982–4=100'' (downloaded March 2022). In the NPRM we used the PCE estimate of 4.3 percent for 2021, but now use the available interim CPI figure of 5.1 percent.

[32] For the 2022 inflation rates, we used the PCE median inflation value found in table 1 at *https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20211215.pdf* (Federal Reserve Bank, Summary of Economic Projections, dated December 16, 2021, downloaded March 2022). This figure is updated to 2.2 percent from 2 percent in the NPRM.

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. Rounding in the staffing model does not increase the maximum number of pilots for District Three because the total pilots needed, 21.55, already rounds up to 22. We determine the number of registered pilots based on data provided by the WGLPA. In the NPRM, we estimated that there would be 22 registered pilots in 2022 in District Three. However, during the GLPAC meeting on September 1, 2021, WGLPA reported that they would have three retirements before the 2022 season. Therefore, we now estimate that there will be 19 registered pilots in 2022 in District Three, with 4 pilots assigned to designated areas and 15 pilots assigned to undesignated areas. 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 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 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
Maximum Number of Pilots (per § 401.220(a)) *	22
2022 Authorized Pilots (total)	19
Pilots Assigned to Designated Areas	4
Pilots Assigned to Undesignated Areas	15
2022 Apprentice Pilots	5

* 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).

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 target compensation benchmark of $378,925 by 3.1 percent for an adjusted value of $390,672. The adjustment accounts for the difference in actual Q4 2021 ECI inflation, 4.8 percent, and the 2020 PCE estimate of 1.7 percent.[33] [34] The second step accounts for projected inflation from 2021 to 2022, 2.2 percent.[35] Based on the projected 2022 inflation estimate, the compensation benchmark for 2022 is $399,266 per pilot as shown in table 6. The apprentice pilot wage benchmark is 36 percent of the target pilot compensation, or $143,736 ($399,266 × 0.36).

Next, we certify that the number of pilots estimated for 2022 is less than or equal to the number permitted under the changes to the staffing model in § 401.220(a). The changes to the staffing model suggest that the number of pilots needed is 19 pilots for District Three, which is less than or equal to 22, the number of registered pilots provided by the pilot associations.[36] We estimate that five apprentice pilots will be needed for District Three in the 2022 season. The apprentice pilots will work under a fully registered pilot and receive training in both the designated and undesignated waters, but their target compensation will not differ depending on which area they are training in. The total wages of $718,680 for five apprentice pilots are allocated at 21 percent for the designated area ($150,923) and 79 percent (52 percent + 27 percent) for the undesignated area ($567,756), in accordance with the way operating expenses are allocated in Step 1 and later in Step 6.

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	$399,266	$399,266	$399,266
Number of Pilots	15	4	19
Total Target Pilot Compensation	$5,988,990	$1,597,064	$7,586,054
Apprentice Pilot Wage Benchmark	$143,736	$143,736	$143,736
Number of Apprentice Pilots			5
Total Apprentice Pilot Wage Benchmark	$567,756	$150,923	$718,678.80

* All figures are rounded to the nearest dollar and may not sum.

[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.

[35] For the 2022 inflation rates, we used the PCE median inflation value found in table 1 at *https://www.federalreserve.gov/monetarypolicy/files/fomcprojtabl20211215.pdf* (Federal Reserve Bank, Summary of Economic Projections, dated December 16, 2021, downloaded March 2022). This figure is updated to 2.2 percent from 2 percent in the NPRM.

[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).

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 apprentice pilot wage benchmarks 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 32.

TABLE 32—WORKING CAPITAL FUND CALCULATION FOR DISTRICT THREE

	District Three		
	Undesignated	Designated	Total
Adjusted Operating Expenses (Step 2)	$2,603,961	$711,920	$3,315,882
Total Target Pilot Compensation (Step 4)	5,988,990	1,597,064	7,586,054
Total Apprentice Pilot Wage Benchmark (Step 4)	567,756	150,923	718,679
Total 2022 Expenses	9,160,708	2,459,907	11,620,614
Working Capital Fund (2.48%)	226,880	60,924	287,804

* All figures are rounded to the nearest dollar and may not sum.

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)	$2,603,961	$711,920	$3,315,882
Total Target Pilot Compensation (Step 4)	5,988,990	1,597,064	7,586,054
Total Apprentice Pilot Wage Benchmark (Step 4)	567,756	150,923	718,679
Working Capital Fund (Step 5)	226,880	60,924	287,804
Total Revenue Needed	9,387,588	2,520,831	11,908,418

* All figures are rounded to the nearest dollar and may not sum.

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 Three, using the total time on task or pilot bridge hours. To calculate the time on task for each district, the Coast Guard uses billing data from the GLPMS and SeaPro. 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. 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

[37] 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).

TABLE 34—TIME ON TASK FOR DISTRICT THREE—Continued

[Hours]

Year	District Three	
	Undesignated	Designated
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)	$9,387,588	$2,520,831
Average Time on Task (Hours)	21,106	2,930
Initial Rate	$445	$860

* All figures are rounded to the nearest dollar and may not sum.

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 36 and 37.

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
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

TABLE 36—AVERAGE WEIGHTING FACTOR FOR DISTRICT THREE, UNDESIGNATED AREAS—Continued

Vessel class/year	Number of transits	Weighting factor	Weighted transits
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	$860	1.30	$662
District Three: Undesignated	445	1.30	342

* All figures are rounded to the nearest dollar.

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 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 rates will cover operating expenses and infrastructure costs, and takes average traffic and weighting factors into consideration. Based on this information, the Director is not making any alterations to the rates in this step. We will modify § 401.405(a)(5) and (6) to reflect the final rates shown in table 39.

TABLE 39—FINAL RATES FOR DISTRICT THREE

Area	Name	Final 2021 pilotage rate	2022 pilotage rate
District Three: Designated	St. Marys River	$586	$662
District Three: Undesignated	Lakes Huron, Michigan, and Superior	337	342

* All figures are rounded to the nearest dollar.

VII. Regulatory Analyses

We developed this 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 rule a significant regulatory action under section 3(f) of Executive Order 12866. Accordingly, OMB has not reviewed it. A regulatory analysis follows.

The purpose of this 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.[38] For this ratemaking, the Coast Guard estimates an increase in cost of approximately $2.15 million to industry. This is approximately a 7-percent increase because of the change in revenue needed in 2022 compared to the revenue needed in 2021.

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

[38] Great Lakes Pilotage Rates—2018 Annual Review and Revisions to Methodology (83 FR 26162), published June 5, 2018.

TABLE 40—CHANGES WITH NO COSTS OR COSTS CAPTURED IN THE 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 United States 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, 51 United States 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.
Add a definition of limited registration.	An authorization given 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.	Owners and operators of 293 vessels transiting the Great Lakes system annually, 51 United States Great Lakes pilots, 9 apprentice pilots, and 3 pilotage associations.	No cost, strictly a definitional change.	Provides clarity by distinguishing when apprentice pilots can operate as the pilot of record without being a fully registered pilot.
Adding number of apprentice pilots to Step 3 and setting apprentice pilot wage benchmark in Step 4.	The Coast Guard will modify the staffing model at 46 CFR 404.103 to predict the number of apprentice pilots each district will need for the next season. 46 CFR 404.103 will establish the apprentice pilot wage benchmark at 36% of registered pilot compensation for that year.	Owners and operators of 293 vessels transiting the Great Lakes system annually, 51 United States Great Lakes pilots, 9 apprentice pilots, and 3 pilotage associations.	Total cost of $1,293,622 for the wages of 9 apprentice pilots for the 2022 season. This amount is incorporated into the rate increase.	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.

TABLE 41—ECONOMIC IMPACTS DUE TO CHANGES

Change	Description	Affected population	Costs	Benefits
Rate 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, 51 United States Great Lakes pilots, 9 apprentice pilots, and 3 pilotage associations.	Increase of $2,154,343 due to change in revenue needed for 2022 ($32,486,995) 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.
Changes to staffing model	The Coast Guard will 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 will increase the maximum number of allowable pilots by two, adding one pilot to each of the undesignated areas of District One and District Two.	Owners and operators of 293 vessels transiting the Great Lakes system annually, 51 United States Great Lakes pilots, 9 apprentice pilots, and 3 pilotage associations.	The total potential impact of two additional positions is $775,039. Only one district has hired up to the new maximum so the realized impact is only $387,519.	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.

The Coast Guard is required to review and adjust pilotage rates on the Great Lakes annually. See section III of this preamble for detailed discussions of the legal basis and purpose for this rulemaking. Based on our annual review for this rulemaking, we are adjusting 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 will be an increase in rates for all areas in District One and District Two, and in the designated area of District Three. The rate for the undesignated area of District Three will decrease. These changes will lead to a net increase in the cost of service to shippers. However, because the rates will increase for some areas and decrease for others, the change in per unit cost to each individual shipper will 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 affects United States 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 will be 51 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. United States-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 United States- 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 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 ratemaking 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 will be impacted by this rulemaking. We found that 514 unique vessels used pilotage services during the years 2018 through 2020. That is, these vessels had a pilot dispatched to the vessel, and billing information was recorded in the GLPMS or SeaPro.[39] 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.[40] On average, 275 of these vessels were foreign-flagged vessels and 19 were U.S.-flagged vessels that voluntarily opted into the pilotage service (these figures are rounded averages).

Total Cost to Shippers

The rate changes resulting from this adjustment to the rates will result in a net increase in the cost of service to shippers. However, the change in per unit cost to each individual shipper will 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.[41] 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 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 $32,486,994.

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.[42] This is the best approximation of 2021 revenues, as, at the time of this publication of this final rule, the Coast Guard does not have enough audited data available for the 2021 shipping season to revise these projections.[43] 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 rule
Total, District One	$10,620,941	$11,791,695	$1,170,754
Total, District Two	8,506,705	8,786,882	280,177
Total, District Three	11,205,006	11,908,418	703,412
System Total	30,332,652	32,486,995	2,154,343

* All figures are rounded to the nearest dollar and may not sum.

[39] SeaPro is a data management system developed by District One as an alternative to GLPMS. It tracks the same traffic and invoice data as the GLPMS. Going into the 2022 season, all districts will employ SeaPro.

[40] 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.

[41] While the Coast Guard implemented a surcharge in 2019, we are not implementing any surcharges for 2022.

[42] 85 FR 20088, see table 41. *https://www.regulations.gov/document/USCG-2020-0457-0013.*

[43] The 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 a 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.

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 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 will lead to affected shippers operating in District One experiencing an increase in payments of $1,170,754 over the previous year. District Two and District Three will experience an increase in payments of $280,177 and $703,412, respectively, when compared with 2021. The overall adjustment in payments will be an increase in payments by shippers of $2,154,343 across all three districts (a 7-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 (67 percent of total revenue needed in 2021, and 63 percent of total revenue needed in 2022), followed by operating expenses (29 percent of total revenue needed in 2021, and 31 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	$10,045,658	31	$1,168,808	13
Total Target Pilot Compensation	20,461,950	67	20,362,566	63	(99,384)	(0.5)
Total Apprentice Pilot Wage Benchmark	....	....	1,293,622	4	1,293,622	....
Working Capital Fund	993,852	3	785,149	2	(208,703)	(21)
Total Revenue Needed	30,332,652	100	32,486,995	100	2,154,343	7

* All figures are rounded to the nearest dollar and may not sum.

As stated above, we estimate that there will be a total increase in revenue needed by the pilot associations of $2,154,343. This represents a decrease in revenue needed for target pilot compensation of ($99,384), the now-codified revenue needed for total apprentice pilot wage benchmark of $1,293,622, an increase in the revenue needed for adjusted operating expenses of $1,168,808, and a decrease in the revenue needed for the working capital fund of ($208,703).

The change in revenue needed for pilot compensation, ($99,384), is due to four factors: (1) The changes to adjust 2021 pilotage compensation to account for the difference between actual ECI inflation (5.1 percent) [44] and predicted PCE inflation (1.7 percent) [45] for 2021; (2) the increase in the maximum number of pilots by two pilots because of rounding; (3) an increase of one pilot in District One compared to 2021, a decrease of one pilot in District Two compared to 2021, and a decrease of three pilots in District Three compared to 2021; and (4) projected inflation of pilotage compensation in Step 2 of the methodology, using predicted inflation through 2023.

The target compensation is $399,266 per pilot in 2022, compared to $378,925 in 2021. The changes to modify the 2021 pilot compensation to account for the difference between predicted and actual inflation will increase the 2021 target compensation value by 3.1 percent. As shown in table 44, this inflation adjustment increases total compensation by $11,747 per pilot, and the total revenue needed by $599,080 when accounting for all 51 pilots.

TABLE 44—CHANGE IN REVENUE RESULTING FROM THE CHANGE TO INFLATION OF PILOT COMPENSATION CALCULATION IN STEP 4

2021 Target Compensation	$378,925
Adjusted 2021 Compensation ($378,925 × 1.031%)	390,672
Difference between Adjusted Target 2021 Compensation and Target 2021 Compensation ($390,672 − $378,925)	11,747
Increase in total Revenue for 51 Pilots ($11,747 × 51)	599,080

* All figures are rounded to the nearest dollar and may not sum.

Adjusting rounding in the staffing model to always round up, rather than round to the nearest integer, increases the maximum number of pilots in District One and District Two. The potential impact of this change is equivalent to an increase in revenue needed for two fully registered pilots because the districts would have the ability to hire two more pilots than they would have without rounding. The cost of $775,039 is based on target compensation for 2022. However, only District One will utilize the increased maximum number of pilots in the 2022 season, while District Two will have fewer than the maximum number of pilots in the 2022 season. For this reason, the potential impact of rounding in the staffing model is not fully realized in the 2022 season. Further, the increase in revenue needed from rounding is offset by the net decrease in pilots needed, such that the cost is not represented in the rate for this year. For that reason, the Coast Guard breaks out the potential and realized costs separately and does not show the percentage in relation to the increase in total revenue needed, as shown in table 45. To avoid double counting, the Coast Guard excludes the change in revenue resulting from adjustments for inflation to account for the difference between actual and predicted inflation.

[44] In the NPRM we used a figure of 3.5 percent, the most recently available at the time. Employment Cost Index, Total Compensation for Private Industry workers in Transportation and Material Moving, Series ID: CIU2010000520000A.

[45] *https://www.federalreserve.gov/monetarypolicy/fomcprojtabl20201216.htm.*

TABLE 45—POTENTIAL AND REALIZED IMPACTS OF ROUNDING IN THE STAFFING MODEL

Potential impact		Realized impact	
2022 Target Compensation	$399,266	2022 Target Compensation	$399,266
Total Number of New Pilots	2	Total Number of New Pilot	1
Total Cost of New Pilots ($399,266 × 2)	$798,532	Total Cost of New Pilot ($399,266 × 1)	$399,266
Difference between Adjusted Target 2021 Compensation and Target 2021 Compensation ($390,672 − $378,925).	$11,747	Difference between Adjusted Target 2021 Compensation and Target 2021 Compensation ($390,672 − $378,925).	$11,747
Increase in total Revenue for 2 Pilots ($11,747 × 2)	$23,493	Increase in total Revenue for 1 Pilot ($11,747 × 1)	$11,747
Net Increase in total Revenue for 2 Pilots ($798,532 − $23,493).	$775,039	Net Increase in total Revenue for 1 Pilot ($399,266 − $11,747).	$387,519

* All figures are rounded to the nearest dollar and may not sum.

As noted earlier, the Coast Guard revised the total number of pilots needed from 56 pilots in the NPRM to 51 pilots in this final rule because of the attrition of one apprentice pilot, the removal of one temporary pilot in District Two, and three retirements in District Three going into the 2022 season. This change is discussed in detail in section IV. F. of the discussion of comments and changes. The result is a net decrease of three pilots needed compared to the 2021 season, which projected 54 pilots needed. The difference reflects an increase of one pilot in District One, a decrease of one pilot in District Two, and a decrease of three pilots in District Three (1 − 1 − 3 = − 3). Table 46 shows the decrease of $1,162,558 in revenue needed solely for pilot compensation. As above, to avoid double counting, this value excludes the change in revenue resulting from the change to adjust 2021 pilotage compensation to account for the difference between actual and predicted inflation.

TABLE 46—CHANGE IN REVENUE RESULTING FROM NET DECREASE OF THREE PILOTS

2022 Target Compensation	$399,266
Net Number of New Pilots	(3)
Total Cost of new Pilots ($399,266 × − 3)	($1,197,798)
Difference between Adjusted Target 2021 Compensation and Target 2021 Compensation ($390,672 − $378,925)	$11,747
Increase in total Revenue for − 3 Pilots ($11,747 × − 3)	($35,240)
Net Increase in total Revenue for − 3 Pilots (− $1,197,798 − − $35,240)	($1,162,558)

* All figures are rounded to the nearest dollar and may not sum.

Another increase, $438,311, is the result of increasing compensation for the 51 pilots to account for future inflation of 2.2 percent in 2022. This will increase total compensation by $8,594 per pilot, as shown in table 47.

TABLE 47—CHANGE IN REVENUE RESULTING FROM INFLATING 2021 COMPENSATION TO 2022

Adjusted 2021 Compensation	$390,672
2022 Target Compensation ($390,672 × 1.022%)	399,266
Difference between Adjusted 2021 Compensation and Target 2022 Compensation ($399,266 − $390,672)	8,594
Increase in total Revenue for 51 Pilots ($8,594 × 51)	438,311

* All figures are rounded to the nearest dollar and may not sum.

Finally, the largest part of the increase in revenue needed is to account for the apprentice pilot wage benchmark, now incorporated into the rate. First, in Step 3, we estimate the need for nine apprentice pilots for the 2022 shipping season. Based on the 2022 target pilot compensation of $399,266, the apprentice pilot wage benchmark will be $143,736 ($399,266 × 0.36 = $143,736). Setting the wage benchmark in this manner, rather than through a surcharge, better allows apprentice pilot wage benchmark to match fluctuations in the pilot compensation, 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'' once the target amount of surcharge is collected, which makes rates throughout the season more predictable for shippers. The total cost of the wage benchmark for the 9 apprentice pilots will be $1,293,622, as shown in table 48.

TABLE 48—CHANGE IN REVENUE RESULTING FROM APPRENTICE PILOT WAGES

2022 Apprentice Pilot Wage Benchmark	$143,736
Total Number of Apprentice Pilots	9
Total Cost of Apprentice Pilots ($143,736 × 9)	$1,293,622

* All figures are rounded to the nearest dollar and may not sum.

Table 49 presents the percentage change in revenue by area and revenue-component, excluding surcharges, as they are applied at the district level.[46]

TABLE 49—DIFFERENCE IN REVENUE BY COMPONENT AND AREA

	Adjusted operating expenses			Total target pilot compensation			Total apprentice pilot wage benchmark	Working capital fund			Total revenue needed		
	2021	2022	% change	2021	2022	% change		2021	2022	% change	2021	2022	% change
District One: Designated	$2,328,981	$2,419,401	4	$3,789,250	$4,165,143	10	$172,483	$207,255	$163,077	(21)	$6,325,486	$6,747,621	6.7
District One: Undesignated	1,502,239	1,613,051	7	2,652,475	3,309,117	25	114,989	140,741	121,906	(13)	4,295,455	5,044,074	17.4
District Two: Undesignated	1,003,961	1,078,929	7	3,031,400	3,366,611	11	172,483	136,698	110,101	(19)	4,172,059	4,555,641	9.2
District Two: Designated	1,540,146	1,618,395	5	2,652,475	2,510,585	(5)	114,989	142,025	102,261	(28)	4,334,646	4,231,241	(2.4)
District Three: Undesignated	1,947,484	2,603,961	34	6,820,650	6,556,746	(4)	567,756	297,021	226,880	(24)	9,065,155	9,387,588	3.6
District Three: Designated	554,039	711,920	28	1,515,700	1,747,987	15	150,923	70,112	60,924	(13)	2,139,851	2,520,831	17.8

* All figures are rounded to the nearest dollar and may not sum.

Benefits

This rule allows the Coast Guard to meet the requirements in 46 U.S.C. 9303 to review the rates for pilotage services on the Great Lakes. The rate changes 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 also help recruit and retain pilots, which 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 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 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 Manta[47] and ReferenceUSA.[48] As described in section VII.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 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.[49] Table 50 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 50—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 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 rule by subtracting their estimated 2021 pilotage costs from their estimated 2022 pilotage costs and found the average costs to small firms will be approximately $9,375, with a range of $354 to $41,331.[50] 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 0.35 percent of their annual revenue.

[46] The 2021 projected revenues are from the Great Lakes Pilotage Rate-2021 Annual Review and Revisions to Methodology final rule (86 FR 14184), tables 9, 21, and 33. The 2022 projected revenues are from tables 9, 21, and 33 of this final rule.

[47] See *https://www.manta.com/*.

[48] See *https://resource.referenceusa.com/*.

[49] 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. Accessed April 2021.

[50] 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.

In addition to the owners and operators discussed above, three U.S. entities that receive revenue from pilotage services will be affected by this 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 will 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 will be impacted by this rule. We also did not find any small governmental jurisdictions with populations of fewer than 50,000 people that will be impacted by this rule. Based on this analysis, we conclude this rulemaking will 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 rule will have a less than 1 percent annual impact on small entities; therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic impact on a substantial number of small entities.

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 rule so that they can better evaluate its effects on them and participate in the rulemaking. If the rule will 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 CONTACT** section of this rule. The Coast Guard will not retaliate against small entities that question or complain about this 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 rule calls 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 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 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 CONTACT** 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 rule will not result in such an expenditure, we do discuss the effects of this rule elsewhere in this preamble.

G. Taking of Private Property

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

J. Indian Tribal Governments

This rule does not have tribal implications under Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), because it will 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 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 rule does not use technical standards. Therefore, we did not consider the use of voluntary consensus standards.

M. Environment

We have analyzed this 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 concluded 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 final Record of Environmental Consideration supporting this determination is available in the docket for this rulemaking. For instructions on locating the docket, see the **ADDRESSES** section of this preamble.

This 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.[51] 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; (c) those that implement, without substantive change, procedures, manuals, and other guidance documents; (d) those that interpret or amend an existing regulation without changing its environmental effect; (e) Technical guidance on safety and security matters; or (f) guidance for the preparation of security plans. Paragraph L54 pertains to regulations which are editorial or procedural.

This rule involves setting or adjusting the pilotage rates for the upcoming shipping season to account for changes in district operating expenses, changes in the number of pilots, and anticipated inflation. In addition, the Coast Guard is (1) changing the way we determine the number or pilots that are needed for the upcoming season in the staffing model, and (2) including in our methodology a calculation for a wage benchmark for apprentice pilots. All of these changes are consistent with the Coast Guard's maritime safety missions.

[51] *https://www.dhs.gov/sites/default/files/publications/DHS_Instruction%20Manual%20023-01-001-01%20Rev%2001_508%20Admin%20Rev.pdf.*

List of Subjects

46 CFR Part 401

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 amends 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), (19) and (b) 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 an authorization 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.

(b) [Reserved]

■ 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 $834;

(2) Lake Ontario is $568;

(3) Lake Erie is $610;

(4) The navigable waters from Southeast Shoal to Port Huron, MI is $536;

(5) Lakes Huron, Michigan, and Superior is $342; and

(6) The St. Marys River is $662.

* * * * *

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 and 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 by:

■ a. Revising the section heading;

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

■ c. Adding 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 and Apprentice Pilots with Limited Registrations expected to be in training and compensated.

■ 8. Amend § 404.104 by:

■ a. Revising the section heading; and

■ b. Adding paragraphs (d) and (e).

The revision 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 and Apprentice Pilots with Limited Registrations projected under § 404.103(b).

Dated: March 23, 2022.

J.W. Mauger,

Rear Admiral, U.S. Coast Guard, Assistant Commandant for Prevention Policy.

[FR Doc. 2022–06394 Filed 3–29–22; 8:45 am]

BILLING CODE 9110–04–P