



UNITED RAIL

We bring the World of Rail Together

US Rail Market Experience Report

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Agenda

Introduction United Rail

US Rail Market introduction

Avoid common mistakes when entering the US market

How to enter the US market

Buy America

Q & A

INTRODUCTION UNITED RAIL

Company Profile

ABOUT US

- A privately held Florida Corporation inaugurated in 2012
 - Headquartered in Jacksonville, Florida, USA
- United Rail Canada Inc. in Toronto, Ontario to support the Canadian market
- Nominated and awarded as one of the '100 Fastest Growing Companies in Florida' for 2016 and 2017

United Rail's Portfolio

- Representation of international Rail and Transit technology providers
- Consulting and support in North American Rail market entry
- Own systems and products like the 'Sentinel Solutions™'
- Market entry consulting / support and 'Buy America' support for international partner companies

Our customers



Companies we represent:



US RAIL MARKET INTRODUCTION

US market: Track miles comparison

Total Track Kilometers:*

No 1: United States – 293,564km

- Total North America 371,496km (including Canada 77,932km)

No 2: China – 191,270km (51% of NA market)

No 3: Russia – 87,157km (23% of NA market)

D A CH combined: 54,919km (15% of NA market)

- Germany – 43,468km (12% of NA market / rank No 6 worldwide)
- Austria – 5,268km (2% of NA market / rank No 35 worldwide)
- Switzerland – 5,651km (2% of NA market / rank No 33 worldwide)

Commuter / Transit rail / US Total 54,944km: **

- Commuter – 18,664km
- Heavy Rail – 29,507km
- Light Rail – 4,305km
- Other – 2,468km

**Source: CIA World Fact Book*

***Source: Bureau of Transportation Statistics*

US Rail Market segmentation

Freight

- Class I Railroads (Union Pacific, BNSF, CSX, NS, CN, CP, KCS)
- Class II / Class III or regional / short lines (FEC, Alaska Railroad, G&W, etc.)

Transit

- Heavy Rail (NYCT, CTA, MBTA, WMATA, etc.)
- Commuter (LIRR, Metro North, NJ Transit, Caltrain, etc.)
- Light Rail (TriMet, Sandag, Metro Houston, Trams, trolleys etc.)
- High speed lines

AMTRAK

- North East Corridor (NEC)
- AMTRAK Michigan line (Chicago and surrounding cities)
- AMTRAK West
- Etc.

Freight and Passenger Rail are completely separated markets

- Freight: privately owned, very profitable, ROI focused
- Transit / Passenger: Government / State / City owned and subsidized, regulated spending (RFP, RFQ, Buy America, DBE), focused on liability
- Track sharing between Freight and Transit

US Rail market characteristic

Rather closed market:

- Due to geographical barriers most customer don't know and don't care about Rail technology outside of the US or North America
- Patriotic feelings are very strong (not invented here; where is it running in this country; manufactured here, etc.)
- Many customers are in the opinion the US is leading in Rail technology
- Customers with travel experience, international views, interest and understanding are rather the exception

Relationship oriented market (old boy's club)

- Network to insider is key to success
- Nearly impossible to be accepted as a non Railroader or foreigner

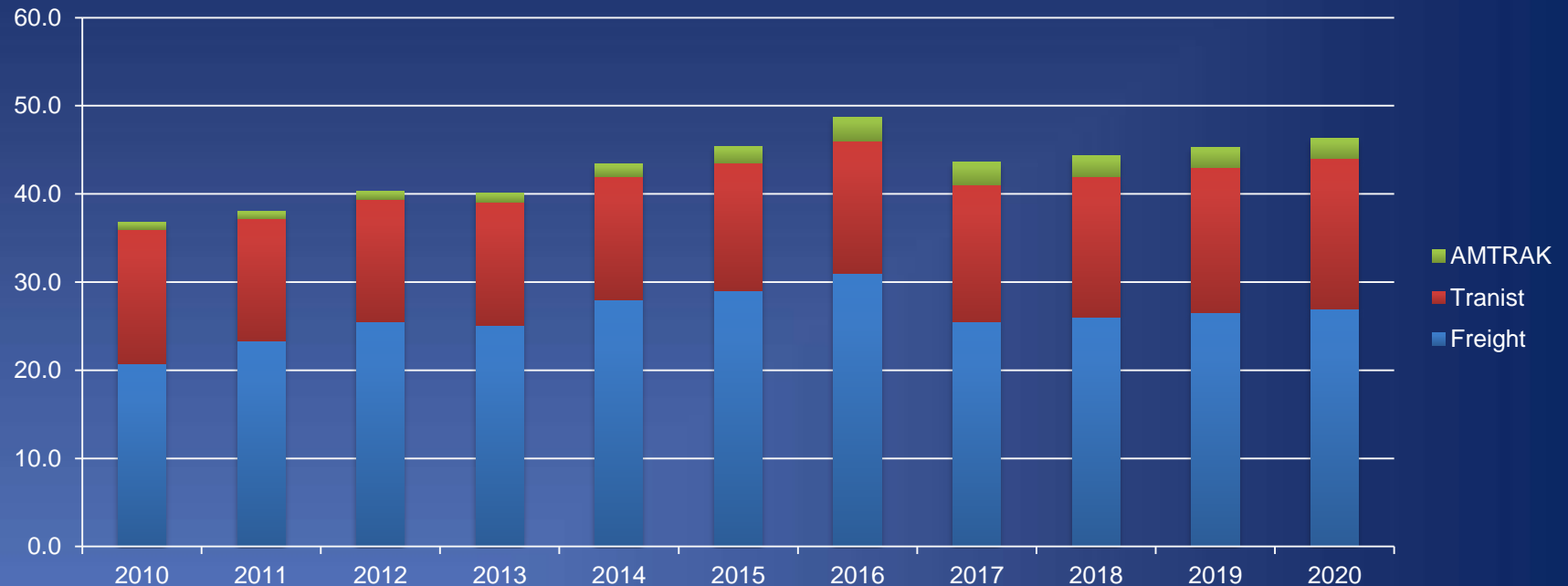
Very rugged and robust and rather antiquated technology

Completely different standards and acceptance criteria than Europe

- CENELEC, BAV, EBA, etc. vs. AREMA, FRA and IEEE

Different measurement system: Imperial vs. Metric

Overall CAPEX in the US Rail market



Year	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Freight	20.7	23.3	25.5	25.1	28.0	29.0	31.0	25.5	26.0	26.5	27.0
Transit	15.3	13.9	13.9	14.0	14.0	14.5	15.0	15.5	16.0	16.5	17.0
AMTRAK	0.8	0.8	0.9	1.0	1.4	1.9	2.7	2.6	2.3	2.3	2.3
Total	36.8	38.0	40.3	40.1	43.4	45.4	48.7	43.6	44.3	45.3	46.3

All numbers in Billion\$

Green numbers are United Rail estimates

Market trends / opportunities

Freight

- Most Class I's suffering under crisis (Oil, coal, commodities)
- Moderate growth over the next couple of years
- Increase safety with PTC (Positive Train Control)
- Increase efficiency / safe cost
- Consolidations of Freight operators

Transit / Passenger

- Huge growth potential:
 - Build new systems
 - Extend existing systems
 - Modernize technology like CBTC, refurbishment of vehicles, new fleet, etc.
 - Increase capacity and efficiency
 - Increase safety and reduce accidents
- Mixed traffic (Freight and Passenger, AAF)
- CENELEC SIL level recognized and required (NYCTA)
- High Speed

COMMON MISTAKES WHEN ENTERING THE US MARKET

Avoiding the most common mistakes when entering the U.S. Market

Independent research conducted by several institutions say the withdrawal (failure) rate when international companies try to enter on their own to the US market is estimated to be 50% to 65%

Identify wrong partner companies

- Lack of specific market and domain knowledge
- US vs. European communication style

Differences in cultural and business environment

Many European companies lack U.S. business intelligence

- Competitors, customer requirements, pricing, market trends, standards, etc.

Not willing to invest in US marketing

- Business development, exhibitions, advertising, sales force, etc.

Many European companies expect results way too quick (6 months)

Lack of understanding / fear of the US legal system

Most Europeans fail to understand the size and complexity of the market

- US is 27.5 x larger than Germany (comparing area)
- US is 245.7 x larger than Switzerland

HOW TO ENTER THE US RAIL MARKET

How to enter the US Rail market?

Local presence is a must

- Same time zone
- Communicate in American English
- Provide 1st and 2nd level customer support
- Customer access: must understand and be part of US Rail market 'Old boys club'

Price needs to be in line with existing technology

Stronger offering (technology, added value, ROI, etc.) than US offerings

Reliable Quality delivered on time

American Standards vs. European Standards

- PTC vs. ETCS
- IEEE vs. CENELEC
- FRA vs. EBA/BAV

BuyAmerica (60%, 65%, 70%) & BuyAmerican (100%)

Obsolescence Management

Understand and live the "US communication style"

- Polite and face saving communication style / reading between the lines vs. direct communication to the point
- Applicability assumptions (It works for ETCS so it works in US)
- Same Meeting / Different Meeting

How can United Rail help

Direct representation to customers

Customer access

Cultural business support

Knowledge and experience in US market

Interpretations of specifications

Buy America/Buy American support

Local support (technical and inventory)

Project Management, Engineering, Account Management, After Sales Support

Total transparency in representing partner company

BUY AMERICA

Buy America

- Buy America Act was introduced 1933 by President Hoover; FTA (Federal Transit Authority) adapted Buy America in 1982
- In FTA projects financed by the US federal government (tax money) complying with the 'Buy America Act' is a must and is not negotiable
- Buy America is asking for local manufacturing:
 - 65% local content in fiscal year 2018 – 2019
 - 70% local content in 2020 and after
- Final assembly has to occur in the USA
- Final testing has to occur in the USA
- Pre award audit / Post delivery audit will be performed (vehicles)
- General waivers exist e.g. Microprocessors waiver
- United Rail is experienced in providing Buy America concepts for its partner companies and is well connected with the local manufacturing industry

Buy America

United Rail is able to support:

- Identify and manage local manufacturing
- Provide final assembly and factory testing
- Host manufacturing specialist from our partner companies including support to obtain a proper US work visa
- Interface with Operators, Consultants and Integrators
- Legal support
- Logistics
- Warehousing
- After Sales technical and commercial support

We bring the World of Rail Together

Thank you for your attention!

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