



Fine Tune Your Network Strategy

Cost factors and capacity help guide a logistics strategy in the Southeast region of the United States.

While no single measure or cost factor typically determines a distribution site choice, each logistics network will make different demands and, therefore, place a heavier emphasis on certain factors. Operations which are heavily dependent on import/export flows or which combine a regional distribution operation with some consolidation or deconsolidation of international traffic will naturally stress ocean and air capacity.

In the Southeast Region, Memphis, Miami/Ft. Lauderdale and Atlanta all offer strong air cargo capabilities. Based on its status as a bulk commodities port, New Orleans ranks at the top of the national capabilities for ocean and inland waterway operations.

Carrying the air/ocean scenario further, Miami/Ft. Lauderdale have immediate access to an ocean port in conjunction with their strong air capacity. Atlanta has close proximity to Savannah for ocean support. Memphis would rely on inland waterways or rail intermodal to effect a connection to ocean services.

On an annual cost-of-ownership basis, at \$12,719,000 per year the Boyd study indicates Savannah has the lowest overall operating cost of these five SMSAs. Memphis is slightly higher at \$12,774,000, followed by Atlanta, \$13,149,000. Ft. Lauderdale and Miami are somewhat higher at \$15,906,000 and \$16,296,000, respectively.

Georgia has a very logistics friendly environment from the perspective of overall taxes and fees applied to logistics operations, including those affecting highway moves. Boyd's research shows an effective property tax rate of \$16.10 per \$1,000 of valuation for Atlanta, which is nearly double the rate in Mobile, Ala., the region's low-cost city. But Atlanta is more than \$9 per \$1,000 lower than New Orleans, the region's high-cost venue.

While a heavy user of air cargo might rule out Mobile and New Orleans based on their air capacity, when it comes to

property tax rates, Atlanta and Ft. Lauderdale are equal, \$1.12 per \$1,000 less than Memphis, \$2.00 less than Savannah, and \$2.50 less than Miami. For a company that prefers to own its facility, the wider gaps can add weight to their decision but can also provide a negotiating tool with local and state governments if other factors don't take a city completely out of consideration. Boyd's operating cost numbers don't attempt to estimate the impact of abatements, which could lower the effective rate, or additional municipal school, fire and special assessment fees that could add to the property costs.

If the Georgia venues are looking good, based on air, ocean and property taxes, how do they fare on other logistics-related factors? Work force and the presence of transportation and distribution related industry are pluses. Road conditions and interstate highways are all good, according to the rankings provided by the Logistics Quotient. Even rail access is good. But when it comes to road infrastructure and density, congestion

and safety matters, both Atlanta and Savannah report some high numbers.

Congestion is also a factor in Miami, Ft. Lauderdale and Memphis, according to the data used to compile the Logistics Quotient, so a shipper making a site-selection decision may still be facing a five-way tie among these major metro areas. At this point other factors start to come into play, including proximity to sources and markets. New developments that have not yet shown up in databases can also affect choices. If Memphis was attractive because it is the home of FedEx, that company's new hub slated to open in 2009 in the Piedmont Triad area in North Carolina may influence future network planning.

Tie breakers can also be very personal. There is the story of the CEO who liked to visit the company's factory near the university his daughter attended. No statistical tool or consultant can help in swaying that site selection determination, but for the rest, consult the Southeast regional portion of the 2006-2007 Logistics Quotient. **LT**

by Perry A. Trunick

Most distribution networks are made up of multiple facilities in a regional configuration. For companies handling import/export or regional distribution needs out of the Southeastern United States, *Logistics Today's* Logistics Quotient examines 105 standard metropolitan statistical areas (SMSAs) on 10 major, logistics-related measures.

The full ranking of 362 SMSAs assigns one to five stars to the markets based on how they fare on the 10 measures overall. The Boyd Company (Princeton, N.J. www.bizcosts.com) has, for the last three years, taken the top 50 SMSAs and researched the cost to own or lease a distribution facility in those cities (See box). The Southeast Region contains 17 cities that have currently or previously ranked among the national top 50.

San Francisco the Most Expensive Location, Little Rock the Least

Study compares operating costs of top logistics locations nationwide.

If you want to operate a distribution center, San Francisco is the most expensive of the top logistics markets in the United States. Little Rock, Ark. is the cheapest of the most "logistics friendly" cities as identified by *Logistics Today* and *Expansion Management* magazines. The difference in cost between the most and least expensive on an annual operating basis is around \$8.7 million.

To arrive at these figures **The Boyd Company** (Princeton, N.J. www.bizcosts.com) modeled a 350,000 sq.-ft. distribution center with a non-exempt workforce of 150 people that serves a national distribution network via truckload shipments. Applying costs such as labor, electric power, natural gas, amortization costs (for an owned facility or lease costs for a leased facility), property and sales tax costs, shipping costs and heating and air conditioning, Boyd's "BizCosts Comparative Distribution Warehousing Operating Costs" study presents its findings for 67 major metropolitan areas. Those 67 cities were selected from the Top 50 Logistics Friendly Cities as designated by *Logistics Today* and *Expansion Management* magazines over the last three years. (Boyd included cities as they moved into the top 50 but did not drop any top-ranked cities that dropped out from prior years, accounting for the total of 67.)

Leasing the model facility will improve costs by \$4,882,970 per year in the San Francisco market or \$1,648,738 in Little Rock. That's a reduction of 31% over the cost of ownership in San Francisco or 16% in Little Rock. But of course there's more to site selection than just cost.

How to use the Logistics Quotient

The Southeast Regional Logistics Quotient matrix provides an overall ranking of each city within the Northeast region, assigning a rank of 5 stars to the top tier, 4 stars to the next group and so on down to a 1-star rank. The Logistics Quotient also features 10 logistics-related categories with national numerical rankings on a scale from a top score of 1 down to 362 (the number of Standard Metropolitan Statistical Areas ranked). Those categories are:

Transportation and distribution industry—based on business and employment base providing transportation, distribution, warehousing and related services.

Work force—geared to existing and available logistics-related workers in the area.

Road infrastructure—measures factors like available lane miles per capita, interstate highway access, miles of paved roads etc.

Road density, congestion and safety—ranks the city on traffic volumes and delays as well as accident statistics and other factors affecting the smooth flow of traffic.

Road condition—draws on state performance and includes condition of highways and bridges among other measures.

Interstate highway—includes access to interstate highways, spending on highway construction and maintenance.

Taxes and fees—provides a measure of logistics-related costs, including highway and fuel taxes and related business activity taxes.

Railroad—offers a state-based rank of access to Class 1 and other rail services and miles of track.

Waterborne commerce—includes ocean port capacity as well as inland waterways.

Air cargo—ranks the city on its access to cargo services, including wide-body passenger service by combination carriers, international and expedited services.

2006/2007 Rating	METROPOLITAN AREA	T&D Industry Rank	Work Force Rank	Road Infrastructure Rank	Road Density, Congestion and Safety Rank	Road Condition State Rank	Interstate Highways Rank	Taxes & Fees State Rank	Railroad Rank	Waterborne Commerce Rank	Air Cargo Rank
*****	Atlanta-Sandy Springs-Marietta, Ga.	7	66	289	345	4	12	3	34	95	8
*****	Baton Rouge, La.	57	41	281	340	280	52	45	102	4	115
*****	Birmingham-Hoover, Ala.	48	74	190	238	210	23	34	24	38	67
*****	Charleston-North Charleston, S.C.	58	17	334	211	163	120	21	63	76	117
*****	Charlotte-Gastonia-Concord, N.C.-S.C.	34	140	301	265	270	52	158	34	112	26
*****	Chattanooga, Tenn.-Ga.	85	51	269	206	50	52	29	63	57	107
*****	Columbia, S.C.	70	12	334	118	163	36	21	225	108	48
*****	Jacksonville, Fla.	33	30	21	295	29	52	188	63	40	51
*****	Knoxville, Tenn.	70	112	225	337	73	36	57	102	64	73
*****	Little Rock-North Little Rock, Ark.	53	23	231	81	158	23	136	34	44	72
*****	Memphis, Tenn.-Miss.-Ark.	18	34	275	319	155	52	99	34	27	2
*****	Miami-Fort Lauderdale-Miami Beach, Fla.	4	3	21	357	29	36	188	151	47	4
*****	Mobile, Ala.	97	79	190	222	210	52	34	24	22	93
*****	Nashville-Davidson-Murfreesboro, Tenn.	36	76	225	231	73	36	57	102	36	40
*****	New Orleans-Metairie-Kenner, La.	30	36	281	276	280	52	45	17	1	48
*****	Orlando, Fla.	35	94	21	340	29	157	188	151	73	22
*****	Richmond, Va.	43	124	175	102	172	15	90	225	55	51
*****	Savannah, Ga.	84	71	289	244	4	52	3	63	75	134
*****	Tampa-St. Petersburg-Clearwater, Fla.	31	9	21	362	29	23	188	310	19	27
*****	Norfolk-Newport News, Va.-N.C.	38	64	201	247	185	36	108	34	35	62
*****	Washington-Arlington, D.C.-Md.-Va.-W.Va.	16	48	175	305	222	9	124	63	24	23
****	Augusta-Richmond County, Ga.-S.C.	139	183	309	235	64	120	18	151	111	166
****	Cape Coral-Fort Myers, Fla.	138	166	21	359	29	157	188	310	19	83
****	Fayetteville-Springdale-Rogers, Ark.-Mo.	74	22	235	247	187	288	132	151	117	119
****	Fort Smith, Ark.-Okla.	119	98	271	138	208	120	105	34	72	166
****	Greensboro-High Point, N.C.	61	109	350	124	134	81	111	151	225	55
****	Greenville, S.C.	102	203	334	313	163	23	21	102	106	92
****	Huntsville, Ala.	180	173	190	278	210	120	34	151	50	76
****	Jackson, Miss.	89	80	305	213	181	52	100	225	41	80
****	Lafayette, La.	127	159	281	336	280	81	45	151	83	134
****	Lake Charles, La.	160	143	281	94	280	120	45	102	37	217
****	Macon, Ga.	201	296	289	88	4	52	3	151	116	166
****	Montgomery, Ala.	153	156	190	313	210	81	34	151	103	134
****	Pensacola-Ferry Pass-Brent, Fla.	150	168	21	346	29	120	188	151	67	119
****	Raleigh-Cary, N.C.	64	105	350	310	134	52	111	225	133	42
****	Roanoke, Va.	134	198	175	251	172	120	90	225	118	82
****	Sarasota-Bradenton-Venice, Fla.	147	176	21	361	29	120	188	225	70	102
****	Shreveport-Bossier City, La.	136	157	281	98	280	52	45	151	98	87
****	Spartanburg, S.C.	129	136	334	167	163	81	21	225	225	107
****	Tuscaloosa, Ala.	185	169	190	291	210	52	34	34	225	233
****	Winston-Salem, N.C.	115	212	350	139	134	81	111	102	126	143
***	Albany, Ga.	227	238	289	311	4	288	3	151	120	166
***	Alexandria, La.	245	237	281	27	280	157	45	151	225	217
***	Asheville, N.C.	144	142	350	79	134	52	111	310	153	154
***	Deltona-Daytona Beach-Ormond Beach, Fla.	198	232	21	339	29	81	188	225	225	193
***	Dothan, Ala.	192	164	190	145	210	288	34	34	93	233
***	Durham, N.C.	166	113	350	268	134	81	111	151	133	217
***	Fayetteville, N.C.	190	174	350	333	134	157	111	63	150	166
***	Gulfport-Biloxi, Miss.	164	133	305	316	181	120	100	102	33	263
***	Hickory-Morganton-Lenoir, N.C.	122	203	350	274	134	157	111	102	148	127
***	Kingsport-Bristol, Tenn.-Va.	178	186	220	48	104	120	89	225	225	154
***	Lakeland-Winter Haven, Fla.	91	146	21	258	29	157	188	225	225	143
***	Lynchburg, Va.	169	152	175	83	172	288	90	225	225	193
***	Monroe, La.	204	158	281	329	280	157	45	63	101	217
***	Palm Bay-Melbourne-Titusville, Fla.	87	73	21	353	29	157	188	310	225	119
***	Port St. Lucie-Fort Pierce, Fla.	178	257	21	196	29	157	188	151	225	166
***	Tallahassee, Fla.	268	324	21	354	29	157	188	225	58	111
***	Wilmington, N.C.	150	145	350	343	134	157	111	151	53	193
**	Anderson, S.C.	296	326	334	125	163	157	21	102	225	320
**	Blacksburg-Christianburg-Radford, Va.	316	353	175	220	172	157	90	225	225	193
**	Brunswick, Ga.	327	268	289	195	4	157	3	225	225	320
**	Charlottesville, Va.	268	335	175	201	172	157	90	151	225	217
**	Cleveland, Tenn.	318	274	225	165	73	157	57	225	225	298
**	Columbus, Ga.-Ala.	258	351	279	301	51	280	19	151	89	193
**	Dalton, Ga.	191	58	289	317	4	157	3	225	225	320
**	Decatur, Ala.	253	225	190	323	210	157	34	225	225	298