



High-Speed Intercity Passenger Rail

SPEEDLINES

NOVEMBER 2016
ISSUE #19

Serious Upgrade

ABOVE: Amtrak's new trainsets "AVELIA LIBERTY" to enter service in 2021; Station upgrades and improvements for track capacity and ride quality among infrastructure upgrades.





HS&IPR Committee Members and Friends

I am very pleased to submit my first Letter from the Chair in our fall issue of Speedlines. Before I recap our recent meetings and activities, I will highlight our upcoming second annual High-Speed Rail Policy Forum on November 30 at APTA headquarters. Our forward-looking theme is - Getting to the Tipping Point – U. S. High Performance Intercity Passenger Rail.

We have an exciting roster of confirmed and invited panelists. Confirmed Panelists include; California High-Speed Rail Authority CEO Jeff Morales, Former FTA Administrator Jim Simpson, NNEPRA Executive Director Patricia Quinn, FRA Associate Administrator for Railroad Policy and Development Paul Nissenbaum, Virginia Railway Express CEO Doug Allen, and Steve Schlickman of the University of Illinois.

Potential policy and program developments in intercity and high speed rail in the new administration of President-elect Donald Trump will be among the pertinent and timely topics of our speakers and panel. Visit the APTA.com website for the details. By the way, this issue of SPEEDLINES includes Peter Peyser's Washington Update. His early review of a potential Trump Administration infrastructure program and current congressional funding issues is a must-read.

Many of you were able to join us for our Committee meeting on Sunday at 8 a.m. at the APTA Annual Meeting in Los Angeles. Notwithstanding the hour, the room was full and we barely squeezed in our very full agenda. APTA Leadership welcomed our Committee and provided an update on the latest developments in the APTA Consensus Process. Other updates include:

- Steve Schlickman on the HS&IPR Return on Investment Study,
- Jim Michel on new FRA System Safety Rule,
- Mitch Warren on the Northeast Corridor Commission,
- Mariah Morales with the latest from Amtrak,
- Peter Gertler on the UIC International Conference.

Subcommittee chairs shared updates on other Committee activities, including the Policy Forum, Legislative Subcommittee, Speedlines and Committee presentations at the 2016 Rail Conference in a very steamy June in Phoenix, AZ. The Sunday morning calendar also included a 7 a.m. meeting of the Regional Corridors Subcommittee Meeting, chaired by Committee Secretary Jennifer Bergener of the Orange County Transportation Authority (OCTA). The meeting included a discussion of the Committee's future direction upon its one year anniversary with the thought being a consideration of routine corridor issues in an extended Committee meeting and activation of the Subcommittee on an ad hoc basis.

I want to acknowledge in particular the efforts of Dominic Spaetling our Program Subcommittee Chair to raise the profile of the HS&IPR in the APTA Rail and Annual Meetings programs and of course, for leading the Policy Forum development. And as always, the SPEEDLINES team leaders Al Engel, Ken Sislak, Eric Peterson and Wendy Wenner of Amtrak have brought you another excellent edition.

I hope many of you can join us at the November 30 Policy Forum at APTA headquarters. It's offered at no charge and promises to be a great event. And thank you for your interest in the High-Speed & Intercity Passenger Rail Committee.

CONTENTS



SPEEDLINES MAGAZINE



» p. 16

On the front cover:

A new era of high-speed train travel is coming to the nation's busiest rail corridor.

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- 3 LETTER FROM OUR COMMITTEE CHAIR
ANNA BARRY
- 4 APTA HIGHLIGHTS
Los Angeles Annual Meeting - 2016
- 5 WASHINGTON, DC UPDATES
- 7 SPOTLIGHT
- 8 TRANSIT TRIVIA
- 10 IMPRESSIONS OF INNOTRANS
- 13 AMTRAK'S NEXT-GEN TRAINSETS
- 15 FRA SYSTEM SAFETY RULE
- 17 AMTRAK IMPROVEMENTS
- 20 STATE SUPPORTED ROUTES
- 22 HSIPR FORUM 2016
- 23 DATES TO REMEMBER



HSR POLICY FORUM,
NOVEMBER 30, 2016

APTA Headquarters, Washington, D.C.

APTA HIGHLIGHTS

HS&IPR - ANNUAL MEETING 2016

Contributor: Dominick Spaethling

At the APTA Annual Meeting in Los Angeles, on the last day of the conference, September 14th, the High-Speed and Intercity Passenger Rail Committee sponsored a session titled, "High-Speed & Intercity Passenger Rail: Planning, Engineering, Funding and Partnerships Lead to Success." The session covered a wide range of projects ranging from the California High-Speed Rail project and its partnerships in the Los Angeles region, to Florida where we heard about the privately financed "All Aboard Florida" railroad and its "Brightline" service between Miami and Orlando. Below is a recap of the different speakers and the topics that they presented.

Michelle Boehm, Southern California Regional Director, California High-Speed Rail Authority, gave an update on the Authority's progress in constructing the first true high-speed system in the United States in the Central Valley of California. She also described how the Authority is working in partnership with local agencies to fund important projects like grade separations in Southern California that have positive effects on freight, commuter and future high-speed rail operations as well as improving pedestrian and vehicular safety.

We then heard from Jeanet Owens,

P.E. Senior Executive Officer, Project Management and Regional Rail for Los Angeles Metro. She described the ambitious "Link Union Station" project which is the re-envisioned Los Angeles Union Station with run-through tracks and the incorporation of California High-Speed Rail. The project is planned to not only transform the passenger rail station operations but also provide a mix of passenger amenities that turn the station into a destination in itself. She highlighted the innovative designs that are under development for the station and discussed the important partnerships with the California High-Speed Rail Authority and other regional partners.

Next, we shifted to the East Coast and heard from Gene Skoropowski, Senior Vice President for Railroad Operations at "All Aboard Florida". He described the rail line under development between Miami and Orlando and the incredible development that is planned around and on top of the station areas. He showed pictures and videos of the "Brightline" services' innovative rolling stock that is customer comfort focused and has wonderful amenities. The rolling stock is also unique because it has extending boarding plate that comes from the vehicles to bridge the gap between the platforms and

the vehicles. This innovation was put on the vehicles to allow level boarding for passengers while still allowing freight trains clearance past the "All Aboard Florida" station platforms.

Finally, we rounded out the presentations with a report by Allan Rutter, the Freight Practice Leader for the Texas A&M Transportation Institute. He provided a survey of the recent passenger rail research that the Transportation Research Board and the National Cooperative Railroad Research Program (NCRRP) have conducted over the last few years. The three reports he focused his report on were:

- Alternative Financing Approaches for Passenger and Freight Rail Projects
- Intercity Passenger Rail Service and Development Guide
- Developing Multi-State Institutions to Implement Intercity Passenger Rail Programs

All of these reports are published and available on the internet. Allan made the point that it is now time to take this excellent research and to put it into practice.

WASHINGTON, DC UPDATES

PUSH FOR INFRASTRUCTURE INVESTMENT

Contributor: Peter Peyser

Donald Trump's victory on November 8 shocked the political establishment in Washington – and much of the nation. His ascension to the presidency means some abrupt policy shifts may be in the offing. But one area in which a dramatic change is not expected is in infrastructure investment. A Trump presidency will mean that a strong infrastructure investment package is likely to come before Congress in 2017. The same expectation was in place for a would-be Clinton presidency.

While the Trump campaign was not as specific as the Clinton campaign about their infrastructure plan for most of this year, they did release in late October a paper that compared Mr. Trump's plans for infrastructure investment to Secretary Clinton's. In doing so, the document gives much more specificity to the Trump plan than has previously been available.

The document is in the form of a paper prepared by Wilbur Ross and Peter Navarro, two economists who are Trump campaign advisors.

The Trump plan focuses on incentivizing equity investment in transportation projects. It discusses almost exclusively projects that feature a revenue stream that can repay debt and equity investment. The plan assumes that an appropriate ratio of debt to equity in an infrastructure project is 5-to-1. Therefore, to generate \$1 trillion in investment, \$ 167 billion in equity would be required.

To incentivize the \$167 billion in equity investment, the plan suggests an 82% federal tax credit on equity invested in an infrastructure project. It stipulates that the portion of equity benefiting from the tax credit would not require a return on investment from project revenues. Therefore, the typical 9-10% equity return would only be required on 18% of the invested equity. So, for example, on a project with \$ 1 billion of equity, only \$180 million of that (18%) would be calling on project revenues for a return. At a rate of return of 10%, this means the expected return on equity coming from project revenues would be only 1.8% of the total equity investment. This makes the equity cheaper to the project than debt financed in the municipal markets.

The Trump plan appears to be focusing exclusively on projects that can support debt and equity investment through project revenue streams or dedicated revenues. It does not supply any additional funding in the form of grants.

Passenger rail advocates may see some benefit to a plan that provides more financing options for projects that can supply a revenue stream. However, many potential rail projects fall short in that regard and will require grant support. Once the Trump plan reaches Capitol Hill, there should be an opportunity to argue for a more balanced mix of funding and financing.

Because of the emphasis placed on infrastructure both by the President-elect and his opponent, interest groups in Washington began discussing long before

votes were cast how they would like to see an infrastructure investment program structured. Key issues include how the funds would be divided among the various types of infrastructure, how flexible federal funds will be in terms of multi-modal projects, whether there will be a “shovel ready” requirement, and others.

The discussions taking place in Washington now provides passenger rail advocates an opportunity to push for inclusion of passenger rail funding in any package on that will be proposed by the new Administration. Serious work on the structure of the plan is likely to be underway by the presidential transition team shortly after this publication goes to press.

Fiscal 2017 Spending Bills Await Return of Congress

Congress departed Washington on September 30 without having completed any of the spending bills required for fiscal 2017. Instead, they approved a Continuing Resolution to fund government agencies until December 9. Congress is slated to return to work on November 14 for a post-election “lame duck” session. Annual spending bills will be near the top of the agenda for the session.

House and Senate leaders have yet to agree on a path forward to enact appropriations bills. House Speaker Paul Ryan (R-WI) has indicated a preference to act on a series of “minibuses” – packages of two-to-four appropriations bills – as opposed to an “omnibus” bill that would consolidate all 11 spending bills into one large package. Senate Majority Leader Mitch McConnell (R-KY) has expressed skepticism that there will be time to push multiple legislative packages through in the three weeks of voting allotted for the session. Either

President-Elect Trump Expected to Make Early Push for Infrastructure Investment Plan

way, leaders seem intent on getting all the bills completed by the end of the year.

Here is a comparison of how the pending House and Senate bills would fund passenger rail programs:

The funding levels for the new FAST Act programs are well below their authorized levels, but – assuming the Senate is successful in getting agreement for funding for Restoration and Enhancement – at least they will all receive some funding. That is progress.

The Senate and House are in agreement on the amount of Amtrak grants. The House followed the accounting changes enacted in the FAST Act while the Senate did not. It appears this will be resolved in the final product to reflect the House breakdown.

(\$ in Millions)

	House	Senate
Fed.-State Partnership for State of Good Repair	25.0	20.0
Consolidated Rail Infrastructure and Safety Improvement	25.0	50.0
Restoration and Enhancement	0	15.0
Northeast Corridor Grants to Amtrak	420.0	0
National Network Grants to Amtrak	1,000.0	0
Amtrak Grants	0	1,420.0

SPOTLIGHT

YOU SHOULD GET TO KNOW US



CHAD EDISON

"California is moving into the future with a high-speed train service serving as the backbone of an integrated network of intercity and inter-regional rail services connected to local transit. This integrated network of public transportation services will improve mobility, increase access to opportunity and provide Californians with more travel choices, saving them time, money and worry."

Deputy Secretary for
Transportation

CalSTA



JENNIFER BERGENER

"In California we are very serious about offering our residents high quality rail options. Through my APTA HS&IPR committee involvement I look forward to exchanging lessons learned with other operators and adapting new ideas to enhance our customers' experience."

MANAGING
DIRECTOR FOR
THE LOS ANGELES
- SAN DIEGO -
SAN LUIS OBISPO
(LOSSAN) RAIL
CORRIDOR AGENCY

Director, Rail Division
for the Orange County
Transportation
Authority (OCTA).

“

For every \$1 billion we invest in public transportation, we create 30,000 jobs, save thousands of dollars a year for each commuter, and dramatically cut greenhouse gas emissions.

-Bernie Sanders

TRANSIT TRIVIA CHALLENGE

Can you ID a city from a subway sign?

The typefaces used on and around transportation systems and walkways – take the Helvetica font of New York or the Johnston Sans of the London Underground – are intimately tied to the cities as identifying markers.

But can a typeface really represent what's unique about a city? You might be surprised at the subliminal power of city fonts and how many are familiar!

1. Where would you find a sign like this?

New York

Boston

Sydney



2. Where would you find a sign like this?

Frankfurt

Berlin

Geneva



3. Where would you find a sign like this?

London

San Francisco

New York



4. Where would you find a sign like this?

Beijing

Singapore

Hong Kong



5. Where would you find a sign like this?

Prague

Moscow

Warsaw



6. Where would you find a sign like this?

Paris

Brussels

Lille



IMPRESSIONS OF INNOTRANS BERLIN 2016

INTERNATIONAL TRADE FAIR FOR TRANSPORT TECHNOLOGY

Contributor: Bruce Horowitz, Principal, Rail Transport Economics - ESH Consult

RAIL TRANSPORT TECHNOLOGY. INNOTRANS IS HELD EVERY TWO YEARS AT THE MESSE BERLIN EXHIBITION CENTRE, WHICH HAS OUTDOOR STANDARD GAUGE RAILWAY SIDINGS WHICH CAN BE USED TO EXHIBIT RAILWAY VEHICLES. DURING THE WEEKEND, AFTER THE TRADE SHOW, THE PUBLIC CAN VISIT THE ROLLING STOCK ON DISPLAY.


Largest Train and Transit Technology Trade Fair in the World!...“Kid-in-a-Candy-Shop”...Beyond Amazing! These are just a few of the superlatives that come to mind as I look back at InnoTrans 2016 in Berlin. For those of you who have not yet had the pleasure, I can unequivocally give it the highest recommendation. Whether your interest is planning, engineering, structures, rolling stock, components, on-board amenities or services, there will be plenty to keep you occupied. It is important for North American passenger rail-interested parties to consider exploring this wonderful opportunity in the future, noting their relatively low historic participation rate at InnoTrans.

InnoTrans by the numbers: Trade show fills the entire “Messe Berlin” Expo Center (inside halls and outside grounds) totaling 1.7 million square feet! Participation includes 2,955 Exhibitors from 60 countries and 144,470 attendees from 140 countries! Major displays or actual equipment are provided from virtually all the world’s major passenger rail/rail transit manufacturers, with largest contributions from Europe, China and Japan. The “Messe Berlin” Expo Site

extends the breadth between two stations on divergent “S-Bahn” (regional rail) Lines.

Many of the hundreds of InnoTrans indoor exhibits would be of particular interest to APTA’s HS&IPR Membership. One entire exhibit hall was focused on advanced electronic signage and related customer information technology, including: dramatic train station arrival/departure boards; on-board speed/next stop(s)/location information; plus, a whole array of current and near future mobile device technologies especially with real-time train location and arrival predictor algorithms. (PIX067)(PIX070) Another exhibitor display area focuses on a broad range of automated ticket vending and printing devices, including those featuring payment by near-field credit card chip or smart phone pay technology. Another major functional area focused on all aspects of train interior components: seating (from simple fixed arrangement to complex advanced and luxurious). (PIX083) (PIX084) Additional display topics include creative and cost-effective approaches to on-board catering, ranging from new, high-tech rolling trollies with pull-out



 *InnoTrans 2016 (20-23 September 2016)
Berlin, Germany*

drawers and hot beverages) to full bar-cafe-lounge car interior designs with attractive stand-up counters and varied seating arrangements. (PIX079) (PIX082)

Continuing through indoor exhibits area one could find many of the predominant suppliers of train cars and integrated trainsets hosting enormous individual display areas, many featuring substantial scale models or full size mock-ups of their newest I/C and HSR equipment. Several of these spaces were elaborate multi-level structures, filling stadium sized halls; some also included functioning custom-built operating model train layouts displaying their products. All were staffed by welcoming, multi-lingual, technically knowledgeable representatives to answer specific questions and share glossy handouts with full equipment specs.

Last, but no means least was the spectacular outdoor exhibit space, consisting of 10 tracks literally filled end-to-end with the examples of actual railway equipment! (PIX143) Nearly half of the track space is devoted to a wide variety of machinery related to track, rail and ROW maintenance, including dual

function "HyRail" or road- and rail-enabled maintenance support vehicles. On the passenger rail equipment side of the display are literally dozens of ultra modern LRTs and DMUs, some featuring new dual mode power or even battery-supported off wire capability. (PIX) Many of these units represent the most modern lo-floor LRT's recently introduced to major European cities.

Of greatest interest to APTA HS&IPR Committee Members were the spread of over a half dozen actual InterCity and HSR Trainsets. (PIX130) (PIX089) (PIX141) Among the most visible and celebrated was the soon-to-be-introduced Stadler-built SBB EC250 HSR Trainset, which was officially handed over to SBB by Stadler's President at a highly publicized and video graphed InnoTrans celebration event. (PIX) In addition to HSR and Intercity DMUs there were also selective examples of luxurious new conventional intercity passenger rolling stock. (PIX121) One singularly well visited car was the prototype Azerbaijan Railways Sleeping Car destined to operate on the international route from Baku to Istanbul via Tblisi, Georgia. Deluxe sleeping room interiors feature equally attractive daytime seating and nighttime bed arrangements and offer high tech video screen and other electronic amenities as well as private bathrooms with showers. (PIX157)

(PIX164) (PIX168) (PIX170) Unique mechanical design features include self-adjusting, dual-gauge wheel sets (to accommodate both the Azerbaijan broad gauge as well as Turkey's standard gauge) and individual car APU with a 24-hour independent capability when not connected to locomotive power or standby.

Any discussion about InnoTrans 2016 would not be complete without an enthusiastic "shout-out" to sponsor and participant BVG (Berliner Verkehrs Betriebe), the Public Transportation Authority of Berlin. In the finest of public transit fashion, every registration pass for InnoTrans came pre-encoded with an unlimited BVG Transit Pass, ensuring that even the first inbound trip to the show would be "fare

included." For the many of attendees who took further advantage of this pass, it is worthwhile to note that Berlin enjoys one of the richest and best integrated urban transit networks in Europe!

The BVG system is 100% "Proof-of-payment" and utilizes an easy to understand 3-zone fare system (concentric circles of increasing diameter for zones A; B and C). All zone-to-zone fares are "mode neutral," allowing customers to use any combination of enormous network of bus, tram (LRT), "U-Bahn" (metro) and "S-Bahn" (regional rail). This network is extremely easy to navigate, and assisted by excellent electronic as well as traditional print map availability for all its components.



Just outside the exhibition halls, a wide range of rail-bound vehicles are presented on a comprehensive 3,500-meter track system. The outdoor display is a unique feature of InnoTrans: exhibits include multiple unit trains, locomotives, freight vehicles, trams, and construction and two-way vehicles. In addition to 10 standard gauge tracks, the Special Gauge Display showcases rail vehicles with broad and narrow gauges.



NEXT-GENERATION TRAINSETS

AMTRAK'S UPGRADING : AVELIA LIBERTY

Contributor: Andrew Wood | AMTRAK,
Executive Project Director, Tier III Trainset
PMO

High-Speed Trains, Made in America - Building upon 15 years of high-speed rail service in the Northeast, Amtrak® is working with Alstom to produce the next-generation of high-speed trainsets built to international standards, to replace the equipment used to provide Amtrak's premium Acela Express service on the heavily-traveled Northeast Corridor (NEC). As part of this multi-faceted modernization program, Amtrak is also investing in infrastructure needed to improve the on-board and station customer experience and accommodate the increased high-speed rail service levels made possible by the new trains.

In August, Vice President Joe Biden announced that Amtrak will purchase 28 Next-Generation trainsets from French train manufacturer Alstom. Amtrak will fund the purchase, together with other investments in the Northeast Corridor, with a loan from the U.S. Department of Transportation under the Railroad Rehabilitation Infrastructure Financing (RRIF) program. The loan will be repaid out of operating revenues generated by the new rolling stock.

The trainsets, known as the Avelia Liberty, are part of the Avelia family which will be Alstom's flagship high-speed trainset for many years to come. Built in Hornell, New York, the trainsets could start entering revenue service as early as 2020 as they replace the existing Acela fleet on the Northeast Corridor (NEC) spine from Washington to New York and Boston. Similar trainsets will start operating in many other parts of the world. This truly is the next generation



of high-speed train.

The new trainsets, consisting of a power car at each end and nine passenger vehicles, will be slightly longer than the existing Acela but still fit inside the Amtrak maintenance facilities in Washington, New York and Boston. The new trainsets will be capable of operating at 186 mph (300 kph) but due to infrastructure limitations will initially be limited to 160 mph (227 kph). This means the new trainsets will be able to take immediate advantage of any NEC upgrades without modification, bringing the immediate benefits of reduced journey time. They can also be modified to run at 220 mph (350 kph) by removing the tilting mechanism. The trainsets are expected to reduce the journey time by a few minutes, even when limited to 160 mph.

This next-generation will bring heightened luxury to the route and with 40% more equipment will allow more frequent and regular service. Among the advantages are increased safety (crash energy management technology), better energy efficiency (the trainsets are expected to reduce running cost by around 30%), and increased capacity (about a third more seats in each trainset).

The Avelia Liberty is an articulated trainset, very similar to the TGV® that operates on SNCF (French National Railways), which delivers a smoother,

more comfortable ride for passengers. Like the Acela, these trains will have a tilting mechanism, however the system is anticipatory – meaning the train knows where it is and will already begin tilting as it enters a curve rather than react to it. This is one of the advances of next generation technology.

Perhaps viewed by some as futuristic is the ability for the trainset to adjust its height while servicing platforms. Together with the introduction of gap fillers – automatically deployed when doors open – this improvement will make boarding easier and safer, especially for those who are mobility challenged.

Seats on the new trainsets will have the same spacing as customers have come to expect on Acela, with additional space underneath the seat for legroom or small luggage. Each seat will be equipped with a USB outlet, a power outlet and an individual reading light.

A Bistro Car is planned for the center of the train with display cabinets to allow passengers to select food and drink purchases prior to arrival at the counter, speeding the purchase process. At-seat food service will continue to be available to First Class customers.

At the same time Amtrak signed a contract for the new trainsets, it signed an agreement for a Technical

Support, and Spares Supply (TSSSA) for 15 years with a 15-year extension option. The TSSSA is the approach taken by many operators around the world for maintaining trains using their own workforce while counting on continued engagement from the original manufacturer. This balanced approach gives Amtrak control over when and where maintenance is performed, but places responsibility for the provision of technical assistance and supply of spare parts on the manufacturer. This makes financial planning for the maintenance of the trainsets over their lifetime very predictable, as the train builder takes all the risk of parts failing prematurely or any price escalation. A new Train Scanner that detects wear in brakes, wheels and pantographs by laser makes for a more reliable train and one more readily available for service. As a result, Amtrak expects to see a reduction in maintenance costs over the lifetime of these trainsets and more efficient utilization of equipment. Part of the contract with Alstom is for future options. There exists a firm fixed price for both more trainsets, and the ability to lengthen these trainsets if demand warrants it.

Acela Express service has grown steadily in ridership since it was inaugurated in 2000. On many days, peak hour trains are sold out – limiting Amtrak's ability to maximize the financial rewards of the service. This is why it is so important for Amtrak that the new, higher-capacity trainsets enter revenue service as quickly as possible.

Readers can expect to see the trainsets under test in 2019. We look forward to riding them regularly in the future and hope you enjoy them too!




 new

FRA SYSTEM SAFETY RULE

PASSENGER SERVICES NOW EFFECTIVE

Contributor: James Michel, PE | Senior Vice President,
Marsh Global Rail Practice

After almost 10 years of rulemaking activity, the US Federal Railroad Administration (FRA) has issued its final rule to implement System Safety Program Planning (SSPP) for commuter and intercity passenger operations under its jurisdiction. Title 49 Part 270 of the Code of Federal Regulations is a new rule applicable to passenger services operated on the general rail system under the FRA's safety enforcement jurisdiction. Another final rule, Part 271, will be issued by the FRA to cover the Class 1 freight railroads and some regional railroads and this may also affect passenger operations that are hosted by such freight railroads. Both of these rules were part of Congress' legislative actions after the 2008 Chatsworth Metrolink accident and enacted as part of Public Law 110-432 Division A under the Risk Reduction Programs, Section 103.

The FRA started the rulemaking

process in 2009 by focusing on the passenger operations. The Notice of Proposed Rulemaking (NPRM) for Passenger Rail System Safety Plans was published in the Federal Register on September 7, 2012. Public comments were reviewed within the RSAC Passenger Safety Working Group in April, 2013 and the final rule was published on August 12, 2016 and became effective on October 11, 2016.

The rule requires an agency sponsoring passenger rail service under FRA purview to develop a System Safety Program Plan (SSPP) and demonstrate full safety integration among the participants in the passenger operation as well as proof of implementation through employee training and independent auditing. The sponsoring agency may not contract away its compliance responsibilities except in very limited circumstances where the FRA determines adequate safeguards for compliance are present. FRA guidance suggests that when a sponsor

furnishes only funding and does not actively participate in any part of the operation or maintenance, policy formulation, or service execution, an assignment of compliance responsibility may be acceptable, but each case will be evaluated by the FRA on its individual merits.

Local transit systems receiving federal aid have had system safety requirements since 1991 under the state safety oversight regulations of the Federal Transit Administration (FTA). Many state and regional commuter agencies have prepared System Safety Management Plans and SSPPs as a requirement for obtaining federal transit grants. The FRA's final rule pre-empts these FTA plans which are only subject to FTA grant administration and not safety enforcement. Multi-mode agencies that have one plan for both FTA and FRA operations should consider preparing separate plans for each mode immediately. Additionally, the FTA

is itself revising the SSPP requirements for transit operations under state oversight as part of the Part 673 rulemaking.

Part 270 defines the passenger rail service sponsor as the primary responsible party for developing and assuring full implementation of the SSPP no later than August, 2019. The rule also requires that all affected employees of the sponsor and its contractors be consulted during the development of the SSPP with specific deadlines for employee notices; the first date occurring on December 12, 2016 when all non-agreement workers performing FRA safety regulated tasks should be advised of the sponsor/railroad's process to solicit input. Agreement workers may be represented by their labor organization officials with the first meeting occurring no later than April 10, 2017. Individual workers may submit concerns directly to the FRA if they feel their input was not considered; this "good faith" consultation process is detailed in Appendix B of the rule and employee submitted comments may be considered by the FRA in its review of the railroad's submitted SSPP.

This rule also increases the scope of who is subject to FRA jurisdiction and enforcement. Part 270.5 definitions for a "railroad" and for a "person" enable the FRA to apply the rule against contractors and other parties that perform tasks that if performed by a railroad, would be subject to FRA enforcement. This approach is similar to the requirements contained in the Part 243 Training Rule that became effective in 2015. Contractors to passenger railroads should review their own safety programs and determine if developing and submitting their

own SSPPs for FRA approval would be appropriate. Such contractor plans could then be referenced in the sponsor/railroad's SSPP.

A key requirement in these safety rules for both passenger and freight operations is the use of a risk based hazard analysis in determining how to mitigate and create a safer railroad. These principles are contained in national and international Safety Management Systems (SMS) standards. Conducting such analyses require a candid and holistic approach to risk which might expose a sponsor/railroad to civil actions in court after a serious incident. Hazard analysis data created solely for the preparation of a SSPP after August 14, 2017 is protected from use in a trial or be subject to court discovery.

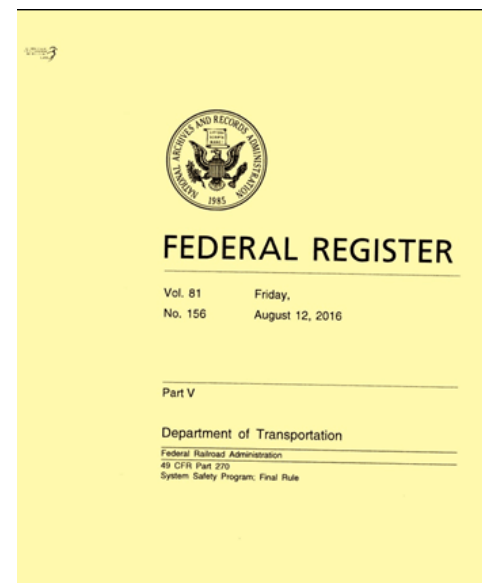
The FRA SSPPs are legally enforceable documents which carry the potential of civil citations and penalties for non-compliance. The most far-reaching violations would be the failure to train employees and fully implement the FRA approved SSPP and failing to annually review the SSPP elements and issue updates and corrections. The rule also requires the corporate officer directly responsible for safety to personally certify the SSPP submission to the FRA and subsequently be personally responsible for any required updates and corrections in the annual assessment. Each day of violation constitutes a new violation, hence the fines can become quite large very quickly for latent non-compliance.

The FRA has stressed that passenger service sponsors must involve their host freight railroads in the preparation of SSPPs or freight Risk Reduction Plans. Plans must

be scaleable to the available resources and should not duplicate one another, but rather cross reference each other. Passenger sponsor/railroads should keep in mind that their plans should only commit to do what they can faithfully execute.

The reportable accident and injury incident rates have been falling due to the improved technology and joint efforts of the government, the railroads and the employees to address root causes of loss. But worldwide, the percentage of serious incidents attributable to human performance and risky behavior continues to climb; typically over 50% of such incidents have a primary or substantial secondary human factors probable cause. These rules have the potential to change the way the industry works and should be used as a tool to minimize loss, protect life, and improve operational and financial performance. The Part 270 final rule and supporting discussion can be downloaded at this link:

<https://www.gpo.gov/fdsys/pkg/FR-2016-08-12/pdf/2016-18301.pdf>



AMTRAK

IMPROVEMENTS

2016 - 45 YEARS

WHILE INFRASTRUCTURE AGE AND CONDITION ARE MAJOR CONSIDERATIONS, THE LONG-TERM OUTLOOK MUST ALSO CONTEMPLATE THE GROWING CAPACITY NEEDS OF THE NEC. THE NORTHEAST IS A HIGHLY PRODUCTIVE AND DENSELY INHABITED REGION, SUPPORTING 17 PERCENT OF THE NATION'S POPULATION ON TWO PERCENT OF ITS LAND AREA AND GENERATING 20 PERCENT OF ITS GDP. ABOUT 80 PERCENT OF THIS POPULATION LIVES WITHIN 25 MILES OF THE NEC. THIS POPULATION IS EXPECTED TO GROW SIGNIFICANTLY IN COMING YEARS, AND THAT GROWTH IS FORECAST TO TRANSLATE INTO INCREASED DEMAND FOR PASSENGER RAIL SERVICE. IN ITS CURRENT STATE THE EXISTING INFRASTRUCTURE CANNOT ACCOMMODATE THIS DEMAND.

Contributions By: Mariah Morales and Ran Barton
AMTRAK | Government Affairs

Amtrak celebrated its 45th birthday this year. Intercity passenger rail plays a singular role in knitting the country together from coast to coast, and in this capacity we are an expression of the very hopes that lay behind the creation of the Department of Transportation in 1966. When President Johnson first conceived of a new cabinet level department, he believed that America needed to approach transportation issues from a coherent, national, intermodal perspective. Amtrak has been a central part of that vision since 1971, and we are focused on enhancing that relevance in the years ahead.

Several different measures reflect the success Amtrak is finding these days: fiscal year 2016 was our sixth consecutive year carrying more than 30 million riders; we are achieving record customer satisfaction scores; we've had a near-doubling of our state-supported ridership since 1998; we've doubled our revenues since 2001, which has allowed us to reduce our debt by two-thirds since 2004; and we've achieved an industry-leading cost recovery ratio of 92%. We have done all of this while making a net annual contribution of \$6.9 billion to the American economy.

We work with our partners to target the investments we make to maximize the value we bring to the corridors we serve. Working with state partners across the country, we are striving to improve our offerings by improving reliability, increasing frequencies, and expanding services. Our network is most valuable when it integrates with the local transit networks in the hundreds of communities we serve. The more seamless these networks are, the greater the connectivity and mobility we offer to our passengers.



New Services and amenities at Amtrak are making train travel more convenient and relevant than ever.

- Equipment Upgrades like our recent \$466 million investment in new electric engines which has resulted in a 25% reduction in engine delays in the Northeast. These new engines accomplish this while also featuring regenerative braking, which captures braking energy and returns it to our power grid to be used elsewhere – estimates suggest these engines will save over 3 billion kilowatt hours over the next twenty years. This fall we announced Alstom as the manufacturer for our next-generation Acela Express trainsets. By expanding the number of trains by 40%, and increasing the seating aboard each train by

33%, this equipment will supply vital new capacity between Washington and Boston.

- Onboard Wifi access is an increasingly essential amenity, which we launched in 2010 and have subsequently rolled out on enough of our routes that more than 90% of our passengers have access while traveling with us. As with all technological developments, change is rapid, so we have upgraded our service on several routes and have more improvements underway that will bring much higher speeds to some of our most popular markets.

- Pets on Trains launched in 2016 and in just a year, service has expanded to a majority of our routes. “Paw-pularity” of the program has been great. As of October 2016, more than 15,000 cats and dogs had ridden our trains with their humans in tow, helping generate almost \$2 million in ticket sales. By offering a more appealing option for dogs and cats under 20 pounds (with carrier) than airline travel, we see significant room for growth in this initiative. Amtrak.com provides important details regarding stations, size and type of pet, and duration of the journey.

- Train Side Checked Bike service expansion has dramatically improved the way we support the bicycle riding community. Our trains with baggage cars have always offered boxed bike service, but over the past two years we have worked hard across Amtrak and with our partners to launch a more convenient service to offer our bike-riding patrons. This effort and the introduction of 70 new baggage cars with dedicated bike racks in them has meant that over the past year, we have been able to expand dramatically Amtrak’s trackside checked bike service and, on some services, offer

limited roll-on/roll-off bike carriage that makes it easier than ever for passengers to board a train with a bike. Through October 2016, nearly 50,000 bikes and their riders have traveled the network on the 23 (and growing!) routes with expanded out-of-the-box bike service. More information on stations served, fees, and type of bikes permitted can be found on the Amtrak.com website.

This summer, Amtrak partnered with the National Association of Rail Passengers’ (NARP) “Summer by Rail” tour: 38 Days, 20 Cities, 10,000 miles and bike “Stevie”. As seen in CityLab “A Cyclist is Setting Out to Prove You Can Travel around the U.S. by Bike and Rail”- Spoiler alert: she succeeds. Watch her journey from our network onto many of yours here – bit.ly/SBR2016.

- First and Last Mile connections are a part of every Amtrak passenger’s journey. Amtrak is exploring connectivity solutions to make rail travel simpler and more convenient. From smartphone apps and mobile ticketing to partnerships with service providers like transit and car share/bike share; we are working toward a future where our passengers can move across the national network more seamlessly.

Amtrak is hard at work pursuing new technologies and services that maximize our value to our riders and our partners. Our new offerings highlight our commitment to innovation as we collaborate with our state and Federal partners. From the coastal corridors to the 40% of the country’s rural population served by Amtrak, we bring America together like no other transportation provider and we look forward to seeing you aboard!





STATE SUPPORTED ROUTES



2008 MICA-OBERSTAR DEAL IS DESTROYED AND LEFT HOLDING THE BAG

Contributor: Ray Chambers, Association of Independent Passenger Rail Operators

Public investment in rail infrastructure is the only answer to our growing population. According to a Texas A&M University study traffic congestion alone cost Americans over \$121 billion in wasted time and fuel in 2011 and is growing worse each year. You can't build enough highways to fix the problem, but you can vastly expand rail capacity. Sadly, for 50 years passenger rail has been at the children's table of federal infrastructure investment. Each year the Trust Fund pours more than \$44 billion into highways and only dribbles into passenger rail. The FAST Act did include rail in the overall transportation program for the first time. While appropriated programs remained level, the dial moved slightly on the trust fund. This included a new \$4.5 billion freight program that permitted rail

projects as well as a \$199 million Trust Fund set aside for Positive Train Control.

The President-elect pledged major new infrastructure investment and there is likely to be legislation moving early in the next Congress. We must be ready with a program for rail. A two pronged attack is needed. First, at a minimum passenger rail projects should be fully eligible for all money contributed to the Trust Fund by the general taxpayers. For the last ten years the general taxpayer has contributed \$52 billion more than collected from the gas tax. At the current rate of spending over the next 10 years HTF revenues will need a \$157 billion bailout from all taxpayers. All includes all taxpaying citizens and corporations—including companies and people in rail sector! The states should have full flexibility to commit those funds to public interest rail

projects where the benefits exceed alternative highway projects.

The second prong is to right a wrong. The feds have broken a deal to provide states mandated to fully subsidize intercity passenger corridors with capital funding. In PRIIA 2008 a deal was cut between House Transportation and Infrastructure Chairman Jim Oberstar and Ranking Republican John Mica. The deal was the states would agree to assume the full subsidy for all intercity routes under 750 miles, relieving the federal treasury of a substantial obligation (Section 209). In exchange DOT was to provide capital grants and planning money to states that supported intercity passenger corridors (section 301). It was in fact a rough adaption of the interstate highway model. The bipartisan

There is no doubt that transportation and our economic future are tied together. By investing in our transportation system, we are investing in our economic future and the future of our towns and cities.

deal was specific and spelled out in the in the statute and signed into law by President George W. Bush.

In the years that followed, every state stepped up to the subsidy obligation (209). Sadly, the capital grant pillar (301) promised the states was circumvented by billions in stimulus grants that randomly flooded the system under the Obama High-Speed Rail proposal. While some good projects were undertaken, this led to a conservative revolt which caused Congress to end all but survival level Amtrak funding. The modest Oberstar-Mica PRIIA 301 capital program simply died in the backwash. The states were left holding the bag in a deal gone sour. They are now paying nearly \$300 million in annual 209 subsidies to Amtrak to keep 27 intercity corridors in operation throughout the country. They are looking to competitive options to cut costs and improve service which is encouraged by the

FAST Act, but the promised federal capital funding commitment has vanished. Some state service may soon be in real jeopardy if Congress does not restore its end of the bargain. In addition private interests around the country including Texas, Nevada and Florida are expending substantial sums to develop high performance passenger proposals. State governments in these areas may well have interest in supporting capital infrastructure projects that yield high public benefits such as grade separations.

The PRIIA Section 301 concept was in fact reauthorized in a bill that passed the House last year. The Senate Rail Title consolidated 12 old programs into one grant program. The Senate version was adopted in the FAST Act, but appropriations for state passenger rail capital are nothing. The 2008 deal is broken.

Rail stakeholders, including APTA, AAR, AASHTO, States for Passenger Rail, my AIPRO (independent passenger operators), Amtrak, NARP, OneRail and labor should press hard to restore the section 209 and 301 Oberstar-Mica Deal as a part of the coming infrastructure bill. The authorization should be at least \$1 billion a year. For planning purposes it should be a stable and guaranteed source of revenue. It should be financed through the Trust Fund!

HIGH-SPEED INTERCITY PASSENGER RAIL FORUM 2016

NOVEMBER

Contributions By: Michael Brown | HNTB, Transportation Planner

WEDNESDAY, NOVEMBER 30, 2016 | 8:30 A.M. - 4:30 P.M.
APTA, 1300 I STREET, NW | SUITE 1200 EAST | WASHINGTON, DC 20005

APTA and the High-Speed and Intercity Passenger Rail Committee is hosting the “High Performance Intercity Passenger Rail Policy Forum” in Washington DC on Wednesday, November 30, 2016. The Rail Policy Forum is a follow-on to a meeting held last December, “Getting to the tipping point for High Speed Rail in the U.S. – The Role of Federal Government in High-Speed and Intercity Rail Development”. The Rail Policy Forum will explore a broad range of issues relating to high performing intercity passenger rail, beginning with a roundtable discussion with rail leaders from around the country. Following the roundtable will be a discussion examining the status of high profile passenger rail projects in the United States as well as issues that these projects are currently facing. During a break for lunch, the Rail Policy Forum will hear from keynote speaker Congressman Earl Blumenauer who will discuss the latest intercity passenger rail buzz from the Hill. After lunch, the Rail Policy Forum returns to take a look ahead to intercity rail policy under the Trump Administration. In the mid-afternoon, APTA will present its Return on Investment Study examining the benefits of high performing passenger rail. The Rail Policy Forum will conclude with a discussion of how rail research and planning can be better aligned with public outreach and what is reported by rail media. We look forward to your attendance and participation at the Rail Policy Forum. Please contact Cynthia Owens, cowens@apta.com to register.

Agenda:

8:00 - 8:30	Registration
8:30 - 9:00	Opening Remarks
9:00 - 10:15	Session 1: High-Speed and Intercity Passenger Rail Leadership Roundtable
10:15 - 11:30	Session 2: Awareness of HSR/Intercity Project Pipeline and Issues
11:30 - 12:00	Lunch Speaker
12:00 - 1:15	Session 3: High-Speed and Intercity Passenger Rail Under the New Administration
1:30 - 2:45	Session 4: Return on Investment Study
3:00 - 4:15	Session 5: Rail Research and the Role of Rail Media
4:15 - 4:30	Recap

Intercity Passenger Rail

dates

to Remember

Monday, November 28 –
 Wednesday, November 30, 2016
 2016 Federal Railroad Administration Rail
 Program Meeting
 Washington Marriott at Metro Center
 775 12th Street, NW
 Washington, D.C.

Wednesday, November 30, 2016
 High-Speed Rail Policy Forum
 Getting to the Tipping Point
 U.S. High Performance Intercity Passenger Rail
 8:30 a.m. - 4:30 p.m.
 APTA – Conference Rooms 1-4,
 11th Floor East, 1300 I Street, NW
 Washington, D.C.
 Staff Contact: Cynthia Owens,
 cowens@apta.com

Transportation Research Board Annual Meeting
 Intercity Passenger Rail Committee Workshop
 The Virtual Automobile:
 Ubiquitous Traveler Platform
 Sunday, January 8, 2017
 9:00 AM – 12:00 PM
 Walter Washington Convention Center,
 Room 144B
 Mount Vernon Square, NW
 Washington, D.C.

Transportation Research Board Annual Meeting
 Commuter Rail Committee
 The Business of Passenger Railroading
 Monday, January 9, 2017
 8:00 AM- 9:45 AM
 Walter Washington Convention Center,
 Room 144B
 Mount Vernon Square, NW
 Washington, D.C.

Transportation Research Board Annual Meeting
 Intercity Passenger Rail Committee Meeting
 Monday, January 9, 2017
 8:00 AM- 12:00 PM
 Marriott Marquee Hotel
 Mount Vernon Square, NW
 Washington, D.C.

Transportation Research Board Annual Meeting
 Current Innovations in Intercity Passenger
 Rail Service
 Poster Session
 Monday, January 9, 2017
 3:45 PM- 5:30 PM
 Walter Washington Convention Center,
 Room 144B
 Mount Vernon Square, NW
 Washington, D.C.

Transportation Research Board Annual Meeting
 Intercity Passenger Rail Intermodal Interface
 Sub-Committee, AR010(1)
 Tuesday, January 10, 2017
 3:45 PM- 5:30 PM
 Marriott Marque Hotel
 Mount Vernon Square, NW
 Washington, D.C.

Transportation Research Board Annual Meeting
 Intercity Passenger Rail Research Subcommittee,
 AR010(3)
 Tuesday, January 10, 2017
 7:30 PM- 9:30 PM
 Marriott Marque Hotel
 Mount Vernon Square, NW
 Washington, D.C.

Transportation Research Board Annual Meeting
 Rail Capacity Joint Subcommittee of
 AR040, AR030, AP070, AT010, AR010 - AR040(1)
 Tuesday, January 10, 2017
 7:30 PM- 9:30 PM
 Marriott Marque Hotel
 Mount Vernon Square, NW
 Washington, D.C.

13th Annual Southwestern Rail Conference
 Thursday evening January 12th and
 Friday, January 13th, 2017
 Magnolia Hotel on Central Expressway,
 across from SMU and the Bush Presidential Library
 Dallas, Texas

AASHTO – SCORT Meeting
 Monday, February 20 -
 Friday, February 24, 2017
 Hyatt Regency
 400 New Jersey Ave NW
 Washington D.C. 20001

APTA The 2017 Legislative Conference
 Sunday, March 12 –
 Tuesday, March 14, 2017
 JW Marriott Hotel
 1331 Pennsylvania Avenue NW
 Washington, D.C.

Thursday, June 8 – Sunday, June 11, 2017
 APTA International Rail Rodeo
 Baltimore, Maryland

Sunday, June 11 – Wednesday, June 14, 2017
 APTA Rail Conference
 Hilton Baltimore Hotel
 401 West Pratt Street
 Baltimore, Maryland

