

HIGH-SPEED INTERCITY PASSENGER RAIL

SPEEDLINES

November 2015
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THINKING

SMART

with

HSR



GETTING TO THE TIPPING POINT



★ ★ ★ ★ ★
Special
EVENT
POLICY FORUM

» p.15



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SPEEDLINES MAGAZINE



Getting to the Tipping Point for U.S. HSR

Cities that have high-speed rail will be more competitive and better positioned to attract tourism, businesses, and high quality personnel.

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We're working to insure that proper consideration is given to the integration of urban and intercity modes, and that there is effective and prompt exchange of data and information that can enhance passenger access to all systems.

FROM THE DESK OF PETER GERTLER

Dear HSIPR Committee Members & Friends:

I hope all you were able to join us this year for the fantastic Annual Meeting and the High-Speed and Intercity Passenger Rail (HS&IPR) Committee meetings this year in my beautiful home town of San Francisco. As a native of San Francisco, I am very proud of my City and this year we had fantastic weather to show off our natural beauty, architecture, restaurants, entertainment, and of course our world class transit options and the future northern terminus of the California High-Speed Train.

At our Committee meeting which was at 8 a.m. on Sunday morning of the Annual Conference we were able to update you on all of our activities since our last meeting in June in Salt Lake City. We had lots of exciting progress to report on, including an update of the UIC's 9th World Congress on High-Speed Rail in Tokyo, Japan; a presentation from the FRA on the Northeast Corridor; an update on the selection and execution of the HS&IPR Return on Investment Study; a presentation from Leadership APTA; and updates of program activities of the Committee including the upcoming Policy Forum in Washington, DC in December, and the Rail Conference in June 2016.

In addition, prior to the full Committee meeting we held the first Regional Corridor Subcommittee Meeting, chaired by Darrell Johnson, CEO of the Orange County Transportation Authority (OCTA). We are very excited about this subcommittee to provide a forum and venue for owners and operators of the regional corridor operations to come together and share best practices and lessons learned. Overall, the Conference and the Committee meeting was a success with significant US, global and APTA participation.

As mentioned above and in more detail in an article contained herein, we are delighted to host the upcoming HSR Policy Forum entitled: "Getting to the Tipping Point for High-Speed Rail in the U.S. - The Role of Federal Government in High-Speed and Intercity Rail Development" on Wednesday December 2, at APTA's new Headquarters in Washington, DC. Several dignitaries and subject matter experts will be participating in this event, and it is sure to be not only informative but, also a great opportunity to network; preceded by an Open House function. Details about this event will be distributed shortly, and we encourage you to attend and tell your colleagues; it is sure to be one of the HSR highlights of the year. A big shout out to Dominic Spaethling, HS&IPR Program Chair, Al Engel, HS&IPR Vice Chair and APTA staff for their efforts and hard work to make this happen.

Please enjoy another amazing edition of Speedlines that covers important articles of the HS&IPR brought to you by our editorial staff led by Al Engel, Ken Sislak and Wendy Wenner (Amtrak). I look forward to seeing all of you in Washington, DC in December at the Policy Forum. And don't forget our forthcoming meetings in March 2016 at the Legislative Conference and in June 2016 at the Rail Conference.

Peter Gertler
Chairman APTA High-Speed Intercity Passenger Rail Committee

HSIPR COMMITTEE

PUBLIC BENEFITS METHODOLOGY

Contributed by Charlie Quandel

APTA released an RFP in early 2015 seeking services to develop a High-Speed and Intercity Passenger Rail (HSIPR) public benefits methodology. The purpose of developing such a methodology is to capture the full range of economic and public benefits associated with high-speed and intercity passenger train service.

The sponsors of the project are:

- APTA Business Members Board of Governors
- Capital Corridor
- HNTB
- Hatch Mott McDonald
- WSP/Parsons Brinckerhoff
- Quandel Consultants
- HDR
- AI Engel Consulting

APTA selected the University of Illinois for the project. A contract is currently being negotiated.

Motivation

The emergence of High-Speed Rail initiatives and the increasing number of intercity passenger rail services has brought focus onto the issue of whether these projects and investments are sufficiently relevant in social and economic contexts to merit greater public investment. The difficulty in translating the impacts of HSIPR projects into understandable and quantifiable metrics has been the root of this issue and has impacted the public understanding of high-speed rail (HSR) benefits.

Objectives

Develop a consistent approach that can be used to comprehensively assess and present in monetary terms

the economic and social benefits of HS&IPR projects in the U.S.

General Methodology

1. Conduct a literature review of studies that identify specific economic and public benefits associated with HS&IPR and/or propose specific methodologies for estimating benefits.
2. Review estimates of benefits prepared for HS&IPR projects under serious consideration.
3. Identify and document a full range of economic and public benefits expected to be realized by HS&IPR projects.
4. Develop a consistent methodology for estimating benefits.
5. Prepare complete estimates of public benefits for each project currently in development using the methodology devised for this study.
6. Catalogue actual outcomes of investment in high-speed rail projects internationally and present those findings in a way that can be related to the U.S. situation.

Proposed Schedule: 12 months
Budget: \$150,000

Technical Deliverables

1. Technical Memorandum documenting the results of the literature review.
2. Technical Memorandum documenting existing estimates of HS&IPR economic and public benefits.
3. Technical Memorandum documenting and supporting methodology for estimating economic and public benefits.
4. Technical Memorandum detailing estimates of

economic and public benefits for each HS&IPR project in development.

5. Draft Final Report
6. Final Report

Key Team Members

1. Stephen E. Schlickman, J.D., University of Illinois at Chicago
2. Rapiq Saat, Ph.D., PMP, University of Illinois at Urbana-Champaign
3. Glen Weisbrod, Economic Development Research Group
4. Bo Zou, Ph.D., University of Illinois at Chicago
5. Stephen Fitzroy, Ph.D., Economic Development Research Group
6. Joseph M. Sussman, Ph.D., Independent Consultant
7. P.S. Sriraj, Ph.D., University of Illinois at Chicago
8. TC Kao, Ph.D., P.E., University of Illinois at Urbana-Champaign

List of HSR&IPR Public Benefits, Economic, and Social Impacts to be Addressed

Benefit-Cost Analysis (Public Benefits)

1. Generalized travel cost savings / out-of-pocket money and time travel costs.
2. Safety benefits – reduction of fatalities, injuries and property damages.
3. Energy and environmental benefits - fuel and energy savings, reductions in greenhouse gas emissions, air pollutant emissions, noise, and impact on landscape/ townscape.
4. Capital, operating and maintenance cost reductions in other passenger transportation systems - non-fuel operating costs for passenger travel including the cost of operations and maintenance of vehicles, the cost of tires, and vehicle depreciation.
5. Improvement in freight distribution systems - reduced congestion in the highway systems and freight rail transportation.
6. Improvement in intermodal network connectivity - intermodal connectivity between rail, air and ground networks.

Economic Impacts

1. Short-term construction and operations spending impacts - employment and wage impacts based on the specific mix of workers, equipment, materials, and services required for rail line construction, acquisition

of rail system equipment, and ongoing operations and maintenance.

2. Long-term productivity gain due to travel time, cost and reliability savings - direct effects on productivity and spending patterns from business and personal travels.
3. Productivity gain due to wider economic benefits - enhanced connectivity among rail, air and ground travel services can lead to denser and more productive travel networks, agglomeration economies occurring as shorter travel times between cities enable more inter-city commerce, as well as greater labor market sharing and mega region efficiencies.
4. Overall impacts on jobs and wages - direct effects on construction and operations activities, indirect effects on business orders for American suppliers of equipment, parts and materials, induced effects on consumer spending associated with re-spending of worker wages, and dynamic effects over time as increased business productivity expands economic competitiveness.
5. Tax impacts - longer-term effects on income, sales and property tax revenues at state and federal levels.

Social Impacts

1. Accessibility to jobs, healthcare, education and other services - measure accessibility to economic, health, education, and other activities.
2. Personal mobility - enhanced mobility with reduced highway and airport congestions.
3. Public health and environmental quality - reduction in transportation emissions and the benefits to public health and environment.
4. Improvement and new development of livable urban communities - development of more livable, walkable urban communities, making the business district stronger.
5. Property value change and affordable housing - fast and convenient rail services can connect relatively remote, affordable housing to major business districts, but may elevate nearby land and housing values and make them less affordable to workers.
6. Unique impact on public institutions - assessing the influences of HS&IPR services on public institutions.

Authors:

Stephen E. Schlickman, J.D., University of Illinois at Chicago
 Melanie K. Johnson, P.E., Quandel Consultants

LEGISLATIVE NEWS



2015

Contributed by Jeff Boothe, President, Boothe Transit

As Congress headed towards the Fall, several daunting issues were facing the White House and Congress. First up was extending Moving Ahead for Progress in the 21st Century (MAP-21) that was scheduled to expire on October 29th. Hot on the heels of MAP-21 Extension were the need to extend the Debt Limit by November 3, the Positive Train Control (“PTC”) compliance deadline of December 31, 2015, and an appropriations process that ground to a halt due to substantial disagreements between the White House and Congress, and Republicans and Democrats over the budget caps set in 2013 for FY 16 and FY 17.

Just when it appeared that Congress would continue to remain dysfunctional and unable to address these critical issues facing the nation and the surface transportation industry, compromise broke out. In a flurry of activity in late October and

early November the White House, Senate and the House reached agreement on these issues and a pathway was cleared for adjourning by December 11th with resolution of these issues a high probability.

The surprising first step was taken when the Speaker John Boehner (R-H) announced his resignation effective October 29. He committed to his successor that he “would clear the barn” before he left and bring to resolution many of the issues vexing him as Speaker. House and Senate leadership and the White House engaged in secret negotiations to broker a deal that addressed many of the key issues facing Congress. On October 26 Congressional leadership and the White House announced a budget deal for raising the caps for both FY 16 and FY 17 and to increase the Debt Limit. The key elements of the deal are as follows:

- A total of \$80 billion in increased discretionary appropriations in FY 16 and FY 17. Of that total, \$50 billion is provided in FY 16 and another \$30 billion in FY 17. The increases would be evenly divided between defense and non-defense spending.

- Debt Limit was increased through March 15, 2017 and into the next Congress with a new President.

The House approved the budget deal on October 27 by a vote of 266-167 with all Democrats and 79 Republicans supporting the deal. House Republican leadership and many members of the House Appropriations Committee supported the budget deal. The Senate approved the deal on October 30 by a vote of 63-35 with 43 Democrats and 18 Republicans supporting the deal. All of the opposing votes were made by Republicans. Paul Ryan was then

elected Speaker by the House on October 29.

This deal clears the way for Congress to begin work on the FY 16 appropriations bills. Potential beneficiaries of the increased domestic cap for FY 16 are programs funded from the General Fund, such as Amtrak, Capital Investment Grants and the TIGER program. Allocations have been made to each of the subcommittees and the House and Senate Appropriations Committees aspire to complete many of the bills and have them adopted into law before December 11 when the current Continuing Resolution expires. The bills not enacted into law separately will be rolled into an Omnibus FY 16 Appropriations Bill that Congress must pass in order to adjourn for this session. There is one potential issue, though, standing in the way of wrapping up the FY 16 appropriations process. Many in the Republican Caucus in the House seek to have a vote on defunding Planned Parenthood. The task to address these concerns and complete action prior to December 11 will now fall to newly elected Speaker Paul Ryan.

Agreement on the Debt Limit and budget caps was followed by an agreement to extend MAP-21 until November 20 and to include a three-year extension, with two one-year extensions possible, for compliance with the PTC mandate. This passed the House on October 27 and the Senate on October 28. As part of the deal to reach agreement on this legislation, Sarah Feinberg was confirmed

as Administrator of the Federal Railroad Administration ("FRA").

On November 5, the House of Representatives completed action on a six-year authorization by a vote of 363-64 by amending H.R. 22, which was the bill to which the Senate passed bill, Developing a Reliable and Innovative Vision for the Economy ("DRIVE"), was attached. A last minute surprise on the House floor was an amendment offered by Congressman Randy Neugebauer (R-TX) that eliminated the Federal Reserve dividend cut as a "pay for", representing \$17 billion in "savings" as well as other Senate "pay fors", and substitute the abolishment of the Federal Reserve surplus. The surplus currently stands at \$29 billion, and the Congressional Budget Office also credited the next ten years of anticipated payments to the proposed "pay for" resulting in a total offset of \$59 billion. Offsetting this new "pay for" against the deleted Senate "pay for" results in net "pay for" of \$40 billion of new funding. This additional funding is sufficient to provide six years of funding at the levels in the House or Senate bills, but could provide even healthier funding levels if the monies were spread over five years instead. The House and Senate have named conferees and the goal now is to complete action before Congress adjourns.

A final piece of legislation Congress hopes to complete is the reauthorization of the Passenger Railroad Investment

and Improvement Act ("PRIIA") of 2008. The House already passed the Passenger Rail Reform and Investment Act ("PRRIA") on March 4, 2014 by a vote of 316-110. There are many similarities between the House passed bill and what the Senate included within the DRIVE Act. Reauthorization of PRIIA is expected to be included in the surface transportation authorization bill. It is not unrealistic to expect completion of a comprehensive surface transportation authorization bill by December 11.

Quite a unexpected turn of events for the surface transportation industry in the waning months of the 114th Congress.



Despite modest investments, American lawmakers have not given high-speed rail the priority it deserves.

-The New York Times

COLLABORATIVE AGREEMENT

STRENGTHENING COOPERATION IN THE INTERNATIONAL SPHERE

Contributed by Eduardo Romo, President - FCH



In Salt Lake City, last June at the time of the APTA Rail Conference, a Collaborative Agreement was signed between the American Public Transportation Association and the Fundación Caminos de Hierro (FCH). This is the consequence of a close initial cooperation during these recent years and the first step for a wider range of future activities approached with a common view and effort.

FCH is a non-profit research center established in Madrid (Spain) focused on railway technologies with the goal of promoting 21st century railway systems based on the development and incorporation of modern techniques and innovative solutions. The professional team at FCH comprises senior engineers and technical experts who have devoted most of their professional careers conceiving, planning and implementing solutions to make possible the success of the modern high-speed rail systems in Europe.

Over the last few decades high-speed rail has experienced an outstanding expansion in a number of European countries based on the solid and

successful result of efficiently building and reliably operating them. Particularly in Spain the output of a strong and continued investment effort – around an average of more than two billion USD per year along the last twenty years- is now in fact enjoying the reputation for being the second largest network (more than 1500 miles of new HSR lines) world wide.

Through the emergence of these expansive networks, FCH has acquired a deep experience on the various techniques applied and on the level of efficiency of each of them, having taken advantage of the numerous lessons learned during such a sustained activity. In addition to the expertise built in this process, FCH's members are continuously involved in promoting and carrying out research projects to provide new and more effective solutions for future projects.

Along with its research activities, FCH also delivers high level technical advice for public and private entities as well as dissemination activities consisting of qualified training courses and specialized conferences. Among these, the "International Conference

on Engineering for High-Speed Railways” held annually in Cordoba (Spain) since 2006 is the premier event. As a consequence of the nature of the FCH, these initiatives are developed in cooperation with other domestic and international entities. FCH has signed more than twenty Agreements for Collaboration in numerous countries (Transportation Research Group of India, Mineta Transportation Institute (California, USA), Beijing Jiaotong University (China), CSU Fresno (California, USA), University of Southampton (United Kingdom), Universities and companies in Spain,...) and is a very active member of the Intercity and High-Speed Committee of the UIC (Railways International Union) and APTA.

The purpose of the Agreement is to advance programs that promote the development of sustainable quality rail transportation world wide, particularly in the field of high speed railways. To this end both entities agree to cooperate on programs and projects of common interest, including among others:

- Education and training. APTA and FCH will cooperate in programs that advance the training and education of policy-makers and practitioners in the railway sector,
 - Each entity will bring the major conferences and congresses organized by the other to the attention of their respective members,
 - A full range of publications and reports will be exchanged between the two entities on a regular basis,
 - Reciprocal registration on request at each other’s conferences and meetings. Members of the organizations will qualify for member registration rates at each other events.

In order to apprise the organization’s leadership of significant developments and anticipated

If you spend
all your energy
on your immediate
reaction
you won’t have
enough energy left
for your long term
solution.

-Doe Zantamata

activities under this agreement, a discussion will be scheduled at at least once each year.

Based on the common aim of advocating for long distance efficient and sustainable rail systems – in other words, high-speed systems, this agreement extends the opportunities of cooperation between both entities started some years ago. APTA and FCH are currently engaged in a shared effort to identify and schedule the first projects to be developed in cooperation within the framework of the recently signed Collaborative Agreement.



SPOTLIGHT

YOU SHOULD GET TO KNOW US



DARRELL JOHNSON
CHIEF EXECUTIVE OFFICER

"The connectivity between different modes of public transportation is becoming more critical as our urban areas continue to grow. Ensuring intercity trains are woven together with longer distance carriers will help us all reach our goal of improving the passenger experience. I look forward to working with my colleagues on the great opportunities that exist in this area."

ORANGE COUNTY
TRANSPORTATION
AUTHORITY



GENE SKOROPOWSKI
SENIOR VICE PRESIDENT

"I freely admit that my All Aboard Florida work on the new 'Brightline' train service is really a labor of love. For more than 40 years I've worked across the planet, delivering and operating successful passenger rail services, many of which were predicted to fail. None have, and in fact, they are all flourishing. Development of the Brightline service has been an especially rewarding experience, not just because it introduces a new passenger rail service in Florida, but because of the unique approach and the private sector creativity that is establishing a totally new model for intercity train service in North America."

ALL ABOARD
FLORIDA
Passenger Rail Development



ANNA BERRY
DEPUTY DOT COMMISSIONER

"I am enjoying my service with the leadership of the High-Speed and Intercity Rail Committee. It is especially gratifying to bring the perspective of Connecticut, which is pursuing an aggressive public transportation program that includes intercity rail, commuter rail and transit. We think that our High-Speed Rail Intercity Rail Project will produce one of the great new services in the U. S."

CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

HSR PANEL

APTA'S ANNUAL SESSION

On Monday, October 5 at the APTA Annual meeting in San Francisco, the High-Speed Intercity Passenger Rail (HSIPR) committee hosted a standing-room-only session named: High-Speed and Intercity Projects: Continued Progress in Key Corridors. The session was chaired by Peter Gertler and he had an excellent panel of rail operators and planners from the Northeast Corridor (NEC), Florida and throughout California.

Ray Lang, Chief, State Government Relations for Amtrak discussed the Gateway project in New York and the importance of the Northeast Corridor (NEC) for regional mobility and described it as a "national asset" that needs to continually be upgraded. The major component of the Gateway Project is the construction of two new tunnels connecting New Jersey with Penn Station, New York City. He also underscored the importance of the partnerships with the Commuter operators for the long term sustainability of the NEC.

He was followed by Gene Skoropowski who outlined the exciting developments with the All Aboard Florida project and how this privately financed rail project will leverage the development around the station areas to help fund the railroad capital costs and operations. He also discussed the importance of partnerships with Tri-Rail and sharing tracks to serve their commuter markets along with the AAF's regional intercity markets. Revenue service is expected to begin in 2017.

Chad Edison Deputy Secretary, California State

Transportation Agency described how the state of California is taking a more active role in looking at how to create better connections between rail services throughout the state. With additional frequency, better connections and new services such as high-speed rail he noted how statewide mobility can be greatly enhanced via better use of the passenger rail mode.

Jeff Morales, CEO of the California High-Speed Rail Authority, outlined the justification for the California High-Speed Rail project and showed how the project is under construction in the Central Valley providing much needed jobs and mobility for that region of the state. In addition, he mentioned the CHSRA's contributions and partnerships for important rail projects in the Bay Area and Greater Los Angeles region such as the electrification of Caltrain between San Francisco and San Jose and the station projects in the Greater Los Angeles region like the ARTIC and LA Union Station (SCRIP).

Stacy Mortensen, the Executive Director of the San Joaquin Regional Rail Commission, talked about the recent trend in California of reassigning the management and governance of intercity services from the State to Regional Joint Powers Authorities in order to be more responsive to customers and stakeholders' needs. She discussed the synergies between the Amtrak San Joaquin and Surfliner services and how many riders transfer between the two services to travel to and from Southern California to the Central Valley. She also underscored the importance of the connecting bus services in making the San Joaquins and Surfliners successful services in the Amtrak system and also the eventual important connection with the statewide high-speed train system.



Peter closed the session by emphasizing that these are real projects moving the modes of intercity and high-speed train service forward and most importantly improving mobility in the regions they serve.

MICHIGAN ACCELERATED RAIL PROGRAM

SETTING THE STAGE FOR SUCCESS

Contributed by Tim Hoeffner, P.E.

The Michigan Department of Transportation's (MDOT) vision for intercity passenger rail is laid out in the Midwest Intercity Passenger Rail Initiative (MWRRI), a cooperative effort between nine Midwest states to develop a 3,000-mile rail network in the region, with a central hub in Chicago.

As part of this network, the Michigan Accelerated Rail Program includes 100 miles of Amtrak-owned railroad from Porter, Indiana, to Kalamazoo, Michigan, and 135 miles of MDOT-owned segment from Kalamazoo to Dearborn, Michigan. It should be noted that accelerated rail has a maximum speed of 110 mph; it is not high-speed rail like the bullet trains in Japan or the TGV in France.

Two MDOT-supported Amtrak routes run on this line: the Chicago-to-Detroit/Pontiac Wolverine Service and the Chicago-to-Port Huron Blue Water Service, which partially runs on it with a connection at Battle Creek. MDOT also is responsible for the Chicago-to-Grand Rapids Pere Marquette, but it bypasses the accelerated rail line when it connects at Porter.

Recent improvements to MDOT's Accelerated Rail Program are included in several key

components: track structure, including bridges; train control and communications; and stations.

Track structure: Norfolk Southern Railroad (NS) is working to improve the efficiency of the railroad, just west of Porter, via the Indiana Gateway Project. This work will allow for flexible movement for passenger trains on their way to Chicago Union Station (CUS) through this very congested corridor.

For years, both MDOT and Amtrak have focused on increasing speeds from Porter to Kalamazoo, a predominately single-track railroad with passing sidings, where eight Amtrak trains in Indiana and Michigan have been travelling up to 110 mph since Feb. 15, 2013. As part of the Indiana Gateway Project, Amtrak is building a new siding at the connections with NS at Porter, allowing for train meets coming off those 40 miles of congested railroad between CUS and Porter. Additional railroad tie and resurfacing work is being done to maintain the 110 mph speeds.

The majority of the improvements are occurring between the Kalamazoo and Dearborn segment to upgrade the track to 110 mph. MDOT received Federal Railroad Administration (FRA) funding to buy the line and upgrade it, along with a second



Michigan's Intercity Passenger Rail Routes



track, to improve efficiency. This work is estimated to be complete in late 2017.

MDOT is building about 9 miles of new track and making a 20-mile double-track segment near Dearborn to accommodate freight traffic from a major auto manufacturing facility served by NS, along with providing flexibility, reliability, and increased speeds for passenger trains. Other improvements include a track upgrade, tie replacement, resurfacing, grade crossing reconstruction, and curve modification for higher speeds. Initially, MDOT contracted with Amtrak for capital and maintenance on the line, but is now focused on just maintenance.

This year, a contractor is working on the double-track project, while Amtrak has worked on curve modifications, crossing surfaces, and crossovers between Kalamazoo and Battle Creek. They will continue to work on many other aspects of the improvement program.

For the Dearborn-to-Pontiac segment, the major work underway is a new track connection called the West Detroit connection, between Conrail Shared Assets and Canadian National Railroad, which will save five to ten minutes for all six Amtrak Wolverine trains. The work involves constructing a new rail bridge over a city street and the associated track connections on each end. This project is scheduled to be completed in late 2016 / early 2017.

Train control and communications: The major Positive Train Control (PTC) work on this corridor involves extending the installation of Incremental Train Control System (ITCS) on MDOT-owned track, with completion scheduled for late 2016/early 2017. ITCS is an advanced communication-based train control system that meets PTC requirements and allows for speeds greater than 90 mph. It provides cab signals, positive stops using GPS, and communication-based technology. This system is currently in operation on the Amtrak line using an FRA grant awarded in 1995. This project was a partnership between FRA, Amtrak, General Electric (Harman Industries

originally), and MDOT.

Stations: From October to December 2014, three new stations opened in Troy, Grand Rapids, and Dearborn. All were locally managed projects, as MDOT considers stations as the gateways to communities. MDOT works closely with community leaders to take the lead on these types of projects, as well as ownership of the facilities to ensure the station becomes a long-term part of the community fabric. Renovations at the Battle Creek Intermodal Facility were completed in 2013, and a new East Lansing intermodal facility serving intercity rail and bus and local transit will open later this year.

One of the key initiatives to address the largest hurdles for intercity passenger rail service is efficient access between CUS and Porter. That segment of railroad is one of the busiest and congested in the area because of large volumes of freight and passenger trains. The Chicago - Detroit/Pontiac Passenger Rail Corridor Program, which issued a Tier 1 draft Environmental Impact Statement on Sept. 19, 2014, refines the vision of the MWRRRI to identify the locally preferred alternative for a dedicated passenger alignment through this area. The document is expected to be completed later this year, with FRA sign-off shortly thereafter. The project is being funded by an FRA grant with a match provided by NS, along with the Illinois, Indiana, and Michigan DOTs (MDOT is the lead state DOT). Like all federal National Environmental Policy Act (NEPA) documents, FRA is the lead agency.

MDOT's goal is to increase ridership and revenue, while reducing costs. This will be achieved through reducing travel times, increasing service reliability and safety, increasing frequency, and providing better customer service.

The stage is set for a dynamic corridor that will efficiently serve the traveling public.



POLICY FORUM

TRANSIT INSIDER

On December 2, APTA's High-Speed & Intercity Rail Passenger Rail Committee will sponsor a Policy Forum called: "Getting to the Tipping Point for High Speed Rail in the U.S. - The Role of Federal Government in High-Speed and Intercity Rail Development." This is a follow up to a forum APTA hosted just about a year ago in the fall of 2014 titled: "What will be the tipping point for a U.S. high performance intercity passenger rail policy and program?" At that session several high-speed rail practitioners, educators and policy experts gathered and discussed what is needed in the United States to get to the now famous "tipping point" from Malcolm Gladwell's book of the same name.

At the fall of 2014 session, the panel and participants voiced frustration that the high-speed rail vision articulated by President Johnson and renewed by President Obama has yet to be realized. However, there remains a great deal of desire and interest to see something constructed in the remaining life times of many of those who gathered for the First SPEEDLINES Roundtable Discussion. Even the skeptics hoped the Vision Plan for the Northeast Corridor articulated by Amtrak and the FRA would be realized and perhaps that Vision Plan could inspire a national rail plan and broader high-speed rail agenda.

This frustration is not unique to the participants in the last forum, but has been expressed in the media in Yonah

Freemark's August 13, 2014 article in the online journal City Lab (Citylab.com). His article titled "One thing is stopping the US from building a high-speed-rail system" argued that a national policy and plan is the single biggest obstacle from a national agenda for high-speed rail being realized in the U.S. He goes on to argue that: "Intercity transportation systems require active federal engagement to guarantee the development of routes that reflect national needs and national priorities. Yet without political consensus on the need to develop national goals and focus investments, high-speed rail will remain a pipe dream for decades to come." This rallying cry from Mr. Freemark is not unique. Recently at the APTA annual meeting in San Francisco our Vice Chair, Al Engel posited the question to our panel at our session titled: High-Speed and Intercity Projects: Continued Progress in Key Corridors if a national rail plan would be helpful for system development in states and regional corridors around the U.S. "Absolutely" Jeff Morales, CEO of the California High-Speed Rail Authority replied. A national (federal) high-speed rail plan reflective of all the projects across the U.S. would help create the "critical mass" nationally to prioritize a significant funding program for the mode.

The policy forum will be held in APTA's new headquarters on "I" street and will be the first policy forum for APTA at the new location. The session will kick-off at 9 AM with welcoming comments from Michael Melaniphy, President & CEO and Chair Valarie McCall of APTA and from

our Committee's Chair, Peter Gertler.

The forum will have three sessions. The first will focus on the Planning and Environmental Clearance of High-Speed Train Systems and will feature David Valenstein from the FRA, David Carol of Parsons Brinckerhoff and Tim Keith, CEO of Texas Central Partners. The second session will be on the funding and finance of high-speed rail systems and will include: Laurene Mahon, Managing Director of Infrastructure Finance at CIBC, Marc-Andre Roy, Partner at CPCS, Jodie Misiak, Build America and Melissa Porter of the FRA. The third panel will be on political leadership and will feature Stephen Gardner from Amtrak, Matt Kelly of the U.S. Senate and other speakers.

The day will end with a facilitated workshop on these three topics where participants will have the opportunity to provide input and help APTA shape its agenda for high-speed rail at the federal level.

We look forward to our Speedlines readers participation in the forum and we plan on inviting representatives from all levels of industry and government (especially from "the Hill") to come and listen, learn and participate in the process. **If you are interested in attending, please contact Cynthia Owens, cowens@apta.com, 202-496-4853, by November 30, 2015.** Come and shape the agenda for high-speed rail in the US!

HSR IN AMERICA

SURVEY FINDINGS OF 2015

Contributed by Kenneth Sislak, AECOM

The American Public Transportation Association (APTA) recently completed a survey entitled “High-Speed Rail in America 2015” as part of its on-going effort to identify key trends affecting public transportation. The survey included 1,005 randomly selected telephone interviews. The astounding and reassuring findings of the survey can be summarized simply, “If you build high-speed rail in America, they will come.”

The survey found that if high-speed rail were available today, nearly two-thirds (63 percent) of Americans would likely ride high-speed trains. This jumps to 67 percent when respondents were informed of the costs and time saving benefits of high-speed rail service. The likelihood of respondents using high-speed rail for their work and leisure travel increases as they were informed that it will likely be less expensive than flying and that it will take less time than driving to their destination. When told of these cost and time saving benefits, Millennials and young people (18-44) expressed a strong likelihood of use, jumping to 76 percent.

And the results don't depend on political affiliation. Those respondents who identify as Republican represent the largest growth of intended use when informed of

the savings of time and costs. Their likelihood of using high-speed rail increases from 58 to 65 percent, which is followed by Independents, 61 to 67 percent. Democrats' already strong likelihood of use goes from 73 to 75 percent when also informed of the savings of time and costs.

The survey also revealed that Americans overwhelmingly support efforts to streamline government regulations that will promote real-estate development near high-speed rail stations. This development could include amenities such as popular retail shops, walkable neighborhoods, and unique dining experiences. Overall, nearly three quarters of respondents (71 percent) support reducing regulations so that transit oriented development can be encouraged near high-speed rail stations.

It is clear from the survey that a high-speed rail network will have a tremendous benefit to our entire transportation system. It will enable America's air, rail, bus and highway systems to each function effectively and efficiently as we face dramatic population growth in megaregions across the country that adds more travelers than our current capacity can accommodate. High-speed rail not only provides a great transportation option, but the public's interest in development and other amenities near high-speed rail stations is another way to

create economic growth and jobs in local communities across the country. If we have strong investment in high-speed rail, it will be an opportunity to generate real-estate and land use income for the private sector as well as local tax revenue for communities for decades to come.

The “High-Speed Rail in America 2015” survey was conducted by Techno Metrica for APTA. The survey includes 1,005 interviews using random digit dial sample of both landline and cell phone numbers. At the 95% confidence level, the margin of error for the respondents' overall sample is +/-3.2 percentage points.



“There are always excuses to delay tough decisions but the time has come for the U.S. to commit to a long-term infrastructure revitalization plan that invests at least \$200 billion a year.

-Governor Ed Rendell

NEC FUTURE

DRAFT EIS RELEASED NOVEMBER 10TH FOR PUBLIC COMMENT

What is the NEC? The NEC, the rail transportation spine of the Northeast region, is a key component of the region's transportation system and vital to its sustained economic growth. Today, the 457-mile NEC—anchored by Washington, D.C.'s Union Station in the south, New York's Pennsylvania Station in the center, and Boston's South Station in the north—is one of the most heavily traveled rail corridors in the world. The NEC is shared by intercity, commuter, and freight operations and moves more than 365 million passengers and 14 million car-miles of freight per year.

Contributed by Al Engel

In late September 2010, Amtrak announced its vision for a next generation high-speed rail system for the transportation corridor connecting Boston, New York and Washington, D.C. A modern high speed rail system operating at maximum speeds of 220 mph was proposed with express service connecting Boston, New York, Philadelphia and Washington D.C., cutting trip times in half or more. Intercity volume currently around 12 million passengers per year, was projected to more than triple.

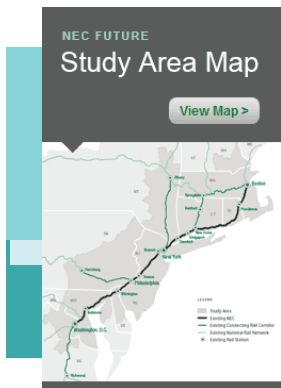
This forward thinking idea was enthusiastically received by those involved in the industry and the general public alike. While it was fully understood by transport professionals that such a \$100+ billion project could not proceed without a full environmental review, the promise of what such

a transformative project could mean to the region in terms of utility and economic impact generated a lot of interest. The NEC HSR Vision also served as a catalyst to energize the recently created NEC Commission (an outcome of the 2008 PRIIA Legislation) and the FRA in addressing the urgent need for more investment in the Northeast passenger rail system. Investment is needed to achieve a state of good repair, increase capacity, and provide a much higher level of service that would make rail fully competitive for all trips and achieving a Boston to Washington trip time close to 3 hours, not the more than 6 hours currently offered.

The FRA collaborating with a committee of the NEC Commission in 2011 developed a scope of work to undertake a comprehensive planning review and environmental

impact assessment of the corridor and what improvement alternatives might be pursued. In February 2012 the FRA contracted with a planning and engineering joint venture team of Parsons Brinckerhoff and AECOM. The teams worked closely with Ms. Rebecca Reyes-Alicea, the FRA Program Manager, who has been busy over the last three years defining the need and purpose of the study and generating a myriad of alternatives to evaluate and screen for more detailed study and impact analysis. The progress of that work, which involved extensive community outreach including public meetings in all major cities along the 457 mile Corridor, having been reported in a number of articles in this publication. The undertaking is now about to arrive at a major milestone.

Rebecca Reyes-Alicea, in her appearance at the October 2015 APTA



Annual Meeting in San Francisco, offered conference delegates very encouraging news noting that the Tier 1 Draft EIS will be released sometime in November 2015 with the final and Record of Decision (ROD) scheduled for late 2016. The study team hopes to elicit extensive feedback from the public on the action alternatives being advanced as described in the Tier 1 Draft EIS.

So what are the three action alternatives for evaluation in the Tier 1 Draft EIS?

Alternative 1 maintains the role of rail with the level and capacity of rail passenger service to keep pace with proportional growth in population and employment. This requires some new track at various points along the line and also a new Baltimore tunnel and a 3rd and 4th tunnel under the Hudson River. A brand new segment between Old Saybrook, CT and Kenyon, RI is included.

Alternative 2 grows the role of rail, expanding rail service at a higher pace than the proportional growth in

Alternative 1. Expanded service to serve selected new markets and a higher frequency of service are planned. New route segments between New Haven, Hartford and Providence will improve performance for express trains. Philadelphia Airport receives greatly improved rail service. Another market to receive additional service is Long Bridge Corridor between Washington D.C. and Alexandria, Virginia.

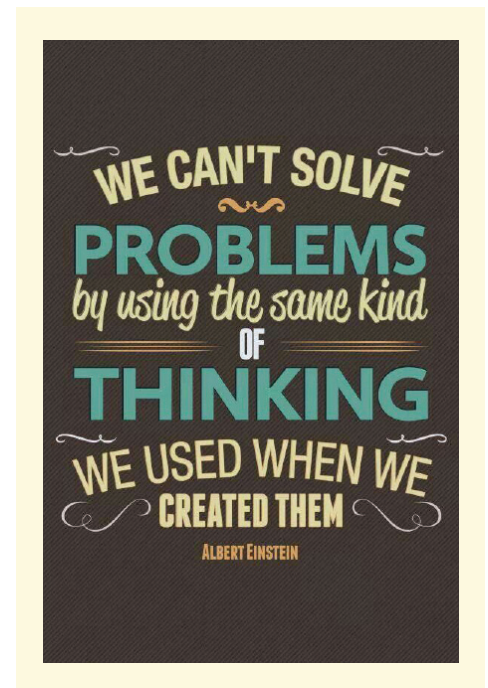
Alternative 3 transforms the role of rail by becoming a dominant mode choice for intercity travel in the Northeast. This alternative provides for a major increase in capacity through the addition of a second two-track spine line. Not only does it provide true high-speed rail service in the Northeast, it opens up additional capacity for regional and intercity travel. Beyond the construction of extensive new track, this alternative also requires a 5th and 6th rail tunnel under the Hudson River. For the Draft Tier 1 EIS there remain several routing alternatives between New York City and Boston. There are several alignment variations for going through Connecticut but all go through Hartford. One route goes out Long Island and turns at Ronkonkoma heading north to New Haven. These will be analyzed and refined in the final phase of the EIS based on further stakeholder feedback to be obtained after the publication of the Tier 1 Draft EIS.

All these alternatives include bringing the existing NEC to a state of good repair and the removal of choke points in the system which are too numerous

to delineate in this brief article. Remedies run the gamut from interlocking improvements to new track, flyovers, express bypass tracks, additional station platforms and more.

The interested reader is urged to consult the FRA website and the reports listed there for more information.

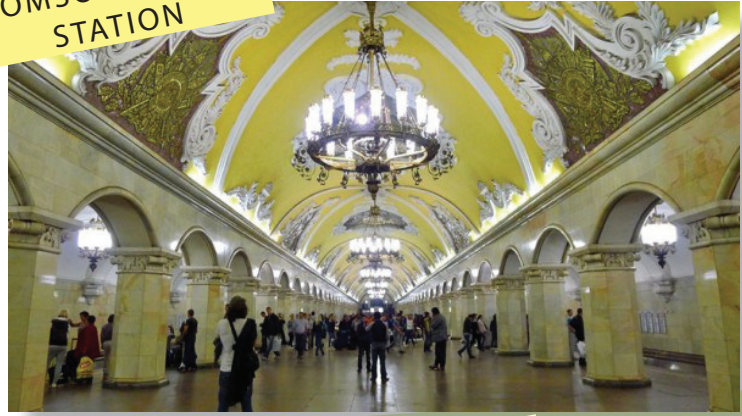
<http://necfuture.com/>



SIRKECI STATION



KOMSOMOLSKAYA STATION



MILAN STATION



ANTWERP CENTRAAL STATION



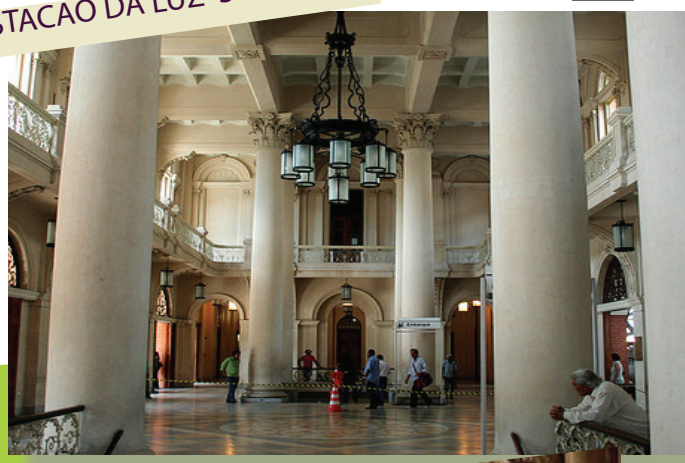
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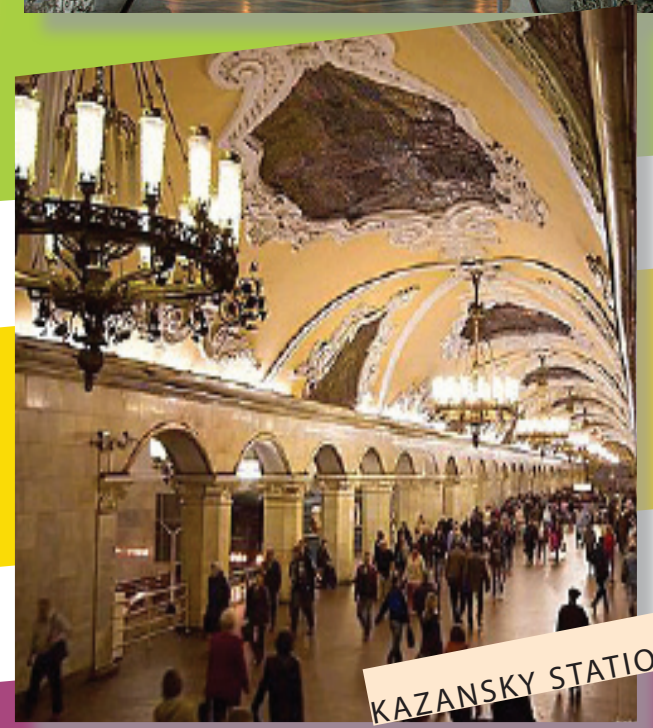
Train travel is not only fast and efficient, but also provides ample opportunity to admire some of the world's greatest architecture.

Train travel was once at the forefront of innovation, revolutionizing travel and prompting monarchs, architects, and city planners to build magnificent train stations to impress passengers.

Next time you're strolling along, take time to admire; it might just be worth waiting around in.



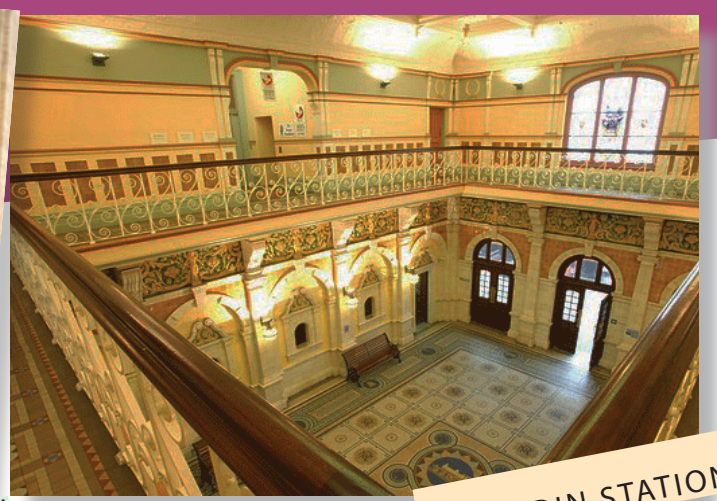
GARE DE LYON STATION



KAZANSKY STATION



GRAND CENTRAL STATION



DUNEDIN STATION

RECAP OF THE

21

9th

UIC WORLD CONGRESS

High-Speed 2015 World Congress took place in Tokyo, the birth place of High-Speed Rail 50 years ago.

The article contains contents from UIC press releases and various communications.

The 9th UIC HIGH-SPEED World Congress, jointly organized by the International Union of Railways (UIC) and East Japan Railway Company (EJRC) in July 2015 convened in Tokyo, at the Tokyo International Forum with 1,200 delegates representing 40 countries and with the participation of 20 sponsors, 40 exhibitors, 12 press partners. Among the delegates were APTA HS&IPR Committee members Peter Gertler, Chair, Norman Forde, Scientific Committee representative for the Committee and Jim Michel, Chair – Standards Task Force Subcommittee, Michael Melaniphy, President & CEO of APTA and KellyAnne Gallagher, APTA Assistant Vice President. Melaniphy served on a panel and Gertler and Michel were presenters at the Conference.

The high-speed rail passenger mode was born more than 50 years ago in Japan with the inaugural service of the first Shinkansen “bullet trains” between Tokyo and Osaka in October 1964. Since that launch, high-speed passenger rail has been introduced and marked by a rapid expansion in Europe, Asia, Middle-East, with projects or planned implementations in the United States, North Africa, Asia and several regions of the world.

Mr. Shinzo Abe, Prime Minister of Japan, underlined that after a period of decline in railway legacy, the Shinkansen brought hopes and dreams to the Japanese people. From 30 million passengers trips annually on the Shinkansen at the beginning, this figure has now grown to 250 million passengers. The Shinkansen strongly supported the growth of the Japanese economy. Without the Shinkansen the country could not develop itself in such a sustainable and efficient way as today. Mr. Shinzo Abe emphasized that The High-speed Rail Congress in Tokyo can strongly contribute to the dissemination of expertise and experience across the world about Japan and the Shinkansen and many other countries operating High-Speed Rail.

In his welcome address, Japan’s Minister of Land, Infrastructure, Transportation and Tourism, Mr Akihiro Ohta, underlined that the Shinkansen represents a wonderful mode of transport in terms of safety, comfort, speed, punctuality and heavy commuter usage; being proud of this system. Research is being conducted to optimize the High-speed Rail system with respect to earthquake resistance, vibrations, noise, and more.

After an introduction and warm thanks to the Japanese hosts by Mr Jean-Pierre Loubinoux, UIC Director General and moderator of the Opening Session, Mr. Vladimir Yakunin, UIC Chairman, President of Russian Railways (RZD), stressed that “High-Speed Rail development is not only a technical issue. Furthermore, it concerns the future of our children and great grandchildren. High-Speed Rail is one of the most human-oriented modes of transport. Due to its advantages in terms of environment, safety, comfort and reliability, High-Speed Rail is of enormous socio-economic importance considering opportunities for investment and job creation”. Concerning Russia, he mentioned the possibility to extend the project of the Moscow-Kazan high-speed



line to Ekaterinburg and further afield to Kazakhstan and possibly China.

For UIC Vice-Chairman, Mr. Michele Mario Elia, CEO of Ferrovie dello Stato Italiane (FSI), this Congress “provides a unique opportunity for those who already operate High-Speed to demonstrate the advantages of this system to boost the economy. This technology is fully competitive, but it is essential to continue to invest in innovation and in research and development. The objective of interoperability is essential in matters of rolling stock, infrastructure, signalling, certification methods, in order to create an integrated high-speed rail network”.

Mr. Tetsuro Tomita, President and CEO of East Japan Railway Company (EJRC), host of this World Congress in Tokyo, underlined that the preparation of this worldwide event was ensured in the frame of an excellent cooperation between East Japan Rail, UIC, all railways in Japan and many other partners. “The bullet train in Japan was not created in one day. Considering the state-of-the-art of technology it had to be transformed into a High-Speed Rail system. It is interesting to learn lessons from other countries around the world and in this matter UIC can strongly contribute, through a Congress such as this, to

spread experiences and best practices”.

On behalf of Europe, Mr. Michael Cramer, Member of the European Parliament, Chairman of the Commission on Transport and Tourism of the Parliament, delivered a video message and insisted on the fact that High-Speed rail offers a number of appreciated advantages to customers, but the main issue to consider – particularly in this Congress – is the improvement of connections between High-Speed Rail services and conventional rail, and better use of high-speed infrastructure for other types of rail transport, for example freight.

A review of High-Speed Rail implementations across the globe was given by Jean-Pierre Loubinoux, UIC Director General, and Inaki Barron, Director of High-Speed and Passengers at UIC, presented a journey across the world illustrating High-Speed Rail implementations, starting from the West and finishing with Japan in the East. The current status of High-Speed projects and implementations was presented successively by Mr. Pablo Vazquez-Vega, President of Renfe Operadora, Mr. Guillaume Pepy, President of SNCF, Mr. Michele Mario Elia, CEO of Italian Railways FSI, Mr. Ömer Yıldız, President of Turkish Railways TCDD, Mr. Zhao Guotang, Deputy Chief Engineer, CRC China, Mr. Zheng Jian, Deputy Administrator, NRA China, Mr. Jeng James, CEO of THSRC, Taiwan, Mrs. Choi Yeon

Hye, CEO of KORAIL, Korea, Mr. Norimichi Kumagai, President of RTRI, Japan.

The final part of the Opening Session was dedicated to the presentation of the program of the Congress that was designed this year with the objective to be paperless and extremely interactive, in particular through exchanges between speakers and the floor with digital devices. This presentation was made by Mr. Masaki Ogata, Vice Chairman of East Japan Railway Company (EJRC) and Mr. Michel Leboeuf, UIC, Chairman of the Scientific Committee of the UIC World Congress on High-Speed Rail.

Innovation this year

Both in terms of design and substance, the 9th HSR Congress took innovation to a new level.

The goal of “zero congress paper - real-time” was achieved with the distribution of tablets to all attendees thanks to the Toshiba sponsor. Participants had everything in hand in a few clicks: the program, corporate information from UIC and JR East, the two organizers, the opportunity to ask questions directly to the speakers or to vote on several issues, speaker presentations, etc.

The content of the conference was ambitious with the objective of covering several topics related to high-speed during 35 parallel sessions: infrastructure, rolling stock, operations, management, distribution and marketing, economics and finance, railway governance, etc. A new concept was to dedicate a full session to the academic world in order to connect it to the training of future managers, experts and researchers.

With the motto of the congress being “Celebrate the past, Design the Future”, the conference was divided into two parts, respectively aiming to learn from experience and analyze the opportunities and challenges ahead.

Two Round Tables

Each part ended with a round table during which invited guests expressed their views on topics as diverse as:

- Speed,
- Interoperability
- The digital revolution
- The environment,
- Innovation,

- Mobility,
- Inter and intra-modal competition,
- The station of today and tomorrow,
- New transport technologies,
- Security,
- Standards,
- etc.

A significant role was reserved for the industry, alongside railway operators and infrastructure managers. Among the conclusions of the congress we must, among other things, remember that:

- While the railways lost their important role at the end of last century, high-speed rail has unquestionably renewed its appeal, with the advancement of many kilometres of lines built worldwide; new countries have begun to join the “country-club of high-speed”, such as Saudi Arabia, Morocco, the United States, and soon Malaysia and Singapore;
- The ecological advantage of high-speed rail is certain and partly explains the revitalization of the train; however, other modes of transport are also in progress and the benefit of rail transport cannot be maintained without further efforts and innovations to always do more and better;
- If environmental constraints and the scarcity of natural resources have an impact on the global economy, railways will have to maintain their traffic by increasing their share in a market made less dynamic by attenuating growth;
- Competitors (car and airplane) are changing the economic model and the trend introduced by the low-cost model is considered as irreversible; however, new forms of competition can also be seen as opportunities to resolve the issue of the first and last kilometre which generate handicaps for all public transport;
- The digital revolution is a source of productivity and a way to decrease costs, but competitors do the same as well;
- Innovation has become the main engine of growth; with the digital revolution, entirely new fields open to scientific and technological inter-disciplinarily. UIC Director General Mr. Jean-Pierre Loubinoux said in his concluding remarks: “The Shinkansen and later the TGV were conceived by our fathers, for us. And today we are designing a future for our children. And from one High-Speed Congress to the other we can feel its evolution. This future will learn the lessons of our present and our past. But we can be proud of our legacy. We must also be demanding with our transmission. Even

if we must always stay modest in front of tomorrow. I can see from this congress six evolutions for a future that will be more safe (hopefully), sustainable (necessarily), service-oriented (evidently), connected (digitally), interoperable (technically), intermodal (systematically). Now the show must go on and we must think of the next steps". During the closing session, Michael Melaniphy presented an overview of U.S. projects including efforts in California, Texas, Florida and the Northeast Corridor. As with previous Congresses, the UIC mounted an formidable exhibition of global suppliers to offer visitors a glimpse of the newest in products and train operating services.

Conclusions

The congress ended with two practical conclusions. First, UIC will launch an "alliance" with the academic world by connecting its own network of members with a network of world-renowned universities. Some of them have already expressed their support for this project, in China, Japan, the USA (MIT), Russia and Europe. High-Speed Rail requires the university to train and recruit talent. High-speed rail cannot be at the forefront of innovation by staying away from scientific laboratories and inter-disciplinary bodies. For their part universities need to develop their training with the knowledge of railway engineers and of the railway industry as well as with a number of railway research subjects.

10th World Congress

A new date has been scheduled for July 2017 to meet again at the next UIC World Congress on high-speed

rail. The 10th edition will be held in Istanbul.

Many very positive testimonials about the congress have already been received. Feedback has been given not only to UIC but also to JR East whose organizing skills and the traditional hospitality are without comparison. Delegates were welcomed by various friendly events. The gala dinner was an enjoyable event for the participants and will remain in their memory, as it combined artistic and culinary tradition and modernity, perfectly in line with the motto of the congress. Eight technical and cultural tours were also offered on the last day to the participants of the congress thanks to a trip on the Shinkansen that embodies "punctuality, the politeness of kings".

Warm thanks!

UIC is particularly thankful to Mr Masaki Ogata, Vice Chairman of East Japan Railway Company (EJRC), for his personal involvement in the success of this congress, as well as his team, as well as Michel Leboeuf and Inaki Barron, UIC, as efficient architects of this congress, and all the UIC team also involved in the preparation of this major event. APTA was a partner in the 8th World HSR Congress in Philadelphia and participated in the planning of the 9th. KellyAnne Gallagher, APTA Assistant Vice President and Norman Forde, STV Inc. Associate, Senior Project Manager.

