Date: September 8, 2017

Prepared By: CG-REG-1

Background and Notes on "*Analysis of the Great Lakes Pilotage Costs on Great Lakes Shipping and the Potential Impact of Increases in U.S. Pilotage Charges*"

The U.S. Coast Guard (USCG) is required to comply with Executive Order (EO) 12866 on Regulatory Planning and Review, Executive Order 13563 on Improving Regulation and Regulatory Review, Office of Management and Budget (OMB) Circular A-4 on Regulatory Analysis, and the Regulatory Flexibility Act (5 U.S. Code) as part of its rulemaking processes. Given these requirements, the USCG must perform a benefit-cost analysis for each rulemaking. The majority of the economic impacts are measured as monetary changes to the directly or primary impacted industry or entities (shippers, Great Lakes pilots, and pilot associations). However, comments from the public on the Great Lakes Pilotage Rates - Annual Review and Changes to Methodology indicated that the USCG should consider the secondary impacts to industry and Great Lakes ports.

The USCG wanted to explore additional frameworks and methodologies for assessing the cost of Great Lake's pilot's ratemaking regulations, with a focus on capturing industry and port level economic impacts. The Standards Evaluation and Analysis Division (CG-REG-1) developed a contract to analyze the secondary impacts of the U.S. pilotage charges. The objective of the contract was to provide an updated analysis similar to the results of the report entitled "Analysis of the Great Lakes Pilotage Costs on Great Lakes Shipping and the Potential Impact of Pilotage Rate Increases, 2004". The contractor, Martin Associates, drafted a report titled "Analysis of the Great Lakes Pilotage Costs on Great Lakes Shipping and the Potential Impact of Increases in U.S. Pilotage Charges*"* that assessed the baseline economic conditions of maritime commerce on the Great Lakes, quantified the cost of operating vessels on the Great Lakes, compared the cost of foreign trade on the Great Lakes to other modes of transportation and coastal ports, and assessed the impact of changes in pilotage rates to the Great Lakes shipping industry including surrounding ports.

This study provides a methodology and model for estimating the secondary impacts of Great Lakes pilotage rates holding all other factors constant. This is often done in economic studies that focus on the economic impacts of a single sector. However, the results of a single sector analysis should not be interpreted as a full regional or national economic impact analyses. If the other factors or sectors were not held constant but instead were allowed to adjust or fluctuate, it is likely the impacts of pilotage rates would be different. For example, in the case of steel imports, some of the factors driving the level of international marine cargo moving on foreign flag vessels into and out of the Great Lakes/St. Lawrence Seaway System that were held constant are:

- Domestic and international economic conditions, import trade restrictions

- The value of the U.S. dollar, migration of steel consuming industries away from the Great Lakes region
- Restricted shipping season of the Great Lakes/St. Lawrence Seaway System
- Terminal/stevedoring charges, rail and truck availability and rates to competing ports
- Vessel size restrictions due to the dimensions of the locks on the System (hence impacting the economies of shipping on a per ton basis)
- Insurance requirements
- Seaway System tolls

Additional factors that drive grain exports on the Great Lakes/St. Lawrence Seaway System and were not taken into account in the study include:

- Weather conditions
- Crop production (U.S. and global)
- Domestic vs. export prices
- Inland waterway river levels
- Barge and rail car capacity to serve coastal ports
- Vessel size restriction on the Great Lakes/St. Lawrence Seaway
- World demand by region
- Tolls
- Elevator capacity at Great Lakes and Coastal ports.

These factors impacting steel and grain tonnage levels on the Great Lakes/St. Lawrence Seaway System are for the most part, outside of the model developed by Martin Associates. The U.S. pilotage charge is only one factor that could impact the competitive position of the Great Lakes/St. Lawrence Seaway System ports.

It is also important to note that when the report refers to lost tonnage or jobs, these are estimated impacts to the Great Lakes regional economy from a single sector analysis (holding other variables constant) and are not necessarily net losses to the total U.S. and Canadian economies. Losses in one sector or region could result in gains in another sector or region if the tonnage is diverted to coastal ports. However, the gains resulting from diverting traffic to coastal ports depends on the ability of these ports to handle additional throughput along with the existing capacity at the coastal ports, including terminal capacity, vessel capacity and surface modal capacity. In the study, the contractor assumed the ports could handle the increased impacts.

CG-REG-1 plans on using this study in the following ways going forward. The study included an analysis of the pilotage costs as a percentage of the total voyage costs that USCG can use in future regulatory analysis to estimate the direct impact of changes to the pilotage rates. This study will also be used to inform USCG on one method that could be used to assess the secondary impacts of the Great Lakes Pilotage annual rulemaking and other rulemakings.