Maritime Development Center

RoRo & RoPax Market

”Challenges and Opportunities”

Source: Navitaship; ShipPax

Agenda

- Before the Crisis
- RoRo Market
- RoPax Market
- Challenges
- Opportunities
- Questions

Before the Crisis

- RoRo/RoPax markets enjoyed healthy growth in freight volumes.
- Development and expansion of route network by operators.
- High profitability.
- Charter market enjoyed historical high rates.
- Large orderbooks and high contract values.
- Vintage tonnage went through life extension.
- Deficit of tonnage and high demand.

What does the market look like in terms of tonnage profile?

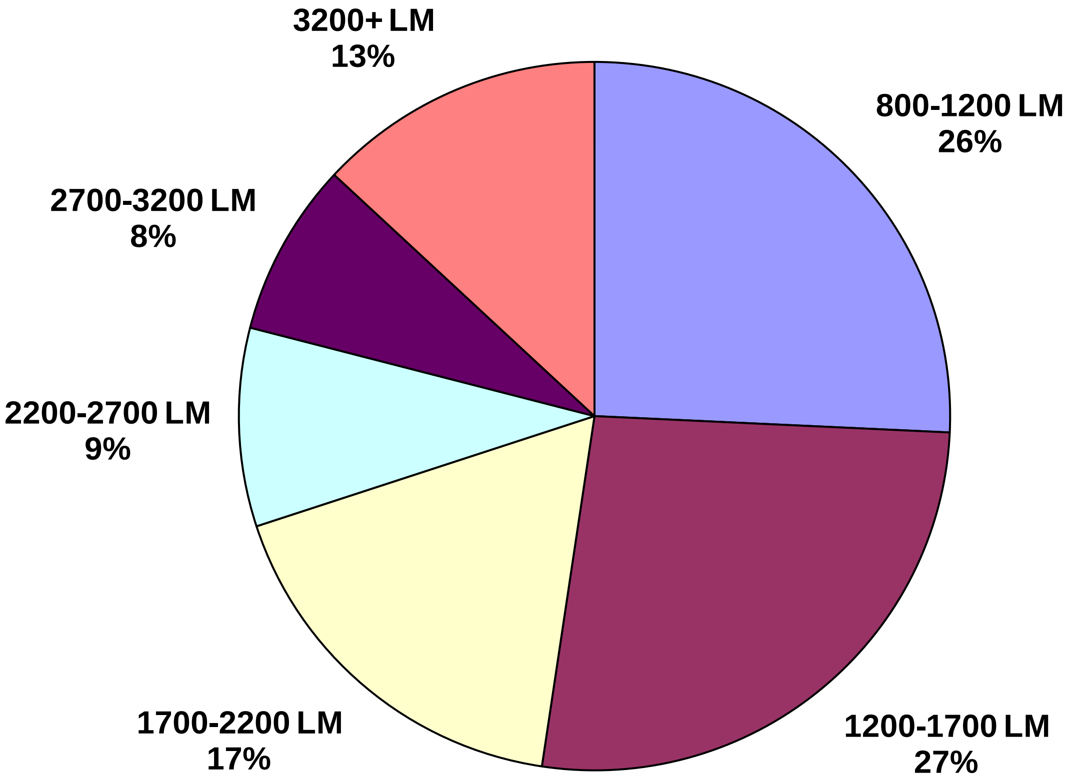
RoRo Definition

- Vessel with RoRo Capacity
- Minimum 800 Lanemeters
- Passenger capacity of maximum 12 persons

- Maximum 1,800 cars
- Maximum 2.0 cars per Lanemeter

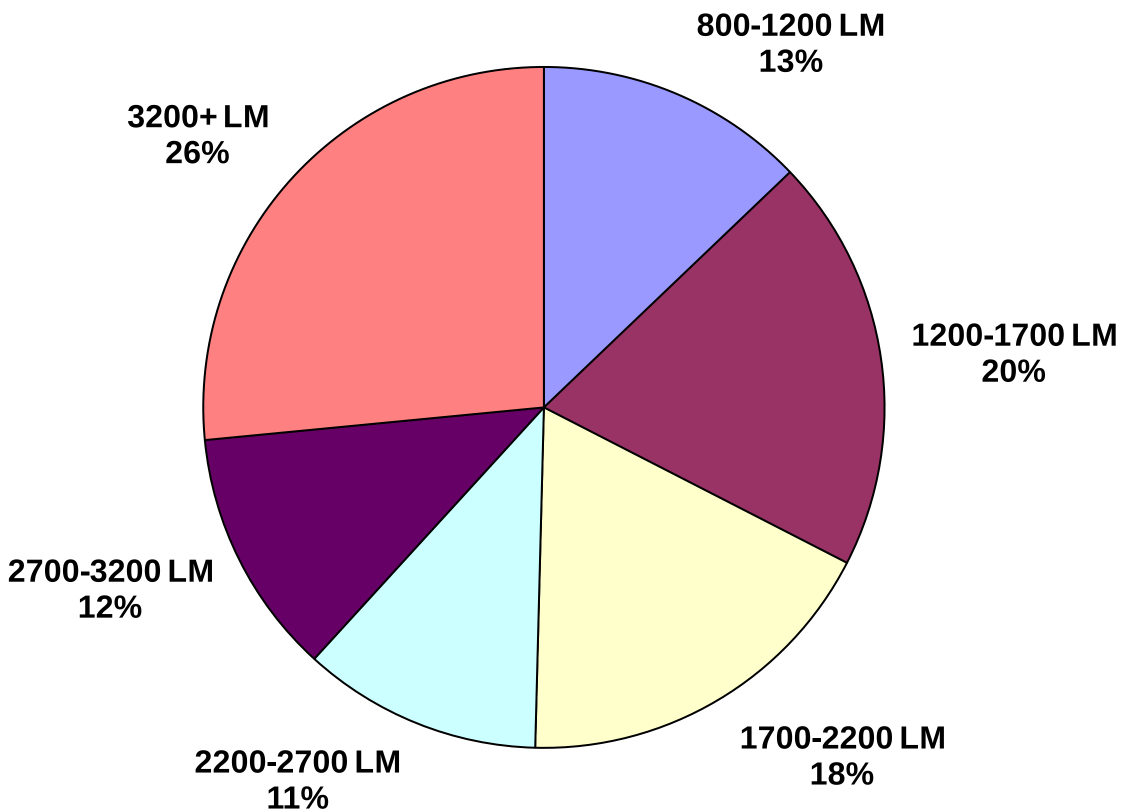
  (To avoid typical car carriers)

RoRo Fleet Composition
(No. of Vessels)



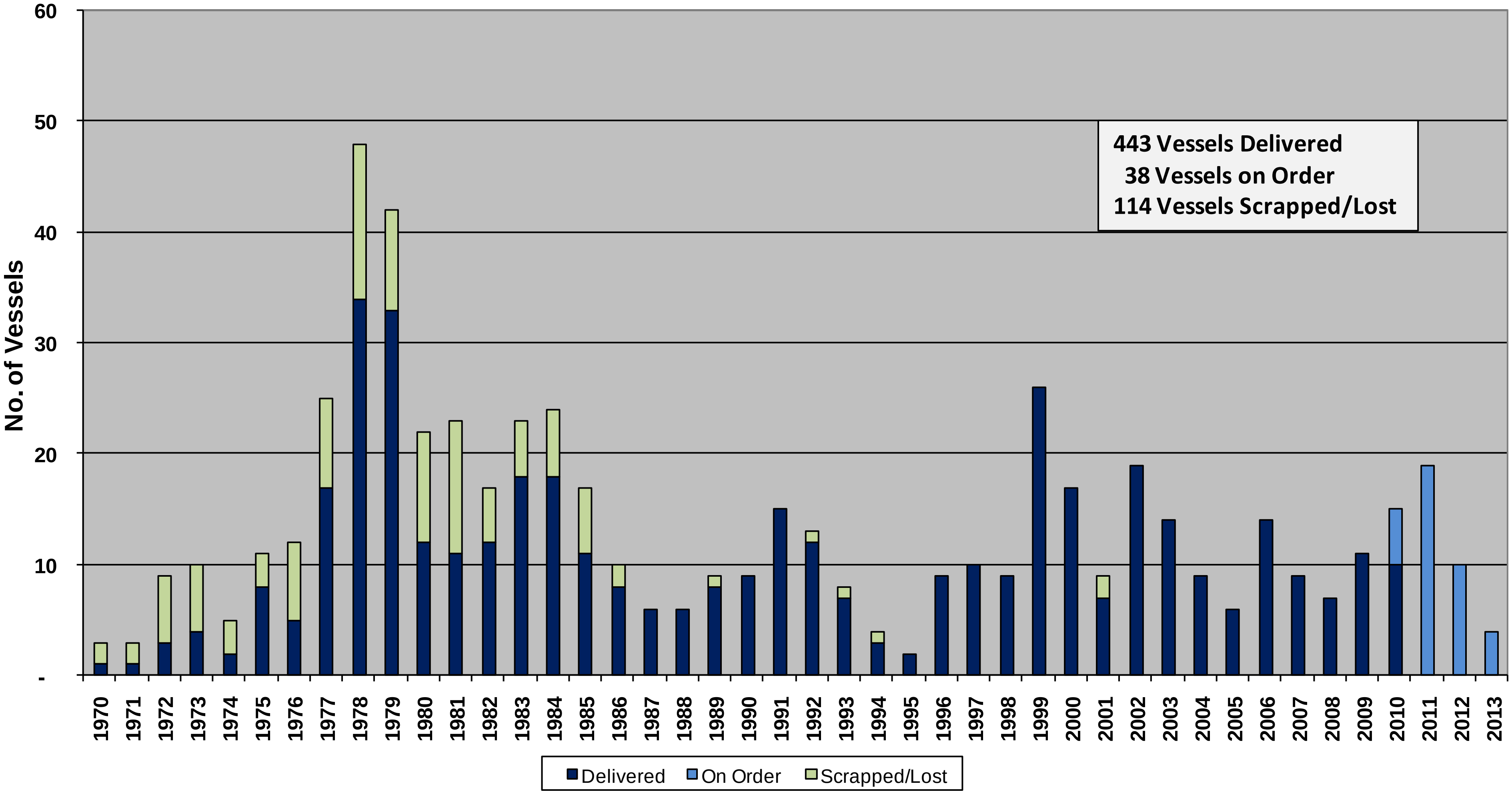
Average Age: 19.8 Years
Fleet: 443 Vessels / 865,022 Lanemeters

RoRo Fleet Composition
(Capacity)

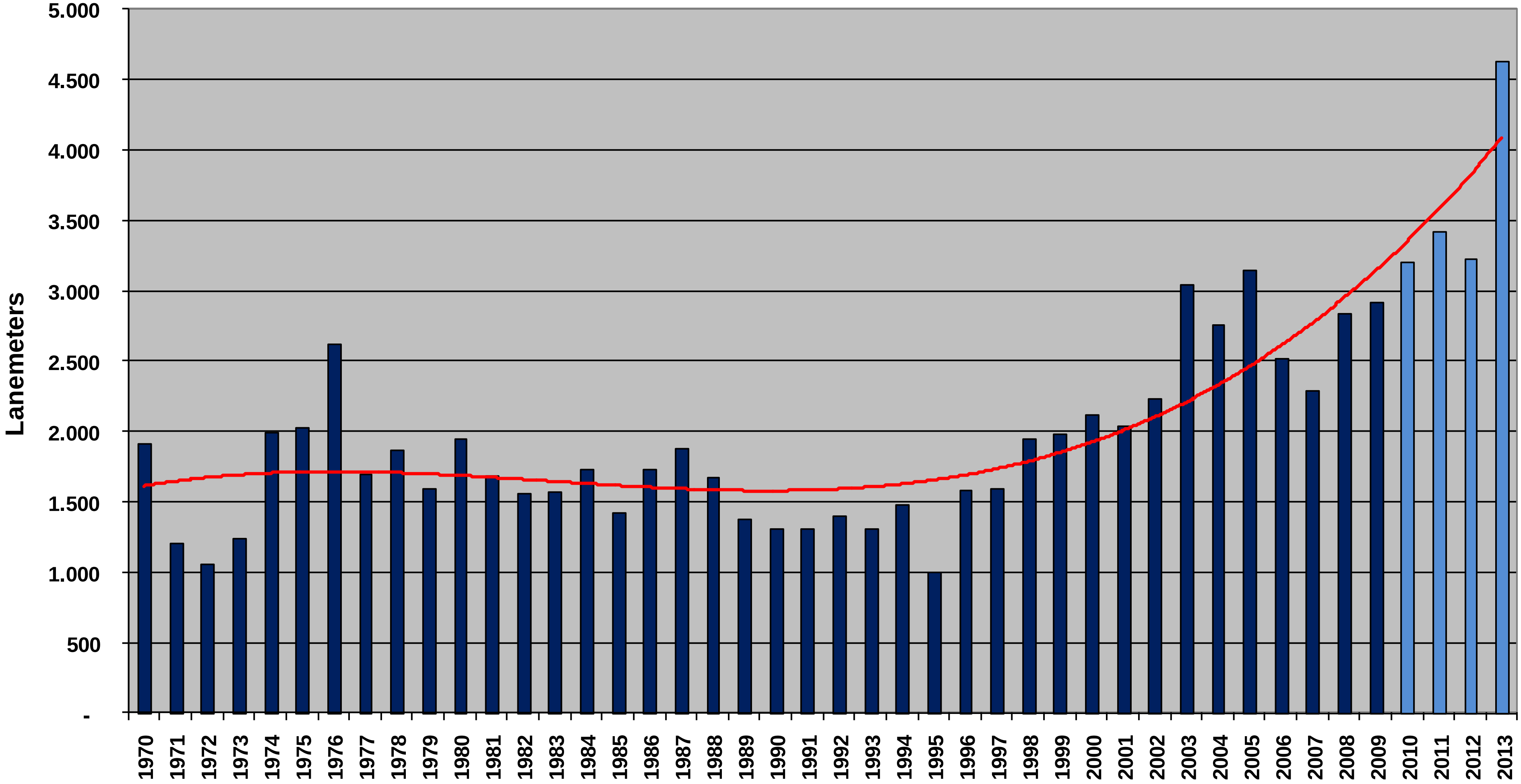


Average size: 1,986 LM

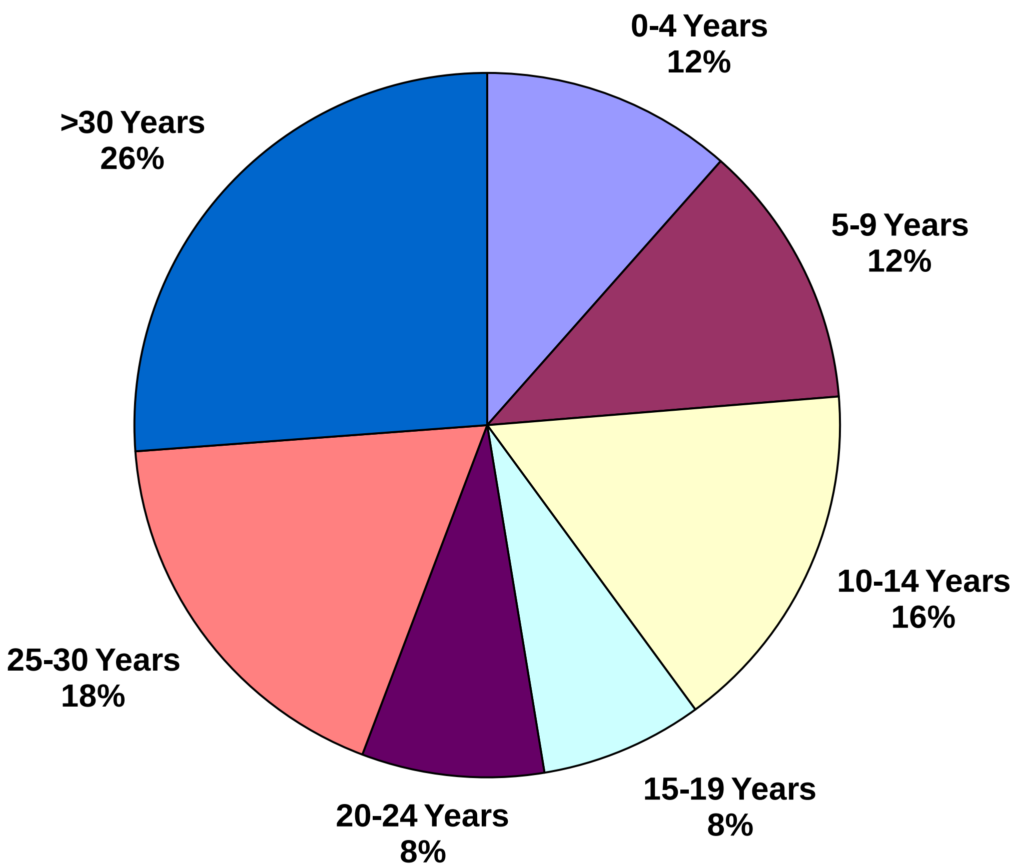
RoRo Delivery Profile



RoRo Size Development



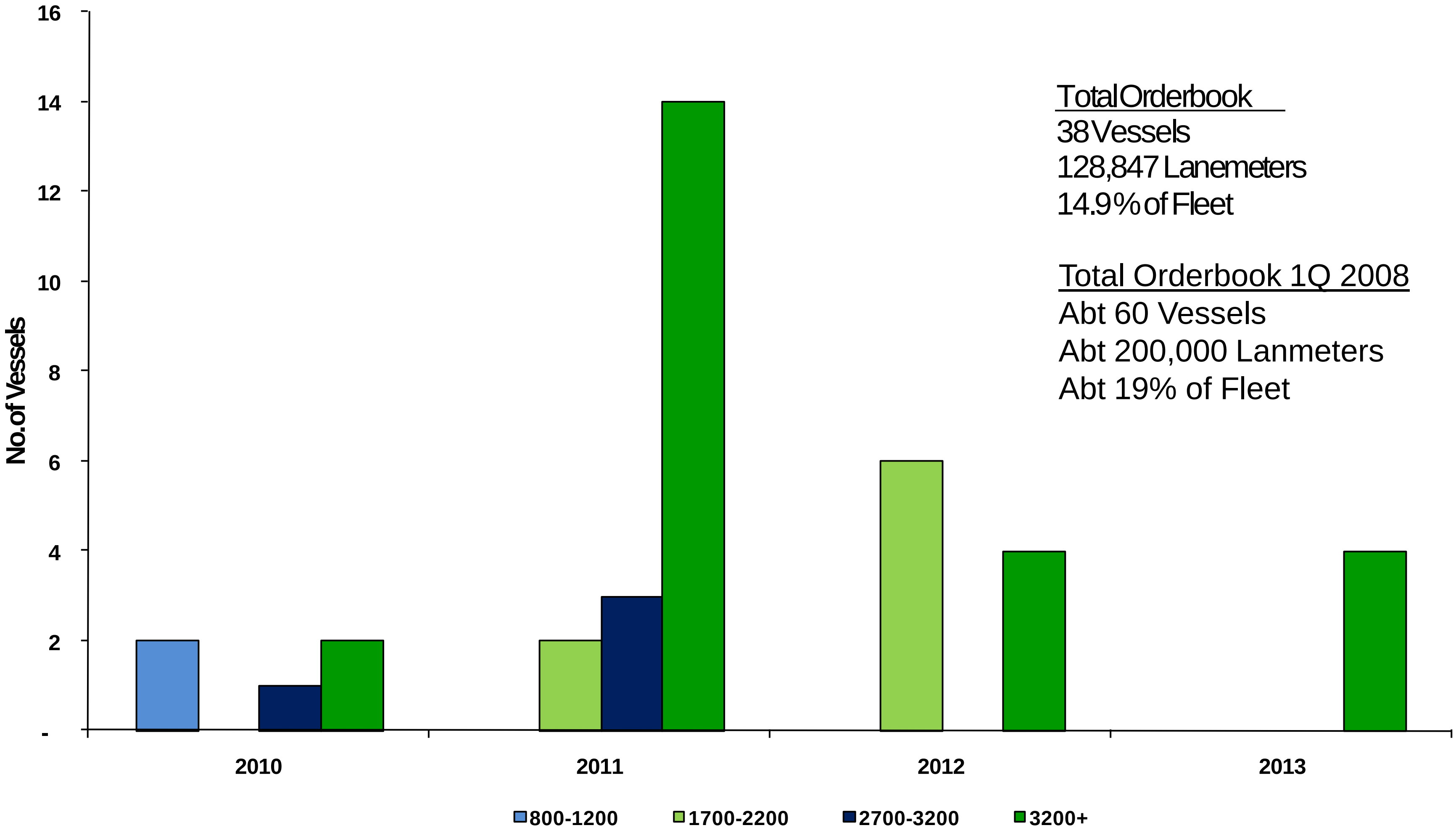
RoRo Age Profile



Average Age: 19.8 Years

Average in 2007 abt 21 years

RoRo Order Book



Total Orderbook
38 Vessels
128,847 Lanemeters
14.9% of Fleet

Total Orderbook 1Q 2008
Abt 60 Vessels
Abt 200,000 Lanmeters
Abt 19% of Fleet

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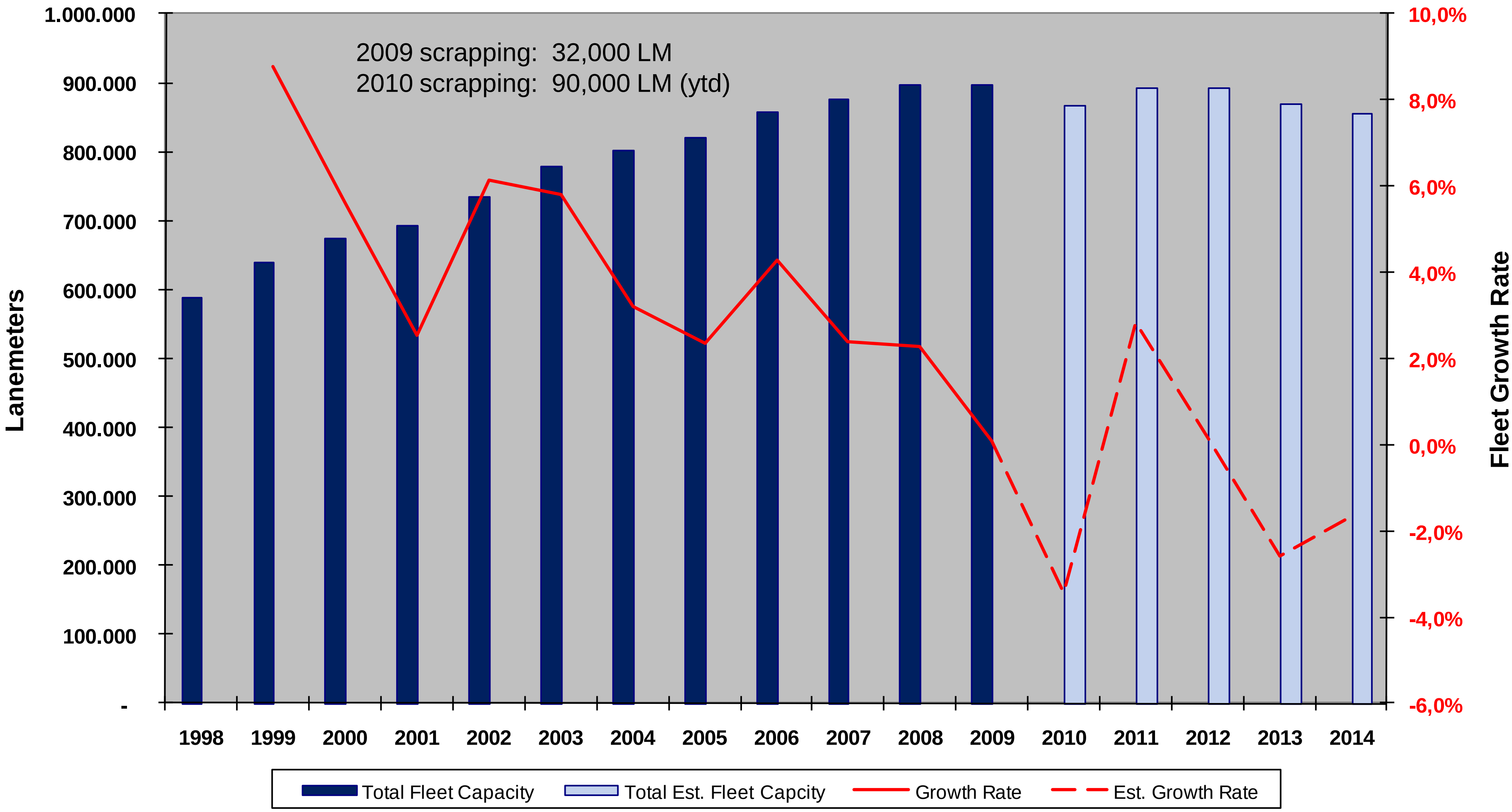
RoRo Fleet Development



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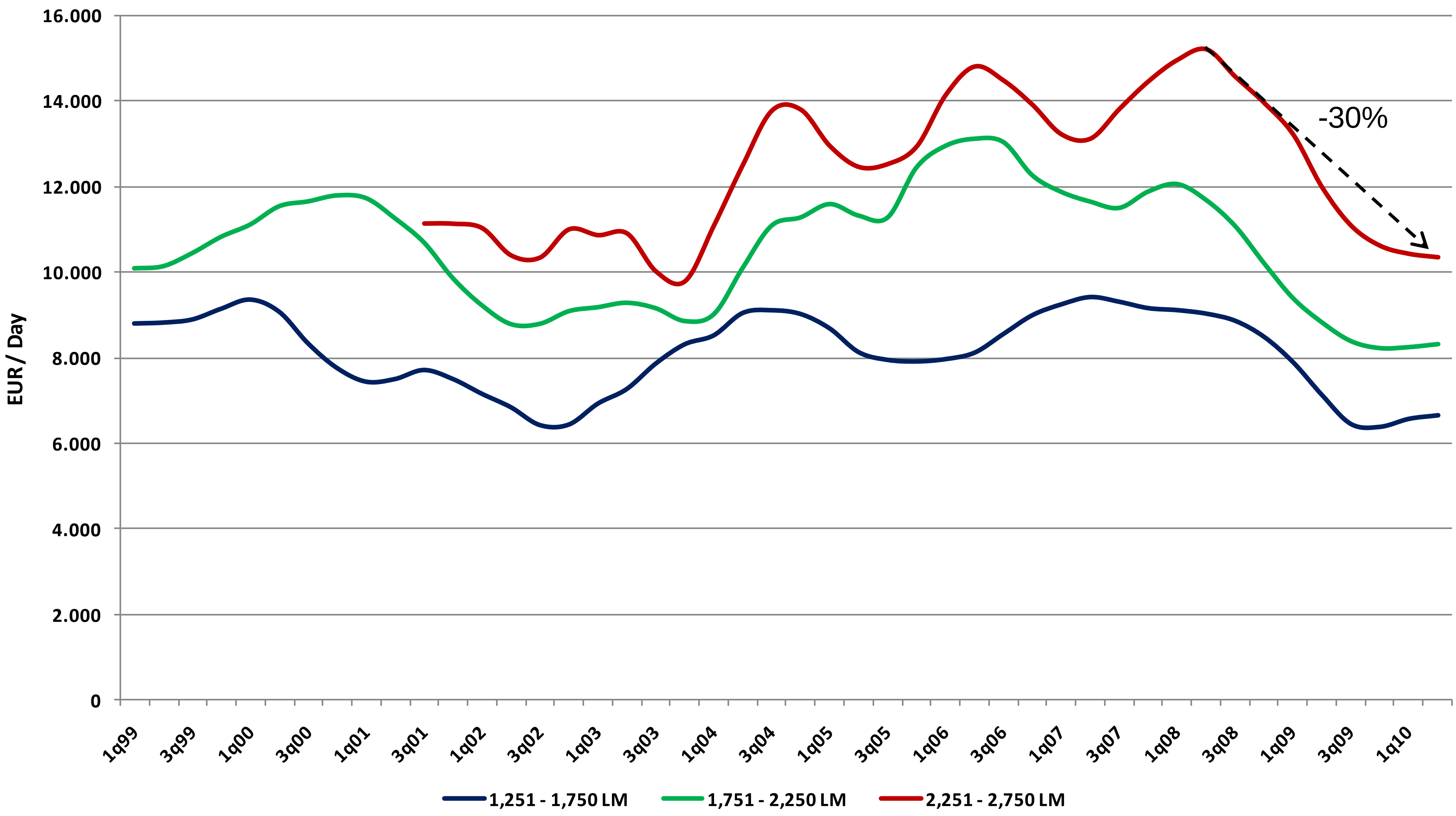
RoRo T/C Rates Development
(1 year Moving Average)



RoPax Definition

- Vessel with RoRo and Passenger Capacity
- Minimum 800 Lanemeters
- Passenger capacity of above 12 persons

- Passenger capacity of maximum 2,000 persons
- Minimum 1.25 Lanemeters per Passenger
  (To avoid typical ferries)

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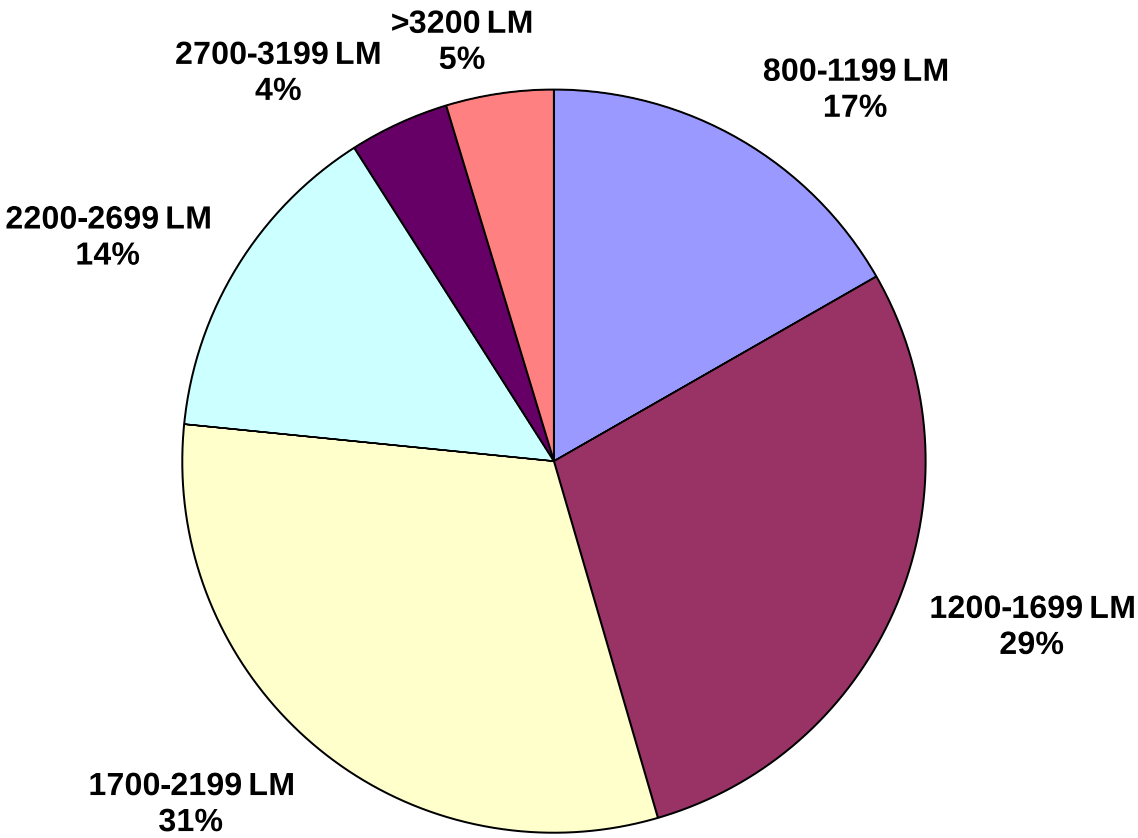
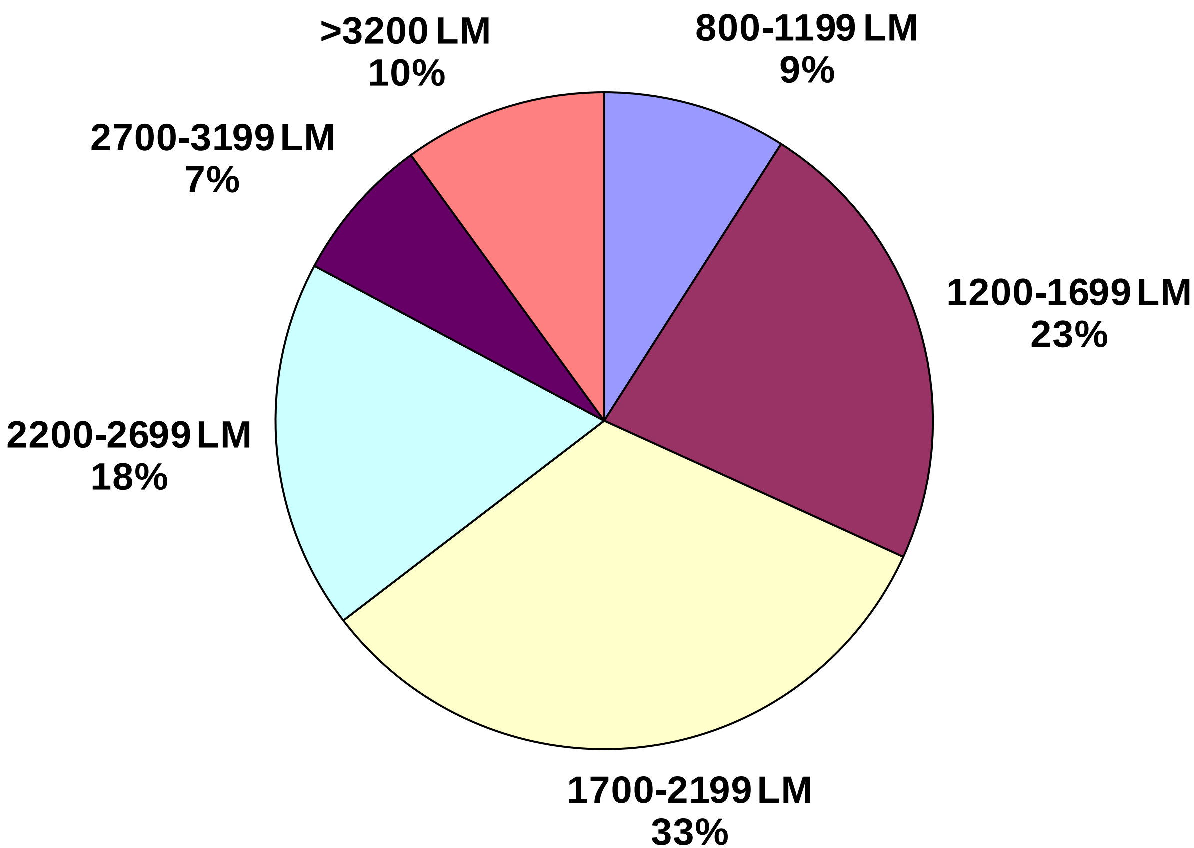
RoPax Fleet Composition
(No. of Vessels)



Average Age: 16.7 years
Fleet: 299 Vessels / 556,963 Lanemeters

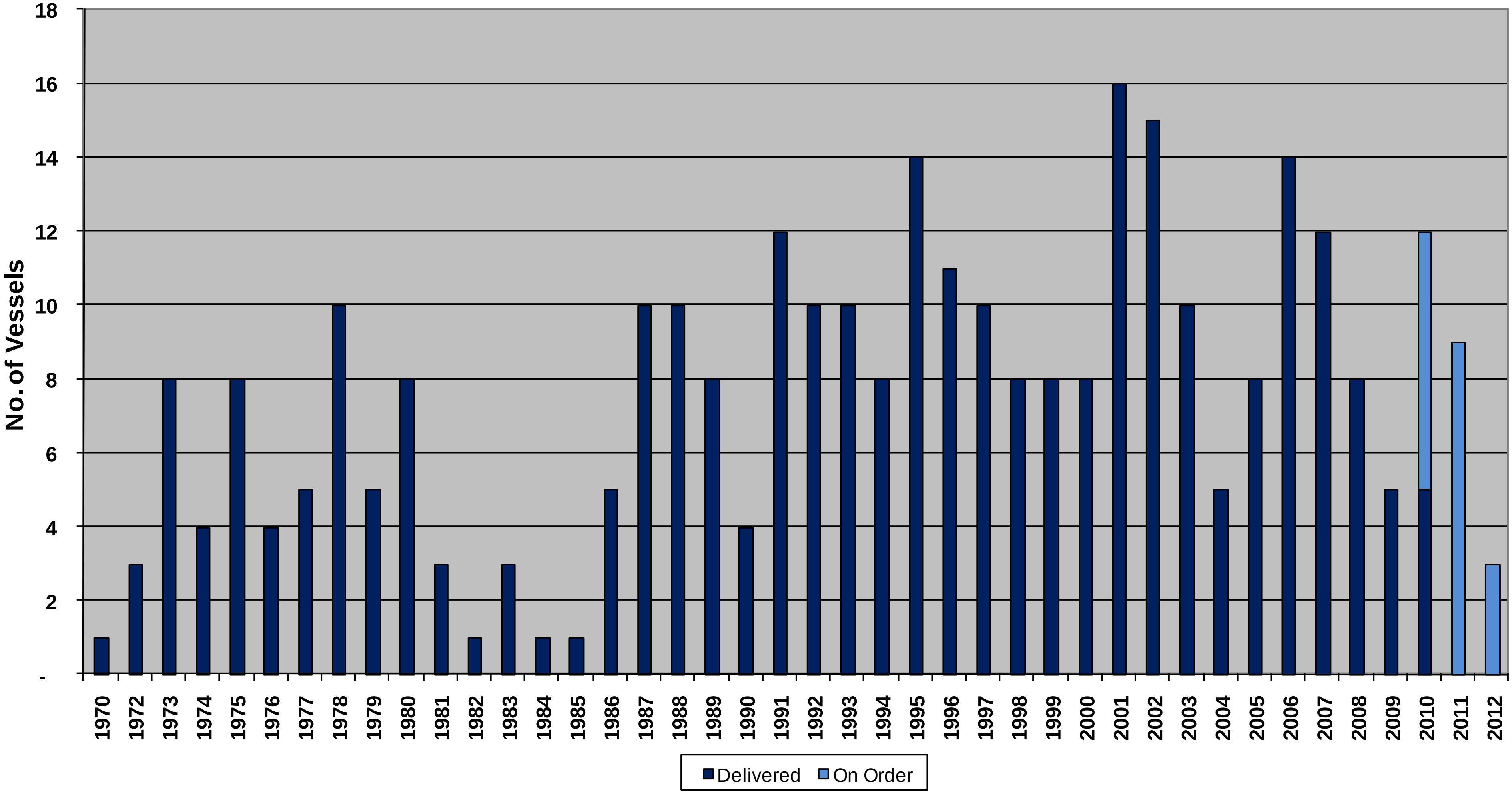
Average Age in 2007: Abt 17 years

RoPax Fleet Composition
(Capacity)

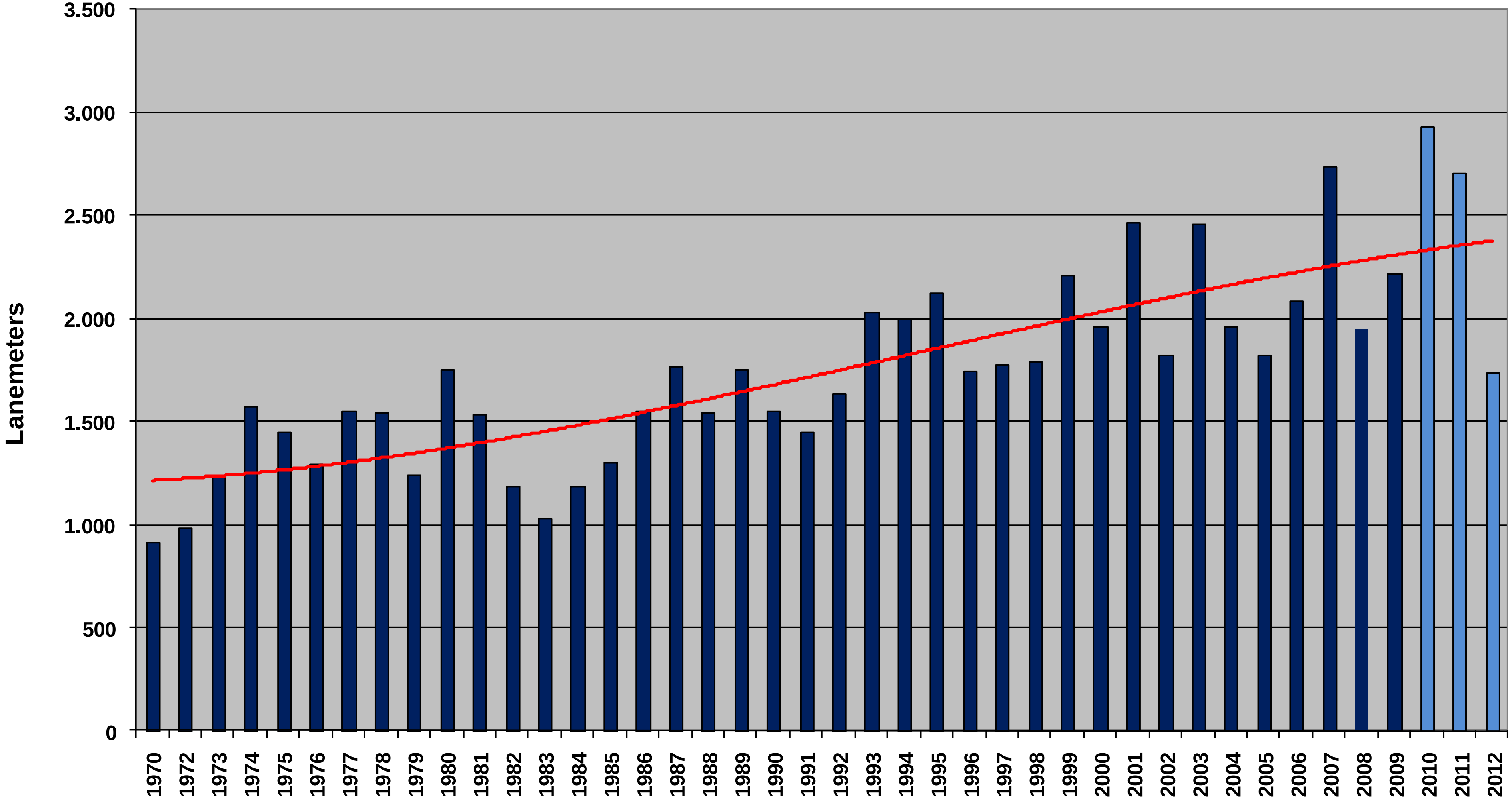


Average Size: 1,863 Lanemeters
Average Pax: 578 Passengers

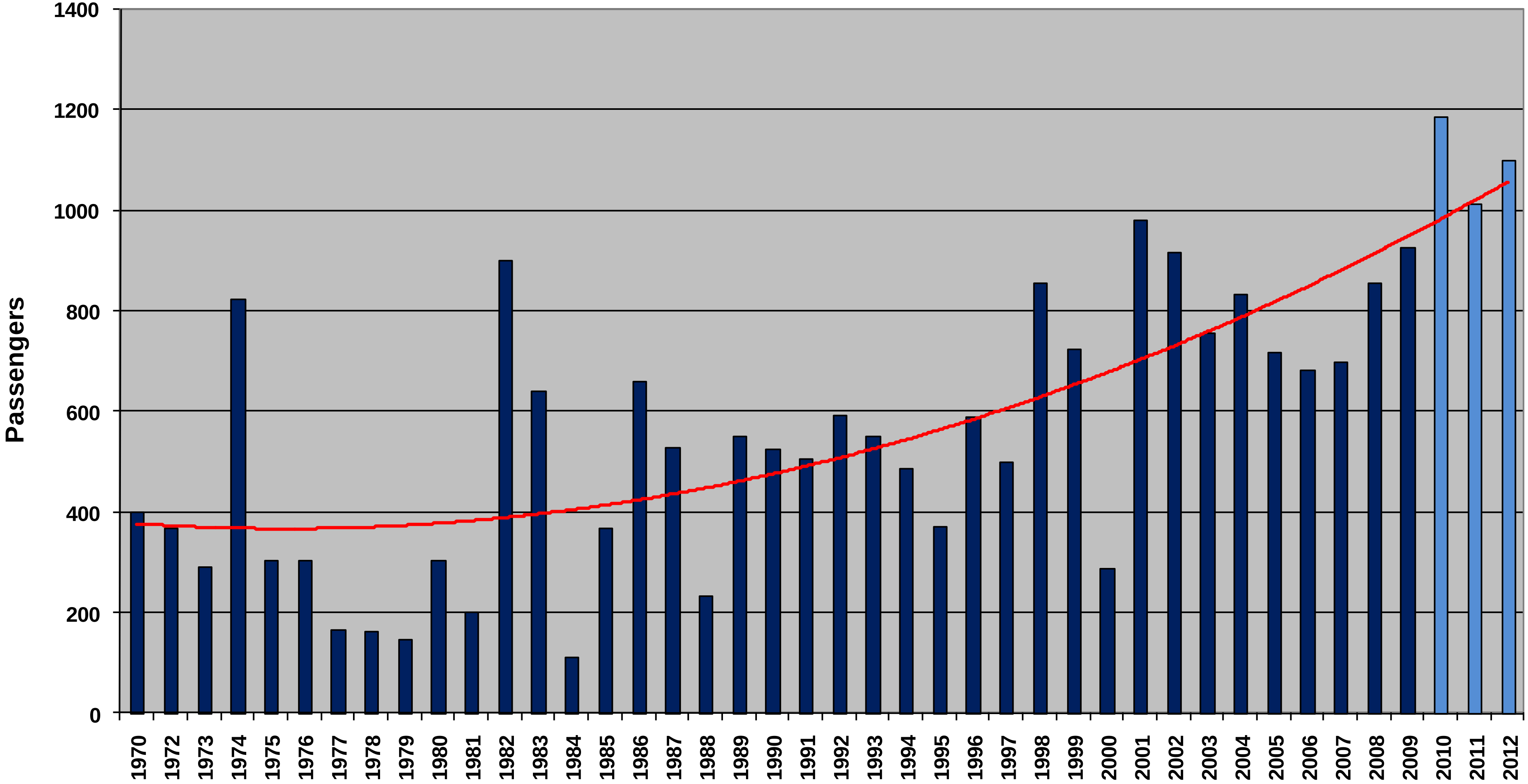
RoPax Delivery Profile



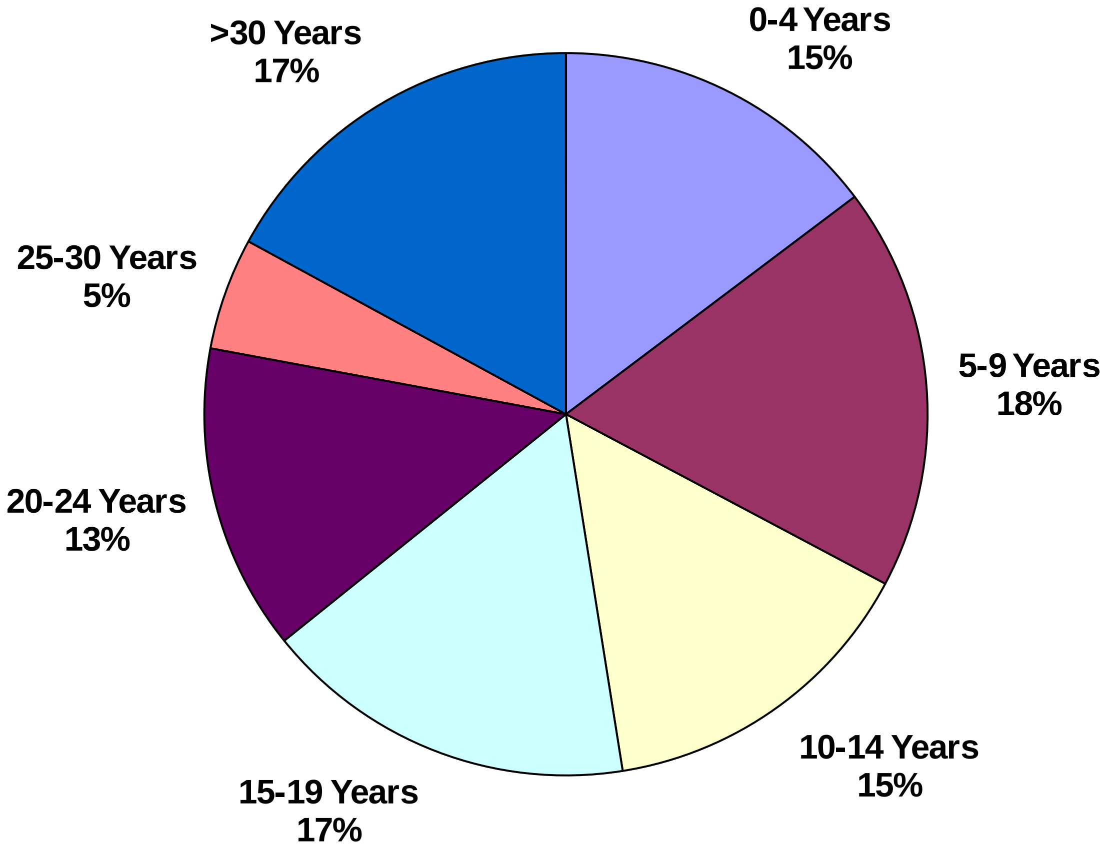
RoPax Size Development



Average Passengers per RoPax Vessel

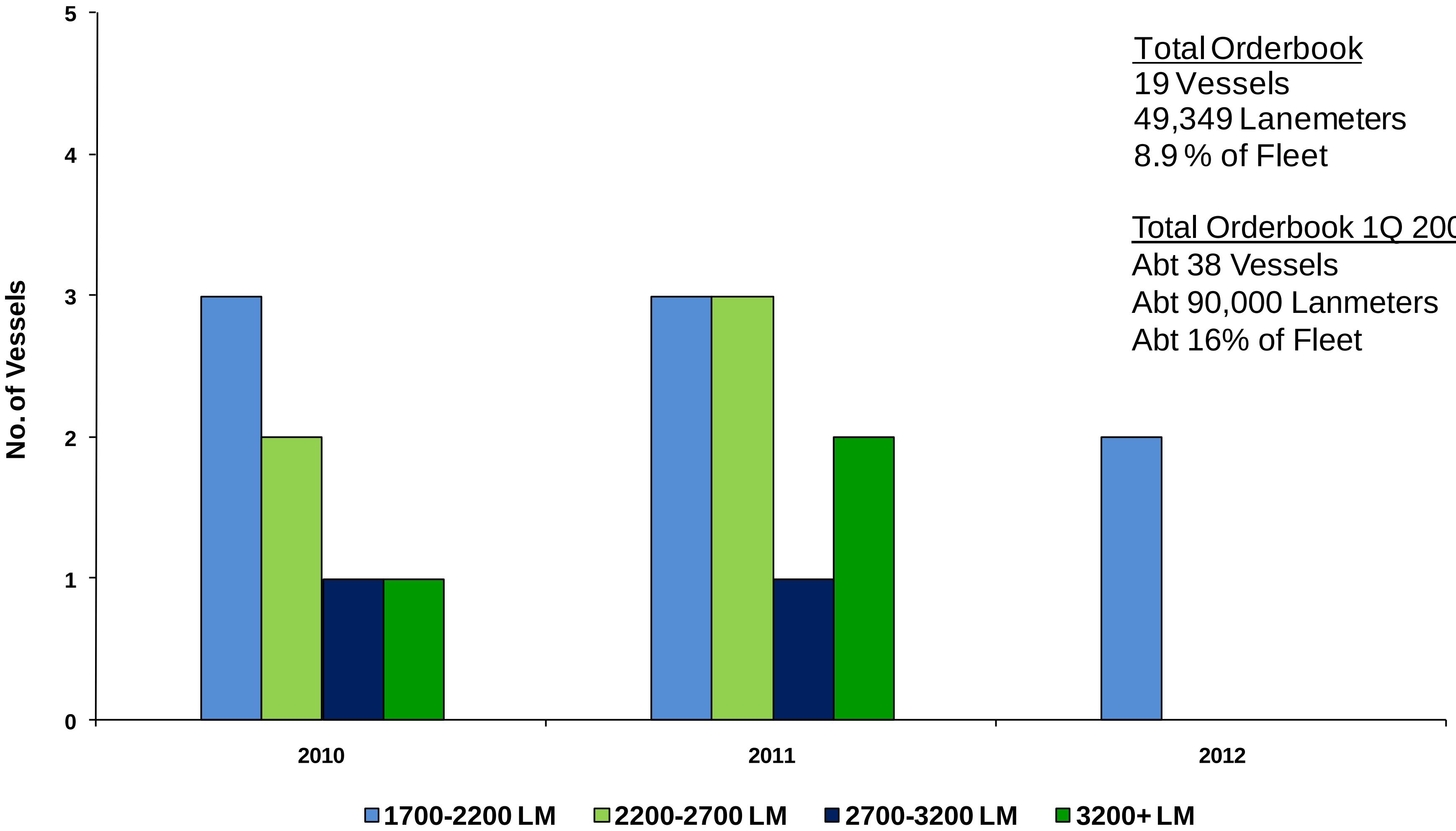


RoPax Age Profile



Average Age: 16.7 Years

RoPax Order Book



Total Orderbook
19 Vessels
49,349 Lanemeters
8.9 % of Fleet

Total Orderbook 1Q 2008
Abt 38 Vessels
Abt 90,000 Lanmeters
Abt 16% of Fleet

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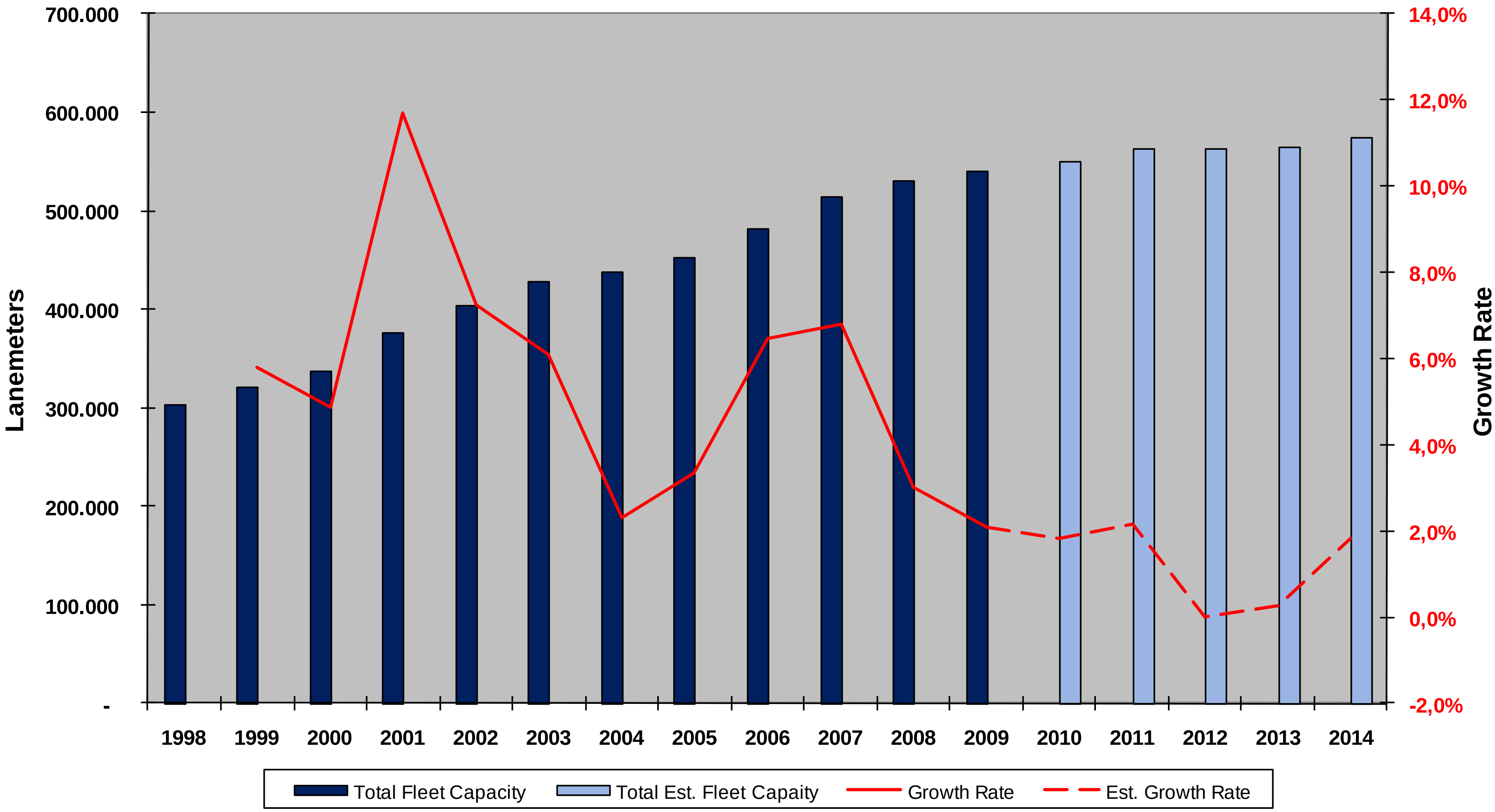
RoPax Fleet Development



Challenges

Market Conditions

- Soft demand for modern RoRo and RoPax tonnage within last 18 months, with rates down abt 30-35% from peak in Spring 2008.
- Surplus tonnage in the market, particularly RoPax having a number of laid up vessels.
- Order book delivering additional tonnage to a saturated market. In 2011 more than 50% of the current order book will be delivered.
- Yet only weak signs economic upturn.
- Expectation of further 18-24 months of depressed markets to be bridged.

Opportunites

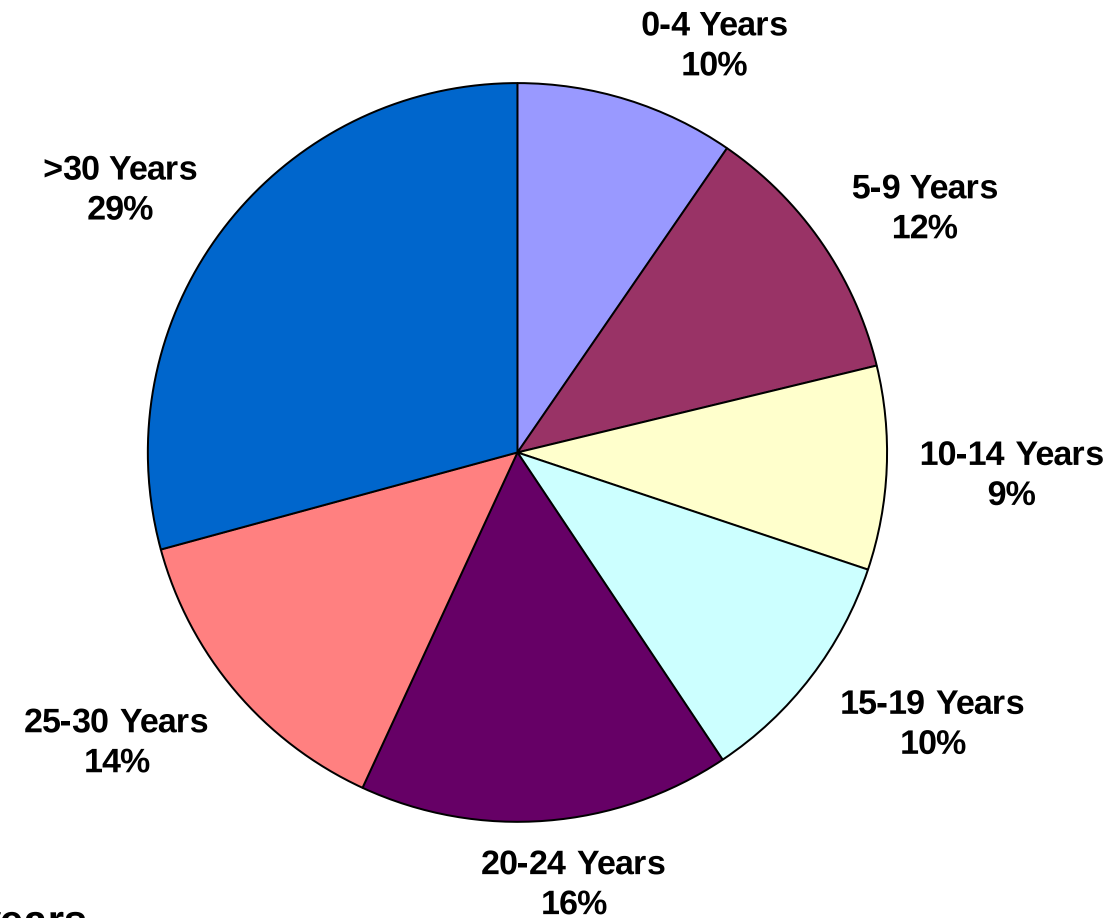
Factors

- Low shipbuilding activity, and order books reduced to less than 15 pct for RoRo and less than 10 pct for RoPax.
- High age profile (20/17 years average).
- High scrapping activity for RoRo – 90,000 LM (~10%) ytd.
- Political pressure to put trailers at Sea.

RoPax vs. Ferries

- RoPax tonnage replacing vintage Ferry tonnage.
- RoPax provides more freight capacity, and less passengers, in line with today's travel/traffic pattern.
- More steady year round freight earnings.
- Ageing Ferry fleet fail to comply with new SOLAS 2010 requirements coming into force by Oct 2010.

Ferry Age Profile



Average Age: 21.8 years

Political Pressure

- Focus on lower emissions
  - Trucks and trailers by sea in stead of road
  - EU subsidies to new lines (e.g. LD Lines St. Nazaire/Gijon)
  - Modernisation of fleet to improve economy of scale
  - Larger vessels to reduce emission level per transported unit.
- Other political measures
  - Road pricing being introduced
  - Road safety
  - Truck free days
  - More restrictive driving hours / Resting requirement

Limited Newbuilding

- Number of capable shipyards is limited
  - RoRo
    - 4-5 yards in Asia (this number is increasing)
    - 8-10 yards in Europe
  - RoPax
    - 2-3 yards in Asia (this number is increasing)
    - 5-6 yards in Europe
- After crisis Korean and Chinese yards have again started to focus more on specialised tonnage including RoRo and RoPax.
- Highly sophisticated vessels, compared to standard tonnage
- High building cost
  - High degree of specialisation for each design
  - Short building series
  - Prices have not been reduced to the degree expected during crisis.

Forecast

3-5 years

- Soft market will continue through 2011.
- Continued scrapping of RoRo and expected scrapping of RoPax/Ferries from 2012.
- Scrapping of RoRos will off-set newbuilding capacity through 2013.
- Current surplus RoPax vessels will be absorbed by the market during next 1-2 years.
- Balanced supply/demand expected again during 2012.
- Continued growth in European freight volumes.
- Further consolidation of operators expected (like DFDS/Norfolkline)
- Focus on economy of scale ➡ Larger more cost effective vessels.
- Limited newbuilding activity in 2009 and 2010, leaving a supply deficit in the market from 2013.
- Increased overall demand.

Question?

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Shipbrokers

Sales & Purchase – Newbuildings – Chartering - Valuations

September 2010