

The JITI Journal

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Welcome

The JITI Journal is a bimonthly publication of the Japan International Transport Institute, USA (JITI), in which JITI shares information on transportation developments in Japan and elsewhere, as well as recent JITI programs. As a supplement to our regular events, we hope that the Journal likewise serves as a resource for the transportation community.

In this issue, JITI staff member Yoshitaka Araki presents an article on urban rail transit in Japan, both in anticipation of the 2020 Olympic Games and in terms of accessibility for passengers. Additionally, JITI staff member Ryoki Toku writes a short article on the Kintai-kyo-bridge, located in Yamaguchi Prefecture.

This issue concludes with JITI Senior Representative, Taro Kobayashi gives a summary of JITI's presentation at an aviation seminar in Tokyo co-hosted by the Aviation Policy Research Board and the Japan Transport Research Institute.

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JITI Events

UPCOMING:

On January 27th, 2017 JITI will hold an aviation workshop entitled "[Carbon Offsetting and Reduction Scheme for International Aviation](#)" at the Hay Adams hotel. More information, and a link to register, can be found [here](#).

PAST:

[JITI 2016 Aviation Tourism Seminar: Maximizing the Benefit of the New Haneda Daytime Services](#)

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Upcoming Events

[JITI 2017 Aviation Workshop: Carbon Offsetting and Reduction Scheme for International Aviation](#)

Please [click here](#) to register for the workshop.

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On October 27th, JITI hosted a seminar at the St. Regis Hotel in which experts and representatives from Japanese and US airline companies who will start Haneda daytime services, Japanese and US tourism agencies who play major roles in business and tourism exchange between the countries, tourism consultants and researchers, as well as academic experts who are familiar with both aviation and the tourism industry were invited to a discussion of the new Haneda daytime services. The speakers discussed a wide range of issues and ideas, as well as participating in a panel and Q&A session with the audience. [Click here](#) for an overview, presentation materials, and bios of the keynote speakers.

Urban Rail Transit in Japan

by Yoshitaka Araki

◆Improving Railway Facilities in Japan◆

In Tokyo, the venue for the 2020 Olympic and Paralympic Games, there are many initiatives in progress to make the railway systems more accessible.

Of course, these initiatives are not just for the Olympics, but also for the increasing number of foreign travelers to Japan. Improving the accessibility of the railways will help to increase and encourage tourism.

In this article, I will introduce a few initiatives, including:

1. Platform Doors
2. Shibuya Station
3. New Stations
4. Ease of Use for Foreign Travelers

◆Increase of Stations with Platform Doors◆

In Japan, installation of platform doors on new railway lines is required by law. On existing lines, there is a need for doors at stations with many passengers.

There are several types of platform doors; full doors, which reach the ceiling; half-height edge doors, which are chest height; and rope or bar based platform barriers.

Half-height doors are relatively easy to install, in terms of cost and time, so they are often used for existing railway lines.

However, there are some issues with half-height doors that need to be taken into account:

1. The base of platform facilities need to be reinforced, so that they can carry the weight of doors, and expanded if they are too narrow.
2. Trains must stop exactly at certain positions, so the operating system must be precise.
3. Unique to Japan, there are some lines operated by different companies that use the same tracks. Companies need to adjust the positions of their train doors and the edge gate on platform to match.

Doors are very effective from a safety standpoint to prevent things such as passengers falling onto the tracks and, especially during rush hour,

objects from falling onto the tracks which would prevent the trains from running smoothly.



Full doors on Nanboku Line (Source Tokyo Metro)



Platform Doors on Ginza Line (Source Tokyo Metro)

◆Development of Shibuya Station◆

Shibuya has been the fashion center of Japan, particularly for young people, since the 1970s. Recently it has become an integrated area of business and entertainment.

Shibuya Station is the gate of this downtown area, and an important terminal with 8 railway lines and many buses. However, it has become complicated and inconvenient for passengers, after the renovation of the station and neighboring area. The renovation was necessary, from the perspective of quake-resistance, as the station was too old to comply with standards.

Tokyu Corp. and the Urban Renaissance Agency (UR) are leading the renovation projects, with cooperation from East Japan Railway Company (JR East) and Tokyo Metro. The project consists of: rearranging railway stations and bus terminals, constructing complex office and commercial buildings, and free pathways to connect the area.

Relocation and Improvements for the Station:

1. Saikyo Line Platform, JR East

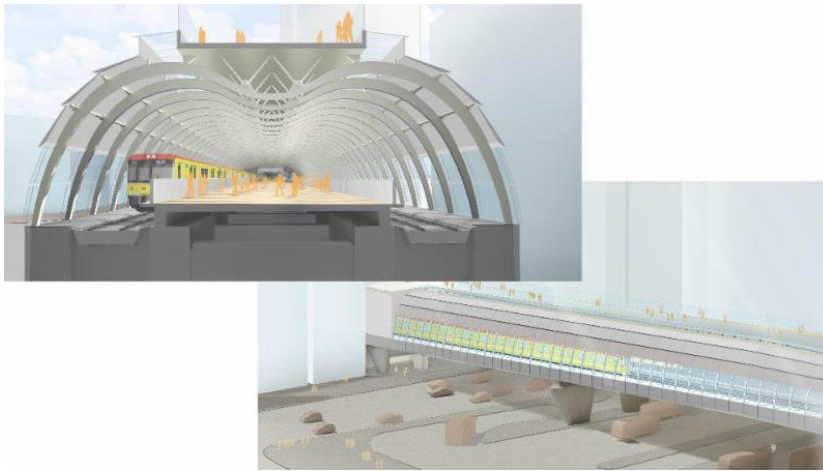
The Saikyo Line runs between sub-centers of Tokyo (Ikebukuro, Shinjuku and Shibuya) and Saitama. The trains continue on the Rinkai Line, which goes to the Tokyo waterfront area. This platform is also used by the Shonan-Shinjuku Line.

However, this platform is far from the others and inconvenient for transfers and area access. JR East will align the platform with others, and passengers will be able to use it by the spring of 2020.

2. *Ginza Line Platform, Tokyo Metro*

Ginza Line runs from Asakusa, via Ueno, Nihonbashi, and Ginza, to Shibuya. Although it's a subway line, the platform is on the 3rd floor of a department store. The department store building is more than 80 years old, so it will be renovated.

In addition to this reconstruction, the present platform is narrow and a little bit inconvenient. Tokyo metro will move the platform and change it structurally to an island platform. These works are large scale, containing rebuilding of tracks, so operations will be stopped on two weekends (Nov. 5&6 and 19&20). There will be such three operation halts by 2019, when passengers will be able to use the new platform.



New Shibuya Station (Ginza Line) (Source Tokyo Metro)

◆New Infill Stations◆

In the Tokyo metropolitan area, two new stations will be created on existing lines. Passengers will be able to use these stations by the games in 2020, but the work will be completed after that.

1. *Shinagawa New Station (tentative), Yamanote Line and Keihin-Tohoku Line*

There is a JR East rail yard between Shinagawa station and Tamachi station. As a part of a revitalization and business district expansion project, a new station will be created between the two stations.

The Shinagawa and Tamachi area already have many office buildings and the project will use these two areas to create efficiency.

Shinagawa Development Project



Shinagawa New Station (tentative) (Source East Japan Railway Company)

2. Toranomom New Station (tentative), Hibiya Line

Although there is only about a mile distance between Kasumigaseki and Kamiyacho stations, there are plans to build another station between them.

In this area, a loop road is being built and the Toranomom Hills skyscraper was just built. It takes time to get to the skyscraper by foot, from the existing stations, so passengers will be able to directly access it via this new station and also be able to transfer to the Ginza line.

In addition, a rapid bus transit terminal will be built to connect the area to the Tokyo Waterfront, where many events will be held during the games.



Toranomom New Station (tentative) (Source Tokyo Metro)

◆For Passengers◆

With the Tokyo Metro 24-hour Ticket, passengers can take trains for 24 hours from first use. It is reasonably priced, and 48 and 72-hours tickets can also be purchased.

For foreign passengers, language is a very important issue. Smartphone apps by each railway company can respond in various languages, and some apps by different railway company can work with each other, so that passengers will be able to transfer lines smoothly.

The guidance in stations is also increasing. Most signs are written in multiple languages, and passengers can search routes by themselves, using touch screen tablets fixed in the station.

Service Managers can assist passengers and Pepper, which is a robot, can also guide passengers, at Ueno Station, where it has special coloring in honor of the zoo.



Pepper with Special Coloring (Source Masahiro Komatsu)

In addition, staff can announce in multiple languages with bullhorns that have a multi translating function.

There are many attractive spots in the Tokyo metropolitan area. As the station utilities improve, travelers will be able to move with ease and discover new attractions in Tokyo.

The Kintaikyo Bridge

by Ryoki Toku

Do you know the three most famous bridges in Japan?

The three most famous are the Nihonbashi-bridge in Tokyo, the Meganebashi-bridge in Nagasaki, and the Kintaikyo-bridge in Yamaguchi.

The Kintaikyo-bridge crosses over the Nishiki-river in Yamaguchi prefecture, which is in west Japan. Historically speaking, this area is known as a castle town since it contains Iwakuni Castle.



(Kintai-kyo-bridge)

The Kintai-kyo-bridge consists of 5 consecutive small bridges.

The three center bridges are arch-shaped and don't have any pillars as part of the design.

It is a really beautiful and unique wooden bridge, and has been designated as a place of scenic beauty by the Japanese government.

The area around the bridge is famous for the traditional castle town, with several historical structures. The bridge completely blends in with the scenery of the town.

The Kintai-kyo-bridge is built very elaborately; when you see the bridge in person you can really feel the wisdom and effort of the people of the past in creating it.

If you have a chance while traveling in Japan, why don't you set your next destination to the Kintai-kyo-bridge, one of the most famous bridges in the country?



(Kintai-kyo-bridge with Cherry blossoms)

Aviation Seminar "The US Aviation Industry - The Current Market Trend and the Rise of Ancillary Revenue"

by Taro Kobayashi

On November 16th, 2016, the Aviation Policy Research Board and the Japan Transport Research Institute co-hosted a seminar on the US aviation industry at Koku-Kaikan, in Tokyo, Japan. On behalf of the Japan International Transport Institute, USA (JITI), Taro Kobayashi, the Senior

Representative of JITI, presented on current market trends and the rise of ancillary revenue in the US Aviation Industry. The presentation included historic trends as well as current issues and expected outcomes; followed by a panel discussion and Q&A session with three experts from various areas of the industry. A summary of the presentation is as follows.

(The Current Market Trend)

The US aviation industry, as a whole, has maintained a favorable condition with growing demand since 2010. US airlines carried 7.9% more passengers in 2015 than in 2014, and their average load factor (LF) exceeded 80% in 2015.

One of the most notable events in the US aviation industry in 2015 was the fall of crude oil prices, which are a major input cost for airlines. Because of cheaper fuel prices, airfares were lowered significantly, and airlines removed fuel surcharges from international airfare. As a result, many airlines saw a decline not only in their total cost, but also their total revenue. However, the decrease in costs greatly exceeded the decrease in revenue, so the operating profits of airlines almost doubled from the previous year, both with network carriers and low cost carriers (LCC).

In addition, airline yield (defined as the average fare paid by a passenger per kilometer) was reduced in 2015, along with the reduction in airfare.

Personnel expenses continued to increase with both network carriers and LCCs; LCCs have exceeded network carriers regarding personnel expenses per capita in recent years. Furthermore, the revenue of network carrier is heavily dependent on outsourcing revenue from their partner regional carriers.

(The Rise of Ancillary Revenue in the US Aviation Industry)

In the latter half of the 2000s, so-called Ultra Low Cost Carriers (ULCC) emerged in the US aviation industry, with a focus on ancillary revenue (defined as revenue beyond the direct sale of tickets to passengers). Network carriers and LCCs also increased optional services, creating ancillary revenue.

In the 2010s, the entire US aviation industry widely accepted ancillary revenue as one of the biggest revenue sources for the industry. The following is a summary of the rise of ancillary revenue as a source of revenue for the industry.

US airlines have increased their ancillary revenue from roughly 5% of operating revenue in the 1990s, to almost 20% in recent years. While ULCCs Allegiant Air and Spirit Airlines increased their ancillary revenue dramatically from 13% in 2006 to 43% in 2015, network carriers also increased their ancillary revenue by up to more than 10%. Ancillary revenue has been widely recognized as a portion of airline operating revenue over the past decade in the US aviation industry.

Some background as to why ancillary revenue has increased in recent years follows:

1. After emerging ULCCs entered the market with cheaper airfare, caused by unbundling certain services which were traditionally included in airfare, network carriers and existing LCCs had to follow this strategy to compete.
2. After the 9/11 terror attacks, the US aviation industry struggled with seven years of aggregate net losses because of the decreasing number of passengers as well as the declining airfares. During that time, airlines positioned ancillary revenue as a new revenue source in place of airfare, and tried to increase "a la carte" services, as well as create new services.
3. Since ancillary revenue is not subject to the 7.5% excise tax, unbundling reduces taxable income for airlines.

The current ancillary services by US airlines can be classified into the

following 4 categories:

1. Unbundling Services: a service which is unbundled from the airfare and charged separately; including food, beverage, and baggage.
2. Premier Services: a type of service which used to be provided only in first/business class seats, but is now provided in economy class seats with extra charges. Including premier check-in and boarding, as well as more spacious and comfortable seats
3. IT Services: a type of service which introduce new technology, including in-flight Wi-Fi, and entertainment.
4. Frequent Flyer Program (FFP) Services: a type of service which is intended to enhance customer loyalty to a certain airline, and to generate higher footfalls in flights of the airline[Sf1] . FFP has become a big revenue source for airlines, as they are a major cash generator through the sale of miles to banks, credit cards, and other program partners.

While ULCCs are mostly dependent on unbundling services to increase ancillary revenue, network carriers and LCCs are dependent highly on FFP services.

As ancillary revenue is expected to be an important revenue source for the US aviation industry in the future, airlines will push forward with the following strategies:

1. ULCCs pursue unbundling services to reduce their airfare, and to gain passengers who prioritize cheap airfares
2. Network carriers and LCCs pursue unbundling services to compete with ULCCs, while also focusing on premier services to gain economy class passengers who will pay extra fees for higher services.
3. Network carriers give more favorable treatment FFP services to first/business class passengers to secure them, while LCCs strengthen their premier services to attract passengers who would otherwise have used network carriers' first/business class.

While Ancillary Revenues become a more important source of revenue in the US Aviation Industry, airlines should address the following challenges:

1. It has become more difficult for passengers to understand what services are included in their airfare, and which are not, when they buy tickets online. This is because ancillary services have been so widely diversified and airlines do not always have accurate information on the internet. Airlines must disclose accurate information about their services via the internet, from the perspective of consumer protection.
2. As some ULCCs have received complaints about their services, including delays and baggage troubles, airline should try to maintain the minimum service level, even with cheaper airfare, to meet customer expectations for air travel.
3. Since some ancillary service have increased costs for airlines, airlines should pursue high-value added services, by utilizing new technology to increase their operating profits.

Regarding Japanese airlines, the two major airlines, JAL and ANA, have focused on their revenue from airfare, instead of ancillary revenue[Sf4] , as passengers in Japan tend to expect basic services to be included in airfare. Because these two airlines have dominated the Japanese airline market for a long time, they did not have to unbundle their services to reduce airfares. The ratio of ancillary revenue in total operating revenue in the Japanese airline market has been very low compared to other countries.

On the other hand, some LCCs, such as Peach, Vanilla, and Jetstar Japan, have emerged in the Japanese airline market over the past decade. They have increased their market shares and profits by following the U.S.

ULCC's strategies on ancillary revenue. Because their services and airfares are attractive for passengers who want to travel long distances in Japan, they have customers who would have not only used major carriers, but also those who would have used railways and buses. Currently, ancillary revenue of Japanese LCCs is still less than 20% of their operating revenue, but they are aiming to reach more than 25%, as most of the US ULCCs already have.

Although market conditions are different between Japan and the US, Japanese LCCs can still learn some ideas about ancillary services from the US ULCCs, and even Japanese major carriers can think about taking some ancillary revenue strategies from US airlines. Selling FFP mileage and providing premier seats for economy class passengers might be a part of these applicable strategies.

Finally, the rise of ancillary revenue should be a trend not only in the US, but also in the worldwide aviation industry. We should continue to keep eye on this issue and expand our scope to Europe and Asia in the future.

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Thank you for reading the JITI Journal. Until the next issue, whatever your mode, travel safely!

The JITI Team