Charting the Course

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IEG Vantage
Product Descriptions
Barge Fleet Profile Report

- Thirty-Second Annual Report
- Survey of Inland Barge Operators
- Results reflect fleet dynamics as of December 31, 2018
- Number barges by operator, by year built
- Covered, Open and Tank Barges
- 10-Year Asset Value
- New Builds and Retirements
- Turns per year
- Subscriber Webinar
- www.bargefleet.com
Barge Commodity Profile Report

- Fifteenth Annual Report
- Army Corps of Engineers Waterborne Commerce Data
- Internal Domestic Commodity Movements
- Current through Calendar Year 2017
- Commodities Assigned to Barge Type
- IEG Vantage Fundamental Analytics

www.bargefleet.com
Macro Drivers
Key Themes and Trade Issues Impacting Macro Environment

- Trade disputes and tariffs
- Geopolitical events
- Global macroeconomic activity demonstrating mixed opportunity
- Global supply shift underway in volume and location
- Margin compression
- Infrastructure issues, and improvements
- Cropping area, herd and exploration expansion; mine contraction
- Global consumption not slowing, but China is
- Merger and acquisition continues; grain alphabet in jeopardy?
- Farmer, producer, manufacturer profitability at risk
- Technology enhancements and interruption from farm gate to consumer
  - Big data, AI, blockchain, autonomous functions
- Revolving door traders, merchandisers & leadership across supply-chain
- Consumer preferences:
  - Impossible meat, non-GMO, organic, renewables, electric vehicles, emissions
- Weather Still Matters
In 2016, IMO announced the effective date for reduction of marine fuel sulphur is January 1, 2020. Under the global cap, ships required to use marine fuels with sulphur content of no more than 0.5% against current limit of 3.5% to reduce greenhouse gas emissions. The Emission Control Areas (ECAs) will remain at the 2015 standard of 0.1% content.

Ship owners deciding 1) continue using high sulphur fuel oil with scrubbers or exhaust gas cleaning systems; 2) switch to low sulphur fuel options; or 3) LNG fuel.

Impact represents approximately 75% of global marine fuel demand compared to demand of ECA.

In total, 3 million barrels per day of High Sulphur Fuel Oil bunkers will need to switch to 0.5% fuel through blending with gasoil, plus improved logistics segregation.

Refineries adjusting late this year will create supply chain issues.
Barge Fleet
Situation and
Outlook
Fleet Expanded on Covered Developments

Size of Inland Barge Fleet

Year


Total Number Barges

Total

Tank

Dry Covered

Dry Open

Number Barges by Type

0 2,000 4,000 6,000 8,000 10,000 12,000 14,000 16,000 18,000 20,000 22,000 24,000


0 2,000 4,000 6,000 8,000 10,000 12,000 14,000 16,000 18,000 20,000 22,000 24,000

0 2,000 4,000 6,000 8,000 10,000 12,000 14,000 16,000 18,000

IEG Vantage, Barge Fleet Profile
Larger Barge Fleet Despite Slightly Lower Volumes Moved

Size of Inland Barge Fleet

Number Barges by Type

Year

Size of Inland Barge Fleet
Dry Covered Dry Open Tank Tonnage Moved

IEG Vantage, Barge Fleet Profile
Covered Fleet Record Large as Volumes Fall on Dropping Soybean Movements

Size of Inland Barge Dry Covered Fleet

- **Dry Covered**
- **Tonnage Moved**

Number Barges by Type vs. Million Tons Moved over the years from 1990 to 2018.
Open Fleet Expands on Find Back while Volumes Bottom

Size of Inland Barge Dry Open Fleet

IEG Vantage, Barge Fleet Profile
Tank Fleet Expands as Volumes Expand

Size of Inland Barge Tank Fleet

- Tank
- Tonnage Moved

IEG Vantage, Barge Fleet Profile

Year

IEG Vantage | Agribusiness Intelligence
Covered Fleet Dynamics

Covered New Builds, Retirements and Fleet Size

- Retirements
- New Builds
- Covered Fleet

Year

Fleet Size

Number of Covered Barges

IEG Vantage, Barge Fleet Profile
Open Fleet Dynamics

Open New Builds, Retirements and Fleet Size

- **Retirements**
- **New Builds**
- **Open Fleet**

![Graph showing the number of open barges and fleet size over years.](image-url)
Tank Barge Fleet Dynamics

Tank New Builds, Retirements and Fleet Size

- Retirements
- New Builds
- Tank Fleet Size

Year

Number of Tank Barges

Size of Tank Fleet


Retirements
New Builds
Tank Fleet Size
Covered Barge Asset Values Steady

Asset Value of a 10-Year Vintage Covered Barge


Asset Value

$0  $50,000  $100,000  $150,000  $200,000  $250,000  $300,000  $350,000  $400,000  $450,000

IEG Vantage, Barge Fleet Profile
Barge Commodity Situation and Outlook
Covered Barge Commodities on the Inland Navigation System (tons)

- Farm Prod.: 55%
- Flour, Animal Feed & Gr. Prod.: 5%
- Metallic Ores: 4%
- Primary Metal Prod.: 9%
- Nonmetallic Minerals, Except Fuel: 6%
- Chemicals & Allied Prod.: 12%
- Lumber, Wood, Pulp & Allied Prod.: 0%
- Soil, Sand, Rock & Stone: 1%
- Stone, Clay, Glass & Concrete Prod.: 7%
- Other & Misc.: 1%

- Corn: 35%
- Wheat: 12%
- Soybeans: 36%
- Barley, Oats, Rye and Rice: 3%
- Food Kindered: 13%
- Sorghum Grains: 1%
- Lumber, Wood, Pulp & Allied Prod.: 0%
- Metallic Ores: 4%
- Flour, Animal Feed & Gr. Prod.: 5%
Covered Barge Commodities on the Inland Navigation System (tonmiles)

- Farm Prod.: 57%
- Flour, Animal Feed & Gr. Prod.: 6%
- Metallic Ores: 4%
- Primary Metal Prod.: 7%
- Nonmetallic Minerals, Except Fuel: 8%
- Chemicals & Allied Prod.: 13%
- Stone, Clay, Glass & Concrete Prod.: 4%
- Soil, Sand, Rock & Stone: 1%
- Other & Misc.: 0%

- Corn: 40%
- Soybeans: 35%
- Wheat: 8%
- Food Kindered: 14%
- Barley, Oats, Rye and Rice: 2%
- Sorghum Grains: 1%
Commodity Tons and Tonmiles on the Inland Navigation System in Total and for Liquid Tank Market
Commodity Tons and Tonmiles on the Inland Navigation System by for the Dry Barge Sectors

Domestic Covered Barge Traffic

Domestic Open Barge Traffic

Year

Million Tons

Billion Tonmiles

Dry Tons

Dry Tonmiles

Dry Tons

Dry Tonmiles
Barge Pressure Index
Covered Barge

Covered Barge Utilization

Covered Barge Utilization on Ton-mile Basis
Barge Pressure Index
Tank Barge
Barge Freight Rates
Covered Barge Freight Rates Fall on Demand Pull Back Amidst Waterway Interruption

Illinois River Barge Freight Rate (percent of tariff) by Crop Year (Sep/Aug)

Week
Percent of Tariff
Questions?