

# Chassis: What in the World Will We Do?



MERRITT C. BECKER, JR.

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# Malcolm McLean- Father of Containerized Shipping

- Trucking 1934
- Hoboken, NJ 1937
- Designed, patented and bought Pan-Atlantic Steamship Company: 1956
- Today, roughly 90% of what used to be international breakbulk cargo is shipped by container



# The Standard Shipping Container

- Breakbulk: Boxes, Crates Sacks, Bales, etc.
- Stevedores and Longshoremen
- McLean - 25% cheaper due to speed
- Reduced loading and loading time by 84%
- Reduced cost by 35%



# Containers Have Fostered Intermodalism



# Standard International Chassis

- A wheeled under carriage onto which the container fits
- Marine chassis, ocean carrier chassis, ocean liner chassis, or ocean container chassis
- The linchpin to international freight



# Roadability

- The average age of chassis is 19 years
- Most have no anti-lock brakes, radial tires or LED lights
- The IMO has mandated certain minimum requirements
- Chassis safety regulations equals “roadability” with the burden of compliance falling on the marine terminals and drayage companies, not the ocean carriers.

**CONTAINER ROAD ACCIDENTS**

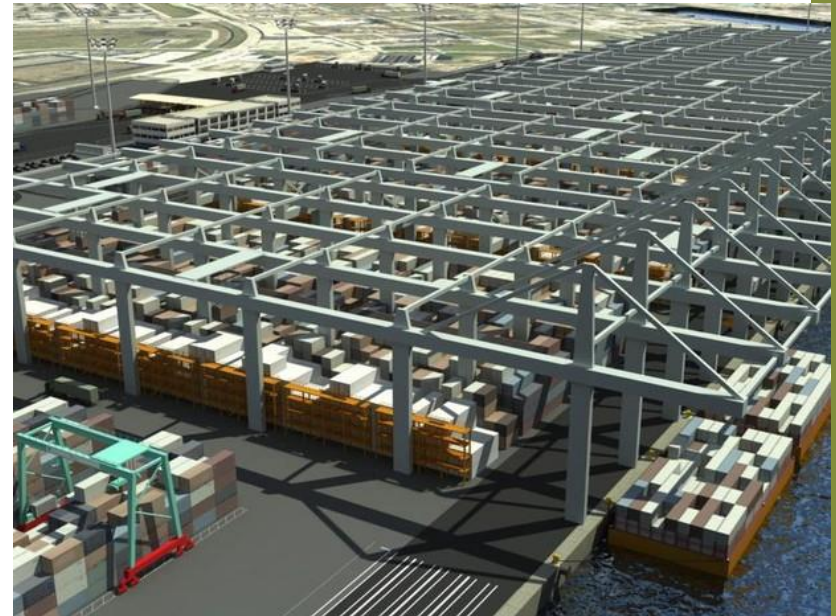
- Containers have been flung off the chassis due to sudden breaking.



- There has been relatively lesser number of accidents during rail transportation of containers.

# Global vs US Chassis Regimes

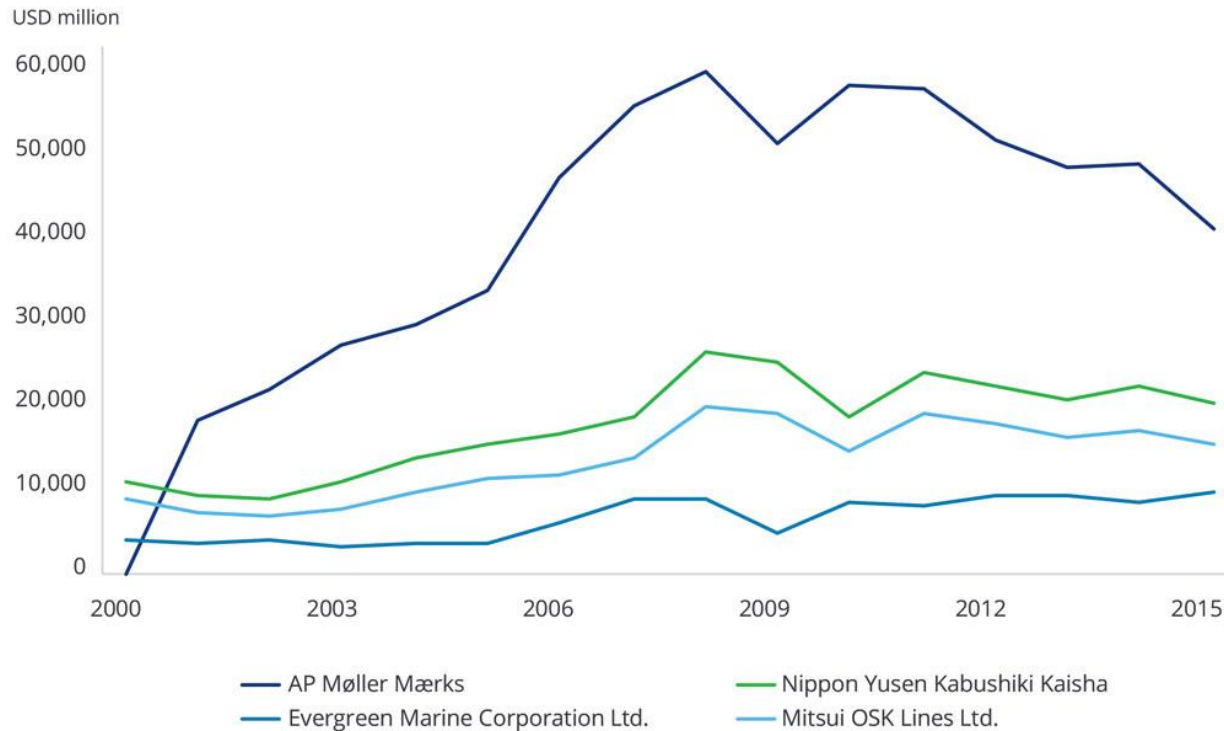
- Everywhere else in the world container chassis are supplied by customers, truckers, or off-terminal pools, and are brought to the marine terminal by the drayage driver.
- Drivers do not interchange chassis with the ocean carriers or terminal operators.
- Costs or delays in obtaining a chassis are therefore an internal drayage company issue and of no concern to the marine terminals
- In the US, however, chassis leasing companies are the predominant model



Venice, Italy

# Great Recession 2008

Figure 3. Key shipping companies have faced stagnant or declining revenues in recent years



Source: S&P Capital IQ, Deloitte Services LP economic analysis.

Deloitte University Press | [dupress.deloitte.com](http://dupress.deloitte.com)



# 3 Major Chassis Lessors

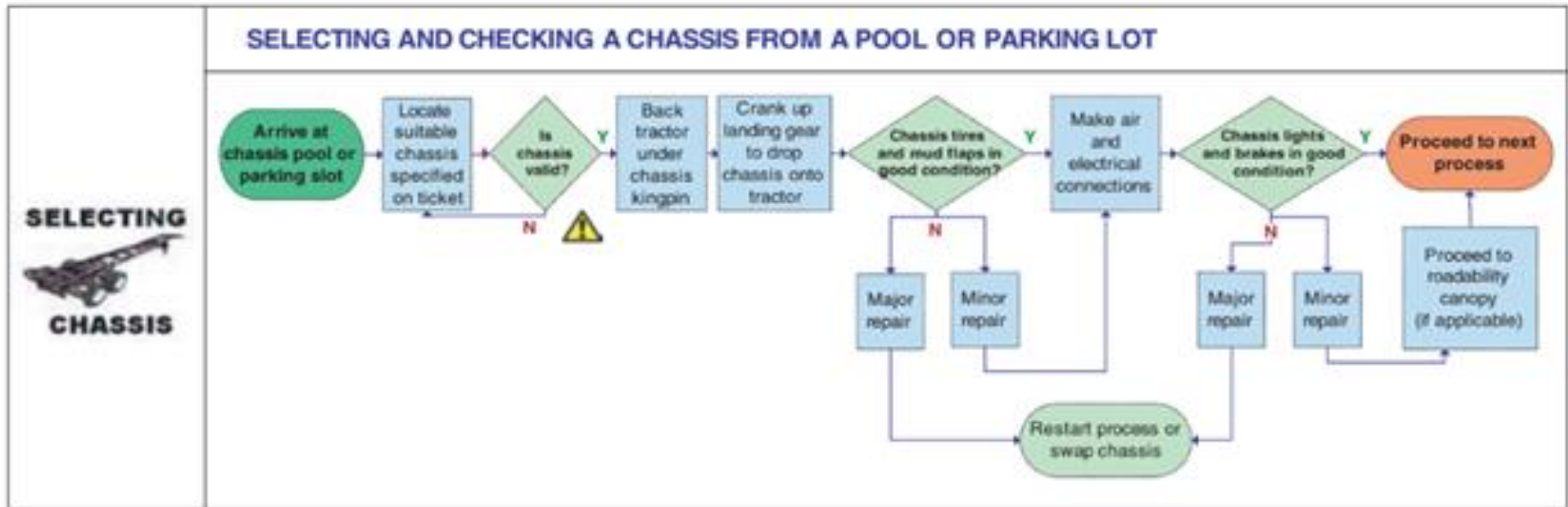
Approximately 500,000 units



# Legacy Contracts



# Chassis Sub-Processes



<https://www.nap.edu/books/14536/gif/14.gif>

# Ports Need Space for Chassis Storage



# Chassis Access Can Cause Terminal Congestion

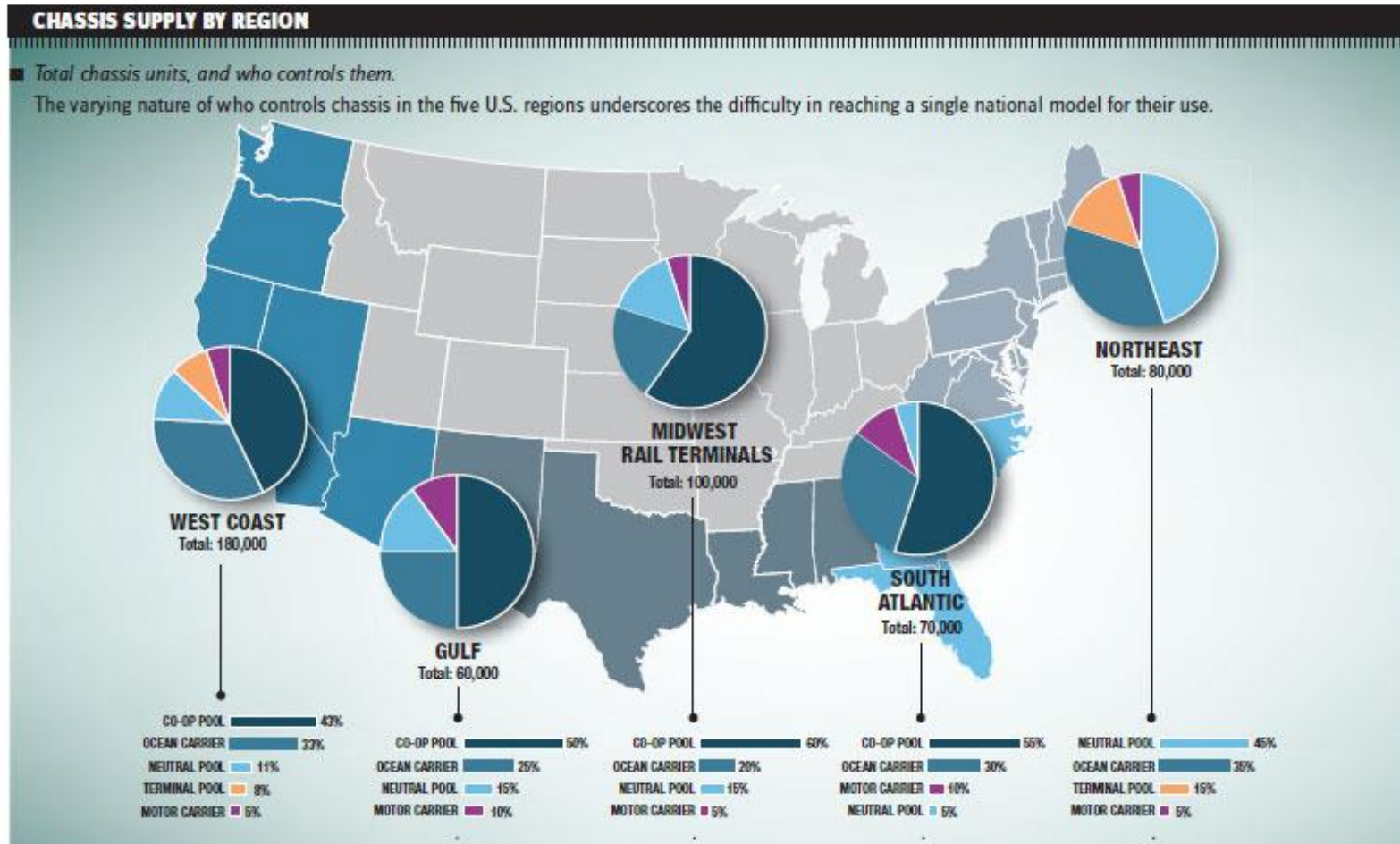


<http://amoyline.com/wp-content/uploads/2016/07/150218113409-port-of-lb-trucks-780x439.jpg>

# Truckers Not Paid for Extra Chassis “Turns”



# Current Solutions: Chassis Pool Variants



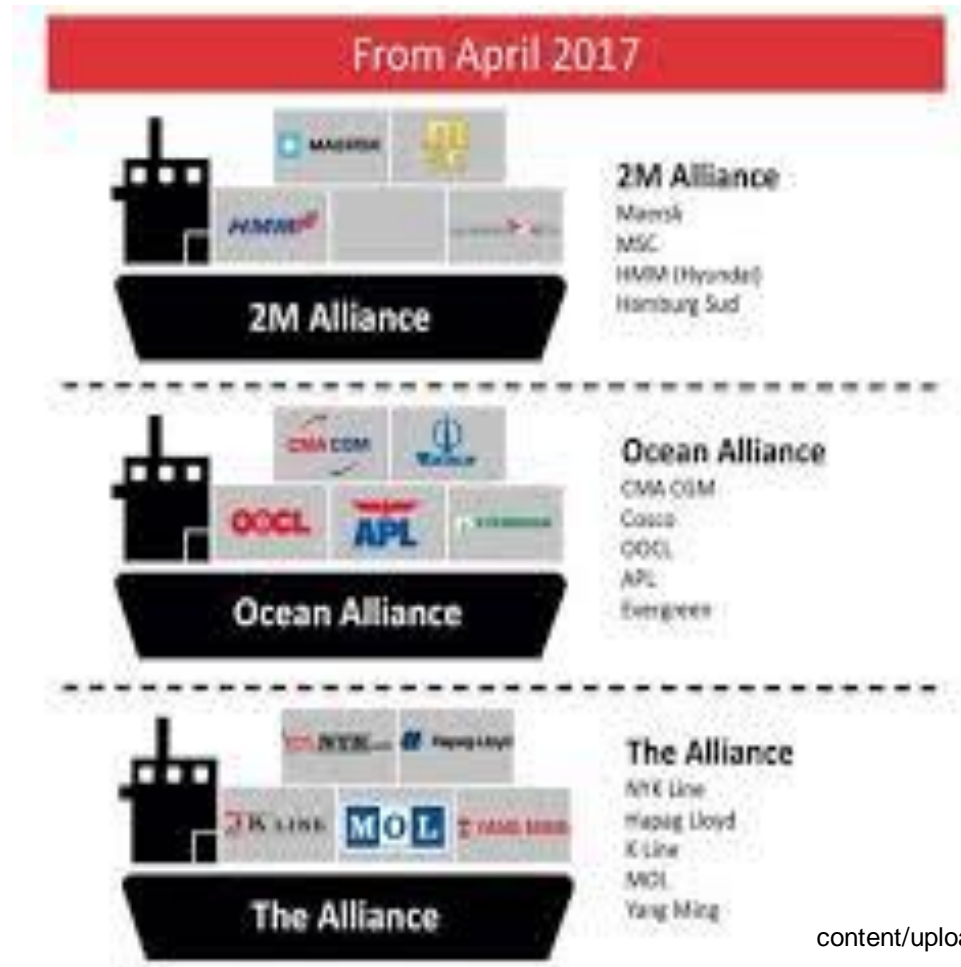
Source: Intermodal Association of North America

# Open Choice

Open choice is the ability of a trucker or shipper to determine which IEP (chassis lessor) it uses to provide a chassis for moving a container to or from a terminal, rather than the carrier making that decision and stipulating the Intermodal Equipment Provider (IEP)...



# Ocean Carrier Mergers & Chassis

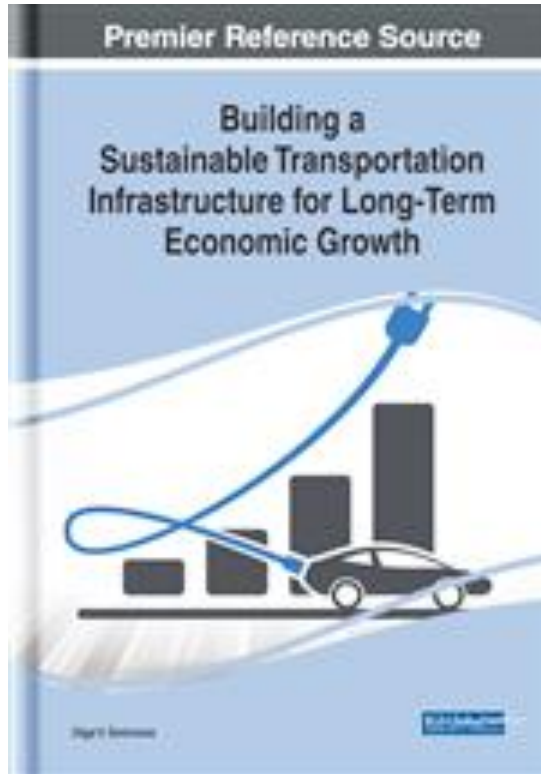


<https://www.shipit.com/wp-content/uploads/2017/05/Understanding-the-Ocean-Carrier-Alliances.jpg>

# Recommendations

1. Update OCEMA
  - Individual ocean carriers should have nothing to do with chassis provision, maintenance or management; Legacy contracts null and void; free market can decide which provider is successful
  - All responsibility for inspection and M&R is the province of the motor carrier
2. Adopt a national chassis pool model: open choice
3. Mandate a modern chassis fleet nationwide
4. Investigate chassis utilization analytics and chassis fleet rightsizing for typical US port sizes
5. Investigate the roll of chassis in disaster resilience
  - The US chassis fleet is not adequate for resilience
  - Winter of 2017-2018 Chicago and Memphis were hit by massive chassis shortages at intermodal rail terminals
  - Hurricane Irma was a significant dislocator of chassis

# Thank You



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