

High-Speed Intercity Passenger **SPEEDLINES**

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The New Haven-Springfield CTrail service will cost more than \$760 million in construction: \$564.3 million from the state of Connecticut and \$204.8 million from the federal government.

CONTENTS

SPEEDLINES MAGAZINE



» p. 21

On the front cover:

Officials have announced a mid-June start date for new high-frequency, high-speed rail service between New Haven, Connecticut and Springfield, Massachusetts. The new service called CTail will have 17 train trips a day between New Haven and Hartford with a dozen connecting to Springfield beginning June 18th. The trains will travel at top speeds of 110 mph. Connecticut Gov. Dannel Malloy encouraged spending hundreds of millions of dollars to build the high-speed rail infrastructure as a way to spur economic development along the new line.

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3 LETTER FROM THE CHAIR

Your voice is much-needed as we strive toward an innovative, modern, passenger-focused railway network. It takes understanding the issues and concerns that you face every day and I hope that the upcoming Rail Conference in Denver can provide the venue for that to take place.

4 APTA RAIL CONFERENCE

5 STATE PROJECTS ROUND-UP

17 FEDERAL FUNDING OPPORTUNITIES

20 UPDATES ON CONNECTICUT

24 CALIFORNIA HSR

26 PUBLIC-PRIVATE PARTNERSHIP (P3)

28 FRA / AMTRAK SPOTLIGHT

32 BRIGHTLINE

34 THE HISTORY OF HSR

35 APTA'S 4TH ANNUAL POLICY FORUM

44 LEGISLATIVE REPORT



Rail Conference

June 10-13, 2018

Hyatt Regency Denver at Colorado Convention Center
Denver, CO



Dear

HS&IPR COMMITTEE

& Friends:

Welcome to our Spring 2018 issue of Speedlines. If I could put a plug in for Committee Vice-chair Al Engel and his team, they are recruiting management, editing and composition help from the Committee. Get in touch with Al or Ken if you would like to help out

We have been busy since the last issue was published. We conducted our fourth Policy Forum (including the initial roundtable in September 2014). And we once again hosted a well-attended 7:30 am Committee meeting at the Legislative Conference.

The Policy Forum tackled the theme of "Getting to the Tipping Point – Higher Performance Intercity Passenger Rail." APTA leaders, Chair Nathaniel P. Ford, Sr. and Acting President and CEO Richard A. White welcomed the more than 100 attendees. As your Chair, I provided Committee updates and opened the program. You can read the details about this in an article elsewhere in this issue. However, I assure you the Committee and its Program Co-chairs Melanie Johnson and Norman Forde were effusively praised for the well-rounded and high-quality Forum.

The day before our committee meeting, Co-Chairs, Samuel E. Smith & Karen J. Hedlund convened the Commuter & Intercity Rail Legislative Subcommittee for a lively conversation, including some about funding for the Gateway Program. APTA Staff member Mara Stark-Alcala made her first appearance in this sub-committee, which she will support going forward.

Our Sunday Committee meeting was shortened a half hour to make room for a longer Legislative Committee meeting. Nonetheless, we covered a lot of ground and still had time for some Roundtable Discussion. Michael Lestingi, Director of Policy and Planning for FRA provided a detailed update on FRA activities.

Our Partnership Perspective Panel included Amtrak's Mariah Morales, Chuck Baker from One Rail, Sean Jeans-Gail of the Rail Passenger Association and Ray Chambers of the Association of Independent Rail Passenger Operators. The panel responded to questions we had posed regarding their organizations' major issues, federal passenger rail infrastructure funding and their wish lists for the next FAST Act reauthorization. It was a frank and informative discussion.

Committee Leadership continues to make monthly conference calls to work on the business of the Committee.

Thank you to the Speedlines team Al Engel, Ken Sislak, Eric Peterson and Wendy Wenner of Amtrak and all of our contributors for another stellar edition.

And thank you for your continuing interest in the APTA High-Speed & Intercity Passenger Rail Committee. Our next meeting is June 10, 2018 in Denver, CO. At that time, we will announce the slate for Committee officers. I look forward to seeing you then.

Anna M. Barry

APTA RAIL CONFERENCE

Denver

PASSENGER RAIL SESSIONS

APTA will hold its annual **Rail Conference June 10-13, 2018**, at the Hyatt Regency Denver at Colorado Convention Center in Denver, CO! The High-Speed & Intercity Passenger Rail Committee will kick off the weekend with its meeting on Sunday, June 10 from 7:30 a.m.-10 a.m. and will feature updates from committee members and discussions on the November 2018 APTA Policy Forum and the “Framework for Assessing the Return on Investment for High-Speed and Intercity Passenger Rail Corridors” study.

The HS&IPR Committee is also planning two action-packed conference sessions:

- On Monday, June 11, Chad Edison, the Deputy Secretary of Transportation for California, will be moderating a session on the recently-released California State Rail Plan. The panel will discuss how Caltrans planned and implemented a seamless mobility system across California and determined the capital improvement investments for California’s Plan.
- Wednesday, June 13, in the Passenger Rail session, we will hear updates on several intercity passenger rail programs in the U.S. including All Aboard Florida’s Brightline service and Texas Central’s proposed “bullet train” between Houston and Dallas/Fort Worth.

Two other exciting passenger rail sessions will also be held that should be relevant and interesting to our committee members:

- On Tuesday, June 12, a session on Capital Programs – Mega Projects will discuss the challenges faced in planning, designing, constructing, and financing mega projects. Two large-scale projects in London will be highlighted as well as the Durham-Orange Light Rail Transit Project and the CT Rail Hartford Line project.
- Also on Tuesday, June 12, a session on Regional High-Performance Passenger Rail Networks will be held to explore the steps that regional and high-speed rail networks are taking to improve travel options within their regions.

Note: Session specifics are subject to change. WE LOOK FORWARD TO SEEING YOU IN DENVER!

STATES ROUND-UP

HIGHLIGHTS AND NOTEWORTHY ACHIEVEMENTS

CONTRIBUTED BY: Ken Sislak, AECOM

Amtrak broke another ridership record in FY 2017 by carrying 31.7 million passengers, which is an increase of 1.5 percent over FY 2016. This was the seventh consecutive year Amtrak carried more than 30 million passengers. Several Amtrak services had record years for ridership including:

- Northeast Corridor (NEC): 12 million riders – increased 1 percent and was the NEC's highest ridership year ever.
- The long-distance trains: 4.7 million riders - increased ridership by nearly 1 percent despite poor on-time performance.

And in FY 2018, Amtrak year-to-date ridership continues to increase over the prior year-to-date totals. As of February 2018 (latest data available) Amtrak system wide ridership is up 2 percent despite cancellations because of winter storms and abysmal on-time performance for many long distance trains.

The growth of passenger rail service outside of the existing Amtrak national network is astounding. What follows are brief discussions of how regions, states and local communities from around the country are getting involved in planning and implementing the investments needed to restore and improve intercity passenger rail services.

Interstate Regional Planning

The Federal Railroad Administration (FRA) has taken the lead on organizing and coordinating multi-state planning efforts. In 2016, FRA initiated the Southeast and Midwest multi-state regional planning studies. The plans are intended to unite state rail planning in these regions, foster multi-state coordination and provide a framework

for governance and operation of interstate and inter-regional passenger service planning. The studies examined existing conditions and assessed baseline and future market opportunities. A Generalized Network Vision that describes the communities to be served by rail and the corridors that link them are being prepared along with a Service Plan to describe the range of train services (frequencies, speeds, capacity) connecting the markets in the network and how those services would operate and interact in the network. FRA selected CH2M (now part of Jacobs) for the Southeast Regional Rail Planning Study and Quetica, LLC (with WSP, formerly Parsons Brinckerhoff) for the Midwest Regional Rail Planning Study. Stakeholder involvement and outreach is a key element of both studies.

The FRA Southeast Regional Rail Planning Study, encompassing the area from DC south to Florida and all the states east of Alabama, was the first of the studies to get underway. The FRA and its consultant team recently completed preliminary analysis and stakeholder outreach work. The final report for the study is now being prepared. The Southeast study examined the potential multi-state rail linkages in the studied region using the FRA developed CONNECT sketch-planning tool. Likely corridors were identified using the FRA service tiers, Core Express (over 125 mph), Regional (90 to 125 mph) and Emerging (79 to 90 mph). The FRA hopes the study results will encourage multi-state service planning coordination including cooperation in the development of State Rail Plans. The Final Report is expected later in 2018.

The FRA Midwest Regional Rail Planning Study commenced roughly six months following the Southeast study, and encompasses twelve Midwest states, spanning the area bracketed by North Dakota, Ohio, and Kansas. As was the case with the Southeast, the Midwest study recently

completed its core analytical work, and held the last of its four stakeholder meetings in Chicago in December 2017. Its preliminary conclusions point to an expansion of the already significant network of intercity passenger rail in the Midwest, including a matrix-like system in the eastern half of the region that would capitalize on the dense clustering of major metropolitan areas in Michigan, Ohio, and Indiana.

Gulf Coast Passenger Rail Restoration

More progress has been made on restoring passenger rail service to the Gulf Coast, which was lost after Hurricane Katrina. The Southern Rail Commission (SRC) has coordinated with Amtrak to study restored passenger service along the Gulf Coast from Louisiana to Florida. The SRC is part of the Gulf Coast Working Group (GCWG), which was established by the FAST Act to outline a path that restores passenger rail service along the Gulf Coast. Support to achieve this goal has continued to grow deeper and stronger since last year's SPEEDLINES update. SRC officials are praising the funding allocations packaged in the omnibus bill signed by President Trump in March 2018. The grant programs at play for Gulf Coast passenger rail service restoration include the following:

- Consolidated Rail Infrastructure and Safety Improvements (CRISI) – This grant program received \$592.5 million for fiscal year 2018, with \$35.5 million set aside to restore lost passenger rail service such as the Gulf Coast route. Officials close to the Gulf Coast rail restoration talks believe that the line from New Orleans to Mobile is the only one eligible, and could capture the full \$35.5 million.
- The Restoration and Enhancement Grant Program (REG) – This grant program consists of \$20 million to support operating expenses for new passenger rail service. This amount is \$15 million more than what Amtrak got in fiscal year 2017. Most of this funding could be used to off-set start-up and operating expenses

Applications for the two federal grant programs requiring state matches are due in May and June. The deadline to apply for the REG grant is May 21 and CRISI applications must be turned in by June 22. State officials in the Gulf States will have to dedicate local funds over the course of four years to match these federal grants aimed at restoring service. If any of the states take a pass, they risk losing out on a restored Gulf Coast passenger rail service.

State Updates

Alabama – The Alabama Department of Economic and

Community Affairs (ADECA) is undertaking a study of the feasibility of the Montgomery – Mobile segment of the Birmingham – Montgomery – Mobile route. AECOM was selected to assist ADECA in completing this study. This new service is dependent on restoring the aforementioned Gulf Coast service that would run between New Orleans and Orlando serving various cities along the way including Mobile, AL.

Arizona – The Tucson to Phoenix Tier 1 Final EIS was completed by the Arizona Department of Transportation (ADOT), in coordination with the FRA on December 19, 2016. There still has been no construction schedule established for the project and no funding plan has been put in place. The project remains alive as an aspiration. Amtrak's Chicago-Los Angeles Southwest Chief and Los Angeles-New Orleans Sunset Limited continue to serve the state along with connecting Thruway buses.

Arkansas – The Arkansas State Highway and Transportation Department (AHTD) is studying the feasibility of new passenger rail service between Little Rock and Memphis, which is part of FRA's designated South Central High-Speed Rail Corridor (SCHSRC) across the state. AECOM is preparing the study with Cambridge Systematics. Most of the corridor follows the existing Texas Eagle route. The initial phase is exploring the feasibility of extending the SCHSRC designation from Little Rock to Memphis, which would invite passenger rail investments linking these cities with Dallas and potentially San Antonio. A feasible alignment was identified between Little Rock and Memphis. The Service Development Plan (SDP) was prepared for the full service corridor and submitted to FRA for comments at the end of February 2018. Currently, the FRA is reviewing the SDP and comments are expected in early summer 2018.

California – Caltrans completed its 2018 State Rail Plan, emphasizing network integration as part of its Vision 2040. Under the 2040 Vision, high-speed rail will become a trunk system uniting the northern, central and southern parts of the state, and riders will rely increasingly on intercity and regional commuter trains and urban transit services to access the high-speed rail system with timed transfers and strategically located hub stations.

Construction continues on the California high-speed rail system between Merced and Fresno in the Central Valley. The construction includes two major projects in Fresno: a trench taking trains 40 feet below ground under a rail spur, a canal and State Route 180, and a half-mile-long,



80-foot-tall elevated viaduct south of downtown.

The three California state-supported corridor services – the Capitol Corridor, the San Joaquin, and the Pacific Surfliner – continue under regional managements, which are planning improvements to enhance services and attract new riders. For example, capital projects planned or in progress on the 351-mile Pacific Surfliner route between San Luis Obispo, Los Angeles and San Diego total \$5.4 billion.

Metrolink is considering electrifying some of its lines that will facilitate blended service with high-speed trains similar to what is being implemented in Northern California on the Caltrain route between San Jose and San Francisco.

The Caltrain electrification project is moving forward. Caltrain signed a \$697 million design-build electrification contract with Balfour Beatty Infrastructure Inc. Some construction elements are already underway. In addition, Caltrain has procured 16, six-car double-decker electric multiple unit (EMU) trainsets from Stadler valued at \$551 million. Funding for the \$1.98 billion project is coming from a \$100 million grant from the Federal Transit Administration with the balance from local and state sources.

Amtrak long distance trains the Chicago-Los Angeles Southwest Chief, Chicago-Oakland California Zephyr, Los Angeles-Seattle Coast Starlight, and Los Angeles-New Orleans Sunset Limited continue to serve the state, along with multiple connecting Thruway bus routes.

Colorado - Amtrak restarted a Colorado tradition – the Ski Train, aka the Winter Park Express, between Denver and Winter Park. After a successful first season (2016/2017), expanded service was announced for the 2017/2018 season, including first-Friday round trips and lower ticket prices for some departures. The train utilizes the Superliner equipment used on the California Zephyr. It is anticipated that this service will continue into the 2018/2019 ski season under the terms of a three year contract. Amtrak has said special trains will no longer

be operated according to a brief notice of a policy change sent to Amtrak employees in March 2018. It remains to be seen if this policy change will impact the Ski Train.

Amtrak's Chicago-Emeryville California Zephyr and the Chicago-Los Angeles Southwest Chief continue to serve the state, along with connecting Thruway buses. Projects to improve the speed and reliability of the Southwest Chief's route through Colorado, Kansas and New Mexico are continuing with another TIGER grant awarded in 2018 for \$16 million. This grant will fund additional track improvements to increase speed, comfort and service reliability. Amtrak, BNSF and matching state and local support add to the funding support for these track and signal improvements. The state is continuing its effort to consider Front Range rail by extending the Southwest Chief line.

Connecticut - Work continues for the 2018 completion of the state's \$693 million New Haven, Hartford, and Springfield rail project – now called the CTrail Hartford Line (Hartford Line). With engineering completed and construction almost complete for Phases 1, 2 and 3A, the CTrail Hartford Line will launch new passenger rail service on June 16, 2018. (See our feature story.)

Florida – Brightline commenced passenger train service on Saturday, January 13, 2018 and is running an average of 11 roundtrips per day between Palm Beach and Fort Lauderdale. Ridership is "three times what was expected" according to senior managers at Brightline. The first train operated from Miami to Fort Lauderdale and West Palm Beach on Saturday, May 19, 2018. Reports indicated the train was packed with passengers.

Georgia – The Georgia Department of Transportation (GDOT) is still studying two passenger rail corridors. The FRA, GDOT, and the Tennessee Department of Transportation (TDOT) prepared a Tier I Environmental Impact Statement (EIS) to evaluate the general corridor-level environmental and related impacts of constructing and operating proposed high-speed ground transportation (HSGT) service within an approximately 140-mile corridor between Atlanta and Chattanooga. The Tier 1 EIS/Record of Decision (ROD) was signed by the FRA September 12, 2017. The next step in the project development process is refinement of the preferred alternative in a Tier 2 EIS.

In addition, GDOT is preparing the Atlanta to Charlotte Passenger Rail Corridor Investment Plan (PRCIP). This is an extension of the Southeast High-Speed Rail Corridor (SEHSR), which is under development from Charlotte

to Washington, D.C. The extension from Charlotte, would travel southeast through portions of South Carolina and into Atlanta. Currently, a Tier 1 Draft EIS is being prepared by HNTB for FRA and GDOT. The Tier 1 Draft EIS has not been released for public review as the document is undergoing revision in response to comments from FRA. It is expected the draft will be ready for public review later this year.

A proposal for a high-speed rail that could run from Columbus and Atlanta was presented to the House Commission on Transit Governance and Funding in November 2017. This commission, which was created by House Resolution 848 during the 2017 legislative session, will study Georgia's transit needs and analyze ways for the state to adequately plan and provide for those needs. The feasibility study prepared by HNTB was presented to the commission. The study showed the Columbus – Atlanta rail passenger project could create thousands of jobs, increase business productivity through travel efficiencies, spur the revitalization of cities, and much more.

Illinois – The Illinois High-Speed Rail Project between Chicago and St. Louis is nearing completion. The \$2 billion project will enable higher-speed operations of up to 110 MPH between Joliet and East St. Louis. In 2017 much of the work was completed throughout the corridor. Newly constructed rail stations were open in Dwight, Pontiac, Carlinville and Alton; and the renovations to the station in Lincoln were completed. Work began in Springfield, including the closing of five at-grade crossings. In 2018, the Illinois Department of Transportation (IDOT) will complete fence installation in Alton; the Kankakee River Bridge construction and crossing upgrades in Wilmington; and the work along the 3rd Street corridor in Springfield. The final project element, the Springfield Rail Improvements Project, will establish a quiet zone through the city and provide safety and local access enhancements. The City has contracted with Hanson Professional Services Inc. for these improvements valued at \$25 million. Amtrak will complete installation of Positive Train Control (PTC) on its locomotives. Work also will continue on the Elwood to Braidwood Environmental Assessment. A program management team led by WSP has been supporting IDOT in the development, design, public involvement, and implementation of the new high-speed rail service.

Last year, the City of Chicago and the US Department of Transportation (USDOT) Build America Bureau entered an Emerging Projects Agreement (EmPA) regarding Chicago Union Station. The goal of the agreement is to invest \$1 billion to modernize Chicago Union Station and redevelop the surrounding area. Many individual projects have been completed. Amtrak opened a new "Metropolitan Lounge,"



doubling its space and adding many new amenities for customers who are traveling in sleeping cars or in Business Class, as well as Select Plus and Select Executive Amtrak Guest Rewards members. The Grand Staircase and facade of the building have been restored. Renovations of the Great Hall Skylight and dome structure are in progress. Amtrak selected a team led by Riverside Investment & Development Co. as the Master Developer for commercial elements of Chicago Union Station and neighboring Amtrak-owned properties.

Quandel Consultants is the IDOT Program Manager responsible for advancing a proposed passenger rail service between Chicago and Moline / Quad Cities. Some of the current preliminary engineering activities taking place under the program manager with assistance from the railroad include inspection and assessment of bridge structures and track conditions, grade crossing design, signal and systems design and track rehabilitation planning and roadbed core samples.

The Midwest High-Speed Rail Association (MHSRA) continues to advocate for regional rail improvements and a framework for next-generation high-speed rail in the Midwest. Its signature concept is the CrossRail program of interrelated projects in Chicago. CrossRail extends the Metra Electric Line to the Milwaukee District West and North Central Lines terminating at the O'Hare International Airport (ORD) in the vicinity of the under-utilized O'Hare Transfer Station. In addition, MHSRA is also advocating for a phased approach to high-speed rail development beginning with electrification of additional lines and the acquisition of modern passenger rail equipment such as the trainsets purchased by Brightline.

In a stunning reversal, a multi-state contract with Sumitomo Corp of Americas to supply locomotive-hauled coaches for use in California, Illinois, Michigan and Missouri was amended in late 2017, with the order now to be fulfilled with Siemens as Sumitomo's subcontractor rather than Nippon Sharyo. In September 2012 the four states co-operating in

the California-led joint procurement agreed to award Sumitomo a \$352 million contract to supply 120 double-deck vehicles, which were to have been manufactured at Nippon Sharyo's plant in Rochelle, Illinois, for delivery between late 2015 and early 2018. However, a prototype carbody shell suffered a structural failure during testing, and it was realized that the required redesign would delay the project beyond the validity of federal funding agreements. The revised contract worth \$371 million now covers the supply of 49 single-deck coaches to California Department of Transportation (Caltrans) and 88 to Illinois Department of Transportation on behalf of the Midwest states. Caltrans said production of the '100% Buy America' vehicles at Siemens' Sacramento plant was now expected to begin sometime during 2018.

Indiana – Five years ago the City of Fort Wayne and the Northeast Indiana Rail Passenger Association (NIPRA) sponsored a feasibility study for new passenger rail service between Chicago - Fort Wayne - Columbus. Since then, HNTB has been conducting pre-scoping studies in anticipation of funding from FRA and InDOT for the Chicago – Fort Wayne – Lima segment of the route. The Midwest Ohio Regional Planning Commission (MORPC) and several other Ohio communities have agreed to fund some additional data collection and pre-scoping activities for the Lima – Columbus segment. Up to now, local community leaders in Columbus expressed skepticism about passenger rail service and were instead expressing interest in examining Hyperloop options. However, MORPC decided to study both technologies. (See Ohio)

Iowa – No action has been taken to advance the Chicago to Council Bluffs-Omaha Regional Passenger Rail Project.

Another feasibility study of passenger rail service between Iowa City and North Liberty commenced in 2016. The study is being spearheaded by the Iowa DOT and the Metropolitan Planning Organization (MPO) of Johnson County. The MPO and local elected officials agreed to proceed with the third phase of the feasibility study of passenger rail service connecting Iowa City and North Liberty. Officials from the Johnson County Board of Supervisors, University of Iowa and city councils in Iowa City, North Liberty and University Heights also expressed interest in further study. The Phase 2 study put the cost of an Iowa City to North Liberty passenger rail service at about \$40 million to build out. The upcoming Phase 3 study will include a cost-benefit analysis, financial plan, operation and maintenance costs, and proposed station stops. HDR has been conducting the study.

Louisiana – The Southern Rail Commission released a Governor's briefing book on passenger rail opportunities between Louisiana's two largest cities: New Orleans and Baton Rouge (September 2015). The recommended proposed passenger rail service start-up suggested operating two round trip trains a day with the goal of increasing trips, speed and ridership incrementally. The rail passenger service would connect an 80-mile corridor, representing more than 2.2 million people and nearly 1 million Louisiana jobs. The line is projected to serve 210,000 riders per year and would require both capital and operating funding support. This study was completed by Transportation for America and the Center for Planning Excellence. While no funding has been identified for operations, corridor planning continues to be active. Baton Rouge, Gonzales and LaPlace obtained an FRA grant to start station area planning for the Baton Rouge – New Orleans service. Local governments have put up additional money for station design and development. A team led by HNTB was selected to plan and design two stations that would be part of the passenger service linking Baton Rouge and New Orleans, and \$450,000 has been budgeted for HNTB's work. The Southern Rail Commission awarded the city-parish \$250,000 in federal funds in December, part of a \$2.5 million distribution to local governments in Louisiana, Mississippi and Alabama earmarked for designing, building and improving train stations. The East Baton Rouge Parish Metro Council in August 2016 voted to invest \$250,000 for a downtown rail station.

Maine – A study of a proposed Downeaster extension to Lewiston – Auburn was launched in 2017. The Maine legislature allocated \$500,000 to fund the study and directed the Department of Transportation (MaineDOT), in consultation with the cities of Lewiston and Auburn and Northern New England Passenger Rail Authority (NNEPRA), to conduct the study for the extension of Amtrak Downeaster passenger rail service. The municipalities of Lewiston and Auburn have contributed \$50,000 toward the project cost. NNEPRA is serving as the Project Manager for the Lewiston/Auburn Passenger Rail Service Plan. Through a competitive procurement process, VHB in partnership with WSP was selected as the Project Consultant Team. Under the direction of a project committee, which includes representatives from the City of Lewiston, City of Auburn, MaineDOT, and the NNEPRA, the study will evaluate the demand for a passenger rail expansion to Lewiston and Auburn. It will consider questions such as whether the passenger rail expansion should be a commuter-based connection to Portland or potentially a regional connection to Boston.

Maryland – Amtrak selected Penn Station Partners, which includes Beatty Development, Armada Hoffer Properties,

Cross Street Partners and Gensler, to lead the master planning and the long-discussed redevelopment of Baltimore's Penn Station and nearby Amtrak properties. Amtrak said it is negotiating exclusively with Penn Station Partners for a master development deal that could result in up to 1.6 million square feet of retail, residential and office development in a five-acre area around the century-old station. The project could bring the kind of transit-oriented development that lawmakers have long sought to attract new residents, especially young commuters priced out of the Washington, D.C. rental market, while bolstering redevelopment in Station North with much-needed retail.

Massachusetts – High-speed rail from Springfield to Boston might be moving forward in incremental steps. The Massachusetts Department of Transportation (MassDOT) says it is ready to take a closer look at the idea of linking these two cities. MassDOT released a draft state rail plan that reexamined many of the rail corridors under active consideration. The draft state rail plan listed projects it considers priorities, such as commuter rail service to New Bedford and Fall River and the expansion of South Station. Other less likely projects, including the extension of rail service to Montreal, were removed from priority consideration. The Boston to Springfield link, known as East-West Rail, was not listed as a priority but deemed worthy of additional study. HDR is preparing the state rail plan with assistance from AECOM.

Michigan – The Michigan Department of Transportation (MDOT) sponsors three separate intercity passenger rail routes serving 22 station communities in Michigan. Operated by Amtrak, these trains include:

- Wolverine service - Three daily round-trips between Chicago and Detroit/Pontiac
- Blue Water service - One daily round-trip between Chicago and Port Huron
- Pere Marquette service - One round trip daily between Chicago and Grand Rapids.

An important part of Michigan's Intercity Passenger Rail services is Michigan's Accelerated Rail Program, which focuses on improving the federally designated Chicago-Detroit/Pontiac High Speed Rail Corridor. Enhancements for passenger speeds up to 110-mph have been completed for the segment between Porter, Indiana and Kalamazoo, Michigan. MDOT purchased 135 miles of the rail corridor between Kalamazoo and Dearborn from Norfolk Southern Railway (NS) in 2012. On the MDOT-owned portion, the maximum speeds are 79 mph, but they are expected to increase to 110 mph this year in certain sections once the

testing of the positive train control system is completed and when new locomotives are put into service. All these improvements are the direct result of \$347 million in federal American Recovery and Reinvestment Act funding and High-Speed Intercity Passenger Rail Program funding. Outside of MDOT ownership, other improvements have been made that will benefit the movement of both passenger and freight trains. A new bridge connection was installed in west Detroit allowing for a faster connection for trains bound for Detroit, Royal Oak, Troy, and Pontiac.

A Tier 1 Draft EIS for further improvements in the corridor, led by the State of Michigan with assistance from HNTB, was released in 2014. The Program team (FRA and MDOT) are in the process of reviewing and preparing responses to public and agency comments on the draft EIS received between September and December 2014. Responses to the comments, and updates to the environmental analysis will be included in the Tier 1 final EIS, which was anticipated for release in the summer of 2017. FRA is now leading the study with no advertised date for a Record of Decision. The Record of Decision (ROD) will present FRA's final decision on the Tier 1 EIS and the ROD will identify the Program's selected route and service alternative for the corridor. Following completion of the Tier 1 final EIS and issuance of the ROD by FRA, subsequent Tier 2 NEPA documents will be developed to evaluate the environmental impacts quantitatively within one or more specific logical sections or phases of the program, which would be developed through separate but related projects. There is no announced schedule for the completion of this work.

The City of Ann Arbor, MDOT and FRA continue to coordinate on final location for a new multimodal passenger rail station in Ann Arbor. Ann Arbor is the busiest rail stop in Michigan. The proposed project includes the construction of a new intermodal station, platform, and parking. The new station supports both the existing and planned expansion of the Amtrak intercity service between Detroit/Pontiac and Chicago. It also supports proposed regional commuter rail service between Detroit and Ann Arbor. AECOM has provided support to the City of Ann Arbor for planning, conceptual design and NEPA coordination for this station since 2014. The project team prepared an environmental assessment (EA) on September 18, 2017. The EA was reviewed by the public and comments were received. A final report, which includes a summary of the EA document as well as all of the public comments received, was submitted to the FRA for review. The next steps will vary, depending on the outcome of the FRA review.

TEMS was selected to conduct a \$100,000 feasibility study

of restoring passenger rail service from Ann Arbor to Traverse City and Petoskey.

Minnesota – The Northern Lights Express (NLX) is a proposed higher speed passenger rail project that would provide rail service between Minneapolis and Duluth. If constructed, NLX will operate on approximately 152 miles of an existing BNSF rail corridor. The project is envisioned to operate at a top speed of 90 MPH. The FRA and Minnesota DOT (MnDOT) in cooperation with the Minneapolis-Duluth/Superior Passenger Rail Alliance and Wisconsin Department of Transportation released a Tier 2 project level environmental assessment (EA) last year. The Tier 2 EA, developed with assistance from HNTB, addresses specific elements outside the scope of the 2013 Tier 1 EA. The anticipated cost to implement the NLX project is estimated to be approximately \$500 - 600 million. On February 20, 2018 the FRA issued a finding of no significant impact (FONSI) on the Tier 2 Project Level Environmental Assessment. Additionally, under the State of Minnesota environmental review process, MnDOT, serving as the responsible governmental unit (RGU), issued the findings of fact and conclusions and a negative declaration, indicating that a state EIS is not required. If fully funded, final design and construction can be completed within two years.

MnDOT was required to terminate the study examining a higher speed rail corridor (up to 90 mph) along the Empire Builder route between Minneapolis/St. Paul and Chicago. MnDOT expected to release a service alternatives analysis (AA) report by June 2017. However, a pair of Republican state lawmakers effectively derailed the study. All they needed to do was object. MnDOT suspended work earlier this year on the current phase of the project — a mostly completed series of studies costing \$1.2 million — after Representatives Scott Newman, (R-Hutchinson) and Paul Torkelson, (R-Hanska) blocked \$182,162, which was a part of the funds needed to complete the environmental study. HDR was the prime consultant for this work.

In July 2016, MnDOT and WisDOT initiated the Twin Cities -Milwaukee - Chicago (TCMC) Intercity Passenger Rail Service phase 1 study. Amtrak completed a feasibility study for these service improvements in 2015. The current study is examining adding a second daily round trip along the portion of the Empire Builder corridor between St. Paul Union Station and Chicago at conventional train speeds up to 79 mph. MnDOT selected an HNTB team with HDR to perform the study. The schedule for the phase I study includes completion of tasks needed to advance the project to the next phase of service development planning, completion of the environmental review process and advancement of the design for the project. MnDOT and its project partners completed the purpose and

need statement in the fall of 2017 and expect to complete the study later in 2018.

Mississippi – Amtrak currently provides intercity passenger rail services in Mississippi operating two daily trains in Mississippi: The City of New Orleans between Chicago and New Orleans; and the Crescent, between New York and New Orleans. A third train, the Sunset Limited, between Los Angeles, New Orleans and Orlando, served Mississippi until Hurricane Katrina in 2005, and has since been suspended. Amtrak has studied the potential restoration of the service, which remains unrealized. Mississippi is a member-state of the Southern Rail Commission, which seeks to restore rail service operating along the Gulf Coast. Mississippi as part of the SRC has begun planning necessary to restore the Gulf Coast service between New Orleans and Jacksonville, which was suspended after Hurricane Katrina. This is the service that would also stop in Biloxi and Mobile and would continue to Orlando as the preferred alternative. The service originates in Chicago as part of the City of New Orleans with through service to Orlando.

Mississippi also has explored four other potential new passenger rail services plus several suggested Thruway motor coach services as part of its state rail planning process. If implemented, potentially there could be seven distinct rail services in Mississippi including the two existing Amtrak services. Two of the five new services – New Orleans-Meridian-Birmingham-Atlanta and New Orleans-Jackson-Memphis – would be on existing Amtrak routes, where they would provide multiple frequencies daily at Mississippi stations. Two more – Meridian-Jackson-Shreveport-Fort Worth and Jackson-Hattiesburg- Gulfport/Biloxi – would be on totally new routes, providing rail service in parts of Mississippi that have not seen a passenger train in decades. The fifth service is the aforementioned restoration of Gulf Coast service.

Missouri - Amtrak service is provided in Missouri on two long distance routes – the Southwest Chief and Texas Eagle (Chicago-San Antonio, Texas) - and two state-supported routes - the Missouri River Runner (Kansas City – St. Louis) and Lincoln Service (Chicago-St. Louis). The state provides about \$8 million annually to operate the Missouri River Runner. Missouri is participating in the Midwest NextGen equipment procurement for new locomotives and passenger rail equipment assigned to the Missouri River Runner service.

The Missouri Department of Transportation submitted an application for a \$73.1 million federal INFRA (Infrastructure for Rebuilding America) grant to help replace the



127-year-old Merchants Bridge spanning the Mississippi River between Venice, Illinois and St. Louis, Missouri. Built in 1890, the bridge carries rail traffic from all six Class 1 carriers, five regional short-line railroads, and Amtrak's state-supported Lincoln Service (Chicago-St. Louis) and long-distance Texas Eagle service.

Nevada – Amtrak operates one long distance train through Nevada, the California Zephyr (Chicago-San Francisco Bay Area) and operates California-supported corridor trains that provide motorcoach connections to Reno.

Xpress West continues to seek funding to complete the development of phased high-speed rail service between Anaheim and Las Vegas.

New York – New York State Department of Transportation's (NYSDOT) plans to strengthen its rail passenger system by providing higher speed passenger rail within the 463-mile rail corridor between New York City and Buffalo/Niagara Falls (Empire Corridor) are moving forward, albeit more slowly than originally planned. FRA and NYSDOT completed the tier I draft environmental impact statement (DEIS) in January 2014. Six public hearings statewide presented the findings of the tier 1 DEIS and solicited public comments. Public comments on the tier 1 DEIS ended April 30, 2014. FRA anticipates publishing the Tier I final EIS in Fall 2018.

The Gateway Program is a comprehensive program of strategic rail infrastructure improvements designed to improve current services and create new capacity that will allow the doubling of passenger trains running under the Hudson River. The program will increase track, tunnel, bridge, and station capacity, eventually creating four main-line tracks between Newark, NJ, and Penn Station, New York, including a new, two-track Hudson River tunnel. The Trump administration continues to oppose an informal agreement made during the Obama administration. The

informal agreement committed the federal government to pay half of the estimated \$12.7 billion bill for the first phase of Gateway, which would build the tunnel and a new bridge over the Hackensack River. Additional bridges and an expansion of Penn Station would push the total price tag for the project to \$29 billion, a lot of that to be funded with federal tax dollars. New York and New Jersey pledge half the cost by using federal loans to cover their share of the cost. The omnibus appropriations bill passed in March provided several hundred million for the first phase of the Gateway Program.

Plans to convert the historic James A. Farley Post Office into a world-class transportation hub continued to make news. Construction has begun on Penn Station's fast-tracked Moynihan Train Hall. Located within the existing James A. Farley Building (across from the existing Penn Station entrance), the new 255,000-square-foot train hall will serve as a new concourse for Amtrak and Long Island Railroad passengers, while an additional 700,000-square-feet will be dedicated to commercial, retail and dining spaces. Construction on the new train hall is expected to be completed by December 2020. Designed by SOM, the renovation will feature a new 92-foot-tall skylight located within the center of the beaux arts building (designed by McKim, Mead and White the designers of the original Pennsylvania Station across the street). The train hall will service nine platforms with 17 tracks.

North Carolina – The program of projects managed under the Piedmont Improvement Program (PIP) and funded as part of the ARRA grant requirements have largely been completed. Along with new equipment and increased frequencies the other improvements are designed to increase train operating speeds. The program of interrelated projects includes adding 31 miles of double track, 12 grade-separations, closing 23 public and 15 private railroad crossings, renovating train stations in Cary, High Point, Burlington and Kannapolis. Mott McDonald has supported NCDOT with project development and administration, as well as numerous other firms on design and construction.

The Raleigh Union Station project is a multimodal facility planned for Downtown Raleigh's Warehouse District. The facility will be implemented in a number of phases. The station is expected to be fully operational by June 2018. The architect is Clearscapes and the track and structure design team was STV/Ralph Whitehead. Urban Design Associates provided urban planning and public outreach.

Ohio - The Mid-Ohio Regional Planning Commission (MORPC), Columbus' metropolitan planning organization,

released a request for proposals for the study of higher speed passenger rail service between Chicago and Columbus. Indiana has been studying the Chicago - Ft. Wayne - Lima segment of the route as part of a pre-scoping exercise. Ohio communities helped raise funds to assist in data collection supporting the tier I EIS to collect data and conduct pre-scoping on the Lima - Columbus segment of the route to align the data collection and pre-scoping activities along the entire length of the corridor. (See Indiana for more discussion).

In addition, MORPC also advertised for a feasibility study of hyperloop technology in the Chicago - Columbus - Pittsburgh Corridor as an outgrowth of their successful submittal in the Virgin Hyperloop One Global Challenge. The MORPC Midwest Connect proposal was one of ten selected from 2,600 applicants worldwide to be studied. MORPC selected a team led by AECOM to study hyperloop feasibility in this Midwest Connect Corridor.

In September 2016, the Cincinnati USA Regional Chamber and advocacy organization All Aboard Ohio hosted a conference on the Amtrak Cardinal service, with participation from states all along the Chicago to East Coast route. The Cardinal currently operates thrice weekly round trips, and the focus of the conference was an increase to daily service. Amtrak announced it would cut the Cardinal back to a Washington, DC terminus as it continues to rehabilitate Penn Station tracks. Plans for an Amtrak stop in Oxford are gaining momentum, with design ideas and funding moving forward. The city and Miami University have committed \$350,000 each to the plan to build a platform for a proposed Oxford/Miami University Amtrak stop, and the Talawanda local school district has submitted a letter of support. Conceptual designs have been prepared and circulated throughout the community. The current vision for the project calls for a simple design with a platform along the tracks with a covered bench, although open. Using sketches based on similar plans in other communities, the committee is proceeding with that simple design in mind. The city has been engaging AECOM in design collaboration.

The Northeast Ohio Areawide Coordinating Agency (NOACA), the Cleveland area MPO, issued an RFP for a Chicago - Cleveland - Pittsburgh Hyperloop Feasibility Study partnering with Hyperloop Transportation Technologies, a competitor to Virgin Hyperloop One. Responses were due on April 24, 2018.

Oklahoma - Oklahoma Department of Transportation (ODOT) continues its support of one round trip daily between Fort Worth and Oklahoma City as part of the Heartland Flyer. In 2016, an Amtrak Thruway bus was implemented between Oklahoma City and Newton, Kansas connecting the Heartland

Flyer with the Amtrak Southwest Chief operating between Chicago and Los Angeles.

Oklahoma DOT also initiated a Tulsa - Oklahoma City Corridor Investment Plan to define, evaluate and prioritize future investments in the Tulsa-Oklahoma City Corridor. The planning effort will include an objective evaluation of passenger rail as a means of providing inter-city connectivity between Tulsa and Oklahoma City. This effort will focus on long-term needs for inter-city transportation and will complement other planning efforts addressing regional and local transportation issues. Parsons Brinckerhoff was assisting Oklahoma DOT in preparing the Corridor Investment Plan.

Four years ago when the Stillwater Central Railroad bought the Sooner Sub from the Oklahoma DOT, there was a promise of passenger rail. The agreement with Stillwater Central Railroad required the railroad to implement a pilot project by August 2019. The train was called the Eastern Flyer. But the plan for the promised passenger train between Tulsa and Oklahoma City is on-hold. ODOT says it's not sure what the holdup is on Stillwater Central's end. In the meantime, Tulsa Senator Kevin Matthews is starting a bipartisan task force to study transportation possibilities in Tulsa, including a high-speed train between Tulsa and Oklahoma City. Senator Matthews says the task force will figure out how to pay for it with a public/private partnership. An Oklahoma law passed in 1996 says the state has to start passenger rail between Tulsa and Oklahoma counties, but there is no deadline.

The Texas-Oklahoma Passenger Rail Study is an evaluation of a range of passenger rail service options in an 850-mile corridor from Oklahoma City to South Texas. Oklahoma Department of Transportation (Oklahoma DOT) is an important partner in the study. The study is scheduled to conclude by the end of 2016 after the completion of a tier I service-level environmental impact statement (EIS) and a service development plan. More details of this study are outlined under Texas as the Texas DOT is managing the study effort.

Oregon - The Oregon Department of Transportation (ODOT) and the FRA are jointly developing a tier 1 DEIS investigating alternatives for enhanced rail passenger on the 125-mile Portland-Springfield-Eugene corridor. The corridor is part of the federally designated Pacific Northwest Rail Corridor, served today by the Amtrak Coast Starlight and the state-sponsored Amtrak Cascades. ODOT completed its analysis for improved passenger rail service

between Eugene-Springfield and Portland – a 125 mile segment. Information in the DEIS includes the general rail alignment, communities where stations would be located and service characteristics, such as the number of daily trips, travel time objectives and recommended technologies. The DEIS is expected to be released for public comment early in the summer of 2018. ODOT will hold public hearings in the form of open houses — including an online open house — to answer questions and take public input. After the public comment period is complete, ODOT and FRA will review all comments and develop a final EIS and record of decision identifying the final, selected alternative.

Pennsylvania – Pennsylvania DOT (PennDOT), in cooperation with the FRA and Norfolk Southern, completed the Keystone West High Speed Rail study in 2014. Since then, the Western Pennsylvanians for Passenger Rail and Pittsburgh Downtown Partnership have been pushing for increased service on the Pennsylvanian, which operates between Pittsburgh - Harrisburg - Philadelphia - New York City. The Pennsylvania House passed House Resolution 385 by a vote of 184 to 0. The resolution directs the Legislative Budget and Finance Committee (LBFC) to conduct a study of the feasibility of providing two additional passenger rail trips daily between Pittsburgh and Harrisburg and its impact on existing freight rail service. The study will identify the existing and proposed Keystone West round trips that could feasibly be extended west to Cleveland and Chicago. The study will also include additional information on the feasibility of introducing an option for Altoona local service as a part of the expanded passenger rail package. The Pennsylvania Senate has already passed an identical resolution (Senate Resolution 76), but the Legislative Budget and Finance Committee has not begun the study. House Transportation Committee staff intends to meet with the chairman of the LBFC, to suggest that the LBFC staff work with PennDOT since they are already doing a rail study through the state transportation commission.

Texas – Three high-speed rail (HSR) corridors that would connect major urban areas of the state are being studied in Texas. The corridors currently under consideration are Dallas to Houston (DAL-HOU, Dallas to Fort Worth (DFW) and Texas Oklahoma Passenger Rail Study (TOPRS).

FRA is preparing a tier 1 EIS for the proposed Dallas to Houston High-Speed Rail Project. FRA's responsibility in conducting the environmental analysis is to ensure the project is federally compliant, mitigates potential impacts, and is safe. A key step in this environmental analysis process is public involvement. The draft EIS was published and available for public review in December 2017. The last public hearings on the project were conducted in March 2018. This

completed nearly four years of work and provides a path for the high-speed train's planning, design and pre-construction phases along the 240-mile route. AECOM prepared the EIS on behalf of FRA and Texas Central Railway. A final EIS and ROD are expected by the end of the 2018. WSP was selected by Texas Central Railway to provide engineering support as the project moves ahead in its pre-construction phase.

The Texas Transportation Commission established the Commission for High-Speed Rail in the DFW Region to provide advice and counsel on the proposed Dallas-Fort Worth Core Express Service. The Texas Department of Transportation (TxDOT) and the FRA developed an environmental study to examine the feasibility of a faster, limited-stop passenger rail service that could connect possible future high-speed rail lines currently being planned in Dallas and Fort Worth. The study was 100 percent federally funded and considered possible rail alignments, train types and speeds. Although there has been regional discussion about station concepts serving downtown Dallas, Arlington and downtown Fort Worth, specific station locations have not been determined. In addition, the North Central Texas Council of Governments, the metropolitan planning organization for the Dallas-Fort Worth Region, has included high-speed or express passenger rail corridors in its long-range regional transportation plan (Mobility 2040). The FRA concluded the project in June 2017 with the production of an alternatives analysis final report. Urban Engineers, Inc. and WSP Parsons Brinckerhoff assisted TxDOT and FRA with the alternatives analysis report.

TxDOT is evaluating an 850-mile corridor from Oklahoma City to South Texas. The Texas-Oklahoma Passenger Rail Study was started in 2013 and concluded in November 2017 after the completion of a tier 1 EIS and a service development plan. Both of these reports document how passenger rail could serve Texas communities and the benefits and impacts of different passenger rail choices. It documented the costs, benefits and impacts of potential rail service alternatives compared to a no-build alternative. The study considered the costs and impacts to the corridor as a whole, as well as three discrete portions of the corridor including Oklahoma City to Dallas/Fort Worth; Dallas/Fort Worth to San Antonio and San Antonio to Rio Grande Valley/Corpus Christi/Laredo. CH2M Hill (now part of Jacobs) conducted the study on behalf of TxDOT and FRA.

Virginia – Virginia has an active state-sponsored passenger rail program. Service to Roanoke, an extension

of the highly-successful Lynchburg train, commenced on October 31, 2017. A public-private partnership with Amtrak, Norfolk Southern, the City of Roanoke and the Virginia Department of Rail and Public Transportation (DRPT) brought renewed intercity passenger rail service back to Roanoke for the first time in nearly 40 years.

The FRA and DRPT completed tier II draft EIS between Washington and Richmond (DC2RVA) in September 2017. The purpose of the DC2RVA project is to increase the rail system capacity between Washington, D.C. and Richmond to deliver higher speed passenger rail, improve conventional speed passenger rail, expand commuter rail, and accommodate growth of freight rail service in an efficient and reliable multimodal rail corridor. Based on agency and public comments on the tier II DEIS and DRPT's recommended preferred alternative, DRPT and FRA will prepare a final EIS, which will report the preferred alternative and list environmental commitments to mitigate unavoidable impacts. HDR is supporting DRPT with the project by completing the environmental documentation.

Washington – Amtrak's Los Angeles-Seattle Coast Starlight and Chicago – Seattle Empire Builder continue to serve the state with long-distance service. In partnership with the State of Oregon, Washington State Department of Transportation's (WSDOT) also sponsors a state-supported corridor train operating between Portland – Seattle and Vancouver, British Columbia. The Cascades corridor is 467 miles long: 300 miles in Washington, 134 miles in Oregon, and 33 miles in British Columbia. WSDOT completed 20 capital projects, funded by \$800 million in federal grants to improve Amtrak Cascades service. Sadly and tragically, the December 18th inaugural run of the Cascades operating over a new bypass route resulted in a deadly derailment. Since the derailment, the Cascades train has not used the new Point Defiance Bypass route and the new Tacoma Dome Station or the new Tacoma Freighthouse Square Station.

WSDOT contracted with CH2M (now part of Jacobs) to conduct a feasibility study for an ultra-high-speed rail line between Seattle and Vancouver, British Columbia. The line would be capable of 220 MPH maximum speeds. The study examined high-speed rail, maglev and hyperloop technologies. The FRA CONNECT sketch planning tool was used to estimate probable ridership in addition to examining costs and benefits of the proposed optional services. The Ultra-High-Speed Ground Transportation Study was submitted to the state legislature on Dec. 14, 2017; an economic impact addendum was added to the final report document on Feb. 1, 2018. The benefits to the region were substantial and seemed to justify additional

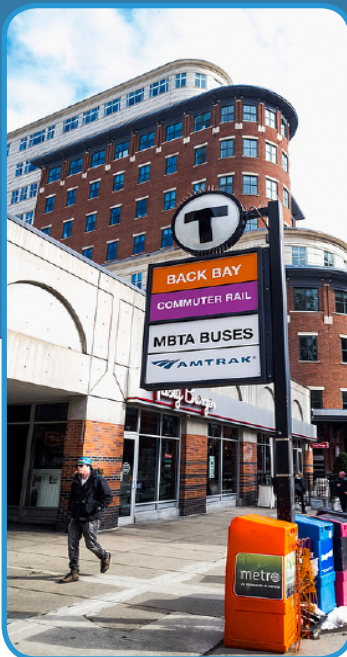
study following the FRA project development process. The Washington state legislature appropriated \$1.2 million for more detailed analysis of ultra-high-speed rail in the Cascades Corridor. The "business case analysis" included in the new state budget will build on the Jacobs report.

Wisconsin – The Wisconsin Department of Transportation (WisDOT) and Illinois Department of Transportation (IDOT), in coordination with FRA and Amtrak, are conducting an EA and SDP for service improvements between Chicago and Milwaukee. A key project objective is to increase Amtrak Hiawatha service from 7 to 10 daily round trips. The final EA, being prepared by Quandel Consultants, should be released during the summer of 2018. A FONSI would follow in late 2018 or early 2019.





Congress reached an agreement on funding the federal government through Sept. 30. The \$1.3 trillion bipartisan FY18 Omnibus Appropriations bill, which President Trump signed on Friday, includes \$1.94 billion for Amtrak—more than \$400 million above what we received just last year! The bill provides \$1.29 billion for the National Network and \$650 million for the Northeast Corridor (NEC) and includes funding for various DOT competitive grant programs that will further support intercity passenger rail.



The NEC is a shared transportation asset and so Amtrak is working with its federal, state and local partners to advance environmental reviews, project design and is looking for funding to begin construction. To successfully modernize our infrastructure, all stakeholders must work closely together to prioritize and fund a shared vision of the NEC's future.



FEDERAL FUNDING

SPECIFIC OPPORTUNITIES

In recent weeks the U.S. Department of Transportation (USDOT) and its Federal Railroad Administration (FRA) have issued notices of funding opportunity (NOFO) for a variety of programs including the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program, Restoration and Enhancement Grants Program, the newly announced BUILD Program, and a Broad Agency Announcement (BAA).

Federal Railroad Administration (FRA), Department of Transportation (DOT). Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program Notice of funding opportunity (NOFO or notice).

SUMMARY: This notice details the application requirements and procedures to obtain grant[1] funding for eligible projects under the Consolidated Rail Infrastructure and Safety Improvements (CRISI) Program. CRISI Program funding is provided by the Consolidated Appropriations Act, 2017, Div. K, Tit I, Public Law 115-31, (Appropriations Act). The opportunities described in this notice are available under Catalog of Federal Domestic Assistance (CFDA) number 20.325, "Consolidated Rail Infrastructure and Safety Improvements."

DATES: Applications for funding under this solicitation are due no later than 5:00 p.m. EDT, June 21, 2018. Applications for funding or supplemental material in support of an application received after 5:00 p.m. EDT on June 21, 2018 will not be considered for funding. Incomplete applications will not be considered for funding. See Section D of this notice for additional information on the application process.

ADDRESSES: Applications must be submitted via www.Grants.gov. Only applicants who comply with all submission requirements described in this notice and submit applications through www.Grants.gov will be eligible for award. For any supporting application materials that an applicant is unable to submit via www.Grants.gov (such as oversized engineering drawings), an applicant may submit an original and two (2) copies to Ms. Amy Houser, Office of Program Delivery, Federal Railroad Administration, 1200 New Jersey Avenue SE, Room W36-412, Washington, DC 20590. However, due to delays caused by enhanced screening of mail delivered via the U.S. Postal Service, applicants are advised to use other means of conveyance (such as courier service) to assure timely receipt of materials before the application deadline.

FOR FURTHER INFORMATION CONTACT:

For further project or program-related information in this notice, please contact Ms. Frances Bourne, Office of Policy and Planning, Federal Railroad Administration, 1200 New Jersey Avenue SE, Room W38-207, Washington, DC 20590; email: frances.bourne@dot.gov; phone: 202-493-6366. Grant application submission and processing questions should be addressed to Ms. Amy Houser, Office of Program Delivery, Federal Railroad Administration, 1200 New Jersey Avenue SE, Room W36-412, Washington, DC 20590; email: amy.houser@dot.gov; phone: 202-493-0303.

Applications for funding under this solicitation are due no later than 5:00 p.m. EDT, June 21, 2018. Applications for funding or supplemental material in support of an application received after 5:00 p.m. EDT on June 21, 2018 will not be considered for funding. Incomplete applications will not be considered for funding. See Section D of this notice for additional information on the application process.

Federal Railroad Administration (FRA), Department of Transportation (DOT). Restoration and Enhancement Grants Program notice of funding opportunity (NOFO)

SUMMARY:

This notice details the application requirements and procedures to obtain grant 1 funding for eligible projects under the Restoration and Enhancement (R&E) Grants Program. This notice makes available R&E Grants Program funding provided by the Consolidated Appropriations Act, 2017, Div. K, Tit. I, Public Law 115-31

(Appropriations Act). The opportunities described in this notice are available under Catalog of Federal Domestic Assistance (CFDA) number 20.324, "Restoration and Enhancement."

DATES: Applications for funding under this solicitation are due no later than 5:00 p.m. EDT May 22, 2018. Applications for funding, or supplemental material in support of an application, received after 5:00 p.m. EDT on May 22, 2018 will not be considered for funding. Incomplete applications will not be considered for funding. See Section D of this notice for additional information on the application process.

ADDRESSES: Applications must be submitted via www.Grants.gov. Only applicants who comply with all submission requirements described in this notice and submit applications through www.Grants.gov will be eligible for award. For any supporting application materials that an applicant is unable to submit via www.Grants.gov, an applicant may submit an original and two (2) copies to Amy Houser, Office of Program Delivery, Federal Railroad Administration, 1200 New Jersey Avenue SE, Room W36-412, Washington, DC 20590. However, due to delays caused by enhanced screening of mail delivered via the U.S. Postal Service, applicants are advised to use other means of conveyance (such as courier service) to assure timely receipt of materials before the application deadline.

FOR FURTHER INFORMATION CONTACT:

For further information regarding this notice, please contact Ruthie Americus, Office of Policy and Planning, Federal Railroad Administration, 1200 New Jersey Avenue SE, Room W36-403, Washington, DC 20590; email: ruthie.americus@dot.gov; phone: 202-493-0431. Grant application submission and processing questions should be addressed to Amy Houser, Office of Program Delivery, Federal Railroad Administration, 1200 New Jersey Avenue SE, Room W36-412, Washington, DC 20590; email: amy.houser@dot.gov; phone: 202-493-0303.

U.S. Department of Transportation Launches BUILD Transportation Program, Announces \$1.5 Billion Notice of Funding Opportunity

SUMMARY:

The U.S. Department of Transportation (DOT) today published a Notice of Funding Opportunity (NOFO) to apply for \$1.5 billion in discretionary grant funding through the Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program.

BUILD Transportation grants replace the pre-existing Transportation Investment Generating Economic Recovery (TIGER) grant program. Grants under this program are for investments in surface transportation infrastructure and are to be awarded on a competitive basis for projects that will have a significant local or regional impact. BUILD funding can support roads, bridges, transit, rail, ports or intermodal transportation.

Projects for BUILD will be evaluated based on merit criteria that include safety, economic competitiveness, quality of life, environmental protection, state of good repair, innovation, partnership, and additional non-federal revenue for future transportation infrastructure investments.

DOT will award a greater share of BUILD Transportation grant funding to projects located in rural areas that align well with the selection criteria than to such projects in urban areas. The notice highlights rural needs in several of the evaluation criteria, including support for rural broadband deployment where it is part of an eligible transportation project.

The Consolidated Appropriations Act of 2018 made available \$1.5 billion for National Infrastructure Investments, otherwise known as BUILD Transportation Discretionary grants, through September 30, 2020.

For this round of BUILD Transportation grants, the maximum grant award is \$25 million, and no more than \$150 million can be awarded to a single State, as specified in the FY 2018 Appropriations Act. At least 30 percent of funds must be awarded to projects located in rural areas.

To provide technical assistance to a broad array of stakeholders, DOT is hosting a series of webinars during the FY 2018 BUILD grant application process. A webinar on how to compete for BUILD Transportation Grants for all applicants will be held on Thursday, May 24; a webinar for rural and tribal applicants will be held on Tuesday, May 29; and a webinar on how to prepare a benefit cost analysis for a BUILD application will be held on Thursday, May 31. All webinars will take place from 2:00-4:00 PM EDT. Details and registration information regarding these webinars will be made available at <https://www.transportation.gov/BUILDgrants>.

The Department will schedule additional webinars on these topics in June.

The deadline to submit an application for the FY 2018 BUILD Transportation Discretionary Grants program is July 19, 2018.

For more information, please visit <https://www.transportation.gov/BUILDgrants>.

Federal Railroad Administration (FRA) Broad Agency Announcement (BAA) 2018

SUMMARY: FRA is releasing the Broad Agency Announcement (BAA) to solicit proposals on a variety of research topic areas that will have a direct impact on the safety and efficiency of freight and passenger rail operations in the United States. The submissions will then undergo evaluation and selection by the Office of Research, Development & Technology.

This year, there are two BAAs:

- The first is a general announcement with a listing for multiple research topics organized by FRA's four research areas of Track, Rolling Stock and Equipment, Train Control, and Human Factors. For more information about this BAA, including program guidelines, the specific research topics under consideration, and the submission deadline, visit the Federal Business Opportunities website at: <https://www.fbo.gov/spg/DOT/FRA/OAGS/BAA20182/listing.html>
- The second is an announcement focused on Intelligent Railroad System Research, and is restricted to university and university-led teams as qualifying applicants. For more information about this BAA, including program guidelines and the submission deadline, visit the Federal Business Opportunities website at: <https://www.fbo.gov/spg/DOT/FRA/OAGS/BAA20181/listing.html>



CONNECTICUT

NEW TRAVEL OPTIONS FOR NORTHEAST REGION

CONTRIBUTED BY: Jeff Schultz, Senior Principal Technical Specialist, WSP

The New Haven-Hartford-Springfield (NHHS) Rail Program is one of the nation's most comprehensive efforts to revitalize intercity passenger rail services. With \$564.3 million in State of Connecticut funding and \$204.8 million in federal funding, it's one of the largest investments in intercity rail passenger service in the nation. When completed later this year, the Hartford Line, which runs between New Haven, Connecticut and Springfield, Massachusetts, will provide faster, more frequent, reliable rail service to the corridor.

First completed in 1844, this historic rail link between New Haven and Boston connected the key industrial centers of New England, and provided essential rail passenger and freight services via an "inland route". Unfortunately, this rail line experienced service reductions when limited access expressways provided new travel options. Amtrak acquired the line in 1976, and operated approximately six daily round trips. The line was double tracked, but a project in the late 1980's reduced much of the line to single track with passing sidings to lower maintenance costs. The Connecticut Department of Transportation (CTDOT) was aware that restoring the second track was critical for future rail service expansion. Therefore, when funding from the Federal Railroad Administration's (FRA) High Speed Rail Program became available in 2009, CTDOT's plans for rail expansion were set into motion.

Nine years later, the first stage of the NHHS Rail Program is nearing the end of construction, and the improvements on the line are extensive. With 62 miles between New Haven and Springfield, the line had 23.3 miles of double track and 38.7 miles of single track.

Construction has virtually restored all of the double track south of Hartford and an additional five miles of 2nd track between Hartford and Windsor is now the only portion under construction. When completed in fall 2018, less than twelve miles of single track will remain.

Other improvements have brought the Hartford Line up to modern standards. New signal systems and high-speed track will enable Amtrak trains to operate up to 110 mph. This will reduce trip times between New Haven and Springfield, and is the first new stretch of high speed track in New England in 20 years. Upgraded bridges, new communications lines, and improved drainage systems round out some of the extensive improvements on the line.

Another critical objective of the NHHS Rail Program was to modernize and update rail stations along the line to improve the facilities and interconnect communities. New stations have been completed in Wallingford and Meriden, Connecticut. Also, a fire to the historic Berlin station delayed work at the new station site. As such, improvements to this new station will be completed in the fall. All three stations have expanding parking, new ticket vending machines, passenger train information systems (PTIS), electric vehicle charging spaces, and wifi.

Less extensive, but vital improvements were also conducted in New Haven and Hartford. In Hartford, a new high level platform was placed into service in 2016. Furthermore, State Street station in New Haven is being expanded with a new high level platform to handle the increased CTrail Hartford Line rail service. Both stations also have new ticket vending machines and PTIS.

MERIDEN, CT

NEW HAVEN - HARTFORD - SPRINGFIELD RAIL PROGRAM



Meriden - The New Haven-Hartford-Springfield rail program has been the catalyst for new development in several communities. In Meriden, CT this new development was built just across the street from the new train station, and has been very popular with renters.



"This new station is a catalyst for transit-oriented development in Meriden, helping to make it a more livable, walkable community and drastically increasing transportation choices for commuters," said Gov. Malloy.



Hartford Line stations have become the focus of extensive local transit-oriented development (TOD) activities. In Meriden, construction finished on a new mixed-use development near the station and the residential units in the development are already full. More TOD projects are being constructed nearby. New apartments have been completed near the historic Windsor station, and a large redevelopment project has started near the location of the new Windsor Locks station.

At the north end of the line, the historic Springfield Union Station was re-opened in 2017 after an extensive City redevelopment project. Originally opened in 1926, the station was closed in the 1970's. Beautifully restored, it now houses Pioneer Valley Transit Authority, Amtrak, Peter Pan Bus, in addition to office and retail space, and a new multi-story parking garage. The station project helped spur other City revitalization activities nearby, including a new MGM hotel/casino.

Safety is the foundation of all work undertaken within the program. The Advanced Civil Speed Enforcement System Positive Train Control system is being installed by Amtrak along the entire route. This will improve the safety of the Hartford Line train service. Significant improvements to grade crossing warning devices have been completed to further improve safety.

Due to a limited project budget, new rolling stock was not part of this project phase. For now, Amtrak service will continue to operate with Amfleet coaches and P42 locomotives. In the short term, CTrail services will operate with newly refurbished locomotives, and coaches leased from MassDOT. CTDOT has plans to acquire new rolling stock in the next five years.

The service plan developed for the Hartford Line is the first of its kind in the U.S. Like many states, CTDOT sponsors Hartford Line Amtrak trains under section 209 of PRIIA. However, CTDOT wanted to explore alternatives to using Amtrak as its operator for new CTrail Hartford Line Services. CTDOT and Amtrak developed an Access Agreement that enabled CTDOT to bring on a

competitively-procured Service Provider to operate CTrail Hartford Line services. An extensive RFQ/RFP process was conducted to select the new Service Provider and in 2016 a joint venture of Transit America Services Inc./ACI was chosen to provide train crews, customer service, and facilities management services for CTDOT.

CTDOT desired that CTrail Hartford Line service be seamless and easy to use for passengers. Working together with Amtrak, and MassDOT, a new integrated ticketing program was developed. "One Ticket/Any Train" enables passengers to ride Amtrak and CTrail trains with tickets issued by either entity. The idea is that passengers will just get on the next train, with a CTrail or Amtrak ticket. The program is only for good for travel between Springfield, MA and New Haven, CT and all intermediate stops. This win-win for customers will provide more flexibility for travelers and encourage more rail usage.

In June, Hartford Line weekday service is expanding to 34 trains between Hartford and New Haven with 24 of those operating to/from Springfield. Amtrak will operate 18 of the 24 trains to Springfield, while TASI/ACI will operate six new CTrail trains. Between New Haven and Hartford, all ten new trains will be operated by TASI/ACI. Extensive modeling and analysis of the railroad operations was performed to ensure the planned improvements would enable trains to operate reliably and make connections in New Haven with Amtrak and Metro-North Railroad.

Extensive efforts are underway to promote the new Hartford Line service. A new Hartfordline.com website has been developed, containing schedule, ticketing, and service information. A new marketing campaign is being rolled out to inform everyone of the new service and create excitement about this new travel option in the region.

It is clear that State and Federal NHHS Rail program investments are already spurring new economic investments in the region and helping to create more livable communities. With the largest single expansion of rail passenger service in years ready to begin, with a coordinated train schedule and unique ticketing program, Connecticut is regaining its place as a leader and innovator in rail passenger service development in the US.



To read more about the Hartford Line website launch, [click here](#).

Visit the new Hartford Line website [here](#)!



The CTrail Hartford Line will have options to connect to Amtrak and Acela services, Metro North and Shore Line East rail services via the New Haven station. Express bus service is available to Bradley International Airport from the Hartford rail station, as well as a transfer to CTfastrak.



Amtrak Train 475 at Windsor. With construction of the new 2nd track, and grade crossing improvements nearly completed, Amtrak train 475 departs Windsor, CT heading south to New Haven. By early fall, this new track will be cut over and operational.



just
released

CALIFORNIA HSR BUSINESS PLAN

ESTIMATED COSTS INCREASE; CURIOUSLY, SO DOES PUBLIC SUPPORT

CONTRIBUTED BY: David Cameron

In early March, the California High-Speed Rail Authority released its draft 2018 Business Plan. (http://hsr.ca.gov/docs/about/business_plans/Draft_2018_Business_Plan.pdf). The authority is now seeking public comment as part of a 60-day public comment period that started March 9 and closed May 7, 2018. The Draft Plan acknowledges the challenges and outlines a path forward.

The plan identifies the following investment priorities:

1. **Meet Commitments to Federal Funding Partner:** The authority will complete the 119-mile segment in the Central Valley and complete environmental review for the entire Phase 1 System between San Francisco to Los Angeles/Anaheim by 2022, as required by the federal grant agreement.

2. **Extend the Valley-to-Valley Service from San Francisco to Bakersfield:** The draft business plan recognizes the high ridership and revenue potential of linking the Silicon Valley with the Central Valley between San Francisco and Bakersfield.

3. **Deliver 224 Miles of High-Speed Rail Ready Infrastructure for Use by 2027:** The draft business plan proposes to construct high-speed rail ready infrastructure in the Central Valley (Madera to Bakersfield) and in Silicon Valley (San Francisco to Gilroy) to reduce travel times for existing passenger rail systems, expand clean, electrified service, and

prepare the corridors for testing and potential early high-speed rail operations.

4. **Continue Bookend Investment in Southern and Northern California:** The draft business plan continues to prioritize improving Los Angeles Union Station, the Burbank to Anaheim corridor and the electrification of the Caltrain corridor in the Bay Area.

Already, thousands of Californians are at work building the system, not only in California's Central Valley, but also in San Francisco, where the \$4 billion Transbay Terminal, the northern terminus, is nearing completion. The electrification of the Caltrain commuter system (San Jose to San Francisco) will create an additional 9,600 jobs not only in the peninsula but also in places like Utah, Texas, and West Virginia, where the new equipment will be manufactured.

The draft business plan acknowledges significant cost increases affecting each segment of the project ranging from 20-35 percent and revised schedules that push out delivery dates of the 119-mile segment in the Central Valley to 2022, and also the initial service/testing of the Silicon Valley to Central Valley Line to 2026/27, with full service of that segment by 2029. It also pushes out the completion of the Phase 1 – San Francisco to Los Angeles – to 2033, four years later than the previous plan envisioned, and the estimated cost increases to \$77.3 billion, up \$13 billion from what was previously estimated.

Intriguingly, according to a new poll (<http://www.ppic.org/wp-content/uploads/s-318mbs.pdf>) conducted by the Public Policy Institute of California after the draft plan was released, the majority of Californians still support the project, with 53 percent in favor, and 43 percent opposed. That's up from 48 percent in favor when the survey was conducted last year, despite revelations that costs have risen substantially. And, 72 percent of respondents said they would be in favor if the system cost less.

It's notable that support for the project remains strong, considering negative press reports.

The positive economic benefits from the project have been substantial, including \$6 billion in total economic activity in California to date, reducing Fresno's unemployment rate to under 10 percent for the first time in decades.

Given that California's high-speed rail project is arguably the single largest and most complex infrastructure project in the history of the nation, delays and cost increases are frustrating but inevitable. Nonetheless, successful economies demand efficient and effective transportation systems. California's airports are at capacity. Building more airports and expanding highways to meet our growing population will cost multiple times what high-speed rail will cost. Expanding freeways will gobble up more and more of our precious farmland. We need to address the challenge of our rising population and the growing congestion on our freeways and at our airports. High-speed rail is a transportation system that has been proven effective in more than a dozen countries worldwide.

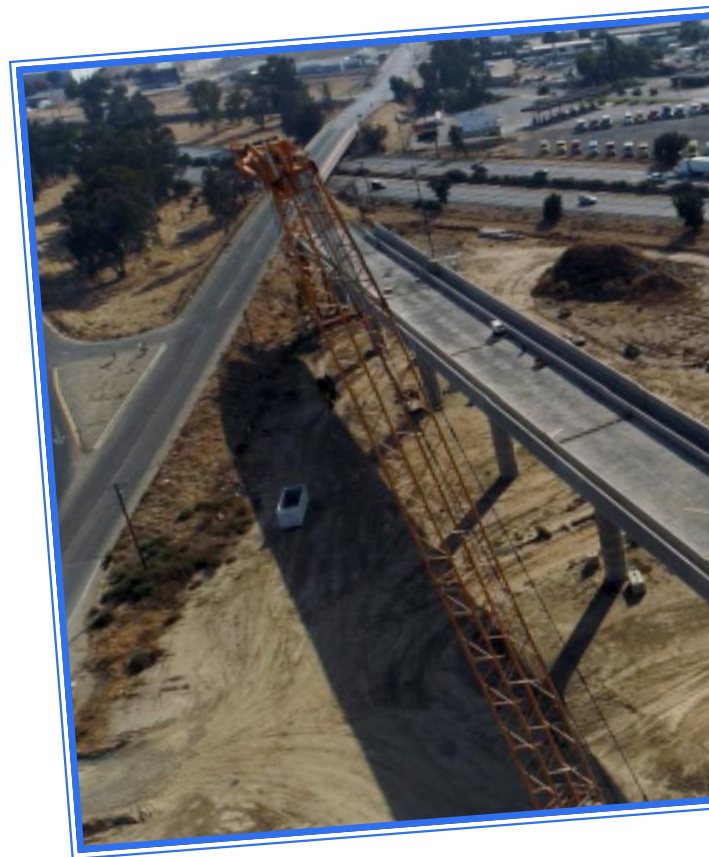
Already, the ongoing construction of the system in the Central Valley is transforming the economy in what has been a historically neglected part of the state that has suffered the state's highest unemployment rates. To those who contend the project costs too much and that the challenges of building it too great, the question must be asked, "what is the alternative to addressing the state's growing population and our transportation needs?"

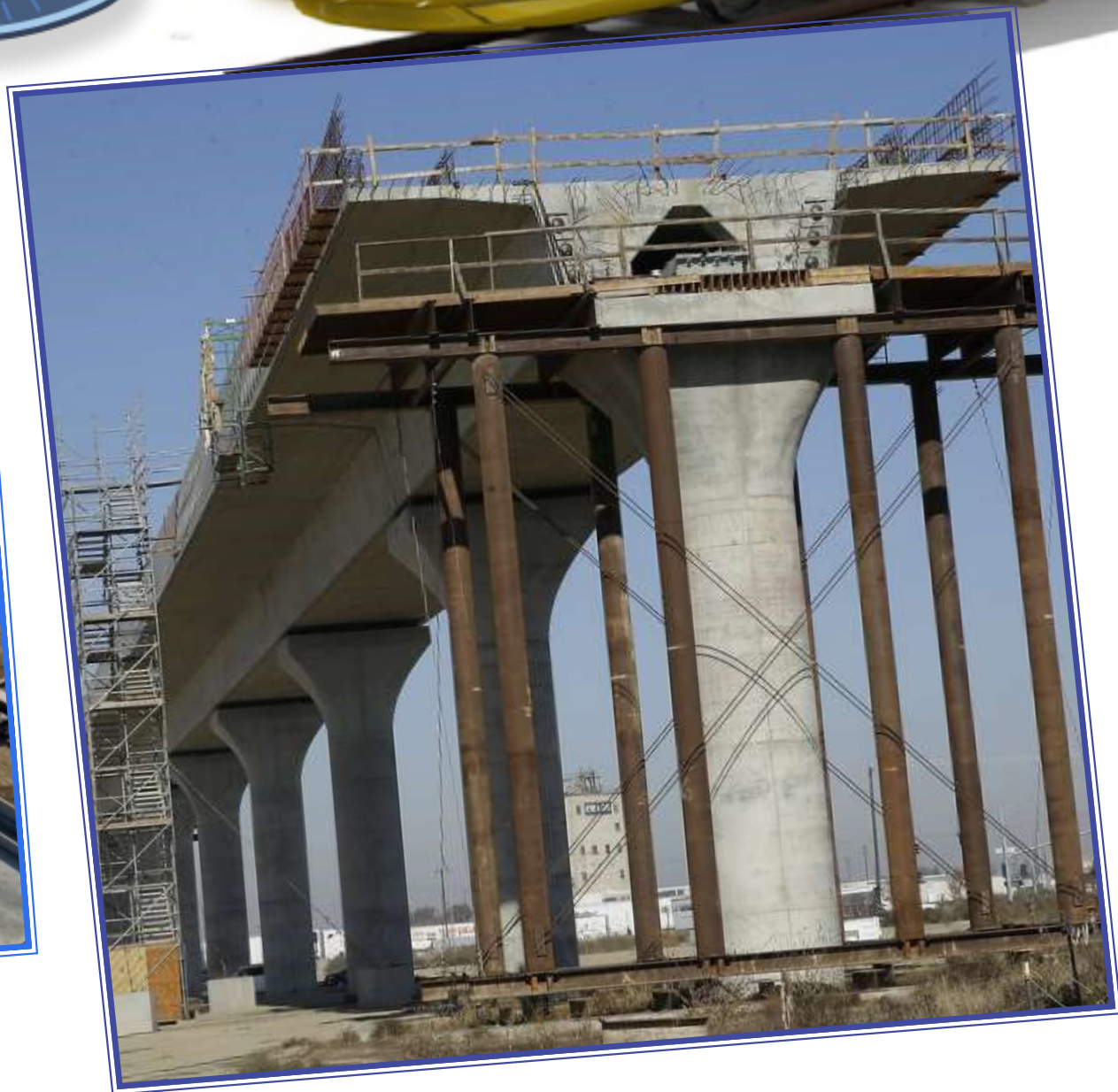
The authority is providing the following options for submitting comments:

- Online comment form through the Draft 2018 Business Plan website at: http://hsr.ca.gov/About/Business_Plans/Draft_2018_Business_Plan_Comments.html
- By email at:
2018businessplancomments@hsr.ca.gov

As costs continue to escalate, the bullet train now faces audits from the state and the federal government. In January, after years of rejection by Democrats, the legislature's joint audit committee unanimously approved an audit of the bullet train to conduct an examination of contract costs, change orders, economic effect to communities, the use of small businesses and environmental outcomes that result from the project's "green construction practices." State auditor Elaine Howle said her evaluation would take six to nine months.

At the request of Rep. Jeff Denham (R-Turlock) on April 12, it was announced the inspector general of the U.S. Department of Transportation will review the Federal Railroad Administration's oversight of \$3.5 billion in federal grants provided for the bullet train.





LEVERAGING PUBLIC INVESTMENT IN HSR PASSENGER RAIL

THROUGH INNOVATIVE P3S



For more than two decades the concept of building high-speed passenger rail in the United States using public/private partnerships (P3s) as the procurement model has received considerable attention from academics and policy researchers. However, there is little evidence that the concept is attracting the attention of those in the best position to make it happen: investment funds and passenger rail operators around the world that have successfully put the concept to work. This article explores some of the background for successful P3s outside the U.S. A follow-up article in the subsequent issue of SPEEDLINES will look at the recent experience in the U.S. with advancing High-Speed Passenger Rail through Innovative P3s.

A 2012 paper prepared by Julien Dehornoy of SNCF, the French National Railway, reviewed all the then-existing P3s in the world – 27, of which 16 were in Europe. The objective of the paper, “PPPs in the Rail Sector – A review of 27 Projects,” was to conduct a comprehensive review of all rail P3s to determine the conditions of their success.

To achieve this objective Dehornoy addressed three specific questions:

What are the common features and the differences among rail P3s and how did they evolve in the last two decades?

What are the specific features of rail P3s compared to

other P3s? and, why do so many P3s fail and need public support, especially among traffic-based concessions?

The conclusions drawn by Dehornoy suggest that even though there are myriad models among the 27 P3s studied, those that succeeded were generally of two models: Airport links integrated traffic-based concessions, and high-speed infrastructure availability-based concessions.

Dehornoy found that these two models were popular with investors because, “they were isolated infrastructure with relatively simple interfaces with pre-existing conventional networks.”

That said, Dehornoy observed that since the 1980s, rail P3s have come in three waves:

“A first wave of unsophisticated attempts in the 1980s;

“A second wave between 1994 and 1996 that saw P3s being established in primarily developing countries; and,

“A third wave between 2006 and 2012 that saw more complex arrangements that engaged existing rail systems, focused on higher performing and high-speed rail, provided airport links, and included equipment and rolling stock.”

Reporting on the UIC’s Eighth World Congress held in Philadelphia in 2012, David Briginshaw noted the variety of P3 models being used in Europe with varying levels of



acceptance and success. Notably, Briginshaw observed, none of the models work without true engagement by the public sector with private sector investors.

Most non-U.S. models presented at the Congress focused on true high-speed rail service. But, in a presentation on “Building US High-Speed Rail Incrementally,” Sharon Greene and Sasha Page noted that the model for development of high-speed rail (HSR) in the U.S. was constrained by financial market concerns about unproven demand, environmental challenges, and funding constraints. They contend that this requires an incremental approach to implementing HSR in the U.S., starting with regional and emerging services, and building the system incrementally through multimodal integration and blended service concepts.

Strengthening the emerging services first, and then assessing the respective passenger response was considered to provide an important “track record” to policymakers and public-private partnership (P3) investors. The latter have been seen as a significant funding source, but so far have been unwilling to accept demand risk in the U.S. Building in increments and improving emerging and blended service was considered to allow for smaller P3 opportunities, to help further improve HSR’s reputation in the U.S. and to attract greater public support and larger P3 investments.

In a 2014 paper, “Analysis of Public Private Partnership

Models in High-Speed Rail Projects in Portugal and Brazil,” Rui Miguel Pereira Carvalho determined that P3s were utilized because neither country had the financial bandwidth to address their respective mobility needs. As a result, the governments were willing to share the risk with the private sector to reduce the public cost, achieve greater procurement efficiencies, enable innovation, introduce new expertise, and accept the financial flexibility of the private sector.

Over the past decade, the U.S. Public Interest Research Group (USPIRG) and its state affiliates have produced more studies scrutinizing the use of P3s to finance high-speed rail in the U.S. than any other entity. Generally these reports and studies have been very supportive of using the P3 procurement model, but they have cautioned in all instances that the public interest must be protected and that P3 procurement should be pursued with the highest level of transparency.

Similarly, the Transportation Research Board (TRB) through its National Cooperative Rail Research Program (NCRRP) has produced seven separate studies on various aspects of high-speed and higher performing passenger rail, the most notable – Report One, “Alternative Funding and Financing Mechanisms for Passenger and Freight Rail Projects,” examined four mechanisms for generating revenue streams that could support 10 financing structures, including P3s, to design, build, operate, and maintain rail projects. The paper encourages that all rail procurements should be run through a P3 screen to test the viability of using a P3 to finance passenger rail procurement. Among the funding alternatives recommended in the report were vehicle mileage-based user fees, payroll taxes used for transport, sales tax, and carbon tax or credits (cap-and-trade).

In launching its Build America Transportation Investment Center in 2016, the U.S. Department of Transportation produced a workbook on successful practices for P3s. While the workbook did not specifically mention application of P3s to rail projects, it is widely recognized that there is interest in using the P3 model to develop portions of the California High-Speed Rail project, the Texas Central High-Speed Rail project, the redevelopment of the Northeast Corridor, and other corridors throughout the United States.

The bottom line in all of these situations will be whether there is a viable, sustainable funding source to service the private sector investments that may be sought to finance these projects. In our follow-up article, we will explore these current U.S. projects and the opportunities and constraints encountered in utilizing P3 models.



ON THE FRONT LINE

with **Ronald Batory**



"Nominated by President Donald J. Trump on July 10, 2017, and confirmed by the United States Senate on February 13, 2018, Ronald Batory is the 14th Administrator of the Federal Railroad Administration (FRA). Batory is a widely respected and highly regarded railroad industry professional with more than 45 years of experience serving in numerous operational, administrative and managerial positions.

At his confirmation hearing Batory said, "Railroads are an integral part of America's transportation system and vital to our national economy. In addressing the challenges and opportunities ahead, my goal is to use data-driven decision making to further enhance safety while embracing leveraging innovative new technologies that will revolutionize America's rail transportation network."

Batory began his career in 1971 working as a traveling Freight Car Accounting Auditor for the Detroit, Toledo and Ironton (DT&I) Railroad. He subsequently served in a series of positions with progressively greater responsibility before joining the Grand Trunk Western Railroad (GTW) in 1981 when it acquired the DT&I. In 1987, Batory became Vice President- General Manager of the Chicago, Missouri and Western Railway, and then in 1989 went to work for the Southern Pacific Transportation Company. During his tenure at Southern Pacific, he fostered joint labor and management efforts focused on casualty prevention, service consistency and cost containment, resulting in significantly improved operational performance.

In 1994, Batory was named President of the Belt Railway Company of Chicago (BRC), the largest switching terminal in the U.S. and a vitally important linchpin in the nation's rail hub, jointly owned at the time by nine Class 1 railroads. His success in serving the needs of multiple competing railroads at the BRC prompted CSX and Norfolk Southern Corporation to recruit him in 1998 to manage the partitioning of Consolidated Rail Corporation (Conrail) as part of a merger approved by the U.S. Surface Transportation Board. In 2004, Batory became President & Chief Operating Officer of Conrail, the eighth largest freight railroad in America, where he served until his retirement in April 2017.

Batory earned his Bachelor of Arts degree in 1971 from Adrian College in Michigan, and a Master of Arts degree in 1975 from Eastern Michigan University.

In prepared remarks at his swearing-in ceremony on February 28, Batory told U.S. Department of Transportation staff that safety is his highest priority: "Rail safety is first and foremost. Its practice is non-compromising and non-negotiable. Safety is embedded into our lives. It is the keystone of the railroad industry. Railroading is not unsafe, as you know; yet you can never assume. One mistake can be your last," Batory said. "Reducing and eliminating risk is paramount toward enhancing safety."

Batory also told DOT staff that increasing public awareness of the agency's safety mission is critical. "Safety reaches beyond the railroad right of ways. Increasing public awareness is necessary, so people will make better decisions around crossings and tracks because most, if not all trains, can't stop short," Batory added.

National Railroad Passenger Corporation

RICHARD H. ANDERSON PRESIDENT and Chief Executive Officer



"The future of rail in the U.S. not only depends on Amtrak advancing safety and infrastructure improvements — it also depends on stronger relationships with our partner railroads and with federal and state governments who are prepared to make investments to accelerate progress in America's passenger rail system.



Appointed to President and Chief Executive Officer by the Amtrak Board of Directors on July 12, 2017, Mr. Anderson is the 11th executive to lead Amtrak since the company began operation in 1971. In assuming his position with Amtrak, Anderson has identified safety, customer service, equipment renovation and replacement, and infrastructure maintenance as his top priorities.

Earlier this year Anderson instituted assigned seating in the business class of the Acela Express trains, and hopes to roll out assigned seating on the rest of the Amtrak network soon. There are other customer service advancements already introduced to include many station improvements such as restroom renovations on the concourse at New York Penn Station, and forthcoming plans to refresh the ticketed waiting room and ClubAcela at New York Penn Station. This work coincides with early construction on the spacious new Train Hall in Moynihan Station across 8th Avenue, the future home of Amtrak's New York City passenger operations.

In Baltimore, Anderson has selected a team to negotiate a master development deal for the station and adjacent Amtrak-owned properties. The intention is to modernize and expand facilities to accommodate growth, renovate the station's upper floors and support transit-oriented development that integrates with the surrounding neighborhoods.

Mr. Anderson highlighted the need for long-term infrastructure investments by Amtrak's state and federal partners including the Michigan Department of Transportation that acquired and made improvements to the railroad between Kalamazoo and Dearborn thanks to \$347 million in federal funding that allowed crews to replace worn railroad tracks, smooth curves

and upgrade the train signaling and communication system. "This," Anderson said, "all adds up to a quicker and more dependable ride on Wolverine Service and Blue Water trains."

On the issue of safety, Anderson observed that Amtrak has taken a series of actions to strengthen its safety capabilities and culture by integrating its safety, compliance and training resources within one department to better coordinate and address safety issues from multiple angles. In testimony before the House Transportation and Infrastructure Committee earlier this spring, Anderson said that Amtrak is also a committed leader in the installation of Positive Train Control (PTC), a safety technology designed to match train speed to track conditions for improved safety. He noted that approximately 90 percent of Amtrak-owned infrastructure is already activated with PTC, including nearly all the Northeast Corridor, the nation's busiest rail line. Anderson lamented that most of the rail infrastructure that Amtrak trains operate over is owned by various host railroads, and that in accordance with federal law, each owner is responsible for implementing the infrastructure-related elements of the PTC system. "When this is completed, Amtrak will activate the elements of the PTC system that are in our locomotives and cab cars. It is imperative that the rail industry urgently work together to get PTC activated on the national railroad network as soon as possible."

Born in Galveston Texas, Mr. Anderson also lived in Dallas, Amarillo, and Houston. He earned his law degree from the South Texas College of Law, and his father was employed by the Atchison, Topeka and Santa Fe Railway.



THIS 125 MPH HYBRID TRAIN WILL TRANSFORM TRAVEL ACROSS FLORIDA'S EAST COAST. THE SERVICE WILL EASE THE STRESS OF TRAFFIC, PROVIDE A SIMPLE AND INTUITIVE EXPERIENCE FROM DOOR TO DESTINATION, AND FOSTER NEW OPPORTUNITIES TO EXPLORE MORE OF SOUTH-

BRIGHTLINE

A CONVERSATION WITH AMERICA'S NEWEST HIGH-PERFORMING INTERCITY PASSENGER RAIL SERVICE

SPEEDLINES: Please remind readers of the origins, history and management philosophy of the Brightline?

BRIGHTLINE: Brightline is the only privately-funded, operated and maintained express, intercity train service in the United States. It was developed by All Aboard Florida, a wholly owned subsidiary of Florida East Coast Industries (FECI). Brightline is a higher-speed train serving Florida residents, business travelers and tourists as they travel throughout Florida.

FECI traces its roots to the late 1890s and the company founded by Henry Flagler who first introduced an integrated rail network into Florida, which gave rise to the eastern coast of Florida. BrightLine service between Fort Lauderdale and West Palm Beach began in January 2018.

SPEEDLINES: The development of higher performing/high-speed passenger rail in Florida has faced significant difficulty for more than a decade. What enabled this particular attempt to be successful, and what lessons could other passenger rail corridors learn from your experience?

BRIGHTLINE: Brightline is leveraging the legacy of the original company and its historic assets (railroad and real estate). For more than 100 years, trains have been continually operating on the corridor. Passenger trains

ceased to operate in the late 1960s when the federal investment in an interstate highway network made automobile travel competitive. Almost since passenger service ceased to exist, there have been numerous studies and proposals to re-establish it.

Prior to introducing Brightline, the company studied profitable passenger rail lines around the world and found densely populated areas that are about 250-300 miles apart are "too long to drive and too short to fly." Brightline also aligns with two emerging trends; more people are moving to city centers and relying on mass transit. In our market, driving speeds on Interstate 95 currently average 34 mph, and there is little to no room to add additional lanes or expand capacity on area roadways. Additionally, Brightline is developing multi-modal transit hubs in the Central Business Districts of Miami, Fort Lauderdale and West Palm Beach. These new urban environments benefit from added transit activity and increase the density and proximity of potential guests.

SPEEDLINES: Since beginning revenue service, what surprises or unexpected developments have occurred for Brightline and its management, and how has management addressed them?

BRIGHTLINE: The Brightline team is focused on the guest experience



from booking a ticket to arriving at our station to riding the train. We welcome feedback from our guests, like the request for later departures, and make changes as appropriate (for example, we introduced a later Friday night departure during introductory service – where we are only running 11 northbound and 11 southbound trains; we'll ramp up to full operations, 16 northbound and 16 southbound, after we launch Miami).

Our company's leadership has extensive experience in the hospitality world and the rail industry.

We are also operating on the same right of way as an existing freight company, and thus, extensive coordination is required.

SPEEDLINES: Has ridership met expectations and how do riders rate the Brightline experience?

Brightline: Brightline is a private company, and we do not disclose ridership numbers. We can say that Brightline has exceed ridership expectations during introductory service, and we look forward to launching Miami in the coming weeks.

SPEEDLINES: Brightline has experienced a number of tragic right-of-way incursions in its brief period of operation. What steps are being taken to reduce such future incidents?

BRIGHTLINE: Safety is Brightline's top priority. Each of the incidents that have occurred have either been ruled suicides or resulted from individuals circumventing the grade crossing infrastructure in place to keep the public safe or disobeying state traffic laws and stopping on active railroad track.

For more than a year, Brightline has been working to educate the public on the importance of staying safe around active railroad tracks, which includes a partnership with Operation Lifesaver. The company continues to partner with federal, state and local agencies, including local law enforcement, to raise awareness about rail safety. Additionally, on Wednesday, April 11, Brightline held a press conference to announce increased safety initiatives prior to the introduction of passenger rail service in Miami-Dade County.

SPEEDLINES: What is Brightline's timetable and plan for future expansion within Florida?

Brightline: Miami service is scheduled to begin this Spring. We expect to start construction north of West Palm Beach soon. Construction is anticipated to take 24 to 30 months.

SPEEDLINES: Is there potential for actual interface between Brightline and Amtrak or other intercity passenger rail service providers either within or outside of Florida?

BRIGHTLINE: Brightline is an express, intercity passenger rail service connecting major city centers.

Tri-Rail, South Florida's local commuter rail service, will operate on the Brightline/ FEC Railway corridor next year, creating a truly dynamic transportation network in South Florida.

SPEEDLINES: Is Brightline's business model replicable in other parts of the United States?

BRIGHTLINE: We believe Brightline's model can be replicated in the U.S. where dense, urban areas are 250 to 300 miles apart ("too long to drive and too short to fly").

SPEEDLINES: Does Brightline have plans to eventually become a "high-speed" passenger rail service?

BRIGHTLINE: Brightline operates on a shared-use corridor, which serves both freight and passenger rail. Train speeds will vary between 79 and 125 mph. Passenger trains will travel up to 125 mph between Cocoa and the Orlando International Airport, which is where Brightline is building 40 miles of new, grade separated track.

SPEEDLINES: What advice would you offer to those who advocate for the renaissance and expansion of America's high-speed and intercity passenger rail services?

BRIGHTLINE: Intercity passenger rail service is a valuable benefit to communities it connects having a positive effect where it touches from a business, leisure and community building perspective. Perseverance on the positives and shining a spotlight on the benefits of projects like Brightline highlight why moving forward on passenger rail is critical to rebuilding our nation's infrastructure. While Brightline is also privately funded, working closely with local, state and federal partners is essential. Brightline has been able to bring benefits, like quiet zones, to local communities along the FEC Railway/Brightline corridor through partnership with transportation planning agencies.

SPEEDLINES: Thank you.

HSR HISTORY

In the beginning the objective was to travel faster than a person could walk or a horse could run. Over time, the objective became to travel more reliably, more frequently, more economically, and more comfortably than one could by another mode of transportation.

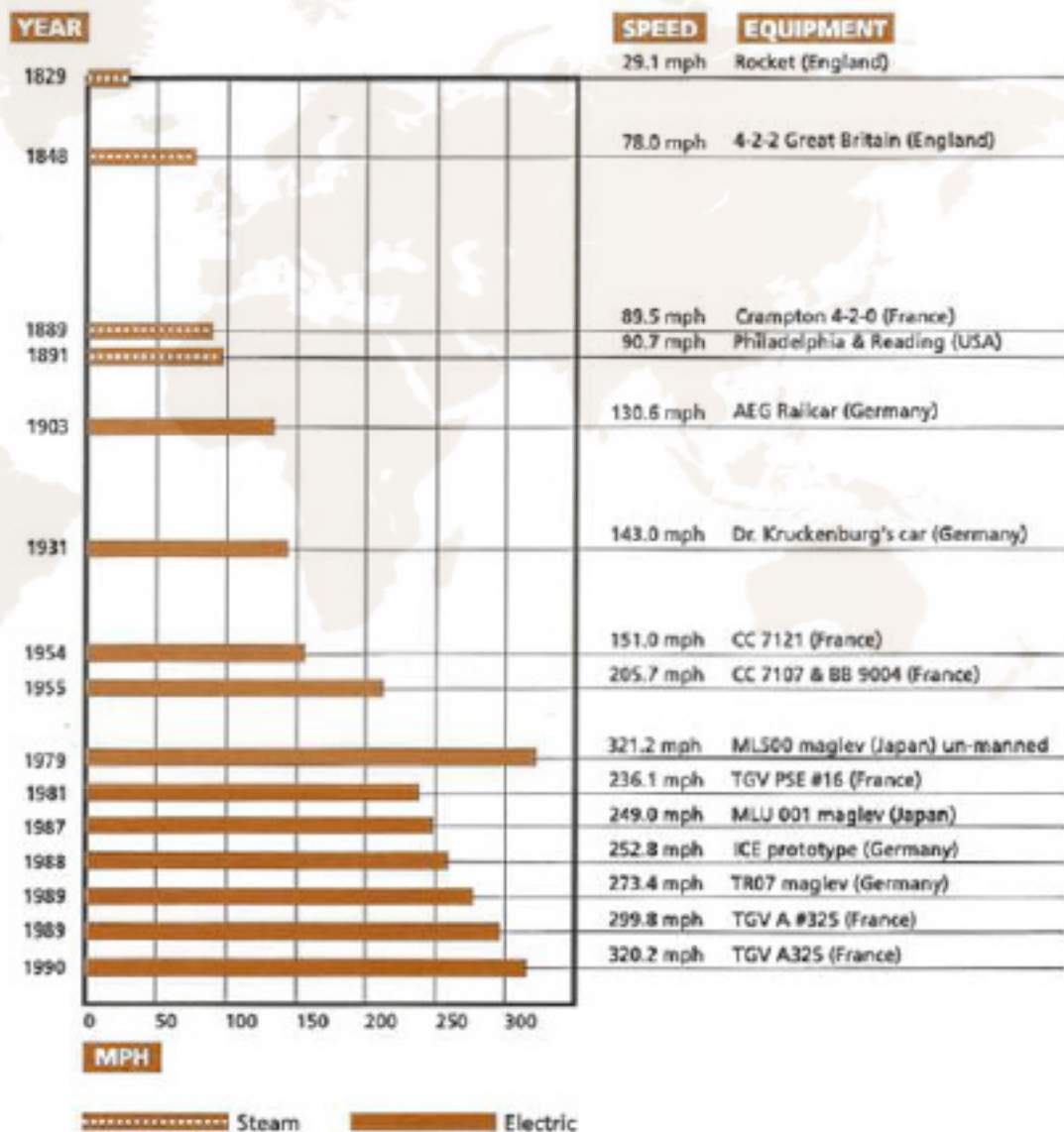
In 1829 inventors experimented with steam power to move a carriage to a speed of 29.1 miles per hour. By the turn of the century, German inventors advanced the speed to over 100 miles per hour. By the time the 21st century approached, technology and its creators were actually operating passenger rail equipment and the systems to support it at speeds of over 300 miles per hour.

Through out the world, including in the United States, these development were occurring at a rapid clip. Yet everywhere, except the United States, these developments were producing actual improvements in intercity passenger rail mobility.

Then came 2010, and the first serious effort by the U.S. Congress and a presidential administration to actually commit to evolving world-class high-speed intercity passenger rail service in the United States. Meanwhile other nations all around the world were racing ahead to build and operate high-speed rail networks. The chart to the right shows a timeline of the world's high-speed rail technology. The second installment will appear in the next edition of SpeedLines.

A Timeline of HSR Developments Over Last Half Century

160 Years of Rail Speed Records



APTA POLICY FORUM

4th ANNUAL

SALUTING AMERICAN PROGRESS TOWARDS HIGH-SPEED PASSENGER SERVICE

CONTRIBUTED BY: Eric Peterson



APTA's High-Speed and Intercity Passenger Rail (HS&IPR) Committee held its fourth annual rail policy forum at APTA headquarters in Washington, DC on November 29 to draw attention to the renaissance in intercity passenger rail occurring in the United States and the efforts underway to move the nation closer to a point when true high-speed rail is a reality in America.

Following welcoming remarks from APTA Chair Nathaniel P. Ford Sr. acting APTA president Richard White, and HS&IPR Committee chair Anna Barry, the first session of the forum featured panelist Chad Edison, deputy secretary of the California State Transportation Agency, Caroline Decker, vice president, government affairs and corporate communications for Amtrak, and Beth McClusky, director of the Office of Intermodal Project Implementation for the Illinois Department of Transportation and chair of the Midwest Interstate Passenger Rail Commission (MIPRC).

In his comments, Ford noted that the changes occurring in America's passenger rail industry reflect a paradigm

shift that is driven by new technologies and a new technology-savvy workforce, and supported by strong advocacy at the state and federal levels.

APTA announced the roll-out of the committee's return on investment study, and noted recent advances including record setting Amtrak ridership, the introduction of Siemens' new Charger locomotives, advances in the development of several new passenger rail corridors and services across the country, and new partnerships between the states, the Federal Railroad Administration, and numerous private interests.

Edison drew the audience's attention to the recently released draft California Rail Plan and its focus on intermodal interface. He said the California High-Speed Rail project is all about serving people and meeting their mobility needs. "California has its eye on the long-term needs of its population and customers by providing reliable, frequent service," Edison said.

According to Edison, California anticipates providing service to more than one million passengers a day by 2040. To effectively provide that service, connectivity throughout the California rail network must be improved, and current and future asset acquisitions must be leveraged to their maximums.

McClusky provided an overview of the MIPRC, a nine state organization of state-sponsored routes that has coordinated the planning of passenger rail service in four corridors supported by \$2.5 billion in grants from the Federal Railroad Administration (FRA) through the American Reinvestment

and Recovery Act (ARRA). She noted that commission member states have acquired new Siemens Charger locomotives and other rolling stock, and that 90 percent of the higher performing passenger rail corridor between Chicago and St. Louis is complete. McClusky said that the commission is looking 40 years into the future to address the rail mobility needs of passengers in 12 Midwestern states. "These challenges will not be successfully addressed unless we have a loud and supportive voice based on a strong partnerships between and among the states and the federal government. We need to have advocacy as strong as the other modes," McClusky said.

Amtrak's Decker said that the real story of passenger rail improvements in the United States lies with the states, and the challenges ahead include continuing the acquisition of new equipment, refurbishing current equipment, improving customer service and putting the pressure on to address critical infrastructure projects like Gateway.

Decker said that on-time performance is the most critical challenge facing Amtrak. Other challenges include lowering Amtrak's level of operational subsidy, securing higher levels of federal capital investment, establishing a culture of safety within the Amtrak workforce, and improving customer service.

The second session of the forum addressed the state of high-speed rail around the globe. Moderated by Peter Gertler, the immediate past chairman of the HS&IPR committee, and senior vice president at HNTB, the panel also included Vanessa Perez of the International Union of Railways (UIC), Christophe Keseljevic, president of Paris based CKrail, Central Japan Railway Company's Mark Nakayama, and Eduardo Romo, president of the Fundacion Caminos de Hierro, Madrid, Spain.

Romo said that Spain's history in high-speed rail has been amazing. "In 1993 we had a dilapidated unreliable, and slow passenger rail system that carried about two million passengers a year. Today, Spain has one of the fastest, most reliable high-speed train networks in the world that carries more than 39 million passengers a year," Romo noted.

Romo observed that Spain instituted a new pricing policy that has enticed travelers to shift in significant numbers from cars and airplanes to high-speed trains.

"We have one network with different services. This network was built based on a long-term plan that offered improved speed, operational flexibility, and improved station capacity and accessibility," he said.

Japan Central's Nakayama said that 53 years ago Japan had six passenger rail companies all competing with each other with no one succeeding. The government undertook a major reorganization, largely for national security reasons, that introduced innovative new rail services and a financing scheme that combined private capital, government loans, and railway bonds backed by the World Bank. Subsequently the rail service went through another reorganization that lead to privatization and self-financing with government support for land and infrastructure investments and the railroad covered its operational costs.

Nakayama said that Japan Central's operating principles include stable financial resources, profitability, effective investment strategies, and consensus between operators and the government. Japan Rail also generates significant revenue from a variety of non-HSR sources like land holdings.

Keseljevic told the forum that at the outset, high-speed passenger rail faced vigorous opposition in France. But after seeing and experiencing the Japanese system, which had its beginnings in the mid-50s, there was a dramatic shift in attitude, but it was not until 1973, in the midst of the oil crisis, that the national government got fully on board. Based on the French experience Keseljevic suggested that American advocates for high-speed passenger rail need to "keep a stiff upper lip and carry on."

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LEGISLATIVE REPORT



THE MEMBER PERSPECTIVE

CONTRIBUTED BY: Peter Peyser

Projects in Major U.S. States Point the Way on Passenger Rail

ADVOCATES FOR PASSENGER RAIL and for all types of infrastructure could be forgiven for thinking that Washington, DC is “all show and no go” when it comes to boosting investment in the nation’s capital assets. Fifteen months since a president took office promising a \$1 trillion infrastructure plan would be enacted as one of his top priorities, there is no suggestion that Congress will act on a comprehensive package this year and only a small chance for action next year.

The Administration suggested upon the release of their infrastructure plan that the commitment of \$200 billion in federal resources over 10 years would spur an additional \$1.3 trillion investment from the state and local level and the private sector. As a result, they said their plan was a \$1.5 trillion plan. On Capitol Hill and in statehouses, city halls and boardrooms around the country the reaction was largely negative. Congressional leaders of the House and Senate have made it clear since the release of the plan that there will not be consideration of a comprehensive plan this year. Further, they have said that anything that does occur with regard to infrastructure will be in the form of individual bills along traditional lines, i.e. there will be an aviation bill, a water bill, etc.

As a small consolation prize for rail advocates and others, Congress and the President did agree on a budget plan for fiscal years 2018 and 2019 that allocates \$10 billion for infrastructure in each year over and above current spending levels. For fiscal 2018, this means that federal spending on Amtrak will

increase from \$1.5 billion to \$1.84 billion and support for competitive passenger rail grants will increase from \$118 million to \$842 million. Highway and transit programs also received significant shots-in-the-arm in the appropriations process. The fiscal 2019 appropriations process kicked off recently with initial action in the House Appropriations Committee. Their plan tracks closely with the fiscal 2018 bill. However, as in previous years, the House bill contains language designed to impede progress on the California high speed rail program. In recent years these provisions have been passed by the House but struck from the legislation in House-Senate negotiations.

With these meager results in Washington, where do we look for signs of progress? Thankfully, the nation’s three largest states are pointing the way on passenger rail and building momentum behind the creation of a new industry in the U.S. California, Texas and Florida are all pushing ahead with ambitious high-speed rail plans. In Florida, the Brightline project is already in business in South Florida and planning its expansion to serve the Space Coast and Orlando. In California, construction is underway on the high-speed rail network and a new business plan points the way to the opening of 220 mph service in 2026. In Texas, the Texas Central railway continues to build support for its high-speed line connecting Houston and Dallas. Combined with the longstanding commitment of other states to improve their rail services, these projects demonstrate that there is an emerging national movement for high-speed rail, whether Washington, DC recognizes it or not.

In recent months, representatives of the projects in California, Texas and Florida have been in conversation with the team at Infrastructure Week to bring to light the impact of their work on the rail industry in the U.S. While the three projects are different in many respects, they share common interests, are creating common opportunities and are facing common challenges. While it is tempting to focus on funding and financing issues, the areas of greatest common ground for the sponsors of these projects have more to do with the challenges and opportunities involved in creating a new industry sector. Developing a supply chain of the materials, equipment and technology required to develop high-speed train networks is important for all three projects. So is gaining access to a qualified and trained workforce. In addition, refining project delivery techniques for these complex programs is also a common goal.

As the three large states – representing 27% of the U.S. population – grapple with these issues, there

are numerous ways they could work together to reap the benefit of experience from around the world in developing high-speed rail projects. All three projects are working with colleagues from overseas – be it Japan, China, Europe or the UK – to gain the benefit of the experience of others. There should be a role for the national government in promoting this interchange as well. This Spring, the President has met with the leaders of Japan, France and Germany and is in frequent conversation with the leadership in China and the UK. Should there be a place in these dialogues over economic and security issues for an exchange of ideas about how to advance the U.S. high-speed rail agenda? Perhaps it would be fruitful for rail advocates in the U.S. to promote a positive answer to that question. Action in that area could help assuage the legitimate concern that Washington, DC is shirking its responsibility to improve our rail infrastructure.



Global engineering giant Bechtel will work with bullet train developer Texas Central on project management for the \$15 billion high-speed rail project planned between Dallas and Houston.

US Federal Railroad Administration announces \$250m to support PTC rollout.

FTA awards \$75 million grant for Sound Transit's Tacoma Link extension.

STV has announced it will serve as the lead designer for the Massachusetts Bay Transportation Authority's \$1.3 billion Green Line Light Rail Extension (GLX).



MTA Long Island Rail Road has taken delivery on the first set of M-9 EMU (electric multiple-unit) married-pair commuter railcars from Kawasaki Rail Car USA, following testing at TTCI in Pueblo, Colorado.