High-Speed Rail & the Future of Passenger Rail in America

Rail Passengers Association

Sponsored by: The High Speed Rail Alliance
Welcome

Sean Jeans-Gail, VP of Gov’t Affairs and Policy
Rail Passengers Association
Today’s Webinar

- Welcome - Sean Jeans-Gail, Rail Passengers VP of Government Affairs + Policy
- **Carlos Aguilar, President & CEO, Texas Central**
  - Update on the Dallas to Houston high-speed rail corridor
- **Boris Lipkin, Northern California Regional Director, California High-Speed Rail Authority**
  - Update on California’s high-speed rail project
- **Congressman Seth Moulton, 6th District of Massachusetts**
  - Legislative update & high-speed rail in the 117th Congress
- Panel Q&A
  - Moderated by Jim Mathews, Rail Passengers President & CEO
- A Look Ahead - Joe Aiello, Rail Passengers Field Coordinator
For a better business case and a stronger political coalition

The Integrated Network Approach
Update on the Dallas to Houston High-Speed Rail Corridor

Carlos Aguilar, President & CEO

Texas Central
THE TEXAS HIGH SPEED TRAIN

CONNECTING PEOPLE, CREATING JOBS & A NEW AMERICAN INDUSTRY
Investor-Owned Approach
Data-Driven Decisions

$10s of millions spent on studies

16-million trips per year already being made

80% of Texans surveyed said they would consider riding the train
Tracking Major Milestones

- **Dec 2017**: DEIS is Released by FRA
- **May 2018**: Agreement Announced with AMTRAK
- **May 2018**: Program Manager
- **Oct 2018**: Civil Construction Consortium (renfe)
- **Oct 2018**: Operating Partner*
- **Feb 2019**: Financial Advisors
- **Aug 2019**: FRA begins rulemaking for safety regulation
- **Nov 2019**: Installation Contractor
- **Feb 2020**: Stations Contractor
- **Jul 2020**: STB decision that Texas Central is an interstate carrier
- **Nov 3, 2020**: RPA/ROD issued

*For development & construction phase
A Project with Regional and National Benefits

- Texas private investors developing the transformational Texas High-Speed Train of geopolitical importance with a world-class transportation solution.

- Expected to generate $83.7 billion in total real cumulative revenue and increase property values within ½ mile of stations by $63-$149 million and support a cleaner environment.

- Investment in project would spur economic development across the US:
  - Infrastructure components such as ballast, steel, and concrete would be sourced domestically.
  - Thousands of construction and permanent jobs.

¹ Sourced from the Preliminary Information Memorandum.
GLOBAL BEST FOR AMERICA’S 1ST HIGH-SPEED TRAIN
Creating A New American Industry With World Class Companies

Program manager will deliver the train on budget and schedule.

Systems installation partner responsible for installing catenary; safety, signal and communication systems.

Technology partner responsible for trains; catenary; safety, signal and communication systems.

Civil contractor building everything from the ground up to the train rail including viaduct and berm foundations.

Operating partner will run the trains, maintain systems such as engines, signals and other equipment; oversee staff and service at train stations.

Financial advisors to lead capital-raising efforts.

Stations contractors together will build passenger train stations.

Systems installation partner responsible for installing catenary; safety, signal and communication systems.

Technology partner responsible for trains; catenary; safety, signal and communication systems.
Construction on a Texas-Sized Scale

>$20 Billion Investment in Civil Infrastructure

**CONCRETE**
10 million cubic yards of concrete, nearly 3X used in the Hoover Dam

**RAIL**
Nearly 1,100 miles of rail

**STATIONS & FACILITIES**
3 passenger stations
2 train maintenance facilities
multiple maintenance of way and power substations
Creating a New Industry in Texas
The Train is Moving Forward
More than 1,500 Direct Jobs
Jobs, Jobs, Jobs

17,000+ jobs created during construction

Electrician
$42,000/year

Welder
$50,000/year

Construction Manager
$80,000/year

Source for salaries: Texas Workforce Commission
## Estimated Procurement from US Supply Chain

### Estimated Breakout of Supply Chain Materials:

<table>
<thead>
<tr>
<th>Item</th>
<th>Total $ to be Purchased from US Suppliers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rebar</td>
<td>$543,000,000</td>
</tr>
<tr>
<td>Concrete</td>
<td>$1,053,000,000</td>
</tr>
<tr>
<td>Structural Steel</td>
<td>$154,000,000</td>
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<tr>
<td>Fencing</td>
<td>$76,000,000</td>
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<tr>
<td>Ballast</td>
<td>$225,000,000</td>
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<tr>
<td>Rails</td>
<td>$175,000,000</td>
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<tr>
<td>Ties</td>
<td>$125,000,000</td>
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<tr>
<td>Electrical Cables</td>
<td>$73,000,000</td>
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<tr>
<td>Waterproofing</td>
<td>$4,500,000</td>
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<tr>
<td>Drywall</td>
<td>$8,000,000</td>
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<tr>
<td>Concrete Masonry</td>
<td>$9,000,000</td>
</tr>
<tr>
<td>Glazing &amp; Metal Panel</td>
<td>$138,000,000</td>
</tr>
<tr>
<td>Roofing</td>
<td>$9,000,000</td>
</tr>
<tr>
<td>Paving (Asphalt)</td>
<td>$150,000,000</td>
</tr>
<tr>
<td>Paving (Concrete)</td>
<td>$7,000,000</td>
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<tr>
<td>Electrical Materials</td>
<td>$116,000,000</td>
</tr>
<tr>
<td>Aggregate Base/ Backfill</td>
<td>$500,000,000</td>
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<tr>
<td>Lime</td>
<td>$250,000,000</td>
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<tr>
<td>Post Tensioning</td>
<td>$100,000,000</td>
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<tr>
<td>Overhead Catenary</td>
<td>$125,000,000</td>
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<tr>
<td>Power Poles</td>
<td>$425,000,000</td>
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<tr>
<td>Manufactured Elements</td>
<td>$70,000,000</td>
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<tr>
<td>Forms, Slip Form, PCY</td>
<td>$85,000,000</td>
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<tr>
<td>AREMA Turnouts &amp;</td>
<td>$25,000,000</td>
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<tr>
<td>Accessories</td>
<td>$127,000,000</td>
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<tr>
<td>Pickup trucks</td>
<td>$1,026,000,000</td>
</tr>
<tr>
<td>Construction Equipment</td>
<td>$95,000,000</td>
</tr>
<tr>
<td>Other Custom Fabrication</td>
<td>$1,507,000,000</td>
</tr>
</tbody>
</table>

~$7.3b of materials from US companies across 37 states will be required for the construction of the project.
High Speed, Low Impact

Fewer cars, less emissions
Fully electric
Regenerative braking
16 million journeys are made between North Texas and Greater Houston every year. 90% are made by car; 10% by plane.

15 million journeys are made by car.

1 million journeys are made by plane.

13 million passengers are projected to ride the Texas High-Speed Train per year by 2050. By taking these travelers off the roads and out of the skies, Texans can expect:

- A total energy savings of 2.46 trillion BTUs. That’s enough energy to make 85 trips to the moon every year for 25 years!
- Reduced greenhouse gas emissions by 4.5 million tons or 101,000 tons per year.
- To save more than 1.2 billion gallons of gas or 65 million gallons per year.
- To save 300 million hours of travel time vs plane or car.
- 86 million cars removed from I-45. That’s 12,500 cars per day!
Less than 1% of AT&T Stadiums consumption at its PEAK demand will be used for ONE train.

- Approximately 12 MW during accelerations
- Approximately 6 MW when cruising at maximum speed
- Regenerative braking technology recycles approximately 10% of the energy back to the grid.
- ERCOT has an installed grid capacity of over 80,000 MW
Dallas Station
Potential Station Renderings

PRIVATE & CONFIDENTIAL
Dallas
Potential Station Renderings
Houston
Potential Station Renderings
Brazos Valley Station

Potential Station Renderings
Business and Workforce Opportunity Program
A Commitment to Diversity and Inclusion

Vision
To provide sustainable economic development through transportation to Texas communities

Mission
To promote growth of Texas-based small, rural, minority, women, veteran and disabled individual-owned businesses
Millions of Texans and Texas businesses from across the state want this train.
Update on California’s High-Speed Rail Project

Boris Lipkin, Northern California Regional Director

California High-Speed Rail Authority
MISSION
CALIFORNIA HIGH-SPEED RAIL

To initiate the construction of a high-speed train system that utilizes an alignment and technology capable of sustained speeds of 200 miles per hour or greater.

**Three principles guide our decisions:**

1. Initiate high-speed rail service in California as soon as possible.

2. Make strategic, concurrent investments that will be linked over time and provide mobility, economic and environmental benefits at the earliest possible time.

3. Position ourselves to construct additional segments as funding becomes available.
CONSTRUCTION PROGRESS
CALIFORNIA HIGH-SPEED RAIL

**Today:**

- 199 miles environmentally cleared
- 119 miles under construction
- Caltrain electrification construction underway
- Funding committed for LAUS improvements
- MOU with Brightline West
- Environmentally clearing full 500 miles between LA- SF
- Station planning
## REVISED DRAFT 2020 BUSINESS PLAN

### PROGRESS – 2018 to 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>2018</th>
<th>2020</th>
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</thead>
<tbody>
<tr>
<td>Construction Jobs Created</td>
<td>2,573</td>
<td>VS. 5,216</td>
</tr>
<tr>
<td>Structures Completed or in Construction</td>
<td>19</td>
<td>VS. 56</td>
</tr>
<tr>
<td>Environmental Drafts Released and ROD's Certified</td>
<td>5</td>
<td>VS. 12</td>
</tr>
<tr>
<td>Right-Of-Way Parcels Acquired</td>
<td>1,423</td>
<td>VS. 1,771</td>
</tr>
<tr>
<td>Miles of Guideways</td>
<td>47</td>
<td>VS. 79</td>
</tr>
<tr>
<td>Monthly Average Expenditures on Design-Build Contracts</td>
<td>$30.47M</td>
<td>VS. $68.13M</td>
</tr>
</tbody>
</table>
SAN JOAQUIN RIVER VIADUCT

• 4,700-foot structure that spans the San Joaquin River in north Fresno and the Union Pacific tracks parallel to State Route 99
• Features arches representing the northern gateway into Fresno, and a pergola structure to allow high-speed trains to cross over the top of the Union Pacific tracks.
2,000-foot Conejo Viaduct will carry high-speed trains over the existing BNSF rail line, Conejo Avenue, and Peach Avenue in south Fresno County
Over 1,100 workers dispatched weekly to the 35 active construction sites
The Wasco Viaduct will take high-speed trains over the existing BNSF freight tracks and will be nearly 2,000 feet long when complete. This super structure is part of CP 4, which is expected to be completed Spring 2022.
ECONOMIC IMPACT

JOB-YEARS OF EMPLOYMENT
54,300 – 60,400

LABOR INCOME
$3.9B - $4.4B

ECONOMIC OUTPUT
$10.5B - $11.4B
“I want the United States to be leading the world when it comes to the access of high-speed rail.”

- USDOT Transportation Secretary, Pete Buttigieg

“America has a chance to lead the world once more through innovation in infrastructure—connecting our communities, creating good jobs, addressing climate change and ensuring equity. Passenger rail development, including world-class high-speed rail, can and must be a part of our strategy to accomplish these goals. As in many other arenas, California has taken the lead nationally to advance high-speed rail, starting an economically transformative project in the Central Valley and assuming the challenges that come with that leadership. The U.S. Department of Transportation looks forward to partnering with California as it leads the way to build back better.”

- Acting Federal Railroad Administrator, Amit Bose
BUSINESS PLAN & PROP 1A ALLOCATION TIMELINE

• Business Plan
  » Feb 9 – March 12: public comment period
  » March: Board, Assembly and Senate Transportation oversight hearings
  » March 25: Board Approved Revised Draft
  » April 15: Submittal to Legislature

• Proposition 1A Allocation
  » Mid May: Governor’s Revised Budget Proposal released
  » April 22: Board Meeting
  » June 15: 2021/22 Budget Act Passed
Legislative Update & High-Speed Rail in the 117th Congress

Congressman Seth Moulton
6th District of Massachusetts
Q&A

Moderated by Jim Mathews, President & CEO

Rail Passengers Association
Upcoming Events:

- **April 18-20** -
  Virtual Day on the Hill

- **May Webinar** -
  The Future of Onboard Hospitality

- **September 19-22** -
  Fall Advocacy Conference in Washington, DC

Go to [railpassengers.org/events](http://railpassengers.org/events) for more information
Join Rail Passengers!
Help us continue the fight for "A Connected America"

railpassengers.org/join