



NATIONAL CAPITAL REGION

TRANSPORTATION PLANNING BOARD

Meeting Summary

TPB FREIGHT SUBCOMMITTEE – FREIGHT TECHNOLOGY

DATE: December 4, 2014

TIME: 1:00 P.M. to 3:00 P.M.

PLACE: MWCOG Room 1

CHAIR: Eulois Cleckley, Manager of Statewide and Regional Planning/Freight Planning, District Department of Transportation

ATTENDANCE:

Eulois Cleckley, District Department of Transportation
Douglas Estrada, WalMart
Herbert Harris, Brotherhood of Locomotive Engineers and Trainmen
Dominic Jordon, UPS (phone)
Bernard McWay, Federal Motor Carrier Administration (phone)
Chip Millard, Federal Highway Administration
Laura Richards, District Department of Transportation
Gina Ronzello, Cargo Airline Association
Yvette Rose, Cargo Airline Association
Cedric Southerland, Maryland State Highway Administration (phone)
John Thomas, Montgomery County Department of Transportation (phone)
Jacqueline Thorne, Maryland Department of Transportation
Norman Whitaker, Virginia Department of Transportation (phone)

MWCOG STAFF ATTENDANCE:

Michael Farrell, MWCOG-DTP
Andrew Meese, MWCOG-DTP
Erin Morrow, MWCOG-DTP
Clara Reschovsky, MWCOG-DTP
Richard Roisman, MWCOG-DTP
Jon Schermann, MWCOG-DTP
Daivamani Sivasailam, MWCOG-DTP
Patrick Zilliacus, MWCOG-DTP

Eulois Cleckley, Freight Subcommittee Chairman

Mr. Cleckley opened the meeting. After a round of introductions, Mr. Cleckley turned the meeting over to Yvette Rose and Gina Ronzello of the Cargo Airline Association.

Yvette Rose and Gina Ronzello, Cargo Airline Association, Air Cargo Industry Overview

Ms. Rose and Ms. Ronzello spoke to a PowerPoint presentation on the opportunities and challenges associated with the air cargo industry.

Overview of the All-Cargo Air Carrier Industry: Air cargo is transported both domestically and internationally and is carried either in the bellies of passenger aircraft or on dedicated all-cargo aircraft. While 50 to 60 percent of global air cargo tonnage is moved on all-cargo aircraft, all-cargo aircraft handle 80 percent of global revenue ton-miles. Express carriers or integrators such as FedEx and UPS provide door to door service that often includes the use of dedicated all-cargo aircraft.

Historically air cargo volumes track gross domestic product (GDP), although factors such as fuel price volatility, globalization, and government regulations also influence the air cargo industry.

Air cargo carriers face price competition from other shipping modes such as trucks, container ships, and railcars. While some shifting to these other modes, particularly trucks, has occurred in certain markets, air cargo is the mode of choice for high value and time sensitive goods. For example, the growth in demand for electronics from China and other parts of Asia has fostered growth in the air cargo industry to the extent that today we see daily FedEx and UPS flights of freighters full of electronics from Asia to North America. Air cargo accounts for about 1.5 percent of total freight by weight but 30 percent of the total freight by value. According to a Boeing report, air cargo revenue accounted for 15 percent of total air traffic revenue worldwide in 2012.

The Cargo Airline Association: The Cargo Airline Association (CAA) represents the all-cargo airline industry and as such is involved only in discussions about cargo that travels in air freighters and not in the bellies of passenger airlines. CAA membership is comprised of the following airlines, airports, and air freight forwarders:

- ABX Air, Inc. (Board of Directors)
- Atlas Air, Inc. (Board of Directors)
- FedEx Express (Board of Directors)
- UPS (Board of Directors)
- DHL Express
- Fort Wayne International Airport
- Kalitta Air, Inc
- Louisville International Airport
- Memphis International Airport

The fact that CAA members carry only cargo and not passengers is important when it comes to security regulations, and also because most air freight operations occur at night. The predominance of nighttime operations at the all-cargo airlines have resulted in extra regulatory scrutiny due to the potential for pilot fatigue. Managing this regulatory issue on behalf of its members is an important function of the CAA.

Another characteristic of all-cargo airlines is their reliance on large sorting hubs (Memphis and Louisville) as well as extensive feeder operations. Packages are flown to the hub, sorted, and then flown to airports near their delivery locations and trucked to their final destination. From an operational efficiency standpoint it is essential that pilots are able to fly into the hub, wait until the sorting operation is complete, and then be able to fly on the return trip without violating hours of service regulations. The

CAA works to ensure regulators understand these operations requirements and the economic necessity that packages be delivered on time.

Forecasts: The Federal Aviation Administration (FAA) publishes a 30-year Aerospace forecast every year. The most recent forecast estimates that domestic air cargo tonnage will grow by 1.4 percent annually and international air cargo tonnage will grow by 5.4 percent annually between 2014 and 2034. The proportion of revenue ton miles handled by the all-cargo airlines is projected to increase from 80 percent of the total to 90 percent of the total by 2034. According to forecasts by Boeing, the work freighter fleet will grow from the 1,738 airplanes currently in operation to 3,198 by 2031.

Challenges: The challenges to the all-cargo airlines are many and can be categorized as follows:

- **Security in an uncertain world:** various concerns related to security are of primary importance to the all-cargo airlines including terrorism and the transport of hazardous materials.
- **Regulatory changes and political pressures:** regulations that impact flight duty times, nighttime flight operations, and the transport of hazardous materials can potentially jeopardize the growth of the air cargo business.
- **Environmental issues:** the way governments address issues of noise and greenhouse gas emissions, especially in the European Union, can have a significant impact on the all-cargo airlines.
- **Issues surrounding airspace modernization efforts:** while the CAA is a strong supporter of the FAA's NextGen airspace modernization effort, it is also clear that the all-cargo airlines will need to make costly aircraft upgrades to meet new requirements.

Regulatory Issues: The primary regulatory issues the CAA is facing are:

- **Flight and duty time regulations:** In 2009 the FAA started looking into updating its rules related to pilot flight duty times. To better understand the impacts of any potential rule changes, the FAA created an Aviation Rulemaking Advisory Committee of which the Cargo Airline Association is a member. A key complicating issue related to any changes in pilot flight duty time rules is the fact that our pilots are union members and there are contract and collective bargaining agreements in place that affect the number of hours that pilots can fly and how those hours are distributed over time. Due in part to the requirement that FAA consider the benefits and costs of any rule changes, the new flight time rules released in 2011 did not affect the all-cargo airline industry and so they continue to operate under the old rules. The Independent Pilots Association (IPA), which is the pilot's union, has since sued the FAA saying that they should have included the all-cargo airline pilots in the 2011 flight duty time regulations. The suit is currently in abeyance. The CAA supports the FAA in this case.
- **Transport of hazardous materials:** The regulatory issues related to the transport of hazardous materials fall into three categories; labeling, packaging, and training. With respect to packaging, both UPS and FedEx have developed new containers for carrying hazardous materials and have installed upgraded fire suppression systems on their planes to deal with any fires.
- **Security rules:** This has been a challenging area for the all-cargo airlines. The Transportation Security Administration (TSA) is still relatively new and has been experiencing a high rate of personnel changes. After the 2010 Yemen printer cartridge incident, CAA members began implementing additional radiation detection tests. They have also been pushing for greater intelligence sharing from the TSA.

Legislative Issues: The legislative issues that the Cargo Airline Association is currently involved in include:

- **FAA Reauthorization:** The FAA collects a 6.25 percent waybill tax that helps fund the air traffic control system. These taxes expire on September 30, 2015. Congress is working to draft new legislation to reauthorize the agency. While this should be relatively straightforward, there has been some drama this time around because some members of Congress are considering

substantive changes to the air traffic control system that involve either privatization or the establishment of a public-private partnership.

- Open Skies: Air cargo is a global industry and operates within a web of international agreements defining how markets are accessed by different carriers. Due to labor concerns, some organizations want to restrict the ability of foreign carriers to operate in the United States. If successful, such restrictions could result in similar access limits for US carriers in foreign countries. This is a complicated issue that impacts both our regulatory and legislative work.
- Noise: This a legislative issue because when people are unhappy with aircraft noise they often complain to their elected representatives. There is also a perception that most of the noise comes from cargo planes. It is a constant challenge for us to explain that, with the exception of the Memphis and Louisville hubs, there are only about one or two night time cargo flights into any given airport. There is even a “silent skies” caucus that is trying to ban night flights which would obviously impact the cargo carriers.
- Pilot Fatigue: There is draft legislation on the Hill that would require the FAA to apply the same “new” pilot flight time requirements currently in place for pilots of passenger aircraft to pilots of cargo aircraft. The Cargo Airline Association continues to make the case that the average cargo pilot flies between 34 and 45 hours per month and that this is not excessive, especially when compared to the roughly 60 flight hours per month for passenger aircraft pilots.

Discussion:

- Q: Has there been any discussion on the Hill about changing the way air traffic control operations are funded – in particular about moving away from the 6.25 percent waybill tax?
A: No. Coincidentally, this 6.25 percent tax on waybills nearly perfectly matches the proportion of the flights that air cargo carriers’ make with respect to total air traffic.
- Q: Is there talk of indexing this tax rate to inflation?
A: No.
- Q: Given that cargo flights occur at night when the air traffic system is least busy, what benefits do your members foresee with NextGen?
A: Fuel savings and environmental benefits.
- Q: Do you think that the all-cargo airlines will be able to make more of their deliveries during times that passenger plane traffic is heavier (i.e., during the day)?
A: No – this is because customers are always pushing to have later pick up times and yet still want their packages delivered the next day.
- Q: What types of hazardous materials are carried on planes other than the lithium-ion batteries mentioned previously?
A: You would be surprised how many materials are considered hazardous. Examples include cleaning supplies and paint among many others.
- Q: Are you seeing evidence that air cargo shippers are increasingly trading down to shipping by truck?
A: No – in fact we are seeing the opposite. Also, customers are usually not driving the mode choice directly – they don’t care how the package is shipped, they just want it delivered on time.

- Q: During the 2013 holiday season many companies had real issues in terms of getting their goods to customers during the last few days before Christmas. How much does that impact the air cargo industry today?
A: I don't know if there was much impact beyond the 2013 season. Also, I think the retailers were most impacted because that is who the customer interacts with rather than the carriers.
- Q: What happened with the money back guarantee?
A: We assume the companies took the hit, but we don't know how exactly they dealt with it.
- Q: Are you aware of any legislation in the works with respect to drones?
A: Senator Feinstein is holding a hearing on that very topic. Also, the FAA is working on drone regulations right now.
- Q: You talked quite a bit about the domestic issues your members are dealing with. Are you involved internationally as well?
A: No. The CAA focuses on domestic issues only. The carriers themselves individually work on the international issues, including bilateral agreements.
- Q: Is there much discussion among your members about landside congestion around airports?
A: We are involved to the extent that we are members of the National Freight Advisory Committee of the USDOT. This committee is very focused on surface transportation issues and includes many trucking industry representatives. For specific problems we sometimes work with the airports directly.

Richard Roisman, Metropolitan Washington Council of Governments – Motor Carrier Division, Maryland Virtual Weigh Station Program Update

Mr. Roisman spoke to a PowerPoint presentation on Regional Air Cargo Plan.

Overview: This presentation will review the following topics:

- The TPB's Continuous Air System Planning Program;
- Previous air cargo studies;
- Scope of work and schedule for the Air Cargo Plan Update;
- Population and employment data and forecasts; and
- Next steps.

The Region's Three Commercial Airports: Our three commercial airports are a key regional asset. Each airport has a robust ground access network serves a distinct passenger and cargo market. As part of our work the Council of Governments together with the Metropolitan Washington Airports Authority and BWI Airport conducts a passenger survey every two years. COG also prepares airport ground access forecasts, monitors ground access travel time, and prepares a regional air system plan – including an air cargo element. Oversight for the Continuous Air System Planning Program is provided by the Aviation Technical Subcommittee.

Current Continuous Air System Planning Program Process and Projects: The Continuous Air System Planning Program process has three phases; the survey phase (every two years), the survey processing phase, and finally the preparation of the ground access forecast and ground access element, which identifies projects within our regional surface transportation plans that impact airport access.

Previous Studies: The Council of governments has been engaged in regional airport planning since the 1970's. The various past planning efforts are summarized below:

- The Future of Washington's Airports (1975) – Air Cargo Not Covered

- Washington-Baltimore Regional Airport System Plan Volume I: Commercial Airports (1988) – Air Cargo Not Covered
 - o In adopting this plan, the TPB recommended that future air system planning efforts include an assessment of regional air cargo needs.
- Washington-Baltimore Regional Airport System Plan Volume II: Ground Access (1993-1994) – Air Cargo Not Covered
 - o Numerous comments received from the TPB that the plan does not yet adequately address goods movement with respect to air cargo.
- Washington-Baltimore Regional Airport System Plan Volume III: Air Cargo (1997-1998) – First Regional Air Cargo Plan
 - o Analyzes BWI and IAD only (DCA excluded).
 - o A regional issue that was stressed at Dulles is the lack of highway access to points west.
- 2008 Washington-Baltimore Regional Air Cargo Study
 - o Focuses primarily on IAD and BWI
 - o Recommendations include:
 - Improving circulation, truck access and congestion around air cargo facilities
 - Incorporating air cargo needs into airport comprehensive planning
 - Airport participation in regional surface transportation planning process
 - Collaboratively identify mutually beneficial opportunities for improving regional airport ground access

2014-15 Regional Air Cargo Study: Scope of Work: The scope of work for the 2014-2015 Regional Air Cargo Study includes the following elements:

- Regional air cargo system supply analysis including a facilities review, a literature review, and a supply analysis technical report.
- Regional air cargo system demand analysis including development of estimates for air cargo demand, forecasted capacity of airport ground access facilities, and a comparison of demand and supply.
- Development of draft and final reports.

2014-15 Regional Air Cargo Study: Project Schedule: This project is behind the initial schedule due to staffing issues and other air systems project demands. The supply analysis is ongoing with the demand analysis to follow. The draft study report is projected to be complete by this Spring with the final report to be completed no later than June 30, 2015.

Summary of Demographic and Employment Information: Mr. Roisman reviewed many slides illustrating detailed demographic and employment information (please see presentation file). A summary of the findings is provided here.

- Washington-Baltimore-Arlington CSA is the fourth largest in the nation and remains an economic engine for the country.
- Per capita income has been up and down, but growing since 2010. The growth has been less in the National Capital Region than nationally since 2010.
- The great recession occurred within months of the previous report
- Unemployment is almost back down to 2007 levels
- Wages have stagnated – this affects demand for consumer goods
- 2010 Census found lower population numbers than were previously projected
- The resulting post Census growth has been pushed out (as seen in 2020), but is still expected by around 2030
- The percent growth in population between 2010 and 2030 in 2008 report was 18.2% and is currently expected to be 20.6% regionally

- 2010 Census found lower household counts than had previously been projected
- Fewer household are now being projected for 2020 and 2030 than had been previously assumed (about 100,000 each)
- Percent growth in households between 2010 and 2030 in 2008 report was 20.9% and is currently expected to be 23.1% regionally
- Due to the recession, 2010 employment numbers are lower than had been previously forecasted
- There is a ripple effect out to 2020 and 2030 with lower employment estimates
- Area will still see growth in employment over time
- Percent growth in employment between 2010 and 2030 in 2008 report was 22.6% and is currently expected to be 26.8% regionally

Jon Schermann, Metropolitan Washington Council of Governments – Review of Freight Plan Draft Materials

Mr. Schermann reported that the comments received on the draft regional freight issues have been incorporated and that if anyone has any further suggestions they should submit them by the Friday, December 12. The updated Regional Freight Network, including more detail about why the routes were selected, was distributed to the Subcommittee prior to Thanksgiving. Please let me know if you have any comments or recommended changes.

Mr. Thomas asked for clarification about how the secondary and connector routes were selected. Mr. Schermann responded that these routes were selected based on the knowledge of MWCOG staff. Mr. Thomas suggested that further analysis using available truck volume and percentage data be conducted to provide supporting evidence about why certain roads were or were not included. Mr. Schermann responded that such an analysis would be conducted and distributed for review at a future date.

Mr. Cleckley noted that there were too many connector routes identified for the District of Columbia and that, while they were part of the freight routes identified on the DDOT website, they should be modified to better fit with the broader nature of the Regional Freight Network. It was also suggested that the names for the three tiers (primary, secondary, and tertiary) could be confusing because of their broad use in the transportation field. Mr. Schermann agreed to work with Eulois on the District routes and to come up with different nomenclature for the tiers – perhaps simply tier 1, tier 2, and tier 3.

Mr. Schermann then reviewed the findings of the preliminary analyses of the Freight Analysis Framework (FAF) for the National Capital Region. The results indicate that the region consumes more freight than it produces, has a high proportion of goods that move intraregionally, and that 87 percent of all goods moved by weight in the region are moved by trucks.

Next Meeting: February 5, COG Room 1
Topic: E-Commerce