



# State of the Inland Barge Industry

IEG Vantage  
Agribusiness intelligence | informa



Ken Eriksen, Senior Vice President  
May 21, 2019



@IEG\_Vantage  
@keriksen

# Charting the Course

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- ▶ **IEG Vantage**
- ▶ **Product Descriptions**
  - **Barge Fleet Profile**
  - **Barge Commodity Profile**
- ▶ **Macro Drivers**
- ▶ **Barge Fleet Situation and Outlook**
- ▶ **Barge Commodity Situation and Outlook**
- ▶ **Barge Freight Rates**
- ▶ **Questions and Answers**



# IEG Vantage



# Agribusiness intelligence

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## Agribusiness Consulting

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## IEG Vantage

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## IEG Vu

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## IEG Policy

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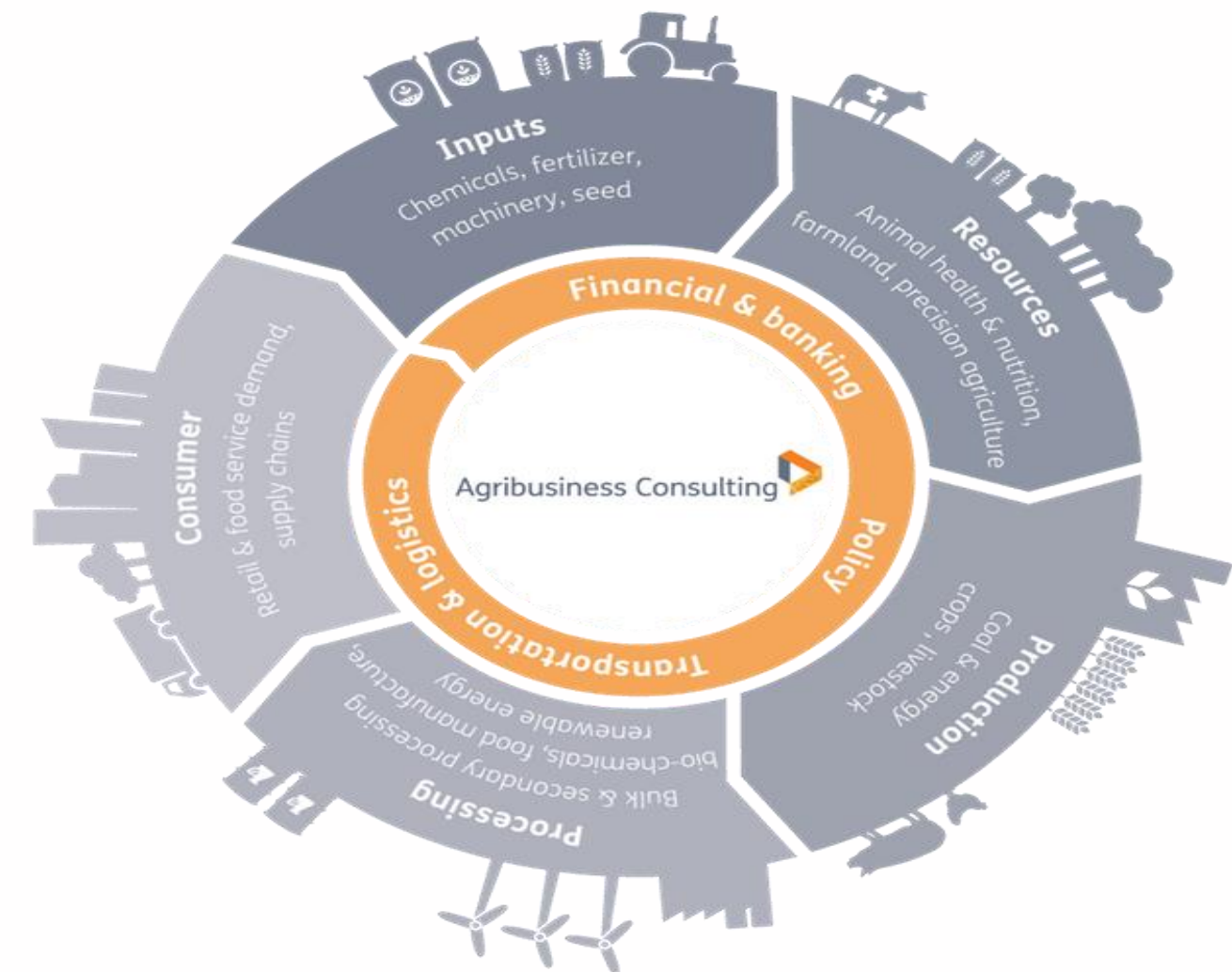
Animal Pharm  
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DTC  
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Fertecon  
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International Sugar Journal  
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Phillips McDougall  
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# 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](http://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](http://www.bargefleet.com)



# Macro Drivers





# Key Themes and Trade Issues Impacting Macro Environment

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- ▶ **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**



# International Maritime Organization (IMO) 2020

- 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.

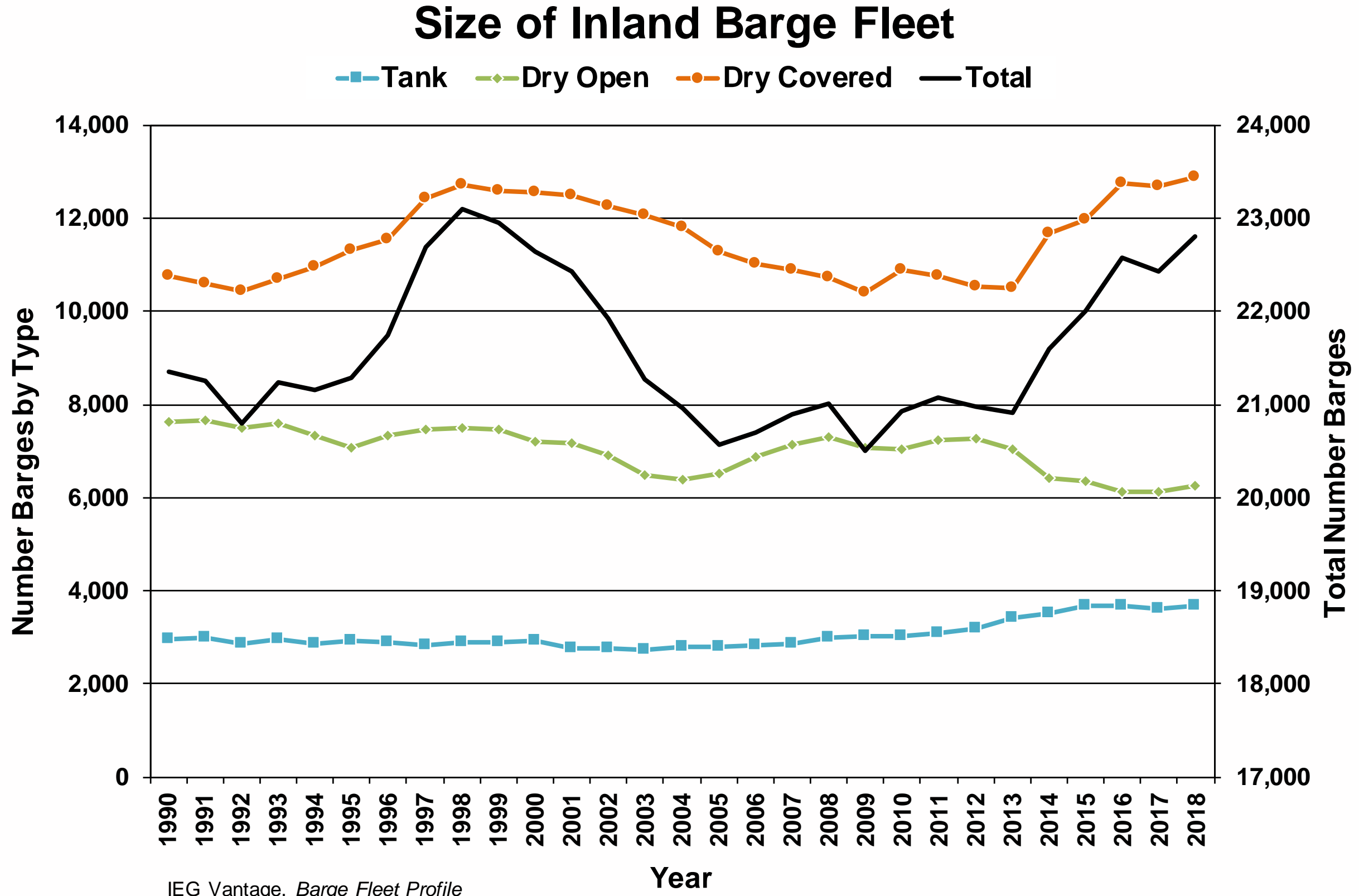
0.1/0.5% Fuel Oil	MGO/DMA	Scrubber New/Retrofit	LNG New Build/Retrofit
			
<ul style="list-style-type: none"> <li>■ Minimise operational difficulty and cost</li> <li>■ Variability of quality of blends per supplier</li> <li>■ Only a few suppliers can offer reliable supply</li> </ul>	<ul style="list-style-type: none"> <li>■ Convenient and widely available</li> <li>■ Operational experience in industry</li> <li>■ Higher cost</li> <li>■ Thermal shock and lubricity issues</li> </ul>	<ul style="list-style-type: none"> <li>■ Cheaper fuel and quick payback</li> <li>■ Limited operating experience</li> <li>■ Ship stability and space</li> <li>■ Safe sludge handling and disposal necessary</li> </ul>	<ul style="list-style-type: none"> <li>■ Proven technology and reduction SO<sub>x</sub>, NO<sub>x</sub> and PM</li> <li>■ Lower GHG emissions</li> <li>■ Growing availability</li> <li>■ Cost advantage to MGO/DMA</li> </ul>



# Barge Fleet Situation and Outlook



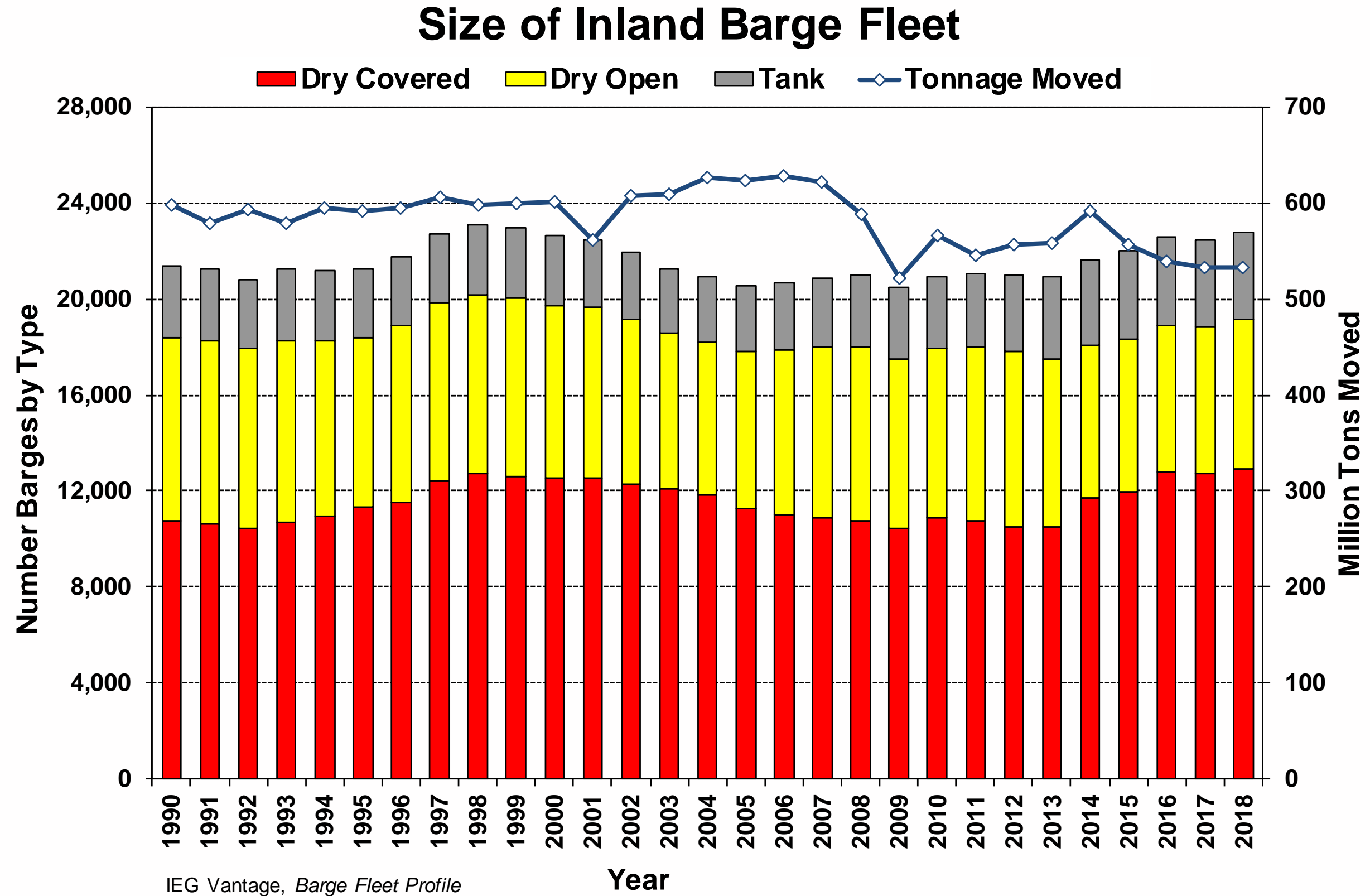
# Fleet Expanded on Covered Developments



IEG Vantage, *Barge Fleet Profile*

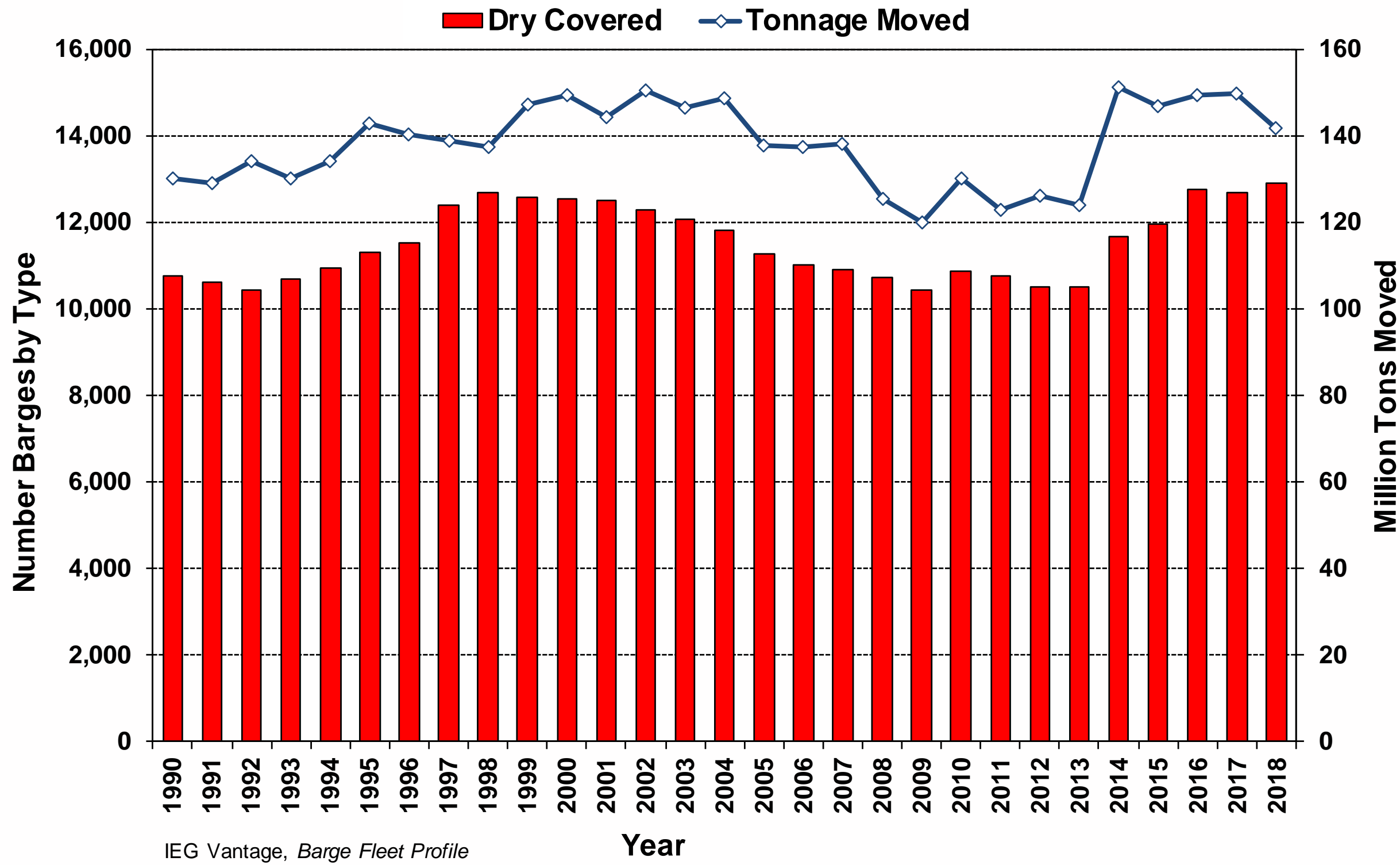


# Larger Barge Fleet Despite Slightly Lower Volumes Moved



# Covered Fleet Record Large as Volumes Fall on Dropping Soybean Movements

## Size of Inland Barge Dry Covered Fleet

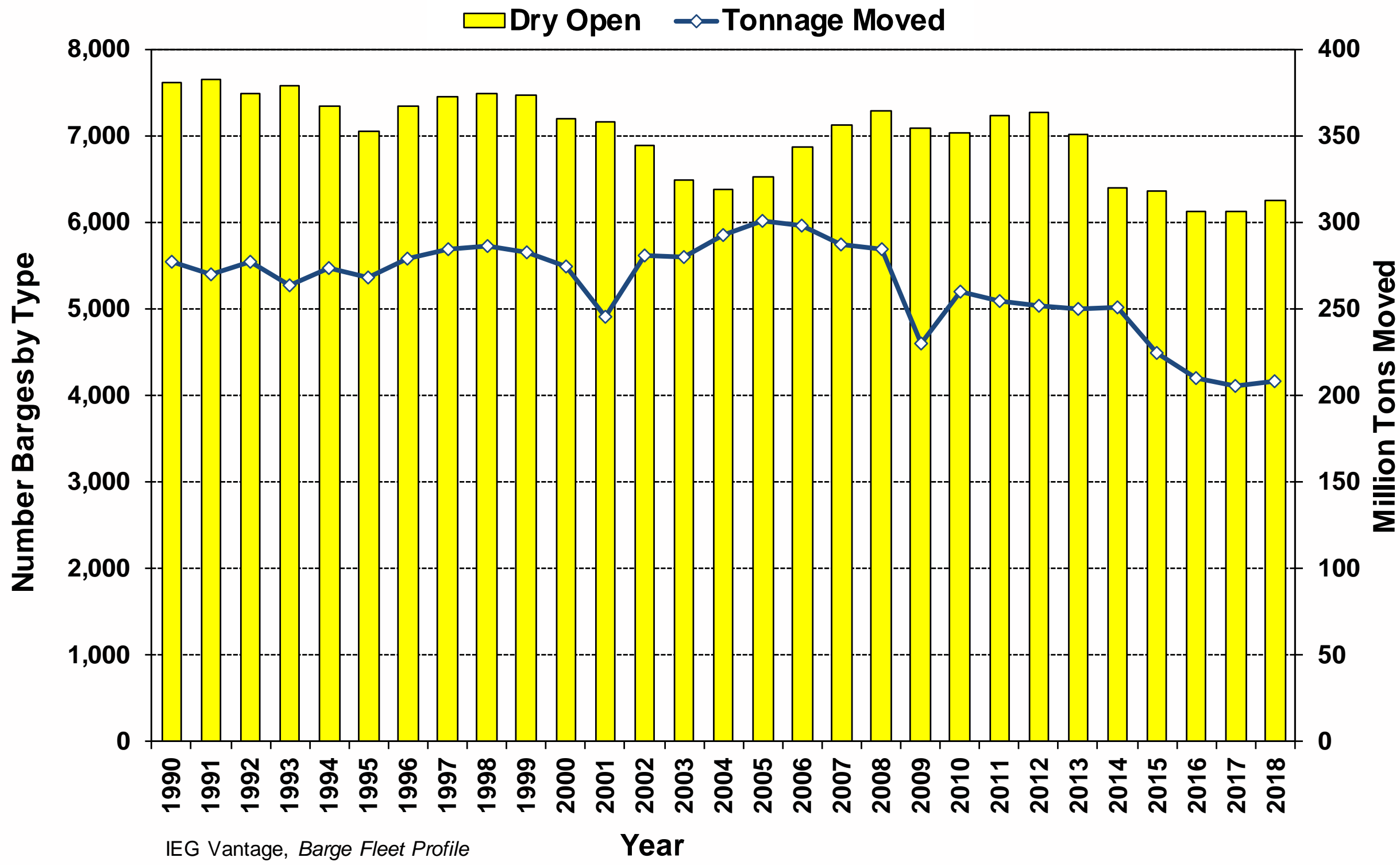


IEG Vantage, Barge Fleet Profile



# Open Fleet Expands on Find Back while Volumes Bottom

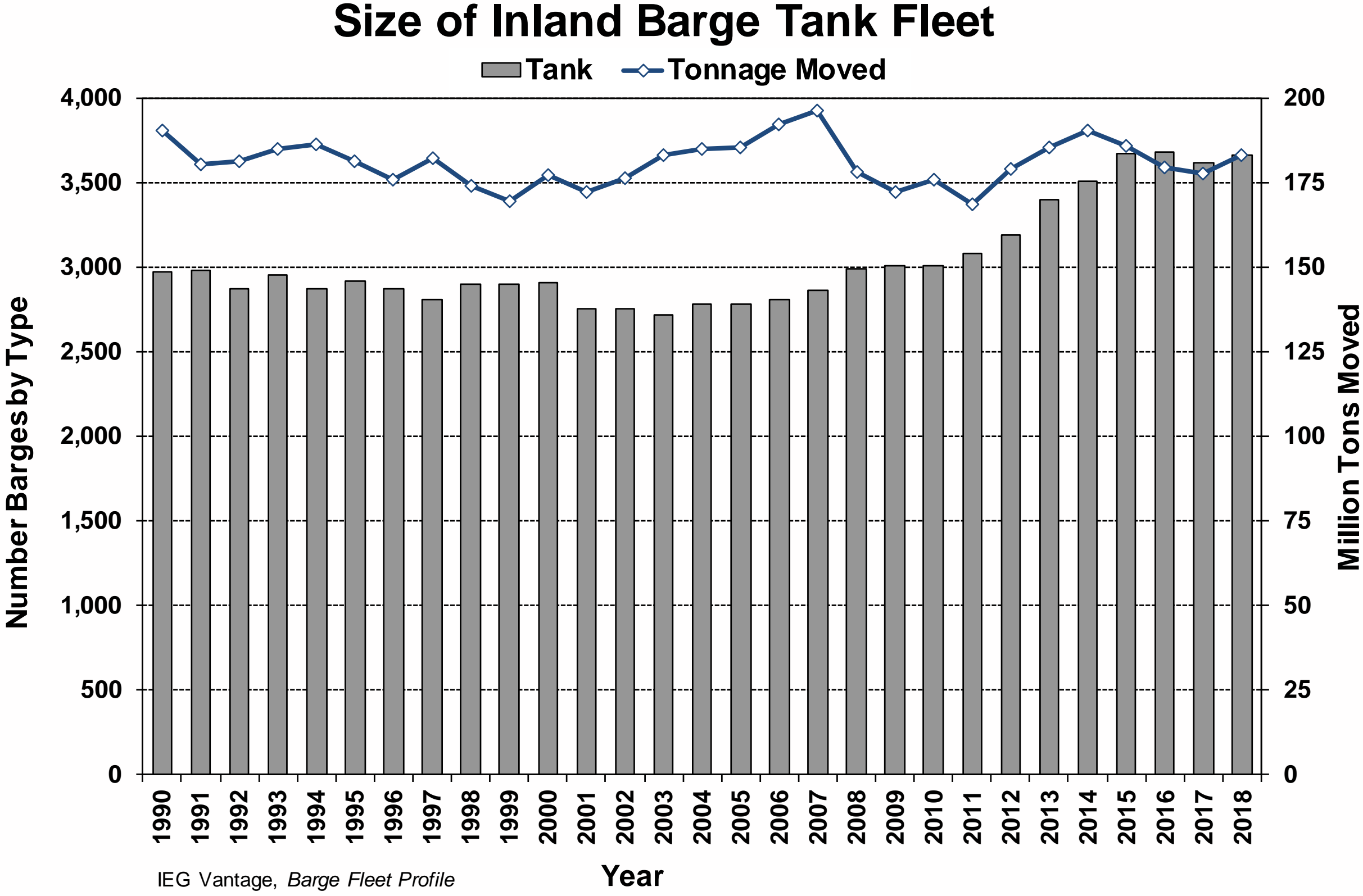
## Size of Inland Barge Dry Open Fleet



IEG Vantage, Barge Fleet Profile



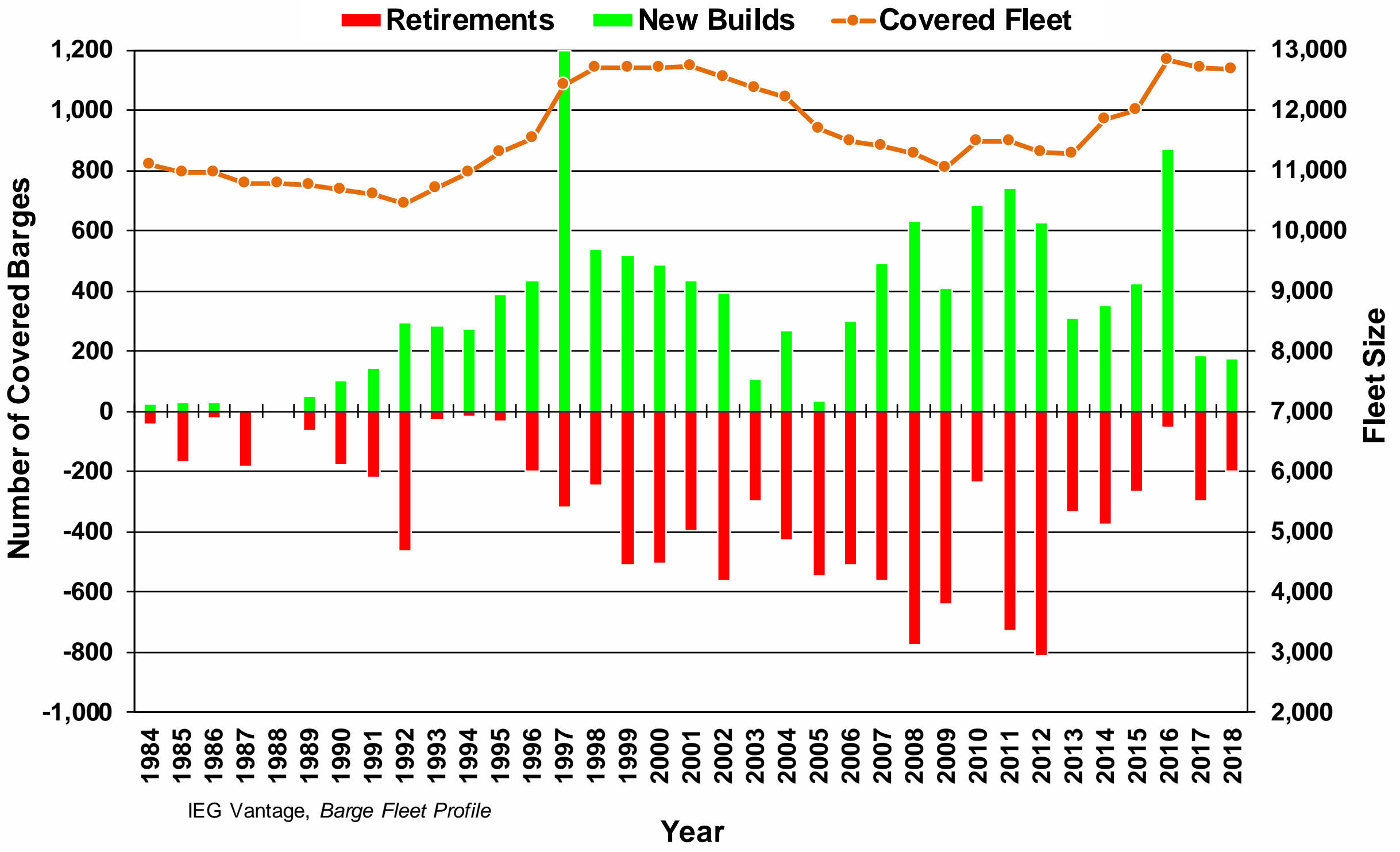
# Tank Fleet Expands as Volumes Expand





# Covered Fleet Dynamics

## Covered New Builds, Retirements and Fleet Size

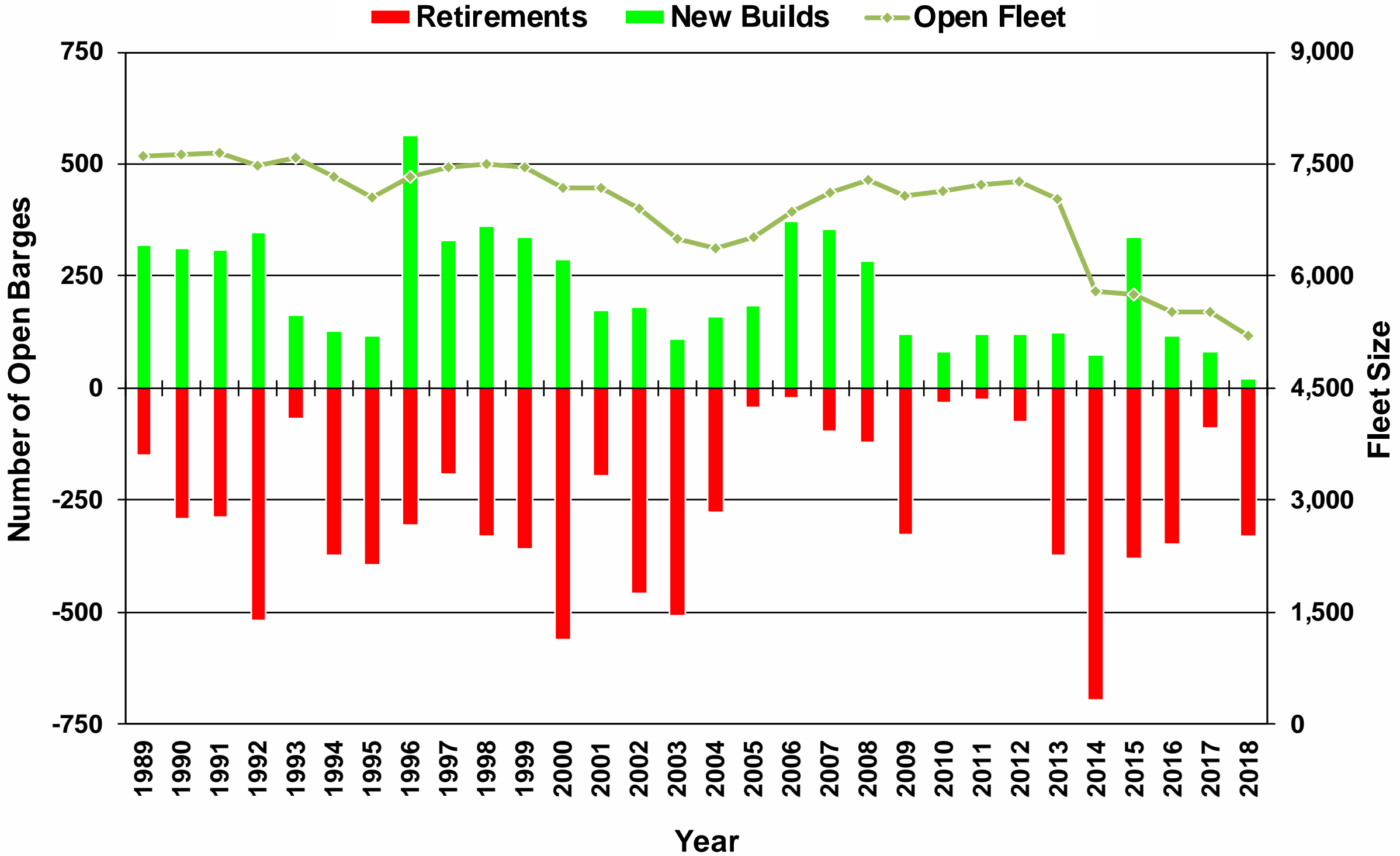


IEG Vantage, Barge Fleet Profile



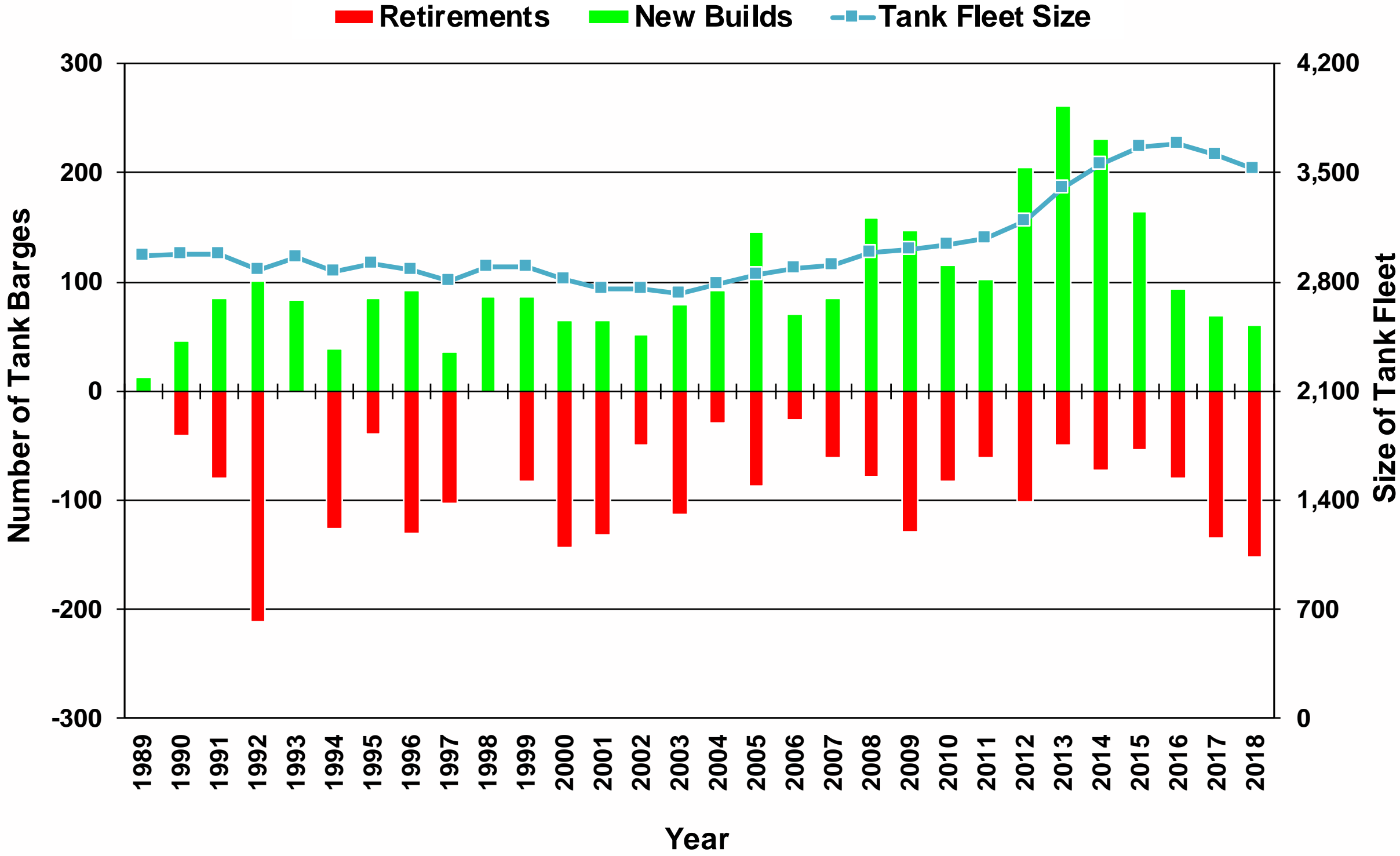
# Open Fleet Dynamics

## Open New Builds, Retirements and Fleet Size



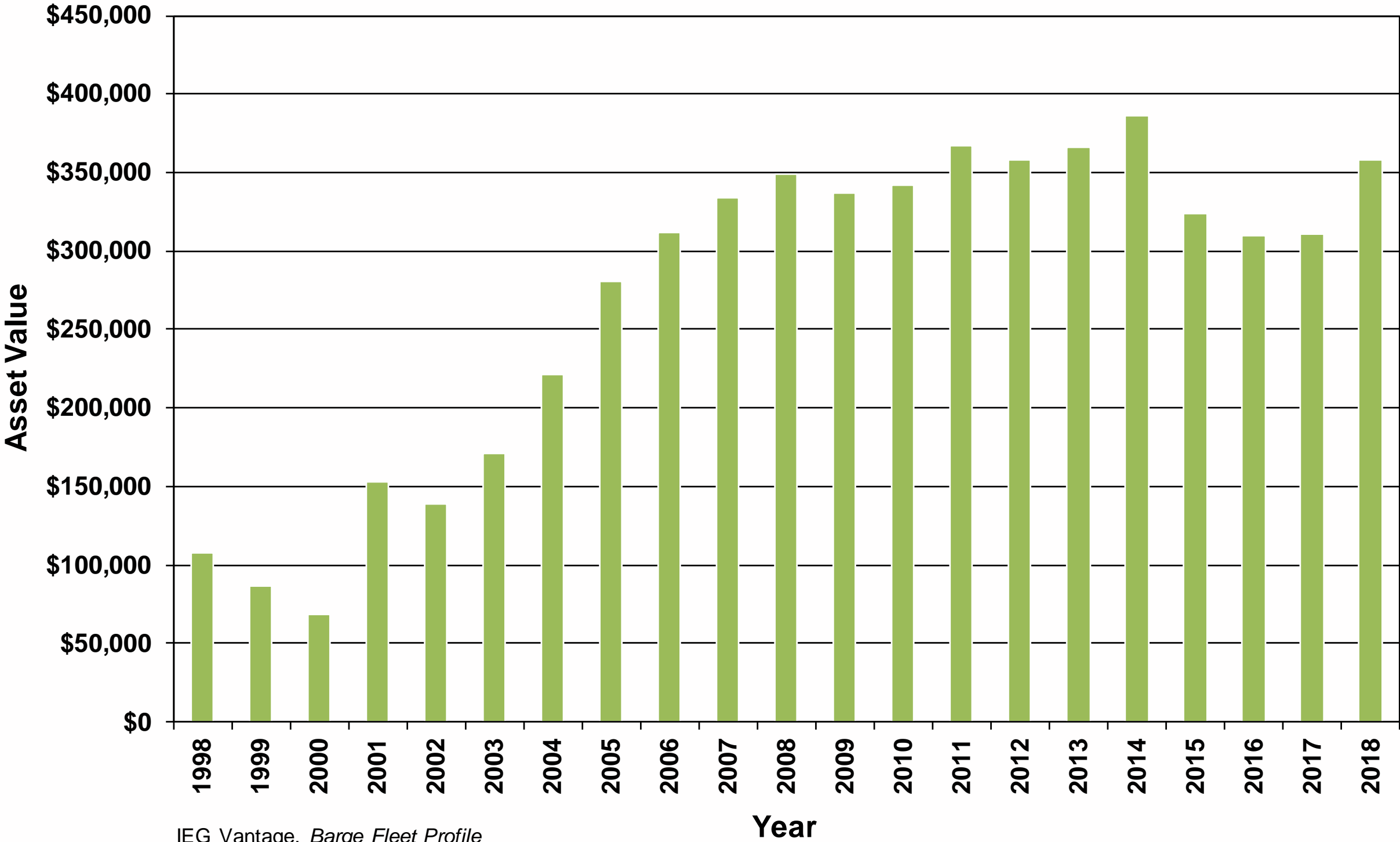
# Tank Barge Fleet Dynamics

## Tank New Builds, Retirements and Fleet Size



# Covered Barge Asset Values Steady

## Asset Value of a 10-Year Vintage Covered Barge



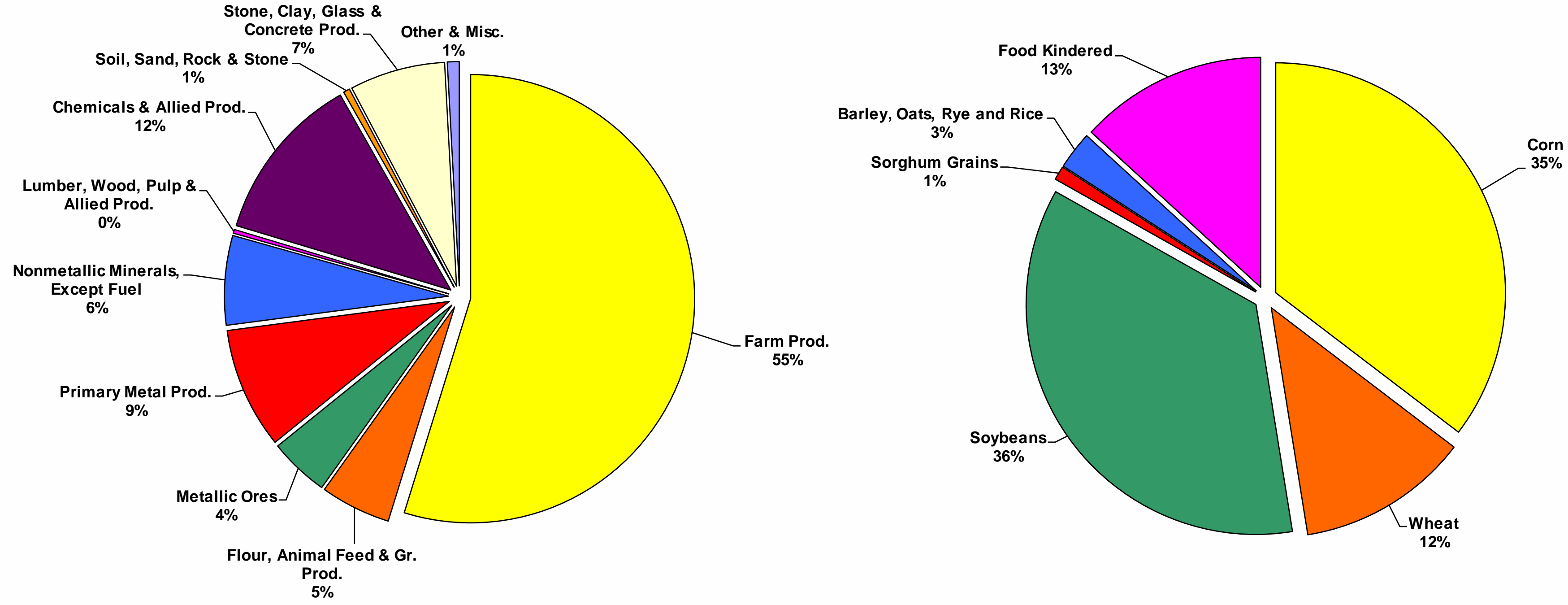
IEG Vantage, *Barge Fleet Profile*



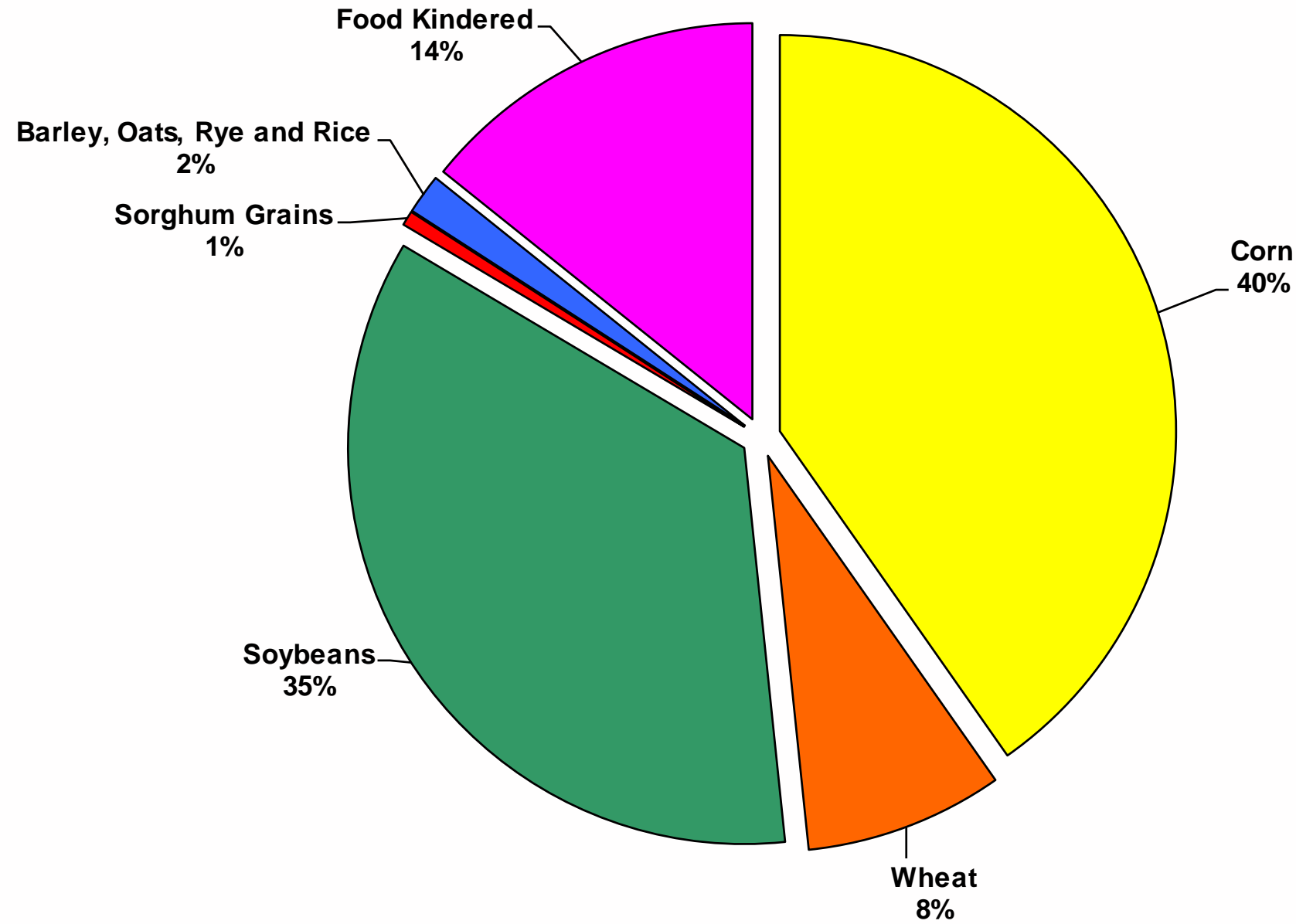
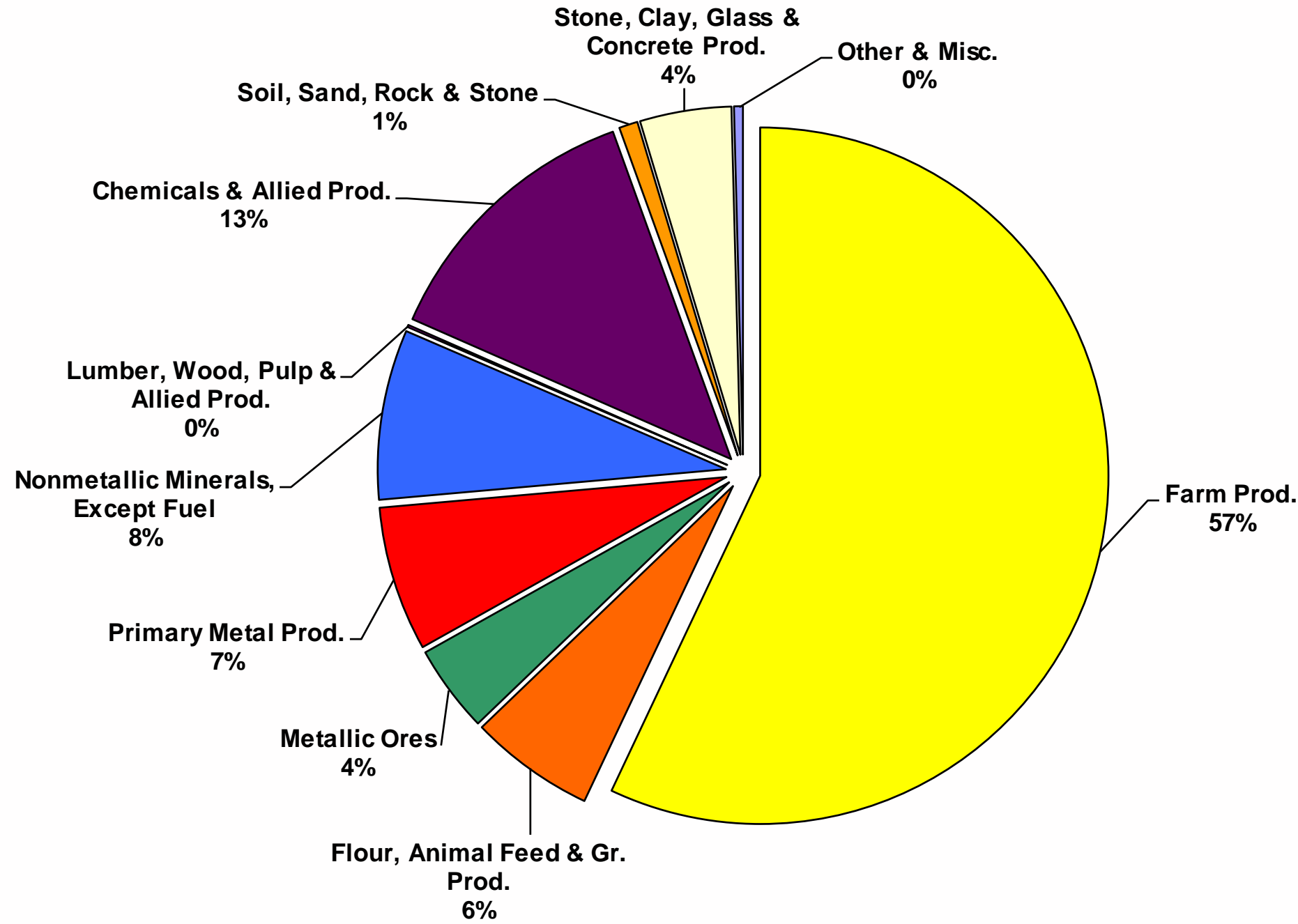
# Barge Commodity Situation and Outlook



# Covered Barge Commodities on the Inland Navigation System (tons)



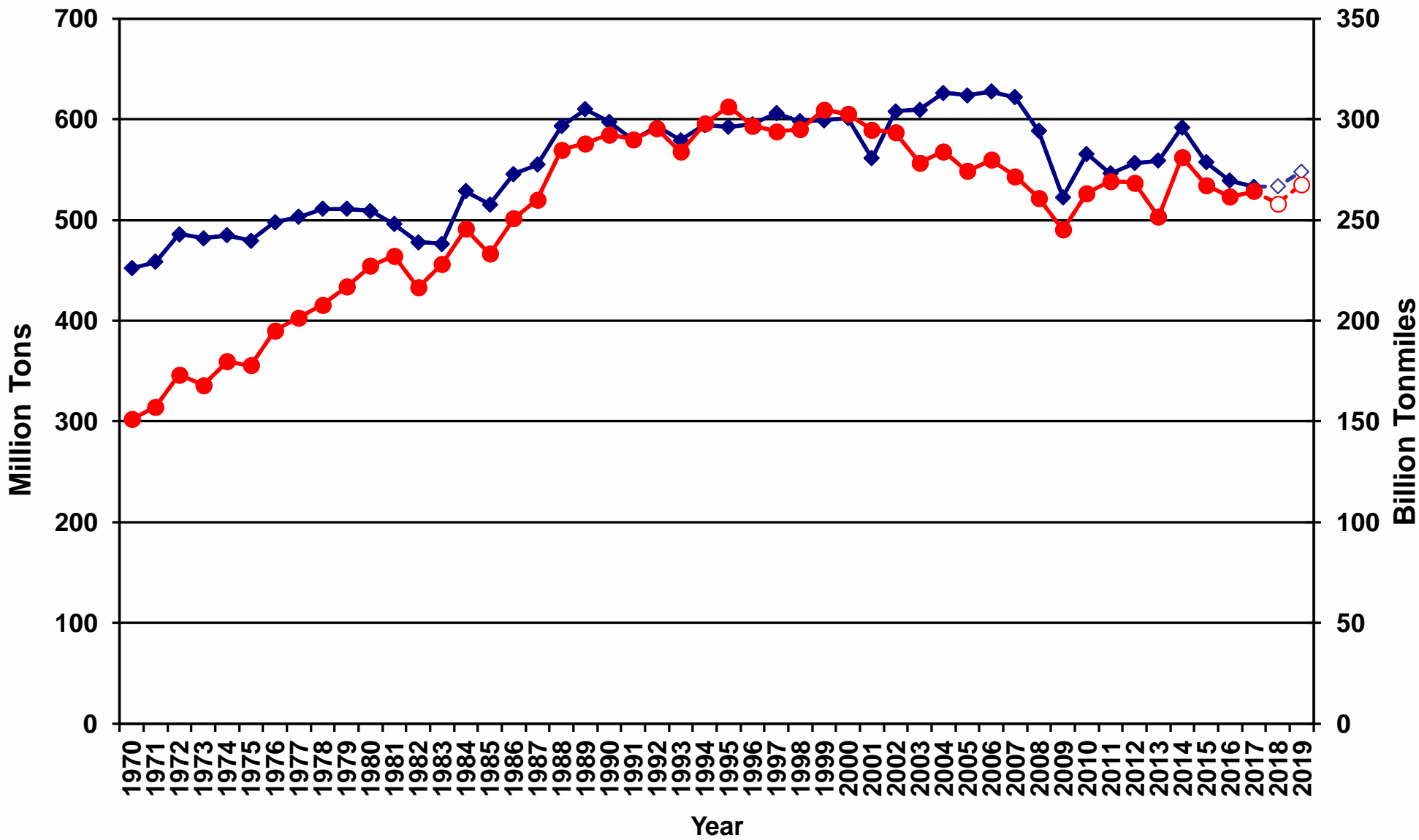
# Covered Barge Commodities on the Inland Navigation System (tonmiles)



# Commodity Tons and Tonmiles on the Inland Navigation System in Total and for Liquid Tank Market

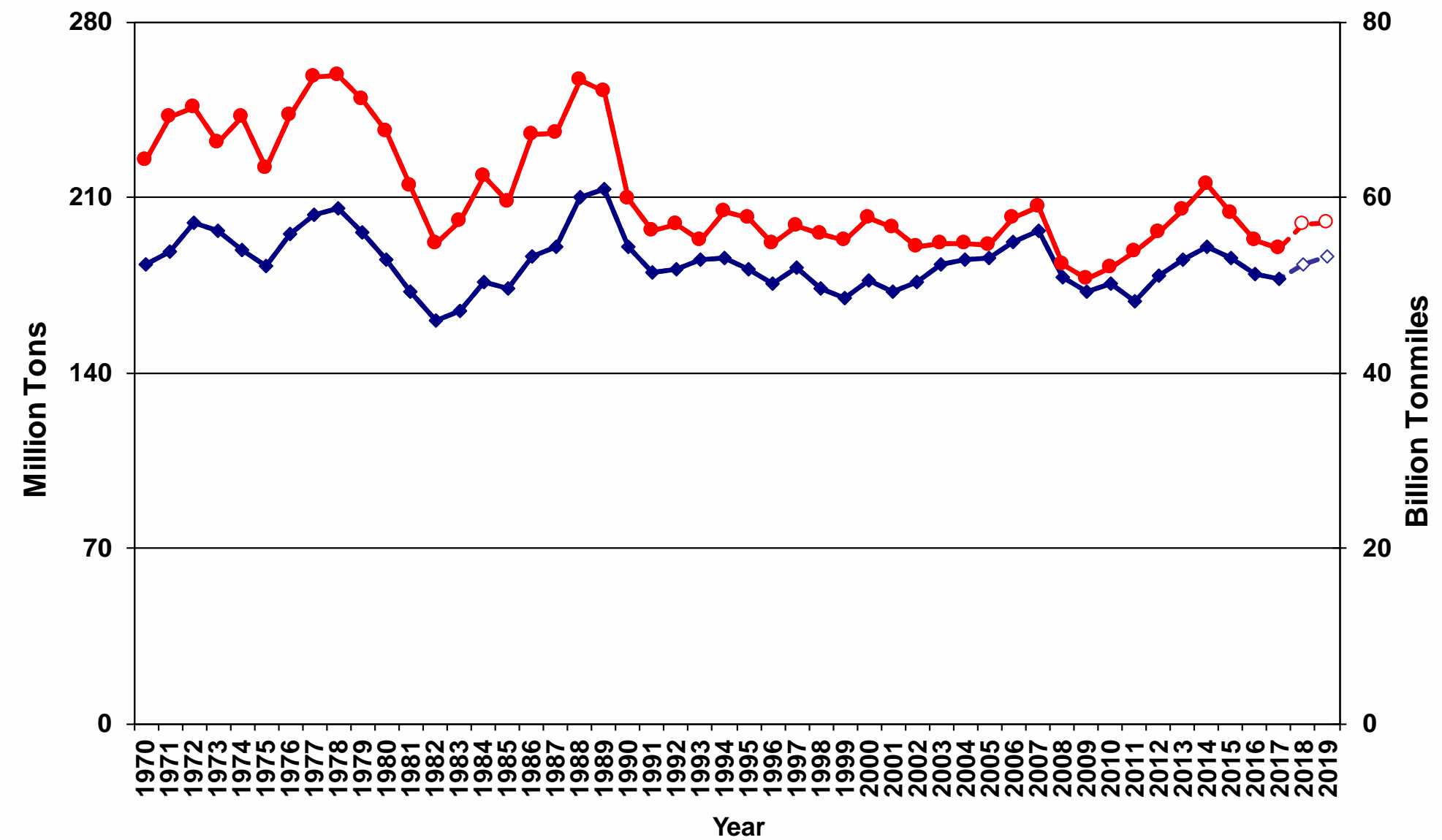
## Domestic Barge Traffic

◆ Tons ● Tonmiles



## Domestic Liquid Barge Traffic

◆ Tank Tons ● Tank Tonmiles

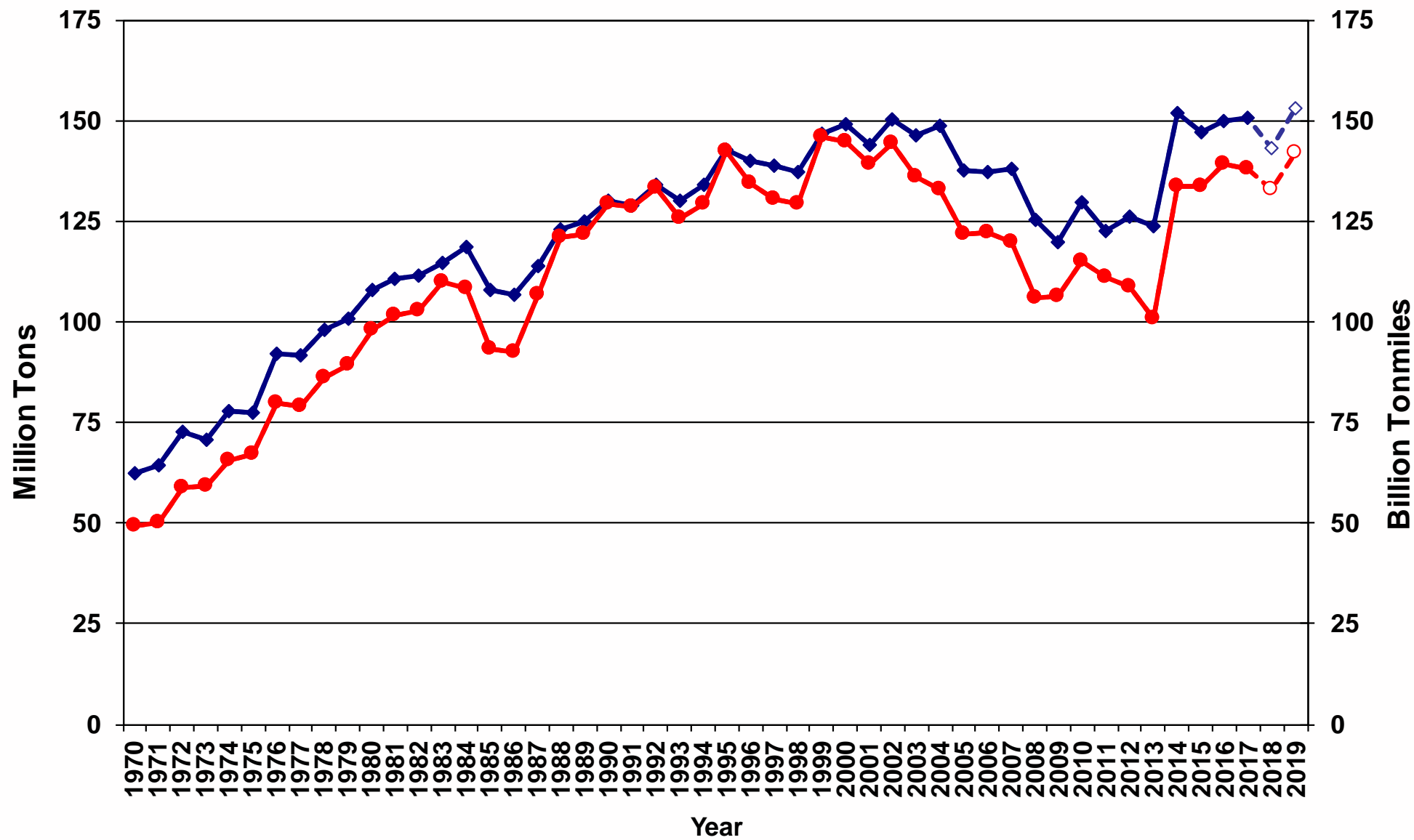




# Commodity Tons and Tonmiles on the Inland Navigation System by for the Dry Barge Sectors

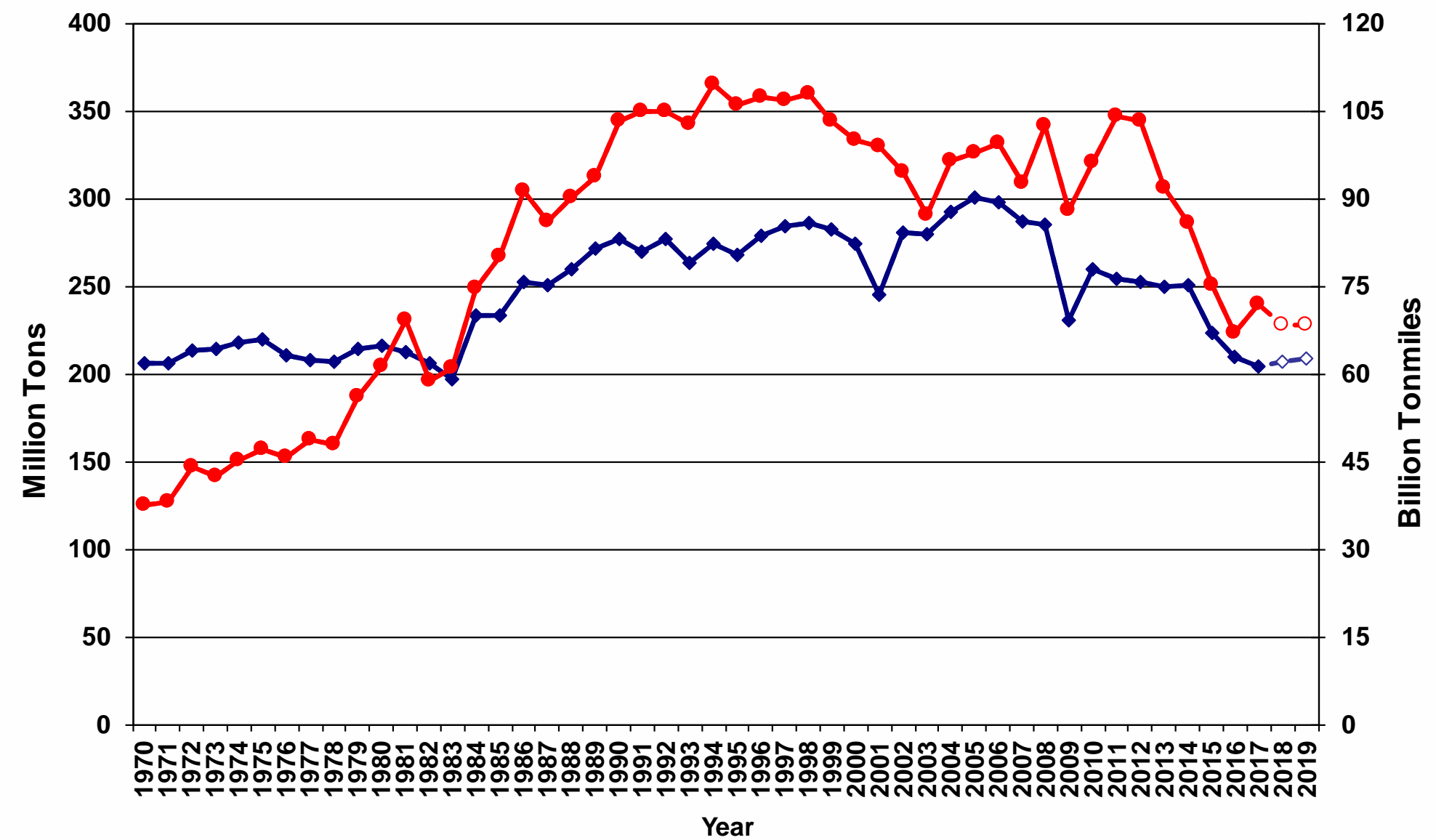
## Domestic Covered Barge Traffic

◆ Dry Tons ● Dry Tonmiles



## Domestic Open Barge Traffic

◆ Dry Tons ● Dry Tonmiles

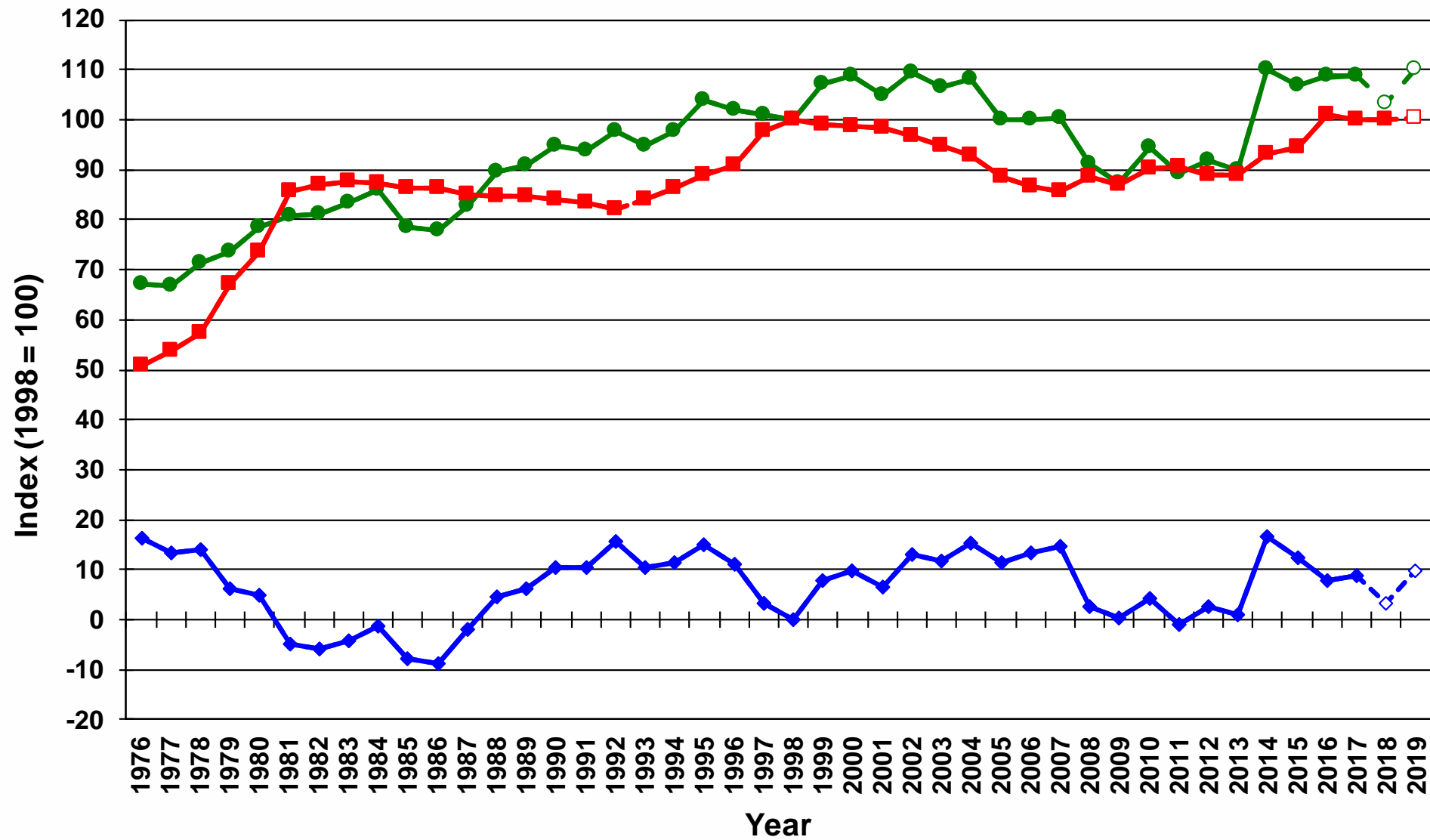


# Barge Pressure Index

## Covered Barge

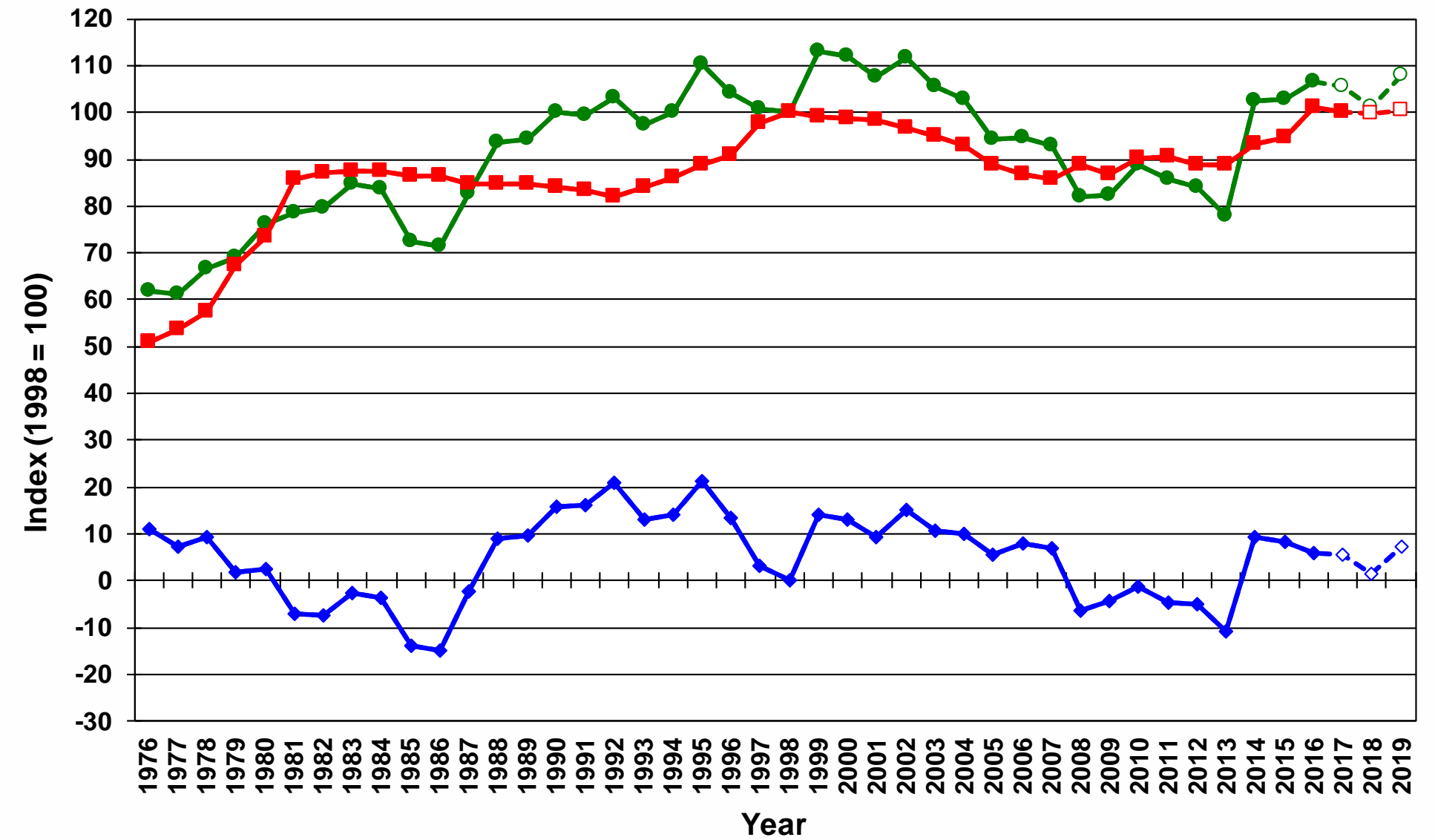
### Covered Barge Utilization

● Tonnage ■ Covered Barge ◆ Informa's Covered BPI



### Covered Barge Utilization on Ton-mile Basis

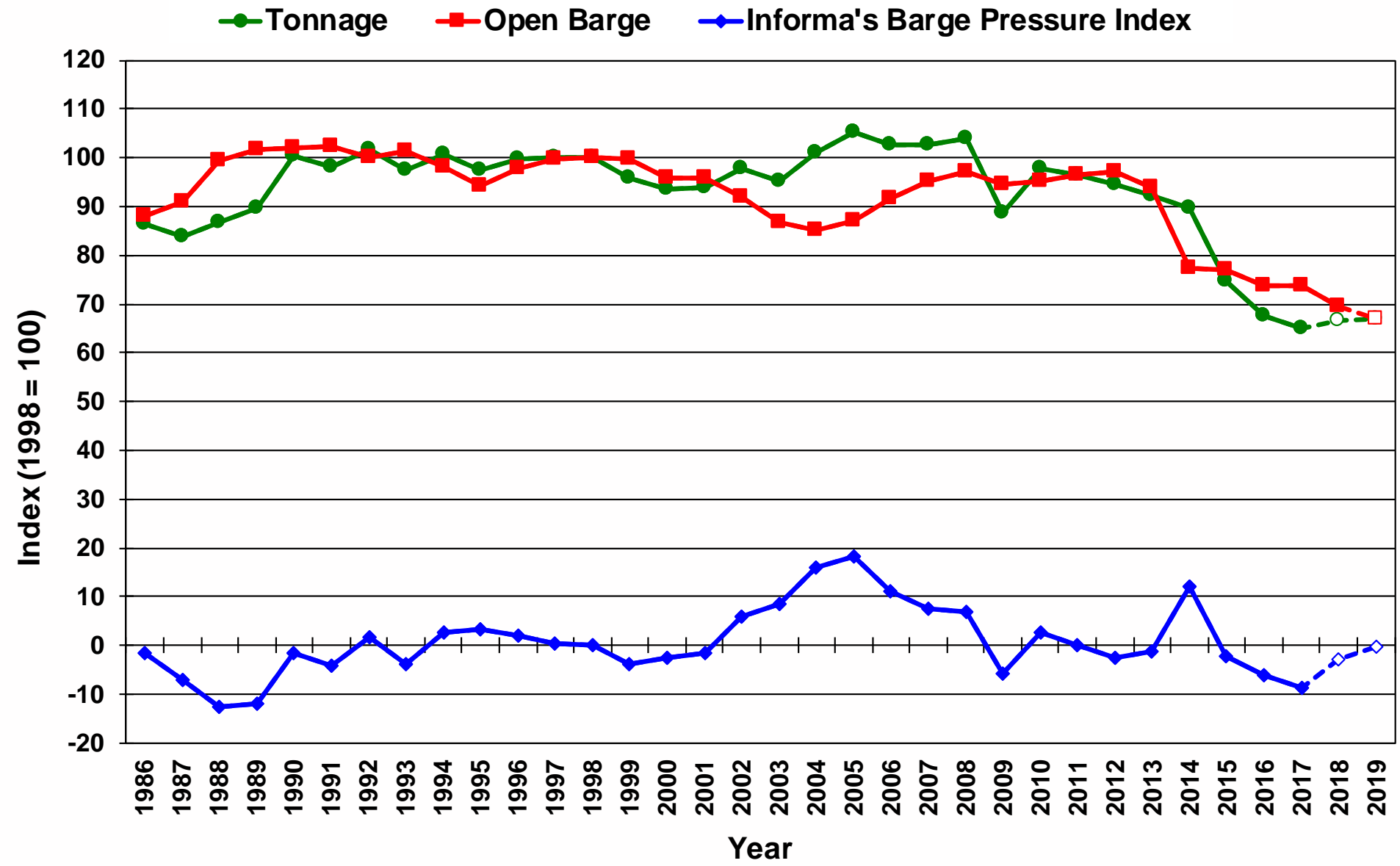
● Tonnage ■ Covered Barge ◆ Informa's Covered BPI



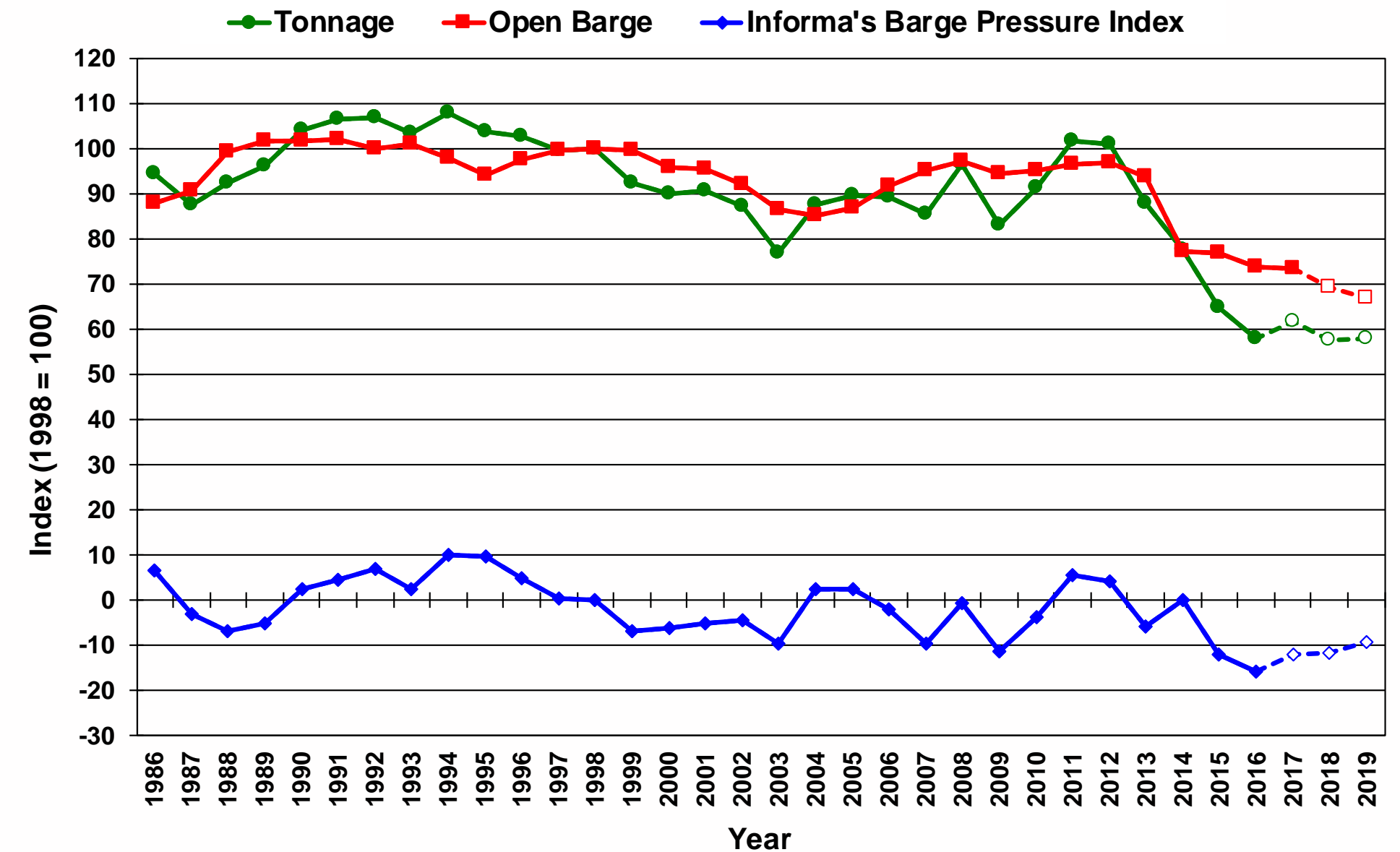
# Barge Pressure Index

## Open Barge

### Open Barge Utilization



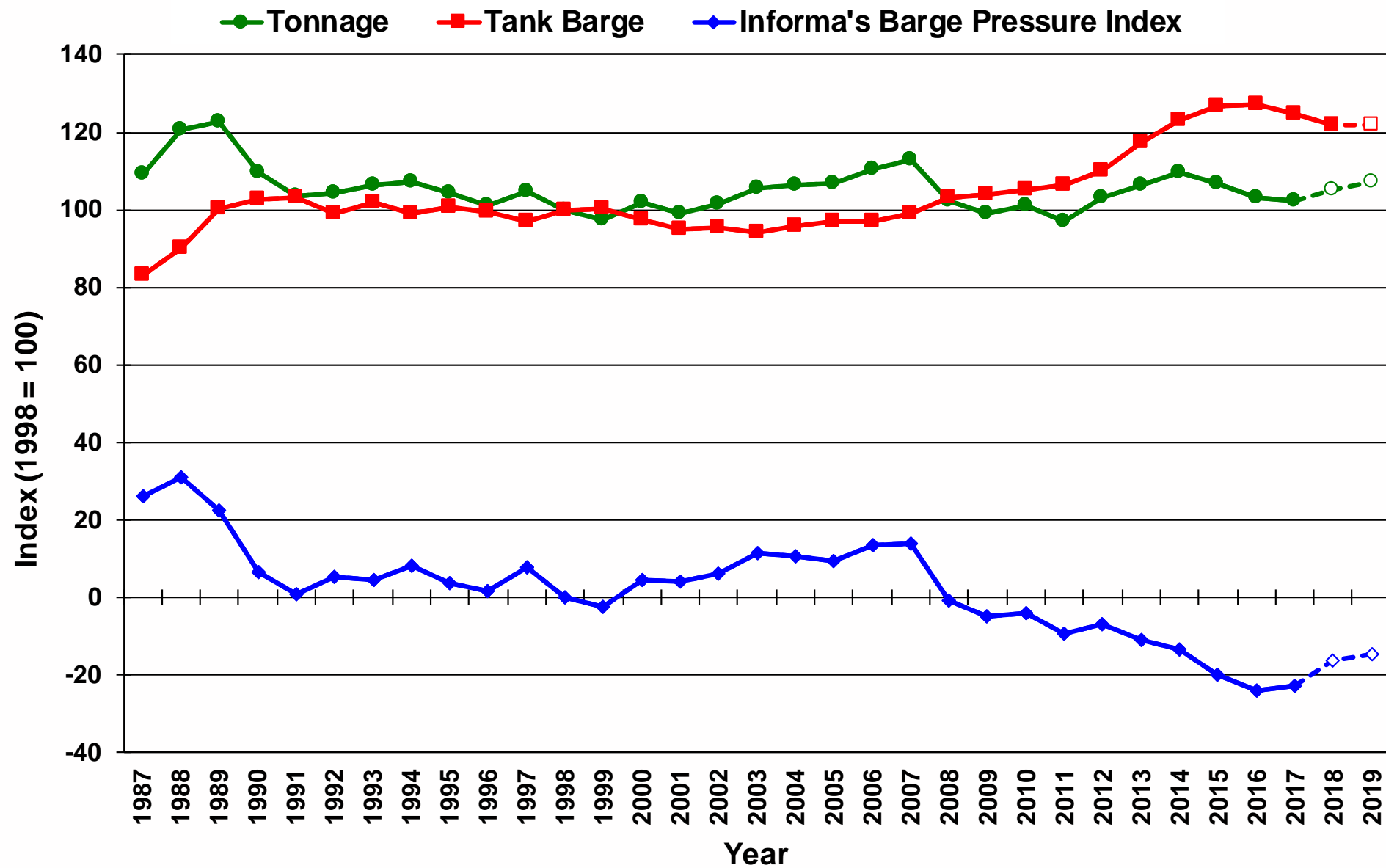
### Open Barge Utilization on Tonmile Basis



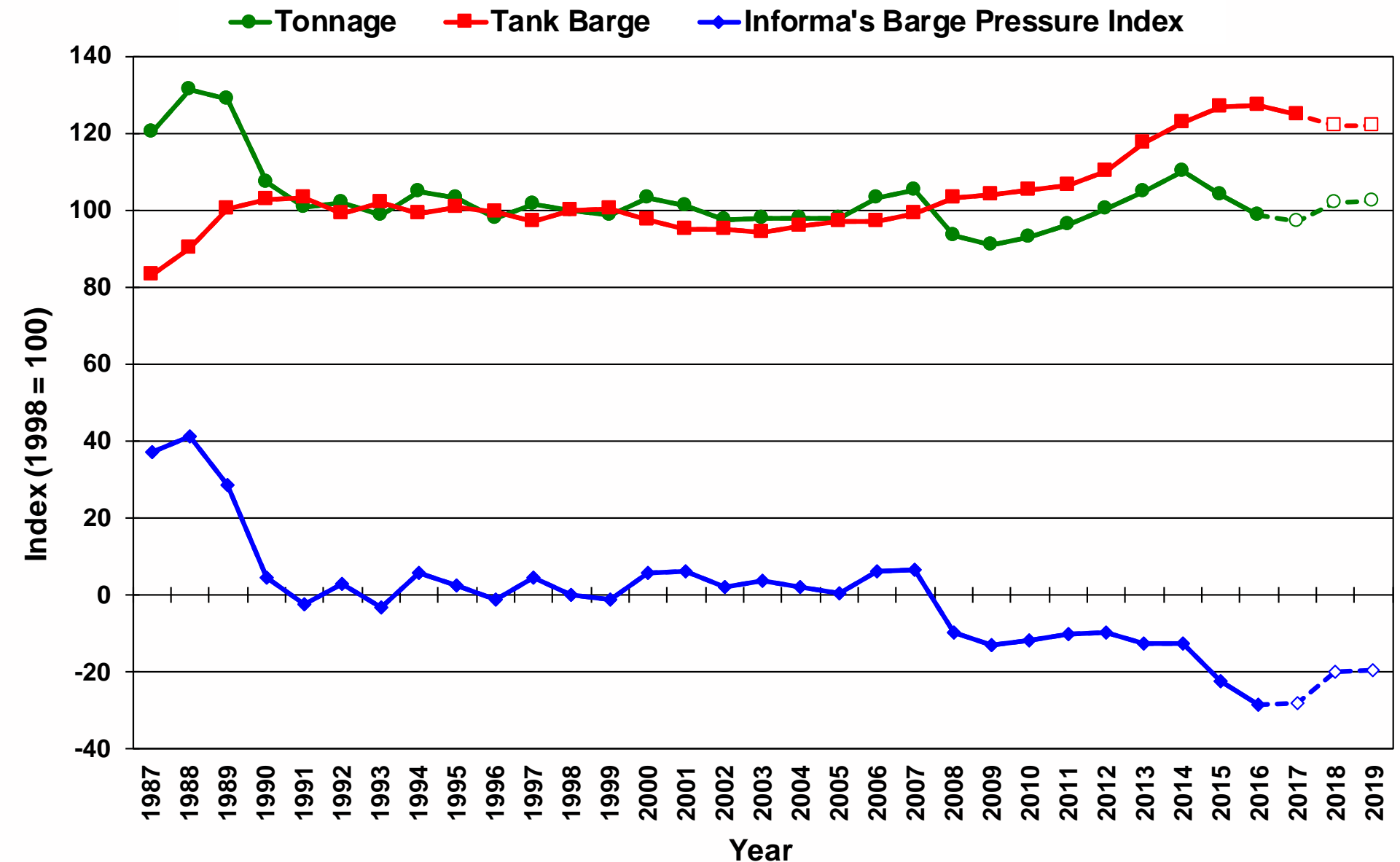
# Barge Pressure Index

## Tank Barge

### Tank Barge Utilization



### Tank Barge Utilization on Tonmile Basis

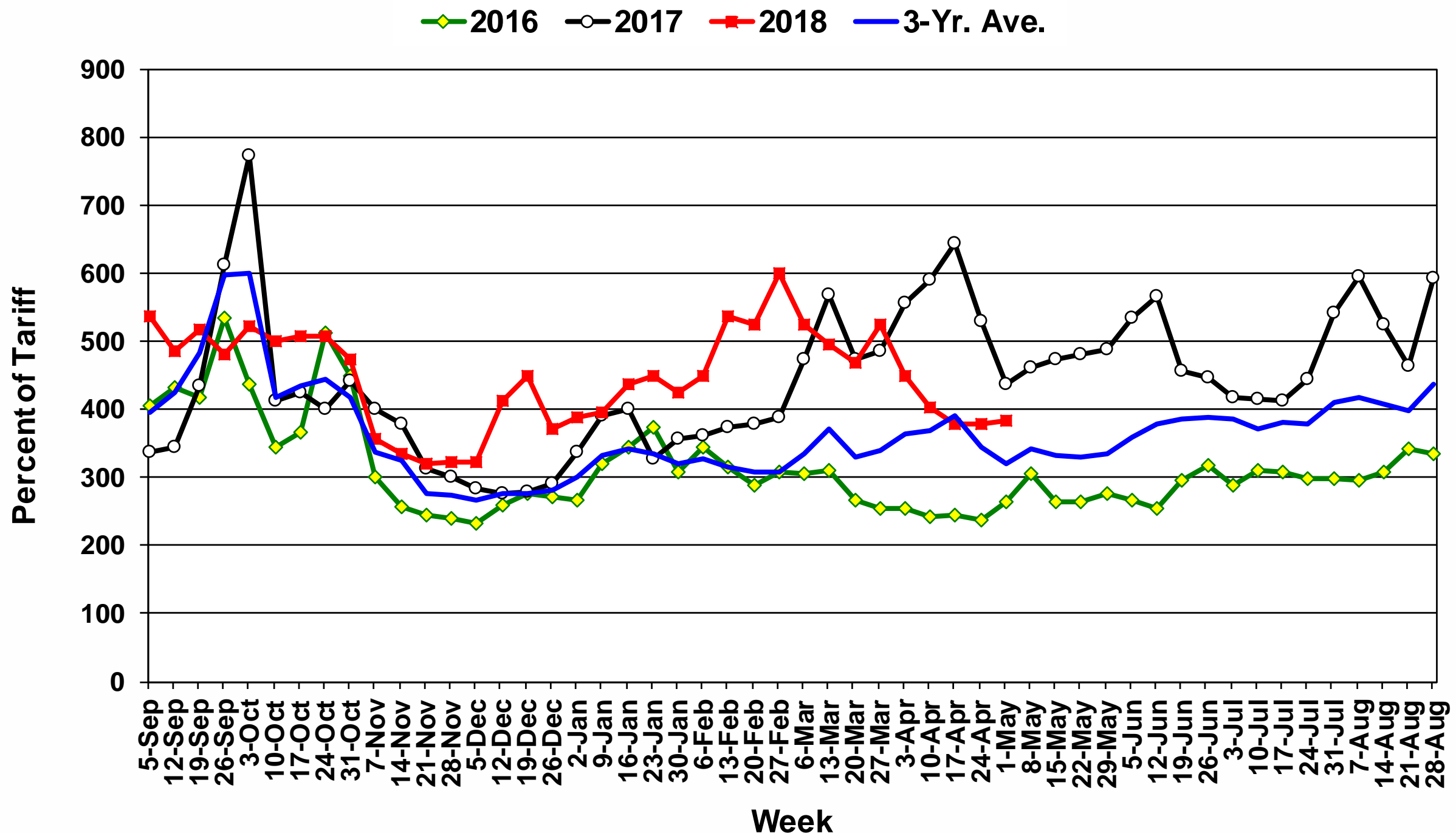


# Barge Freight Rates



# 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)





Questions?



IEG Vantage

775 Ridge Lake Blvd

Suite 400

Memphis, TN 38120

T

E

W

+1 901 202 4600

[info@informa.com](mailto:info@informa.com)

[www.agribusinessintelligence.com](http://www.agribusinessintelligence.com)