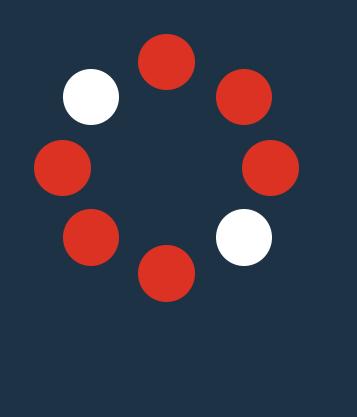


# **Moving America... fast**

Jim Welsh

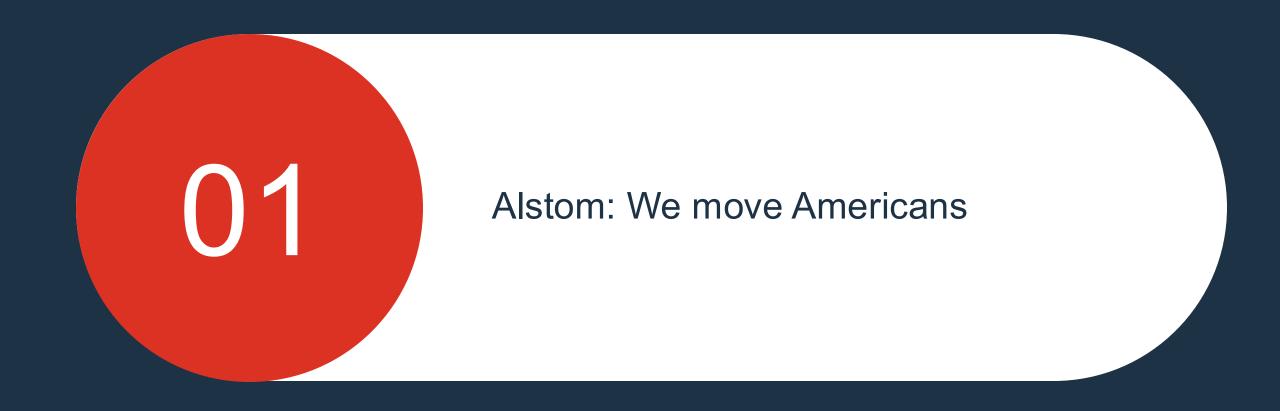
April 8th, 2025





# Agenda

- 1. Alstom: we move Americans
- 2. Texas: More Trains for more Texans
- 3. Avelia Liberty: the first and only US High Speed Train



## We are where mobility is needed

Over

84,700

employees

from

184

nationalities

Over

254

sites

Ir

64

countries

Over

**23,900** engineers

Over

9,800

granted patents

Over

150,000

vehicles in commercial service

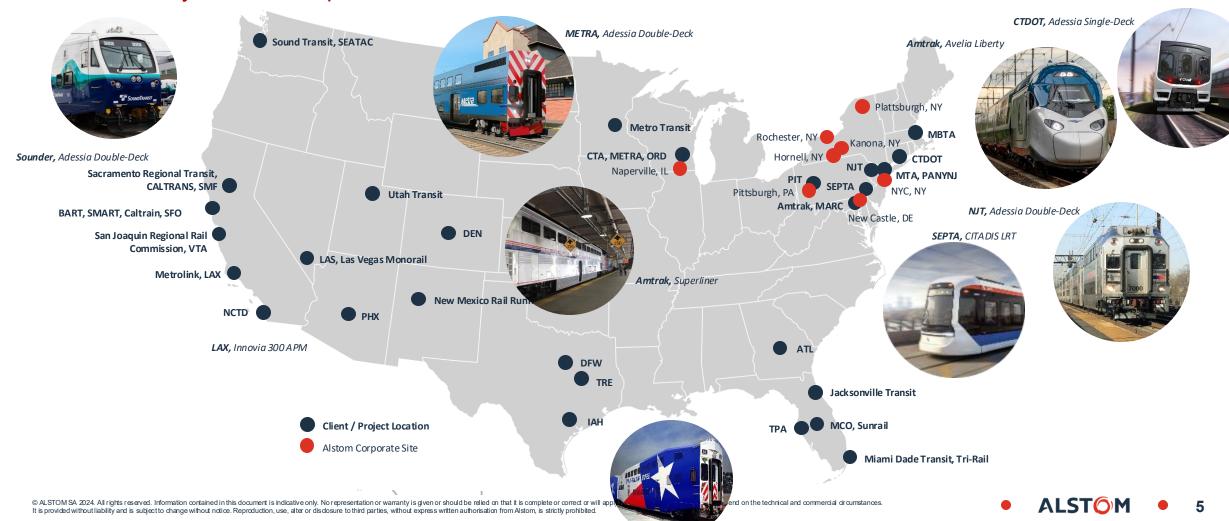
As of 31 March 2024





#### Alstom in the US

#### Our mobility solutions improve communities where over 90% of Americans live and work



# Alstom: Largest private rail operator in North America

#### METROLINK L.A.



26-year partnership

- OTP: 99.73% in 2023
- 7 routes, 546 route-mile network
- 60 locomotives, 232 coaches, 3 DMUs
- MOE\* since 1998





11-year partnership

- OTP: 99.58% in 2023
- 2 lines, 113 miles
- 42 locomotives, 114 coaches
- O&M since 2013
- 10 years without LTI



Orlando



#### 10-year partnership

- OTP: over 99% in 2023
- 1 line, 16 stations, 61 miles
- 10 locomotives, 20 coaches
- O&M since 2014
- 5 year without LTI

1,000
Engineers and Conductors
Managed in North America

250 Decomotives Maintained in North America

1,700
Coach Cars Maintained in

\*MOE: Maintenance Of Equipment

#### **Alstom in Texas**

#### **Key Figures**

5 cities using our solutions

95 employees

100 suppliers+ supporting Buy America





Cityflo<sup>™</sup> 550 automatic train control and switch

 Cityflo<sup>™</sup> 650 automatic train control and switch machines for Dallas Fort Worth International Airport

machines for George Bush Intercontinental Airport

#### ONGOING PROJECTS



#### **AUTOMATED PEOPLE MOVERS**

- 16 Innovia APM 100 vehicles for George Bush Intercontinental Airport Skyway
- 64 Innovia APM 200 vehicles for Dallas Fort Worth International Airport Skylink





#### **ROLLING STOCK**

 25 BiLevel vehicles (passenger and control cars) for Trinity Railway Express



#### **OPERATIONS AND MAINTENANCE (O&M)**

- O&M for George Bush Intercontinental Airport Skyway for 15 years
- Maintenance for Dallas Forth Worth International Airport Skylink since 2005

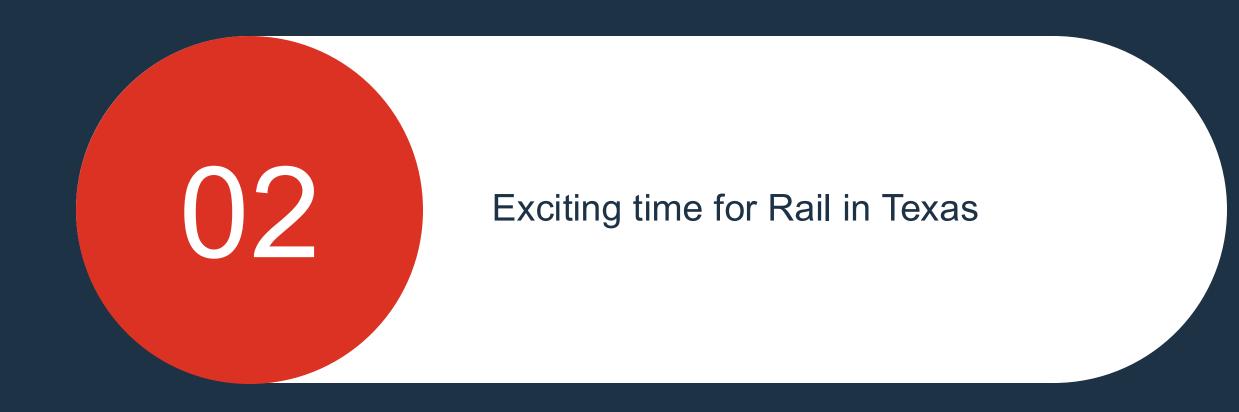






**SIGNALING** 

Skyway



## **Exciting Times for Rail in Texas**

Light rail system renewal (DART)

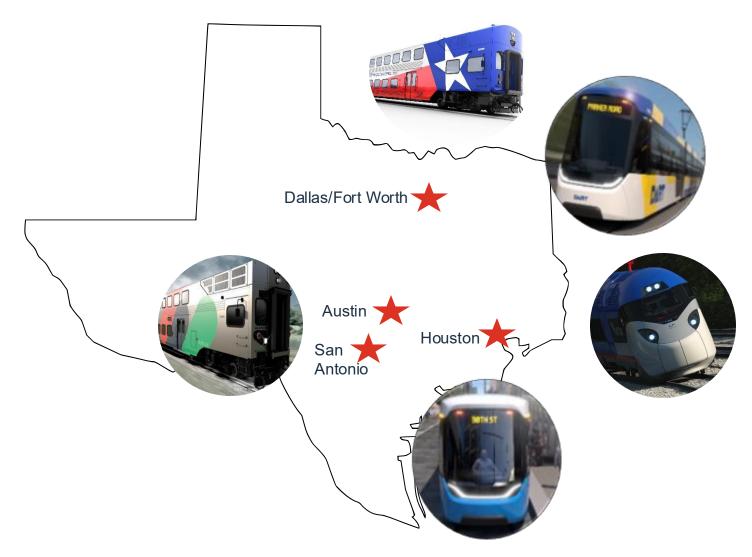
New light rail system (Austin)

Commuter Rail upgrade (TRE)

Expansion to Commuter Rail (Austin)

New High-Speed Rail (Texas Central)

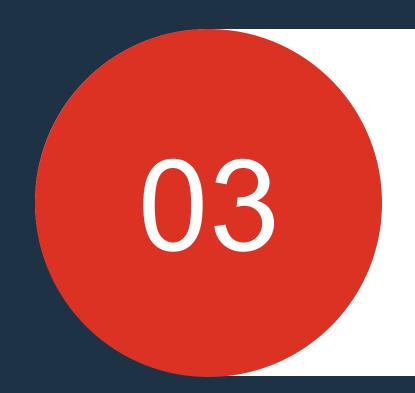
Renewal of Intercity Trains (Amtrak Long Distance)



# **Amtrak Long Distance: An essential service to connect America**







Avelia Liberty: the first and only US High Speed Train

### High Speed Rail: A multitude of socio-economic benefits



Access to affordable housing



Reduction of highway traffic



Safer intercity travel



Reduction of greenhouse gas emissions



Bringing cities together



Enhanced intermodal travel



Economic Development



Best use of land

# Alstom Avelia<sup>™</sup> – key facts



Half of the world's high-speed fleet is running with Avelia technology



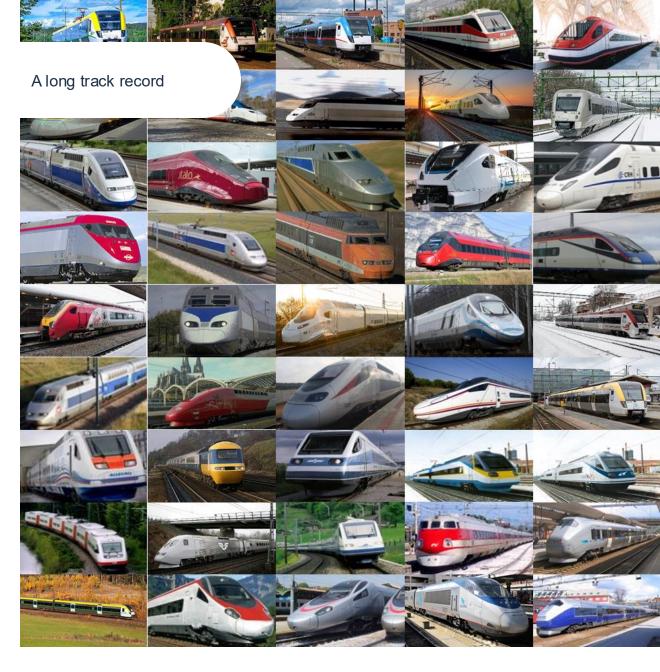
Alstom has more than **40** years of experience in high-speed speed trains



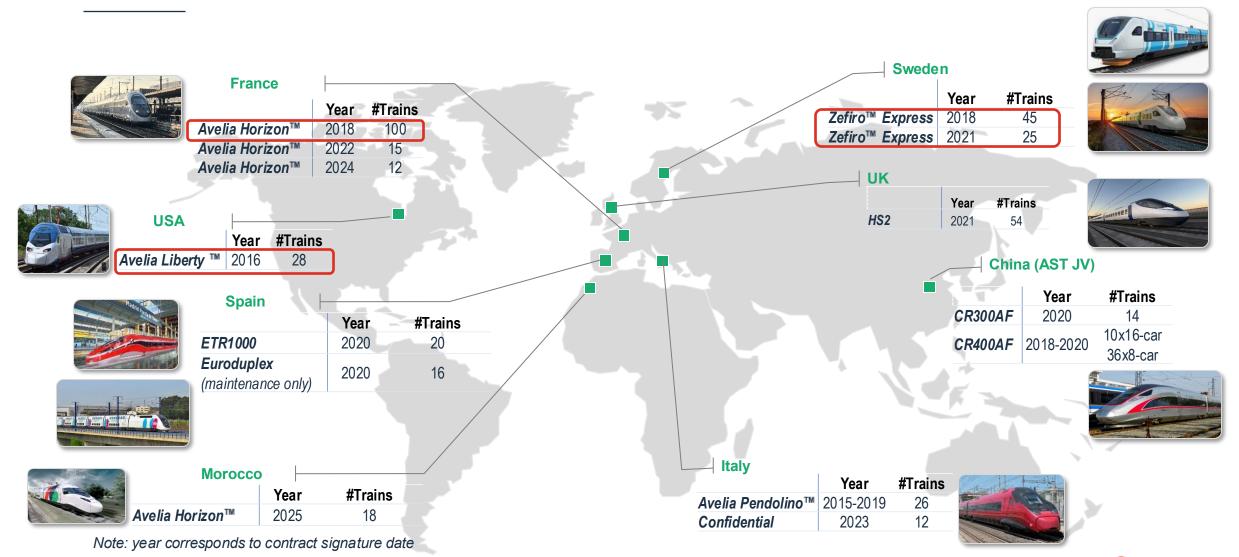
Over **2200 trains** with Alstom technology sold globally **in 26 countries.** 



Experienced in **bringing high-speed technology to new markets** e.g. U.S. Morocco, Korea



# 40 years of world-wide experience in High-speed Rail



# Avelia Liberty™ for Amtrak, USA

Vehicle data	
Type of vehicle	Concentrated power (power cars), tilting, single deck
Quantity	28 trains; 252 coaches + 56 PC
Configurations	9-car (upgradable to 12-car)
Power supply	25/12.5 kV 60Hz, 12 kV 25 Hz
Train length / system length	700'
Train control	P40, ACSES
Capacity	386 seats
Maximum service speed	186 mph
Propulsion	7 MW
Carbody	Aluminum carbody
Axle Load	17.7 t/axle (MNO)
Services	
Contract type	Rolling stock + TSSSA



#### Avelia Liberty<sup>™</sup> for Amtrak, USA

#### Combining the best of Avelia trains:

- Combined versatility & efficiency
- Reduced journey time thanks to tilting as Pendolino
   → 1<sup>st</sup> tilting articulated trainset up to 186 mph
- Compact traction as Avelia Horizon

#### Conceived to provide:

- Enhanced passenger experience : accessibility, connectivity, comfort, services...
- Increased capacity: compact traction & optimized interiors
- **Future proofing**: ready for speed upgrades, additional cars, passenger systems evolution...



# Avelia Liberty: Thought for future evolution



### Upgrade capacity with more vehicles

- Ready to add up to 3 passenger cars
- Limited modification
- Simple and economic cars (no traction)
- Comply with journey time

#### Upgrade speed to 220 mph

- Ready for very high-speed lines
- Compatible with NEC
- Upgrade with no major changes
- All with proven technologies



# **Avelia Liberty - Testing**





# Avelia Liberty - Interiors







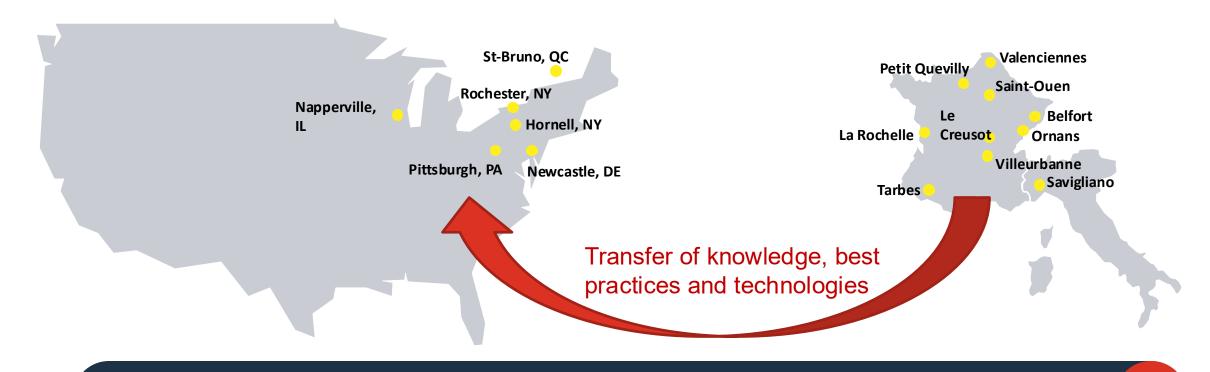






# Buy America has facilitated successful transfer of technology and manufacturing

18 sites in Europe and in the US are involved in the Avelia Liberty<sup>™</sup> development and manufacturing All with extensive high-speed train, technology transfer and/or maintenance experience



High-speed trainset technology has arrived in the U.S. from around the world

# Hornell, NY – North America's Largest Rolling Stock Manufacturing Facility

#### Unionized for over 40 years

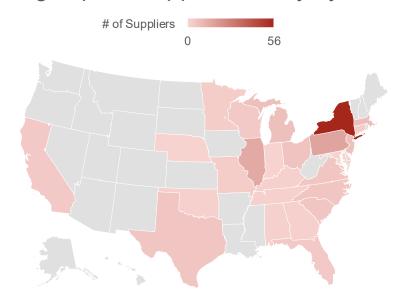






# 170 US Suppliers

High-speed supplier density by state





27 US States \$230

Million USD to Small & Disadvantaged Business Enterprises



https://www.gao.gov



# A Successful Made-in-America High Speed Rail Industry Requires:

- ✓ Transfer of technology from countries with long HS Rail experience
- Development of US knowledge and workforce
- Establishment of US supply chain

#### Plus

- Firm commitment to Buy America
- Viable pipeline of projects (+3 years)
- Continuity of production / planning to maintain supply availability and skilled workforce.



# **Texas High Speed**

- Move people more efficiently between major cities
- Density allows for successful project
- Technology exists here in America
- Supply chain is mobilized to contribute and create jobs in the US



