



Consolidated Chassis Management

**Operational and Commercial Changes
in the Chassis World**



Topics

- ✓ Who is CCM?
- ✓ Changes in the chassis industry
- ✓ Considerations for chassis provision
- ✓ Options - Comparison of chassis provision options



CCM

- Consolidated Chassis Management (CCM) is a chassis pool network and chassis management company
 - owned by OCEMA, a non-profit association of 19 of the world’s leading ocean carriers.
- 137,000 chassis managed (M&R and logistics).
- CCM is the “back room” operation managing the combined fleet of multiple entities (ocean carriers, leasing companies, motor carriers)
- CCM Pools are co-operative chassis pools
 - All of the chassis in the pools are “gray”, i.e. they can be used by all participants
 - Participants can pick up or return any chassis at any common pool location
 - CCM Pools operate on a cost pass through basis (no profit)

250 facilities served from 16 CCM offices with 148 CCM staff

CCM Manages 28% of the U.S. Marine Chassis Fleet

SERP
SACP
SATL
MCCP
MWCP
COCP
GCCP
DCCP



U.S. Department of the Interior
 U.S. Geological Survey

 Pool Offices & Service Cities
 Service Cities

Participants

- ACL
- APL
- Bridge Chassis
- China Shipping
- CMA-CGM
- Cosco
- CSAV
- Direct Chassis Link
- Evergreen
- Flexi-Van
- Hamburg Sud
- Hanjin Shipping
- Hapag Lloyd
- Hyundai
- K Line
- Maersk Line
- Matson
- MOL
- Motor Carriers Chassis Pool
- Med Shipping
- NACPC
- NYK Line
- OOCL
- Pacer
- TRAC Intermodal
- Turkon Line
- United Arab
- Yang Ming Line
- Zim Line

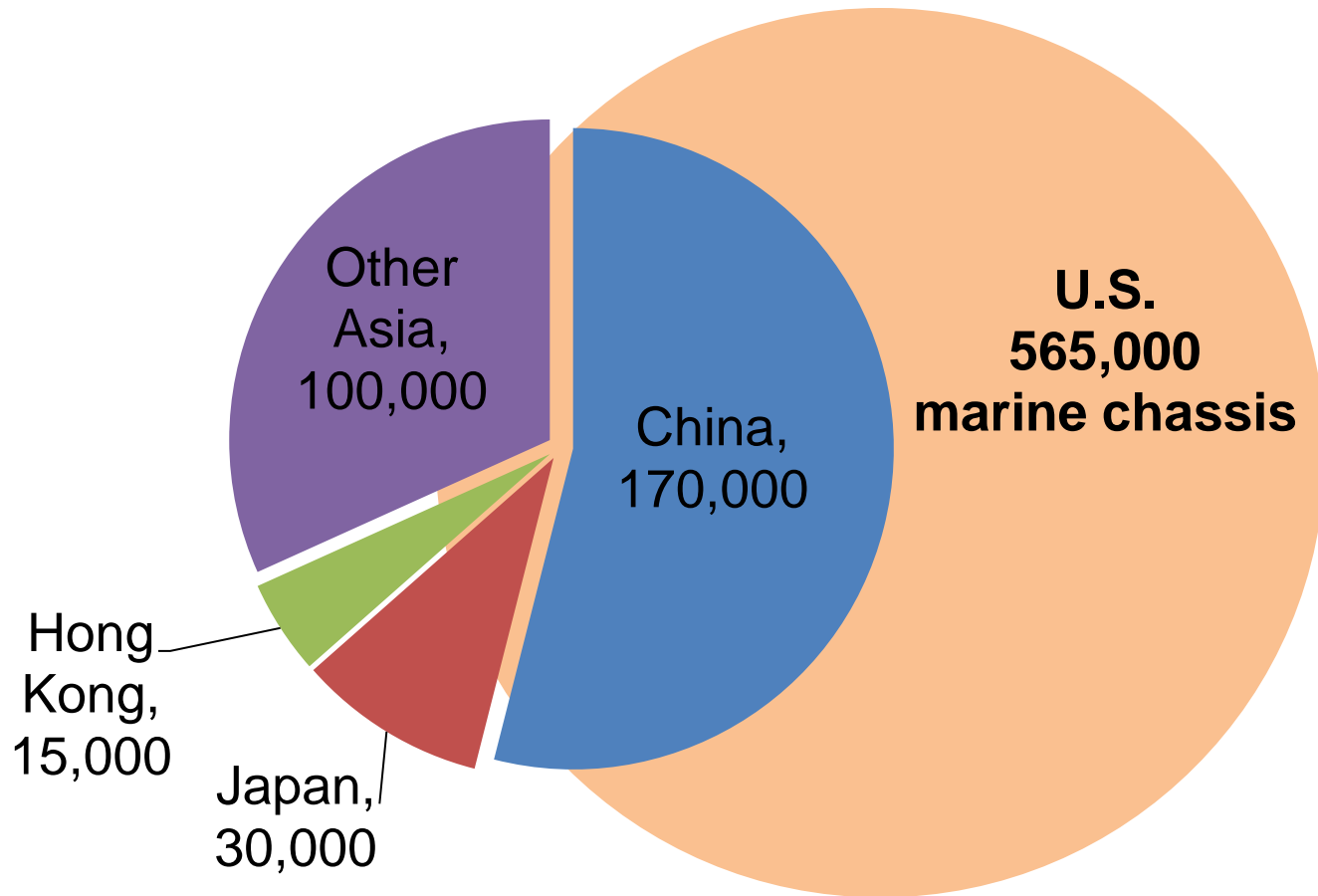


The New Chassis Paradigm

- Ocean Carriers' core competency is ocean transport
- Handing off the provision of chassis to the appropriate parties is an evolution
- All the stakeholders, Ocean Carriers, Shippers, Leasing Companies, Terminals and Motor Carriers want a smooth transition



Chassis Count USA versus Asia. More is NOT Better





Why does the U.S. have so many chassis?

- LD TEU to Chassis Ratio (approximate) *
 - Asia : 300:1
 - U.S. : 52: 1
- U.S. Main Differences:
 1. Majority of ocean, rail and container yard terminals require chassis under containers
 2. Large amount of drop & pick deliveries



New Chassis Paradigm Transition Stages

- Ocean Carriers reduce their provision of chassis
 - Challenges:*
 - Carrier vs. Merchant Haulage
 - Exceptions by contract
 - On-terminal at rails and ocean terminals
 - Progression to grounded container operations
- Ocean Carriers sell chassis, further disengagement from chassis
- Shipper / Motor Carrier become responsible for providing chassis



U.S. International Chassis Ownership Change

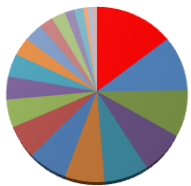
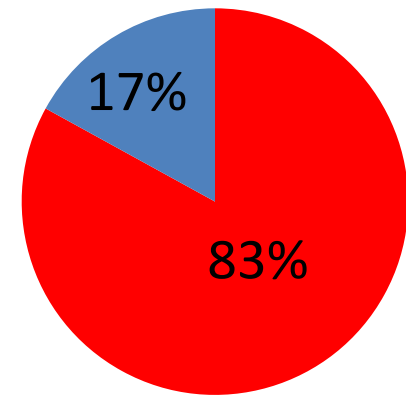
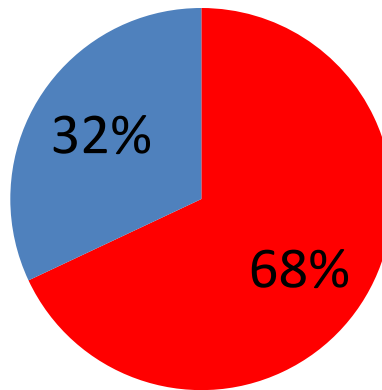
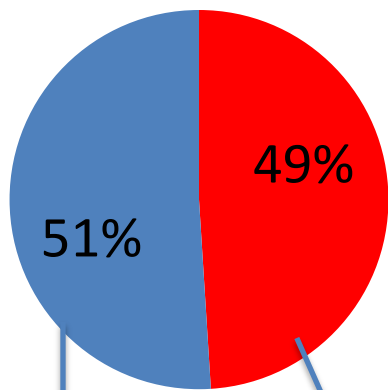
■ Ocean Carriers

■ Leasing Companies

2009

2012

2013



Ocean Carriers



Leasing Companies

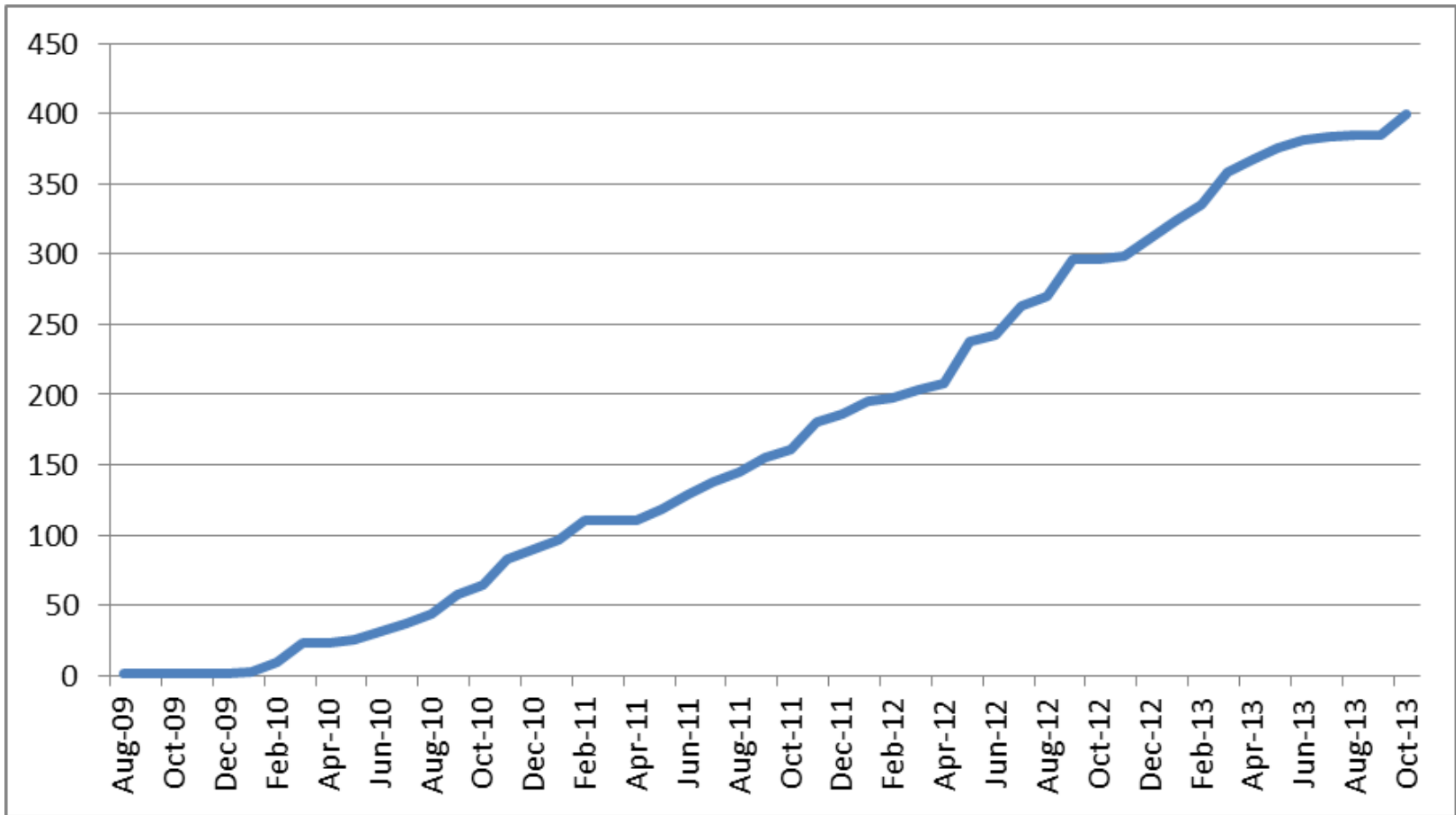
Leasing Companies





OCEMA Carriers' Announcements of Chassis Provision Change

Metro City / Ocean Carrier Combination



Source: OCEMA.org tracked public announcements for 42 major cities



U.S. Chassis Supply Models

1. **Traditional Model.** Ocean Carrier owns/leases and operates its fleet. Ocean Carrier provides chassis to its customers.
2. **Leasing Company provision.** Ranges from Daily lease to dedicated fleet options.
3. **Terminal Operator** supplies/manages chassis pool
4. **Motor Carrier or Shipper** owns/leases and operates its own fleet

Added dimension - Co-operative Chassis Pool:

Pool structure with common management that can include Ocean Carriers, Leasing Companies, Motor Carriers, Shippers, 3PL's. Models #1, 2 & 4 can operate within the co-op pool.



Consideration

- Average age of current U.S. Chassis fleet is 15 years
- No new marine chassis built in 5+ years
 - Who will invest in chassis?
 - What are the cost implications?
- Will the supply of chassis meet demand?
- Remanufacturing (reconditioning) of a chassis can double or triple a chassis life

Increased investment likely after successful transition to new business models



Chassis Provision Options





Chassis Provision Options

Next steps:

- ✓ Analyze your current operations in regards to chassis usage days
 - Number of moves with chassis
 - Measurement of usage (in terminal days)
 - include dwell or idle times at facilities
 - include day of pickup & return from chassis lot
 - Include on-terminal time at rail or ocean terminal?

- ✓ How variable are your volumes (spikes & seasonality)?



Chassis Provision Options

Next steps:

- ✓ Does your DC or customer have usage time limits, incentives or penalties on chassis usage days?
- ✓ Review options that “fit” your operation
- ✓ Rank values of different chassis provision options



Cost Analysis of Chassis Options

	Own & Operate	Lease & Operate	Lease & in Pool	Own & in Pool	Day Rent	Day Rent in Pool
Asset Cost		\$\$	\$\$		\$\$	\$\$
Capital investment	\$\$\$			\$\$\$		
M&R	\$\$	\$\$	\$\$	\$\$		
Storage / gate	\$	\$	\$	\$		
Admin	\$	\$	\$	\$	\$	\$
Repositioning	\$	\$	\$	\$	\$	\$
Insurance	\$	\$	\$	\$	\$	\$
Utilization	%	%	%	%		
Turn time	* X	* X	* X	* X	* X	* X
On-Terminal use	+ Y	+ Y			+ Y	
Maximum usage	>	>	>	>	>	>
Minimum usage	<	<	<	<		
Locations covered	#	#	#	#	#	#



Chassis Provision Options #1

Shipper or its contracted Motor Carrier lease or purchase chassis and operate as a private fleet

- ✓ Capital investment
 - Right-sizing the fleet for chassis size, fleet size; volume peaks & valleys
- ✓ On own or outsourced?
 - Maintenance & repair
 - Qualified mechanics
 - Compliance with roadability regulations
 - Over the road repairs
 - Labor jurisdiction
- ✓ Need storage facility?
- ✓ Tracking of fleet – system & administration
- ✓ Will all movements require a chassis?
- ✓ Contractual liability for use
- ✓ Wheeled terminals could be problematic

EXAMPLE



Are all ocean carriers used not providing chassis?



Chassis Provision Options #2

Shipper or its Motor Carrier rent chassis from Chassis Leasing Company

- ✓ No capital investment
- ✓ Locations covered – Likely able to handle wheeled operations
- ✓ M&R included
- ✓ Daily rental rates
- ✓ Small administration of tracking usage

EXAMPLE





Chassis Provision Options #3

Shipper or its contracted Motor Carrier leases or purchases chassis and contributes chassis directly into a co-op chassis pool

- ✓ Capital investment
 - Right-sizing the fleet for size; volume peaks & valleys
- ✓ M&R included
- ✓ Small administration of tracking usage
- ✓ Locations covered – Likely able to handle wheeled operations

EXAMPLE





Within the CCM pools there is an added dimension of chassis provider selection

When ocean carriers provide chassis, the usage will remain with the ocean carrier

But, when the ocean carrier does not provide chassis,

- Shippers / Motor Carriers can choose specific moves to be directed to themselves or a named chassis provider
 - Allows Shippers' to have the ability to provide chassis for multiple motor carriers
 - Allows Motor Carriers' to have ability to provide chassis for multiple Shippers



Summary

- Chassis provision is evolving
- Multiple options are available for Shippers & Motor Carriers
- Match your needs with provision options



For More Information



visit

CCMpool.com

WWW.CCMPPOOL.COM

The screenshot shows the CCM website homepage. At the top, the CCM logo and 'CONSOLIDATED CHASSIS MANAGEMENT' are displayed. A search bar and 'UNIT LOOKUP' button are visible. The main content area features a 'POOL MEMBERSHIP' section with a description: 'Membership is available to a broad range of intermodal industry participants and other entities that wish to contribute and use pool chassis.' Below this is a navigation menu with links for MEMBERSHIP, ABOUT, CHASSIS POOLS, MAINTENANCE PROGRAM, CUSTOMER TOOLS, and CONTACT. A sidebar menu is open, listing: BENEFITS OF POOLS, CHASSIS MODELS (highlighted with a white arrow), OPERATIONS EXCELLENCE, ENVIRONMENT, POOL LOCATIONS, CCM POOL GENERAL FAQ, CHASSIS PROVIDER CHOICE, and CHASSIS PROVIDER SEARCH. The main content area also includes 'ABOUT US' text, 'BENEFITS OF PROVIDERS' with an image of a person at a truck, and 'POOL BENEFITS' with an image of a yellow truck and text explaining fuel savings and reduced emissions.



Question & Answer