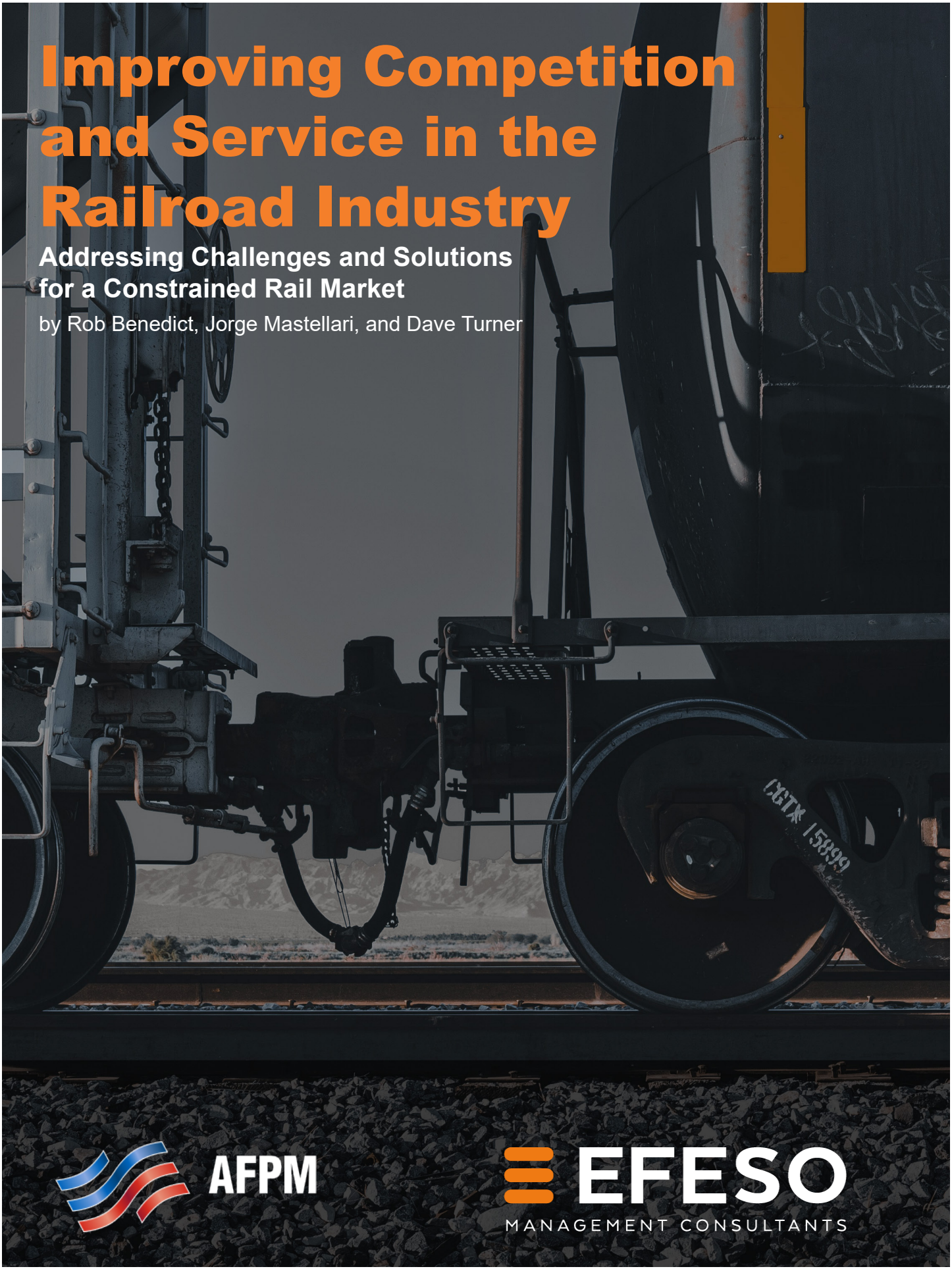
Improving Competition and Service in the Railroad Industry

Addressing Challenges and Solutions for a Constrained Rail Market

by Rob Benedict, Jorge Mastellari, and Dave Turner



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Rail shippers, including refiners and petrochemical manufacturers, depend on a safe, reliable, and efficient rail system to transport goods to and from their facilities and make essential products that fuel the American and global economy. Unfortunately, the landscape of the rail industry has changed significantly over the past 40 years, due to consolidation and the implementation of new rail operating models, which has resulted in a dramatic loss of competition. This lack of competition has led to poor service and higher prices for both rail shippers and consumers.

Since 1980, the number of Class I freight rail shippers has dwindled from nearly 30 to just six, leaving over three-quarters of rail shippers with just one railroad to use, a situation referred to in the industry as "captive shippers." This lack of choice has resulted in shippers paying more for less while the railroads reported record profits.

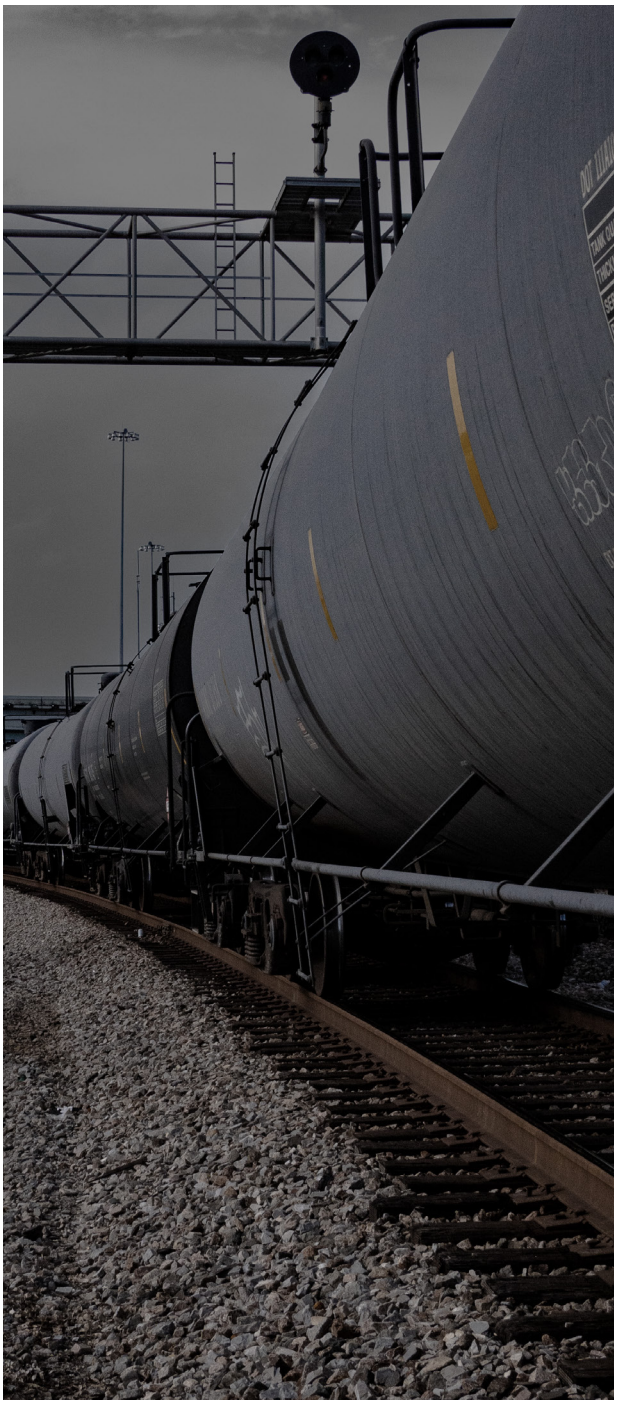
Today, four companies control 90 percent of all U.S. rail traffic and rates for the largest U.S. railroads have increased by more than twice the rate of inflation and the rates for long-haul trucking. This lack of competition and virtually unchecked pricing has resulted in a 43 percent increase in freight rail rates since 2004, compared to only an eight percent increase in operating costs.
Source: AFPM Communications https://www.afpm.org/

To add to these issues, in the mid-2010's the rail industry started to adopt a new operating model called Precision Scheduled Railroading (PSR). PSR focuses on lowering operating ratios to increase railroad operational efficiencies and maximize profit. Unfortunately, PSR has resulted in several negative realities for rail shippers. In an effort to lower operating ratios, railroads have eliminated shipping lanes, closed railyards, mothballed equipment and cut operational staff. This has led to increasingly poor service, delays, and more frequent use of longer trains, which often cause operational problems and disruptions to local communities. Railroads have also made abrupt service cuts and imposed rate increases with zero negotiation and effectively no lead time. With many shipping customers captive to a single rail carrier, they have limited recourse to affect change when service levels slip and rates continue to rise.

"Today, four companies control 90% of all U.S. rail traffic."

Freight Rail in America: Can a Market Be 'Free' if There's Almost No Competition? AFPM, April 25, 2022 https://www.afpm.org/newsroom/blog/freight-rail-america-can-market-be-free-if-theres-almost-no-competition

Rail shippers now frequently face service issues and operational complications due to the adoption of PSR as a standard industry practice. Meanwhile, changes in government policies to reintroduce competition into the rail industry have been slow to materialize. This article aims to sheds light on some of the common issues that rail shippers encounter and discusses a recent government proposal that could potentially improve the competition-constrained rail market, as long as modifications are made to be effective.



FIRST-MILE / LAST-MILE CHALLENGES: MANAGING DOWNSTREAM RAIL LOGISTICS

In the intricate world of downstream operations (refineries and petrochemicals), the first mile and the last mile logistics include a series of critical value-adding and non-value-adding events. Despite their significance, these events are often beset with challenges that can impact efficiency, capacity, safety and environmental sustainability.

Complexities that impact facilities will generally range from inside the fence switching and loading constraints to inconsistent service from Class I carriers, sometimes compounded when these customers are captive and

Some of the most important challenges that these operations face include:

1. Erratic inbound car flow, availability and ratability – This situation may include issues such as PSR practices forcing car volumes, SIT yard availability, lack of coordination with commercial and fleet management, etc.

2. Fleet management and right sizing – In this category, downstream operations have to deal with a car cycle's lack of management, car availability, customer constraints on car releases and erroneous car routing.

3. Yard management and switching operations – Lack of standard procedures or knowledge for creating yard and switching plans, ineffective use of storage capacity and movements inside the fence, lack of timely car/traffic information from carriers or others that generate a reactive car management situation.

4. Coordination with third parties servicing the downstream operations – Whether a third-party switcher or a short-line carrier, lack of integration with the production and communication flow of the refinery may cause car movement and management breakdowns.

5. Loading rack constraints and production problems – Issues here can range from sub-optimized use of the asset to loading equipment maintenance and reliability breakdowns to issues with actual plant production. Issues at this phase can have a ripple effect on the rest of the even flow of product.

6. Inside/outside the fence yard capacity – Either at "Storage in Transit" yards or yards inside the fence line, lack of space management or excessive inventories can limit flexibility and create bottlenecks and car flow problems. First in – last out, stranded cars, spurs/tracks out of service can cause bottlenecks that start a chain reaction in the operation.

7. Lack of an effective performance management system – Rail operations are typically at the end of the decision-making chain of a plant, so they must respond to the changes in manufacturing reliability and production runs. Sometimes legacy constraints are accepted as maximum capacity without really tracking improvement metrics that could reveal opportunities for breakthrough output.

In addition to these constraints, PSR has continued to put pressure on downstream shippers. Class I carriers have captured the benefits in operating ratio and profitability (carriers have seen train length increased between 20 percent and 30 percent and staff reduced around 25 percent during the last ten years) while shippers have seen flexibility and service deteriorate.

Under PSR, railroads prioritize the efficient utilization of rolling stock. As a result, there might be limited availability of railcars, especially during peak seasons or in specific regions. Shippers may struggle to secure the necessary number of railcars for their shipments, leading to delays in transportation and increased competition among shippers for the available resources.

Rigid schedules and streamlined operations leave little room for flexibility in shipments. This lack of flexibility can disrupt supply chain planning, leading to inventory imbalances and potential customer dissatisfaction.

With PSR's emphasis on reducing dwell times at terminals, shippers are under pressure to load and unload railcars promptly. Failure to adhere to strict loading and unloading schedules can result in demurrage charges – fees imposed by railroads for exceeding the allotted time for car usage.

To improve plant logistics performance, inside-the-fence programs like yard management and switching best practices should be applied. In addition, using digital tools to collect essential data for decision-making is also crucial.

For outside-the-fence issues, consistent tracking of Class I carriers' service metrics is required to ensure constructive performance discussions. Shippers should use a combination of internal data,

CAN AN UPDATED FEDERAL POLICY RESTORE RAIL COMPETITION THROUGH RECIPROCAL SWITCHING?

Reciprocal switching is a process that grants a shipper access to the network of another Class I railroad at an interchange, with the idea that the shipment would continue the network of the competing Class I railroad. As highlighted in this article, rail shippers' operations are highly dependent on the service reliability and consistency of Class I carriers and even more so when they are captive to that railroad. Reciprocal switching has significant potential to ameliorate the variations in rail traffic operations that have proven determinantal to rail shippers. Reciprocal switching is also regarded as a valid prescription for lack of competition in certain markets, which clearly impacts the agility and efficiency of shippers.

The Surface Transportation Board (STB) oversees freight rail shipments in commerce and their current policies include authorizations for reciprocal switching under very limited circumstances. While the STB has been considering updates and broadening of access since 2016, the Board recently announced an updated proposal that would limit reciprocal switching access to "captive shippers" that are experiencing prolonged periods of poor service.

As part of this new reciprocal switching initiative, the STB has proposed the use of three main metrics or standards that are consistently applied across Class I rail carriers and their affiliated companies. These metrics are intended to reflect a minimal level of rail service below which a shipper would be entitled to relief.

- Service reliability: The measure of a Class I rail carrier's success in delivering a shipment by the original estimated time of arrival (OETA) that the rail carrier provided to the shipper. The OETA would be compared to when the car was delivered to the designated destination and would be based on all shipments over a given lane for a period of 12 consecutive weeks.
- Service consistency: The measure of a rail carrier's success in maintaining, over time, the carrier's efficiency in moving a shipment through the rail system. The service consistency standard is based on the transit time for a shipment, i.e., the time between a shipper's tender of the bill of lading and the rail carrier's actual or constructive placement of the shipment at the agreed-upon destination.
- Inadequate local service: The measure of a rail carrier's success in performing local deliveries ("spots") and pick-ups ("pulls") of loaded railcars and unloaded private or shipper-leased railcars within the applicable service window, often referred to as "industry spot and pull" (ISP). The Notice of Proposed Rulemaking (NPRM) recommends that a rail carrier fail the standard if the carrier had an ISP success rate of less than 80 percent, over a period of 12 consecutive weeks.

Reciprocal switching can be a useful solution for captive shippers, but as proposed, the STB's rule would limit access to reciprocal switching only to rail customers who are both served by a single railroad **AND** have experienced prolonged periods of poor service. The current rulemaking would improve service, but only after rail shippers have felt the prolonged impacts of unreliability and delay. The STB proposed rule would require a shipper to experience 12 weeks of abysmal service before they could seek reciprocal switching as a remedy. Poor rail service for just one week severely hurts operations and can even shut down a refinery or petrochemical facility, and rail shippers should not have to wait until service is unacceptable for a predetermined duration to have access to reciprocal switching.

The AFPM supports the idea of reciprocal switching but believes it should be more broadly available and not as limited as the STB proposes. In AFPM's comments on the STB's rulemaking, we stressed the importance of reciprocal switching being available in all instances where there is a lack of competition. While reporting the three metrics can be helpful, the thresholds must be appropriately set. If the thresholds for railroad performance are set too low, the railroads will likely do 'just enough' to avoid reciprocal switching. AFPM urged the STB to continue pursuing broad access to reciprocal switching for all captive shippers to reintroduce competition in the rail industry on a wide scale.

In the 2023 NPRM, the STB proposed a new set of regulations that would provide for the prescription of reciprocal switching agreements to address inadequate rail service, as determined using objective standards based on a carrier's original estimated time of arrival, transit time and first-mile and last-mile service. In a related decision, the Board also chose to close a 2016 NPRM that employed the lack of competition clause as its rubric for the prescription of a reciprocal switching agreement. The Board's new approach in the 2023 NPRM instead uses the public interest clause to determine whether such a switch is merited but not the preferred clause. AFPM is supportive of the 2023 NPRM, with specific suggestions highlighted as follows:

- Reciprocal switching can reintroduce competition in the market: Reciprocal switching should be available when there is a lack of competition, a dire reality the Board has repeatedly recognized in the current rail market.
- Service metrics are critical and can provide benefits to customers: In the absence of broad access to reciprocal switching based solely on lack of competition, a service-based approach is in the public interest and will benefit the American people if crafted carefully. The service metrics proposed will allow rail shippers to hold railroads accountable for wholly deficient service.

- Avoid mediocre service: Specific thresholds to trigger reciprocal switching must be carefully considered to ensure that they adequately incentivize railroads to improve service and spare captive shippers the consequences of pervasive service failures. If the thresholds for railroad performance are set too low, the railroads will improve no more than required, incentivized to do “just enough” to avoid reciprocal switching.

- Broad applicability is key: In the absence of broad access to reciprocal switching based on lack of competition, the proposed reporting requirements must apply to contract shipments, not just those under an STB tariff rate. Such metrics should be used as grounds for prescribing a reciprocal switching arrangement that would become effective after the contract expires.

The proposed new regulations by the STB are a good start for incentivizing improved service, but they may not be enough for rail shippers. The current proposal for reciprocal switching falls short of the broader access that shippers require. If rail shippers are forced to endure prolonged periods of inadequate service, it will lead to further disruption of business activities. Therefore, while AFPM supports the idea of reciprocal switching, it should also be available to bring back much-needed competition to the market caused by the introduction of PSR.

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