

Ten Years After: The Second Intermodal Revolution

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About the Author



Tony Hatch has been a senior transportation analyst on Wall Street for over twenty years, starting at Salomon Brothers; proceeding to Argus, PaineWebber, and most recently at NatWest Markets (USA) prior to starting his independent analyst/consultancy in 1999 and working with partner Miller Tabak beginning in 2009. Mr. Hatch's coverage has been focused on the freight transportation segment, particularly surface transportation. Mr. Hatch is known for his knowledge of the intermodal area, where the various modes of freight transport converge, on which he has held a dozen specialized conferences.

Recently, Mr. Hatch has been providing not only "traditional" institutional transport research but also providing due diligence and other services to new forms of transport investment such as private equity, infrastructure and hedge funds in such areas as rail maintenance and construction, railcars and 3PLs, along with *Progressive Railroading Magazine*. He co-presents and leads "Railtrends", the most comprehensive railways conference every fall in NYC.

With a quarter century's experience in the field, Mr. Hatch has been active as an independent analyst and consultant, doing work for major railroads, transportation trade associations and management consulting firms. He has also worked with an extensive list of private equity firms in the space, both here and in or involving Europe, Brazil, China and Australia.

Mr. Hatch, when directly on "the street", was named to various honor rolls, including the Institutional Investor ("II") and Wall Street Journal All Star Teams and he has garnered the top spot in the Greenwich Poll. He is a past president of the Motor Carrier Analysts Association. He was just recently named to the board of Axion, a recycled-materials rail tie manufacturer. A career highlight had been testifying before congress on railroads, starting in 1998, among other testimonies.

Mr. Hatch graduated from Harvard College with an A.B. in American History in 1982. He lives in New York City, and enjoys baseball (watching and playing), English soccer & history, US politics, and sports cars.

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Executive Summary

The intermodal industry has become an accepted shipper choice for both international and domestic goods movement due to vastly improved operations, improving modal competitive scenarios and public policy implications. And yet, in terms of market share and growth potential (volumes and contribution) we are still at an “early innings stage.”

The increased railway Return on Investment from the first phase of this “renaissance”, in the first decade of the 21st century was initially misunderstood by many rail stakeholders (notably investors) until well after the inflection point; a similar pattern is developing in this second decade of the century as the groundwork is being laid for the domestic segment of bi-modal transportation to truly take off not just in terms of volume and market share, but of ROI.

Slightly over ten years ago a white paper written by Thomas Brown and this author (Anthony Hatch)¹ successfully and, in retrospect, shockingly predicted the intermodal revolution that was a – if not *the* – key driver of the “Railroad Renaissance.” Intermodal eventually did become the largest rail commodity by revenue even if it did spend years locked in battle with the former King, coal. That battle is now clearly over. Intermodal has now fully come of age as an accepted mode of transport and a viable rather than marginal outlet for sophisticated shippers moving goods both/either domestically and internationally.

Intermodal has moved from marginal to profitable. In the 1990s and the first decade of this century, rail intermodal growth was fueled by international trade and (and in turn was absolutely critical to) globalization – the worldwide sourcing of goods and services that changed the international economy (and still does, near-sourcing being just a global shift towards the US). Rails passed a mythical supply/demand point in 2003 and gained, for the first time in modern history, pricing power. The corresponding move of intermodal within the Class One rail’s revenue portfolios from a breakeven ROI (and high OR) up towards the top-ranked commodity was the single biggest contributor to rails earning their cost of capital in this second decade of the 21st century for the first time since the Staggers Act of 1980.

Intermodal has allowed rails to move back up the value chain. Rails had for decades ceded value added and consumer goods to the highway. With the development of modern intermodal, all that has changed. The movement into successfully handling value-added goods eventually brought higher margins but also higher cyclicity, as the results during and after the 2008 crash and the (second) “Great Recession” testify.

Now the rails face new challenges, from outside of intermodal (the decline of domestic coal whose cash flow funded a lot of main line development - and the rise of new energy) to within (the wider Panama Canal, a new focus on shorter haul domestic goods.) But as so often happens, with challenge comes opportunity: the true domestic business represents very low share/very high prospects given a significant increase in service levels (which requires some combination of IT/Capex/willpower).

Historic Railway Advantages remain, and this time the wheel is already invented. Given the (poor) state of the national infrastructure vs. that of the rail network (excellent), the secular driver shortage issue, the likely continued fuel price advantages, *etc*, rail is poised for a next big jump, a “second revolution” (and a second phase of the “renaissance”) on the domestic side, and a concurrent move from close to breakeven up the contribution chain.

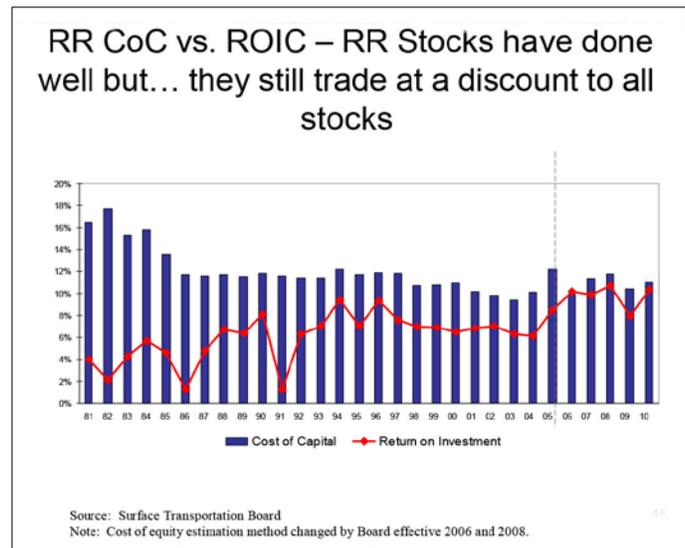
¹ Thomas R. Brown and Anthony B. Hatch, “The Value of Rail Intermodal to the U.S. Economy”, September 2002

I. Industry Overview: Intermodal – Ten Years After

Ten years ago Thomas Brown, now at UP's Streamline, and I wrote a White Paper on Intermodal that captured the spirit of the times and the imagination of the business public as we sought to argue for the potential future success of the combined transport mode that, when operated correctly, captures the best of the capabilities, long haul to destination, of ship and rail and the first/last mile convenience of truck. We startled observers a decade ago by noting that the central cog, railways, would soon feature intermodal as their largest commodity segment in the (very) near future. This meant re-penetrating finished and value-added goods most thought had been long abandoned to the highway and moving away from being "merely" a bulk carrier of raw or semi-finished materials ("not your father's railroad.")

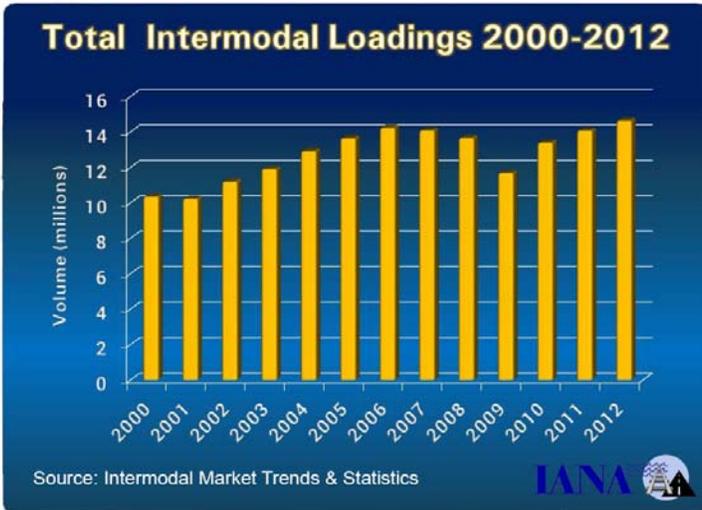
Truly, the Railway Renaissance since the Staggers Act of 1980 was proving that it was no longer the bloated, obsolete, inflexible and near-bankrupt industry of the regulated era. In fact, the industry was a central player in the defining business activity of the late 20th and early 21st century: Globalization. Without a double-stacked network across the continent there would be no industrial outsourcing, no global sourcing, no big box retailers, no JIT, etc....and we were fortunate to be prescient. Immediately after the issuance of the White Paper we were able to celebrate the mythical "Cross-Over Day", when intermodal became the number one Rail commodity, and the intermodal growth explosion of 2003-2007 (and the move of intermodal from below to above average ROI) would redefine the freight rail industry – and the global supply chain.

Once intermodal had finally been acknowledged as a *growth* engine (how could it not be?), consensus, even within parts of the rail industry, was that it was only growth with little contribution to the bottom line or ROI (and "negative yield" and OR impact.) However, intermodal results are really different from merchandise or bulk rail numbers, and once an inflection point is reached in terms of supply/demand, the contribution can be just as impressive. Certainly, the performances of railways in the 21st century with ROIC improving, operating ratios declining, earnings exploding – with intermodal as the chief driver of growth – put to rest that now tired old maxim.²



² A great example is the performance of perhaps the star performer in the first phase of the Railroad renaissance – BNSF, whose intermodal revenues increased from a quarter of their total to well over a third in the years 2003-07, and yet whose operating ratio improved by only 8% by 2007 (to what would appear today to be an unseemly 77.9%) – but whose ROIC improved by a full third to 10.5%! It's that level of performance, hard to measure in the short term, that proved so hard for so many to see.

Intermodal survived the “Great Recession” and its aftermath – even as the rails are increasingly cyclical. Intermodal was the first commodity to fully recover to the previous (2006) peak – by 2012 except for Hurricane “Sandy”. Yet, one interesting thing about the “renaissance” is that as rails became both more efficient and more marketing-oriented, they were able to re-penetrate finished



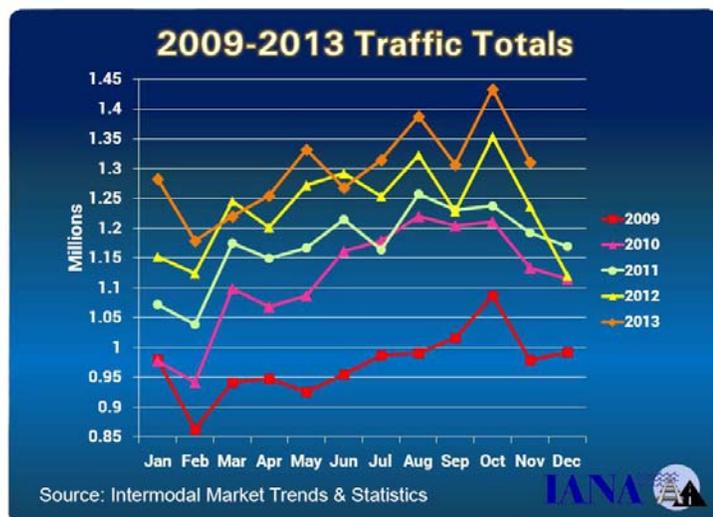
and value-added goods transport, business that they had ceded to trucks over the last half century. Fine and good, but in so doing the old rail model became even more reliant on bulk commodities and thus significantly less cyclical, and its reversal, the modern intermodal revolution, increased the overall cyclicity of the top line due to intermodal’s close ties to retail and housing.

The international half of the intermodal business is closely correlated to consumer spending. In truth, the rails’ franchise remains very diverse, and their earnings performance

since the depths of the “Great Recession” shows both that and their ability to manage short term variable costs. Never before in the modern, post Staggers (1980), age of rails had intermodal volumes dropped three years in a row until 2007 (the real start of the recession) to 2009. On the other hand, intermodal volumes finished 2012 just 1/10 of 1% below the 2006 peak, and when they pass that level this year they will be the first rail commodity to do so. It is during this time that share growth in domestic intermodal began to compensate for the large drop in consumer imports.

From “Cyclical” to “Mature”?

With the gain in international share and relevance came new issues – an increase in cyclicity and growing retail (sales) dependence in an ever uncertain age, a dependence on continued trade growth, stable trade flows and on uncertain or unsteady steamship line strategy. And finally came not just the cyclicity but the – relative – maturation of that segment of the market, with growth rates now expected at 1-3X GDP rather than 5X+.



International Intermodal is the more mature portion of the industry, whose revolution dates back to the mid-80s development of the double-stacked container network. By now virtually all of the international business is cleared for double stack. Changes in trend in this segment come from several factors:

- relative health of the economy, particularly a) retail and b) housing;
- trade flow changes such as: a) port or b) region selection such as west vs. east coast (and the impacts therein of politics, the wider Panama Canal, labor, etc);
- transloading vs. intact³; and
- global manufacturing decisions on: a) regional choice (China vs. SEA), b) near-sourcing, or c) a return to in-sourcing within the USA. These decisions, beyond the direct impact of rails, impact intra-rail share as much as pricing and other typical competitive options.

International business has showed signs not only of cyclical but of maturity, as has globalization itself. More and more, it appears that port diversification has driven trade flow decisions, for which the widening of the Panama Canal in 2014-15 now looks not to be a game-changer but a necessary move simply to remain in the game. The improved service of the rails and the continued importance of the western destinations (especially LA/LB) and the growing transload options have all combined to stabilize market share.

There should be a port shakeout in the east coast after the canal opening, to be sure, but it is unlikely to be a massive further shift to all-water (east coast) service with the possible, albeit small, exception of South Florida. Near-sourcing and other issues related to the ebb and flow of globalization will have an impact – more on the direction of trade flows and on individual carriers, with Mexico clearly already showing amazing growth as a near-source option for autos, white goods, etc. But any movement to re-patriation might shift some business from intermodal to other rail, or from international intermodal to domestic, but likely would be an overall win for the overall rail network.

New port development, on the other hand, has been exciting – both Canadian Prince Rupert in the far northwest Pacific and Mexico's Lazaro Cardenas south of California have exceeded expectations and helped create outlet ports that have benefited their exclusive carriers (CN and KCS, respectively). Miami is a possible new port development, benefitting from the Canal but also from the growing LatAm trade – and providing a northbound service for the first time for Florida carrier FEC.

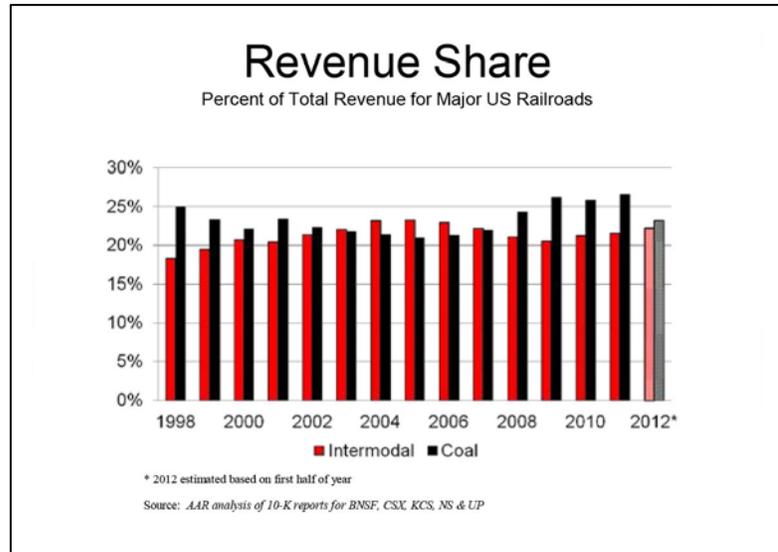
Globalization is beginning to rotate back to the USA - the far off advantages are less compelling as the wage differences are narrowing (China vs. the World), and domestic energy is a game-changer. Off-shore risk includes not only transportation (and fuel) but politics, currency, etc. Clearly, Mexico's growth is for real. These changes will impact rails mostly in classification of commodity: international container vs. domestic or boxcar. Just a guess at this stage, but although it's a fascinating topic, as The Economist wrote, "the re-shoring movement has to be kept in proportion....". The game changer that the North American energy revolution brings will undoubtedly bring about a re-industrialization of sorts, led by chemicals, fertilizers, steel, autos, etc.

³ Remember also that transloading growth (re-stuffing 3 40' international containers into 2 53' domestic boxes) distorts the relative growth rates in favor of domestic, but provides real "stickiness" and possibly balance.

As One Segment Matures, Another (Re)Emerges

Offsetting the international driven opportunities and challenges is a new prospect: true domestic intermodal, the forgotten half of the picture. Domestic, “trucks-off- highways”, was actually the very first intermodal exercise, with roots dating back to the mid-20th century, but this attempt at *Back to the Future* is different: it isn’t going to cannibalize existing rail freight and most importantly it comes with the unwavering support of the more sophisticated shippers, truckers and government. Rail Intermodal has one advantage – it no longer has to battle to win acceptance as a form of freight transportation.

Coal looks unlikely to be a challenger to intermodal as the top commodity anytime in the intermediate future as its own secular regulatory and cost issues come into play. The rails, under continual shareholder pressure, must replace that volume and growth, and they will – with oil & gas related development and transportation, with a revived auto and chemical industry, with a volatile but promising agricultural segment – and with intermodal.



The Future is Now

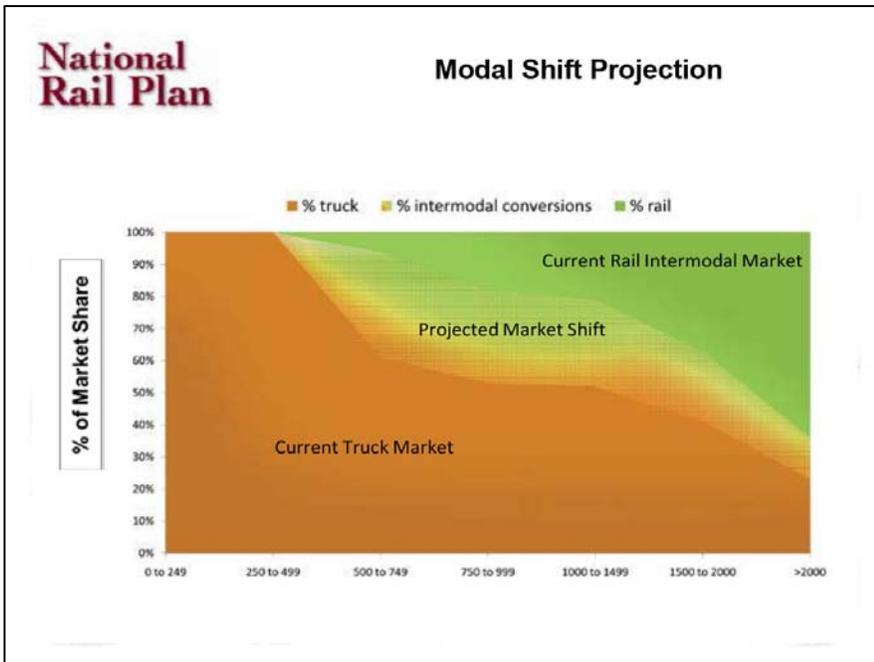
I anticipate that intermodal will grow in the 5-7% range (an estimate a bit more aggressive than TTX'), based on GDP+ growth at international and 2-3X GDP growth in domestic intermodal transportation. As I have stated, there's no free lunch – both will increase cyclicity to rails' overall franchise, international especially so; both require levels of capex to create capacity, speed and terminals that will strain an already and always intensive capex budget; both will require levels of service consistency heretofore unseen in the modern rail age (domestic, with it increasingly shorter haul opportunities, more so).

Intermodal has been key to a change in government sentiment. As intermodal customers tend to be happier with rail performance (or they would be gone, as it were, back to the highway), the overall largest group of rail shippers, coming from big and powerful companies such as UPS doesn't complain in DC. This allows government writ large to see the following advantages in rail performance:

- Economy (good for consumers)
- Reduced fuel reliance (the famed modal advantage of 4:1)
- Emissions reduction
- Safety – rail safety performance is notably better than the highway, recent high-profile incidents notwithstanding
- Tax avoidance – moving “10% of the freight from the highway to the railway” reduces the public highway expenditure – crucial at an era of government and tax avoidance.

Both intermodal segments – especially domestic – offer the rails a chance to grow share also heretofore unseen in the modern railway age. Given the increasing role that shippers want them to fill, and the capacity they can provide the marketplace even as trucking productivity peaked,⁴ and even the position that governments want them to take on⁵, 2012/14 is shaping up a lot like 2002/4 – the cusp of the second phase of the Intermodal Revolution when volumes, share, price and ROI increase simultaneously.

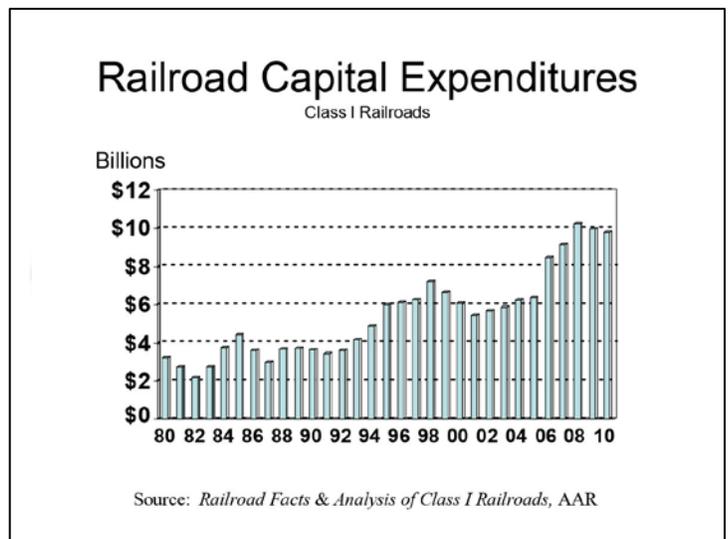
II. Competitive Position of Intermodal Today



There are inherent cost advantages with rail. Basically as understood for reasons of “steel-wheel” physics⁶, rail intermodal is cheaper than highway, with 5%-35% differences coming from factors such as distance, number of handlings, single vs. double-stack, etc. The latter is some 75% more efficient than single stack, for example. On the other hand, while narrowing significantly, rail service isn’t at the overall truck level in terms of either speed or consistency, although in some instances it has met or exceeded those

standards. As the “service-gap” narrows, so can the price gap (historically 10-20%) and as importantly, the gap in market share.

Regarding infrastructural advantage, the rail network for freight in North America is the world’s best, and in the best condition of its modern life, thanks to massive capital spending (see charts) that run up to 18% or so of rail revenues, compared to 2-3% for the average industrial company. IT spending and capability are also at all time highs. The vast majority of the expenditure, if unquantifiable due to shared networks, (though certainly of the *growth spending*) has been on intermodal (sidings, double and triple tracking, terminals,



⁴ In terms of driver shortages, fuel and carbon concerns and infrastructure deficits.

⁵ Take trucks off of the highway for all of those named reasons plus safety and tax avoidance.

⁶ Fuel cost advantages (4-6X), labor costs (2 man crews times X crew-change points carrying 200-300 containers), etc.

rolling stock, etc). The Logistics Park concept – a road/rail warehouse mega-terminal – is very sticky. The barrier to entry for the rail portion is enormous, if not impossible to overcome.

Network advantage is expected to only grow wider. Privately financed infrastructure is like the tortoise, moving slowly but winning in the end. The vaunted interstate highway system, as stated, is in a state of decline, hopefully to be arrested but unlikely to be reversed entirely in the current economic and political environment. Live by the subsidy sword, die (or at least not prosper) by the subsidy sword.

Strong bi-modal partnerships with steamship lines, IMCs, and truck-load carriers reflect a long developed relationship, with advantages conferred usually by contract, or the amount of assets controlled (intermodal value has changed from asset-light towards asset-controlling as the supply/demand balance has secularly shifted towards carriers) or customers controlled (Pacer has remained in the game long enough to restructure in part because of its boxes and customers).

III. Rail Intermodal Clearly Remains the Growth Focus

The solution to the rail growth issues of the teens: follow the money. With coal floundering and the economy in slow-growth doldrums, it is only in a few areas that rails can achieve the growth investors are looking for. Luckily those areas – shale/related, revived industrials and domestic intermodal market share - provide significant upside. Particularly in the latter, domestic intermodal, we have seen rails put their huge capex money where their CEO's mouths are saying they will grow. And right now much of the investor attention is on the shale play, while the much bigger intermodal opportunity is actually being under-estimated, and as we can see by near term focus on so-called “negative mix”, once again misunderstood.

Intermodal opportunities are not without challenges, from inside and out. What is needed to accomplish this second “Golden Age” of rail freight transport, when all modes work in harmony and efficiency and productivity resonate through the supply chain?

From a policy point of view:

- *No re-regulation!* The first rule is, as ever – do no harm. Regulations, whether coming by law or regulatory body, even on the bulk commodities, cap railway ROI and offer the strongest possible incentive to disinvest, especially given rails’ 18% or so of revenues capex run rate, at a time when rails’ privately-financed network is required to help make up for highway deficits.
- *Create an integrated plan!* The second is to develop a true national freight transportation policy that takes both rail and rail intermodal strategy into just consideration. Several connecting “parts” such as chassis pools, etc., also remain unresolved.
- *Co-invest wisely!* The third is to either continue the policy of PPPs in the space and to invest in the ports (seaboard or inland) and the connectors that make the country run at its best or encourage private side financial investment. Given this and good hard work by the carriers on the service front there is every reason that intermodal will lead rails into a second golden age.

From a railways point of view:

- *Achieve pricing power* as they have on international intermodal (and most other) business. At present they are often subordinate to their bimodal partner and pricing has been rather weak given the share change & growth rate. An inflection point will come soon.
- *Mega-Projects* - Create the necessary infrastructure through major projects such as the “Corridors” (NSC, the National Gateway (CSX), Rosenberg (KSU), Prince Rupert (CNI), etc.
- *Constant Projects* - Continuously improve the service product through capex and IT development, i.e. clearances, sidings, choke point removal, double tracking, etc., such as the “Sunset Corridor” (UNP) or the restructuring of the Vancouver-Toronto line at CP. Intermodal has been the primary reason the Class One Rails have spent on average over 18% of revenues over the past five years (versus low single digits for the average industrial).
- *Open new lanes as appropriate* – it’s not just network or even corridor development, but specific city O/D pairs that create truck-like competition.
- *Maintain trade lane flexibility* – globalization is continuing, it’s just (now) spinning back towards North America, with implications for changed routings. Railroads have proven to be nimble in order to accommodate change in energy use, for example.
- *Simplify complicated supply chain* – through IT, consolidation, etc – perhaps disintermediation. There is lots of margin being shared.
- *Add speed* – once a region or network is “completed” even more traffic becomes competitive with the increase in system velocity (which also has major positive productivity ramifications). Expedited services are already faster than truck in some key lanes.
- *Consider strategy changes as needed* – from the traditional point-to-point (a la NSC’s “corridors”) to hub-and-spoke (see CSX’s North Baltimore, Ohio hub, and others to come).
- *Look at new markets* – flatbed, reefer, going after dedicated or private fleets, etc.
- *Repeat*

The need for capacity will create friction with the growing passenger rail story; with bi-modal partners to price rationally, and with pressure on operations to run consistently through weather, etc. But it will also trigger the re-valuation of capacity away from “asset-light” plays to asset holders; capacity ownership will be rewarded.

Domestic Intermodal

Domestic intermodal is the higher service portion of the business with shorter average lengths of haul and a higher competitive battle with trucking. However, shipper demands for capacity and trucker productivity & cost issues have combined to move the more sophisticated (virtually all of the publicly traded fleets) towards offering an intermodal service, running from an option to being a fully bi-modal player like JB Hunt. It is no coincidence that the best returns in the TL sector come from Hunt, whose intermodal business is now larger than its traditional trucking. Now working with their bi-modal partners, the rails are offering dozens of new lanes or “corridors” running into shorter and shorter lengths of haul.

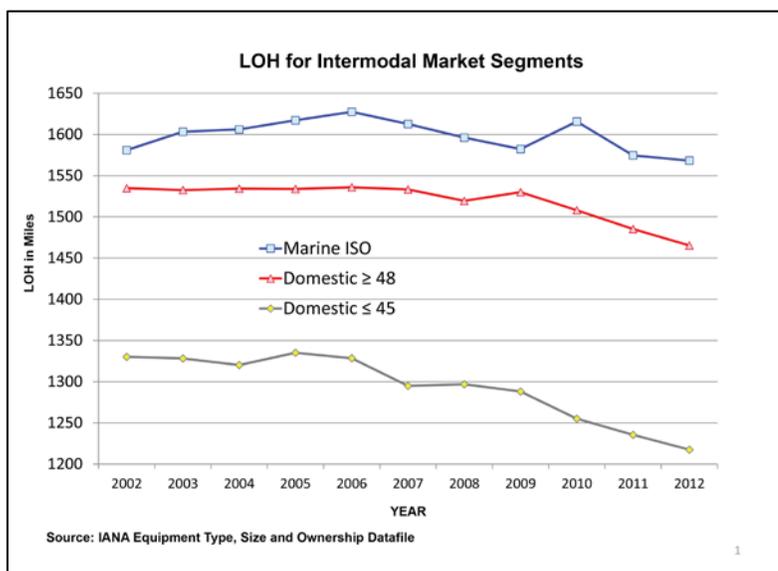
Trucking productivity has peaked. Trucking is facing costly emissions impacts in new engines, increasing and significant road congestion, without any real government building program (or even enough maintenance!) in sight, and driver turnover issues that are systematic and demographic. Driver turnover in the last six months of 2012, a period of limited economic growth and sustained high unemployment, was still over 100% - it reached over 180% in the 2006-2007 peak. These issues are being exacerbated by government regulations, still being debated and enacted, that will reduce driver hours-of-service (HoS) and will record driver's compatibility with laws and regulations (CSA). The cost implications are large – compensation, hiring/training/retaining, and insurance – are all on a secular upswing. The truckers' available responses are limited, although gains in fuel efficiency, technology, routing, etc., help, but aren't in sum big enough - especially with the continued and continual defeat of truck size & weight (TSW) on a national basis, which is no panacea in any event.

The better option to fighting? Joining....so many TL carriers that for years scoffed at offering an intermodal service are now rushing to do just that. Perhaps most notable was the decision in 2011 of FedEx Freight to work with rails after years of not following arch-rival UPS' lead into truck/rail transportation. Fuel alone – and the total cost to shippers after both modes surcharge, is one large reason.⁷

Public policy implications favor rail/intermodal. Diverting traffic from the highway to the railway is now de facto government policy thanks to the reality of the modal situation and to hard marketing by the AAR, IANA, etc. In an era of diminished means and reduced government spending (not to mention debate of the very nature of government spending), the privately financed rail network can absorb capacity while paying taxes as opposed to the enormous cost of adding highway capacity (and the so-far inability to raise taxes towards that end despite the fact that the users support it!). In addition, rail is safer than truck by a far margin, is much greener (note the ads on TV – moving to rail is a significant emissions positive) and when it works well offers economies that quickly translate down to the shippers' (and presumably the consumer) expense.

Down to a Day

It is commonly held that the new competitive battleground, given density, is a day's drive, roughly 550 miles. And consensus holds that in domestic lanes, market share is still extremely small, with some 9mm loads available for competition in the east and still fully 11mm in the less dense West. Domestic is where intermodal started ("piggy-back"). For years it was a relative backwater, save working with



⁷ Avondale Partners figures that diesel at \$1.25/g makes intermodal break-even at 1000 miles (under current conditions), but at \$4/g the breakeven could be as low as 500 miles.

Hunt, Schneider & Swift (and a few others) on the TL side and UPS (and the stagnating and/or declining LTL sector) on the express/parcel side. The strategy seems to offer TL carriers a trailer (“TOFC”) option almost as a gateway drug before (after proof of service reliability) enticing them to the mutually beneficial, efficient (and “sticky”) container (“COFC”) product. Shorter haul business represents a huge opportunity – share at levels below 1000 miles are single digit, and the average rail intermodal LOH has decreased only 3-4% in the last 5 years or so.⁸ There are real opportunities in the low market share domestic lanes, and real complications – intricate pricing patterns in a multi-partner supply chain, differences between eastern and western operations, the mid-length areas between systems that are hard to split (costs, margins) equitably, topography, LOH and politics, etc...but where there is opportunity, rails have proven flexible enough to accept the challenge.

IV. Intermodal Infrastructure

By the end of the last decade, the poor condition of our subsidized national highway (and waterway) infrastructure was well known and publicized – but little or anything had been done about it. Not so for the privately financed railway network, where capex has set records every year coming out of the “Great Recession” (and to a lesser degree the ports, which have had a jolt of “Panama” funding). A trading continent such as ours relies on its historic infrastructure advantages, whether importing retail boxes, exporting grain, or moving manufactured parts within the Midwest. The interconnected intermodal (small “I”) network needs consistent investment but viewed today (and for some time, anyway) also presents a modal advantage for rail intermodal.

What is infrastructure as traditionally viewed? Well, the rail network for sure – and sometimes that indeed gets discreetly valued – examples include the “Meridian (MS) Speedway” JV between KSU and NSC (and maybe even the Patriot Corridor between NSC and Pan Am), or the belt carriers like the line in the ports of LA/Long Beach, etc. The “*Logistics Parks*”, terminals, warehouses and transload facilities are another class. Equipment – boxes, chassis –while obviously quite mobile, is in a secular short position and therefore might qualify. Ports themselves were the subject of the last big infrastructure boom, but there are still private ones out there. All of these have all or majority elements of the three classic infrastructure definitions (strong competitive position/high entry barriers; stable/predictable revenue streams & inflation linked cash flows) although there are elements of growth and cyclicity that would need to be factored in.

The intermodal network consists of the connected rail system, most of which carries the bulk and other mixed goods as well, plus terminals and IT. Rails supply the power, and some of the railcars (the vast majority of the “wells” are supplied by TTX, a rail-owned consortium pool of assets); containers are supplied by some rails, some steamship lines, some truckers, some leasing companies and intermodal marketing companies (IMCs), the brokers of this segment. Trailers are supplied by truckload partners for the most part. Chassis used to be supplied by the steamship lines on the international half of the business, but that concept is in retreat since Maersk announced a pullback from providing all assets to the international model of leaving the box at the destination port. Domestic chassis, as well, are in a state of flux with a real opportunity to combine capital with IT to make a more efficient supply chain for all involved.

⁸ To 1530 miles; source FTR.

After the transportation infrastructure comes terminals (sometimes owned by logistics company, rail company or related entity, or real estate player) and warehouses (real estate or logistics company) and in growing numbers transload facilities (whereby three international containers are stuffed into two 53" boxes with a closer-to-market look at the final destination.) At the ports or hubs there are often belt or terminal railways for switching and moving loaded and empty cars.

There are also, of course, operators, with or without assets – dray, stevedores and terminal operators (SSA, etc), and intermodal marketing companies (IMCs). All of those groups have their own investment theses, built around consolidation and improved IT.

V. Other Intermodal Issues – Stakeholders, Regulations, Consolidation

Regulatory issues are not as significant for intermodal – expressly held out of regulation by the Staggers Act – as for overall rail, but again, the shared mine line of track theory means that anything that hurts traditional rail hurts overall ROI, and thus cuts capacity for intermodal.

Is consolidation likely? No and maybe....there are two types to consider here – rail consolidation once thought to be a sure thing and the “final act of the play”, is now not so sure; the other is M&A within the suppliers segments of intermodal. While efforts in Congress to change rails’ antitrust status (and move consolidation oversight from the STB to the DOJ) have also been beaten back there is a de facto moratorium on rail mergers even after the real one expired a decade ago.

Mergers offer service potential but political, operational – and financial risk. Consolidation might eliminate the interline service issues and lead to more efficient intermodal service on the one hand, but it would lead to a decrease of service options on the other (a western carrier has two eastern options and vice versa, at present); a few well-respected leaders still espouse the cause. But like the confederacy, the issue is dead. As a practical matter any merger would open up regulatory oversight that could overwhelm any benefits and cost savings in the last round and would not come close to those from the last, necessary round in the late 1990s that created the modern Class One system. Finally, those mergers proved to be significantly more difficult than expected, with huge impacts on service and financial performance that would have both the shipper and investor constituencies highly concerned if not outright opposed.

For intermodal suppliers, however, consolidation may well occur. Pacer, long predicted to be on the block, was finally and just recently sold to XPO Logistics for some \$335mm, with management and strategies likely to remain intact. The IMC business in general, perhaps threatened by improvements in rail operations, IT and marketing focus, has for years been thought to be ripe for consolidation and/or a roll-up. Proving a real “value-add” is critical whether by reasons of simply size and scale (vast amount of customers and/or assets) or by controlling a specific niche. UPS, often called the largest rail (and thereby largest rail intermodal) customer, has the means and the track record to look to M&A for improved share, etc. – with IMCs all the way up to JB Hunt said to be in consideration. On the asset supply side we have seen efforts at rollups on the chassis side, and in drayage and others.

Disintermediation is another possibility. While on the one hand rails, especially eastern ones, rely on a vast network of help in intermodal, from TTX⁹, 3PLs and IMCs, terminal workers, etc. – that may no longer be so necessary. At one point rails service and marketing levels were so poor that they needed brokers of some sort to source business. Now, rails’ service levels, IT capabilities and self-confidence have all grown to levels where some carriers are in essence asking themselves “why are we giving away this margin??” CN, for one has publicly talked about extending their reach in the supply chain. The rails’ varying strategies, to go wholesale (a la BNSF – provide no equipment) or retail/full-service a la NSC, CSX, UP (or straight retail like the Canadians) can determine your interest in consolidation of the supply chain, or of disintermediation.

What about back haul? Two recent developments have created some balance in the North American intermodal world, one of the post-recession period’s more promising developments. One is the use of containers for grain (which is heavy to be sure – “weighing out before it cubes out”) but is a new specialty business. It emerged due to the occasional tightness of grain hoppers, the development of sales of the ethanol by-product DDGs or the use of specific “designer grains” in the wake of the hormone issue, etc. The other is the re-emergence of US exports (also tied to the new energy reality). In FL it could simply be the new port development which could provide containerized railfreight heading northbound! These efforts require some terminal capital and operational issues (scheduling, etc.) but obviously come with a high ROI!

VI. Conclusion

Rail Intermodal will resume its leadership role. In the final analysis, the domestic intermodal segment is leading the growth train and will soon drive rails to higher ROI, justifying the risks and the capital employed.

For the rails, and for the shippers, etc., the biggest risk is rail execution and the high capital requirements. Rail service is now at all time highs by any measurement – due to the massive capex deployment (well over \$50B in the last 5 years), the smarter use of capital thanks to vastly improved IT systems, the dedicated operating plan development, management buy-in, government buy-in, closer inter-line cooperation, etc. That is all fine and good at 1500-3000 mile lengths of haul; at 550 (that driver’s day’s pay) there is little room (or time) for catching up if one were to, for example, be late leaving the origin terminal. The state of the economy, the political will to be cooperative or damaging (pre-re-reg, or pro-highway in issues like TSW, etc on the Highway bill) all are factors, but, especially on the domestic side, this is a secular story that solves government problems and reinforces sound public policy. There isn’t a demand side issue – shippers demonstrably want the product. Can the rails deliver?

However, the very nature of the changed utility coal world will reinforce management attention on getting the intermodal product right, and with the capital employed and yet to be, and with the new IT tools, rails are ready to take the market share of value added goods transport back from all-highway movement.

⁹ The Class One rail-owned pool of assets that include boxcars, and flats used for autos and lumber, along with other types used for intermodal.

The rewards are great: a long term secular movement with the combination of enormous share opportunity and participation in the nascent economic recovery will provide rails with plenty of volume; in turn the density and the service discipline – combined with price over a cycle – will provide well above GDP growth in units, revenues and contribution, a fact not well understood by the markets. The best evidence aside from the anecdotal reports of new lanes and new contracts will come from reported volumes and service metrics, quarterly yields, and annual jumps in ROIC/CoC beginning this year (2013) before accelerating in and after 2014.