9110-04-P

DEPARTMENT OF HOMELAND SECURITY

Coast Guard

46 CFR Parts 401, 403, and 404

[USCG-2015-0497]

RIN 1625-AC22

Great Lakes Pilotage Rates - 2016 Annual Review and Changes to Methodology

AGENCY: Coast Guard, DHS.

ACTION: Final rule.

SUMMARY: The Coast Guard revises its Great Lakes pilotage ratemaking methodology, adjusts annual pilotage rates based on the new methodology, and authorizes a temporary surcharge to hire additional pilots and to pay for necessary training for new and current pilots. Rates for pilotage services on the Great Lakes were last revised in February 2015 and by law must be reviewed annually, with any adjustments to take effect by March 1 of the year for which new rates are established. The Coast Guard intends for the methodology changes to be understandable and transparent, and to encourage investment in pilots, infrastructure, and training while helping ensure safe, efficient, and reliable service on the Great Lakes. Without the updates to this methodology and enforcement of these rates, the Coast Guard believes the pilot associations will not be able to recruit experienced mariners, retain current pilots, or maintain and upgrade association infrastructure. Without sufficient registered pilots, current law will prevent international vessels from transiting the Great Lakes. This

rulemaking promotes the Coast Guard's maritime safety and stewardship (environmental protection) missions by promoting safe shipping on the Great Lakes.

DATES: This final rule is effective [INSERT DATE 30 DAYS FROM PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: Comments and material received from the public, as well as documents mentioned in this preamble, are available at http://www.regulations.gov. Insert USCG-2015-0497 in the "Keyword" box, then click "Search."

FOR FURTHER INFORMATION CONTACT: If you have questions on this rule, call or e-mail Mr. Todd Haviland, Director, Great Lakes Pilotage, Commandant (CG-WWM-2), Coast Guard; telephone 202-372-2037, e-mail Todd.A.Haviland@uscg.mil, or fax 202-372-1914**.**

SUPPLEMENTARY INFORMATION:

Executive Summary

This rulemaking will change the methodology by which the Coast Guard sets base rates for U.S. Great Lakes registered pilotage service, set rates according to the new methodology, and impose a temporary surcharge to offset the costs of hiring and training new pilots. The Great Lakes pilotage statutes in 46 U.S.C. chapter 93 provide the legal basis for this rulemaking. The new effective date better aligns with the opening of the shipping season in early spring than the previous implementation date in August, which was based on the effective date of compensation changes in a benchmark union contract, which is no longer available to the Coast Guard.

The Coast Guard is revising the current methodology in place since 1995 for two reasons. First, for at least 15 years both pilots and industry have identified certain methodology issues that perpetuate inaccuracy in the ratemaking calculations. The pilots asserted these inaccuracies have led to revenue shortfalls that impede their ability to provide safe, efficient, and reliable pilotage service. They said these shortfalls are the primary reason that the associations could not provide sufficient pilot compensation to attract, hire, and retain qualified pilots. Furthermore, due to the revenue shortfalls, the associations lacked funding needed to maintain and update their infrastructure and provide adequate rest for pilots during the shipping season. Industry has agreed that there is a shortage of qualified pilots and said that the decay of association infrastructure jeopardized the pilots' ability to ensure vessel safety and provide efficient, reliable service. We believe the current methodology fails to consider the totality of pilot time necessary to perform a given pilotage assignment, which often includes long transits to and from the vessel, resulting in low pilot compensation and overloaded work assignments.

Second, the 1995 methodology used a detailed breakdown of union compensation for merchant marine masters and mates as the benchmark for setting registered pilotage rates. Only one union's contract had ever been available to the Coast Guard for the purpose of setting pilotage rates. That union now regards many of the specific compensation details of its contract as proprietary information. As such, the union will no longer provide the entire contract to the Coast Guard and thus, the Coast Guard can no longer make public a transparent source as the basis for its annual target compensation projections. Due to the methodology issues cited by pilots and industry as well as the lack of availability of reliable and transparent union contracts for benchmark setting purposes, we are establishing a new standard using publicly available information to set the benchmark compensation used in each ratemaking.

Our new methodology sets pilotage rates for the 2016 shipping season only. We will review and adjust rates each subsequent year. We are also amending the regulations to provide for future multi-year rates that would apply for five years unless an interim adjustment is necessary. We would set base rates in a full ratemaking, and review those rates each year to make sure they continue to promote safe, efficient, and reliable pilotage. If the base rate previously set is not satisfactory for that upcoming year, we would either adjust it or open a new full ratemaking. By law, a full ratemaking must be completed at least once every five years.[1] Multi-year rates allow pilots and industry to make longer range financial plans.

In 2014, the Coast Guard's Great Lakes Pilotage Advisory Committee (GLPAC)[2] recommended substantial changes to address stakeholder issues with the 1995 methodology and adjust ratemaking procedures in light of the union's position regarding the confidentiality of its contracts. We have built the new ratemaking methodology around the GLPAC recommendations, a "bridge hour" study completed in 2013, and numerous past public comments identifying distortions created by the 1995 methodology. The new methodology also addresses issues raised by *St. Lawrence Seaway Pilots Association, Inc., et al., v. U.S. Coast Guard,*[3] a lawsuit in which the three district pilot associations successfully challenged the 2014 ratemaking final rule.

[1] 46 U.S.C. 9303(f).

[2] GLPAC is a Federal advisory committee established by Congress (*see* 46 U.S.C. 9307) and operating under the Federal Advisory Committee Act, 5 U.S.C. Appendix 2.

[3] 85 F.Supp.3d 197 (D.D.C. 2015).

In Part IV of this final rule, we describe our new methodology which is consistent with the methodology we proposed in the NPRM. It follows a series of steps that are structured similarly to the steps found in the 1995 methodology. Step 1 reviews and recognizes each association's audited expenses. Step 2 projects each association's future operating expenses, adjusting for inflation or deflation. Step 3 projects the number of pilots required to meet each district's peak pilotage demand, with consideration given to the actual time it takes a pilot to complete each assignment. Step 4 sets target pilot compensation using a compensation benchmark. Step 5 projects each association's return on investment by adding the operating expenses from Step 2 and the total target pilot compensation from Step 4, and multiplying the result by the preceding year's average annual rate of return for new issues of high grade corporate securities. Step 6 calculates each association's revenue needs by adding the operating expenses from Step 2, the total target pilot compensation from Step 4, and the projected return on investment from Step 5. Step 7 calculates initial base rates based on the preceding steps. Step 8 adjusts the Step 7 initial rates, if necessary and reasonable to do so for supportable circumstances, and sets final rates.

This final rule makes several changes from our notice of proposed rulemaking (NPRM). First, the NPRM proposed splitting a particularly long pilotage assignment on the St. Lawrence River into two more manageable segments by creating a new pilot change point. At the request of both pilots and industry, we are not making this change in this final rule. Instead, we will defer any action until we can further assess where the new change point can best be located, and until pilot staffing can be increased to handle the larger number of assignments that shorter pilot transits will cause. Second, in response to public comments, we increased our projection for 2016 target pilot compensation, reduced our pilotage association revenue projection for 2016 (based on our review of 2014 revenue audits and 2015 vessel traffic data), and increased the number of pilots we expect to be available for service in 2016. Third, in response to public comments we increased from 5 to 9 the number of shipping seasons included in our multi-year historical vessel traffic calculations, which we use to estimate future traffic.

In Part V of this preamble, the Coast Guard uses the new methodology to calculate base rates for the 2016 shipping season, as follows:

Step 1 of the new methodology accepts our independent accountant’s final findings on each association’s 2013 expenses.

Step 2 projects 2016 operating expenses and adjusts them for inflation, using actual inflation data for 2014 and 2015 and the Federal Reserve target inflation rate as a proxy for actual 2016 inflation.

Step 3 finds that, based on figures from the 2007-2015 shipping seasons, 54 pilots are required to fulfill pilotage demand, up from the 36 pilots we authorized for 2015. Based on association projections, we expect 37 pilots to be available in 2016, 48 at the beginning of 2017, and the balance to be added later in 2017.

Step 4 sets each pilot’s target compensation at $326,114, with a total target compensation of $12,066,225 for the 37 pilots. We set these targets after identifying 2013 Canadian Great Lakes Pilotage Authority (GLPA) compensation, with adjustments for currency exchange and inflation, as the best benchmark for our 2016 rates.

Steps 5 and 6 calculate each association's return on investment and needed revenue.

Step 7 calculates initial base rates.

Finally, Step 8 affirms the Step 7 rates without adjustment, but also authorizes a temporary surcharge totaling $1,650,000, to cover the anticipated costs of hiring additional pilots and necessary training for new and current pilots.

This rule is not economically significant under Executive Order 12866. It affects 36 U.S. Great Lakes pilots, 3 pilot associations, and the owners and operators of an average of 126 vessels that transit the Great Lakes on an average 396 visits to various ports annually. We estimate that the new rates will result in shippers paying pilot associations $1,865,025, or roughly 12 percent more in 2016 than we estimate they did in 2015. We estimate that the authorized temporary surcharge will add $1,650,000 in costs, for a total 2016 cost increase of $3,515,025 over 2015. Because we must review and if necessary adjust rates each year, we analyze these as single year costs and do not annualize them over 10 years. This rule does not affect the Coast Guard's budget or increase Federal spending. We summarize our regulatory analyses in Part VII.

Table of Contents for Preamble

I. Abbreviations

APA	American Pilots Association
BLS	U.S. Bureau of Labor Statistics
CAD	Canadian dollar
CFR	Code of Federal Regulations
CPA	Certified public accountant
CPI-U	Consumer Price Index
DHS	Department of Homeland Security
FR	*Federal Register*
GLP	Great Lakes Pilotage
GLPA	Canadian Great Lakes Pilotage Authority
GLPAC	Great Lakes Pilotage Advisory Committee
GLPMS	Great Lakes Electronic Pilot Management System
NAICS	North American Industry Classification System
NPRM	Notice of proposed rulemaking
NTSB	National Transportation Safety Board
OMB	Office of Management and Budget
Pub. L.	Public Law
RA	Regulatory analysis
RegNeg	Regulatory negotiated rulemaking
SANS	Ship Arrival Notification System
§	Section symbol
The Act	Great Lakes Pilotage Act of 1960
U.S.C.	United States Code
USD	U.S. dollar

II. Basis and Purpose

The legal basis of this rulemaking is the Great Lakes Pilotage Act of 1960 (“the Act”),[4] which requires U.S. vessels operating “on register”[5] and foreign vessels to use

[4] Pub. L. 86-555, 74 Stat. 259, as amended; currently codified as 46 U.S.C. Chapter 93.

U.S. or Canadian registered pilots while transiting the U.S. waters of the St. Lawrence Seaway and the Great Lakes system.[6] For the U.S. registered Great Lakes pilots ("pilots"), the Act 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."[7] We limit the allowable costs of providing this service by ensuring that all allowable expenses are necessary and reasonable for providing pilotage services on the Great Lakes. We believe the public is best served by a safe, efficient, and reliable pilotage service. The goal of our methodology and billing scheme is to generate sufficient revenue for the pilots to provide the service we require. The Act requires that rates be established or reviewed and adjusted each year, not later than March 1. The Act 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 Secretary has delegated authority under the Act to the Coast Guard.[8]

The purpose of this rule is to change our annual Great Lakes pilotage ratemaking methodology, set new rates using that methodology, and authorize a temporary hiring and training surcharge.

III. Background

We published the notice of proposed rulemaking (NPRM) for this rulemaking on September 10, 2015, and in response to a request we extended the NPRM's initial 60-day

[5]"On register" means that the vessel's certificate of documentation has been endorsed with a registry endorsement, and therefore, may be employed in foreign trade or trade with Guam, American Samoa, Wake, Midway, or Kingman Reef. 46 U.S.C. 12105, 46 CFR 67.17.
[6] 46 U.S.C. 9302(a)(1).
[7] *See* 46 U.S.C. 9303(f) for all of the Act's pilotage ratemaking requirements discussed in this paragraph.
[8] DHS Delegation No. 0170.1, para. II (92.f).

comment period by 30 days.[9] A total of 90 days were available for public comment, encompassing September 10, 2015 through December 9, 2015. We also held a public meeting on September 17, 2015, in Romulus, MI.

This rule directly affects the pilots, their three pilotage associations, and the owners and operators of Great Lakes vessels engaged in foreign trade on U.S. Great Lakes waters. It does not affect U.S. and Canadian "lakers," which account for most commercial shipping on the Great Lakes.[10] It indirectly affects shipping agents who act on behalf of the owners and operators, Great Lakes ports, port workers, and businesses that import or export goods on affected vessels ("shippers"). We refer to pilots and pilot associations as "pilots," and vessel owners and operators, shipping agents, ports, port workers, and shippers collectively as "industry."

We divide the U.S. waters of the Great Lakes and the St. Lawrence Seaway ("the Great Lakes system," or "the system") into three pilotage districts, each containing two or three areas. We certify a private association to operate a pool of pilots in each district. We set rates that each association may charge vessel owners and operators, but we do not control the actual compensation each pilot receives. The actual compensation is a function of vessel traffic in the system and is determined by each association, which has its own business structure and compensation system.

District One comprises areas 1 and 2, the U.S. waters of the St. Lawrence River and Lake Ontario. District Two comprises areas 4 and 5, the U.S. waters of Lake Erie, the Detroit River, Lake St. Clair, and the St. Clair River. District Three comprises areas

[9] NPRM at 80 FR 54484, comment period extension at 80 FR 69179 (November 9, 2015).
[10] 46 U.S.C. 9302. A "laker" is a commercial cargo vessel especially designed for and generally limited to use on the Great Lakes.

6, 7, and 8, the U.S. waters of the St. Mary's River, Sault Ste. Marie Locks, and Lakes Huron, Michigan, and Superior. Because only Canadian pilots serve area 3, Canada's Welland Canal, we do not set rates for that area. Pursuant to the Act, the President has designated Areas 1, 5, and 7 as waters in which a vessel must fully engage a pilot to navigate the vessel at all times. The President left Areas 2, 4, 6, and 8 undesignated. In undesignated waters the Act requires only that a vessel have a pilot "on board and available to direct the navigation of the vessel at the discretion of and subject to the customary authority of the master."[11]

The Act requires us to review rates and adjust them, if necessary, by March 1 of each year, employing a "full ratemaking… at least once every 5 years," and an annual review and adjustment in the intervening years.[12] The 1995 methodology for a full ratemaking every 5 years appeared in 46 CFR part 404, appendix A, and the methodology for annual review and adjustment appeared in part 404, appendix C. Appendix B contained definitions and formulas applicable to both methodologies. We have not used the appendix C methodology since the 2011 ratemaking, and instead we have conducted a full appendix A ratemaking each year.

IV. Discussion of Ratemaking Methodology Changes

We adopt the methodology changes proposed in the NPRM, and a thorough discussion of the methodology is available in that document.[13] The following discussion focuses on the new methodology's principle features and any changes made from the NPRM to this final rule. In the NPRM, we also proposed to amend § 401.450 to add a

[11] 46 U.S.C. 9302(a)(1)(B).
[12] 46 U.S.C. 9303(f).
[13] The NPRM's discussion begins at 80 FR 54486, col. 2.

pilot change point at Iroquois Lock but, based on public comments discussed elsewhere in this preamble, we decided not to finalize the proposed addition.

Reasons for changing the methodology. This rule changes the ratemaking methodology that has been in effect since 1995 and, using the new methodology, sets pilotage rates for 2016. We changed the methodology for two reasons.

First, for at least 15 years both pilots and industry have identified certain methodology issues that, they assert, perpetuate systemic inaccuracies in the ratemaking calculations. The pilots say these inaccuracies led to annual revenue shortfalls that impede their ability to provide safe, efficient, and reliable pilotage service. Pilotage associations believed those distortions resulted in low rates. They also believed that actual association revenue chronically fell short of the revenue targets that, under the 1995 methodology, we projected based on anecdotal industry information. The Director of Great Lakes Pilotage has reviewed his data for 2005 through 2014 and estimates that, over this period, the three pilotage associations cumulatively fell short of revenue projections by $20 million. As a result, the pilotage associations could not provide sufficient compensation to attract and retain qualified pilots, leading to pilot shortages and associated traffic delays. In turn, these shortages meant that each pilot had to carry an excessive workload and forego needed rest and training.

The pilotage associations also said the revenue shortfalls left them unable to maintain and update association infrastructure or provide the essential training and professional development opportunities recommended by the American Pilots Association (APA). For their part, industry commenters believed that pilot shortages jeopardized the safety of their vessels, and meant that the pilots could not provide efficient or reliable service, particularly at the beginning and end of shipping seasons when peak vessel traffic and frequent bad weather often delay vessel movement.

Second, the 1995 methodology used a detailed breakdown of union compensation for merchant marine masters and mates, as the benchmark for setting registered pilotage rates. Only one union's contract has ever been available to the Coast Guard for this purpose. That union now regards many of the specific compensation details of its contract as proprietary information. The union will not provide the entire contract to the Coast Guard and thus, the Coast Guard cannot use the existing methodology and make public a transparent source for our target pilot compensation figure. Therefore, we are adopting a new method for determining which publicly available compensation information best serves as a benchmark for this year's target compensation. That benchmark could change from one ratemaking to the next, as circumstances change.

Advisory committee recommendations. In 2009 we solicited and received public comments to better understand stakeholder perceptions of the 1995 methodology,[14] and referred those comments to GLPAC, the stakeholder group that advises us on Great Lakes pilotage matters.[15] Ever since, we have worked closely with GLPAC to improve the methodology.

We built the new methodology around a set of recommendations GLPAC made at its public meetings in July 2014.[16] We give GLPAC recommendations significant weight because the Act requires any GLPAC recommendation to be endorsed by at least all but

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[14] 74 FR 35838 (July 21, 2009).

[15] GLPAC is established by statute and operates under the Federal Advisory Committee Act. *See* footnote 1.

[16] *See* full transcript in our docket and also available at http://www.facadatabase.gov. Under 46 U.S.C. 9307(d)(1), the Coast Guard "shall, whenever practicable, consult with the Committee before taking any significant action relating to Great Lakes pilotage."

one of GLPAC's seven members.[17] Moreover, with the exception of one member with a background in finance or accounting who is nominated unanimously by the other members, GLPAC's members are evenly divided between pilot and industry representatives, and therefore we consider any recommendation to represent a consensus of pilot and industry members. The Act does not authorize GLPAC positions for any foreign vessel owners and operators or their Canadian agents. However, we believe GLPAC's industry representatives' interests are sufficiently aligned with, and therefore representative of the interests of, affected foreign vessel owners. These stakeholders also consistently attend GLPAC meetings and raise their concerns for GLPAC's full consideration during each meeting's public comment period.

Timing of new rates and future ratemakings. The new pilotage rates will apply from the anticipated opening of the 2016 shipping season, which is a change from the union contract-based August 1 date we used in the 1995 methodology.

The new rates apply only for the 2016 shipping season. We will review and adjust rates as appropriate in the subsequent years. This will allow all stakeholders to gain familiarity with the new methodology and evaluate its ability to set more accurate rates. However, we are amending the regulations to authorize multi-year rates that would apply for five years. We would set base rates in a full ratemaking, and review those rates each year to make sure they continue to promote safe, efficient, and reliable pilotage. If they do not do so satisfactorily, we would either adjust them or open a new full ratemaking. Multi-year rates allow both pilots and industry to make longer range financial plans.

[17] All of the Act's provisions relating to GLPAC appear in 46 U.S.C. 9307.

Changes to specific sections.

46 CFR 401.405, 401.407, and 401.410. These sections contained pilotage rate tables and additional charges. Under the 1995 methodology, most designated-water rates applied to specific transits, for example $2,637 for the transit on Lake Erie between Toledo and Southeast Shoal. However, most undesignated-water rates were hourly, for example $934 for 6 hours of pilotage service on Lake Erie. This mixed approach complicated the otherwise simple transaction of paying for a pilot's service. Instead, as we proposed in the NPRM, new § 401.405 replaces old §§ 401.407 and 401.410 and sets hourly rates for specified portions of the Great Lakes. This aligns with GLPAC's 2014 recommendation, by a 5-1 vote, that all rates be hourly.[18] It simplifies billing, and recognizes that each hour that a vessel uses a pilot draws down on a limited pool of available pilots. The rates differ between the NPRM and the final rule because of changes in the number of pilots expected to be working in 2016, based on the latest projections we have received from the pilotage associations. Further, we increased the historic time period for calculating pilotage demand from the 4 years proposed in the NPRM to 9 years in the final rule, as discussed later in this preamble.

46 CFR 401.420 and 401.428. We amend § 401.420 (charges for a vessel's canceling, delaying, or interrupting pilotage service) and § 401.428 (charges for picking up or discharging a pilot other than at a pilot change point designated in § 401.450) to base those charges on the applicable new hourly rates.

[18] Transcript, "United States Coast Guard – Great Lakes Pilotage Advisory Committee – Thursday, July 24, 2014" (7/24/2014), p. 16. Discussion of this change, referred to by GLPAC members as "re-baselining" of rates, begins on July 23, 2014. *See* Transcript (7/23/2014), "United States Coast Guard – Great Lakes Pilotage Advisory Committee – Wednesday, July 23, 2014," p. 277. Discussion resumes: Transcript, "United States Coast Guard – Great Lakes Pilotage Advisory Committee – Thursday, July 24, 2014" (7/24/2014), p. 5.

We specify that billing under § 401.420 precludes any additional pilotage charge for the time in question. We discard § 401.428's old per diem allowance for a pilot who is picked up or discharged at a point other than a designated change point. Instead, if the pilot is kept aboard for the convenience of or at the request of the ship, the pilot's association can bill the vessel at hourly rates for the extra time involved, plus reasonable travel costs. If the pilot is kept aboard for circumstances outside of the ship's control, for example because a pilot boat is out of service, the association can bill the vessel only for reasonable travel costs. Both sections define "reasonable travel costs" as covering travel to and from the pilot's base.

Finally, these sections allow pilotage associations to charge for delays caused by weather, traffic and ice in the colder and busier months at the beginning and end of shipping seasons. All these amendments are the same as those we proposed in the NPRM.

46 CFR 403.120. As we proposed, we remove this section, concerning notes to financial reports, because these notes are not needed under our current financial reporting system.

46 CFR 403.300. Accurate rates depend on accurate expense and revenue information for each pilotage association. In the past, we had difficulty validating the accuracy of this information, because some associations did not use a uniform financial reporting system. This section now requires each association to use the current Coast Guard-approved and provided financial reporting system to certify their financial data annually. These changes are the same as those we proposed in the NPRM. We continue to require an annual audit prepared by an independent certified public accountant.

46 CFR 403.400. As we proposed to do, we remove language suggesting that pilot transaction records must be submitted on paper. Electronic reporting will become available in the near future, making paper reporting under our current transaction reporting optional but not mandatory.

46 CFR 404.1. We remove redundant language summarizing each section in part 404, state that the goal of part 404 is to maximize the transparency and simplicity of our ratemaking, and state that rates must promote safe, efficient, and reliable pilotage service. We continue to require annual association expense audits, but now we also require annual revenue audits, as GLPAC recommended in July 2014.[19] We first used revenue audits in 2015 and expect them to promote transparency and better alignment between our revenue projections and actual revenue. We also provide for a full ratemaking to establish base pilotage rates at least once every 5 years, with annual rate reviews in the interim years and rate adjustments if changed circumstances warrant them. All these amendments are the same as those we proposed in the NPRM.

46 CFR 404.2. This section formerly appeared as § 404.5. We amend the section so that, instead of using union contract mariner benefit cost data, we state that we will recognize all association-paid pilot benefits, including medical and pension benefits and profit sharing, as appropriate components of a pilot's compensation. These changes are the same as those we proposed in the NPRM.

46 CFR 404.100. This section formerly appeared as § 404.10. We replace the redundant ratemaking overview that section provided with new general rules for setting base rates and reviewing or adjusting them in interim years. We provide for multi-year

[19] Transcript (7/23/2014), p. 180.

rates, as GLPAC recommended in July 2014.[20] These rates apply for 5 years, but we will review them each year to make sure they continue to promote safe, efficient, and reliable pilotage service. If we think we must adjust them to meet that goal, we would use one of two methods to do so. First, we could apply an automatic annual adjustment provided for in the previous full ratemaking in anticipation of economic trends over the multi-year term. Alternatively, we could base the adjustment on changes in the Bureau of Labor Statistics (BLS) (Consumer Price Index (CPI-U). If neither method adequately met the need for adjustment, we would open a new full ratemaking. These amendments are the same as those we proposed in the NPRM.

Ratemaking methodology. We replace the 1995 appendix A methodology with new §§ 404.101 through 404.108, and eliminate old appendix B (definitions and formulas) and appendix C (annual rate reviews, which we have not conducted since 2011) because they are no longer needed. These are the same changes we proposed in the NPRM, with some exceptions as noted in the discussion. Figure 1 compares the old and new regulatory structure.

Figure 1: Treatment of Appendix A Steps in 46 CFR 404.101-404.108

Appendix A Step	Change	Comments
1	Omit	Unnecessary summary of substeps
1.A	Omit	Move substance to § 404.2
1.B	Reword and move	Move substance to new § 404.101 and move Step 1.B's second sentence to § 404.2.
1.C	Reword and move	Add similar language to § 404.102
1.D	Reword and move	Add similar language to § 404.102
2	Omit	Unnecessary summary of

[20] Transcript (7/23/2014), p. 274. Discussion begins on p. 258.

		substeps
2.A	Reword and move	Add similar language to § 404.104
2.B	Reword and move	Add similar language to § 404.103
2.C	Reword and move	Add similar language to § 404.104
3	Omit	Unnecessary summary of substep 3.A
3.A	Reword and move	Cover substance in § 404.106.
4	Omit	Per recommendation approved by GLPAC[21]
5		Add similar language to § 404.105
6	Reword and move	Per recommendation approved by GLPAC.[22] Add similar language to § 404.106
7, except last sentence of first paragraph	Reword and move	Add similar language to § 404.107
7, last sentence of first paragraph	Reword and move	Add similar language to § 404.108

In the discussion that follows, we explain how the new methodology replaces each Step of the 1995 methodology. Our calculations for 2016 rates, using the new methodology, appear in Part VI of this preamble.

46 CFR 404.101–Recognize previous operating expenses. Like old Steps 1.A and 1.B this section describes how we recognize the appropriateness of past pilot association costs, based on independent third party audits.

46 CFR 404.102–Project operating expenses, adjusting for inflation or deflation. Like old Steps 1.C and 1.D this section describes how we calculate an association's projected base non-compensation operating expenses. We will continue to

[21] Transcript (7/23/2014), p. 255. Discussion begins on p. 237.
[22] Transcript (7/23/2014), p. 255. Discussion begins on p. 237.

apply a cost change factor for inflation or deflation to any recognized expense that could be affected by inflation or deflation, based on BLS Midwest Region CPI-U changes.

This rule sets base rates for 2016, using pilot association expense data from 2013, the last full year for which reported and audited financial information is available. Under old Step 1.C, we would have applied a cost change factor for only the next year, 2014, and would have ignored the inflation that took place in 2015 and 2016. In 2014, GLPAC recommended that we take the subsequent years into account,[23] and we now do so in the new methodology using BLS data, or if not available, then the target inflation rate set by the Federal Reserve as a proxy for the Midwest Region CPI-U.

46 CFR 404.103–Determine number of pilots needed. Like old Step 2.B this projects how many pilots the system will need in the next shipping season. To project the total demand for pilot time, we broaden the old "bridge hour" standard to include not only the hours a pilot is on the vessel's bridge, but also the total average time a pilot spends in preparing for and returning from each pilot assignment, along with a "recuperative rest" allowance of up to 10 days per month in non-peak months, as GLPAC recommended.[24] Moreover, instead of projecting future demand based on anecdotal information about future shipping trends, we use a multi-year average of actual past data, as GLPAC recommended in 2014.[25] We also follow GLPAC's recommendation[26] that we project demand based on the number of pilots that would have been needed to provide safe, efficient and reliable pilot service per district. Our NPRM proposed including data

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[23] Transcript (7/23/2014), p. 200. Discussion begins on p. 192.
[24] Transcript (7/24/2014), p. 240. Discussion begins on p. 225. The seven non-peak months run from mid-April to mid-November. Recuperative rest would be available "up to" 10 days per month during those months, dependent on actual traffic patterns and the need to provide reliable pilotage service. Our goal is to regulate the pilotage system to maximize the likelihood of providing the full 10 days per month.
[25] Transcript (7/23/2014), p. 258. Discussion begins on p. 255.
[26] Transcript (7/23/2014), p. 237. Discussion begins on p. 201.

from the previous five shipping seasons in the multi-year average but excluding outlier years that could distort demand trends, substituting available and reliable data from other years. However, in response to public comments, we have decided to omit the outlier-exclusion provision, and also to lengthen the multi-year period to include data for the 9 full shipping seasons between 2007 through 2015, using data from our current financial reporting system, which provides a good source of valid data. We instituted that system in 2006, but we exclude 2006 because we have only partial season data for that year. By 2017, we will have reliable data from 10 full shipping seasons (2007-2016), and thereafter each year we will use data from the most recent 10 seasons.

If the result of our demand calculation is a fractional number, we will round it up or down, as seems most reasonable, to the next whole pilot.

In addition to projecting the number of pilots needed, we will also project the number of pilots we expect to be actually working full-time and fully compensated during the first shipping season of the new base period. This becomes an important factor in the next section.

46 CFR 404.104–Determine target pilot compensation. Like old Steps 2.A and 2.C this determines individual and overall target compensation, but it changes the old methodology in three respects.

First, instead of different target figures for undesignated and designated waters, we will set a single figure for each district. Second, instead of using union contracts as our compensation benchmark, we will use the most appropriate reliable benchmark that is available to the public. Third, instead of basing target compensation on each district's pilot needs, we will base them on the number of pilots we expect to be available for full-time and fully-compensated work in the upcoming season, since actual pilotage availability may be lower than needed, as is the case under the current methodology.

46 CFR 404.105–Project return on investment. At GLPAC's recommendation[27] we deleted old Steps 5 and 6, used to calculate a pilotage association's return on investment, as needless steps that only complicated but did not change the final projection. We continue to project the return on investment by adding operating expenses and target pilot compensation, and multiplying the sum by the preceding year's average annual rate of return for new high grade corporate securities.

46 CFR 404.106–Project needed revenue. As just stated, we have deleted the Step 6 procedure for projecting each association's needed revenue for the next year. Instead, we calculate base revenue needs by adding projected base operating expenses, total base target pilot compensation, and base return on investment. This is a more transparent procedure and it adequately projects an association's needed revenue.

46 CFR 404.107–Initially calculate base rates. Like old Step 7, we initially set base rates for the designated and undesignated waters of each district, subject to modification or finalization under § 404.108. We do this by dividing projected needed revenue by available and reliable data for actual hours worked by pilots in each district's designated and undesignated waters during the multi-year base period. In some years and in some districts, this could produce significantly higher rates for designated waters than for undesignated waters, creating unnecessary financial risk to the pilot associations by focusing revenue generation too narrowly in designated waters at the expense of undesignated waters. To ensure safe, efficient, and reliable pilotage in all Great Lakes

[27] Transcript (7/23/2014), p. 255. Discussion begins on p. 237.

waters whether designated or undesignated, we therefore will apply a ratio to adjust the balance between rates, limiting the designated-water rate to no more than twice the undesignated-water rate while maintaining the same overall revenue. This will correct the undesirable rate imbalance, without affecting the total needed revenue projected for each district.

46 CFR 404.108–Review and finalize rates. Like another provision of old Step 7, we will adjust the initial base rates for supportable circumstances, which include factors defined in current U.S.-Canadian agreements relating to Great Lakes pilotage.[28] To ensure we do not abuse this discretion, we state that any modification to the initial rates must be necessary and reasonable, as well as justified by supportable circumstances. We will continue to submit proposed adjustments for public comment, which may result in our abandoning or modifying the adjustment. Any adjustment will be subject to § 404.107's limitation on the disparity between rates for designated and undesignated waters.

V. Discussion of NPRM Comments

In the following discussion, in general the numbers used to refer to specific commenters are keyed to their docket numbers. Many late comments were docketed as a single entry, so those comments are labeled with the letter codes AA through AW (those codes appear next to each separate comment in the single docketed entry). So, commenter 4's submission is docketed as USCG-2015-0497-0004. We received submissions from 75 commenters on the NPRM, from the individuals and groups (or their associations or

[28] The current Memorandum of Understanding can be viewed at http://www.uscg.mil/hq/cg5/cg552/docs/2013%20MOU%20English.PDF

representatives) shown in Figure 2. In addition, we received emails from two shipping agents and a shipper, all requesting clarification (which we supplied by email) as to how rates would be charged under the new regulations, and a request on behalf of shipping agents for an extension of the comment period, which we granted.

Figure 2: Comment sources

Commenter's affiliation	Docket numbers
Current GLPAC member	AF
Elected officials	AG, AR, AU
Environmental advocacy groups	AD
Former GLPAC member	27
Great Lakes pilot association presidents as a group ("the presidents' group")	52, 62
Great Lakes pilot association presidents as individuals	54, 56, 59, 60, AC
Import or export shippers	10, 12, 15, 16, 19, 20, 21, 22, 23, 25, 28, 30, 31, 32, 33, 41, 47, 50, 51
International ports and shippers coalition	Two comments submitted: 53, AW
National associations of pilots	38, 49
Pilot from outside the Great Lakes system	AH
Pilots or former pilots	29, 44, 45, 46; a single submission from 4 pilots, 55A, 55B, 55C, and 55D; 57, 58, 61, AA, AE, AL, AO, AP, AQ, AS, AT, AV
Pilot service providers (for example accountants for the pilotage associations)	34, 43, AK, AN
Ports and port workers (for example stevedores)	4, 5, 8, 9, 18, 24, 26, 35, 36, 37, 39, 42, 48, AB, AM
Regional businessman	AJ
State pilot association outside the Great Lakes system	40
Vessel operator	6

Of the 75 comments we received, 14, or almost one-fifth, of the comments were submitted after the published date for closing the comment period, December 9, 2015.[29]

[29] This figure does not include 35 comments received on Dec. 22, 2015, but dated before the comment period closed and apparently lost in transmission.

After careful consideration, we have chosen to consider them because of the importance and complexity in changes of this particular rulemaking.

Our responses to some of the comments indicate that the action we are taking this year is subject to possible future modification. For example, using Canadian Great Lakes pilot compensation, suitably adjusted to recognize differences in the benefits the U.S. and Canadian systems provide is considered as the benchmark for setting our own target compensation. In each of those cases, we invite the public to submit formal comments on next year's NPRM, and the Director of Great Lakes Pilotage will accept comments and data informally submitted at any time (see FOR FURTHER INFORMATION CONTACT).

The following discussion treats, in alphabetical order, these major topics raised by the comments, and concludes with a discussion of miscellaneous comments.

- Adequacy of pilot compensation
- Compensation benchmark
- Director's ratemaking discretion
- Effective date and implementation date of the rule
- Factors included in pilot compensation
- General reaction to the NPRM
- Goals of the ratemaking process
- Hourly rates
- Impact of rates on pilotage safety, efficiency, and reliability
- Information provided by commenters
- New pilot change point

- Pilot hiring and retention
- Pilot responsibility for cost control
- Projecting the number of pilots needed
- Recognized pilotage association costs
- Recuperative rest for pilots
- Reliability and completeness of Coast Guard data
- "Runaway costs"
- Stakeholder representation in the ratemaking process
- Traffic projections and use of multi-year historical traffic data
- Miscellaneous issues

Adequacy of pilot compensation. The ports and shippers coalition, in comment 53, responded to our question asking if our target pilot compensation was adequate, or if we should adopt the higher targets proposed by the pilots. They answered that our proposed target improperly depended on the use of the Canadian benchmark, implying that all the proposed targets were too high. They also said a Canadian benchmark is inappropriate because Canadian pilots perform more of their work in designated waters than do U.S. pilots, who perform a higher proportion of their work in "less demanding" undesignated waters.

> **Response:** We thank the coalition for its input. After considering all the comments, we continue to find the Canadian GLPA benchmark to be appropriate. We do not agree with the coalition's implication that our proposed compensation targets were too high, and that use of Canadian GLPA pilots' compensation is inappropriate.

As we stated in the NPRM, GLPA pilots provide service that is almost identical to the service provided by U.S. Great Lakes pilots. With the exception of Area 3, the GLPA provides pilotage service in the same waters as U.S. pilots do; in fact, whether a GLPA or U.S. pilot is assigned to a vessel is a matter of chance. We rejected the Laurentian pilots as not being a comparable benchmark because the Laurentian pilots work exclusively in designated waters. Consequently, we do not think it is accurate to say that "Canadian" pilots perform a higher percentage of their work on designated waters. The difference between the amount of work performed in designated waters by U.S. pilots and GLPA pilots is minimal.

Moreover, we do not agree with the argument that the noted disparities between work done by Canadian and U.S. pilots warrant comparing U.S. compensation to a different system, such as the BLS data suggested by the ports and shippers association. As we stated in the NPRM, BLS data for masters, mates, and pilots cover officers whose duties and responsibilities are substantially different from those of a U.S. Great Lakes pilot. Unlike a Great Lakes pilot, most officers covered by the BLS data are not directly responsible for the safe navigation of vessels of any tonnage through designated waters. Further, the BLS data is skewed downward by the higher number of lower wage mates, who do not hold the same licenses as masters and pilots. Between U.S. and Canadian pilots, however, the impact on overall pilotage services is the same wherever a pilot happens to be. If a pilot is assigned to undesignated waters, the pilot is still "at work" or "on assignment" and therefore is unavailable for assignment to designated waters, and the pilot helps to ensure the safe navigation of the vessel regardless of the circumstances or waters navigated. Finally, a Canadian pilot's compensation is in no way dependent on the proportion of the pilot's assignments in designated or undesignated waters. Canadian pilots earn an annual salary that is affected neither by that proportion, nor, indeed, by varying traffic demand. Also, all U.S. registered pilots are qualified to provide service in both designated and undesignated waters within each pilotage district. Therefore, we do not think the distinction between assignments in designated or undesignated waters should have any bearing on a pilot's compensation.

Compensation benchmark. After analyzing a number of possible benchmarks for setting target compensation for the pilots, our NPRM proposed adopting the compensation of Canadian Great Lakes pilots as our benchmark for this year's target compensation.[30] It also proposed setting the compensation for U.S. pilots by adjusting the Canadian compensation figure upward by 10 percent, in recognition of the different benefits available to Canadian pilots and their U.S. counterparts. We received several comments on the benchmark and benchmark adjustment, some indicating it is insufficient and some indicating it is overly generous.

A national pilot association said, in comment 38, that for too long the Coast Guard set pilot rates too low, in an effort only to keep pilotage costs as low as possible.

[30] See 80 FR at 54497.

The association generally welcomed our proposals but found that the proposed adjustment of 10 percent to the Canadian benchmark insufficiently accounts for differences between the two nations' compensation systems, and that it is skewed because the Canadian compensation data include compensation for both fully qualified and apprentice pilots. It provided data in support of a benchmark adjustment of almost 37 percent, not 10 percent. The group of pilotage association presidents, in comment 52, supported these comments and also recommended using other U.S. pilots' compensation figures, which are generally significantly higher, as the benchmark.

> **Response:** As we explained in our NPRM,[31] we did consider using other compensation schemes, including those for U.S. masters, mates, and pilots, as our compensation benchmark, and we believe our selection of Canadian Great Lakes pilot compensation as the best benchmark for 2016 was correct.
>
> We appreciate the data the association reported in support of the almost 37 percent benchmark adjustment it suggested, but we do not find it persuasive. The commenter admits that determining this differential is subjective and they primarily base this value on the cost of living difference between Detroit, MI and Windsor, ON, which are not necessarily indicative of the regional economy. We do not think the 15 percent COLA differentiator between Detroit, MI and Windsor, ON is relevant—a single comparison point should not be utilized to establish the regional comparison. Also, the U.S. cost of the Masters, Mates, and

[31] NPRM, 80 FR 54484 at 54497, col. 2.

Pilots Membership Health Plan is only a single option of healthcare and benefit packages that are also not necessarily indicative of the regional economy.

We will re-evaluate the association's data before we propose new rates for 2017, at which time the public will be able to comment on their validity and whether the impact of so large an adjustment would require a phase-in, in the interest of avoiding too large a one-year rate increase. We find that our new target compensation for 2016 is fair and justifiable.

The ports and shippers coalition, in comment 53, responded to our question asking if the 10 percent adjustment to Canadian Great Lakes pilotage data is appropriate. The coalition said it is not, and that it abuses our discretion, because it ignores the facts that Canadian pilots perform more work in designated waters than U.S. pilots do, and that they are government employees. The coalition doubted that the Canadian data require adjustment once "comparability adjustments are rationally applied." They also said it is "legally and logically defective" to set rates by "working backward" from individual pilot compensation figures to set future target compensation. Instead, they said we should simply cover reasonable pilotage costs, including the costs of providing reasonable pilot compensation.

Response: We acknowledge that this adjustment is an approximation based on several statements made at the 2014 GLPAC meetings,[32] which were not challenged at the time by industry representatives. We have based our benchmark adjustment on the best data available when we published the NPRM, and believe the new

[32] Transcript, GLPAC meeting, July 24, 2014, pp. 43-45.

methodology covers reasonable pilotage costs and pilot compensation. Our NPRM specifically requested public comment on the appropriateness of a 10 percent adjustment.[33] Two commenters provided arguments or data in support of a higher adjustment, but we have not been able to validate the data or analyze the commenters' arguments within the time frame statutorily allowed for this year's ratemaking. We are taking them under advisement for possible action in the 2017 ratemaking. As we explain previously in this discussion, we do not think the proportion of pilot time spent in designated or undesignated waters has any bearing on the comparability of U.S. and Canadian Great Lakes pilot compensation.

The same coalition, in comment 53, responded to our question asking if Canadian Great Lakes pilot compensation provides the best benchmark for U.S. rates, and if there is a better benchmark. They said that the systemic differences between the Canadian and U.S. systems make the Canadian compensation an unreliable benchmark, and that, instead, we should continue basing our target compensation on the compensation of first mates on U.S.-flagged Great Lakes vessels. They said the union contract information we previously used is still available, as the union's late comment on the 2014 rulemaking showed, and as the court in our recent litigation said we should have used. They also suggested we could use data from the Marine Engineers Beneficial Association or from the Bureau of Labor Statistics.

Response: For reasons described above, we disagree the with ports and shippers association that the work of Canadian pilots is so

[33] NPRM, 80 FR 54484 at 54498, col. 3.

different from U.S. pilots that Canadian salaries do not constitute an appropriate benchmark. We continue to view the Canadian pilots' compensation, suitably adjusted, as the best benchmark for our target compensation because, unlike U.S. pilots in other pilotage systems, pilots in the two Great Lakes systems perform comparable work under comparable conditions. We agree the union provided contract data for the 2014 rulemaking, but the limited data provided are not sufficient or publicly available and therefore, we cannot continue to depend on them reliably in the future. Furthermore, the Marine Engineers Beneficial Association and Bureau of Labor Statistics data could be generally informative, but we do not think they reflect comparable compensation for comparable work in comparable conditions that we believe is the best standard for selecting a benchmark. Under that standard, we continue to think the Canadian Great Lakes pilotage salaries provide the best benchmark available for this year's rate setting.

Director's ratemaking discretion. In comment 38, a national pilot association said that our proposed 46 CFR 404.104 gives the Great Lakes Pilotage Director unfettered discretion to determine the adequacy of pilot compensation, which is bad public policy and leaves the door open to abuse by future Directors. The association recommended that, instead, the Coast Guard should add a regulatory requirement for setting target compensation at a comparable level for comparable work in a comparable community.

Response: We understand and respect the association's concern, but because all Coast Guard exercises of ratemaking discretion are subject to notice-and-comment rulemaking procedures, any exercise of our discretion must first be proposed for public comment, which can highlight any perceived abuse of that discretion on our part. We believe that we will always need to exercise our discretion to determine what is comparable, but we will ensure that any modification made to the initial rates is necessary and reasonable, as well as justified by supportable circumstances.

The ports and shippers coalition, in comment 53, said we should eliminate the Director's ability to make reasonable and necessary discretionary adjustments to initially-calculated rates, for supportable circumstances such as carrying out pilotage agreements between the U.S. and Canada. The coalition said this discretion is open to abuse and that the exercise of this discretion in the past has been widely criticized by stakeholders. The coalition also said that, if we retain the discretionary tool, we should expressly limit its use to circumstances in which we fully take into account the adjustment's economic impact and the public interest.

Response: We acknowledge the past criticism of our use of discretionary adjustments, and as the coalition pointed out, at least in the recent past those adjustments have benefitted the pilots. However, in general we made those adjustments to offset the unintended consequences of our old ratemaking methodology. Even with adjustments, it is clear that pilot revenue still has consistently fallen below our targets. Had we not made those adjustments, we think it likely that the pilot associations would have had even more trouble attracting and retaining pilots, and maintaining infrastructure, than they did.

No matter how well crafted a permanent rate setting methodology may be, it is bound to produce inequities when it cannot accommodate unforeseeable circumstances. We think it is essential for the methodology to include a tool that provides the ability to respond to those circumstances. We note that any proposed adjustment is fully made public in that year's NPRM, and we will carefully consider any public comments raising concerns as to a proposed adjustment's necessity and reasonableness.

We also note that we are required, by various statutes and Executive Orders, to consider the economic impact of any rulemaking, and statutorily required to consider the public interest as well as the costs of providing the services in setting rates. Therefore, although we agree with the coalition that our discretion should be exercised subject to these controls, we do not think additional regulatory language is necessary at this time.

The association presidents, as a group in their comment 52, said the Director enjoys overly broad discretion to adjust compensation benchmarks, and that a good standard for the exercise of that discretion would be "comparable compensation for comparable work in a comparable community."

Response: For the reasons we have stated, we disagree that this discretion is overly broad. We generally agree with the association presidents that comparable compensation for comparable work in a comparable community is a good standard, but we do not believe explicitly stating this standard is necessary to achieve that result. We believe the regulatory language in this rule and public comment input will ensure that any modification made to the initial rates is necessary and reasonable, as well as justified by supportable circumstances.

One association president in comment 56 said proposed § 404.108 is unclear as to how agreements with Canada could have any impact in adjusting U.S. rates, when despite comparable language over the past two decades, no such agreement has ever led to an adjustment.

Response: Promoting alignment with international agreements is just one of the supportable circumstances that could warrant an adjustment where it is found appropriate. Our 2016 rates move us closer to the "comparable" compensation called for by the current U.S.-Canada agreement.[34] Past agreements called for "identical" rates, which could never be achieved given the acknowledged differences in how the two pilotage systems operate, and therefore in the past it was not possible to use our discretion in a way that could make our rates "identical" to Canadian rates.

Effective date and implementation date of the rule. The national pilots association that submitted comment 49 said the proposed 2016 rates should be implemented at the beginning of the 2016 shipping season. The pilots association said there is no longer any

[34] Memorandum of Understanding, Great Lakes Pilotage Between the United States Coast Guard and the Great Lakes Pilotage Authority, Sept. 19, 2013, para. 7.

reason for an August 1 implementation date, which was linked to the benchmark union contracts we no longer use in setting rates. The association also said that in the past the Coast Guard has violated its statutory requirement to "establish new pilotage rates by March 1 of each year."[35] The presidents of the pilots associations, as a group and in their comment 52, supported these comments.

> **Response:** We agree that there is no longer any reason to implement rates on August 1, rather than as close as possible to the start of the annual shipping season. However, we do not agree with the association's interpretation of the statutory requirement, which Congress added in 2006.[36] The statute requires that we establish new pilotage rates by March 1. It is our understanding that the 2006 legislation was intended only to change the Coast Guard's previous practice of reviewing rates at irregular intervals, and to mandate annual reviews. We note that by 2006 we had set August 1 implementation dates on several occasions, and that therefore had Congress sought a rate *implementation* date of March 1, Congress would have included explicit language to that effect in the statute.
>
> The purpose of making a rule "effective" by March 1, but deferring rate implementation until August 1, was to give all parties clear and settled information, at the beginning of the shipping season, on a significant cost factor that would change as the season progressed. We no longer see any reason to defer rate implementation until August and believe an

35 46 U.S.C. 9303(f).
36 Pub. L. 109-241, sec. 302.

implementation date at the beginning of the shipping season is reasonable under the new methodology. This ensures that the new rates can be charged from the beginning of the shipping season, which usually occurs in late March.

The ports and shippers coalition, in comment 53, responded to our question as to when new rates should be implemented; they said they should have 90 days in accordance with common marine industry contract requirements.

Response: We believe that 30 days is a reasonable amount of time to prepare for the new rates. In light of our inability to continue using the union contracts which went into effect each August 1, and given the statutory requirement that rate adjustments must be set by March 1 of each year, henceforth we will implement new rates with the opening of the shipping season or as soon thereafter as possible.

Factors included in pilot compensation. The ports and shippers coalition, in comment 53, said that, as independent contractors, pilots should bear some of the risk of unforeseeable events like accidents or weather conditions that cause vessel delays and detention, and therefore should not be compensated at full base rates for time lost to those conditions.

Response: We generally disagree. Pilot time is lost when it is wasted due to delay or detention, and the pilot associations cannot make up the resulting lost revenue. Pilot compensation would suffer as a result if they were paid at less than full rates, and the lost revenue could degrade the ability of pilot associations to bear the cost of the investments needed to support pilotage service whenever it is needed. However, we note that pilots do bear some risk under the cancellation and delay provisions in § 401.420; we discuss comments on those provisions later in this preamble.

A pilot said in comment 55B that compensation for delay and detention should be paid not only when the event is for the vessel's convenience, but for any event that is not caused by the pilot.

Response: Pilots and pilot associations are responsible for their own actions and the maintenance of necessary infrastructure, and cannot bill for any delay or detention reasonably attributable to them. Industry is responsible for other delays including those not necessarily for the convenience of the vessel.[37]

Pilot 55B "applaud[ed]" our recognition that compensation data should be adjusted for inflation.

Response: We agree that such adjustments are essential components of fair compensation under current conditions.

With respect to the "compensation for interruption" provisions of proposed § 401.420(c), the president of an association in comment 56 asked what constitutes a traffic interruption, and what difference it makes whether such an interruption occurs during May through November or at other times.

[37] Except as specified in 46 CFR 401.420(c) with respect to ice, weather, and traffic delays. An example of a chargeable delay would be caused by the unavailability of staffing at a dock, such that the vessel cannot dock. This delay would not be "for the convenience of the vessel," but nevertheless would needlessly consume scarce pilotage resources. This aligns with vessel chartering contracts that require payment regardless of the actual status of the vessel during the charter agreement.

Response: Section 401.420(c) deals with interruptions to a vessel's transit that are caused by ice, weather, or traffic disruptions from May through November. We proposed relieving vessels of liability for such disruptions during those months because they are during the non-peak traffic period. We agree that a pilot's time is lost to these disruptions regardless of when they take place, but outside of peak traffic periods the impact of that loss of time on the overall force of available pilots is less, and the resultant vessel stoppage reduces the need for pilot assignments. Conversely, the opportunity costs for pilot time during the peak traffic periods at the beginning and end of the shipping season, which also coincide with most winter weather conditions, are much higher. We note that this comment was the only one to raise this particular point, and we will continue to consider the issue carefully in the future..

General reaction to the NPRM. Pilot service provider in comment 34 said that the pilots have "suffered over the past two decades because of a ratemaking mechanism that fails, chronically and often by a very wide margin, to produce the revenue that it promises." The commenter said the whole pilotage system has suffered as a result, and that the "shipping industry should THANK the Coast Guard, not criticize it, for finally recognizing that the system is broken, and taking the initiative to fix it" (emphasis in the original).

Response: We agree with the commenter and have proposed regulatory amendments precisely to address the concerns the commenter raised.

A pilot service provider in comment 43 pointed out that we "lost a critical tool in arriving at an equitable payscale" when benchmark union contracts became unavailable for the Coast Guard's use in setting rates. The commenter "commend[ed]" our "pro-active work" in devising a new procedure for ensuring fairer pilot compensation.

> **Response:** While we agree that our longstanding use of benchmark union contracts was an accepted and generally useful tool for setting rates, we think the new procedure is more flexible and will work as well, or better, over time. The new methodology relies on publicly available and current data to set a benchmark for each ratemaking, and allows us to choose the most appropriate benchmarks available.

The national pilot association in comment 49 expressed support for our proposals because they responsibly meet our obligation to "encourage investment in pilots, infrastructure, and training while helping to ensure safe, efficient, and reliable" pilotage service.

> **Response:** We think the investments cited by the association are indispensable components of providing safe, efficient, and reliable pilotage service, and we think this rule promotes those investments in the interests of all system stakeholders.

The ports and shippers coalition, in comment AW, said the Coast Guard may have been overly ambitious in proposing both the methodology changes *and* new rates based on those changes in the same rulemaking. It said our proposed changes are flawed and need to be refined. It therefore proposed extending the 2015 rates into 2016, which it said should "be generously remunerative" to the pilots.

Response: We disagree with these assertions and believe that the new rates are necessary and reasonable for safe, efficient, and reliable pilotage on the Great Lakes. Failure to implement these important revisions will continue to delay the addition of pilots and the investment in important infrastructure to sustain the pilotage system on the Great Lakes.

The president of a pilot association in comment 59 said our methodology and rates were fair and should be adopted.

Response: For all the reasons we cite elsewhere in this discussion, we agree with the commenter.

The presidents of the pilot associations, as a group and in their comment 62, pointed out that the Coast Guard has full discretion to set pilotage rates, and that the Coast Guard must ensure first and foremost that the rates we set promote the safety, efficiency, and reliability of the regulated entities' operations. They said that the shippers coalition was mistaken in its assertion that we failed to give sufficient attention to their "public interest." The presidents pointed out that our statutory mandate is to consider, without limitation, the "public interest," and shared our interpretation of that interest as extending to that of every American or any foreign person who might be affected by our ratemakings. The presidents said that, had Congress intended to limit the "public interest" to the interest of persons directly affected by the Great Lakes system, it knew how to do so by speaking in plain terms.

Response: We agree that the economic interests of Great Lakes ports and shippers must be considered as one of many interests in the context of our statutory mandate to consider the public interest in general.

The ports and shippers coalition, in comment AW, said that industry's interests are "congruent" with those of the pilots, that our rates should fairly compensate the pilots without imposing unreasonable costs that can harm the viability of Great Lakes shipping, and that our proposals do not meet these goals.

> **Response:** We think the coalition correctly identifies the goals of our ratemaking, and we agree that the interests of all the principal stakeholders are "congruent," but we do not agree that we have failed to achieve the best possible balance between these two rate setting goals. We believe the rate in this rule balances fair compensation for pilots while taking into account the necessary costs of providing shipping services.

Hourly rates. The ports and shippers coalition, in comment 53, opposed our proposed use of hourly charges for all routes, instead of the current point-to-point charges for routes in designated waters. They said that fixed charges for those routes provide cost certainty for shippers and impose discipline on pilots, whose financial interests are served by navigating those routes in the most expeditious manner.

> **Response:** We acknowledge that fixed routes provide greater cost certainty for shippers, but this certainty needs to be balanced against interests of safety because the speed with which a pilot transits a route should be dictated by circumstances. We do not think the risk of an overly expeditious passage should be borne by the environmental safety of Great Lakes waters and by public safety, both of which could be jeopardized as a result. We also think this risk is contrary to the interest of shippers in the safe passage of their vessels.

A pilot in comment 55B and a president of a pilot association in comment 54 said that the hourly compensation standard should recognize that not all hours are billable.

> **Response:** We believe the current rate adequately addresses hours that are appropriate for billing. It is unclear to us from these comments what non-billable hours these commenters had in mind and how we should take them into account in setting rates. We invite them, and others, to provide us with additional information for consideration in 2017 and beyond.

Impact of rates on pilotage safety, efficiency, and reliability. An environmental group in comment AD said the low compensation and poor working conditions under which U.S. Great Lakes pilots work puts safety at risk, and therefore, threatens the Great Lakes environment, and that Congress clearly intended our ratemaking to take the public interest in such matters into account. A regional businessman in comment AJ also said that the regional economy depends on safe shipping and environmental protection of the Lakes.

> **Response:** We agree with both commenters. A vessel's safety is clearly a concern for pilots, vessel operators, shippers, and the general public. Ultimately, we think an unsafe system could provide shippers with incentives to shift their operations to other ports or other transportation modes.

A pilot service provider in comment 43 cited studies[38] showing that "more than 80 percent of maritime property damage claims and more than 90 percent of collisions"

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[38] According to the commenter, this quotation appears in J.A. Barber's *Naval Ship Handler's Guide.*

are due to the irregularity of master or pilot work schedules and the pressure of the responsibility these individuals bear, leading to insomnia and "near continuous fatigue," "often accompanied by intense stress and punctuated by large sudden shots of adrenalin." A pilot association president in comment 60 made very similar comments.

> **Response:** As is true for all transportation modes, chronic fatigue from irregular work schedules and insufficient rest periods can cumulatively increase the safety risks for maritime transportation. These increased risks are in no one's interest, and they also lead to pilotage service that is neither efficient nor reliable. The recuperative rest period is intended to ensure that, in addition to required rest periods between assignments, pilots have sufficient off-assignment time during the season so they can avoid chronic fatigue.

The national pilot association in comment 49 noted that shipping agents for foreign vessel operators have long demanded Coast Guard action to address the "untenable situation" in which pilot shortages and aging infrastructure can lead to expensive vessel movement delays. The association said that only in 2015 did the Coast Guard begin rectifying the severe pilot association revenue shortfall over the past decade, and commended the Coast Guard for continuing this rectification with our proposals for 2016. A pilot service provider in comment AN made similar comments.

> **Response:** We agree and think the pilot association correctly understands that increased pilot compensation is warranted if it leads to a pilotage system that is safer, more efficient, and more reliable for all stakeholders.

Information provided by commenters. A pilot in comment 55C said that his association's staffing will be decreased by upcoming retirements, and that the association has aging infrastructure that must be modernized.

> **Response:** We acknowledge this information, which advises us of conditions that threaten this association's ability to provide safe, efficient, and reliable pilotage. Our changes in this rule were intended to mitigate such conditions.

The president of a pilot association in comment 54 said his district will have significant unforeseen dispatch costs in 2016.

> **Response:** We agree that this commenter will incur dispatching costs from the beginning of the 2016 shipping season, including the acquisition of necessary facilities and technology. Previously, this service was provided by Canada. Data for those costs were not available in sufficient detail to be included in the 2016 rate but can be evaluated for reimbursement in a future rulemaking.

A U.S. pilot from a different system in comment AH said that pilots in his association earn over $459,000 a year and also receive medical and pension benefits, and that compensation for Great Lakes pilots contributes to hiring and retention difficulty.

> **Response:** We thank the commenter for this information. We find that our use of Canadian Great Lakes pilot compensation, suitably adjusted, is the best benchmark for our target compensation because pilots in the two systems perform comparable work under comparable conditions. We have no publicly available information on how rates are

set in other U.S. pilotage systems, and therefore, we cannot analyze whether the figure cited by this commenter would make a better benchmark for our system, though we invite public input and data on this topic for our consideration in future ratemakings. We agree that low compensation in comparison with that of U.S. pilots elsewhere probably contributes to hiring and retention problems. Our rule is intended to mitigate that disparity.

New pilot change point. Our NPRM proposed adding a new pilot change point to break up overly long pilotage assignments in the St. Lawrence Seaway. The national pilot association in comment 38 said we should not add the new change point until pilot associations reach full staffing in 2017, because until then an additional change point would only require additional workload and travel time for an already over-stretched pilot work force. The ports and shippers coalition, in comment 53, said that this rulemaking is not the right venue to discuss a new pilot change point, which deserves more discussion and a thorough investigation.

Response: We agree that this issue requires more study and the addition of more pilots to handle the increased number of pilotage legs created by the new change point. Therefore we are taking no action on it this year.

Pilot hiring and retention. Elected officials in comments AG and AI said that hiring and retaining highly trained and qualified pilots is essential for protecting the Great Lakes environment. Official AR said that our rate increases would help hire and retain the high quality pilots who protect the safety of the Great Lakes environment and hence the reliability of Great Lakes transportation.

Response: We agree, and our new rates are intended to promote such hiring and retention.

The national pilot association in comment 38 said our proposed rates do not adequately cover the cost of adding new pilots, over the potential 5-year lifespan of the new rates.

Response: The commenter may be correct and we would adjust the rates should we find the rates need adjustment over the 5-year period. For 2016 hiring costs, we are authorizing a temporary surcharge to fund new applicant pilots, and if warranted we could authorize similar surcharges in future years, if necessary.

Pilots in comments 29, 44, 45, 46, and AV, as well as a pilot service provider in comment AK and a port commenter in comment AM, all said that low pay and high workload are principal causes of pilot hiring and retention problems. In addition, a pilot in comment 29 compared U.S. Great Lakes pilot compensation and working conditions unfavorably to those available to their Canadian counterparts, and said our proposals would “go a long way” toward easing hiring and retention problems, improving pilot training, and helping shore up pilotage association infrastructure. A pilot in comment 57 said that a well-compensated pilot will not want to leave his position, and that a well-compensated pilot in another stable environment will not want to take a position in the unstable Great Lakes pilotage system. A pilot in comment 58 said that in the past, target pilot compensation has been set “abysmal[ly]” and in no way has kept up with compensation for other pilots or other mariners. A pilot in comment 61 said that the inability of the pilotage associations to hire and retain qualified pilots is putting the safety, efficiency, and reliability of pilotage service at significant risk, and said industry should understand this as well as the pilots do. He said the pilots had long warned industry that pilot shortages would inevitably result in the sort of delays that industry had to endure at the beginning of the difficult 2014 shipping season. A pilot in comment AA said that in 2010 he withdrew his application to become a Great Lakes pilot because the risk was not worth it, and that he knows several colleagues who did not apply, for the same reason. He said that if industry is not willing to pay increased rates they may lose pilotage service altogether. Pilots in comments 55A and 55C made similar comments. A pilot association president in comment AC said his association has difficulty hiring replacements for several pilots who have left the system or retired, or who plan to do so in the near future; similar comments came from pilots in comments 55D, AE, and AV. President AC also said that pilotage costs are a small fraction of overall shipping costs in the Great Lakes. A pilot in comment AL said he retired from the system because of low compensation and lack of time off, and withdrew his application for another opening when it became clear those conditions had not improved. A pilot in comment AO said he never would have become a Great Lakes pilot had he foreseen the low compensation and long hours involved, and that as a hiring agent found that these issues kept many highly qualified mariners from signing on as pilots. A pilot in comment AP said 10 pilots in his association took early retirement to escape the low compensation and long hours their positions entailed. A pilot in comment AQ said his job as a pilot was a “great fit” but that he resigned because of low pay and long hours. Pilots in comments AS and AT welcomed the surcharge that the NPRM proposed to help defray pilot association hiring and training costs.

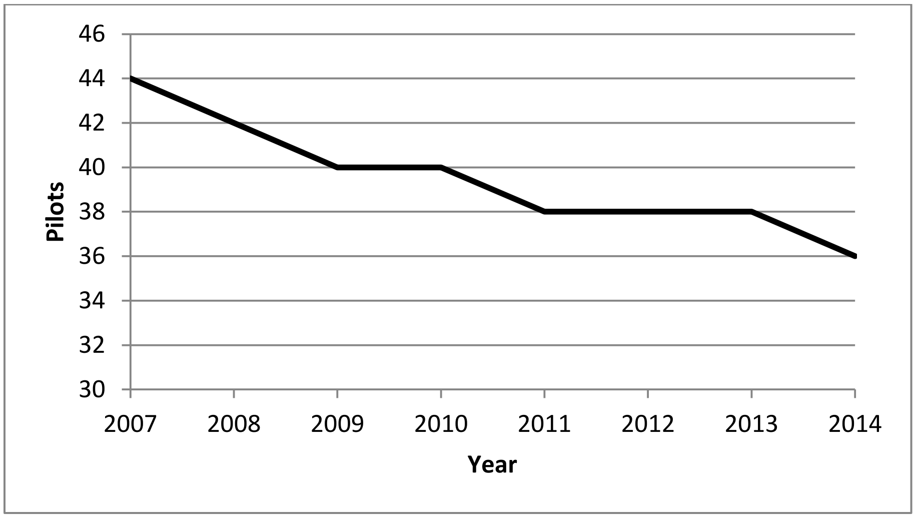
> **Response:** These comments echo comments that pilots and others have made to us, and to GLPAC, repeatedly over many years. Such comments highlight the pilot hiring and retention challenges this rule addresses to ensure that our rates provide the pilotage associations with sufficient revenue to attract and retain pilots, improve pilot working conditions, and shore up the infrastructure on which the pilots rely.

The ports and shippers coalition, in comment 53, said that our analysis of pilot attraction and retention issues is not founded on tested data, and that we should explore alternative ways to attract and retain good pilots, such as up-front apprentice bonuses and living standard supports. The coalition said we should look into each departed recruit's or pilot's reasons for leaving the system. In comment AW, the same coalition said that we have produced no data establishing that there are difficulties in attracting and retaining qualified pilots, or that there is a relationship between those difficulties and low pilotage rates. The coalition said we should produce enough data to convince the public that there is a problem, that it is caused by low rates, and that it is not affected by other unrelated factors.

> **Response:** Our analysis shows that over the last 11 years, 31 pilots have left the Great Lakes pilotage associations. Of these 31 pilots, 9 went to other unspecified jobs, 5 went to another system outside the Great Lakes, 5 took mariner positions on board lakers, 1 went back to deep sea shipping, 1 became a training instructor, 1 went to another district, 1 took work with a dredging

company, and 8 gave no reported reason for leaving. Figure 3 shows that the number of pilots dropped from 44 in 2007 to 36 in 2014, a net decrease of 22 percent.

Figure 3: Total Pilots 2007-2014



Industry considers pilot understaffing directly responsible for vessel traffic delays. Figure 4 shows our data for delay hours overall and by district between 2007 and 2015. This data is pulled from the Great Lakes Pilotage Management System, an online database shared by USCG and the Canadian GLPA, as well as the pilot associations.

Figure 4: Great Lakes Delay Hours 2007-2015

Year	District 1	District 2	District 3	Total Delay Hours
2007	1295.97	657.1	1231.99	3185.06
2008	1232.4	679.47	1350.3	3262.17
2009	476.13	546.52	1771.05	2793.7
2010	1096.22	1272.05	1377.53	3745.8
2011	824.41	588.05	1501.02	2913.48
2012	656.5	711.01	1152.09	2519.6
2013	2071.72	1064.31	2829.36	5965.39

2014	2702.35	2439.8	7879.62	13021.77
2015	2532.33	1501.05	383.17	4416.55

Figure 5 shows how much these delays cost, which we calculated by dividing the delay hours shown in Figure 4 by 24 hours and multiplying the result by the average daily vessel operating costs, excluding the cost of pilotage during delays.[39] Delay hours in 2014 included an estimated 7,200 delay hours due to the ice opening that we removed to better represent the trend over the years. The figure shows an overall increasing trend in delay hours and the cost of these hours over the last 9 years.

[39] *"Ship operating costs: Current and future trends",* Richard Grenier, Moore Stephens LLP, December 2015. $5,191 was used as the daily operating cost as the majority of affected vessels are handy size bulkers.

Figure 5: Operating Cost of Delays 2007-2015

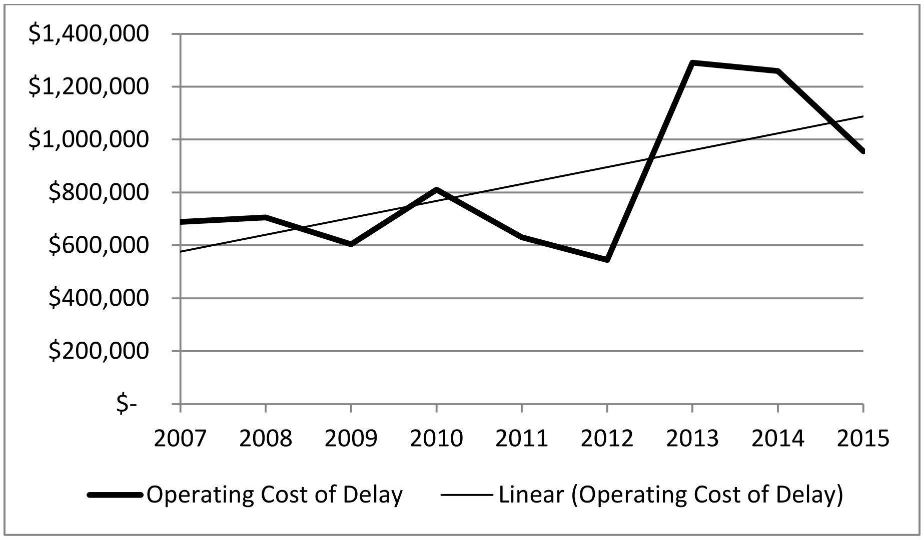
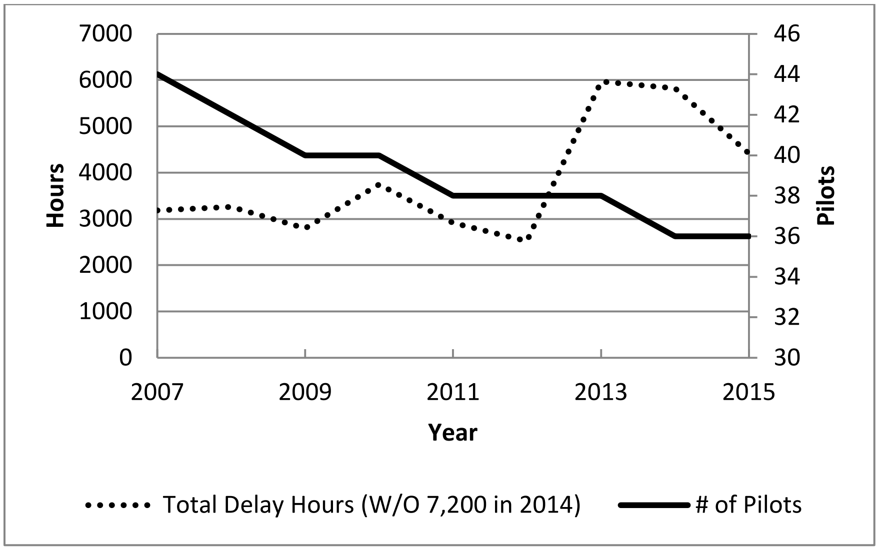


Figure 6 shows that since 2007, the number of available pilots has decreased 22 percent, while delay hours have increased 45 percent. Over this period, delays increased by 2,636 hours, or 329 hours per year, per pilot loss. Other factors contribute to delays, but clearly pilot shortfalls are one important factor.

Figure 6: Total Delay Hours vs. Pilot Strength



Pilot associations say they want to reach full staffing, but cannot do so because of chronic pilot attraction and retention difficulties. We are open to any reasonable proposals for mitigating those difficulties, but the remedies suggested by the coalition may not work and could take longer than the system can sustain in the face of more pilot departures and the inability to replace those pilots. We doubt that the coalition's suggestions would be effectual, given the career-long prospects a recruit or new pilot faces for lower compensation than their counterparts in Canada side or in other U.S. ports. The pilots have emphasized these issues repeatedly at pilotage summits and GLPAC meetings, and we are not aware of evidence that the pilots' emphasis is misplaced. Our preceding figures suggest that increased pilot rates are the best and quickest way to attract and retain more qualified pilots.

Pilot responsibility for cost control. The ports and shippers coalition, in comment 53, said that the Coast Guard encourages inefficiency in the pilotage system, by maintaining three separate pilotage district associations instead of a single association as the Canadians do. It said we do not adequately pressure the pilotage associations to maintain a full staff of pilots, and that each association has an incentive to maintain low staff levels because every pilot on staff can receive higher compensation. It also said we should explore more efficient ways to reduce association overhead. The coalition suggested that pilots should bear some of the risk of unforeseeable events that cause a vessel's delay or detention, and therefore should not be paid base rates for those events. A pilot association president in comment 54 disagreed, and said that a pilot should be responsible only for events that are outside the pilot's control (we assume the commenter intended to say "events within the pilot's control").

> **Response:** We are interested in, and continually explore, efficiencies to keep staffing up and overhead low. We share the coalition's concern regarding understaffing of the pilot associations and our new methodology focuses pilot compensation on those pilots actually expected to be working in a given year, rather than on the target for full staffing. This reduces any incentive an association might have to understaff.
>
> Consolidation of the three districts into one continues to be an option we consider. However, it should be noted that the three-district model predates the Coast Guard's assumption of the system's control almost 50 years ago, and GLPAC's authorizing statute specifies that three of GLPAC's seven members must represent the presidents of the three

pilotage districts, which in our view implies that each district will have its own association.[40] Therefore we assume Congress recognizes the existing three-association model and would need to amend the Act to allow us to change that model. We agree with the pilot association president in comment 54 that, contrary to the coalition's suggestion that the pilots absorb some of the risk of unforeseeable events, it makes more sense to allocate risks so that pilots bear the costs only for events that are within their control. This is because there is a limited pool of pilots, and the association cannot simply add pilots or pilot hours to make up for pilot hours lost to delays outside the pilots' control.

Projecting the number of pilots needed. The national pilots association in comment 38 said our NPRM's announced goal of having 50 pilots on hand within the near future is fully justified to keep vessel traffic moving and to avoid the pilot fatigue that the National Transportation Safety Board (NTSB) has said threatens pilotage safety. The association found it "baffling" that the same shippers who express concern over traffic delays also criticize the costs of adding the pilots needed to avoid those delays.

Response: This final rule increases the 50-pilot goal we announced in the NPRM to a new goal of 54 pilots, for reasons we will discuss in Part VI of this preamble.[41] This target is set to ensure we achieve our goals of safe, efficient, and reliable pilotage, and we agree

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[40] *See* 46 U.S.C. 9307(b)(2)(A).

[41] The 50-pilot figure appears in the NPRM at p. 54496, Table 10. In Part VI of this preamble, we discuss our reasons for increasing the number of pilots needed in our presentation of calculations made in accordance with new § 404.103. The 54-pilot figure appears in that presentation as Figure 19.

that, at least in the near future, these goals can be met only by providing adequate pilot compensation and rest.

The ports and shippers coalition, in comment 53, said the NPRM's proposal that pilot numbers be set high enough to cover peak traffic periods should be revised so that peak demand is used only at the beginning and end of a shipping season, when delays due to pilot shortages are most common, and should rely on alternative tools, such as the use of contract part-time pilots, during the non-peak periods.

Response: Traffic peaks usually are confined to the periods just after the opening and just before the closing of a season, but could occur at other times as well. Setting pilot numbers high enough to accommodate all these peak periods is essential for reducing traffic delays during peak periods, and is also essential if we are to provide the recuperative monthly rest periods recommended by the NTSB in the interests of safety.

We considered using contract or semi-retired pilots as an alternative way to handle traffic peaks. We do not think that is a viable alternative because those pilots are unlikely to possess current and thorough knowledge of local waters. We consider such knowledge essential for safe piloting, especially in the bad weather conditions often experienced during peak periods. This kind of specialized knowledge takes up to 48 months to acquire and cannot be summoned at short notice to address temporary traffic peaks. It is true that other pilotage systems outside the Great Lakes sometimes use part-time or contract pilots, but those systems cover smaller areas in which those pilots more easily can maintain the necessary knowledge without impacting safety. The coalition did not propose other alternatives for our consideration and we have not identified such alternatives. However, we invite the public's input on any alternatives that exist, and would carefully consider using those alternatives in future ratemakings.

The president of a pilot association in comment 56 criticized our proposed basis for target pilot compensation in § 404.104, by which compensation would be set according to the number of pilots actually on hand, instead of the number of pilots needed. He said this would be unfair to the existing pilots, each of whom has to work harder until the association is fully staffed.

Response: We have authorized a temporary surcharge to assist in achieving the goal of hiring and training new pilots and think this is a more transparent tool than setting base rates according to "pilots needed," which as an industry commenter pointed out could provide an incentive for an association to keep pilot strength artificially low.

Recognized pilotage association costs. The national pilots association in comment 38 said that, in proposed 46 CFR 404.2(b)(3) regarding transactions not directly related to providing pilotage services, we should specify that transactions must be related to the provision of "safe, efficient, and reliable" pilotage service.

Response: We agree with the motivation behind this suggestion, but we think it unnecessary to add the proposed language. Our proposed regulations make it clear that our goal is safe, efficient, and reliable pilotage, and we recognize only those expenses that are reasonable and necessary for promoting that goal.

The national pilots association in comment 49, supported by the president's group in comment 52, said that our proposed 46 CFR 404.2(b)(6) disallowance for legal fees associated with actions against the U.S. Government and its agents appeared to be in retaliation for the pilots' lawsuit against the Coast Guard for our 2014 ratemaking. The association said our proposal was contrary to past Coast Guard practice, which allowed those fees so long as there was no finding of bad faith on the part of the pilots. The president's group, in comment 52, said disallowing fees is an arbitrary and capricious departure from past Coast Guard practice and an illogical departure from customary practice in other industries. They said the disallowance may have been based on the mistaken assumption that the fees paid to their lawyers were for lobbying expenses.

Response: We disagree. The U.S. Government, through the Coast Guard, is the pilots' regulator, and therefore, it is inappropriate for the Coast Guard routinely to approve any legal costs for actions against the Government or its agents. We note that when court-ordered to do so, as we were as part of the settlement ending the 2014 litigation, we do pay the opposing party's litigation costs. The presidents correctly state that we do not recognize lobbying expenses for ratemaking purposes.

The ports and shippers coalition, in comment 53, opposed our recognizing the pilot associations' cost of membership in the American Pilots Association (APA), because they did not think it necessary for safe, efficient, and reliable Great Lakes pilotage.

Response: We acknowledge that until recently we did not view APA membership as "necessary," but we have since come to realize that the APA provides its members with information about best practices and pilot training, which we think is essential if pilots are to provide safe, efficient, and reliable service on the Great Lakes. The APA engages in lobbying, but we have determined that lobbying represents 15 percent of APA activity and we deduct that amount from the recognized expenses accordingly.

Recuperative rest for pilots. The national pilots association in comment 49 said it was pleased with our proposal that pilots be allowed up to 10 days' recuperative rest per month in non-peak months, and hoped foreign vessel operators will understand the proposal's value to them. The presidents' group, in comment 52, also supported the proposal as essential for safety and for pilot attraction and retention.

Response: A pilot's chronic fatigue from irregular work schedules and insufficient rest can cumulatively increase the safety risks for maritime transportation. Such increases in risk serve no one's interest, and they also lead to pilotage service that is neither efficient nor reliable. Our recuperative rest requirement is intended to ensure that, in addition to required rest periods between assignments, pilots have sufficient off-assignment time during the season so they can avoid chronic fatigue.

The president of an association in comment 54 said that each district's peak demand period is different from the others, and therefore, it makes sense to allow the recuperative rest periods between each district's double-pilotage seasons.

Response: Double pilotage is used mostly at the beginning and end of a shipping season, and our recuperative rest periods will take place between those times. Peak periods do vary from one district to another, but these variances are so small that, at this time, we see no reason to set different periods for each district.

The president of an association in comment 56 said we should amend § 404.1 by specifying that, instead of ensuring fair compensation for trained and rested pilots, we would ensure a sufficient number of well-qualified and well-rested pilots to cover peak demand, and have 10 days' recuperative rest each month during non-peak months. He also asked us to clarify how our proposal would deal with the possibility that such rest could be modified to ensure continuous pilot availability.

Response: We do not think we need to specify 10 days' recuperative rest each month during non-peak months. Though this is one of the goals of this rule, we believe it is necessary to review the results of the 2016 shipping season under our new staffing model and methodology before we establish the duration and timing of the recuperative rest periods in regulation. With respect to rest periods being modified to provide for continuous pilot availability, we require rested pilots to be available for assignment and we are increasing pilot strength to be able to fulfill both our recuperative rest guidelines and our requirements for rested pilots to be available for assignment.

Reliability and completeness of Coast Guard data. The ports and shippers coalition, in comment 53, said that, unlike other rate-setting agencies, the Coast Guard cannot assure the rate-payers that the financial data it uses are reliably reported or audited. It said our revenue projections failed to take vessel weighting factors and differences between specific routes into account, and that these should affect our rates. In comment AW, the coalition said that the pilot association financial data in the record are “rudimentary and inadequate” and provide insufficient information for comparing actual and projected revenue. It said that until we construct an “adequate data platform,” our ratemakings “will continue to be random, subjective, and arbitrary.” It also said our record lacks data or analysis to show that, in setting new rates, we have adequately considered the needs of safety, the public interest, and relevant costs. It said our current accounting systems fail to provide sufficient data on which we can reach informed and defensible decisions on whether current rates produce adequate revenues.

Response: We disagree with the coalition’s characterization of the data. As amended in this rule, § 403.300 requires pilotage associations to use a Coast Guard-approved financial reporting system that will provide us with more accurate financial data, which should facilitate accurate Coast Guard audits of that data. We make those audits publicly available in the dockets for our annual rate reviews. Over the past few years we have gone to great lengths to ensure that the associations follow uniform reporting procedures and use the reporting software that we provide. Moreover, we have worked closely with our contract auditor to ensure uniform auditing procedures, and in recent years we have begun annual pilot association revenue audits to help validate the billings they report. However, there is no statutory or regulatory requirement that the Coast

Guard use the same financial reporting or auditing methods used by other rate-setters for other purposes.

We see potential merit in the suggestion that our ratemaking take weighting factors into account, and we take it under advisement. Given the high variability from year to year in the numbers and types of vessels requiring pilotage, we have never considered weighting factors in projecting revenue projections of the rate. We do not consider specific routes in the rulemaking, only the needed revenue for the pilot associations to provide safe, efficient and reliable service. Our comparison of needed revenue from year to year reflects the overall cost of the pilotage system; some routes may see higher increases than others depending on factors including weather, traffic, cargo, and destination.

We do not agree that pilot financial data are unreliable. The data provided in the docket readily allows comparisons between projected and actual revenues. Our independent accounting firm conducts extensive reviews of pilot association financial information, to enable us to determine the necessity and reasonableness of association expenses. We recently began auditing association revenues, and these audits validate association claims that they generate the target revenues set in previous ratemakings. We have also posted financial information (including information requested by the coalition) on our public website. We believe we have provided extensive evidence in support of our analysis of association expenses and revenues, and that we have fully explained how our new methodology and this year's rate increases support safe, efficient and reliable pilotage. We have also added analyses of the potential economic impact of the ratemaking to support our methodology and rate increases.

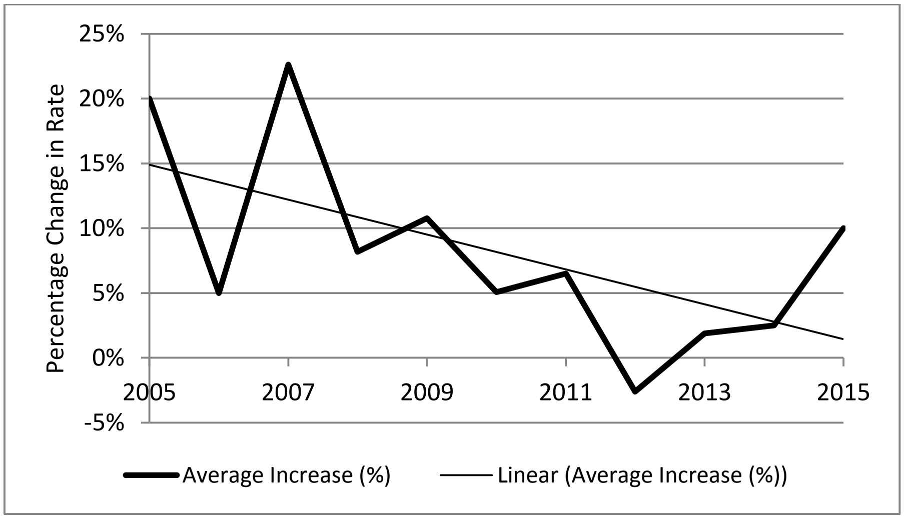
Finally, our responses to the comments we received on the NPRM demonstrate that we have considered safety needs, relevant costs, and the public interest.

"Runaway costs." Representatives of shippers in comments 10, 12, 15, 16, 19, 20, 21, 22, 25, 28, 41, 47, 50, and 51 said pilotage rates now represent "runaway costs." One of these commenters said that we had increased pilotage rates by 114 percent over the past decade, while simultaneously reducing the number of available pilots. Another said these cost increases exceeded Consumer Price Index cost increases (23 percent) over the same period.

Response: We acknowledge that the rates have increased since 2005, but by 90 percent, not 114 percent. Of that increase, 21.4 percent reflects consumer price index increases.[42] A 20 percent increase occurred over a decade ago (2005) and a 22.6 percent increase took place in 2007. Before 2005, there were only two increases in the rate: 11 percent in 1997 and 3 percent in 2001. Figure 7 below displays the average increase or decrease in the rates for each year from 2005 to 2015. It shows an overall decreasing trend in the average rate increases over the last 11 years.

[42] Average yearly CPI from 2005 and 2015, http://www.bls.gov/cpi/cpid1512.pdf

Figure 7: Great Lakes Pilot Rate Average Increase or Decrease 2005-2015



Many of the shippers cited the adverse impact the proposed rate increases could have on their businesses or on the regional economy in general. One said that higher pilotage costs could decrease the attractiveness of Great Lakes shipping relative to other transportation modes, and that ultimately reduced shipping demand will result in lower pilotage revenues, forcing further rate increases and creating a cost spiral. Some of the shippers said that, as a regulator, the Coast Guard should protect the interests of the consumer from cost increases that are unaccompanied by system efficiencies and that threaten the health of the Great Lakes economy. The ports and shippers coalition, in comment 53, made similar statements and said that we erred in saying the proposed rates would not hurt small businesses, because we overlooked the ripple effect of rate increases on the small shippers and their suppliers who are indirectly affected by those increases.

Response: We recognize the importance of commerce on the Great Lakes and believe the rule achieves the best long-term balance of interests. We analyzed the potential impact of the increase in pilot rates on Great Lakes shipping. To determine the elasticity of demand[43] for commodities shipped on the Great Lakes we reviewed a 2004 report by Martin and Associates,[44] analyzing two principal commodities moving through the Great Lakes, import steel and export grain. These commodities accounted for 74 percent of the U.S. Great Lakes cargo on vessels subject to pilotage requirements. The study found that the demand for shipping grain and steel was highly inelastic (insensitive) with respect to pilotage rates.[45]

In addition, the overall impact of an increase in pilotage costs should be small and have little effect on a shipper's transportation route and mode preferences. A 2011 study by Martin and Associates[46] examined the economic impacts of the Great Lakes and St. Lawrence Seaway system. The study showed that in 2010, the system's ports handled 322.1 million metric tons of cargo, generating $33.6 billion in direct business

[43] Elasticity of demand for a product is the percentage change in the demand for a product or service due to a percentage change in the price of that product or service. Demand elasticity is considered inelastic if there is little change in the demand for a product or service as a result of a price change.
[44] "*Analysis of Great Lakes Pilotage Costs on Great Lakes Shipping and the Potential Impact of Pilotage Rate Increases",* Martin and Associates, 2004.
[45] The study compared the least cost routing cost for each U.S. inland steel and grain destination by Great Lakes port to the next least cost routing using an alternate coastal port and the baseline Great Lakes pilotage cost. The study found a range of cost savings for 20 Great Lakes ports over coastal ports. These ranges were used to draw the conclusion that Great Lakes shipping of grain and steel are highly inelastic with respect to pilotage charges.
[46] "*The Economic Impacts of the Great Lakes St. Lawrence Seaway System*", Martin and Associates, 2011. http://www.marinedelivers.com/sites/default/files/documents/Econ%20Study%20-%20Full%20Report%20Final.pdf

revenue. Cargo moving on the foreign-flagged vessels that are the primary users of mandatory Great Lakes pilotage service accounted for $2.3 billion, or approximately 7 percent of the total revenue. The study also found that U.S. and Canadian Great Lakes pilots generated $91.7 million in direct business revenue. Therefore, pilot revenue accounted for less than 0.3 percent of the total direct revenue generated in the system. Any increase in this small proportion would be distributed over the entire system, thereby diminishing its impact.

We are required by statute to set rates with "consideration to the public interest and the costs of providing the [pilotage] services."[47] The statute does not limit the "public interest" to that of the Great Lakes region, or to that of any industry, and we therefore interpret the statutory intent to apply to the entire nation's public interest. This larger interest, of course, includes the public interest in promoting the economic health of all the nation's regions including that of the Great Lakes region. We believe the measures we proposed in our NPRM achieve the proper balance of covering pilotage costs and ensuring safe, efficient, and reliable pilotage in the public interest.

As to the impact of increases on small businesses, we acknowledge the coalition's concern, but the Regulatory Flexibility Act requires consideration only of the direct costs of a regulation on a small entity that

[47] 46 U.S.C. 9303(f).

is required to comply with the regulation.[48] As previously explained, pilot revenue accounted for less than 0.3 percent of the total direct revenue generated in the Great Lakes and St. Lawrence Seaway system and any increase in this small proportion would be distributed over the entire system, thereby diminishing its impact. It is not clear how this rule could have significant "ripple effects."

Also, we think these comments overlook the adverse regional economic impact that lower pilotage rates could have. Lower rates lead to lower revenues, and as we have stated, we think chronic low revenues are responsible for the pilotage system problems that industry says leads to damaging vessel traffic delays. It is those delays that are most likely to weaken the competitiveness of the Great Lakes in the near future, and our rate increases are intended to forestall that impact.

More importantly, however, and as we previously noted, if we fail to implement this methodology and new rates, we believe the pilot associations will not be able to recruit experienced mariners and retain their registered pilots. Without registered pilots, current law would prohibit international vessels from transiting the Great Lakes.[49] This vessel traffic would be forced to use other ports or another mode of transportation, resulting in a negative impact on the regional economy and the economies of Great Lakes ports.

[48] The courts have held that the RFA requires an agency to perform a regulatory flexibility analysis of small entity impacts only when a rule directly regulates small entities. See the Small Business Administration's "A Guide for Government Agencies How to Comply with the Regulatory Flexibility Act," May 2012, page 22. https://www.sba.gov/sites/default/files/rfaguide_0512_0.pdf

[49] *See* 46 U.S.C. 9303(f).

A port commenter in comment 35 said pilotage costs now exceed a vessel's total operational costs, or the cost of loading and unloading vessels.

> **Response:** In 2015 the average daily operating costs (excluding fixed costs) for Great Lakes bulkers and tankers ranged roughly from \$5,191 to \$7,879.[50] There may be transits for which pilotage costs are more than other operating costs during the time operating on the Great Lakes, but this will rarely be the case because pilotage is only required in the Great Lakes for a portion of most transits. Moreover, all of the vessels for which pilotage is required come from ports outside the Great Lakes-Seaway system, and most of their voyage time is conducted without a pilot's services.
>
> To estimate the impact of U.S. pilotage costs on the foreign vessels affected by the rate adjustment, we used 2012-2014 vessel arrival data from the Coast Guard's Ship Arrival Notification System (SANS) and pilotage billing data from the Great Lakes Electronic Pilot Management System (GLPMS). A random sample of 50 arrivals was taken from SANS data. To estimate the impact of pilotage costs on the costs of an entire trip, we estimated the length of each one way trip. We used the vessel name and the date of the arrival to find the last port of call before entering the Great Lakes system. The date of the departure from this port was used as the start date of the trip. To find the end date of the trip we used

[50] *"Ship operating costs: Current and future trends",* Richard Grenier, Moore Stephens LLP, December 2015. The 2015 weighted average operating cost is estimated at \$5,191 for a handysize bulker, \$5,771 for a handymax bulker, and \$7,879 for a product tanker. We assumed these costs include only the costs of operating (such crew costs, repairs and maintenance, insurance, administration, and dry docking) and do not include any fixed costs of the vessels (such as amortization of vessel construction costs).

GLPMS data to find all the pilotage charges associated with this vessel during this trip in the Great Lakes system. The end date of the one way trip was taken as the last pilotage charge before beginning the trip to exit the system. We estimated the total operating cost by multiplying the number of days for each by the 2015 average daily operating cost and added this to the total pilotage costs from GLPMS for each trip. The total pilotage charges for each trip were updated to the 2015 rates using the average rate increases in the Great Lakes Pilotage Rates 2012-2015 Annual Review and Adjustments final rules.[51] The total updated pilotage charges for each trip were then divided by the total operating cost of the trip. We found that the U.S. pilotage costs could account for up to 17.2 percent[52] of the total operating costs for a voyage. We also estimated the impact of the rate increase in this final rule. We took the same 50 trips and updated the pilotage costs to the proposed 2016 rates. With this rule's rates for 2016, pilotage costs are estimated to account for up to 18.8 percent of total operating costs, or a 1.6 percent increase[53] over the current cost. The total operating costs do not include the fixed costs of the vessels. If these costs are included in the total costs, the pilotage rates as a percentage of total costs would be lower.

[51] The average percentage changes in the rates for 2012-2015, were -2.62%, 1.87%, 2.5%, and 10%, respectively.

[52] For the random sample of 50 arrivals, the average of the pilotage costs as a percentage of the total operating costs was 17.2%. The percentages ranged from a low of 2.1% to a high of 41.2%.

[53] 18.8% of total operating costs in 2016 – 17.2% of total operating costs in 2015 = 1.6% incremental increase of pilotage costs as a percentage of total operating costs.

A port commenter in comment 42 said our proposed ratemaking methodology is "decoupled from market realities" and adds costs without adding productivity or accountability. The commenter said we should set rates to optimize the availability of "high quality pilots" with "minimal impact on vessel schedules and routes," and with the lowest possible costs not directly related to pilotage. A pilot association president in comment 56 said that, in fact, pilotage associations are subject to market forces because those forces dictate the success of each association's efforts to attract and retain talent, and because the Coast Guard is required to set rates with consideration to the cost of pilotage service, which itself is subject to market forces.

Response: We agree with the pilot association president in comment 56 that pilotage associations are not "decoupled" from market forces, for the reasons the president gave. This rule is intended to promote safe, efficient, and reliable Great Lakes pilotage. Pilot associations have made it clear that they cannot ensure safe pilotage if continued low rates make it impossible to attract and retain high quality pilots, maintain adequate infrastructure, and provide decent working conditions. Shipping interests have made it clear that they will not tolerate delays to vessel schedules, or backups on certain vessel routes, that are attributable to pilot shortages. This rule lays out the vision of a system in which highly capable pilots want to work on the Great Lakes, do so safely, and move traffic efficiently and reliably. We think every stakeholder wants to see that vision realized. However, achieving that level of efficiency and reliability requires a comparable level of compensation to attract and support those pilots.

The presidents' group, in comment 62, said that the "runaway cost" argument is flawed because much of the costs over the past decade came in 2005, when a delay of many years in promulgating that year's rate increase resulted in a large gap between the pilots' incurring of costs and new rates to cover those costs.

Response: We agree with comment 62's accurate explanation for a large part of the cost increases cited by the ports.

Stakeholder representation in the ratemaking process. A port commenter in comment 42 said our ratemaking process does not give adequate voice to foreign vessel owners or to companies that import or export goods through the Great Lakes.

Response: We do not agree that our process denies foreign interests or U.S. importers and exporters a voice in our ratemaking process. Under both the old and the new processes, we make various calculations to derive tentative rates that we then propose for broad public comment. We analyze and carefully consider the public comments before finalizing rates. That process is open to the "public" wherever it resides, and we regularly receive comments from the stakeholders mentioned by this commenter. All stakeholders have the same opportunity to participate in the ratemaking process.

In addition, foreign stakeholders and their representatives generally attend GLPAC meetings as members of the public, and are able to voice their concerns and opinions during those meetings which include discussion of recommendations on the future ratemakings.

Finally, because Great Lakes pilotage is regulated both by the U.S. and Canada, the Coast Guard's Director of Great Lakes Pilotage is in nearly daily contact with his Canadian counterpart, and together they meet regularly with pilots, port representatives, and U.S. and Canadian agents for foreign vessel owners and operators. This, plus the attendance and representation of Canadian stakeholders at GLPAC meetings, ensures that both the Coast Guard and Canadian officials are continually aware of the concerns and views of all pilotage stakeholders, and can coordinate a binational response, if necessary.

The ports and shippers coalition, in comment 53, said that our NPRM gave "undue weight" to the GLPAC recommendations on which the NPRM's proposals are based, because GLPAC is no longer representative of all stakeholders, particularly foreign shippers and shipping agents who are not directly represented on the committee, and is now a "pilot-dominated interest group." A current GLPAC member AF, who represents port interests, denies this charge and stated he believes the charge is "offensive and wrong."

Response: We disagree with the coalition. Like all Coast Guard committees subject to the Federal Advisory Committee Act, GLPAC membership is carefully vetted by the Coast Guard and the Department of Homeland Security to ensure a fair balance of stakeholder representation.

Moreover, the statute creating GLPAC specifies that six of its seven members must be balanced between pilots on one side and ports, shippers, and vessel operators on the other, which we believe ensures that the pilots will have adequate, but not dominant, representation on the committee.[54] We reiterate that the great weight we give GLPAC recommendations is due in no small part to GLPAC's diverse representation and the statutory requirement that any GLPAC recommendation be approved by at least all but one of its serving members.

As we have already stated, although GLPAC does not include any foreign members, GLPAC's meetings are open to the public, including foreign citizens. As members of the public, Canadian stakeholders, the head of the Canadian Great Lakes pilot authority, members of the coalition, and their representatives all routinely attend and voice their concerns at those meetings.

Traffic projections and use of multi-year historical traffic data. In comment 52, the presidents' group said it is important to note that, when we overestimate the shipping traffic that will take place in the upcoming shipping season, actual pilot compensation falls below the target compensation we project. They supported using a 5-year traffic average to more accurately project future traffic, and including all pilot time related to an assignment to help set the number of pilots needed.

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[54] *See* 46 U.S.C. 9307(b)(2).

Response: We agree that traffic overestimates have been a problem in the past and that, as a result, pilot revenue has been less than necessary to support pilot attraction and retention efforts and the maintenance of necessary pilot association infrastructure. We also agree that a multi-year average should produce more reliable estimates for future traffic projections. We are lengthening our proposed 5-year average to include (starting in 2017) 10 years of data, which should reduce even further the rate volatility caused by basing rates on traffic projections for the upcoming season, rather than on actual past experience.

The ports and shippers coalition, in comment 53, charged that the Coast Guard acted arbitrarily in proposing to exclude 2009 and 2014 traffic volume data from our 5-year average, because we viewed those years as "outliers" the inclusion of which would distort that average. The coalition pointed out that 2015 is on track to mirror 2014 traffic volume, and that therefore, 2014 should no longer be considered an outlier year. In comment AW, the coalition opposed identifying any seasons as outliers, for the purpose of projecting future traffic.

Response: We agree that 2009 and 2014 traffic volume data should be included in our calculations. We have reliable traffic data from 2006 (covering only part of that season) onward, and therefore, for the 2016 ratemaking we have 9 years of data available for use in our calculations (2007-2015). Because our identification of an "outlier" year would be subjective, and because a 9-year data set will reduce any distortion that an outlier year's data could cause, we have decided against excluding outlier years from our calculations, and to consider all 9 years' data for this ratemaking. By 2017, we will have reliable data from 10 full shipping seasons, 2007-2016, and from then on we will use data from the 10 most recent seasons.

The ports and shippers coalition, in comment 53, responded to our question asking if there is an objective standard by which we can determine whether a particular shipping season should be considered an outlier and excluded from our multi-year historic average traffic level. They said there is no typical shipping season, that both 2014 (which we considered an outlier in the NPRM) and 2015 should be included, and that we should rely on industry projections to estimate future demand.

Response: We agree that, at least at this time, we cannot identify a "typical" season. As already discussed, we agree and have decided not to identify or exclude outlier shipping seasons from our calculations and to expand our data set to include more years.

We disagree with the coalition's suggestion that we should rely, not on historical traffic data, but on industry projections. That was our practice for the past 20 years and we repeatedly found it unreliable. It led to significant overestimates of the next season's traffic, and consequently to revenue shortfalls and overworked pilots. Continued use of such projections would jeopardize the safe, efficient, and reliable pilotage service that the Coast Guard and all stakeholders see as our goal.

The ports and shippers coalition, in comment 53, responded to our question asking for other sources of traffic data for shipping seasons prior to 2009 to help identify outlier years. They said we should consult industry sources. A pilot association president in comment 56 also responded to this question, and said his association could provide its data for District Three.

Response: We thank these commenters for their input, however we will not identify or exclude outlier years and thus no longer need outlier year data to expand our traffic history data set.

A pilot in comment 55B welcomed the proposed use of a multi-year historical average to predict future traffic demand.

Response: We agree that this will provide a more objective and reliable standard than the industry traffic projections that have consistently underestimated the next season's traffic volume.

Miscellaneous issues. The national pilots association in comment 38 said we should allow a higher return on investment, given a pilot association's management responsibilities and exposure to the risk of fluctuating traffic levels.

Response: We disagree. The rate of return is reasonable given the nature of a regulated service that precludes any competition.

A national pilot association, in comment 38, also said that current 46 CFR 401.451's existing requirement for a minimum of 10 hours between a pilot's assignments should be revised upward to reflect the travel time that may be necessary for a pilot to reach home or another place where the pilot can sleep between assignments.

Response: We will take this suggestion under advisement but it is outside the scope of this rulemaking, which does not address the adequacy of § 401.451's 10-hour requirement.

A national pilot association in comment 38 said we should add regulatory language to provide for surcharges between ratemakings, to cover unanticipated pilot association expenses.

Response: We disagree and believe our current annual rate structure is sufficient to identify and authorize the need for surcharges.

A port commenter in comment 48 said the high cost of pilotage could be mitigated by eliminating pilotage requirements in large open portions of the Great Lakes or where improved navigational tools can offset the need for pilotage.

Response: U.S. Great Lakes pilotage requirements are set by statute. The Coast Guard has no authority to change these requirements, and therefore, this comment is outside the scope of this rulemaking.

The national pilots association in comment 49 said we should specify that, in setting target pilot compensation, the Coast Guard will consider the need to attract and retain the most qualified persons to provide safe, efficient, and reliable pilotage.

Response: We appreciate this comment but find it unnecessary to add the suggested language. Our proposed language for § 404.1(a) makes it clear that the guiding principle of our ratemaking is to ensure safe, efficient, and reliable pilotage service, and it therefore goes without saying that we will encourage the hiring and retention of a sufficient number of highly qualified persons to provide that service.

The presidents' group, in comment 52, supported the use of automatic annual rate adjustments between base years.

Response: We agree and believe this will provide all stakeholders with more predictable cost information for the interim years.

The ports and shippers coalition, in comment 53, said we arbitrarily departed from our past practice of not requiring a reserve allowance for unforeseeable future needs by proposing that our 2016 rates include a reserve allowance for each pilot association's unforeseeable future needs, which the coalition said is contrary to generally-accepted rate setting principles. The coalition said that, in the past, we recognized only those reasonable and necessary expenses that have already been incurred.

Response: Our rates have always allowed for a fair return on an association's revenue, as one way for the association to fund future improvements. However, long-term revenue shortages have led to degraded infrastructure that threatens safe, efficient, and reliable pilotage. This change will ensure that the pilotage associations can build up additional reserves to address current and future infrastructure needs before they become critical.

The coalition, in comment 53, said we should consider an alternative regulatory tool, negotiated rulemaking to set rates.

Response: Negotiated rulemaking committees are typically authorized and follow a process set by statute.[55] The coalition correctly pointed out that a negotiated rulemaking brings key stakeholders and Federal agencies together to develop a consensus recommendation on a particular regulation. We accept their statement that it has been used 85 times in the past, by various agencies. We agree

[55] Negotiated Rulemaking Act, codified as 5 U.S.C. 561-570.

that negotiated rulemaking can be a very useful regulatory instrument in certain contexts. However, the negotiated rulemaking process is also long and complex involving the creation of, and work by, a formal stakeholder committee attempting to achieve consensus, in addition to undergoing the standard notice and comment process we already follow. Although variations on this process are possible, we do not think that negotiated rulemaking could work within the constraints of our statutory requirement to set rates annually or that it would provide stakeholder input not already gained through GLPAC recommendations and input from public comment.

A pilot association president in comment 56 said our regulations should include a definitions section to provide discipline and transparency.

Response: We appreciate the commenter's concern but think it unnecessary to add a definitions section. Where the regulation does not define its own terms, all its terms have ordinary dictionary definitions.

A pilot association president in comment 56 said we proposed setting future pilot needs, and setting target compensation based on the projected number of pilots, only for the first year of a multi-year ratemaking, but not for the out-years, and that we should also cover the out-years, lest associations be forced to cancel recuperative rest periods to keep up with growing demand. He suggested revising these projections during each annual rate review.

Response: We agree that this is an important consideration for implementation of a multi-year rate, but given our intention to continue annual ratemakings in the near future, we see no need for action with respect to out-years at this time.

A pilot association president in comment 56 asked us to clarify whether proposed § 404.107(b) was intended to adjust rates only in his district's (District Three's) designated waters or in both designated and undesignated waters. He also supported our proposed harmonization of rates in all the undesignated waters of his district, to reduce revenue volatility due to shifting traffic patterns.

Response: We believe an adjustment to rates in a district's designated waters rates would also require an adjustment to its undesignated waters' rates, since the association must meet the same revenue requirements regardless of the waters in which assignments take place. We agree the rate harmonization in District Three should reduce revenue volatility.

A pilot association president in comment 56 said that the proposed cancellation provisions of § 401.420(b) were ill-adapted to the large distances found in District Three, where a pilot might have to begin traveling to a pickup point long before the order for his services becomes final.

Response: We agree with the president's comments but are unsure of a remedy that would be appropriate across all districts, and we have never issued regulations that apply to only one district. We defer action on this comment until a future rulemaking and we welcome further comment on an appropriate solution for this district based on the results of 2016.

A pilot association president in comment 56 said, with respect to the proposed vessel trip delay and pilot detention language in § 401.420(c), that weather conditions in November often produce these delays, and that therefore, we should modify our proposed exception to the rule, from May through November, that vessels are responsible for compensating a pilot for weather-related delay or detention.

> **Response:** We will take this suggestion under advisement. We think more analysis is required before we adjust the calendar exclusions, and we welcome further input from the president on this issue.

With respect to the "overcarriage" provisions of proposed § 401.428(a), a pilot association president in comment 56 said there is confusion between what we meant by "change points" in this section and what we meant by the term in proposed § 401.450. He interpreted the former provisions to relate only to one of the eight change points where vessels normally do not stop unless they are changing pilots, and that a pilot should be compensated whenever his overcarriage results from factors beyond his control.

> **Response:** "Overcarriage" refers to a pilot being kept on board a vessel past the normal change point. The change points to which § 401.428 refers are those listed in § 401.450. We do not agree that a pilot should be compensated for any overcarriage for which the pilot is not responsible. For example, a pilot would not be responsible for a weather delay, but (except at the beginning and end of the season) neither would it be fair for the vessel to have to pay for an unforeseen weather event.

A pilot association president in comment 56 said that the vast majority of harbor moves in District Three are short jobs that require extensive pilot travel, and that because these moves are compensated at the lower undesignated waters rate, there is no industry incentive to eliminate unnecessary moves. Therefore he favored compensating these assignments at the higher designated waters rate.

> **Response:** We disagree. These moves occur in undesignated waters and thus must be billed at the undesignated rate. However, the travel costs for these jobs are necessary and reasonable expenses that will be reflected in future rates. We welcome further proposals from the president for improving the dispatching system to make better use of pilot resources.

A port commenter in comment AB supported the new rates but said we need to maintain strict oversight to ensure that the rates are used largely to hire and train new pilots and to retain current pilots.

> **Response:** We monitor the pace at which the pilotage associations hire and train pilots, and the overall size of their pilot pools, and in each of our annual ratemakings we report to the public on the number of pilots currently on hand in each association. We also closely monitor the training of all new pilots as a routine part of issuing registrations to Great Lakes Pilots. We think this provides the strict oversight the commenter requested.

VI. Discussion of Rate Changes

We proposed new rates and a temporary surcharge (for pilot hiring and training) for 2016. We reviewed the independent accountant’s financial reports for each association’s 2013 expenses and revenues. Those reports, which include pilot comments on draft versions and the accountant's response to those comments, appear in the docket.[56]

We are setting new rates, applying our new ratemaking methodology as follows:

Recognize previous year's operating expenses (§ 404.101). We reviewed and accepted the accountant's final findings on the 2013 audits of association expenses, as shown in Figures 8 through 10.

[56] *See* "Summary—Independent Accountant's Report on Pilot Association Expenses, with Pilot Association Comments and Accountant's Responses."

Figure 8: Recognized expenses for District One

	District One		
	Area 1 Designated	Area 2 Undesignated	TOTAL
Reported Expenses for 2013	St. Lawrence River	Lake Ontario	
Operating Expenses			
Other Pilotage Costs			
Pilot subsistence/Travel	$281,488	$168,508	$449,996
License insurance	$26,976	$25,010	$51,986
Payroll taxes	$65,826	$51,244	$117,070
Other	$6,925	$5,460	$12,385
Total other pilotage costs	$381,215	$250,222	$631,437
Pilot Boat and Dispatch Costs			
Pilot boat expense	$131,193	$102,077	$233,270
Dispatch expense	$-	$-	$-
Payroll taxes	$9,169	$7,230	$16,399
Total pilot and dispatch costs	$140,362	$109,307	$249,669
Administrative Expenses			
Legal - general counsel	$631	$498	$1,129
Legal - shared counsel (K&L Gates)	$12,736	$10,040	$22,776
Insurance	$22,525	$17,756	$40,281
Employee benefits	$11,063	$7,868	$18,931
Payroll taxes	$5,190	$4,093	$9,283
Other taxes	$22,175	$17,486	$39,661
Travel	$524	$413	$937
Depreciation/auto leasing/other	$42,285	$33,333	$75,618
Interest	$15,151	$11,943	$27,094
APA Dues	$13,680	$10,830	$24,510
Dues and subscriptions	$280	$220	$500
Utilities	$4,920	$3,878	$8,798
Salaries	$54,153	$42,691	$96,844
Accounting/Professional fees	$5,091	$4,009	$9,100
Pilot Training	$-	$-	$-
Other	$8,834	$6,954	$15,788

Total Administrative Expenses	$219,238	$172,012	$391,250
Total Operating Expenses (Other Costs + Pilot Boats + Admin)	$740,815	$531,541	$1,272,356
Proposed Adjustments (Independent CPA)		-	-
Payroll taxes	($1,855)	($1,750)	($3,605)
TOTAL CPA ADJUSTMENTS	($1,855)	($1,750)	($3,605)
Proposed Adjustments (Director)			
Dues and subscriptions	($280)	($220)	($500)
APA Dues	($2,052)	($1,625)	($3,677)
Legal - shared counsel (K&L Gates)	($12,736)	($10,040)	($22,776)
Dock Adjustment*	$11,936	$9,409	$21,345
Surcharge Adjustment**	($54,481)	($42,948)	($97,429)
TOTAL DIRECTOR'S ADJUSTMENTS	($57,613)	($45,424)	($103,037)
Total Operating Expenses (OpEx + Adjustments)	**$681,347**	**$484,368**	**$1,165,715**

*Based on the discussion without objection in the 2014 GLPAC meeting on this subject, this adjustment allocates $21,345 to District 1 to ensure complete recoupment of costs associated with upgrading the dock in Cape Vincent. Revenue projection shortfalls, confirmed by the revenue audits, resulted in District 1 not fully recouping the costs of the dock through previous rulemakings.
**District One collected $146,424.01 with an authorized 3% surcharge in 2014. The adjustment represents the difference between the collected amount and the authorized amount of $48,995 authorized in the 2014 final rule.
Note: Numbers may not total due to rounding.

Figure 9: Recognized expenses for District Two

	District Two		
	Area 4 Undesignated	Area 5 Designated	TOTAL
Reported Expenses for 2013	Lake Erie	Southeast Shoal to Port Huron, MI	
Operating Expenses			
Other Pilotage Costs			
Pilot subsistence/Travel	$84,164	$126,246	$210,410
License insurance	$6,168	$9,252	$15,420
Payroll taxes	$44,931	$67,397	$112,328
Other	$33,021	$49,532	$82,553
Total other pilotage costs	$168,284	$252,427	$420,711

Pilot Boat and Dispatch Costs			
Pilot boat expense	$142,936	$214,405	$357,341
Dispatch expense	$7,080	$10,620	$17,700
Employee benefits	$60,665	$90,997	$151,662
Payroll taxes	$8,316	$12,474	$20,790
Total pilot and dispatch costs	$218,997	$328,496	$547,493
Administrative Expenses			
Legal - general counsel	$3,414	$5,122	$8,536
Legal - shared counsel (K&L Gates)	$7,304	$10,956	$18,260
Legal - USCG litigation	$231	$346	$577
Office rent	$26,275	$39,413	$65,688
Insurance	$9,175	$13,762	$22,937
Employee benefits	$20,586	$30,879	$51,465
Payroll taxes	$4,899	$7,349	$12,248
Other taxes	$14,812	$22,217	$37,029
Depreciation/auto leasing/other	$22,956	$34,434	$57,390
Interest	$3,439	$5,159	$8,598
APA Dues	$8,208	$12,312	$20,520
Utilities	$14,310	$21,465	$35,775
Salaries	$42,633	$63,949	$106,582
Accounting/Professional fees	$9,294	$13,940	$23,234
Pilot Training	$-	$-	$-
Other	$9,757	$14,638	$24,395
Total Administrative Expenses	$197,293	$295,941	$493,234
Total Operating Expenses (Other Costs + Pilot Boats + Admin)	$584,574	$876,864	$1,461,438
Proposed Adjustments (Independent CPA)		-	-
Insurance	($2,362)	($3,544)	($5,906)
Employee benefits	($360)	($541)	($901)
Depreciation/auto leasing/other	($6,391)	($9,587)	($15,978)
TOTAL CPA ADJUSTMENTS	($9,113)	($13,672)	($22,785)
Proposed Adjustments (Director)			
APA Dues	($1,231)	($1,847)	($3,078)
Legal - shared counsel (K&L Gates)	($7,304)	($10,956)	($18,260)
Legal - USCG litigation	($231)	($346)	($577)

TOTAL DIRECTOR'S ADJUSTMENTS	($8,766)	($13,149)	($21,915)
Total Operating Expenses (OpEx + Adjustments)	**$566,695**	**$850,043**	**$1,416,738**

Figure 10: Recognized expenses for District Three

Recognizable expenses	District Three		
	Areas 6 and 8 Undesignated	Area 7 Designated	TOTAL
Reported Expenses for 2013	Lakes Huron, Michigan, and Superior	St. Mary's River	
Operating Expenses			
Other Pilotage Costs			
Pilot subsistence/Travel	$337,978	$112,660	$450,638
License insurance	$13,849	$4,616	$18,465
Payroll taxes	$-	$-	$-
Other	$15,664	$5,221	$20,885
Total other pilotage costs	$367,491	$122,497	$489,988
Pilot Boat and Dispatch Costs			
Pilot boat expense	$435,353	$145,118	$580,471
Dispatch expense	$140,440	$46,814	$187,254
Payroll taxes	$15,680	$5,227	$20,907
Total pilot and dispatch costs	$591,473	$197,159	$788,632
Administrative Expenses			
Legal - general counsel	$567	$189	$756
Legal - shared counsel (K&L Gates)	$20,260	$6,754	$27,014
Office rent	$7,425	$2,475	$9,900
Insurance	$8,098	$2,699	$10,797
Employee benefits	$123,002	$41,001	$164,003
Payroll taxes	$10,272	$3,424	$13,696
Other taxes	$1,383	$461	$1,844
Depreciation/auto leasing/other	$24,237	$8,079	$32,316
Interest	$2,403	$801	$3,204
APA Dues	$18,895	$6,299	$25,194
Dues and subscriptions	$4,275	$1,425	$5,700
Utilities	$32,672	$10,891	$43,563

Salaries	$89,192	$29,731	118,923
Accounting/Professional fees	$20,682	$6,894	$27,576
Pilot Training	$-	$-	$-
Other	$11,260	$3,753	$15,013
Total Administrative Expenses	$374,623	$124,876	$499,499
Total Operating Expenses (Other Costs + Pilot Boats + Admin)	$1,333,587	$444,532	$1,778,119
Proposed Adjustments (Independent CPA)		-	
Pilot subsistence/Travel	($5,183)	($1,728)	($6,911)
Payroll taxes	$103,864	$34,621	$138,485
Dues and subscriptions	($4,275)	($1,425)	($5,700)
TOTAL CPA ADJUSTMENTS	$94,406	$31,468	$125,874
Proposed Adjustments (Director)			
APA Dues	($2,834)	($945)	($3,779)
Legal - shared counsel (K&L Gates)	($20,260)	($6,754)	($27,014)
TOTAL DIRECTOR'S ADJUSTMENTS	($23,094)	($7,699)	($30,793)
Total Operating Expenses (OpEx + Adjustments)	**$1,404,899**	**$468,301**	**$1,873,200**

Project next year's operating expenses, adjusting for inflation or deflation (§ 404.102). We base our 2014 and 2015 inflation adjustments on BLS data from the Consumer Price Index for the Midwest Region of the United States,[57] and project it for 2016 based on the target inflation rate set by the Federal Reserve,[58] as shown in Figures 11 through 13.

[57] Available at http://www.bls.gov/data. Select "One Screen Data Search" under "All Urban Consumers (Current Series) (Consumer Price Index – CPI)". Then select "Midwest urban" from Box 1 and "All Items" from Box 2. Our numbers for 2014 and 2015 are generated through this query and formatted to show annual percentage changes (available through "More Formatting" link).
[58] Further discussion available on the Federal Reserve target inflation rate is on their website at http://www.federalreserve.gov/newsevents/press/monetary/20160127b.htm , http://www.federalreserve.gov/newsevents/press/monetary/20120125c.htm , and http://www.federalreserve.gov/faqs/money_12848.htm

Figure 11: Inflation adjustment, District One

	District One		
	Designated	Undesignated	Total
Total Operating Expenses (Step 1)	$681,347	$484,368	$1,165,715
2014 Inflation Modification (@1.4%)	$9,539	$6,781	$16,320
2015 Inflation Modification (@1.5%)	$10,363	$7,367	$17,731
2016 Inflation Modification (@2%)	$14,025	$9,970	$23,995
Adjusted 2016 Operating Expenses	**$715,274**	**$508,486**	**$1,223,760**

Figure 12: Inflation adjustment, District Two

	District Two		
	Undesignated	Designated	Total
Total Operating Expenses (Step 1)	$566,695	$850,043	$1,416,738
2014 Inflation Modification (@1.4%)	$7,934	$11,901	$19,834
2015 Inflation Modification (@1.5%)	$8,619	$12,929	$21,549
2016 Inflation Modification (@2%)	$11,665	$17,497	$29,162
Adjusted 2016 Operating Expenses	**$594,913**	**$892,370**	**$1,487,283**

Figure 13: Inflation adjustment, District Three

	District Three		
	Undesignated	Designated	Total
Total Operating Expenses (Step 1)	$1,404,899	$468,301	$1,873,200
2014 Inflation Modification (@1.4%)	$19,669	$6,556	$26,225
2015 Inflation Modification (@1.5%)	$21,369	$7,123	$28,491
2016 Inflation Modification (@2%)	$28,919	$9,640	$38,558
Adjusted 2016 Operating Expenses	**$1,474,855**	**$491,620**	**$1,966,474**

Determine number of pilots needed (§ 404.103). We first consider if reliable traffic data are available from up to the 10 most recent full shipping seasons. In this case, we have reliable data from the Great Lakes Pilotage Management System dating back to 2007. This gives us 9 years of data (2007-2015) that we can use for this year's ratemaking. Beginning with next year's ratemaking, and for all subsequent ratemakings, we should have reliable data for 10 years of full shipping seasons.

Next, we calculate the average cycle time associated with each pilot assignment, in each area. In the future, we intend to use Great Lakes Electronic Pilot Management System (GLPMS) data to track cycle time, but that data is not available for our current base period. Our best source for that base period's cycle time is the Bridge Hour Definition and Methodology Final Report prepared on our behalf in 2013.[59] Although we expect GLPMS data to produce better data in the future, the 2013 report relied heavily on pilot input and drafts were made widely available to the pilots for their review and comment. Figure 14 shows the 2013 report's calculation of the pilot work cycle for each area.

Figure 14: Cycle time, 2013 report

<table>
<tr><th></th><th></th><th>Trip Time (hrs)</th><th>Travel (hrs)</th><th>Pilot Boat Transit (hrs)</th><th>Delay (hrs)</th><th>Admin (hrs)</th><th>Total Time on Assignment (hrs)</th><th>Mandatory Rest (hrs)</th><th>Pilot Assignment Cycle (hrs)</th></tr>
<tr><td rowspan="2">D1</td><td>Area 1</td><td>7.7</td><td>2.9</td><td>0.3</td><td>0.7</td><td>0.5</td><td>12.1</td><td>10</td><td>22.1</td></tr>
<tr><td>Area 2</td><td>10.4</td><td>4.0</td><td>0.6</td><td>0.9</td><td>0.5</td><td>16.4</td><td>10</td><td>26.4</td></tr>
<tr><td></td><td>Area 3</td><td colspan="8">Welland Canal Exclusive to Canadian Pilots</td></tr>
<tr><td rowspan="2">D2</td><td>Area 4</td><td>11.1</td><td>4.2</td><td>0.4</td><td>0.7</td><td>0.5</td><td>16.9</td><td>10</td><td>26.9</td></tr>
<tr><td>Area 5</td><td>6.1</td><td>2.3</td><td>0.9</td><td>0.4</td><td>0.5</td><td>10.2</td><td>10</td><td>20.2</td></tr>
<tr><td rowspan="3">D3</td><td>Area 6</td><td>22.5</td><td>1.6</td><td>0.8</td><td>1.0</td><td>0.5</td><td>26.4</td><td>10</td><td>36.4</td></tr>
<tr><td>Area 7</td><td>7.1</td><td>1.4</td><td>2.2</td><td>0.3</td><td>0.5</td><td>11.5</td><td>10</td><td>21.5</td></tr>
<tr><td>Area 8</td><td>21.6</td><td>1.8</td><td>1.9</td><td>3.3</td><td>0.5</td><td>29.1</td><td>10</td><td>39.1</td></tr>
</table>

We then determine the average peak late-season traffic demand over the base period, as shown in Figure 15. Figure 15 also shows the average number of pilots that would have been needed to meet the peak demand, and for comparison purposes shows the average number (39) of needed and authorized pilots for 2007-2015.

[59] *Bridge Hour Definition and Methodology Final Report*, MicroSystems Integration, Inc. (June 25, 2013), available in the docket and at http://www.uscg.mil/hq/cg5/cg552/pilotage.asp. This analysis is detailed in Appendix B of the report, on page B-10.

Figure 15: Average peak traffic demand and pilot requirements, 2007-2015.

	District One		District Two		District Three		
	Area 1 (designated)	Area 2 (undesignated)	Area 4 (undesignated)	Area 5 (designated)	Area 6 (undesignated)	Area 7 (designated)	Area 8 (undesignated)
Average late-season peak assignments per day	5	5	5	5	5	5	5
Average number of pilots needed to meet peak demand (total = 54)	10	5	5	10	7	10	7
Average authorized pilots, 2007-2015 (total = 39)	6	5	4	6	8	4	6
Authorized pilots, 2015 (total = 36)	6	5	4	6	6	4	5

As shown in Figure 14, according to the 2013 report cycle time for pilots in designated waters is a little over 20 hours. This implies that, on average in late seasons over the base period, one pilot could move one vessel per day. However, to fully meet peak season demand, the pilot associations must be staffed to provide double pilotage, and Figure 15 reflects that doubling in the number of pilots needed in the designated waters of Areas 1, 5, and 7.

Except in extreme circumstances, double pilotage is not required in the open and undesignated waters of Areas 2, 4, 6, and 8, and Figure 15 shows no doubling in those areas. However, Figure 14 does show a 50 percent increase from the one pilot-one vessel standard in undesignated Areas 6 and 8, which are located in the large western Great Lakes. Areas 6 and 8 are not contiguous, but both flank the designated waters of Area 7. Travel times in Areas 6 and 8 are greater than they are in the undesignated waters of smaller Lakes Erie and Ontario, and on average a pilot needs approximately 1.5 days per vessel, not just 1, to move a vessel. Therefore, Figure 15 shows 7 pilots, not 5, in each of Areas 6 and 8. This number will ensure that the five ships shown as moving daily through Area 7 could be moved through the undesignated waters at the same rate.

Based on our Figure 15 numbers, and as shown in Figure 16, we find that 54 pilots are needed over the period for which 2016 base rates will be in effect, as opposed to the 36 currently authorized pilots shown in Figure 15. Figure 16 also shows that based on our best current information we project there will be only 37 fully working and fully compensated pilots ("working pilots") in 2016. This decrease from our initial projections in the NPRM is based on feedback from the pilot associations. However, we have increased the number of applicants funded via surcharge significantly from the NPRM, again based on pilot association feedback, to help the pilot associations close the gap between needed pilots and working pilots as soon as possible.

Figure 16: Pilots needed; pilots projected to be working

	District One	District Two	District Three
Needed pilots, period for which 2016 rates are in effect (total = 54)	15	15	24
Working pilots projected for 2016 (total = 42)	12	12	13

Determine target pilot compensation (§ 404.104). *Coast Guard analysis and calculations.* For this 2016 ratemaking, we considered three possible sources for benchmark compensation data, and we selected GLPA data for that benchmark because they provide the most comparable compensation for comparable work under comparable conditions. Recent GLPA compensation is shown in Figure 17. The compensation in 2013 and 2014 is increased based on additional information supplied by the GLPA, documenting how they compensate full-time, part-time, and contract pilots. We believe only compensation associated with fulltime Canadian pilots should be used as a basis of comparison to set the benchmark for U.S. Registered Pilots.

Figure 17: Comparing Pilot Compensation and Wage Information

	Average GLPA Compensation[60] (CAD)
2011	$233,567
2012	$247,145
2013	$273,145
2014	$329,045
Average	**$270,726**

[60] http://www.glpa-apgl.com/annualReports_e.asp. Also, see GLPA updates posted to the public docket. 2013 and 2014 figures are calculated by including only full-time compensation information for GLPA pilots. Part-time and contract pilots are excluded from the figures.

GLPA pilots provide service that is almost identical to the service provided by U.S. Great Lakes pilots. However, unlike the U.S. pilots, GLPA pilots are government employees with guaranteed minimum compensation, increases for high-traffic periods, benefits (retirement, healthcare, vacation), limited professional liability, and guaranteed time off during the shipping season.

Figures 18 through 20 show actual GLPA compensation figures for 2011-2014, adjust for foreign exchange differences and inflation,[61] and project future GLPA compensation for 2015 and 2016.

Figure 18: Recent History of Canadian GLPA Pilot Compensation[62]

Year	GLPA Compensation (CAD)	GLPA Compensation (USD)
2014	$329,045	$286,375
2013	$273,145	$255,037
2012	$247,145	$237,639
2011	$233,567	$226,984

Figure 19 adjusts these figures for inflation in each year.

[61] Based on Midwest CPI-U from BLS. Available at http://www.bls.gov/data. Select "One Screen Data Search" under "All Urban Consumers (Current Series) (Consumer Price Index – CPI)".). Then select "Midwest urban" from Box 1 and "All Items" from Box 2. Our numbers for 2011-2014 are generated through this query and formatted to show annual percentage changes.
[62] All figures reflect annual average currency conversions for the time periods provided, using exchange rates provided by the Internal Revenue Service. *See* http://www.irs.gov/Individuals/International-Taxpayers/Yearly-Average-Currency-Exchange-Rates

Figure 19: Inflation Adjustments[63]

Year	USD (From Figure 16)	2012 Inflation Adjustment (@3.2%)	2013 Inflation Adjustment (@2%)	2014 Inflation Adjustment (@1.4%)	2015 Inflation Adjustment (@1.5%)	2016 Inflation Projection (@2%)*	Total (2016 USD)
2014	$286,375	$-	$-	$-	$4,296	$5,728	$296,398
2013	$255,037	$-	$-	$3,571	$3,826	$5,101	$267,534
2012	$237,639	$-	$4,753	$3,327	$3,565	$4,753	$254,036
2011	$226,984	$7,263	$4,540	$3,178	$3,405	$4,540	$249,909

[63] *See* footnote 64 for supporting inflation data. *See also* our earlier discussion of the Federal Reserve's target inflation rate for 2016 projections. *See also* the Bank of Canada's 2% target inflation rate at http://www.bankofcanada.ca/core-functions/monetary-policy/inflation/

Figure 20 shows the year-on-year percentage change in GLPA compensation, converted to 2016 USD.

Figure 20: Analysis of Canadian GLPA Pilot Compensation

Year	GLPA Compensation	Percent Change
2014	$296,398	10.8%
2013	$267,534	5.3%
2012	$254,037	1.7%
2011	$249,910	-

We base our target pilot compensation on 2013 GLPA compensation, because it provides a more reliable benchmark than 2014, which saw a sharp rise from the previous trend, probably due to a 17 percent Canadian traffic increase in 2014, compounded by extended ice conditions.

Based on 2013 GLPA compensation, Figure 21 shows our projection for GLPA's 2016 compensation. Compensation is increased at 3.5 percent annually, the average growth rate of Canadian compensation between 2011 and 2013.

Figure 21: Projected increases in Canadian Great Lakes Pilot Compensation[64]

Year	Projected GLPA Compensation (2016 USD)*
2016	$296,467
2015	$286,491
2014	$276,850
2013	$267,534

[64] Figures are expressed in USD. Each year's compensation increases 3.5% in line with average compensation increases in 2012 and 2013.

The difference in the status of U.S. and Canadian pilots, and the different compensation systems in place in the two countries are supportable circumstances for adjusting U.S. target pilot compensation by 10 percent over the projected 2016 GLPA figure, taking the U.S. target to $326,114, as shown in Figure 22. Several speakers at the 2014 GLPAC meetings[65] cited the 10 percent figure, and no other, as an appropriate adjustment for those differences. Public comments on the NPRM did not provide sufficient basis to adopt the target figures recommended by the pilots, $355,000 and almost $394,000. Figure 22 also shows total target compensation for each district, which is the individual target multiplied by the district's number of working pilots.

Figure 22: Total target pilot compensation per district

	District One	District Two	District Three
Target compensation per pilot	$326,114	$326,114	$326,114
Number of working pilots	12	12	13
District target pilot compensation (total = $12,066,225)	**$3,913,370**	**$3,913,370**	**$4,239,485**

Determine return on investment (§ 404.105). The 2013 average annual rate of return for new issues of high-grade corporate securities was 4.24 percent,[66] which as shown in Figure 25 we use in setting each district's allowed return on investment.

[65] Transcript (7/24/2014), pp. 43-45.
[66] Based on Moody's AAA corporate bonds. *See* http://research.stlouisfed.org/fred2/series/AAA/downloaddata?cid=119

Figure 23: Return on investment

	District One		District Two		District Three	
	Designated	Undesignated	Undesignated	Designated	Undesignated	Designated
Adjusted Operating Expenses (Step 2)	$715,274	$508,486	$594,913	$892,370	$1,474,855	$491,620
Total Target Pilot Compensation (Step 4)	$2,282,799	$1,630,571	$1,630,571	$2,282,799	$2,935,028	$1,304,457
Total 2016 Expenses	$2,998,074	$2,139,057	$2,225,484	$3,175,170	$4,409,882	$1,796,077
Return on Investment (4.24%)	$127,118	$90,696	$94,361	$134,627	$186,979	$76,154

Project needed revenue (§ 404.106). Figure 24 shows each district's 2016 needed revenue. The projected needed revenue for all districts is $17,453,678, up from 2015's latest projections of revenue of $15,588,653.

Figure 24: Revenue needed

	District One		District Two		District Three	
	Designated	Undesignated	Undesignated	Designated	Undesignated	Designated
Adjusted Operating Expenses (Step 2)	$715,274	$508,486	$594,913	$892,370	$1,474,855	$491,620
Total Target Pilot Compensation (Step 4)	$2,282,799	$1,630,571	$1,630,571	$2,282,799	$2,935,028	$1,304,457
Return on Investment (Step 5)	$127,118	$90,696	$94,361	$134,627	$186,979	$76,154
Total Revenue Needed (Total = $17,453,678)	**$3,125,192**	**$2,229,753**	**$2,319,844**	**$3,309,797**	**$4,596,861**	**$1,872,230**

Set initial base rates (§ 404.107). Figure 25 shows how we set initial base rates using pilot hours worked in our multi-year base period. This year, the base period includes data from the previous nine full shipping seasons from 2007 to 2015. By the 2018 ratemaking, we will have 10 year’s data, and thereafter we will use the most recent 10 seasons for our base period.

Figure 25: Hours Worked, 2007-2015, Designated and Undesignated Waters

	District One		District Two		District Three	
	Designated	Undesignated	Undesignated	Designated	Undesignated	Designated
2015	5743	6667	6535	5967	22824	2696
2014	6810	6853	7856	7001	25833	3835
2013	5864	5529	4603	4750	17115	2631
2012	4771	5121	3848	3922	15906	2163
2011	5045	5377	3708	3680	16012	1678
2010	4839	5649	5565	5235	20211	2461
2009	3511	3947	3386	3017	12520	1820
2008	5829	5298	4844	3956	14287	2286
2007	6099	5929	6223	6049	24811	5944
AVERAGE	5390	5597	5174	4842	18835	2835

Figure 26 shows our new initial rate calculations.

Figure 26: Rate calculations[67]

	District One		District Two		District Three	
	Designated	Undesignated	Undesignated	Designated	Undesignated	Designated
Revenue Needed (Step 6)	$3,125,192	$2,229,753	$2,319,844	$3,309,797	$4,596,861	$1,872,230
Average time on task 2007-2015	5,390	5,597	5,174	4,842	18,835	2,835
Hourly Rate	**$580**	**$398**	**$448**	**$684**	**$244**	**$660**

[67] Rounded.

District Three’s rate for designated waters would be more than twice its rate for undesignated waters. Therefore, as shown in Figure 27, we apply a ratio to balance those rates so that the rate for designated waters is no more than twice the rate for undesignated waters while maintaining the same overall revenue requirement for the district.

Figure 27: District Three – Capped Designated Waters Rate

	District Three	
	Areas 6, 8 Undesignated	**Area 7 Designated**
Revenue Needed	$ 4,972,265	$ 1,496,827
Projected Pilotage Demand	18,835	2,835
Hourly Rate	$ 264	$ 528

Review and finalize rates (§ 404.108). We are working with the pilotage associations to close the gap between the 37 working pilots we project for 2016 and the 54 pilots required to fulfill pilotage demand by training 11 applicant pilots during 2016. This requires expensive recruitment and training for these new pilots and ongoing training for the working pilots. Our usual practice of reimbursing training expenses only after they are incurred would delay that reimbursement for several years and reduce association funds for other vital purposes. This is a supportable circumstance for imposing a necessary and reasonable temporary 2016 surcharge for 2016 training expenses, which we will validate and adjust as necessary during our audit of actual 2016 association expenses. In the NPRM, we projected that the associations would hire 6 new pilots in 2016 at a training cost of $150,000 per pilot, for a total training cost of $900,000. We have modified pilot strength based on the pilot association’s guidance for the number of registered and applicant pilots. This changed the revenue required for the districts by shifting pilots from our registered pilot estimates to applicants paid for by the surcharge. We project that the associations will hire 11 new pilots in 2016, at a total training cost of about $150,000 per pilot, as shown in Figure 28.

Figure 28: Surcharge Calculation by District

	District One	**District Two**	**District Three**
Projected Needed Revenue	**$ 5,354,945**	**$ 5,629,641**	**$ 6,469,092**
Training Surcharge	$450,000	$300,000	$900,000
Percent Surcharge	8%	5%	14%

VII. Regulatory Analyses

We developed this final rule after considering numerous statutes and Executive Orders related to rulemaking. Below we summarize our analyses based on these statutes or Executive Orders.

A. Regulatory Planning and Review

Executive Orders 13563 and 12866 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 effects, and equity). Executive Order 13563 emphasizes the importance of quantifying both costs and benefits, of reducing costs, of harmonizing rules, and of promoting flexibility.

This rule has not been designated a “significant regulatory action” under section 3(f) of Executive Order 12866. Accordingly, this rule has not been reviewed by the Office of Management and Budget (OMB).

We developed an analysis of the costs and benefits of the final rule to ascertain its probable impacts on industry. The following figure summarizes the affected population, costs, and benefits of the final rule.

Figure 29: Summary of Regulatory Economic Impacts

Category	Description	Affected Population	2016 Costs	Benefits
Rate Changes	Under the Great Lakes Pilotage Act of 1960, Coast Guard is required to review and adjust base pilotage rates annually.	126 vessels journeying the Great Lakes system annually	$3,515,025	-New rates cover an association's necessary and reasonable operating expenses -Provides fair compensation, adequate training, and sufficient rest periods for pilots -Ensures the association makes enough money to fund future improvements
Procedural Changes	Changes to the annual ratemaking methodology.	3 pilot associations	No direct cost for procedural changes but indirect costs could be changed in annual rate changes due to procedure revision	-Provide maximum transparency and simplicity in the ratemaking methodology -Make submitting data easier for pilots and more accurate

The Coast Guard is required to review and adjust pilotage rates on the Great Lakes annually. See Parts III and IV of this preamble for detailed discussions of the Coast Guard's legal basis and purpose for this rulemaking and for background information on Great Lakes pilotage ratemaking. Based on our annual review for this rulemaking, we are adjusting the pilotage rates for the 2016 shipping season so pilot associations can generate sufficient revenues to reimburse their necessary and reasonable operating expenses, fairly compensate trained and rested pilots, and provide an appropriate profit to use for improvements. The rate changes in this rule would lead to an increase in the cost per unit of service to shippers in all three districts, and result in an estimated annual cost increase to shippers of approximately $1,865,025 across all three districts over 2015 payments (Figure 27).

In addition to the increase in payments that would be incurred by shippers in all three districts from the previous year as a result of the rate changes, we are authorizing a temporary surcharge to allow the pilotage associations to recover training expenses that would be incurred in 2016. We estimate that District One will incur $450,000, District Two will incur $300,000, and District Three will incur $900,000 in training expenses. These temporary surcharges would generate a combined $1,650,000 in revenue for the pilotage associations across all three districts. Note that in the NPRM, we projected that the associations would hire 6 new pilots in 2016 at a training cost of $150,000 per pilot, for a total training cost of $900,000. We have modified pilot strength based on the pilot association's guidance for the number of registered and applicant pilots and project that the associations will hire 11 new pilots in 2016.

Therefore, after accounting for the implementation of the temporary surcharges across all three districts, the annual payments made by shippers during the 2016 shipping season are estimated to be approximately $3,515,025 more than the payments that were made in 2015 (Figure 27).[68]

A regulatory analysis follows.

[68]Total payments across all three districts are equal to the increase in payments incurred by shippers as a result of the rate changes plus the temporary surcharges applied to traffic in Districts One, Two, and Three.

This rulemaking proposes revisions to the annual ratemaking methodology (procedural changes), and applies the ratemaking methodology to increase Great Lakes pilotage rates and surcharges from the current rates set in the 2015 final rule (rate changes). The methodology is discussed and applied in detail in Parts V and VI of this preamble. The last full ratemaking was concluded in 2015. The last annual rate review, conducted under 46 CFR part 404, appendix C, was completed early in 2011. Figure 29 summarizes the changes in the regulatory analysis (RA) from the NPRM to the final rule. These changes were the result of public comments received after publication of the NPRM. Figure 30 presents the elements in our analysis that changed along with the resultant change in the RA.

Figure 30: Summary of Changes from NPRM to Final Rule

Element of the analysis	NPRM	Final Rule	Resulting Change in RA
Number of historic years of demand data used to establish the hourly rate	5 years of data, excluding data from 2009	Final rule uses data from 2007-2015, future ratemakings will use most recent 10 years of data	Data indirectly affects the calculation of projected revenues
Mandatory change point at Iroquois Lock	Proposed additional change point at Iroquois Lock	Final rule removes the mandatory change point at Iroquois Lock	No change
Target pilot compensation	$312,500	$326,114	Data indirectly affects the calculation of projected revenues
Projected revenues	2015 revenues projected at $12,289,193, 2016 revenues projected at $18,557,345	2015 revenues projected at $15,588,653, 2016 revenues projected at $17,453,678	Cost increase to shippers decreases from $6,268,152 to $1,865,025

Pilot strength for registered and applicant pilots	42 registered working pilots and 6 applicant pilots in 2016	37 registered working pilots and 11 applicant pilots in 2016	Training expenses increased from $900,000 to $1,650,000

Affected Population

The shippers affected by these rate changes are those owners and operators of domestic vessels operating on register (employed in foreign trade) and owners and operators of 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. Owners and operators of other vessels that are not affected by this final rule, such as recreational boats and vessels operating within the Great Lakes system, may elect to purchase pilotage services. However, this election is voluntary and does not affect the Coast Guard's calculation of the rate increase and is not a part of our estimated cost to shippers.

We used 2012-2014 vessel arrival data from the Coast Guard's SANS to estimate the average annual number of vessels affected by the rate adjustment. Using that period, we found that a mean of 126 vessels journeyed into the Great Lakes system annually from the years 2012-2014. These vessels entered the Great Lakes by transiting at least one of the three pilotage districts before leaving the Great Lakes system. These vessels often make more than one distinct stop, docking, loading, and unloading at facilities in Great Lakes ports. Of the total trips for the 126 vessels, there were 396 annual U.S. port arrivals before the vessels left the Great Lakes system, based on 2012-2014 vessel data from SANS.

Costs

The procedural changes are the revisions to the annual ratemaking methodology and several Great Lakes pilotage regulations. The procedural changes include all changes to the annual ratemaking methodology as discussed in Section IV. These procedural changes are intended to clarify and simplify the current methodology, and increase the accuracy of collecting information on each pilot association's expenses and revenues in order to lower the variance between projected revenue and actual revenue. These procedural changes do not impose any direct costs, but indirectly affect the annual rate change. We capture these indirect impacts of procedural changes in the rate change impact. The rate changes resulting from the new methodology would generate costs on industry in the form of higher payments for shippers. The effect of the rate changes on shippers is estimated from the District pilotage revenues. These revenues represent the costs that shippers must pay for pilotage services. The Coast Guard sets rates so that revenues equal the estimated cost of pilotage for these services.

We estimate the effect of the rate changes by comparing the total projected revenues needed to cover costs in 2015 with the figures for 2016, plus the temporary surcharges authorized by the Coast Guard. The last full year for which we have reported and audited financial information for the pilot association expenses is 2014, as discussed in Section VI of this preamble. Figure 31 shows the audited revenues and the revenue projections.

Figure 31: Revenue Projections

Area	2013 Revenue (Audited)	2014 Revenue (Audited)	2015 Revenue	2016 Projected Revenue
D1 Designated	$1,990,865	$2,504,809	$2,725,255	$3,125,192

D1 Undesignated	$1,415,299	$1,991,313	$2,166,567	$2,229,753
Total, District 1	**$3,406,164**	**$4,496,122**	**$4,891,822**	**$5,354,945**
D2 Undesignated	$1,267,750	$2,196,822	$2,099,600	$2,319,844
D2 Designated	$1,901,627	$3,295,230	$3,149,396	$3,309,797
Total, District 2	**$3,169,377**	**$5,492,052**	**$5,248,996**	**$5,629,641**
D3 Undesignated	$3,242,971	$5,165,165	$4,085,869	$4,596,861
D3 Designated	$1,080,994	$1,721,731	$1,361,964	$1,872,230
Total, District 3	**$4,323,965**	**$6,886,899**	**$5,447,835**	**$6,469,092**
System Total	**$10,899,506**	**$16,875,073**	**$15,588,653**	**$17,453,678**

*Values may not sum due to rounding.

Figure 32 details the additional cost increases to shippers by area and district as a result of the rate changes and temporary surcharges on traffic in Districts One, Two, and Three.

Figure 32: Effect of the final rule by area and district ($U.S.; Non-discounted)

Area	Projected Revenue Needed in 2015	Projected Revenue Needed in 2016	Total Costs 2015 (2016-2015)	Temporary Surcharge	Additional Costs of this Final Rule
D1 Designated	$2,725,255	$3,125,192	$399,936	--	
D1 Undesignated	$2,166,567	$2,229,753	$63,187	--	
Total, District 1	**$4,891,822**	**$5,354,945**	**$463,123**	**$450,000**	**$913,123**
D2 Undesignated	$2,099,600	$2,319,844	$220,244	--	
D2 Designated	$3,149,396	$3,309,797	$160,401	--	
Total, District 2	**$5,248,996**	**$5,629,641**	**$380,645**	**$300,000**	**$680,645**
D3 Undesignated	$4,085,869	$4,596,861	$510,992	--	
D3 Designated	$1,361,964	$1,872,230	$510,267	--	
Total, District 3	**$5,447,835**	**$6,469,092**	**$1,021,257**	**$900,000**	**$1,921,257**
System Total	**$15,588,653**	**$17,453,678**	**$1,865,025**	**$1,650,000**	**$3,515,025**

*Values may not sum due to rounding.

The resulting difference between the projected revenue in 2015 and the projected revenue in 2016 is the annual change in payments from shippers to pilots as a result of the rate change. This figure is equivalent to the total additional payments from the previous year that shippers would incur for pilotage services from this final rule.

The effect of the rate change in this final rule on shippers varies by area and district. The rate changes would lead to affected shippers operating in District One, District Two, and District Three experiencing an increase in payments of $463,123, $380,645, and $1,021,257, respectively, from the previous year.

In addition to the rate changes, temporary surcharges on traffic in District One, District Two, and District Three would be applied for the duration of the 2016 season in order for the pilotage associations to recover training expenses incurred. We estimate that these surcharges would generate an additional $450,000, $300,000, and $900,000 in revenue for the pilotage associations in District One, District Two, and District Three, respectively, for a total additional revenue of $1,650,000.

To calculate an exact cost or savings per vessel is difficult because of the variation in vessel types, routes, port arrivals, commodity carriage, time of season, conditions during navigation, and preferences for the extent of pilotage services on designated and undesignated portions of the Great Lakes system. Some owners and operators would pay more and some would pay less, depending on the distance travelled and the number of port arrivals by their vessels. However, the increase in costs reported earlier in this rulemaking does capture the adjustment in payments that shippers would experience from the previous year. The overall adjustment in payments, after taking into account the increase in pilotage rates and the addition of temporary surcharges would be an increase in payments by shippers of approximately $3,515,025 across all three districts.

Benefits

This rule will allow 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 will promote safe, efficient, and reliable pilotage service on the Great Lakes by ensuring rates cover an association's operating expenses; provide fair pilot compensation, adequate training, and sufficient rest periods for pilots; and ensures the association makes enough money to fund future improvements. The rate changes will also help recruit and retain pilots, which will ensure a sufficient number of pilots to meet peak shipping demand, which would help reduce delays caused by pilot shortages. During the 2014 shipping season, shippers reported over $5 million in delay related costs (lost charter hire and fuel spent idling) from ships having to wait for pilots.[69] The procedural changes will increase the accuracy of pilotage data by utilizing a uniform financial reporting system (see discussion of 46 CFR 403.300 in Part V of the preamble). The procedural changes will also promote greater transparency and simplicity in the ratemaking methodology through annual revenue audits (see discussion of 46 CFR 404.1 in Part V of the preamble).

B. Small Entities

As required by the Regulatory Flexibility Act,[70] we have considered whether this final 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 people.

We expect that entities affected by this rule would be classified under the North American Industry Classification System (NAICS) code subsector 483-Water Transportation, which includes the following 6-digit NAICS codes for freight transportation: 483111-Deep Sea Freight Transportation, 483113-Coastal and Great Lakes Freight Transportation, and 483211-Inland Water Freight Transportation. According to the Small Business Administration's definition, a U.S. company with these NAICS codes and employing less than 500 employees is considered a small entity.

For this rule, we reviewed recent company size and ownership data for the period 2012 through 2014 in the Coast Guard's Marine Information for Safety and Law Enforcement database, and we reviewed business revenue and size data provided by

[69] *See* July 18, 2014 letter from the Shipping Federation of Canada and the United States Great Lakes Shipping Association to Admiral Zukunft.
[70] 5 U.S.C. 601-612.

publicly available sources such as MANTA[71] and Cortera.[72] We found that large, foreign-owned shipping conglomerates or their subsidiaries owned or operated all vessels engaged in foreign trade on the Great Lakes.

There are three U.S. entities affected by the final rule that receive revenue from pilotage services. 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 industry classification and small-entity size standards described above, but they have fewer than 500 employees; combined, they have approximately 65 total employees. We expect no adverse effect to these entities from this final rule because all associations receive enough revenue to balance the projected expenses associated with the projected number of bridge hours and pilots.

Therefore, the Coast Guard certifies under 5 U.S.C. 605(b) that this rule will not have a significant economic effect on a substantial number of small entities.

C. Assistance for Small Entities

Under the Small Business Regulatory Enforcement Fairness Act of 1996[73] we want to assist small entities in understanding this final rule so that they can better evaluate its effects on them and participate in the rulemaking. If the final rule would affect your small business, organization, or governmental jurisdiction and you have questions concerning its provisions or options for compliance, please consult Mr. Todd Haviland, Director, Great Lakes Pilotage, Commandant (CG-WWM-2), Coast Guard;

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[71] See http://www.manta.com/

[72] See https://www.cortera.com/

[73] Public Law 104-121, sec. 213(a).

telephone 202-372-2037, e-mail Todd.A.Haviland@uscg.mil, or fax 202-372-1914. 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[74] but adjusts the burden for an existing COI number 1625-0086, as described below.

TITLE: Great Lakes Pilotage

OMB CONTROL NUMBER: 1625-0086

SUMMARY OF THE COLLECTION OF INFORMATION:

The rule requires continued submission of data to an electronic collection system, identified as the Great Lakes Pilotage Management System, which will eventually replace the manual paper submissions currently used to collect data on bridge hours, vessel delay, vessel detention, vessel cancellation, vessel movage, pilot travel, revenues, pilot availability, and related data. Further, the rule requires pilot associations to provide copies of their paper source forms, or billing forms, until the transfer to electronic

[74] 44 U.S.C. 3501-3520.

submission is available later in 2016. The pilot associations currently provide these documents to the Coast Guard each month.

NEED FOR INFORMATION:

This information is needed in order to more accurately set future rates.

PROPOSED USE OF INFORMATION:

We use this information to comply with the statutory and regulatory requirements for the Coast Guard's ratemaking and oversight functions.

DESCRIPTION OF RESPONDENTS:

The respondents represent the three U.S. Great Lakes pilotage associations whose 37 pilots provide pilotage service, as well as an estimated 11 applicants for 2016 pilot positions.

NUMBER OF RESPONDENTS:

The rule increases the estimated number of respondents from 9 to 51 per year: the 3 pilot association representatives, 6 applicants, and 42 current pilots.

FREQUENCY OF RESPONSE:

Frequency is dictated by marine traffic levels and association staffing.

BURDEN OF RESPONSE:

We estimate the burden will vary from 15 minutes for a pilot to complete the source form to one hour for the pilot association to transmit those forms to the Coast Guard.

ESTIMATE OF ANNUAL BURDEN:

We estimate the total annual burden will increase from 19 to 2,129.5 hours.

You need not respond to a collection of information unless it displays a currently valid control number from OMB. The Coast Guard must have OMB's approval before it can enforce collection of information requirements.

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 that order and have determined that it is consistent with the fundamental federalism principles and preemption requirements described in Executive Order 13132. Our analysis is explained below.

Congress directed the Coast Guard to establish "rates and charges for pilotage services."[75] This regulation is issued pursuant to that requirement and is preemptive of state law.[76] Therefore, the rule is consistent with the principles of federalism and preemption requirements in Executive Order 13132.

F. Unfunded Mandates Reform Act

The Unfunded Mandates Reform Act of 1995[77] requires Federal agencies to assess the effects of their discretionary regulatory actions. In particular, the Act addresses actions that may result in the expenditure by a State, local, or Tribal Government, in the aggregate, or by the private sector of $100,000,000 (adjusted for inflation) or more in any one year. Though this rule will not result in such an expenditure, we discuss its effects elsewhere in this preamble.

[75] 46 U.S.C. 9303(f).
[76] *See* 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.
[77] 2 U.S.C. 1531-1538.

G. Taking of Private Property

This rule does 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. It is not an economically significant rule and creates no environmental risk to health or risk to safety that might disproportionately affect children.

J. Indian Tribal Governments

This rule has no tribal implications under Executive Order13175, Consultation and Coordination with Indian Tribal Governments, because it has no 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. The Administrator of the Office of Information and Regulatory Affairs has not designated it as a significant energy action. Therefore, it does not require a Statement of Energy Effects under Executive Order 13211.

L. Technical Standards

The National Technology Transfer and Advancement Act[78] 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 Department of Homeland Security Management Directive 023-01 and Commandant Instruction M16475.lD, which guide the Coast Guard in complying with the National Environmental Policy Act of 1969,[79] and have determined that it is one of a category of actions that do not individually or cumulatively have a significant effect on the human environment. An environmental analysis checklist and categorical exclusion supporting this determination are available in the docket. This

[78] 15 U.S.C. 272, note.
[79] 42 U.S.C. 4321-4370f.

rule is categorically excluded under section 2.B.2, figure 2-1, paragraph 34(a) of the Instruction, which pertains to minor regulatory changes that are editorial or procedural in nature. This rule adjusts rates in accordance with applicable statutory and regulatory mandates.

List of Subjects

46 CFR Part 401

Administrative practice and procedure, Great Lakes, Navigation (water), Penalties, Reporting and recordkeeping requirements, Seamen.

46 CFR Part 403

Great Lakes, Navigation (water), Reporting and recordkeeping requirements, Seamen, Uniform System of Accounts.

46 CFR Part 404

Great Lakes, Navigation (water), Seamen.

For the reasons discussed in the preamble, the Coast Guard amends 46 CFR parts 401, 403, and 404 as follows:

Title 46—Shipping

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; Department of Homeland Security Delegation No. 0170.1(II)(92.a), (92.d), (92.e), (92.f).

2. Revise § 401.405 to read as follows:

§ 401.405 Pilotage rates and charges.

(a) The hourly rate for pilotage service on—

(1) The St. Lawrence River is $580;

(2) Lake Ontario is $398;

(3) Lake Erie is $448;

(4) The navigable waters from Southeast Shoal to Port Huron, MI is $684;

(5) Lakes Huron, Michigan, and Superior is $264; and

(6) The St. Mary's River is $528.

(b) The pilotage charge is calculated by multiplying the hourly rate by the hours or fraction thereof (rounded to the nearest 15 minutes) that the registered pilot is on the bridge or available to the master of the vessel, multiplied by the weighting factor shown in § 401.400 of this part.

§ 401.407 [Removed]

3. Remove § 401.407.

§ 401.410 [Removed]

4. Remove § 401.410.

5. Revise § 401.420 to read as follows:

§ 401.420 Cancellation, delay, or interruption in rendition of services.

(a) Except as otherwise provided in this section, a vessel can be charged as authorized in § 401.405 of this part for the waters in which the event takes place, if—

(1) A U.S. pilot is retained on board while a vessel's passage is interrupted;

(2) A U.S. pilot's departure from the vessel after the end of an assignment is delayed, and the pilot is detained on board, for the vessel's convenience; or

(3) A vessel's departure or movage is delayed, for the vessel's convenience, beyond the time that a U.S. pilot is scheduled to report for duty, or reports for duty as ordered, whichever is later.

(b) When an order for a U.S. pilot's service is cancelled after that pilot has begun traveling to the designated pickup place, the vessel can be charged for the pilot's reasonable travel expenses to and from the pilot's base; and the vessel can be charged for the time between the pilot's scheduled arrival, or the pilot's reporting for duty as ordered, whichever is later, and the time of cancellation.

(c) Between May 1 and November 30, a vessel is not liable for charges under paragraphs (a)(1) or (2) of this section, if the interruption or detention was caused by ice, weather, or traffic.

(d) A pilotage charge made under this section takes the place and precludes payment of any charge that otherwise could be made under § 401.405 of this part.

6. Revise § 401.428 to read as follows:

§ 401.428 Boarding or discharging a pilot other than at designated points.

For a situation in which a vessel boards or discharges a U.S. pilot at a point not designated in § 401.450 of this part, it could incur additional charges as follows:

(a) Charges for the pilot's reasonable travel expenses to or from the pilot's base, if the situation occurs for reasons outside of the vessel's control, for example for a reason listed in § 401.420(c) of this part; or

(b) Charges for associated hourly charges under § 401.405 of this part, as well as the pilot's travel expenses as described in paragraph (a), if the situation takes place for the convenience of the vessel.

PART 403—GREAT LAKES PILOTAGE UNIFORM ACCOUNTING SYSTEM

7. The authority citation for part 403 is revised to read as follows:

Authority: 46 U.S.C. 2103, 2104(a), 9303, 9304; Department of Homeland Security Delegation No. 0170.1(II)(92.a), (92.f).

§ 403.120 [Removed]

8. Remove § 403.120.

9. Revise § 403.300 to read as follows:

§ 403.300 Financial reporting requirements.

(a) Each association must maintain records for dispatching, billing, and invoicing, and make them available for Director's inspection, using the system currently approved by the Director.

(b) Each association must submit the compiled financial data and any other required statistical data, and written certification of the data's accuracy signed by an officer of the association, to the Director within 30 days of the end of the annual reporting period, unless otherwise authorized by the Director.

(c) By April 1 of each year, each association must obtain an unqualified audit report for the preceding year, audited and prepared in accordance with generally accepted accounting standards by an independent certified public accountant, and electronically submit that report with any associated settlement statements to the Director by April 7.

10. Revise § 403.400 to read as follows:

§ 403.400 Uniform pilot's source form.

(a) Each association must record pilotage transactions using the system currently approved by the Director.

(b) Each pilot must complete a source form in detail as soon as possible after completion of an assignment, with adequate support for reimbursable travel expenses.

(c) Upon receipt, each association must complete the source form by inserting the rates and charges specified in 46 CFR part 401.

11. Revise part 404 to read as follows:

PART 404—GREAT LAKES PILOTAGE RATEMAKING

Sec.

Authority: 46 U.S.C. 2103, 2104(a), 9303, 9304; Department of Homeland Security Delegation No. 0170.1(II)(92.a), (92.f).

§ 404.1 General ratemaking provisions.

(a) The goal of ratemaking is to promote safe, efficient, and reliable pilotage service on the Great Lakes, by generating for each pilotage association sufficient revenue to reimburse its necessary and reasonable operating expenses, fairly compensate trained and rested pilots, and provide an appropriate profit to use for improvements.

(b) Annual reviews of pilotage association expenses and revenue will be conducted in conjunction with an independent party, and data from completed reviews will be used in ratemaking under this part.

(c) Full ratemakings to establish multi-year base rates and interim year reviews and adjustments will be conducted in accordance with § 404.100 of this part.

§ 404.2 Procedure and criteria for recognizing association expenses.

(a) A pilotage association must report each expense item for which it seeks reimbursement through the charging of pilotage rates, and make supporting information available to the Director. The Director must recognize the item as both necessary for providing pilotage service, and reasonable as to its amount when compared to similar expenses paid by others in the maritime or other comparable industry, or when compared with Internal Revenue Service guidelines. The association will be given an opportunity to contest any preliminary determination that a reported item should not be recognized.

(b) The Director applies the following criteria to recognize an expense item as necessary and reasonable within the meaning of paragraph (a) of this section:

(1) *Operating or capital lease costs.* Conformity to market rates, or in the absence of a comparable market, conformity to depreciation plus an allowance for return on investment, computed as if the asset had been purchased with equity capital.

(2) *Return-on-investment.* A market equivalent return-on-investment is allowed for the net capital invested in the association by its members, if that investment is necessary for providing pilotage service.

(3) *Transactions not directly related to providing pilotage services.* Revenues and expenses generated from these transactions are included in ratemaking calculations as long as the revenues exceed the expenses. If these transactions adversely affect providing pilotage services, the Director may make rate adjustments or take other steps to ensure pilotage service is provided.

(4) *Pilot benefits*. Association-paid benefits, including medical and pension benefits and profit sharing, are treated as pilot compensation.

(5) *Profit sharing for non-pilot association employees.* These association expenses are recognizable.

(6) *Legal expenses.* These association expenses are recognizable except for any and all expenses associated with legal action against the U.S. government or its agents.

(c) The Director does not recognize the following expense items as necessary and reasonable within the meaning of paragraph (a) of this section:

(1) Unreported or undocumented expenses, and expenses that are not reasonable in their amounts or not reasonably related to providing safe, efficient, and reliable pilotage service;

(2) Revenues and expenses from Canadian pilots that are commingled with revenues and expenses from U.S. pilots;

(3) Lobbying expenses; or

(4) Expenses for personal matters.

§§ 404.3 through 404.99 [Reserved]

§ 404.100 Ratemaking and annual reviews in general.

(a) The Director establishes base pilotage rates by a full ratemaking pursuant to §404.101- 404.108 of this part, conducted at least once every 5 years and completed by March 1 of the first year for which the base rates will be in effect. Base rates will be set to meet the goal specified in § 404.1(a) of this part.

(b) In the interim years preceding the next scheduled full rate review, the Director will review the existing rates to ensure that they continue to meet the goal specified in § 404.1(a) of this part. If interim-year adjustments are needed, they will be set according to one of the following procedures, selected as the Director deems best suited to adjust the rates to meet that goal—

(1) Automatic annual adjustments, set during the previous full rate review in anticipation of economic trends over the term of the rates set by that review;

(2) Annual adjustments reflecting consumer price changes as documented in the U.S. Bureau of Labor Statistics Midwest Region Consumer Price Index (CPI-U); or

(3) A new full ratemaking.

§ 404.101 Ratemaking step 1: Recognize previous operating expenses.

The Director uses an independent third party to review each pilotage association's expenses, as reported and audited for the last full year for which figures are available, and determines which expense items to recognize for base ratemaking purposes in accordance with § 404.2 of this part.

§ 404.102 Ratemaking step 2: Project operating expenses, adjusting for inflation or deflation.

The Director projects the base year's non-compensation operating expenses for each pilotage association, using recognized operating expense items from § 404.101. Recognized operating expense items subject to inflation or deflation factors are adjusted for those factors based on the subsequent year's U.S. government consumer price index data for the Midwest, projected through the year in which the new base rates take effect.

§ 404.103 Ratemaking step 3: Determine number of pilots needed.

(a) The Director determines the base number of pilots needed by dividing each area's peak pilotage demand data by its pilot work cycle. The pilot work cycle standard includes any time that the Director finds to be a necessary and reasonable component of ensuring that a pilotage assignment is carried out safely, efficiently, and reliably for each area. These components may include but are not limited to—

(1) Amount of time a pilot provides pilotage service or is available to a vessel's master to provide pilotage service;

(2) Pilot travel time, measured from the pilot's base, to and from an assignment's starting and ending points;

(3) Assignment delays and detentions;

(4) Administrative time for a pilot who serves as a pilotage association's president;

(5) Rest between assignments, as required by 46 CFR 401.451;

(6) Ten days' recuperative rest per month from April 15 through November 15 each year, provided that lesser rest allowances are approved by the Director at the pilotage association's request, if necessary to provide pilotage without interruption through that period; and

(7) Pilotage-related training.

(b) Peak pilotage demand and the base seasonal work standard are based on averaged available and reliable data, as so deemed by the Director, for a multi-year base period. Normally, the multi-year period is the 10 most recent full shipping seasons, and the data source is a system approved under 46 CFR 403.300. Where such data are not available or reliable, the Director also may use data, from additional past full shipping seasons or other sources, that the Director determines to be available and reliable.

(c) The number of pilots needed in each district is calculated by totaling the area results by district and rounding them to the nearest whole integer. For supportable circumstances, the Director may make reasonable and necessary adjustments to the rounded result to provide for changes that the Director anticipates will affect the need for pilots in the district over the period for which base rates are being established.

(d) The Director projects, based on the number of persons applying under 46 CFR part 401 to become U.S. Great Lakes registered pilots, and on information provided by the district's pilotage association, the number of pilots expected to be fully working and compensated during the first year of the period for which base rates are being established.

§ 404.104 Ratemaking step 4: Determine target pilot compensation.

The Director determines base individual target pilot compensation using a compensation benchmark, set after considering the most relevant currently available non-proprietary information. For supportable circumstances, the Director may make necessary and reasonable adjustments to the benchmark. The Director determines each pilotage association's total target pilot compensation by multiplying individual target pilot compensation by the number of pilots projected under § 404.103(d) of this part.

§ 404.105 Ratemaking step 5: Project return on investment.

The Director calculates each pilotage association's allowed base return on investment by adding the projected adjusted operating expenses from § 404.102 and the total target pilot compensation from § 404.104 of this part, multiplied by the preceding year's average annual rate of return for new issues of high grade corporate securities.

§ 404.106 Ratemaking step 6: Project needed revenue.

The Director calculates each pilotage association's base projected needed revenue by adding the projected adjusted operating expenses from § 404.102 of this part, the total target pilot compensation from § 404.104 of this part, and the projected return on investment from § 404.105 of this part.

§ 404.107 Ratemaking step 7: Initially calculate base rates.

(a) The Director initially calculates base hourly rates by dividing the projected needed revenue from § 404.106 of this part by averages of past hours worked in each district's designated and undesignated waters, using available and reliable data for a multi-year period set in accordance with § 404.103(b) of this part.

(b) If the result of this calculation initially shows an hourly rate for the designated waters of a district that would exceed twice the hourly rate for undesignated waters, the initial designated-waters rate will be adjusted so as not to exceed twice the hourly undesignated-waters rate. The adjustment is a reallocation only and will not increase or decrease the amount of revenue needed in the affected district.

§ 404.108 Ratemaking step 8: Review and finalize rates.

The Director reviews the base pilotage rates initially set in § 404.107 of this part to ensure they meet the goal set in § 404.1(a) of this part, and either finalizes them or first makes necessary and reasonable adjustments to them based on requirements of Great Lakes pilotage agreements between the United States and Canada, or other supportable circumstances. Adjustments will be made consistent with § 404.107(b) of this part.

Date: 1 March 2016

J.G. Lantz,
Acting Assistant Commandant for Prevention Policy,
U.S. Coast Guard.

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