AIR CARGO FACILITIES AND SECURITY SURVEY 2011

December 2011

Table of Contents

Figures

Tables

SUMMARY

INTRODUCTION

The Airports Council International – North America (ACI-NA) launched its 2011 Air Cargo Facilities and Security Survey during the first half of 2011. This survey was based on the 2002 and 2003 cargo surveys, with revised questionnaires to suit the evolving industry. To provide airport operators with as much guidance and effective representation as possible, ACI-NA undertook this effort once again to ensure that we had the most up-to-date airport air cargo data.

Similar to the previous year's survey conducted, the 2011 survey focused on security issues at airport cargo facilities, access points, and the potential to mitigate threats to airport cargo infrastructure and operations at North American airports.

The primary objective was to create a substantive database to assist ACI-NA in coordinating with North American federal security agencies – Transport Canada and the Transportation Security Administration (TSA), as it is ACI-NA's goal to promote the development of balanced air cargo security programs that provide the appropriate level of security while minimizing the negative operational and cost impacts on air cargo transport. This is particularly important since the air transport mode is the most acutely affected by any delays or increased costs.

Another key objective was to elevate airport operators' awareness about the potential faulty implication of air cargo security requirements. In capturing the survey results, airports indicated that completing the survey had required considerable research, and stimulated interest in air cargo security.

The survey response was comprehensive and representative. The 51 airport respondents included 21 of the top 35 (60%) North American cargo airports[1]. The results capture the tremendous variety of operating environments in which airports accommodate air cargo carriers and allied services.

To cite a few variations: some airports are land-rich while others are critically constrained; cargo facilities may be for a single or multiple tenants; some have dedicated cargo roadways leading to a single concentrated cargo area while others have cargo operations spread all over the airport with roadways sharing both cargo trucks and passenger vehicles. Some airport operators develop and directly lease cargo facilities to cargo carriers, while others lease the land to cargo carriers to develop their own facilities; still others lease land to third-party developers who lease and manage the facilities.

The variety and unique character of air cargo operations at airports supports ACI-NA's fundamental belief that optimal air cargo security program(s) would entail a variety of approaches customized to fit the specific operating characteristics and resources of each individual airport. Equally fundamental is ACI-NA's position that the optimal program(s) would focus interdiction of the threat as early/close as possible to its origin – i.e., as far as possible from the airport and aircrafts provided appropriate security controls have been put in place to secure the integrity of the shipment while it is in transit to the airport. ACI-NA strongly supports a program that is risk-based, leveraging available data about shippers and shipments to assist in targeting lower security confidence level shipments for more invasive screening. While recognizing and fully supporting the need to enhance airport cargo security capabilities to strengthen the "last line of defense", the first line of defense must be an intelligence-intensive program largely implemented by direct and indirect cargo carriers in cooperation with airlines and federal agencies.

---

[1] Ranked by ACI 2010 cargo volumes

ACI-NA is pleased to share this summary with our airport and associate members, as well as allied partners with whom we are cooperating on air cargo security. ACI-NA has assured the respondents that this summary only identifies individual airports that have provided a response, treating all responses on an aggregative basis only grouped by annual cargo volumes, and in total. With the exception of data shared with the federal authorities of the U.S. and Canada, no sensitive information has been or will be disclosed about individual airports or individual cargo facilities.

SURVEY SAMPLE: SIZE & DISTRIBUTION

As listed in Appendix 1, a total of 51 airports responded, 44 in the United States and 7 in Canada. The airports represent a broad cross-section of cargo volumes. While the inclusion of 10 of the top 12 airports by 2010 cargo volume assures that the survey sample presents a fair representation of airports responsible for the majority of air cargo in North America, the robust sample distribution includes a fair sample of medium and small airports as well. The air cargo industry functions as a system in which individual cargo facilities (whether on-airport or off) are nodes – any of which, large or small, potentially can be exploited to compromise the system integrity.

Figure 1 shows the size distribution of U.S. airports represented in this survey. Given the size definitions below, the sample consisted of 10 **Large Cargo Airports;** 12 **Medium Cargo Airports;** and 22 **Small Cargo Airports**:

1) Large cargo airports – 500,000 or more metric tonnes in 2010
2) Medium cargo airports – 100,000 – 499,999 metric tonnes in 2010
3) Small cargo airports – 100,000 or less metric tonnes in 2010

Figure 1: Number of Survey Respondents by Range of Ranking by 2010 Cargo Volume
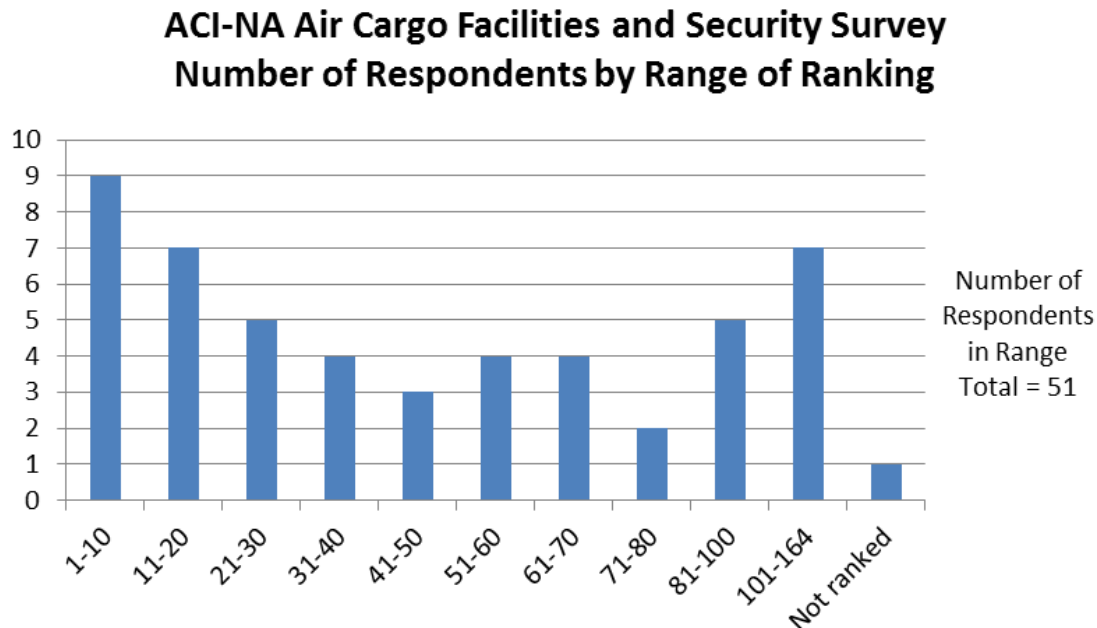
For proposes of this analysis, all Canadian airports have been separated from the US airports unless otherwise noted, and all US airports not included in the ranking are categorized under small cargo airports. Therefore, the sample distribution for this analysis is as below:
1. 10 Large cargo airports;
2. 12 Medium cargo airports;
3. 22 Small cargo airports; and
4. 7 Canadian cargo airports

SURVEY QUESTION COMPOSITION

The survey had five main subject areas: (1) impact of recent industry developments on the market, i.e., annual increase/decrease of all-cargo operations; (2) general airport operating characteristics with an emphasis on roadway and AOA access, including the management of trucks and other ground vehicles; (3) specific characteristics of individual cargo facilities including ownership, tenant mix (belly carriers vs. all-cargo and single-tenant vs. multi-tenant) and capacity; (4) qualitative security driven needs for both new facilities and new security measures; and (5) expansion plans for new cargo facilities. For organizational purposes, this survey summary has been organized as follows: (I) On-Airport Cargo Facilities – General Characteristics; (II) Individual Facilities; (III) Trucking; (IV) Trend and Planning; and (V) Security.

ON-AIRPORT CARGO FACILITIES – GENERAL CHARACTERISTICS

Centralization: The extent to which air cargo facilities are centralized is one of several indicators of the potential challenge to securing cargo operations. Airport respondents were asked whether cargo operations are concentrated in "single main area." Not surprisingly, responses varied greatly between airport sizes. None of the 10 large cargo airport respondents reported having a single main cargo area, and, similarly, only 2 of the 12 medium cargo airport respondents reported having a single main cargo area. On the other hand, only 50% of the small cargo airports reported that their cargo operations are limited to a single area. Canadian airports had only about 28% of their cargo operations concentrated in a single location.

Number of access control points: Similarly pertinent to security control, airport respondents were asked the number of access control points used by cargo operators to enter the Airport Operations Area (AOA).   Unlike the preceding question, responses to this question were far less related to cargo volumes. Of the 51 respondents to this question, only 3 reported using five or more access points for cargo operations; of these, 2 were large, and 1 was a small cargo airport. Airports using four or fewer access points for cargo operations comprised 92% of all respondents of which more than 76% of all respondents used two or fewer access points to accommodate cargo operators. More than 45% of U.S. airports used two or fewer access points to accommodate cargo operators, comprising mainly of small cargo airports.

Third-party ground handlers: Showing a trend of cargo operators minimizing assets at airports, respondents were asked how many third-party ground handlers currently serve cargo operations at their airports. Not surprisingly, the number of contracted handlers at airports varies with volume size. Of the 44 U.S. airport respondents to this question, 12 reported using five or more third-party ground handlers; of these, 5 were large, 5 were medium, and 2 were small cargo airports. Airports using four or fewer third-party ground handlers comprised of 73% of all respondents.   Of the 7 Canadian airport respondents, only 1 airport used five or more third-party ground handlers and 6 airports using four or less third-party ground handlers.

Access control systems: Airport respondents were asked what type of gate security (i.e., swipe-card, cameras, biometrics, manned) is utilized at the access points. Virtually every respondent gave multiple answers as many airports use different technologies at multiple access points and, in some cases, different technologies for the same access points depending on the hours of operation. Airports staff at least some of the gates at 67% of the airports and use swipe-cards at roughly 80% of the airports. Among the 7 Canadian airports, 5 airports gave multiple answers: airports man at least some of the access points at more than 86% of the Canadian respondents; only about 29% use swipe cards. Of the 34 total airports with manned access points, 11 of the access points are staffed with airport personnel, 20 with company contracted representatives, and 2 airports utilizing both. The remaining airports either directly hired security or has security provided by facility developers or cargo carriers. Different from

previous year's surveys, the introduction of biometrics to access control system provides a new form of technology airports can utilize. Of the U.S. airports, 27% utilized biometrics at their access points, and 57% of the Canadian airports implemented such technology. Given the cost and complexity of such systems, only airports with large operations are willing to invest in this type of technology. We can foresee a growing trend in this type of technology as cargo operations at various sized airports grow.

INDIVIDUAL FACILITIES

In addition to the generalized airport-wide characteristics noted in the preceding section, airport respondents were asked to provide detailed information about each individual air cargo facility. We received descriptions of 139 individual cargo facilities located at 35 airports (16 airports did not respond to this question). Although individual facilities information will not be presented here, aggregate general findings are included in this summary. Airport respondents answered the same questions for each facility.

Large Cargo Airports (5 respondents)
32 Individual Cargo Facilities
21 Multi-Tenant; 11 Single-Tenant
        16 Airport-Owned; 13 Carrier-Operated, 3 Third-Party Developed

Medium Cargo Airports (12 respondents)
60 Individual Cargo Facilities
39 Multi-Tenant; 21 Single-Tenant
        32 Airport-Owned; 7 Carrier-Operated, 21 Third-Party Developed

Small Cargo Airports (14 respondents)
31 Individual Cargo Facilities
12 Multi-Tenant; 19 Single-Tenant
        16 Airport-Owned; 5 Carrier-Operated, 10 Third-Party Developed

Canadian Cargo Airports (4 respondents)
17 Individual Cargo Facilities
11 Multi-Tenant; 6 Single-Tenant
        7 Airport-Owned; 1 Carrier-Operated, 9 Third-Party Developed

Of the 135 respondents, 30% of these facilities are used for all-cargo operations, 33% are for mixed utilization, 21% are for belly cargo operations, and 16% are used by integrators for express cargo. Of the 118 individual facilities captured, over 53% of these facilities are served by contiguous ramp, and about 47% are served by tug road. Consistent with the Boeing and Airbus cargo forecast, FAA Aircraft Design Groups IV (ie. 757,767, DC10, A300, A310) and V (777, 787, 747, A330, A340) aircrafts are currently the largest accepted aircraft groups at the airport respondents' cargo facilities, 27% and 20% of all 6 FAA aircraft groups respectively.

TRUCKING

Airport respondents were asked a variety of questions about the degree of AOA access given to cargo trucks, the extent of control over current trucking operations, and resources available for controlling trucking operations in the future.

Of the 50 airports that responded to the question, 94% "permit cargo trucks to enter the AOA". Smaller cargo airports were relatively likely (100%) to allow these operations but a substantial majority of affirmative responses were also given by large (80%) and medium (92%) cargo airports. All Canadian

airports "permit cargo trucks to enter the AOA." A little less than a majority (47%) of all respondents reported allowing through-the-fence[2] cargo operations. At all levels, airport operators were less tolerant of through-the-fence operations than to cargo trucks in general. Large cargo airports were evenly split (50%) on allowing through-the-fence truck operations. Medium (42%) and small (42%) cargo airports were relatively less inclined to permit through-the-fence cargo operations. Canadian airports (67%) cargo airports were relatively more inclined to permit through-the fence cargo operations.

Airport operators were asked which varieties of ground vehicles (tugs only, vans, commercial over-the-road trucks, flatbed trucks, and vans) were allowed on the AOA. A vast majority of the respondents allowed multiple ground vehicles type into the AOA. Only 1 small airport of the 50 responding airports limited cargo ground vehicles to commercial over-the-road trucks only. Different from prior years' survey, airports no longer restrict AOA access to only tugs but have diversified to allow access to most vehicle types, with the exception of 1 respondent.

Table 1: Varieties of Ground Transport Vehicle Allowed on AOA

Cargo Airport Category	Tugs Only	Flatbed Trucks	Vans	Over-The-Road Trucks	TOTAL Respondents
Large	100%	80%	100%	70%	10
Medium	100%	92%	100%	83%	11
Small	96%	77%	96%	95%	23
Canadian	57%	71%	71%	86%	7
TOTAL	94%	82%	96%	90%	51

Sources: ACI-NA survey.

Of the 51 responding airports, only 8 (16%) responded affirmatively that they "presently have plans to develop an on-airport area designated to trucking staging area. The vast majority of airports have no plans of developing an on-airport designated trucking staging area.

Asked whether the airport "presently has any system in place to monitor the movement of over-the-road trucks arriving/departing the airport complex", only 29% responded affirmatively: large cargo airports (20%), medium cargo airports (50%), small cargo airports (27%), and Canadian cargo airports (20%). Of the 8 large cargo airports that answered negatively, only 30% believed that their airport layout suggested that dedicated truck access could be achieved with such monitoring. Of the 6 medium-sized airports that do not presently have commercial truck monitoring, 3 thought that this could be achieved given their current airport layouts. Of the 17 small gateway airports that did not presently have such monitoring, a slightly higher percentage (27%) responded that they could establish separate truck access routes with monitoring of these operations. When asked "if the airport plans to implement such a system in the future, no US cargo gateway has any confirmed plans for such a system, which 1 Canadian airport did. Most respondents answered "Maybe" or "Don't Know," representing 53% of the respondents answers. For the most part, airports' future plans for such a system will depend on their future cargo volumes and location of cargo facilities.

---

[2] Through-the-fence: the owner of an airport may, at times, enter into an agreement (i.e., access agreement or lease agreement) that permits access to the public landing area by independent operators offering an aeronautical activity or to owners of aircraft based on land adjacent to, but not a part of, the airport property.

TREND AND PLANNING

Airport respondents were asked the number of all-cargo carriers from calendar year ending (CY) 2007 to 2010 as well as the number of daily all-cargo operations during the same period of time. Of the 48 respondents who responded, about 48% of the respondents had a decrease in CY 2010 in the number of all-cargo carriers from CY 2007 and about 40% either returned to the CY 2007 level or slightly increased the number of all-cargo carriers. 13% of the respondents showed positive growth in CY 2010 compared to CY 2007. When reviewing the number of daily all-cargo operations the figure appears to have declined. Of the 39 airports that responded to this question, more than 67% incurred a decrease in all cargo aircraft operations from CY 2007 to CY 2010; only 8% of the respondents experienced a moderate increase in all-cargo aircraft operations. According to ACI's annual traffic reports, out of the 164 airports that reported Total Freight/Mail volume data from 2007 to 2010 only 36 airports, about 22% returned to or slightly exceeded the 2007 level.

In addition to information on existing facilities, airport respondents were asked whether any new cargo facilities were planned. With the air cargo industry facing economic difficulties and some contraction since late 2007 the need for new facilities has been affected. While some heavily congested airports are still actively involved in long-term capacity planning, with the belief that the recent industry contraction may have provided a year or two of insulation against confronting absolute capacity crises, virtually all airports are affected by continuous shifts of cargo from aircraft to pure trucking operations and the recent trend of purchasing managers switching to cheaper slower transport modes i.e., ocean shipping. In terms of facilities planning, all of these new developments have had ramifications.

Of the 10 large cargo airports, 1 responded that new cargo facilities are presently planned, with 4 of those planned for completion by 2013. Of the 12 medium centers, 7 currently planned/approved additional or redevelopment of existing cargo facilities with 2 of those planned to open by 2016. Finally, of 22 small cargo airports, 2 responded that they plan new cargo facilities and 1 of these is planned for completion by 2020. The extent to which these new facilities are actually progressing with a firm development commitment versus merely desired (or possibly are planned as part of out-dated Master Plans) is a valid concern. The present economic environment has likely caused many development delays that have not yet been recognized. It is believed that many of the cargo expansion projects planned were completed in prior years; however, airports are hesitant to invest additional resources into cargo planning until the economy stabilizes. Cargo security requirements must be incorporated into plans for new facilities as early as possible in order to avoid expensive retroactive corrective investments.

SECURITY

With the new threat of air cargo bombs in recent years, particularly the incident that happened in Yemen on October 2010, airports were asked what type of air cargo screening technologies are operating at their facilities. The results are as follows:

Table 2: Types of Cargo Screening Technologies Available at Airports

Cargo Airport Category	Advanced Technology X-ray	Decompression chamber	Explosives Trace Detection (ETD)	Explosives Detection System (EDS)	Physical Search with Verification of Manifest or Other Packing Document	TSA Handled Canines
Large	80%	30%	80%	70%	80%	70%
Medium	50%	0%	58%	33%	75%	67%
Small	18%	5%	68%	32%	82%	45%
Canadian	43%	0%	43%	29%	43%	14%
TOTAL	41%	8%	65%	39%	75%	51%

Sources: ACI-NA survey.

Due to the new security requirements[3] set forth by the TSA as a result of the 9/11 Act – 100 percent inbound cargo screening and the Air Cargo Security Final Rule, many airports' cargo facilities/operations were affected. Airports were asked what changes they have made to accommodate the new air cargo security requirements. Although individual airport security enhancements are not included in this summary, some industry trends have been recognized that can be summarized. The respondents' answers varied greatly; but the overall trend appears that airports have implemented or enhanced their SIDA controls. Some airports varying from large to small applied new cargo screening technologies such as x-ray screening and biometrics.[4] While TSA requirements have had a direct impact on U.S. airports, Canadian airports that have service to the United States are also indirectly impacted. For purposes of screening cargo, those who have service to the U.S. must comply with TSA requirements.

Continuing the question of new TSA cargo security requirements, airports were asked how they were affected. Of the 51 airports that responded, all 51 airports were affected in terms of cost and usable space, while predominately large cargo airports were affected in terms of storage space. The airport responses were as follows:

Table 3: New TSA Cargo Security Requirements Affecting Airports' Cargo Operations

Cargo Airport Category	Increased Cost	Loss of Usable Space	Loss of Storage	No Effect
Large	70%	50%	50%	30%
Medium	50%	50%	25%	25%
Small	36%	23%	9%	50%
Canadian	14%	14%	0%	57%
TOTAL	43%	33%	20%	41%

Sources: ACI-NA survey.

---

[3] New security requirements are any security policies that have been enacted by TSA from 2004 to 2011.
[4] In practice, 100% of airports have introduced new cargo security procedures through mandates on their tenants (carriers and forwarders) but this question referred to programs implemented by airport operators.

CONCLUSION

Even in the general form incorporated in this summary document the tremendous range of airport operating environments and subsequent issues for air cargo security are gripping. While gathering such data as resulted from this effort is no more than an input to the beginning of the analysis, one compelling conclusion already appears to be evident: the Transportation Security Administration and Transport Canada must fully consider the myriad of differences among airports and fully engage airport operators from the outset of cargo security planning efforts when contemplating new regulatory initiatives. A "one size fits all" security program may be appropriate in some operations but would be inappropriate and, more specifically, ineffective in addressing cargo security challenges at North American airports.

The Certified Cargo Screening Program (CCSP), launched in 2007 by TSA, acts as a solution to streamline the 100 percent cargo screening mandated by the 9/11 Act. The program itself allows for TSA Certified cargo screening facilities to screen cargo prior to providing it to freight forwarders or airlines for shipments on passenger flights and allows for shippers to better control their supply chain distribution time and cost, while at the same time meeting the cargo screening mandate. With that said, the program remains voluntary and not all shippers/freight forwarders have elected to participate.

Given the economic slowdown since 2008, many airports with planned cargo expansion projects have been delayed until later this decade. 5 new cargo facilities are currently planned for completion by 2016 and a total of 11 airports have new facilities in their plans.

While airport operators have been negatively impacted by fee erosion of passenger volumes, this survey also found substantial anecdotal evidence of many airport budgets being impacted by losses in freighter activity (and subsequent landing fees). In fact, cargo levels began their descent well before September 2001, with the grounding of Emery Worldwide and cutbacks by numerous other cargo carriers due to the larger worldwide economic slowdown.

Often, the most constrained airports are the international cargo airports in major cities whose cargo activities may have been jeopardized due to the absence of the CCSP program which allows cargo to be screened further up the supply chain. Because of the relatively higher cargo market shares of passenger carriers in Trans-Atlantic and Trans-Pacific segments, these often-congested cargo airports had greater concerns about the flexibility of security measures to allow for the efficiency of the system. TSA has made substantial improvements to mitigate this concern through the implementation of CCSP and related risk-based measures to target certain cargo shipments for more invasive screening. However, distinction between international and domestic cargo, as well as freighters versus the passenger aircraft; still must be considered when assessing the appropriate measures to ensure the security of cargo in the operational environment of individual airports which are quite unique. Integrators such as FedEx and UPS are more likely to have their own drivers, truck loaders and aircraft ground-handlers, whereas freight forwarders may contract for these services.

As noted earlier, respondents were assured that only aggregate findings would be included in this summary document. Details pertaining to individual airports and specific cargo facilities have been analyzed and are utilized as a resource for the development of programs to enhance cargo security at airports while recognizing the unique operating environments used to accommodate those operations.

APPENDIX 1
2010 PARTICIPATING AIRPORT RANKINGS

Large cargo airports: 500,000 or more metric tonnes in 2010
Medium cargo airports: 100,000 – 499,999 metric tonnes in 2010
Small cargo airports: 99,999 or fewer metric tonnes in 2010

Large Cargo Airports (ranking in 2010 ACI-NA statistics)

Ranking	Cargo Size:	Airport Code:	Airport Name:	Cargo (metric tonnes)
1	L	MEM	Memphis International Airport	3,916,811
2	L	ANC	Ted Stevens Anchorage International Airport	2,646,695
3	L	SDF	Louisville Regional Airport Authority	2,166,656
4	L	MIA	Miami International Airport	1,835,797
5	L	LAX	Los Angeles International Airport	1,747,629
6	L	ORD	Chicago O'Hare International Airport	1,376,552
7	L	JFK	John F. Kennedy International	1,344,126
9	L	EWR	Newark Liberty Intl Airport	855,594
10	L	ATL	Hartsfield-Jackson Atlanta International Airport	659,129
11	L	DFW	Dallas/Fort Worth International Airport	645,426

Medium Cargo Airports (ranking in 2010 ACI-NA statistics)

Ranking	Cargo Size:	Airport Code:	Airport Name:	Cargo (metric tonnes)
13	M	YYZ	Toronto Pearson International Airport	482,486
14	M	SFO	San Francisco International Airport	426,725
16	M	PHL	Philadelphia International Airport	419,702
17	M	CVG	Cincinnati/Northern Kentucky International	371,297
19	M	IAD	Washington Dulles International Airport	332,275
20	M	SEA	Seattle-Tacoma International Airport	283,425
23	M	DEN	Denver International Airport	251,777
26	M	MSP	Minneapolis-St. Paul International	211,691
28	M	PDX	Portland International Airport	190,117
29	M	YWG	Winnipeg International Airport	173,034
30	M	SLC	Salt Lake City International	145,412
37	M	SAN	San Diego International Airport	115,378
38	M	YUL	Montréal-Trudeau	112,000
39	M	STL	St Louis Lambert International Airport	103,742
40	M	BWI	Baltimore/Washington International Airport	102,362

Small Cargo Airports (ranking in 2010 ACI-NA statistics)

Ranking	Cargo Size:	Airport Code:	Airport Name:	Cargo (metric tonnes)
41	S	YMX	Aéroport de Montréal - Mirabel	93,000
43	S	FLL	Fort Lauderdale International Airport	88,965
44	S	TPA	Tampa International Airport	87,882
53	S	HSV	Huntsville International Airport	70,950
56	S	AUS	Austin-Bergstrom International Airport	69,397
57	S	SMF	Sacramento International Airport	66,998

52	S	PIT	Pittsburgh International Airport	77,335
61	S	JAX	Jacksonville International Airport	54,397
63	S	MSY	Louis Armstrong International Airport	52,604
64	S	RNO	Reno-Tahoe International Airport	51,255
65	S	TUL	Tulsa International Airport	49,590
73	S	MHR	Mather Airport	37,474
74	S	BOI	Boise Airport	36,293
81	S	ORF	Norfolk International Airport	28,668
82	S	YHZ	Halifax Stanfield International Airport	28,462
90	S	GSP	Grenville-Spartanburg International	22,373
92	S	FAI	Fairbanks International Airport	19,877
96	S	RSW	Southwest Florida International Airport	15,498
103	S	SWF	Stewart International Airport	11,731
106	S	FWA	Fort Wayne International Airport	10,831
118	S	LGA	LaGuardia Airport	7,298
120	S	JAN	Jackson-Evers International	6,037
121	S	BTV	Burlington International Airport	5,478
138	S	YQG	Windsor International Airport	374

Cargo Airports responded but not included in the 2010 ACI-NA Cargo Ranking

Airport Code:	Airport Name:
AZA	Phoenix Mesa-Gateway Airport
YZF	Yellowknife Airport

2011 ACI-NA Air Cargo Facilities and Security Survey [PDF Copy]

General Information

The primary objective of the Air Cargo Facilities and Security Survey is to create a substantive database to assist ACI-NA in coordinating with the North American federal security agencies i.e. the Transportation Security Administration (TSA), Transport Canada and other relevant government entities in formulating cargo security related policies.

The preliminary results are expected to be completed by June and will be presented to the entire Air Cargo Committee on June 1, 2011. The final report will be released in October during the Air Cargo Committee meeting to be held in San Diego.

If you have any questions, please contact Aneil Patel at apatel@aci-na.org or by phone at: (202) 293-8500. Thank you very much for your participation.

* 1. Your Information (Required)

Name:

Job Title:

Company:

Phone Number:

Email Address:

> You can submit your response using the online survey form: http://www.surveymonkey.com/s/aircargo
> Please do not fill out this PDF form

* 2. Airport Information (Required)

Airport Name:

Airport 3 Letter Code:

2010 Landed Weight in (lbs):

2010 Cargo Volumes in (metric tonnes):

On-Airport Facilities - Physical Infrastructure and Layout

1. Are cargo operations concentrated in a single main area?

◯ Yes

◯ No

2. How many access control points to AOA (Airport Operational Area) are dedicated for cargo-only use?

3. How many 3rd-party ground handlers currently serve cargo operations at your airport?

4. Please list the ground handling firms currently operating for cargo.

[text box]

Volume of Cargo Operations

1. Number of all-cargo carriers on average:

CY 2007 [____]

CY 2008 [____]

CY 2009 [____]

CY 2010 [____]

2. Number of daily all-cargo aircraft operations handled on average: (Please count both take-offs and landings)

CY 2007 [____]

CY 2008 [____]

CY 2009 [____]

CY 2010 [____]

3. Identify the top 10 cargo carriers by CY2010 cargo weight in total tonnage – the sum of enplaned plus deplaned freight. (e.g. British Airways – 10,000 metric tons)
Note: 1 metric ton = 2204.6 lbs

1. [____]
2. [____]
3. [____]
4. [____]
5. [____]
6. [____]
7. [____]
8. [____]
9. [____]
10. [____]

4. CY 2010 freighter split by weight of total cargo (freight & mail) carried by: (Metric tons)
Note: 1 metric ton = 2204.6 lbs

Enplaned - Passenger Aircraft (Metric tons) [____]

Enplaned - All-cargo Aircraft (Metric tons) [____]

Deplaned - Passenger Aircraft (Metric tons) [____]

Deplaned - All-cargo Aircraft (Metric tons) [____]

1. What type of cargo access control point security system is in place at your airport? (check all that apply)

- ☐ Swipe-card
- ☐ Biometrics
- ☐ Cameras
- ☐ Manned

If Manned - by whose representative?
Also if systems vary by gate (please indicate the mix):

[ ]

2. How many security companies are operating at your airport?

[ ]

3. Please list the security companies currently operating at your airport.

[ ]

4. Does your airport permit cargo trucks to enter the AOA?

- ○ Yes
- ○ No

5. Does your airport permit through-the-fence cargo operations?

- ○ Yes
- ○ No

6. If Yes, who presently controls gate access allowing trucks to enter the AOA?

[ ]

7. What types of vehicles are allowed on the AOA? (Check all that apply)

☐ Commercial over-the-road trucks

☐ Flatbed Trucks

☐ Tugs

☐ Vans

Other (please specify)

[   ]

8. If only AOA pre-approved vehicles are allowed, who provides the approval/permit? (Check all that apply)

☐ Airport Management

☐ FAA

☐ Facilities Developers

☐ Tenants

Other (please specify)

[   ]

9. Does your airport plan to develop an on-airport area designated to trucking staging?

◯ Yes

◯ No

10. Does the airport presently have any system in place to monitor the movement of over-the-road trucks arriving/departing the airport complex? (e.g. taxis)

◯ Yes

◯ No

11. If Yes, please describe the monitoring system:

[   ]

12. If No, then does the airport layout suggest that dedicated truck access to the air cargo complex could be achieved and such monitoring could occur?

◯ Yes

◯ No

13. Does your airport plan to implement such a system in the future?

◯ Yes

◯ Maybe

◯ No

◯ Don't Know

Airport - Cargo Screening

1. What changes have been made to cargo facilities to accommodate new security requirements at your airport?

[text box]

2. How have new security requirements affected cargo facilities? (Check all that apply)

☐ Increased costs

☐ Loss of usable sq.ft.

☐ Loss of storage

☐ None

Other (please specify)

[text box]

3. What are the types of cargo screening technologies that are operating at your airport? (Check all that apply)

☐ Advanced Technology X-ray

☐ Decompression chamber

☐ Explosives Trace Detection (ETD)

☐ Explosives Detection System (EDS)

☐ Physical search with verification of manifest or other packing document

☐ TSA operated canines

☐ Any other detection equipment accepted by TSA

Please specify

[text box]

Individual Cargo Warehouse Facility 1

Please complete this section for each individual cargo warehouse facility. You will have the option to submit additional facilities at the end of this page.

1. Name of Facility:

[   ]

2. Please enter the following:

Warehouse Size: (sq. ft.)   [   ]

Average leased levels over CY2010: (%)   [   ]

Apron: (sq. ft.)   [   ]

Area Dedicated Screening Operations: (sq. ft.)   [   ]

Number of full time equivalent screening staff dedicated to air cargo: [   ]

Number of Shipments for Cargo Screened on airport (CCSP): [   ]

Hours of Operations: (e.g. 06:00 - 21:00)   [   ]

3. Tenants for this facility:

◯ Single-tenant

◯ Multi-tenant

4. Ownership for this facility:

◯ Airport

◯ 3rd-party

◯ Carrier

5. Primary screening provider:

◯ Privatized

◯ Federal

6. What type of aircraft does the current cargo facility accept? FAA Aircraft Design Group - WingSpan Classification (check all that apply)

Please <u>click here</u> here for definitions of FAA Aircraft Design Groups.

- ☐ Group I
- ☐ Group II
- ☐ Group III
- ☐ Group IV
- ☐ Group V
- ☐ Group VI

7. Number of aircraft parking spaces: (Optimum configuration that the building aircraft apron is designed for)

Group I	
Group II	
Group III	
Group IV	
Group V	
Group VI	

8. Primary utilization by type of cargo:

- ◯ Belly-Freight Cargo - "Passenger Airline"
- ◯ All-Cargo - "Non-Integrator"
- ◯ Mixed Cargo – "Passenger and freighter aircraft operations"
- ◯ Integrator – "Express Cargo"

Other (please specify)

[   ]

9. Special Characteristics: (Check all that apply)

- ☐ Perishables
- ☐ ULD Handling (Unit Load Device)
- ☐ Sorting System
- ☐ FTZ - active (Free Trade Zones)

Other (please specify)

[   ]

10. Served by:

◯ Contiguous ramp

◯ Tug-road

Other (please specify)

[_____]

* 11. Do you have an additional cargo warehouse facility you wish to submit a response for?

◯ Yes

◯ No

Note: You can enter a maximum of 25 cargo warehouse facilities per airport response.

Planned Expansion of Cargo Facility

* 1. Is your airport planning expansion of an existing and/or developing a new cargo facility?

◯ Yes

◯ No

If you select "No" you will be directed to a "Thank you" page.

Planned Expansion of Cargo Facility 1

Please complete this section for each planned individual cargo warehouse facility either if the cargo facility will be a new development; expansion of an existing cargo facility; redevelopment of an existing cargo facility or conversion of a non-cargo facility.

1. Name of Facility/Location:

[_____]

2. Description of the cargo facility:

[_____]

3. The new cargo facility is:

◯ Approved

◯ Planned

Other (please specify)

[_____]

4. Projected year of completion:

[　　　　　]

5. Please select the following:

◯ The cargo facility will be a new development

◯ Expansion of an existing cargo facility

◯ Redevelopment of an existing cargo facility

◯ Conversion of a non-cargo facility

Other (please specify)

[　　　　　　　　　　　　　　　　　　]

6. Please enter the following:

Warehouse Size: (sq. ft.)　　　　　　　　[　　　　　　　]

Apron: (sq. ft.)　　　　　　　　　　　　[　　　　　　　]

Area Dedicated Screening Operations: (sq. ft.)　[　　　　　　　]

7. What type of aircraft does the current cargo facility accept? FAA Aircraft Design Group - WingSpan Classification (check all that apply)

Please click here here for definitions of FAA Aircraft Design Groups.

☐ Group I

☐ Group II

☐ Group III

☐ Group IV

☐ Group V

☐ Group VI

8. Tenants for the new facility:

◯ Single-tenant

◯ Multi-tenant

9. Developed by:

◯ Airport

◯ 3rd-party

◯ Carrier

10. Primary utilization by type of cargo:

◯ ⃞ Belly-Freight Cargo - "Passenger Airline"

◯ ⃞ All-Cargo - "Non-Integrator"

◯ ⃞ Mixed Cargo — "Passenger and freighter aircraft operations"

◯ ⃞ Integrator — "Express Cargo"

Other (please specify)

[   ]

11. Special Characteristics: (Check all that apply)

☐ ⃞ Perishables

☐ ⃞ ULD Handling (Unit Load Device)

☐ ⃞ Sorting System

☐ ⃞ FTZ - active (Free Trade Zones)

Other (please specify)

[   ]

∗ 12. Do you have an additional approved/planned cargo warehouse facility you wish to submit a response for?

◯ ⃞ Yes

◯ ⃞ No

Note: You can enter a maximum of 5 new cargo warehouse facilities per airport response

Thank You

Thank you for participating. To submit your survey response, please click on the **"Done"** button below. If you have any questions, please contact Aneil Patel at (202) 293 8500 or apatel@aci-na.org.

You will be redirected to the ACI-NA Air Cargo Conference Home Page.

APPENDIX 3
THANK YOU

ACI-NA thanks its member airports for their contribution and input to this report. Without their participation, ACI-NA would not have been able to create this report and the important information on the airport development costs required for the national airport system of the United States.

In addition, ACI-NA would like to thank the following members from Air Cargo Facilities and Security Working Group for their contribution to the survey:

- Mike Bednarz, Port of New York and New Jersey
- Cecilia Poister, Pittsburgh International Airport
- Richard Pinkham, Cleveland Hopkins International Airport
- John Parrot, Ted Stevens Anchorage International Airport
- Doug Banez, InterVISTAS Consulting
- Joy Banerjee, LeighFisher Management Consultants
- Rex Edwards, Campbell-Hill Aviation Group
- Ana Sotorrio, Aviation Strategies & Trade Solutions
- Monica Serrano, HSS Inc.
- Tracy Fuller, AlliedBarton Security Services
- Roger Austin, Crawford, Murphy, & Tilly Inc.

ACI-NA staff contributors to this report include Liying Gu, Chris Bidwell, Aneil Patel, Nelson Lam, Joe Weidlich, Brett McAllister, and Debby McElroy. For further information on this report, please contact the Economic Affairs and Research at EconomicsAffairs@aci-na.org or (202) 293-8500.