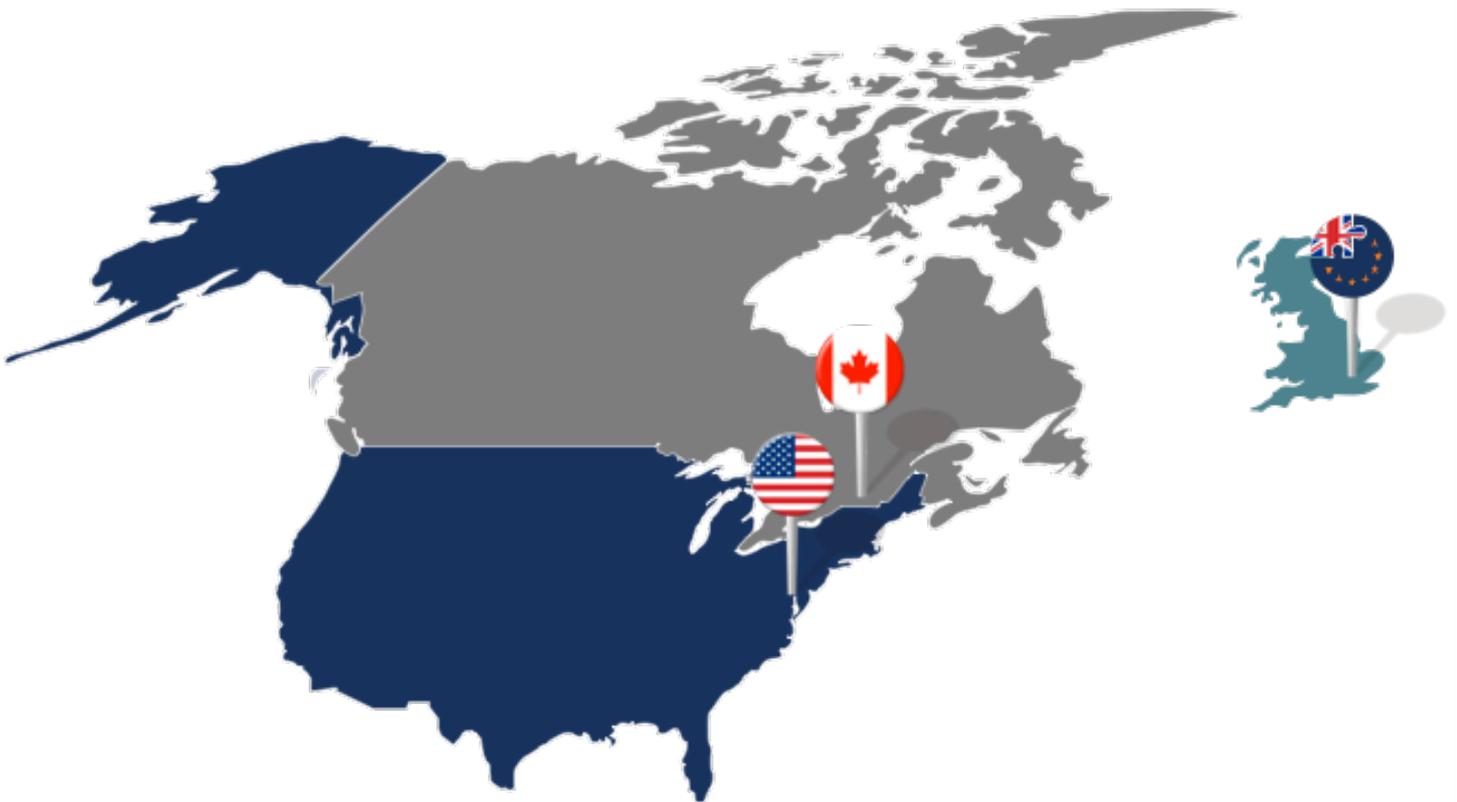


# ***Rail Delivery Group***



## **Rail Border Controls Post-Brexit** ***US and Canada Study Visit***

***28 August to 1 September 2017***







**Contents**

<b>1</b>	<b>BACKGROUND</b>	<b>1</b>
1.1	About Rail Delivery Group	1
1.2	Context	1
1.3	Key issues in international travel	1
<b>2</b>	<b>FINDINGS</b>	<b>2</b>
2.1	Framework for the relationship	2
2.2	Freight	3
2.3	Passenger	4
2.3.1	Cascades: Eugene via Portland and Seattle to Vancouver (two services a day each way)	4
2.3.2	Maple Leaf: New York City to Toronto (one service a day each way)	5
2.3.3	Adirondack: New York City via Albany (NY) to Montreal (one service a day each way)	6
<b>3</b>	<b>HOW CROSS BORDER TRAFFIC IS FACILITATED</b>	<b>7</b>
3.1	Certificates and licences	8
3.2	Staff	8
3.3	Border agencies	8
<b>4</b>	<b>CHALLENGES</b>	<b>9</b>
4.1	Solutions	10
<b>5</b>	<b>CONSIDERATIONS FOR GB RAIL</b>	<b>10</b>
<b>6</b>	<b>ANNEX I: RAIL OPERATIONS IN THE USA</b>	<b>11</b>
6.1	Overview	11
6.2	Passenger railroads	11
6.2.1	About Amtrak	12
6.2.1.1	Northeast Corridor Services	12
6.2.1.2	State-Supported Services	13
6.2.1.3	Long-Distance Services	13
6.2.1.4	Contract Commuter Services	13
<b>7</b>	<b>ANNEX II: RAIL OPERATIONS IN CANADA</b>	<b>15</b>
7.1	Overview	15
7.2	Freight	15
7.3	Passenger railways	15
7.3.1	Intercity	15
7.3.2	Commuter rail (urban and suburban)	16
7.4	About Via Rail	16
7.4.1	Governance:	16

## **1 Background**

### **1.1 About Rail Delivery Group**

Rail plays an ever more crucial role in Britain, with long-term growth in passengers and freight. The purpose of the Rail Delivery Group (RDG) is to enable Network Rail and passenger and freight operating companies to succeed by delivering better services for their customers. This ultimately benefits taxpayers and the economy.

Our work is focused on four transformational portfolios to: enable improvements in today's railway, transform customer experience, inform industry reform to enable excellence, and plan for tomorrow's railway. This activity is supported by communications and engagement with stakeholders, and improvements in how the RDG is organised and operates. While the RDG works for all its members, it also provides support and gives a voice to freight and passenger operators. We also work in close partnership with the rail supply chain.

### **1.2 Context**

On 23 June 2016, a referendum on the United Kingdom's (UK) membership of the European Union (EU) was held with a majority of voters in favour of the UK leaving the EU. On 19 March 2017, Prime Minister Theresa May officially triggered Article 50(2) of the Treaty on the European Union (TEU). In [the letter](#), the Prime Minister notified the European Council of the UK's intention to withdraw from the EU. In accordance with Article 50(2) TEU she also notified the European Council of the UK's intention to withdraw from the European Atomic Energy Community (EURATOM) and the Single Market. As the UK prepares to leave the European Union and the Customs Union, an agreement on the future relationship needs to be found.

In order to gain a better understanding of what leaving the Customs Union may entail for the railway industry in Great Britain and its cross-border rail services, RDG undertook a study visit, meeting with colleagues in the United States (US) and in Canada.

The following report outlines how cross-border rail traffic (freight and passenger) could be coordinated once a hard border is in existence, using the US and Canada as an example. We chose to look at the US and Canada in particular because the political relationship between those countries seems least impacted by geo-political tensions and is likely to resemble the relationship between France and the UK.

### **1.3 Key issues in international travel**

There is no globally unified regime to cover rail transport in the same way as for air and maritime transport. This complicates international rail operations, as there is a lack of consistency in the legal regimes for rail operations. The risk associated with multiple legal frameworks can discourage from the international use of railway services.

Domestic regulations for transport can also create difficulties for international operations. National operating rules, signalling systems and safety standards vary between countries, giving rise to compliance issues and requiring additional training of staff to ensure safe operations. Formalities not related to transport, such as visas for train crews and customs procedures, can also create unnecessary delay and costs.

In general, countries with international rail transport face common challenges, namely:

- Congestion and delays at border stations, particularly at stations with a change of gauge

- Excessive customs controls and often unreasonable and repetitive border checks, veterinary inspections, lengthy procedures for crossing borders
- Lack of harmonisation in the documents that are required by different countries, incorrect information written on the consignment note or absence of the consignment note and accompanying documents
- Inspections on both sides of border crossings
- Different technical standards for rolling stock, power supply, braking systems and signalling systems
- Lack of qualified staff to operate cross-border trains
- Weak infrastructure

The majority of technical, operational and administrative difficulties fall under the scope of responsibility of the railway authorities and can be resolved by improving and harmonising operational regulations and communication and the conclusion of bilateral or multilateral agreements between the railways concerned.

Resolving questions such as the simplification of excessive customs inspections and transit procedures, harmonisation of transport documents, opening hours of border offices and providing enough personnel are under the scope of responsibility of the states and should be dealt with at intergovernmental level.

## 2 Findings

### 2.1 Framework for the relationship

Canada's relations with the US are friendly and cooperative. Trade relations are managed under NAFTA, the North American Free Trade Agreement, which eliminates most obstacles to trade between the two countries.

#### About NAFTA

The US commenced bilateral trade negotiations with Canada more than 30 years ago, resulting in the US-Canada Free Trade Agreement (FTA), which entered into force on January 1, 1989. In 1991, bilateral talks began with Mexico, which Canada joined. NAFTA followed, entering into force on January 1, 1994, and superseding the US -Canada FTA.

Tariffs were eliminated progressively and all duties and quantitative restrictions, with the exception of those on a limited number of agricultural products traded with Canada.

NAFTA also includes chapters covering rules of origin, customs procedures, agriculture and sanitary and phytosanitary measures, government procurement, investment, trade in services, protection of intellectual property rights, and dispute settlement procedures.

In May 2017, an announcement was made indicating that President Trump wants to renegotiate the terms of NAFTA. At the time of writing, talks have not yet started.

In terms of rail services between the two countries, NAFTA has led to harmonised standards and there is a strong will on both sides to enforce this harmonisation even further in order to make operations run more smoothly. An Agreement on Land, Rail, Marine and Air Transport preclearance (LRMA) was therefore signed between the US and Canada in 2016 to expand pre-clearance facilities. This is currently being ratified at a national level.

With this new agreement, both countries intend to further strengthen their relationship and enhance their mutual prosperity. The goal is to expand pre-clearance facilities to the following sites: Billy Bishop Toronto City Airport, Québec City Jean Lesage International Airport, Montreal Central Station, and Rocky Mountaineer rail. CBP officers (US Customs and Border Protection) currently conduct preclearance operations at eight Canadian airports: Calgary, Edmonton, Halifax, Montreal, Ottawa, Toronto, Vancouver and Winnipeg. In addition, CBP officers conduct immigration pre-inspection at multiple marine ports in British Columbia and at Vancouver rail station.

## 2.2 Freight

CP (Canadian Pacific Railway) and CN (Canadian National Railway) have extensively increased cross-border volumes north and south in addition to east and west. Intermodal traffic is also on the increase, for two reasons: trucking and railroad companies are working cooperatively, and new truck bodies with roll-on, roll-off logistics capabilities eliminate the need for a crane.

CP operates 14,000 miles of track from Montreal to the Port of Vancouver and into major U.S. cities such as Chicago, New York, Philadelphia, and Minneapolis.

CN operates 17,500 route miles in Canada. The range of its network runs from Halifax to Vancouver and from Montreal to Chicago, New Orleans, Omaha, and Memphis. Its rails run into the ports of Halifax, Montreal, Vancouver, Prince Rupert, New Orleans, and Mobile, and interchange with major Class 1 U.S. railways.

The logistics' industry continues to ensure border crossings are as seamless as possible. Security is one major concern and several programmes have been designed to educate companies on how to secure border crossings. C-TPAT (Customs Trade Partnership against Terrorism) is one of several initiatives that bring supply chain participants together to secure the movement of goods across the border. Canada has instituted programmes that mirror US regulation such as C-TPAT.

Another initiative enabling smoother border crossings is the Mobile VACIS (Vehicle and Cargo Inspection System) unit. The truck-mounted gamma-ray imaging systems are set up at several Canadian border locations. These units inspect railcars entering the US and quickly and non-intrusively inspect the contents of trucks and trains.

### Case study: US to Mexico

Between the US and Mexico there are no passenger rail services. Freight rail services, however, regularly cross the border. There is a total of eight border crossing points for rail between Mexico and the US.

Unlike the relationship with Canada, which is friendly, the US-Mexico relationship is somewhat more complex. Despite Mexico being the third NAFTA member, goods circulating between the US and Mexico face more barriers than goods circulating between the US and Canada. Since NAFTA was implemented, trade with Mexico increased six-fold and Mexico has become one of the biggest trading partners of the US.

The most heavily used and most modern crossing is on the West Rail Bypass International Bridge connecting Brownsville, Texas, with the city of Matamoros, Mexico. The American side is equipped with X-ray systems that can scan arriving rail traffic whilst moving. There are also Border Patrol Agents and sniffer dogs for onsite inspections.

A freight train crossing from Mexico to the US will first be checked by Mexican customs controls officers. They will check whether the train is stocked just as declared in the form. If

they find inconsistencies, the operator is fined. The train then moves towards the middle of the bridge where it comes to a halt. All Mexican staff is required to leave the train and walk back to Mexico. Only once they have left the bridge is American staff allowed to walk onto the bridge. Staff will then pull the train across the rest of the bridge. On the US side, it will then be scanned, mainly looking for illegal immigrants and substances. Finally, any wagons of concern are pulled into a yard to allow staff to sort anything that may have raised concern.

There is a clear appetite on Amtrak's and the Federal Railroad Administration's side to facilitate cross-border rail freight even further along the border. An on-going dialogue is expected to lead to changes and modernisation which should speed up the process of crossing the border between Mexico and the US.

## 2.3 Passenger

Currently passenger rail border crossings between the US and Canada are limited. There are three passenger services crossing the border, all of them operated by Amtrak.

Despite there being a 'hard' border between Canada and the US, customs and immigration controls differ depending on what service it is. Checks are either undertaken at pre-inspection facilities, at border stations or on board of the train.

When making a reservation for services crossing the US-Canadian border, the passenger must provide certain information, including the date of birth, gender, country of citizenship, and detailed information regarding the form of ID that the passenger will carry on the trip. This information is entered into the passenger's reservation record and supplied to Customs and Immigration officers in advance to facilitate clearance.

Passengers should arrive at least one hour prior to departure for border crossing processing, but even with this time additional delays are possible. Such delays are usually due to US and/or Canadian customs and immigration procedures.

Travelling from Canada to the US tickets must be purchased before 8:30 am on the day of departure as a complete passenger list must be submitted to US Customs and Immigration at that time. Travellers whose names do not appear on this passenger list will not be permitted to enter the United States.

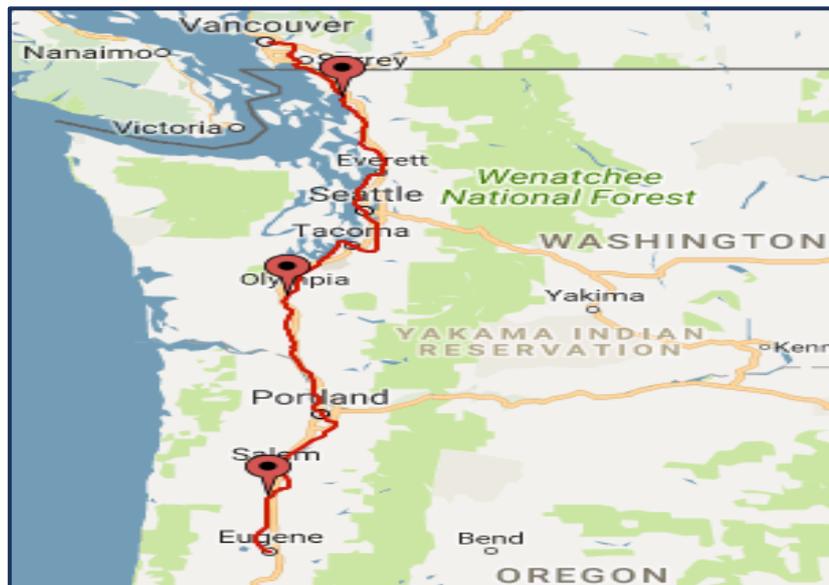
At the border, the train is inspected by Customs officers. Baggage, including hand baggage, is checked. In the event of problems at the border, the train may depart without you.

### 2.3.1 Cascades: Eugene via Portland and Seattle to Vancouver (two services a day each way)

The service from Vancouver to Eugene, Oregon, benefits from a pre-inspection facility in Vancouver station. Passengers boarding the train southbound to the US will pass US immigration in Vancouver. Whilst this means that passengers have to be at the check-in at least 60 minutes before departure, the dwell time at the actual border is significantly reduced to 20 minutes.



Vancouver does not benefit from a pre-clearance facility for customs. This means that customs control officers will still board the train at the border. Any persons of interest are flagged by the pre-inspection facility and customs control officers will focus on them.



Boarding the train northbound, i.e. from the US to Vancouver, passengers do not have to go through any clearance or inspection facilities. A sterile corridor exists between the US border and Vancouver which means that no one can get on the train between the border stop and the final destination. At Vancouver, passengers will clear Customs and Immigration at the facilities in the train station.

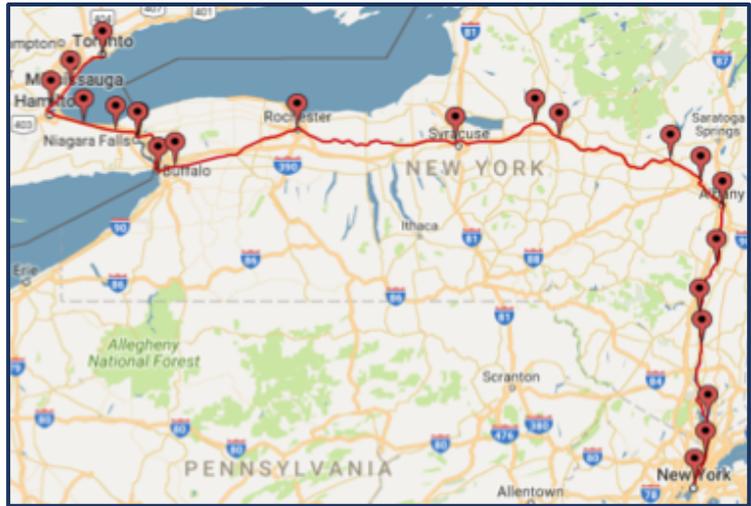
### 2.3.2 Maple Leaf: New York City to Toronto (one service a day each way)

The Maple Leaf service from New York City to Toronto comes with particularly troublesome customs and immigration inspections. There are no pre-clearance or inspection facilities anywhere before the border on either side. This means, clearance has to be undertaken at the border itself. In addition, there is no sterile corridor as the train, going northbound, becomes a VIA Rail service, with numerous stops between Niagara Falls and Toronto. These stops prevent this route having any pre-clearance facilities in Toronto, unless such a facility were to be built at every stop. The train crew, including the driver, also always changes at the border.



Going northbound, all passengers entering Canada have to get off the train at the border with their respective luggage for customs and immigration checks. Passengers have to get off the train and wait on an open platform with no cover. Whilst the train is empty, customs controls officers also sweep the train in search for illegal substances.

Southbound, passengers entering the US also have to get off the train at the border stop but on this side of the border, a station was built including facilities needed for customs and immigration procedures. Here as well, the train is swept by customs controls officers whilst passengers and their respective luggage are removed from the train.



2.3.3 Adirondack: New York City via Albany (NY) to Montreal (one service a day each way)

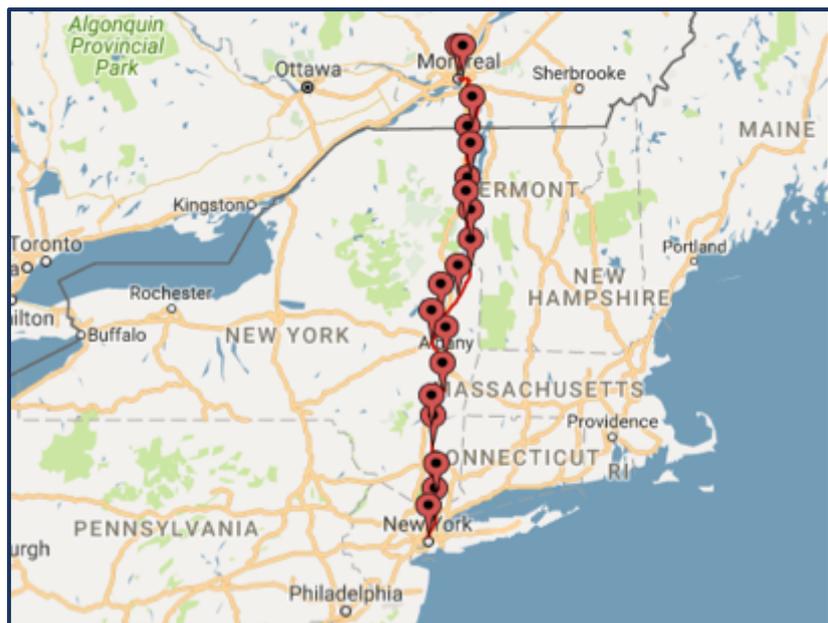
The Adirondack, a service linking New York City and Montreal, also does not have any pre-clearance or inspection facilities anywhere. In this case, however, checks are undertaken at the border, on board of the train.

The train will stop at the border – not at a station – where Customs Controls officers will board the train. All passengers are required to remain seated during the time it takes to check all passengers on board.

Amtrak schedule one hour for the checks which can last between 30 minutes to two hours with an average of 100 passengers per train making the journey to Canada.

The café car needs to shut and be cleared for questioning, should a passenger be taken into secondary questioning. Any person of interest can be removed from the train.

Once all passengers have been checked and all customs control officers have left the train, can it continue its journey to destination.



### Case study: RDG's experience of the Maple Leaf

RDG took the train from New York City to Montreal to experience the border-crossing procedures on the Adirondack service first hand. We had previously been told that customs officers took an average of 30 seconds per passenger to clear them, with an average of 100 passengers being on board. Depending on the season, there can be as few as 50 or as many as 150 passengers crossing the border. The train has a capacity of 260 passengers, with the majority of passengers, however, leaving the train before the Canadian border.



We were told that Amtrak schedule one-hour dwell time for customs and immigration checks at the border that can last any time between 30 minutes to two hours. Persons of interest are removed from the train but Amtrak is obliged to ensure their arrival at destination (unless entry has been denied). The train will therefore wait at the border until the passengers are through the checks, unless they are refused entry to Canada/US.

When we reached the border, Canadian customs and immigration officers came on board. We saw only two officers, previously having been told that a minimum of three would come on board. It is possible that a third or even a fourth officer was on board, checking the other carriages. We would not have been able to see this due to being obliged to remain seated. The timings suggested there were no other officers.

Customs officers, moved at a fast and efficient pace through the carriage. Checking each individual passenger took, however, an average of 1minute and 40 seconds per passengers. There were approximately 30 passengers in our carriage and two officers. They had finished checking everyone after approximately 50 minutes.

In our carriage, we counted at least six different nationalities (Canadian, American, British, Indian, Australian and French). Two passengers were later removed from our carriage for secondary inspection. These passengers did not return on board of the train and the train departed after a dwell time of 2 hours in total. We arrived in Montreal with slightly over 1 hour delay.

	Adirondack – average	Adirondack – 30.08.2017
<b>Passengers</b>	100 for time of year	75
<b>Dwell time</b>	60min scheduled	120min
<b>Customs officers</b>	3	2 (could have been more)
<b>Time spent per passenger</b>	30 seconds	100 seconds

### 3 How cross border traffic is facilitated

Despite there being a hard border between the US and Canada, both countries aim to facilitate cross-border travel by cooperating on a governmental and a business level. The US and Canada have both agreed to a “Smart Border Action Plan” to enhance the security of the shared border whilst facilitating the legitimate flow of people and goods. This includes cooperation on issues such as biometric identifiers, creating a single inspection system, coordinating visa policy, sharing advanced passenger information records or creating compatible databases, for example.

Speaking to Amtrak and ViaRail, we got the impression that where legislation did not provide for any support or limit businesses in finding alternative solutions, a cooperative relationship tends to lead to pragmatic solutions on a business level. Amtrak and Via Rail, as well as the respective regulatory bodies are in regular contact to ensure a smooth flow of goods and people across the border.

Below we explain how issues faced by the rail sector in Canada and the US are dealt with. These issues have been identified as challenges post-Brexit by the rail industry in Great Britain (GB).

### 3.1 Certificates and licences

International operations between the US and Canada have a reciprocal nature. This is primarily based on the fact that the Federal Railroad Administration (FRA, US) recognises Transport Canada as its 'sister' agency having similar qualification and certification requirements for locomotive engineers and other operating crew members. The FRA does not recognise any qualifications from any other country other than Canada.

In GB, it will remain to be seen whether the EU will continue to accept British licences and certificates as it currently does with the UK being a member state of the EU and vice-versa. Should licences and certificates no longer be recognised by the parties involved, it would create additional barriers and red tape for operators who would wish to continue to operate across borders and in the EU or GB.

### 3.2 Staff

In order to be allowed to operate in the US or Canada, the operating crew has to pass both US and Canadian operating rules. This means that staff will on average have to know four to five different operating rule books, considering that within the US, each state can have different operating rules. Staff will have to know the rules of the states on the route of the train.

Staff being employed by either a Canadian or an American company, operating a train into Canada or the US, will continue to be paid under the terms of their contract with their employer.

### 3.3 Border agencies

The US and Canada are signatories to a joint border and inspection programmes which strengthens their faith in each other's systems. The American and the Canadian border agencies both work very closely together, trying to develop the same standards and sharing as much information as possible.

To facilitate the work of the border agencies, an advanced passenger information service captures passenger information at the time of booking. This information is sent to border agencies 24 hours in advance. In the case of GB-EU cross-border passenger rail services, we would need an automated system, similar to what airlines use. We would need to negotiate with our counterparts in the EU what information should be collected, at what point in time it should be sent and shared with the other border agencies and in what format this should be done.



## 4 Challenges

Despite having a very cooperative and pragmatic approach to border crossings between the US and Canada, it becomes clear that having a hard border nonetheless adds challenges and hinders smooth operations of trains across the border.

Challenges our American and Canadian colleagues face include the uncertain dwell time at the border which could be any time between 30min to 2 hours. In the EU, such delays would significantly disrupt the domestic rail networks on both sides of the Channel. Avoiding a stop at the border should therefore be the preferred option. This could be achieved by introducing pre-clearance facilities. Both Amtrak and ViaRail identified pre-clearance facilities as the best option as it would significantly contribute to passenger satisfaction and more predictable timings. Not having pre-clearance facilities was identified as a major issue both by Amtrak and ViaRail.

However, expanding pre-clearance facilities comes with its challenges. It takes long negotiation procedures to get funding to build such expensive facilities. Even though the US and Canada have both signed an agreement to expand customs pre-clearance facilities in Montreal and Vancouver, it is still unclear where the funding would come from. In many cases, legislation regulating government grants and subsidies will prevent that money from being invested in infrastructure projects based in another country. In this case, it would therefore be up to the Canadian government to fund the new pre-clearance facilities in Montreal. The US, on the other hand, would pay for US border force agents to be based in Montreal to carry out immigration and customs checks at the station.

Introducing pre-clearance facilities also comes with the disadvantage of having to ensure a sterile corridor, i.e. between the point of boarding the train and crossing the border, no passenger should be allowed to board the train to prevent a stop at the border for further stops. In the case of the Adirondack and the Cascades trains, this would be possible. For the Maple Leaf service, however, this would not be possible as it is a Via Rail service between Toronto and Niagara Falls (CA) with numerous stops between Toronto and the border.

Another issue identified by our colleagues were the fact that Customs systems, despite agreements at governmental level, are not yet that integrated. The sharing of information, especially for on-board checks, is limited. When withdrawing from the EU, both negotiating parties should negotiate how information is shared in order to facilitate any cross-border movements and cooperation between border agencies in the future.



DÉPARTS		ARRIVÉES			
TRAIN	DÉSTINATION	BOARDING	DEPARTURE	TRACK	REMARKS
*** All aboard for the celebrations					
TRAIN	ARRIVING FROM	TIME	EXPECTED	TRACK	REMARKS
195*	NEW YORK	18:30	19:30	16	ARRIVED ON TIME
66	TORONTO	20:09	20:33	15	ON TIME
39	OTTAWA	20:32		14	ON TIME
29*	QUÉBEC	20:58		16	DELAYED
68	TORONTO	21:49	22:09	16	ON TIME
669	TORO	22:55		16	ON TIME

## 4.1 Solutions

Despite these challenges, both the Canadian and American government as well as the railway industry in both countries aim to improve cross-border services by looking for solutions.

Expanding pre-clearance facilities is a major step towards reducing uncertain dwell time at the border. The LRMA Agreement, passed by the US and currently in the second chamber of the Canadian Parliament, will ensure the expansion of pre-clearance facilities.

Aiming at standardising borders and allowing border agents to have better facilities for private conversations with passengers, having access to the information on the system, being able to identify passengers with their luggage and checking an empty train would contribute to a smoother border crossing.

## 5 Considerations for GB rail

**Advanced passenger information system** – use the system used by airlines. It will be key to negotiate what format the reports containing passenger information should be in and when these should be submitted. The key challenge for GB will be tickets bought less than 24 hours in advance. In the US and Canada, because of the length of the journey this tends to be relatively few.

**Pre-clearance facilities as the best option** – this will come with the added cost of building appropriate infrastructure and an added cost for governments to post customs officers abroad. For GB, a consideration will be where there is space to provide these facilities at already crowded stations and terminals. Furthermore and capital investment in these facilities will need to be funded.

**Build appropriate facilities for freight trains** – X-Ray and Scanners that allow freight train to go through the border without stopping would be key and prevent delays to a certain extent. Customs forms could be sent electronically to allow freight transport to be cleared before it reaches the border. Nonetheless, should checks lead to concerns, a solution will need to be found as to where the train could be checked without causing disruption on the network. It should be noted that VACIS machines can scan a moving train but only at a top speed of five to seven miles per hour.

**Relationship with partners** – it will be key to build a strong relationship with partners across the borders to facilitate discussion and finding of pragmatic solutions in case of challenges. This includes the relationship between railway operators, infrastructure managers and regulatory bodies as well as relevant government departments. GB rail already has excellent relationships with regulators and operators on both sides of the Channel.

## 6 Annex I: Rail operations in the USA

### 6.1 Overview

As a result of the nation's reliance on cars and increasing popularity of airplane travel that led to the declining use of passenger trains, Congress passed the Rail Passenger Service Act of 1970. This legislation established the National Railroad Passenger Corporation (AMTRAK) to take over intercity passenger rail service that had been operated by private railroads. Amtrak began service in May 1971 serving 43 states with a total of 21 routes.

#### Largest rail operators:

- Amtrak (passenger)
- Union Pacific Railroad (largest freight railroad)
- BNSF Railway – Freight (second largest freight railroad network in North America)
- CSX Transportation (owns 21, 000 route miles – freight)
- Kansas City Southern Railway (freight)
- Norfolk Southern Railway (freight)
- Canadian National and Canadian Pacific both own track in the US, but are principally concentrated in Canada.

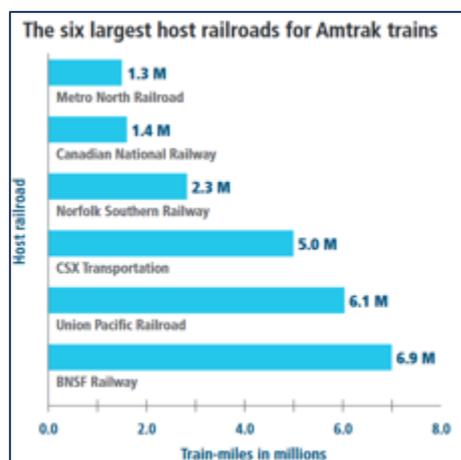
### 6.2 Passenger railroads

The sole intercity passenger railroad in the US is Amtrak. Commuter rail systems exist in metropolitan areas but are not extensively interconnected:

- privately run new inter-city passenger rail operations are under development. “Brightline” is a higher-speed rail train, run by All Aboard Florida, is scheduled to begin service in 2017 between Miami and Orlando.
- Iowa Pacific is seeking to operate “Eastern Flyer”, a passenger train between Oklahoma City and Tulsa. This would be the first passenger trains to serve Tulsa since 1967.

Amtrak only owns 730 route miles (most importantly the northeast corridor from Washington D.C. to Boston) but runs trains via lease arrangements over a further 20,000 miles of track operated by freight companies. Passenger trains get second priority.

Commuter rail generally serve just one city. These systems are also generally publicly held or government run.



### 6.2.1 About Amtrak

Amtrak is the only US high-speed intercity passenger rail provider, operating at speeds up to 150 mph (241 km/h).

**CEO:** Charles W. “Wick” Morrman IV since 2016

**Customers:** 31.3 million in 2016

**Destinations:** 85,700 passengers on more than 300 trains

**Route length:** more than 500 destinations in 46 states, the District of Columbia and three Canadian provinces

**Infrastructure:** 21,300 miles

**Employees:** 18 tunnels and 1,414 bridges

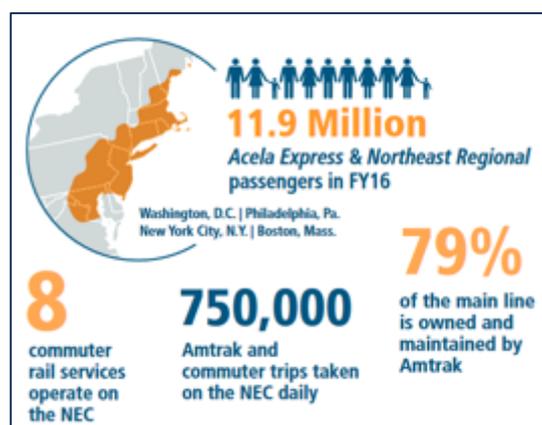
**Ownership:** 20,000

**Railroads:** Amtrak is a federally chartered corporation, with the federal government as majority shareholder. The board is appointed by the President of the United States and confirmed by the US Senate. Amtrak is operated as a for-profit company, rather than a public authority.

**Network:** Amtrak owns 730 route miles. 72% of the miles travelled by Amtrak trains are on tracks owned by other railroads. Known as “host railroads”, the range from large, publicly traded companies, to state and local government agencies and small businesses. Amtrak pays these host railroads for use of their track and other resources needed to operate Amtrak trains, with incentives for on-time performance.

#### 6.2.1.1 Northeast Corridor Services

Amtrak’s Northeast Corridor (NEC) is the busiest railroad in North America, with approximately 2,200 Amtrak, commuter and freight trains operating over some portion of the Washington-Boston route each day.



Amtrak owns and operates 363 miles of the 457-mile NEC spine connecting Washington D.C., Philadelphia, New York and Boston. Two sections of the NEC are owned by:

- The New York Metropolitan Transportation Authority (10 miles)
- Connecticut Department of Transportation (46 miles)

- The State of Massachusetts (38 miles)

### 6.2.1.2 State-Supported Services

Amtrak receives funding from 18 states through 21 agencies for financial support of 29 short-distance routes (less than 750 miles).

Continued operation of these state-supported routes is subject to annual operating agreements and state legislative appropriations.

### 6.2.1.3 Long-Distance Services

Amtrak operates 15 long-distance trains whose routes range in length from 780 to 2,428 miles.

### 6.2.1.4 Contract Commuter Services

Amtrak is one of the largest operators of contract commuter services in North America. Amtrak provides either services and/or access for 13 commuter agencies.

Amtrak operates commuter services for the following state and regional authorities:

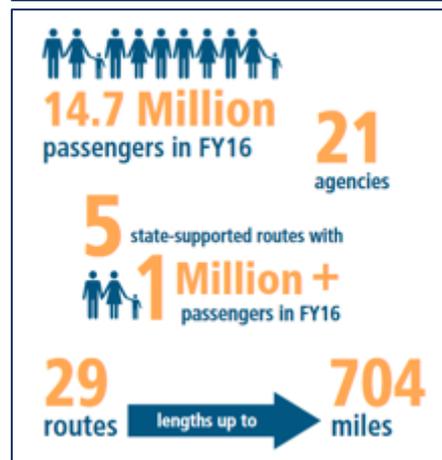
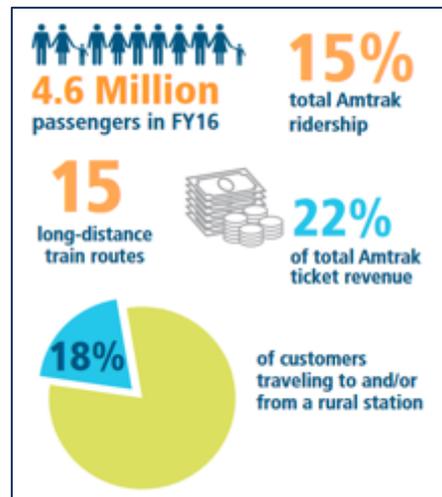
- Maryland Area Regional Commuter
- Shore Line East (Connecticut)
- Metrolink (California)

Amtrak provides services of various types for three other agencies:

- Massachusetts Bay Transportation Authority: Maintenance of way and dispatching
- Sound Transit (Seattle): Maintenance of equipment
- South Florida Regional Transportation Authority (Tri-Rail): Dispatching

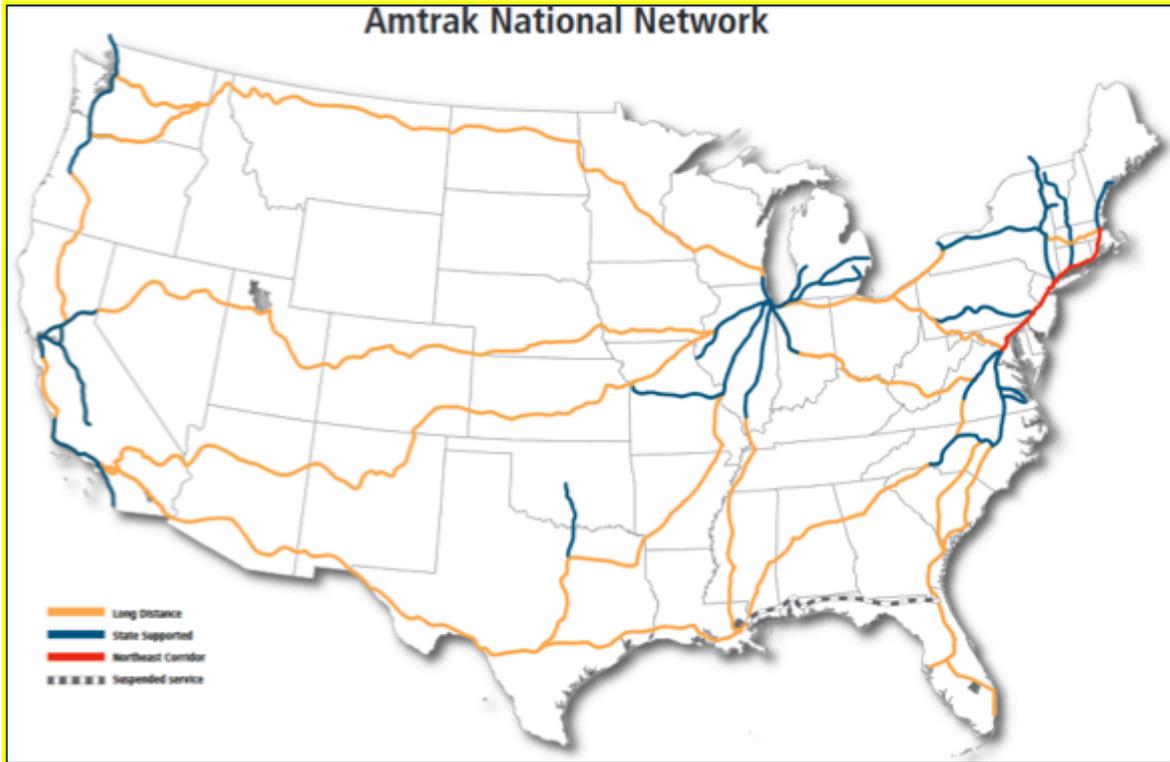
Amtrak provides access (and in some cases, other services) for seven other agencies:

- Long Island Rail Road
- New Jersey Transit
- Southeastern Pennsylvania Transportation Authority
- Delaware Department for Transportation
- Rhode Island Department for Transportation (DELDOT and RIDOT)
- Virginia Railway Express
- Metra (Chicago area)



Rhode Island, Connecticut, Delaware, Maryland, New Jersey, New York, Pennsylvania and Virginia make payments to Amtrak through transit agencies or state transportation departments for use of Amtrak-owned NEC facilities by commuter trains. These agencies or states also provide other funding for the NEC, including capital funds for infrastructure and/or stations. Amtrak has agreements for access and/or maintenance where Amtrak trains operate over locally-owned portions of the NEX in Connecticut, Massachusetts and New York.

# Amtrak National Network



## **7 Annex II: Rail operations in Canada**

### **7.1 Overview**

The Canadian Rail System currently has 45,199 route-kilometres of track. Canada National (CN – freight) owns 49.1%, Canadian Pacific (CP – freight) owns 25.6% and other railways own the remaining 25.3%.

The rail system also includes:

- 19 intermodal terminals operated by either CN or CP
- 27 rail border crossings with the US

The North American rail industry is highly integrated. Companies operating on integrated rail networks build track to a standard gauge, and tracks are maintained to similar standards. Loaded rail cars are usually pulled by locomotives owned and operated by the track owner, but North American integration allows railways to interchange or hand off cars and locomotives that meet industry standards to other railways to complete a journey.

### **7.2 Freight**

Close to 70% of all intercity freight and half of Canada's exports are moved by rail. There are two major publicly traded transcontinental freight railway system: Canadian National (CN) and Canadian Pacific (CPR). Of total Canadian rail transport industry revenues, CN accounts for over 50% and CPR for approximately 35%. Together, CN and CPR represent more than 95% of Canada's annual rail tonne-kilometres, more than 75% of the industry's tracks, and three-quarters of overall tonnage carried by the rail sector.

- CN crosses Canada from the Atlantic Ocean to the Pacific Ocean and follows the Mississippi River to the Gulf of Mexico, linking customers in Canada, the U.S. and Mexico.
- CPR operates 22,500 route-kilometres in six provinces and 13 States, generates almost \$4 billion in annual revenues in Canada.

### **7.3 Passenger railways**

Passenger railways include intercity rail operators, urban rail transit railways and heritage railways.

#### **7.3.1 Intercity**

In 2009, intercity passenger rail traffic totalled 4.5 million passengers and approximately 1.4 billion passenger-kilometres. VIA Rail, a Crown corporation, is Canada's dominant intercity rail passenger services operator.

Remote communities benefit from subsidized intercity passenger rail services provided by carriers such as Tshiuetin Rail Transportation Inc. between Sept-Îles and Schefferville, while cross-border passenger rail service connections are made possible in Vancouver through Amtrak's Cascades service, in Niagara Falls through Amtrak's Empire service, and in Montreal through Amtrak's Adirondack service.

### 7.3.2 Commuter rail (urban and suburban)

Commuter rail provides service between outlying municipalities and a downtown rail station, typically focused on capturing work trips. Commuter rail in Canada's larger cities is operated by provincially created transport agencies (for example, AMT in Montreal).

## 7.4 About Via Rail

As Canada's national passenger railway, VIA Rail provides intercity rail services across the country.

VIA serves more than 400 communities from coast to coast, and operates close to 490 trains every week on a 12,500 km network. Intercity services now carry more than four million passengers a year.

In the 1960's, CP and CN operated freight as well as passenger services but wanted to drop the latter. Since government considered passenger trains an essential service, it agreed that same year to cover 80% of the losses the two companies incurred with their passenger services. This funding, however, did not lead CP and CN Rail to invest more in passenger trains. Service continued to deteriorate and ridership shrank.

In 1977, the federal government led by Prime Minister Pierre Elliott Trudeau took an unprecedented step in Canada. Inspired by the 1971 creation of Amtrak in the United States, it created VIA Rail Canada on the grounds that a Crown corporation with an exclusive mission to organize and provide all intercity passenger train services in Canada could really reduce costs and improve service.

Via Rail owns 2% of the rail network on which it operates. 98% of the infrastructure used by the passenger rail service is owned and managed by partners, primarily CN and CP.

### 7.4.1 Governance:

An independent Board of Directors governs VIA Rail Canada. Board members are appointed by the Governor-in-Council following recommendation by the Minister of Transport

