



## Disrupting and Innovating the Supply Chain by Expediting the Freight Processes, Not Just the Freight **Movement!**

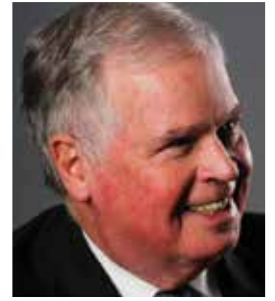
PAGE 16

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- Air Cargo Facility Development: Advancing the Case for Public-Private Partnerships
- Tapping into 100% of the Talent Pool
- How Trucker and Ground Handling Staff Shortages are Affecting Air Cargo



# Air Cargo Facility Development



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## ADVANCING THE CASE FOR PUBLIC-PRIVATE PARTNERSHIPS

Over the past 20 months, many airports and airlines, in the midst of financial freefall, can attribute their survival to the strength of air cargo, driven in large measure by e-commerce. However, while cargo growth has been a life preserver, at the same time, it has highlighted a number of serious physical and business challenges that the industry will need to address.

With the extreme drop in the use of passenger aircraft and increased home-based purchasing, air cargo volumes are changing infrastructure and airport facility planning requirements. Since e-commerce is a function of consumer demand rather than manufacturing production, these changes also impact landside trucking operations as well as facility access. Many existing facilities have therefore become functionally problematic, and in other instances, completely new buildings and infrastructure are essential to meet projected service level targets.

Airports must choose to either modernize the existing facilities or develop new ones. In the midst of historic financial losses and continuing revenue shortfalls, for most airports, available capital will be allocated to major maintenance projects, safety, security, environmental enhancements, and passenger

terminal improvements, leaving cargo as a far lower priority. The most viable solution is a public-private partnership.

The costs of building and operating a cargo facility typically break out into three categories which can be oversimplified using a 30/30/30 analogy:

- 30% for real estate costs including warehouse, office, and infrastructure
- 30% for labor costs for ground handling, and
- 30% for maintenance, equipment, utilities, security, and technology

In an ideal environment, this would leave 10% for profit. Let's look at each of these individually.

### Real Estate

The traditional airport model requires that ownership of developer- and carrier-built cargo facilities reverts to the airport upon the expiration of the basic lease agreement. As this occurs it is essential that the airport establish rental rates based on a current market study rather than use amortized investment based rental rates (i.e., those in place prior to reversion). A revised market-linked base rental rate will, in most instances, bring on sticker shock reflecting 25 to 30 years of inflation since the buildings were developed — in an era of greater profitability and a higher tolerance to pay above market rental rates for then newer facilities. When considering new development,

airports often factor in the reversion rate when considering potential revenue generation of new developments. Very real problems can occur when this is the case — particularly when the airport wishes to explore a public-private partnership.

It is essential to remember that, in such instances, there are three stakeholder interests that must be considered:

1. The airport’s revenue goals
2. The developer’s financial target
3. The costs to tenants and users of the facility

The problems begin when airports fail to establish a realistic revenue target for the development effort and do not recognize that in exchange for the elimination of cost and risk, they receive a new facility. It is unrealistic to assume that the cash flow accruing to the airport could be the same or greater without an adverse impact on tenants and users. The problem is exacerbated when substantial infrastructure modifications are required — the cost of which cannot be directly recovered and must therefore be factored into the rental rates for tenants. Ultimately the decision of how to proceed can be reduced to two considerations: risk and return.

The airport’s return from the project will depend on whether a developer is involved. If no developer is involved, then all project revenues net of expenses ordinarily would be expected to accrue to the airport. This would hold true even if the airport were to hire a firm to manage the facility, in which case the management fee paid to the firm would be included among project expenses. And while the airport’s return is in principle not capped, the airport’s exposure to increasing costs and decreasing revenue is not limited. In contrast, when a developer constructs and operates the project, the return to the airport is typically a fixed (albeit possibly escalating) payment. In the air cargo world, percentage rents are uncommon (but not unheard of).

	Airport Development	Outside Development
<b>Airport Risks</b>	Significant vacancy risk	Some vacancy risk
	Balance sheet exposure	No exposure
	Initial cash outlay	Lower revenues
	Completion risk	Developer credit risk
	Liability issues	Environmental costs
	Operating costs	
	Marketing costs	
	Relocation costs	
<b>Developer Risks</b>	Not applicable	Securing financing
		Changing cost of money
		Significant vacancy risk
		Completion risk
		Operating costs
		Marketing costs
		Relocation costs

As with return, the airport’s project-related risks will depend on a number of factors including (perhaps most importantly) whether the project should be executed by a developer or by the airport itself.

In the absence of a developer, the airport’s risk-return profile may be likened to that of equity in that returns generally increase in proportion to the commercial success of the project in return for the airport assuming the risks of commercial failure of the project. Generally, this is not substantially changed by the retention of a firm to manage the facility on the airport’s behalf. With the involvement of a developer, the airport’s risk-return profile may be likened to that of debt in that returns generally are specified in advance and are largely independent of the commercial success or failure (short of bankruptcy) of the project. The airport gives up upside potential for protection from downside risk.

It is important to note that virtually every airport entering a third-party development agreement must utilize a public solicitation process — typically a Request for Proposal (RFP). In pursuing this option, it is essential that the airport consider that the cost of a

response to an RFP for a large development project can easily exceed a million dollars. Recovery of these dollars has to be factored into negotiations on the lease agreement.

**Labor**

The current model tenancy in a private sector air cargo development is a master lease between the developer and the airport and a sublease with a handling company who will then make its revenue targets through handling fees charged to its customers — these fees will vary from airport to airport but are in the vicinity of \$.08 to \$.10 per pound. The handling environment is extremely competitive, with profits based on very tight margins and usually operating on short term leases with 90-day “out” clauses. Because there is little investment in the real estate element of the development, contracted fees between handlers and their clients typically remain relatively flat for the contract period. However, in many instances, other operational costs increase based on a negotiated consumer price index (CPI) or a fixed percentage. As the handler’s lease matures, it becomes more challenging to reach revenue targets, and to, in turn, meet its rental obligations to the developer.



If we apply our same simple 30/30/30 analogy to the typical per-pound fees handlers charge customers, using 10 pounds at \$.10 per pound, at the start of the basic agreement, the handler's cost is \$.90 for every \$1.00 of income. However, since the real estate costs are fixed and typically linked to an escalator, over a three-year lease with the developer, handler profits can decrease to \$.04 per pound despite having control over maintenance and labor costs. Historically, ground handling operations have always faced staffing challenges. The work requires training, involves difficult schedules and peaking issues, is often labor intensive, is located in a site where public transportation has limited access, requires local and federal security clearances, is not the highest paying, and demonstrates very high turnover rates. The combination of these factors escalates costs to the handling company. The challenge then becomes how to meet targeted levels of service, while meeting its real estate payments without raising rates to tenants and users.

In recent years, airports have begun working with developers and handling companies on increasing sensitivity to social issues and responsibilities. This often manifests itself in the introduction of minimum wage requirements and in some cases mandating that airport tenants and users offer employee benefits outside of what would traditionally be made available to employees. While this is certainly an appropriate direction in which to proceed, it must be recognized that these changes represent additional costs to the handler and the developer, and that in order for all parties to meet their financial objectives, there must be a flow through to carriers and other building tenants whose profit margins are already thin. It is essential that these elements be considered by the airport when determining what its realistic financial target for the development is.

## **With the extreme drop in the use of passenger aircraft and increased home-based purchasing, air cargo volumes are changing infrastructure and airport facility planning requirements.**

### **Maintenance and Technology**

The evolution of air cargo facilities over the past two decades has been dramatic: The need for enhanced security, increased emphasis on throughput and the addition of sophisticated material handling systems, electronic tracking and enhanced communications, and the introduction of stringent environmental and sustainability standards have substantially increased operating costs, which need to be reflected somewhere in the leasing agreement and ultimate cash flow expectations.

One potential approach is a 50-year lease which would allow the investment to be amortized at a much lower rate and facilitate controlling flow-through costs to tenants and users. A third-party developer can provide substantial added value to airport customers by rolling up some of the larger warehouse handling technology and sustainability initiatives and amortizing those larger investments into the real estate component of the lease agreement. This can be achieved through a collaborative effort among the developer, ground handler, and airport to ensure the economics work for all parties. The bottom line is to ensure that with either a new or retrofitted facility, the rental structure reflects market parameters and provides appropriate value for cost to the stakeholders.

If we look at the real estate component holistically, a 50-year lease enables the developer and the facility tenants to plan, develop, and operate more creatively and think outside the box. For example, given appropriate flexibility in the lease agreement, the developer could structure the roof to handle photo voltaic systems and amortize the additional roof support over the ground lease term. The airport could collect roof rent from the photo voltaic company who

installed the solar equipment. Additionally, the airport could receive a portion of percentage rent from charging stations used for electric vehicles and other equipment.

### **Summary**

Very few airports can be all things to all stakeholders. As public entities, their first obligation is to public service and regional economic growth which creates a clear requirement to prioritize the allocation of their land resources and capital. Historically, airport development has been incremental rather than strategic — responding to immediate demand or attempting to generate revenue. For many airports, that approach must become a thing of the past, and planning must become strategic and comprehensive with regard to stakeholders. Passenger terminal development or modification typically involves extensive discussions and negotiations with airline committees to ensure the inclusion of state-of-the-art amenities and cost controls on rates and charges. For air cargo facilities, the same considerations should be part of the process, with the objectives of accommodating demand over the forecast period, meeting customer service needs, and containing the real estate elements of the lease to ensure that the economics work for all stakeholders.

The FAA requires that commercial airports must be financially self-sustaining: At the same time, the airport should not be profit-oriented. Cargo, particularly freighter cargo, is very portable. If it becomes too costly to operate at any one airport, stakeholders in the logistics chain will readily look to other options where the economics are better, and the airport welcomes, understands, and will accommodate the operating and business requirements of its users. ➔