

SPECIALISTS IN
LOCATION ECONOMICS

REALIZING A GLOBAL FREIGHT HUB IN ST. LOUIS

Executive Summary Presented To



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Agenda

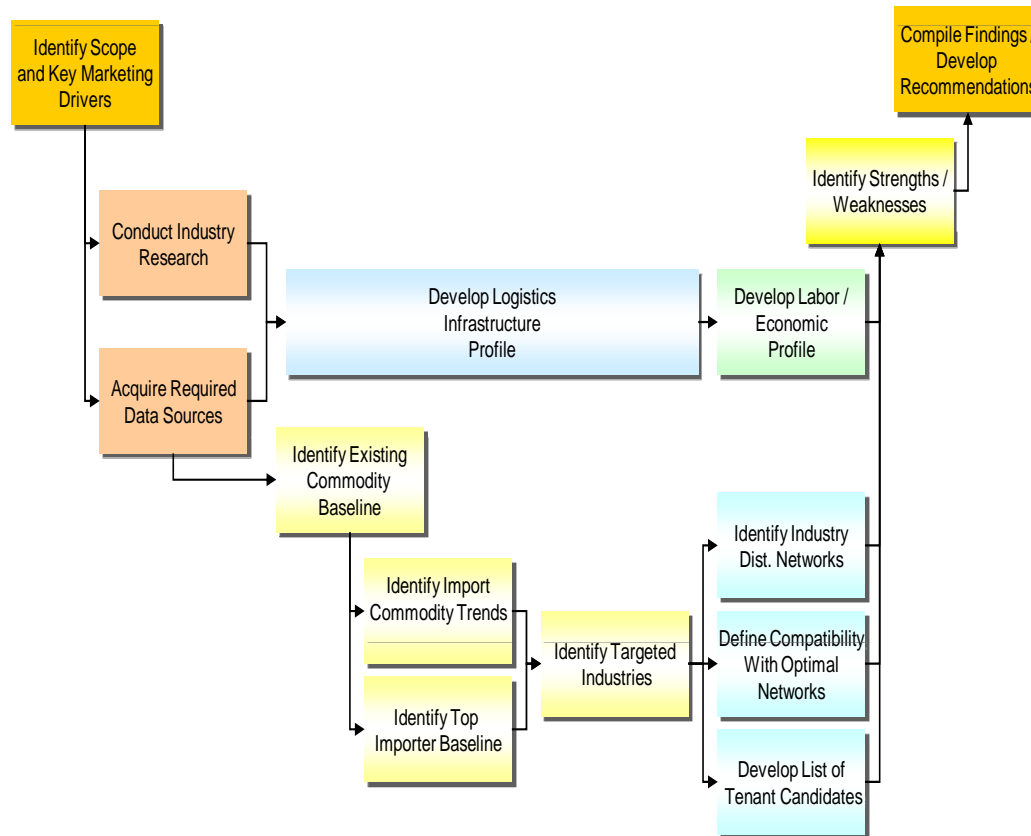
- Background
- Methodology
- Logistics Trends
- The Promise and the “Big Idea”
- Interesting Facts
- Opportunities for St. Louis
- Transportation Profiles
- Air Cargo – An Accoutrement
- Recommendations
- Critical Success Factors
- Discussion

Background

- Lambert-St. Louis International Airport has become the centerpiece of efforts to forge bi-lateral commercial and cultural ties with China
- A specific objective is to engage China via the development of an air cargo intermodal logistics hub in the region
- The long-term goal is to catalyze the many location and transportation advantages of the St. Louis region to enable the growth of a world class international air freight gateway

Methodology

Assessment Approach



Logistics Trends

- In- and out-bound freight are 50% to 60% of costs
- Fuel price risks
- Truck driver constraints
- Asian (not just China) – elongated supply chains
- Security (Sarbanes Oxley)
- Port congestion- Crane / Berth Capacity
- Popular hubs - port diversification:
 - **Southern California:** ports of LA and Long Beach, nation's busiest
 - **Chicago:** intermodal, Prince Rupert port diversification strategy
 - **Dallas, Mexico and Latin America**
 - **Atlanta:** Rail hub (“Terminal”) closest population center to ports of Charleston and Savannah
 - **Indianapolis and Memphis:** no inventory tax
 - **Blue Highway:** inland water ports starting to see a lot of attention

The Promise of St Louis

- The intent of the “Big Idea” was to position St. Louis as the primary platform from which China engages the central region of the US.
- Lambert-St. Louis International features
 - Convenient location
 - Adjacent development sites
 - Recently expanded Foreign Trade Zone
- Mid-America Airport in Mascoutah, IL offers additional capacity and unique capabilities (e.g., cold chain facility and 3,500 acre FTZ).
- As this concept has matured it increasingly has been viewed as a vehicle to leverage all the location and transportation advantages of the St. Louis bi-state region.

The New Big Idea

- The evolving concept: **Global Multi-Modal Logistics Center** leveraging the transportation advantages of the St. Louis Business Economic Area and the development of industrial property at Lambert-St. Louis Airport and the immediate surrounding area and region.
- The concept is well established in Western Europe.
- Defined as “the hub of a specific area where all the activities relating to transport, logistics and goods distribution are carried out by various operators.”
- Objective: the consolidation and regionalization of freight flows by transportation and logistics operators to reduce costs, increase productivity and leverage both economies of scale and capabilities.

Interesting Facts

- The St. Louis region is the 6th largest wholesale trade area that is not located near an ocean port or international border crossing.
- Our analysis reveals that St. Louis is compatible with most scenarios as a location for national distribution.
- The St. Louis super-metro area (the BEA) has been found to be a particularly attractive location for Wholesale Trade business activities. Taken as a whole St. Louis ranks highly among possible central locations for the distribution and logistics industry.
- Wholesale trade occupations in the St. Louis MSA are growing 3.2 times faster than the overall growth rate for all area jobs
- Mapping of the existing distribution centers reveals an existing high concentration and industry cluster in the metro area.

More Interesting Facts

- Largest volume of **Inbound Intermodal** containers to St Louis come from Los Angeles, San Antonio, and New York
 - Top 4 commodities comprise motor vehicle parts, detergents, semi-trailers returned empty and paper
- Largest volume of **Outbound intermodal** containers from St Louis go to Los Angeles, New York, San Francisco and San Antonio
 - Top 4 commodities are motor vehicle parts, detergents, metal scrap and flavoring extracts.

Cost Is The Driver

- Largest volume of **Inbound Air Cargo** to St Louis come from Louisville, Memphis and Indianapolis
 - 3 leading commodities are drugs, motor vehicle parts and mail
- Largest volume of **Outbound Air Cargo** from St Louis also go to Louisville, Memphis and Indianapolis
 - Top 4 commodities include printed matter, motor vehicle parts, paper & mail

Time Is The Driver

Opportunities for St. Louis

- St. Louis is equipped with transportation capabilities that equate to a **Global Multi-Modal Logistics Center** for both domestic and international freight movement.
 - Extensive highway, rail, intermodal, air & waterborne transportation assets
- St. Louis is the 3rd largest inland water port in the United States
 - Waterborne freight tends to minimize environmental impacts and will become increasingly important.
- The “Avenue of the Saints” connecting St. Louis to St. Paul MN is complete. This is a 560 mile “high priority corridor”. This corridor merges with the I-35 corridor, part of the “NAFTA super highway”.
- St. Louis is the third largest rail center in the United States.
 - St. Louis is home to six Class I railroads and six local and short line railroads.
- These are assets that should be heavily promoted.
- *Distribution networks requiring one or three plus warehouses are ideal for St Louis and an ideal prospecting target.*

Opportunities for St. Louis

Distribution Centers within 50 miles of Airport

DC Type	Count of DC's	% of Total
Food Service/Wholesale Grocers	50	40.7%
Home Furnishings Wholesalers	19	15.4%
Home Furnishings Retail	7	5.7%
Drug Wholesale	5	4.1%
Apparel Stores	5	4.1%
Restaurant Chains	4	3.3%
Office Products/Stationery	4	3.3%
Shoe Stores	4	3.3%
Supermarket Chains	4	3.3%
Home Centers & Hardware Chains	3	2.4%
Auto Aftermarket Retailers	2	1.6%
Houseware/Giftware	2	1.6%
Book Stores	2	1.6%
Department Stores	2	1.6%
Sporting Goods Retailers	2	1.6%
Consumer Electronics	2	1.6%
Card/Gift/Novelty	1	0.8%
Service Merchandisers	1	0.8%
Optical Retailers	1	0.8%
Drug Store and HBC Chains	1	0.8%
Candy	1	0.8%
General Merchandise Stores	1	0.8%
Grand Total	123	100.0%

65% of DC's are not air freight focused but are wholesale trade oriented

**Air
Freight
Potential**

3.8% of DC's are focused on air freight and retail time-to-market sensitive

Opportunities for St. Louis

Air Cargo to Asia by State (Kg)

Rank	Code	Description	ANNUAL 2010	Percent
		Total all States	81,711,649.00	
1	IL	Illinois	12,684,058.00	16%
2	OH	Ohio	9,877,425.00	12%
3	MN	Minnesota	8,621,161.00	11%
4	WI	Wisconsin	8,431,161.00	10%
5	MI	Michigan	8,125,523.00	10%
6	IN	Indiana	6,297,726.00	8%
7	MO	Missouri	3,523,050.00	4%
8	PA	Pennsylvania	2,769,334.00	3%
9	KY	Kentucky	2,564,050.00	3%
10	SC	South Carolina	1,821,262.00	2%
11	CA	California	1,696,983.00	2%
12	NC	North Carolina	1,568,583.00	2%
13	TX	Texas	1,562,735.00	2%
14	IA	Iowa	1,463,907.00	2%
15	MD	Maryland	1,384,788.00	2%
16	WV	West Virginia	1,175,363.00	1%
17	GA	Georgia	1,046,701.00	1%
18	MA	Massachusetts	887,281.00	1%
19	TN	Tennessee	878,445.00	1%
20	NE	Nebraska	684,019.00	1%

Opportunity for market share capture as the population center moves south by targeting the logistics integration service industry

Top 4 MO air cargo commodities to Asia: 1]fans & pumps, 2]blood & vaccines , 3]traffic control equipment and 4] civilian aircraft parts

Historic Transportation Profile

Volumes by Mode

INBOUND VOLUME IN TOTAL TONS: ST. LOUIS BEA 2009 (No Intra BEA)							
TOTAL ANNUAL TONS	<u>RAIL</u>		<u>HIGHWAY</u>			<u>AIR</u>	<u>WATER</u>
	Carload	Intermodal	Truckload	LTL	PVT		
131,605,121	73,558,326	1,781,278	28,008,126	767,828	17,789,393	16,308	9,683,861
100%	55.9%	1.4%	21.3%	0.6%	13.5%	0.0%	7.4%

OUT BOUND VOLUME IN TOTAL TONS: ST. LOUIS BEA 2009 (No Intra BEA)							
TOTAL ANNUAL TONS	<u>RAIL</u>		<u>HIGHWAY</u>			<u>AIR</u>	<u>WATER</u>
	Carload	Intermodal	Truckload	LTL	PVT		
178,438,700	22,014,064	2,408,086	29,857,748	899,431	22,884,900	16,768	100,357,702
100%	12.3%	1.3%	16.7%	0.5%	12.8%	0.0%	56.2%

Air Cargo - An Accoutrement

- Air cargo commodities tend to be:
 - High density-value;
 - Time sensitive items;
 - Low weight; and
 - Items that cannot withstand marine transportation.
- Apparel is leading imported air cargo commodity (fashion sensitive), followed by computer equipment (obsolescence and declining value factors), audio and video media, textiles, footwear, science and medical instruments, pharmaceuticals and electronic components.
- Fresh beef and pork exports to China via air are expected to enjoy exceptional growth - to deliver fresh product to expanding Chinese middle class market

Air Cargo - An Accoutrement

- Freight forwarders handle 80% of all intercontinental freight tons.
 - Forwarder relationships will be critical - eastbound demand for service is four times greater than westbound demand
 - As will the marketing effort in the identified catchment area for St. Louis.
 - Success in reducing this 4:1 (or greater) relationship will be reflected in reduced air cargo expenses for users and a corresponding improvement in Lambert St. Louis's competitive position.
- Load aggregation through consolidation by implementing more westbound stops may be necessary to manage the imbalance.
Seattle and Anchorage could also be used in this regard.

Recommendations

- Maximize leverage from the region's highway infrastructure, Class I rail convergence, and growth of rail intermodal, air and the waterborne network
- Mount aggressive marketing campaign to generate backhaul volume to China and other Asian markets, demonstrating cost advantages and focusing on niche commodities:
 - Target commodities presently shipped by air from Chicago to China
 - Establish pre-arranged deals with forwarders and carriers to provide preferential drayage cost to Lambert and cost advantage on airfares to China
 - Also pursue upper end cuts of beef and pork (new market)
 - Consider collaboration with local trucking industry and carriers
- Promote rail/truck intermodal, container-on-barge and wholesale trade cluster to all exporters presently in the catchment area

Recommendations

- Also market St. Louis as destination to industries that align most closely with local transportation modes (wood products; wholesale trade; and retail trade)
- Enhance and integrate rail intermodal assets into regional marketing initiatives (particularly routings from west coast ports direct to St. Louis vs. Chicago)
 - Improve, then promote lift capacity of intermodal sites
 - Market double-stack capability
- Leverage Foreign Trade Zone potential as magnet site
- Certify at least one “mega site”

★ Become a premier global wholesale trade and business-to-business aggregation point for the Americas. ★ Reinforce what is known intuitively: St. Louis is the central location to serve the logistics needs of business.

Critical Success Factors

- Successful multi modal industrial developments contain the following characteristics:
 - Public private partnerships
 - Strong local infrastructure with many modes of transportation present
 - Access to significant markets
 - Ability to be an inland aggregation port or logistics center
 - Strong ties to international trade through rail intermodal and/or dedicated air cargo airports and water ports. On site access to intermodal-rail is dominant
 - On site access to FTZ and custom services
 - Industry targeted cost reducing Incentives
 - Onsite services drayage, recruiting, training, maintenance etc

Working Session:

OPPORTUNITIES

- Some states moving to 90,000 lb trucks
- Enhanced capacity / utilization of barges
- Linkages between ports
- Opportunity to increase share of supply chain of existing industry
- New freight study should examine friction points
- Size and diversity of logistics cluster offers companies opportunities to risk manage supply chain

CHALLENGES

- Container on barge presents weight / volume issues
- Grain and coal create limited economic impacts
- Limited ability to influence railroads (e.g., decisions made at national level)
- Many port customers want private terminals rather than leveraging common assets
- City unable to raise matching funds to qualify for federal grants
- Two rail bridges present significant challenges
 - 70+ years old
 - At capacity
 - Economics unknown
 - Priority for Port Working Group but railroads not highly involved
- Sufficient places to store and inventory empty containers?

Working Session:

- Overall objective: eliminate “linkage friction” and incent multi-modal transportation integration to expand wholesale trade

POTENTIAL INITIATIVES
Create “Mega Zone” around region
Address <ul style="list-style-type: none">• Operational issues:<ul style="list-style-type: none">• Physical Connectivity;• Operational Connectivity; and• Incentives• Marketing issues:<ul style="list-style-type: none">• Create regional logistics marketing initiative to recruit businesses that align with area’s competitive advantages• Focus marketing efforts on shippers and consignees, rather than infrastructure
Map regulations impact logistics sector. Look for potential conflicts between state and federal regulations
Identify alternative funding sources to help leverage federal grants

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