Relationship Building with Freight Railroads Critical to Support Intercity Passenger Rail Development

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ABSTRACT

With most of Amtrak’s 21,000 route miles utilizing privately owned freight railroad infrastructure, public officials seeking to incite intercity passenger rail development and address Amtrak’s deficiencies must work closely with the nation’s freight railroad industry. However, there exists a deep seeded animosity between both stakeholders that has severely hampered progress in Amtrak’s 42 year mission to operate, enhance and expand the nation’s intercity passenger rail network. In light of this, this paper investigates the origins of ongoing contention alongside railroad operating and business characteristics; evaluates the role of existing intercity passenger rail policy and development methods in fostering this conflict; and synthesizes new policy options and strategies aimed at reversing this pervading bad blood to stimulate intercity passenger rail development and establish a public private partnership between the freight railroad industry and the public sector.

INTRODUCTION

As part of a 2009 push for intercity passenger rail (IPR) investment, then newly elected president Barack Obama asked transportation and government officials attending the official press conference to:

Imagine whisking through towns at speeds over 100 miles an hour, walking only a few steps to public transportation and ending up just blocks from your destination. It is happening right now; it’s been happening for decades. The problem is, it’s been happening elsewhere, not here.¹

This statement concisely captures the characteristics America’s IPR system. The National Railroad Passenger Corporation (NRPC) – doing business through its service mark Amtrak – has endured a rocky 42 year existence as the nation’s sole IPR provider. Amtrak’s overall impact in America’s intercity travel market remains minuscule; its 30 million riders in 2011 amount to only 5% of domestic airline ridership² while IPR passenger miles languish at only 2%³ in comparison to intercity bus.⁴

Without hyperbole, the political, economic and operational complexity of America’s rail system is unmatched by any other nation. Anomalous of transportation norms, 93% of Amtrak’s approximately 21,000 route miles utilize infrastructure owned, maintained and operated by privately held freight railroad carriers. This unique shared use model is dependent upon positive interactions between both stakeholders to be effective. However, relations between Amtrak’s government financers and the freight railroad industry have been highly contentious throughout the passenger railroad’s existence.

Ongoing reliability issues and a lack of expansion opportunities have led many in the public sector to accuse freight rail carriers of actively sabotaging Amtrak. Freight railroads have rebutted by pointing to the physical limitations of the existing rail network. Furthermore, the industry has levied their own complaints with claims that Amtrak unduly burdens freight operations and enjoys unfair treatment as a “free rider” on their infrastructure.

In light of such contention, public officials adhering to existing IPR policy, planning and implementation methods will continue to face great difficulty in working with the freight railroad industry. Thus, policymakers should consider alternate approaches that will combat ongoing resentment, instill trust, generate mutual utility and better share risk between both parties. Public-private partnership (PPP) can achieve this. To synthesize new stratagems in adherence to the characteristics of PPP, this paper will analyze and evaluate information, policy and interactions between government and the freight railroad industry in four key categories: (1) railroad history; (2) freight railroad operations, economics and planning; (3) shared use planning, policy and operations and; (4) railroad funding and financing.

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3 This statistic includes scheduled intercity bus service as well as unscheduled charter service.
4 Bureau of Transportation Statistics. "Table 1-40 US Passenger Miles." Chart.
RAILROAD HISTORY

By the late 1960’s, intense competition from the highway and aviation industries – bolstered by public investment – had eroded rail’s once overwhelming dominance in the transportation marketplace. Plummeting freight revenues and massive passenger train losses – $250 million in 1968 alone⁸ – had sent many rail carriers into bankruptcy, culminating with Penn Central Railroad in 1970 – then the largest bankruptcy in American history. In light of the industry’s ongoing difficulties and the prospect of IPR’s extinction, the federal government chartered Amtrak in 1970 as a quasi-public entity⁹ to manage, operate and reform the nation’s ailing IPR network.

During Amtrak’s initial planning and implementation efforts, vitriol spewed from both stakeholders. Policymakers accused the railroad industry of poor management and purposely divesting in IPR service. The industry countered with claims that undue government regulation by the Interstate Commerce Commission (ICC) had effectively destroyed their ability to compete. But with government commanding a stronger negotiating position before financial beleaguered rail carriers, Amtrak’s framers brokered numerous agreements more favorable to their views.

First, Amtrak was granted a guaranteed right-of-access to the nation’s still privately held railroad network in an effort to control capital costs. To control operating costs, legislators stipulated that Amtrak need only to compensate hosting freight railroads on an avoidable cost formula¹⁰ rather than the typical industry practice of negotiated market based rates. Animosity simmered amongst industry professionals who felt Amtrak’s privileges were too excessive and their viewpoints had been ignored. This bad blood only grew as Amtrak’s initial and subsequent public grant and loan financing was low,

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⁸ Nice, Pg. 4
⁹ Amtrak was chartered as a private, for-profit corporation and does issue stock. As of 2013, all of Amtrak’s preferred stock and most common stock is held by the US Department of Transportation. Some shares of common stock are still held by still operating freight railroads or their owners.
¹⁰ Avoidable cost is the change in cost that comes with the addition or subtraction of one unit. Within railroading, this is defined as the costs directly incurred by a freight railroad for hosting Amtrak, namely infrastructure wear and tear and labor costs. This topic is further analyzed on starting on page 13.
leaving Amtrak without the wherewithal to partner on infrastructure capital projects with hosting freight railroads. Amtrak’s issues proliferated past its creation. In 1974 – the year Amtrak was expected to be profitable – the railroad posted a loss of $240 million\textsuperscript{11} and has since never turned a profit.

For freight railroad carriers, their newfound freedom from direct IPR operating and capital costs could not overcome years of diminished revenues, passenger train losses and deferred capital investments. By 1973, regulators determined that Penn Central railroad was unsalvageable without direct government intervention. In response, the quasi-public corporation Conrail was chartered and tasked to redevelop the Northeast’s freight rail system. As federal auditors analyzed Conrail’s losses, the impacts of ICC regulations on the industry’s competitiveness became clearer. In a marked departure from earlier decades of blaming rail carriers themselves for the industry’s woes, policymakers instead began to question their role in railroading. This introspection culminated in the Staggers Act of 1980 which significantly curtailed government railroad regulations.

The Staggers Act remains the defining event in shaping modern railroading. In the years following 1980 thousands of miles of track were abandoned, freight rail rates were altered, routes were consolidated, companies merged and business and capital planning were retailed.\textsuperscript{12} The industry clawed its way back from the brink of disaster to earn the respect of Wall Street investors\textsuperscript{13} and post dependable annual profits. Throughout this time, freight railroad carriers expended no effort toward IPR development, expecting government alone to fulfill its role in properly financing Amtrak.

Since 1980, the railroad industry has opted to self-finance capital projects rather than seek public assistance. As prior interactions with the public sector had begat such a fierce animosity, reborn rail carriers would spare no expense in ensuring government would never again play a role in their

\textsuperscript{11} Nice, Pg. 27
affairs. This attitude would led freight railroads to reject any wide scale public financing options for fear of “strings attached” that threatened their newfound autonomy. As the rail industry retreated from the public sector, transparency disappeared and tensions increased. This seemingly arrogant and selfish behavior has only led public officials to place further blame on freight rail carriers for Amtrak’s woes.14

At this impasse, both parties have hunkered down into their respective camps, thereby letting ongoing issues impacting both freight rail carriers and IPR to continue unaddressed. To advance their goals and railroading as a whole, policymakers must seek ways to counter the industry’s distrust, foster transparency and instill dialog, cooperation and partnership between both stakeholders.

FREIGHT RAILROAD OPERATIONS, ECONOMICS & PLANNING

With the ongoing disconnect between the freight railroad industry and government, gaining insight into relevant freight railroad characteristics can assist policymakers in IPR planning, policy development and negotiations. Railroad infrastructure is very susceptible to the Law of Diminishing Returns; the point where investments into a system fail to provide a proportional monetary return. With the industry’s preference for self-financing capital projects, this is a crucial factor that has set the industry’s planning paradigms. Since 1980, the industry has opted to focus on cost cutting and consolidation, shedding almost 70,000 route miles15 deemed unnecessary to meet existing and projected demand.

This network contraction coalesces with the industry’s newfound business and operational practices. With privately sourced financing, freight railroads are beholden to shareholders who demand regular dividends and shrewd risk management in their business planning.16 In lieu generating new demand through aggressive marketing and network expansion, contemporary railroads have instead

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15 Bureau of Transportation Statistics. "Table 1-1 System Mileage Within the United States." Chart.
solidified their business in captured high volume commodity markets where rail enjoys a natural competitive advantage.

For example, coal generates a very low per unit yield. However, coal’s inability to be efficiently shipped by any other modal competitor nets rail carriers a very dependable and cost effective revenue source. However, in focusing upon these non-competitive bulk commodity markets, the rail industry has ceded many freight markets to the trucking industry. In 2010, rail moved over 50% of total ton-miles in comparison to truck, but generated only 15% of revenue, a testament of the rail industry’s penchant for shipping cheap, bulk goods in niche markets.

This refocus toward bulk commodities has had operational effects as well. To cut capital and operating costs, railroads have opted to increase train flexibility. Bulk freight trains – also known as unit trains – run without schedules on an ad hoc basis that correspond to market demand and revenue potential. Manifest trains – which directly compete with trucks and ships single carloads – remain scheduled, but have received much less investment in the reoriented railroad industry. In 2000, rail possessed only a 7% market share in truck competitive markets.

Altogether, focuses upon cost cutting, consolidation and niche market development has begat a modern railroad network tailored toward one end: cost effectively moving bulk freight. This reality has played must be considered in developing shared use IPR policy and planning guidelines.

**SHARED USE POLICY, PLANNING & OPERATIONS**

Considering America’s privately held railroad network has been optimized for bulk freight activity, what impact does IPR – an operational style of railroading with little similarity to unit train

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17 Bureau of Transportation Statistics. "Table 1-49 U.S. Ton-Miles of Freight." Chart.
18 $67.8 billion in total major freight railroad revenue in 2010 to an estimated $437.7 billion in total trucking revenue. Figures sourced to reports from STB, individual companies and Census Bureau Annual Services Survey.
19 Measured by total freight waybills
operation – have when introduced? As a general rule in transportation, heterogeneity in speed drains capacity and spawns congestion. Quicker trains, such as IPR running at conventional top speeds of 79mph, must have a greater “buffer” of clear track ahead to ensure reliability, thereby pushing slower freight trains onto sidings to wait. For freight railroads, this generates a distinct opportunity cost for their core business and decreases the utility they can derive from their own infrastructure.

Past conventional IPR, high speed rail (HSR) has garnered great attention from IPR advocates in recent years. Furthermore, “Higher speed rail” characterized by top speeds of 110mph has become especially harkened by policymakers as a method to cost effectively spur IPR ridership while continuing to adhere to shared use principles. But is this true? CEO of the freight carrier BNSF Railway best captures the industry’s perspectives toward HSR:

Speaking as a freight railroad CEO, it is possible to increase speeds from 79 mph to 90 mph on tracks that both freight and passenger trains use... At sustained speeds in excess of 90 mph, passenger train operations will need to be segregated from freight operations on separate track. The level of maintenance work required, the very different impacts passenger and freight rolling stock have on the surface of the rail and managing the flow of train traffic with such differences in speeds would make the joint use of track uneconomic and impracticable.

Simply put, IPR – especially HSR – negatively impacts freight railroad operations. Thus, the source of the industry’s ongoing animosity becomes much clearer. In light of this however, policymakers should not consider shared use IPR as an exercise in futility. Rather, this revelation simply underscores the need for better relationship building, planning and collaboration with the freight railroad industry so that the needs of both stakeholders are met. Case studies of existing shared use agreements can help inform new strategies for future IPR development.

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In 2011, Michigan’s Department of Transportation (MDOT) embarked on a plan to institute 110mph top speeds on an IPR line between Chicago, IL and suburban Detroit, MI. Norfolk Southern (NS), the owner of significant stretches of track utilized by the service, had consolidated traffic away from this route in prior years and sought to further pare down capital investment to match existing freight revenue levels. With MDOT’s plans being purely IPR development focused, they failed to generate any added utility for NS’ core business. Thus, NS rejected partnership fearing negative impacts on their autonomy and bottom line. Furthermore, NS downgraded the route’s service standards to the level necessary for existing freight operations, forcing IPR top speeds down to as low as 25mph. MDOT, unable to garner NS’ trust nor generate the railroad any added utility from partnership reoriented its approach and offered to buy the route outright from NS, to which the railroad agreed. However, risk, costs and benefits would not be shared in this agreement while animosities between both parties grew.

In Illinois, a successful partnership was forged between the Illinois Department of Transportation (IDOT) and Union Pacific (UP) to enhance IPR service between Chicago, IL and St. Louis, MO to 110mph top speeds – still the only HSR line utilizing freight railroad owned track. However, UP’s cooperation was by no means voluntary. Southern Pacific, a now defunct railroad enveloped by UP in 1996, had brokered an earlier agreement in the 1970s with IDOT to allow HSR investments on the ailing line once money became available. Once IDOT finally received federal stimulus money to develop the line in 2010, UP was bound to cooperate.

Despite IDOT’s legal authority over UP, the agency has avoided heavy handedness in their partnership and has instead opted to focus on ensuring a strong foundational relationship with UP. IDOT has even gone so far as to guarantee the railroad complete operational autonomy over day-to-day operations.

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operations on the corridor and freedom from IPR on-time performance (OTP) penalties.\textsuperscript{25} This final point runs counter to traditional interactions between both stakeholders. Amtrak ongoing reliability issues have been a major sticking point for IPR advocates who place blame on hosting freight railroads. Thus, public officials have attempted to force freight railroad compliance.

In 2008, Amtrak’s federal reauthorization bill, PRIIA\textsuperscript{26} included a clause – Section 207 – which mandated minimal IPR on-time performance standards on freight railroad infrastructure. Rail carriers were livid and challenged the law’s constitutionality on the grounds that private corporations cannot regulate one another.\textsuperscript{27} The rail industry prevailed in an appeal and the regulation was subsequently overturned.\textsuperscript{28} In light of the failure to exert direct public control over freight rail carriers and the tensions that have only been exacerbated with Section 207, it is worth determining if IDOT’s relationship focused approach is more viable on a national scale. Other case studies can provide evidence.


textrm{Amtrak Cascades} between Vancouver, BC and Eugene, OR has had resounding success since its creation in 1994. Annual ridership has increased from 94,000 in 1994 to 836,000 in 2012, daily train frequency has risen from 4 to 16 and fare box recovery – a measure of operating revenue to operating costs – has grown from 48% in 2006 to from 66% in 2011.\textsuperscript{29} Amtrak Cascades’ success is attributable to strong partnership between the corridor’s main planning and management body, the Washington State Department of Transportation (WSDOT), and hosting freight railroad BNSF. Trust, dialog, freedom from day-to-day public oversight and OTP penalties as well as partnership on capital planning and projects all characterize BNSF and WSDOT’s collaborative efforts. This remarkable partnership played a crucial role in WSDOT’s $780 million stimulus award in 2010 to fund critical capital projects on the corridor.

\begin{footnotes}
  \textsuperscript{26} The Passenger Rail Investment and Improvement Act. Pub. L. 110-432 (2008)
  \textsuperscript{27} This argument harkens back to Amtrak’s charter which labels the railroad a private, for-profit corporation.
\end{footnotes}
A similar relationship exists in California on the Capitol Corridor between the San Francisco Bay area and metropolitan Sacramento. The corridor’s governing agency, the Capitol Corridor Joint Powers Authority (CCJPA) and hosting railroad Union Pacific (UP) have enjoyed numerous achievements. Annual ridership has exploded from 436,000 in 1998 to 1.75 million in 2012, fare box recovery has risen from 30% to 50%, daily passenger train frequency has increased from 8 to 32 and OTP for passenger trains on the corridor is 94%, the highest of any IPR corridor in the nation.  

Alongside freeing UP from stringent oversight and OTP penalties, CCJPA administers an incentive program that levies additional payments to UP should certain IPR performance metrics be met. But as in any partnership, issues do arise. In 2004, interference from UP freight trains was significantly impacting IPR service reliability. CCJPA publically aired their grievances and sought UP arbitration. As a testament to the relationship between both parties, UP apologized and publically detailed an operational plan to address reliability issues. Within a month, IPR service was once again fluid.  

These case studies underscore the power of relationship building. IPR development can be effective without extensive public sector oversight and thereby alleviate freight railroad fears of deregulation arise with public partnership. But while IPR is the cornerstone of the public sector’s rail policy, this is not a viewpoint shared by freight rail carriers. With more demanding capital needs and low, if any, profit margins, freight railroads are generally uninterested in adding IPR to their business portfolio. CEO Michael Ward of CSX Railroad curtly captures this sentiment:

I’m a corporation. I exist to make money, OK? You can't make money hauling passengers, so why would I want to do that? That wouldn't be fair to my shareholders.

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Even in success stories in the Pacific Northwest and California, government’s existing shared use IPR planning and development strategies focus upon obtaining a zero-sum impact on freight operations. This strategy is a weak one. With IPR requiring tremendous effort to plan, implement and maintain, why would a hosting freight railroad agree to expend so much time and effort in partnership for no added utility? To combat ongoing industry animosity toward government and better garner cooperation, public officials should seek methods in which IPR investments can benefit freight railroading. But what can policymakers do?

In recent years, market forces have impacted the freight rail industry’s development focus on bulk commodities and niche markets. Coal, historically the source of approximately 25% of annual railroad revenues, is in an irreversible downturn with annual revenues expected to decrease by 50% in coming years. Furthermore, the Surface Transportation Board (STB) found in 2012 that only two major railroads possessed strong enough revenue sources to meet existing capital needs. A low return on investment (ROI) has been a persisting issue. While rail carriers typically invest 17% of their annual revenues into capital projects, returns languish around 10%. These statistics have alarmed many Wall Street investors which have only intensified the industry’s aversion to risk. With freight rail carriers stretched to meet immense capital needs amidst contracting traffic and revenues, the public sector possesses the opportunity to assist the industry in market and infrastructure development.

Increased rail utilization is already a cornerstone strategy the House Transportation and Infrastructure Committee’s recently convened national freight panel. Public officials would be wise to amend shared use IPR planning and development strategies to generate added utility for freight railroad

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Relationship Building with Freight Railroads Critical to Support Intercity Passenger Rail Development

carriers, thereby combating ongoing animosity, better sharing risks and benefits and instituting a relationship more in tune with public-private partnership. But what specific strategies can policymakers use to assist hosting freight railroads? And how can freight rail benefit the public’s welfare?

Intermodal – shifting containers and tractor trailers between ships, trains and trucks – is a business line that has garnered great interest in recent years. Freight railroads have already heavily invested in intermodal, but only toward corridors of more than 500 miles; playing to rail’s competitive advantage in long distance bulk movements. Subsequently, markets under 500 miles remain largely untapped. However, their revenue potential is by no means secondary. For example, Florida East Coast Railway (FEC), a 350 mile long freight railroad between Jacksonville and Miami, FL, generates 80% of its $200 million in annual revenue from short-haul intermodal shipments. Robust investments into FEC’s physical network have allowed speedy and reliable operations competitive with over the road trucking.

Unlike bulk freight movements, intermodal’s capital and operational requirements are much more similar to IPR with emphasis upon faster average speeds, scheduled service and reliability. Therefore, public investment into IPR corridor development can also benefit the intermodal business, thereby allowing freight carriers to capture new revenues with lower capital outlays. Adding an intermodal development component into IPR planning and negotiations would be beneficial. Equally as promising a business line as intermodal is perishable shipments: fruits, meat and vegetables.

The interoperability between short-haul, truck competitive freight rail and IPR is already being demonstrated on FEC. The railroad’s “All Aboard Florida” initiative is developing shared use IPR service between Miami and Orlando, FL. This example can be transposed into other regions, such as a reintroduction of short-haul intermodal service between Chicago, IL and St. Louis, MO – which operated

in the 1970s under the service mark *Slingshot*\(^43\) – on newly constructed high speed track on the corridor. If planned thoughtfully, IPR focused investments can generate utility to freight rail carriers as well.

While intermodal has been an exciting area of freight railroad development, other sectors offer opportunity for further partnership. As the industry has consolidated routes and cut costs – altogether moving away from truck competitive markets – rail leaders have defended their actions in stating projected revenues could not hope to cover increased capital and labor costs arising from aggressive expansion. But is this true? Consider one major railroad that has balked this trend of cost cutting and contraction.

Now generating 70% of total revenue from manifest shipments, Canadian National (CN) has focused its business into truck competitive markets.\(^44\) As a result, CN has invested heavily in network expansion, earmarking 36% – or $700 million – of their 2013 $1.9 billion dollar capital budget toward network expansion. The results have been astounding. CN’s operating ratio – a measure of operating costs to revenue generated\(^45\) – is an astounding 60%, the best in the industry.\(^46\) In light of CN’s success, other major railroads have begun to reevaluate their views on network expansion. However, tightening capital budgets and declining revenues from coal have made aggressive expansion more difficult.

By the very definition of shared use, any expansion of railroad physical capacity benefits both freight and passenger components.\(^47\) Policymakers should determine ways to assist freight carriers to expand, rather than contract, capacity and network size. An expansion of manifest service has operational benefits for IPR as well. Like high priority intermodal trains, manifest trains are scheduled in order to offer more reliable service to customers. Manifest service also requires additional rail capacity


\(^{45}\) Operating ratios are the bellwether used by railroads and their investors to determine efficiency. Railroads will typically aim for an operating ratio of at least 80%. This signifies that 80% of a carrier’s revenues must be spent to conduct operations. In another example, an operating ratio of 110% signifies that it costs a railroad 10% more than actual revenues earned to conduct operations. Obviously, a lower number is most desirable.


\(^{47}\) Erickson, Pg. 79
in order to ensure fluidity is maintained, altogether generating a more predictable and forgiving system of train movements which allow for dispatchers to better plan and manage rail traffic on a corridor.

Generating added utility for freight railroad carriers is the first step combat ongoing animosity between both stakeholders and support future collaboration. For a PPP to be instituted though, strong funding and financing mechanisms must be in place.

**RAILROAD FUNDING & FINANCING**

Railroad funding and financing remains a woefully underdeveloped component in the interaction between government and freight rail carriers. As capital projects are such a massive drain on rail carriers, the industry’s cost cutting and consolidation since 1980 have been rational approaches. However, in light of the emerging unsustainability of this approach, government’s immense resources can alleviate the industry’s strains, incent private investment and support rail modal expansion.

Concerning IPR, the most basic financial interaction between government and the freight railroad industry is Amtrak’s right of access payments. Right of access agreements are common practice in the railroad industry with compensation often based on negotiated rates informed by market forces. Departing from this norm, Amtrak compensates its hosting railroads on an avoidable cost formula. Since 1971, these agreements have not been altered much to the ire of the nation’s freight railroads. With the industry’s ongoing complaint that Amtrak fails to adequately compensate hosting freight carriers, it is worthwhile to attempt to determine whether Amtrak’s right of access payments are indeed too low. While specifics of these agreements are propriety to protect Amtrak’s negotiating power, some aggregate data permits rough estimates to be generated.

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In 2010, Amtrak paid a combined total of $115.4 million to all hosting railroads.\textsuperscript{50} By dividing this number by annual scheduled passenger train miles on non-Amtrak owned infrastructure,\textsuperscript{51} Amtrak’s compensation rates can be roughly calculated to $4.44 a mile. Now consider a specific example.

*Amtrak’s *Empire Builder* provides daily service between Chicago, IL and the Pacific Northwest with the Seattle, WA section traversing approximately 2,200 miles one way. At $4.44 a mile, it can be speculated that all railroads hosting the *Empire Builder* share, in total, $9,800. And like all IPR, the *Empire Builder* is a high priority train that demands diligent dispatching in order to meet its published 46 hour schedule. Comparing Amtrak generated revenues to freight revenues, a single railroad freight car carrying a common commodity between the Pacific Northwest and the Plain States – a distance of approximately 1,000 miles – generates a freight carrier $5,000.\textsuperscript{52} Thus, it only takes two freight cars to generate revenue comparable to hosting the *Empire Builder*. From an aggregate perspective, the $115.4 million Amtrak paid to all hosting railroads in 2010 amounts to just 0.17% of the $67.8 billion earned by the nations’ seven largest carriers. This is in spite of Amtrak generating 5%\textsuperscript{53} of total train miles on freight railroad trackage that same year.\textsuperscript{54} With this data, it becomes clear that Amtrak’s rights of access rates are extremely low.

Adopting a more market based pricing agreement for Amtrak’s would greatly increase the utility freight rail carriers derived from hosting IPR. Greater compensation might also likely improve relationships and assist government in negotiations concerning IPR reliability and service frequency enhancements. However, determining a more equitable compensation rate is difficult considering the rail industry’s lack of transparency. With stewardship over public money, policymakers must be ensured

\textsuperscript{50} This is an aggregate figure that includes all payments to freight rail carriers, including incentive payments. Since this figure includes additional amounts, actual right of access fees can be presumed to be even lower than this amount.

\textsuperscript{51} Approximately 26 million train miles, as referenced in Amtrak’s official national fact sheet.

\textsuperscript{52} This information comes from a confidential negotiated rate agreement between a railroad, a shipper and a 3rd party logistics firm. As this information is proprietary, specifics are kept intentionally vague.

\textsuperscript{53} A total of 25 million train miles. This figure does not include the estimated 1.1 million annual train Amtrak train miles occurring on Metro-North Railroad, a commuter agency serving the New York City metropolitan area.

\textsuperscript{54} Bureau of Transportation Statistics. "Rail Profile." Chart.
that Amtrak’s payments to hosting freight railroads are not excessive. Should public officials seek to amend Amtrak’s right of access agreements, the freight railroad industry must be willing to share relevant proprietary information to public auditors. To further protect the public welfare, policymakers can consider stipulating that a portion of Amtrak’s increased right of access payments be earmarked toward infrastructure maintenance and improvement projects on trackage directly utilized by IPR.

However, any alteration to increase Amtrak’s compensation to hosting railroads comes with one major downside: costs would dramatically increase. Like all forms of passenger transportation, Amtrak is dependent upon public subsidies. At current levels, public support is considered to be sub-optimal by both Amtrak’s management as well as independent analysts in meeting the railroad’s capital and operating needs. Plagued with a perpetually small budget, Amtrak has been unable to undertake many needed capital projects, thus forcing the railroad to make do with the nation’s existing freight optimized rail network. Occasionally, Amtrak’s positive relationships with its host railroad partners offer a workaround its small budget. However, these instances are few and far between. If Amtrak is to achieve its mission of reforming and enhancing America’s IPR network, it must possess the resources and wherewithal to negotiate, plan and collaborate on key projects with its freight railroad partners.

As per the definition of shared use, any expansion of rail infrastructure and capacity benefits both passenger and freight components. With the railroad industry’s already mature privately sourced financing system, public officials can leverage government resources to complement and enhance the industry’s financing sources at low public cost. Some public financing programs already exist.

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58 In one specific example, Amtrak, BNSF Railway and the State of North Dakota partnered on a $100 million capital project to raise track above rising flood waters. As Amtrak was unable to provide their portion of costs up front, BNSF offered to finance Amtrak’s amount through a long term, low interest loan.
Created in 1998, the Railroad Rehabilitation and Improvement Financing program (RRIF) empowers the Federal Railroad Administration (FRA) to disburse up to $35 billion – greater than the annual capital budgets of the largest seven railroads combined – in loans to fund railroad capital projects. Undeniably, RRIF is impressive program. It offers a large funding pool, repayable at low interest treasury rates over a span of 35 years which can be backed by physical rail assets – an innovation that private lenders do not often allow – at potentially zero cost to taxpayers.\(^{59}\)

Despite its potential, RRIF in practice has been much less revolutionary. As of 2013, only $1.7 billion of the potential $35 billion has been utilized since 1998 – a paltry 4%. Counting only private freight railroad carriers, the total outlay is only 2%.\(^{60}\) Evidence points to a difficult and lengthy application process – as much as 400 days – as the source of this underwhelming performance. Reforms to ease RRIF loan requirements and meet a 90 day turn around can encourage greater utilization at a low risk to government when considering rail financing characteristics.

Despite RRIF having become a method of last resort for the most financially stressed railroads, there has yet to be any defaults since the program’s creation. Other public rail financing tools display similar trends. Among state and federal rail loan programs – totaling 650 applications and $380 million between the early 1990s and 2013 – only two defaults have been indicated.\(^ {61}\) The railroad industry has truly proven its aptitude in risk management. Public officials should recognize and encourage the industry’s past successes by improve accessibility to RRIF to encourage private development.

Infrastructure tax credits present another option for government to bolster rail infrastructure investment at low taxpayer cost. Such programs are already in effect for certain sectors of the railroad industry. The 45G Railroad Tax Credit provides a 50% return on all capital maintenance and expansion


\(^{61}\) Sussman, Michael. “Realizing Railroad’s Promise.” Lecture. ASSTHO Standing Committee on Rail Transportation, Cincinnati, OH, September 2013
projects performed by small shortline railroads. Historically the most capital constrained railroads, the 45G is estimated to spur an additional $300 million of rail capital investment annually.62

In June of 2011, federal legislation was introduced to provide a 25% infrastructure expansion tax credit to all sizes of freight railroads.63 However, the bill was unable to garner any Congressional attention and subsequently died in committee. Considering the industry’s hesitance and limited funding that stands in the way of aggressive capital expansion, this was a great missed opportunity. Policymakers should seek out any reasonable strategy to incent and support private rail investment.

After decades of cost cutting and consolidation, rail carriers will naturally be hesitant to take on the risks of expansion. Public officials should impart policy to minimize these risks. A loan loss reserve is a pool of public money that is used to offset any defaults in a loan portfolio in order to encourage greater private lending at lower rates. In the event of a default, a loan loss reserve reimburses some portion of the outstanding loan to the lender. For example, a loan loss reserve amount of 5% – a reasonable figure considering the industry’s low record of defaults – requires a public entity to set aside 5% of the total loan amount in a private lender’s railroad portfolio. This would leverage a 20:1 ratio in private to public financing, thus diminishing risk and incenting private development at low public cost.

Policymakers can be even more innovative with loan loss reserves by expanding into performance metrics. For example, if a new section of track was constructed under the pretense of generating a certain traffic levels, a loan loss reserve fund could be employed to offset a proportion of already expended capital costs and be reinvested into planning, marketing, or further expansion to meet original performance measures. However, this approach would entail much greater risk for the public sector. Therefore, policymakers must consider if such added liability is worthwhile.

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CONCLUSIONS & RECOMMENDATIONS

Policymakers have been clear in their desire to improve and enhance the nation’s IPR network. To control capital costs, they have opted to develop Amtrak on a shared use model utilizing existing, privately owned rail infrastructure. However, simmering animosity between the freight railroad industry and government has curtailed success. Public officials have sought to force freight railroad compliance in meeting their narrow, IPR focused goals, thus failing to offer any meaningful utility to hosting railroads from public partnership. Meanwhile, the rail industry’s aggressively defensive posturing in retreating from the public sector and eschewing transparency has only deepened the rift between both stakeholders and fosters government perceptions of unethical industry practices. At this impasse, both parties are stagnant, forsaking the benefits of greater collaboration needed to unlock the collective rail industry’s market and revenue potential.

Nonetheless, the chance for partnership has never been greater. Policymakers are more emboldened than ever to advance IPR and freight rail alike, while the rail industry’s hesitance toward innovation, expansion and public assistance have begun to fade in light of emerging negative market shifts. However, if any collaboration between government and the freight railroad industry is to be fruitful and overcome current animosity, alterations to the ways both stakeholders interact is necessary. This paper has exemplified relationship building and public-private partnership (PPP) as the best tools to enable long term collaboration. To advance these goals, combat resentment and promote mutual utility gains, specific recommendations have been synthesized.

**Acknowledge Freight Railroad Expertise by Eschewing Stringent Oversight**

Freight rail carriers are masters at the art and science of railroading; planning, operating and managing an incredibly complex business and transportation system. The intense pride and loyalty rail professionals possess is found in few other industries. In light of this, any attempts by government to more directly administer rail operations will generate extreme distrust. As case studies have
demonstrated, trust and relationship building in lieu of stringent public oversight building has resulted in viable shared use IPR. As such, policymakers should recognize the industry’s prowess in rail operations, avoid belittling hosting railroads with claims of unethical behavior and instead foster trusting strong relationships that to address any service, planning or implementation issues that arise.

**Generate Utility for Hosting Freight Railroads in Partnership**

IPR development strategies focused on obtaining a zero-sum impact on freight operations are weak. If policymakers are unable to generate any added utility to freight rail carriers in partnership, freight carriers will continue to be reluctant toward IPR partnership. Government has already provided ample support to other modes while the public benefits of increased rail utilization are well documented. Reorienting IPR planning and development methods toward a comprehensive approach that includes short-haul freight, intermodal, perishables and manifest service is likely to better pique freight railroad industry interest and thereby enable symbiotic, long term partnership.

**Fund and Empower Amtrak**

Shared use rail operations are highly complex. IPR operations are made all the more difficult on a national railroad network optimized for bulk freight movements. Amtrak’s mission to operate, enhance and expand the nation’s IPR network is significantly hurt in light of lacking investment from its government financers. Even in a shared use scenario, IPR cannot occur “on the cheap.” If government truly wish to grow IPR, increased investment is mandatory. Policymakers must correct Amtrak’s funding to a level that provides the wherewithal to effectively collaborate with its host freight railroad partners.

To this final part, policymakers should institute reforms to Amtrak’s right of access agreements to reasonably compensate freight carriers for the utility they provide. Amtrak’s other contractors are not mandated to provide preferential pricing to the railroad. Nor should public officials expect private
freight rail carriers to subsidize IPR operations at the expense of their own business. Amending Amtrak’s right of access agreements also actively combats the rail industry’s resentment toward government.

**Facilitate Railroad Infrastructure Investment and Expansion**

America’s national railroad system is a product of remarkable self-financing methods. Nonetheless, capital projects are immensely draining and have begat an industry paradigm that favors risk aversion, cost cutting and consolidation. Better leveraging public resources with the rail industry’s already mature private financing mechanisms can address these issues and enable more aggressive rail network expansion. Improving and expanding existing programs, such as RRIF and infrastructure tax credits, alongside new initiatives, such as a loan loss reserve fund, can instill stronger relationships and spur additional rail investment. By the definition of shared use, capacity and network expansion benefits IPR alongside freight operations.

**Encourage Greater Freight Railroad Transparency**

As stewards of public money, policymakers cannot leverage government’s resources without any sort of evaluative process. They must be ensured that any partnership with private stakeholders yields reasonable public benefits as well. The freight railroad industry must in good faith embrace greater transparency if it hopes to utilize any public money to improve their business. Rail professionals will naturally be hesitant to do so in light of the industry’s pervading insular culture. Policymakers should combat these feelings by demonstrating their commitment through developing a strong comprehensive vision for rail and IPR, ensuring proprietary business information is kept confidential and continually fostering dialog, trust and positive relationships with the freight railroad industry.

Altogether, these recommendations seek to alter interactions, set roles and enable the formation of a public-private partnership between the freight railroad industry and government. The roles and duties delineated in these recommendations are concisely displayed below:
**GOVERNMENT**

“The Facilitator”

- Develops overall railroad policy and vision
- Directly funds and finances intercity passenger rail operations (Amtrak)
- Establishes and administers railroad infrastructure financing and tax programs

**AMTRAK**

“The Intermediary”

- Directly operates intercity passenger trains
- Plans for passenger rail service; identifies necessary capital projects – shares data with government to clarify funding needs – shares data with freight railroads to discern project management and cost sharing strategies
-Compensates hosting freight railroads based on the utility provided

**FREIGHT RAILROADS**

“The Partner”

- Develops, maintains and manages physical national railroad network; collects revenue from users
- Oversees and dispatches all railroad traffic
- Collects data on all railroad operations, shares pertinent information with government to assist in railroad policy, vision and financing and tax program development

In all, the full utility of America’s railroad network cannot be realized without lasting partnership between government and the freight railroad industry. No transportation mode can thrive without both public and private support. It is time for both stakeholders to stop considering passenger and freight rail as mutually exclusive. Both can coexist and thrive together – just as they did prior to the railroad industry’s decline in the 1960s. At this crossroads, it remains unclear as to how future relationships and interactions between freight rail carriers and policymakers will look. What is certain is that only through effective collaboration can the full potential of railroading – both passenger and freight components – be guaranteed.
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