The Airport Logistics Park
A 21st Century Logistic Solution
Infrastructure Considerations

- Never underestimate the importance of infrastructure
Multi Modal Alternatives - Ocean

- Balancing the load looks easier at the dock!
Multi-Modal Options - Rail

The beauty of trains is that you have flexibility in loading.
Multi-Modal Options - Trucking

Stopping on a dime may be good in certain situations – sometimes not so much!
Multi-Modal Options - Air

The Only Way to Fly!
The Objectives of Airport Logistics Development

- To accommodate and grow the air cargo business of carriers and the airport,
- To grow the regional economy through the development of compatible and synergistic logistics facilities in the park,
- To add supplementary and supporting industries and the jobs they provide, and
- To contribute to the profitability of the airport and the region
An Airport Logistics Park is Unique

- It is not a typical warehousing and logistics project
- It is not a typical airport freight processing project
- It is not a typical off-airport freight forwarding facility
- It is not a typical construction and development project
Specialized Planning Skills and Knowledge:

- The design, nature, and location of facilities must be compatible with airport operations and tenants’ operating and safety requirements.
- Connections between the aeronautical areas and the Park must be secure and operationally efficient.
- Air cargo has specific operating (Customs) and security needs that are very different than those associated with typical logistics functions.
- The plan must reflect the realities of the local and global marketplace.
The aesthetics of Park design should be linked to on airport facility concepts.

Development and design of the Park must incorporate government and airport operational and planning requirements.

Park design must include the latest security planning elements for facilitated shipping and clearance of goods.

Design must be flexible to reflect and accommodate changes to the regional manufacturing and air cargo shipping dynamic.
Airport Planning

- Design must recognize all elements of air safety and air cargo security
- Design must provide for easy connectivity to the air cargo areas of the airport
- A Logistics Park must be thoroughly integrated into the Airport Master Plan
- Roadway interface with the airport and the surrounding region must not interfere with normal traffic flows
Secure and efficient connectivity to the aeronautical areas of the airport is critical.

Access must be controlled and monitored for security but not create choke points.

The access points must allow for appropriate inspection and screening.

The access points could have two elements:

• A public roadway to connect the Park with on-airport landside facilities
• A restricted service road to allow tug access from the Park to airside facilities
Design of the Park must be refined through:

- A continuing market assessment of regional product flows to determine both volumes and special needs
- Determining the realistic space requirements for the manufacturing and shipping of air eligible products
- Identifying demand in the local real estate market
- Matching the needs of the airport tenant base to development options in the Park
- Monitoring bilateral agreements to identify changes to the global market
Prospective Tenant Needs

The Park design must consider:

- Integration with the airport and carrier specific needs
- The essential requirements of the Park’s tenants
- Special tenant concerns regarding access and connectivity between the Park and airport
- Ancillary services that support the Park and the airport
- The value-added facilities and services for air cargo that the Park could provide
In an industry where security and control are very critical management considerations, the Park should include:

- A security and inspection station for screening requirements
- A communications center for tracking and coordination of shipments
- A government clearance center for customs, agriculture, and other related agencies
The Logistics Park Concept

A Park designed for air cargo should have two major elements.

- The first element contains many of the traditional businesses associated with air cargo and logistics.
- The second is a highly specialized facility designed for the administrative and physical aspects of high-speed logistics – The Logistics Support Center
The Emergence of the Logistics Support Center

- Warehouses
- Distribution Centers
- Integrated Logistics Centers
Enhanced Air Cargo Efficiency:

Local/Regional Manufacturing & Light Assembly Industrial Base

AIRPORT

Cargo Hub

Parcel Sortation Hub

Logistics Support Center (LSC)

Ohio Conference on Freight
The Benefits of the LSC

- Reduced Logistics Investment and financial leveraging
- Facility Flexibility & Adaptability
- Reduced Operations Cost to Clients and the airport
- Inventory Reductions
- Inter-modal Efficiencies
- Integrated IT Networks
To test a Development Plan, look for

- Compatibility with airport operations and needs
- Efficiency of Airport access and traffic flows
- Security of air cargo to include inspection
- Amount of leasable space both vertical and horizontal
- Flexibility of design to accommodate different users and future change
- Optimizing marketability and revenue potential
A well integrated Business and Financial Plan will generate revenues through:

- Optimizing ground and vertical rentals
- Percentage fees on services in the Park
- Cargo handling fees for products prepared for airside transfers
- Cargo screening and inspection fees
- Vehicle access fees to the airport
- Percentage fees on retail sales
Critical Elements for Success

For the development to be truly successful, we believe that several critical things are required.

- Strong Government support of the concept and its integration with the airport
- Continued strength in the air cargo market
- Interest of the private sector in investment and management of the project
- An experienced design and development team that understands logistics and air cargo, and
- The right planning concepts that support the region and the airport.
Prince George Airport, British Columbia

Initial Concept
Aviation Logistics Park
Concept Plan for Shanghai

Just what are we looking at here?
Planning concepts must evolve and will surprise us!
Thank You!

Questions?

Daniel B. Muscatello, Managing Director, Cargo and Logistics
Landrum & Brown
Office (812) 923 – 6318
Mobile (502) 552 - 7112