

A white paper submitted by:**The Memphis Supply Chain Innovation Team*****A Single Gray Chassis Pool Fosters Fluid Commerce and Improves Supply Chain Velocity*****Team assembled as part of FMC Fact Finding Detention and Demurrage Investigation 28****Purpose:**

There is a need for A Single Gray Chassis Pool in Memphis to foster fluid commerce in/out of our rail ramps in Memphis, TN. Chassis are the metal frame and wheels upon which the container is mounted for movement over the road. A container cannot move without this critical piece of equipment. The current chassis provisioning model is broken and needs immediate address to improve supply chain velocity. The Memphis Supply Chain Innovation team seeks a gray chassis pool with the following critical elements to improve velocity and fluidity in moving international containers in Memphis and the Mid-south:

1. Adequate supply of chassis/Interoperability
2. Quality and Safe chassis
3. Fair Access to chassis (Choice!)
4. Accountability of chassis supply by a single manager

Background:

The Memphis Supply Chain Innovation team led by Federal Maritime Commissioner Rebecca Dye assembled following the **FMC Fact Finding Investigation 28** meeting held in Memphis on May 15, 2018. This team is comprised of shippers, ocean carriers, railroads, chassis pool contributor and motor carrier, who volunteered to address the collective challenges we have faced in the Mid-South area in search of a **better and more efficient** supply chain process for all. Each team member was asked to bring with them their tenure and expertise in the industry and agree to step out of individual silos in search of a way to enhance commerce fluidity in Memphis.

Problem:

Our collective challenges included grounding of equipment at our railroads, detention and demurrage charges, chassis shortages, chassis quality issues and trucking shortages that slowed down and then brought freight movement to a halt in the first quarter of 2018. It is important to note that these same issues plagued Memphis again this first quarter of 2019, proving that the issues are indeed systemic and not one-off occurrences. The team unanimously agreed that the most actionable problem was a deeper look at the chassis shortage and what would help to remedy the problem at hand.

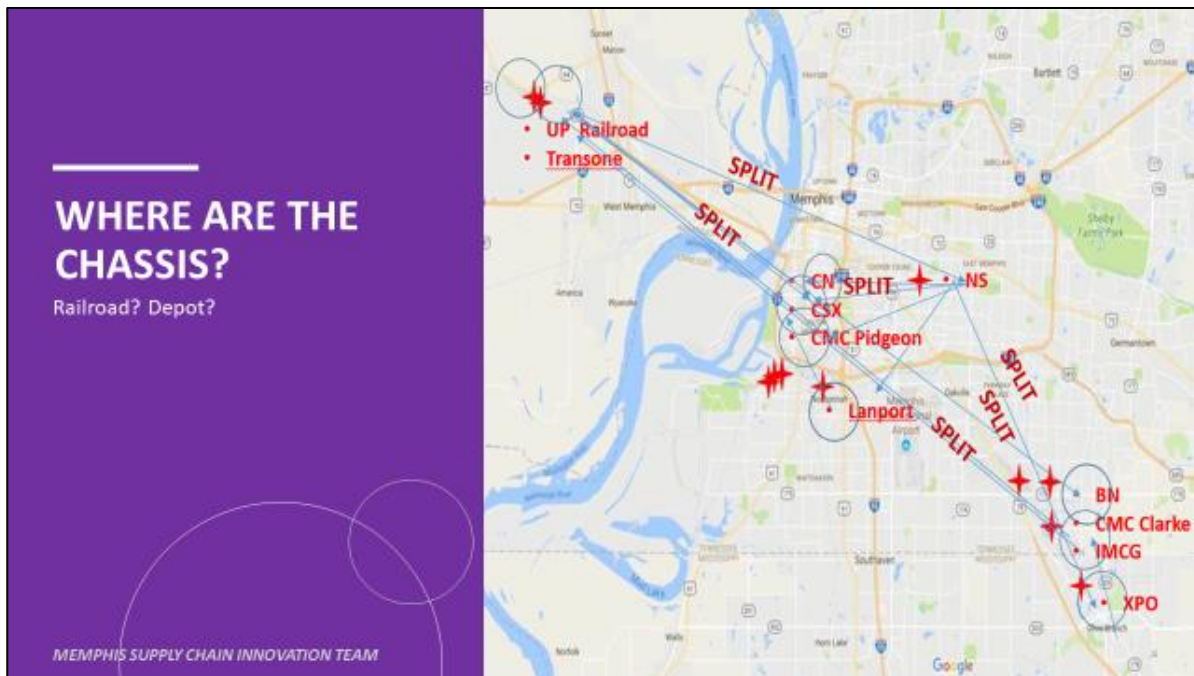
A deeper dive into the supply problem of chassis highlighted the following:

1. Chassis models are not keeping up with growing intermodal container demand.

2. Chassis pools in Memphis are not interoperable & freight is restricted to private pools leased under contract terms by ocean carriers. Shippers are not party to these chassis provisioning contracts, yet are paying the costs of chassis usage under merchant haulage terms. Over 50% of the freight movement in the mid-south has no customer relationship with the chassis providers moving under merchant haulage terms.
3. Chassis costs are rising on merchant haulage moves and costs are subsidized by shippers/truckers who do not have a choice in the chassis provider that is designated without flip charges and extra time at mounted rail facilities.
4. Chassis quality is very poor and equipment is aged. The average age of a chassis is over 19 years.
5. There is no single manager responsible for chassis provisioning and accountable for having chassis in the right place at the right time.

The team identified that these chassis challenges must consider the following facts:

1. When ocean carriers offer to deliver a shipment on a store door delivery (carrier haulage terms), it is the responsibility of the ocean carrier to provide a designated set of wheels (chassis). The challenge is there is no guarantee that a chassis will be available when the train arrives and there is no penalty to the chassis providers under the current model if sufficient equipment is not available. This January, one of our major retailers in Memphis had over \$25M in inventory grounded at the rail ramp waiting on chassis as storage charges mounted.
2. In instances where the ocean carrier contracts on merchant haulage terms, chassis provisioning is not the responsibility of the ocean carrier. The problem is that the ocean carrier has a conflicting agreement with the railroad that holds the ocean carrier responsible for chassis provisioning regardless of merchant haulage or carrier haulage terms. In essence, the ocean carrier has predetermined usage of chassis provider within their captive pool models when that train arrives. The unsuspecting shipper is forced to pay the higher cost of the chassis, yet the merchant (shipper) pays the bill. Merchant haulage shippers are paying thousands of dollars in storage when containers go to the ground at mounted rail facilities because of lack of chassis and these shippers have no voice in chassis provisioning.
3. In Memphis, like all inland rail hubs, shippers and truckers do not have a choice on chassis provisioning when rail operators have a mounted operational procedure. Containers are available as a mounted unit; shippers and truckers must take the unit as tendered or wait in line for a flip fee to move that container onto another chassis.
4. Our railroads do not know if a container is carrier haulage or merchant haulage upon arrival at the ramp. What they know is they need a chassis. Rail operations pull from the same finite pool when the train arrives. In order to keep trains moving, team members believe full interoperability with all chassis providers in a gray pool model in Memphis is needed.



Where are the chassis?

1. Chassis are never in the right place at the right time.
2. Ocean carriers admit forecasting is difficult. Large ships discharging on the coasts result in longer trains. Trains bunch into their inland locations.
3. There is little to no formal forecasting for chassis for US exports. Mid-South exports of cotton, paper and other agriculture products have and continue to suffer from the lack of chassis during peak shipping season. These service delivery problems impact global market competitiveness, reliability and reputation of these critical export commodities.
4. Rail inland hubs has great distance from one rail yard to the other. Take for example Marion, Ark (UPRR) which is 28 miles from the BNSF rail ramp.
5. Chassis repositioning costs are escalating.

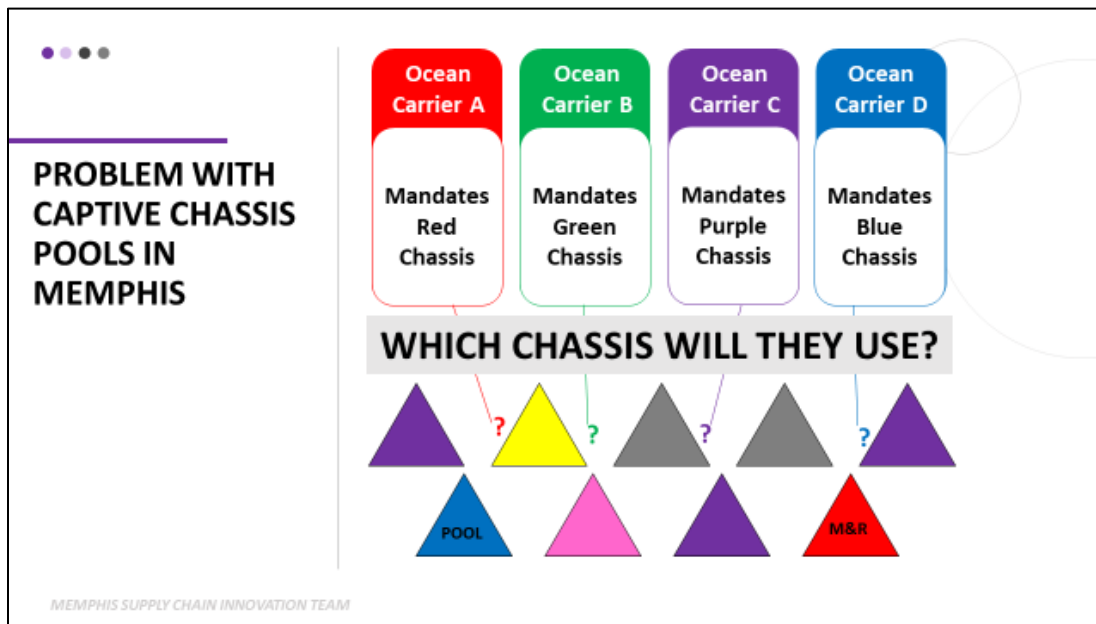
The result:

The result is handcuffed chassis usage, which require shippers and truckers to use a specific color chassis when the train arrives. Supply is restricted and held captive to ocean carrier alignments with chassis providers that they have no part in the selection process, yet pay the cost.

The result is rising costs and wasted time. Access is limited and supply is an on-going problem.

We are left to continue our fight for fair access, supply, quality and accountability for chassis in our market. We are appealing to chassis providers who do not participate in the Uniform Intermodal Interchange & Facilities Access Agreement, even though all rail, motor carriers and ocean carriers participate. These chassis providers are subject to section 4118 of the Safe, Accountable, Flexible,

Efficient, Transportation Equity Act: requiring registration and filing with FMCSA and systematic inspection and repair. The missing issue here is there is no regulation to insure adequate supply, address repositioning of equipment, fair access to chassis and accountability to the market.



Solution:

The Memphis Supply Chain Innovation team believes the answer to reducing gridlock and improving supply chain velocity in the Mid-South is a single gray chassis pool in Memphis offering greater supply, quality, fair access, and accountability. A gray pool allows interoperability of all chassis, which is the exchange of any color chassis for usage.

