Addendum 3 to this Traffic Summary for the NJ PARS – Tug/Tow Coastwise Traffic Analysis

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Introduction and Background

This addendum to the “Vessel Traffic Analysis for Port Access Route Study: Seacoast of New Jersey including the offshore approaches to the Delaware Bay” contains additional graphics detailing the coastal tug/tow vessel traffic in the NJ PARS study area (as defined in the Federal Register, Agency Docket Number USCG-2020-0172) as well as the Chesapeake Bay PARS study area (as defined in the federal Register, Agency Docket Number USCG-2019-0862). This area is shown in green in Figure 1.

Figure 1: Tug/Tow Study Area
Data, Software, and Methodology

Vessel track lines were obtained from and constructed by Marine Cadastre using NAIS data 2017-2019 and were clipped to the appropriate area for the study.

Vessel Track Counts

Vessel tracks are enumerated in one nautical mile square bins and displayed on a color scale from blue to purple to yellow in ArcGIS. Separate graphics are included for each year of data. Between the years, the same scale and colors are used to display the vessel track counts. Thus, the graphics for each year can be directly compared to one another.

Vessel Traffic Densities

Densities were made in ArcGIS and are calculated by enumerating the length of transits per square mile \( \frac{\text{Miles Transited} \ (\text{year})}{\text{mile}^2} \). Each density is represented on a blue, purple, to yellow scale where low density is shown in blue and high density is shown in yellow. These calculations are carried out independently for each traffic density, thus each density is shown on a different scale that best represents the data in each case and cannot be directly compared.

Graphics

Two sets of graphics are provided. The first set details only the vessel track counts or traffic densities in the study area, while the second set also includes the following layers: wind lease and planning areas and the ACPARS proposed fairways. Graphics are organized by year and type, as listed in Table 1.

<table>
<thead>
<tr>
<th>Type</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Track Counts</td>
<td>A.1</td>
<td>A.2</td>
<td>A.3</td>
</tr>
<tr>
<td>Traffic Densities</td>
<td>B.2</td>
<td>B.3</td>
<td>B.4</td>
</tr>
</tbody>
</table>

*Table 1: Graphic Labels*
Number of Tug/Tow Tracks 2017
(Within 1NM Bins)

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Data Source: NAIS
Prepared by the CG NAVCEN
Number of Tug/Tow Tracks 2019 (Within 1NM Bins)

- 1
- >1 to ≤3
- >3 to ≤9
- >9 to ≤27
- >27 to ≤81
- >81 to ≤243
- >243 to ≤729
- >729 to ≤1169

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community.
Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Data Source: NAIS
Prepared by the CG NAVCEN
Legend

- Wind Planning Areas
- Wind Lease Areas

ACPARS Fairways
- Deep Draft Lane
- Tug Tow Extension
- Tug Tow Lane

Number of Tug/Tow Tracks 2018 (Within 1NM Bins)

- 1
- >1 to ≤3
- >3 to ≤9
- >9 to ≤27
- >27 to ≤81
- >81 to ≤243
- >243 to ≤729
- >729 to ≤1169

Coordinate System: GCS WGS 1984
Datum: WGS 1984
Units: Degree
Data Source: NAIS
Prepared by the CG NAVCEN
B.2
With additional overlays