Back to the Future? Moving Intermodal in Mixed Trains

Monday, September 17th, 2018
10:00 am – 11:00 am
Long Beach Convention Center
Long Beach, CA
Back to the Future? Moving Intermodal in Mixed Trains

Moderator:
• Rod Case, Partner, Oliver Wyman

Panelists:
• Doug Punzel, President, Celtic Intermodal
• Rob Nichols, Managing Director, Canadian Pacific
• Nate Asplund, Chief Executive Officer, FEC Railway
Rail’s conundrum

Bigger trains

$41
per 1,000 RTM

vs.

Smaller shipments

$200
per 1,000 RTM

Source: Bureau of Transportation statistics
Photo source: left, Andrew Jennings; right, Getty Images
Worse... rail is increasingly disconnected from the base growth of the economy and the most interesting areas of growth.

Source: Oliver Wyman analysis
Challenge: Total supply chain costs can overwhelm rail tariff
Queuing within supply chains drive massive costs that are increasingly under redesign to drive out the waste

- Inventory carrying costs represent almost 30 percent of logistics costs
- Consistent delivery is more powerful than speed to reduce total supply chain cost in rail offerings

Source: U.S. Logistics Council, “2017 State of Logistics Report” and Oliver Wyman analysis
What and Why are mixed-use trains?
Mixed train operations drive frequency and service consistency with variable demand

**WHAT**

Mixed-use trains carry multiple blocks from *more than one business unit* or customer type

**WHY**

➢ *Daily Frequency* for blocks that are less than trainload
➢ *Stabilize and balance* daily train operations
➢ *Reduce Dwell* to build large blocks
➢ *Leverage the whole* traffic base in a corridor
Multiple-block trains are common but mixed-use trains are rarer. The opportunity is in leveraging multiple business units on the same train.

**BNSF example:**
Example train makeup shows 2 block train for Intermodal Business Unit.
Intermodal is as much about lane size as length of haul
Significant lanes remain unserved in the rail network

Rail intermodal length of haul share
Share of revenue ton-miles per mileage bucket

Source: Freight Analysis Framework, version 4; Intermodal Association of North America, Intermodal Market Trends and Statistics; Surface Transportation Board, 2014 Public Waybill Sample; and Oliver Wyman analysis
Multiblock train designs are common within Intermodal. Often sub scale sized lanes are not included in the network offering.
Mixed trains can be a powerful Business Development tool. Often sub scale sized lanes are not included in the network offering yet parallel blocks exist in other commodities.

### Daily Origin Block size
Typical Intermodal market potential

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<th>Destination</th>
<th>1</th>
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<th>3</th>
<th>4</th>
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<td>1,800</td>
<td>1,600</td>
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### Daily Origin Block size
Typical Carload Hump Yard

<table>
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<td>3,900</td>
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Mixed-use trains are sometimes seen on railways in North America. There are some North American examples of mixed-use trains that cross business units resulting in higher frequency and fill rates.

North American mixed-use train example:
Corridor train makeup shows only 15% of grain trains were pure

- Consistent corridor train counts was key
- Daily operation of dominant “anchor bock” was core of the plan
- Grain blocks were subordinate to other commodities
- These block consolidations were performed on both a tactical basis and a planned basis
Railways have had inconsistent success on growth. Using the power of rail network flows and orientation to daily offerings in emerging lanes has proven to accelerate traffic growth.
Why are mixed trains not more common?
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