Logistics CAPITAL & STRATEGY

The Case for Intermodal in South Florida

By Caitlin Hanley, Brian Clancy and Thomas Guardino

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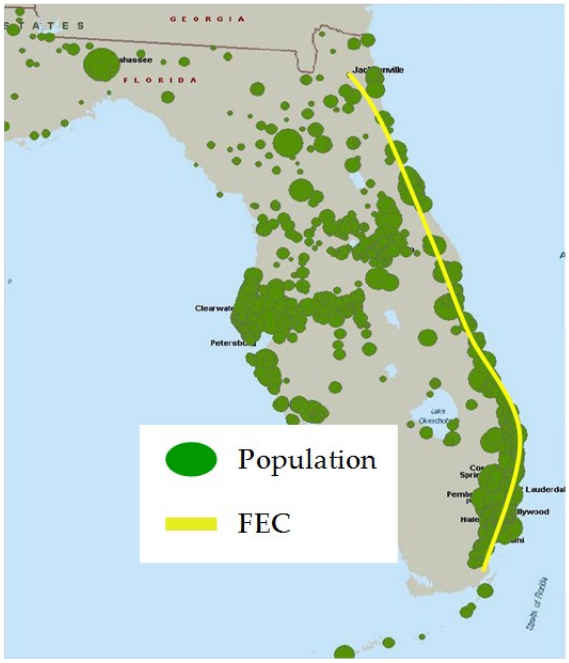
1110 N. Glebe Road, Suite 250
Arlington, VA 22201
Phone: 703.276.9100

The Case for Intermodal in South Florida

Introduction

Trucking into South Florida has become increasingly complicated due to the region's unique geographic location. The sheer population density of South Florida – triggered by rapidly growing residential and tourist consumer markets – has generated significant imbalance in freight flows due to consumption heavily outweighing production. Florida has recently surpassed New York to become the 3rd largest state by population. In addition, Florida is the second largest net consumer region in the US, fueled by both a large population (over 19 million residents) and tourism (85 million out-of-state visitors annually) (Exhibit A)).

A **Florida Population Density**



Florida's dense population has prompted severe congestion on major transportation corridors, particularly I-95, which runs from Jacksonville to Miami. The risk of heavy traffic delays makes trucking into South Florida difficult at best. The shortage – or often, lack – of available outbound loads poses significant risk of deadhead and asset underutilization for carriers. Rising fuel prices further escalate the cost of serving South Florida by truck.

As a result, trucking companies have increasingly turned to intermodal as a reliable and cost-effective option for managing freight flows in South Florida. Intermodal offers carriers a "truck-like" service into South Florida without the hassle of congestion or retrieving backhaul loads. Furthermore, intermodal accommodates the transportation of consumer goods (e.g. food, household supplies, electronics, building supplies, office products) normally carried via truck.

The economics of leveraging intermodal in South Florida undoubtedly favor asset and resource utilization for truck carriers. Carriers can utilize Florida's intermodal services at strategic interchanges – Jacksonville, Atlanta, Nashville, Savannah – instead of trucking into South Florida. By repositioning trucks to serve more opportunistic markets, carriers can yield significant gains in revenue generated per hour of operation.

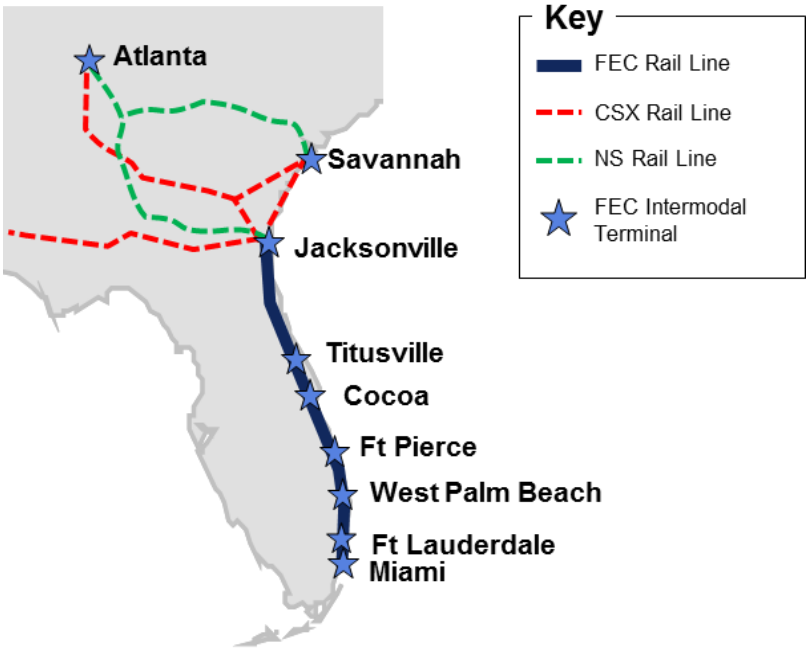
Role of Intermodal in South Florida

South Florida has long served as the crossroads of bi-directional international and domestic freight traffic. Southbound traffic into South Florida is mainly driven by local consumption and exports to the Caribbean and Latin America. On the other hand, northbound traffic from South Florida is driven by demand pull from northern US states for goods produced in Florida and imports from Latin America.

Rail infrastructure plays a critical role in transportation of South Florida's freight flows. Its multi-modal connectivity and geographic breadth has enabled access to key markets for an extensive range of shipper segments.

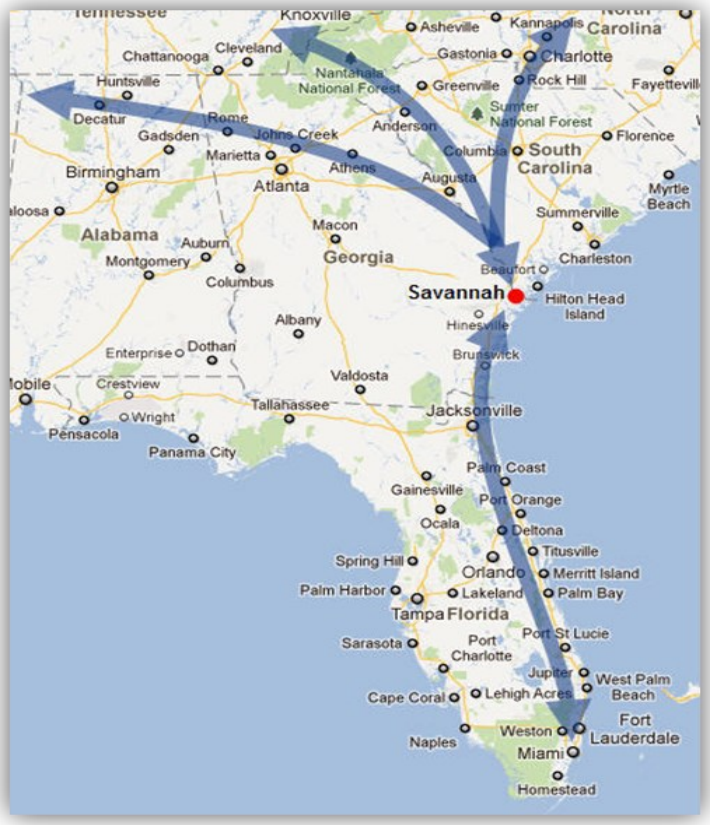
In South Florida, rail provides access to heavily congested areas along the I-95 corridor from Jacksonville to Miami. The South Florida market is served by the Florida East Coast Railroad (FEC), a 351-mile Class II rail road that runs from Jacksonville to Miami with strategic interchanges with both CSX and NS (Exhibit B).

B FEC Network and Intermodal Terminals



FEC, unlike traditional railroads, specializes in intermodal transportation services. FEC offers shippers the flexibility of multi-modal shipping providing connectivity to major ports – Miami, Everglades, Palm Beach – as well as strategic rail-to-truck transload locations. Its intermodal connectivity allows access to / from every major U.S. market, especially major east coast destinations such as Atlanta and Savannah. Approximately 77% of FEC's volume is intermodal, in contrast with Class I railroads whose focus is traditional carload transportation, with approximately 30% - 50% of their total volume being intermodal.

C FEC Savannah Relay Service



To facilitate the movement of freight between the Port of Savannah and the large consumer population of South Florida, FEC continues to develop innovative intermodal solutions, an example of which is their Savannah Relay service. The service maximizes asset utilization for truckers and shippers by making intermodal service available to South Florida, thereby freeing up company tractors and drivers in South Florida (Exhibit C).

The Savannah Relay offers overnight service to key locations in South Carolina including Columbia, Charleston, Greenville, Rock Hill, Florence, Anderson, Orangeburg and Gaston. FEC also serves Charlotte and other key North Carolina markets with two day service into South Florida. The Savannah Relay service is a highway competitive, door-to-door service that has over 99% on-time delivery.

Time-in-Transit Economics: Truck-to-Rail Modal Conversion

South Florida's geographic location makes it difficult to access via truck due to major congestion on the I-95 corridor. According to the State of Florida Department of Transportation (DOT), congestion on the I-95 corridor has and will continue to worsen over the next few decades as South Florida's population continues to grow and I-95 expansion is not a feasible option.

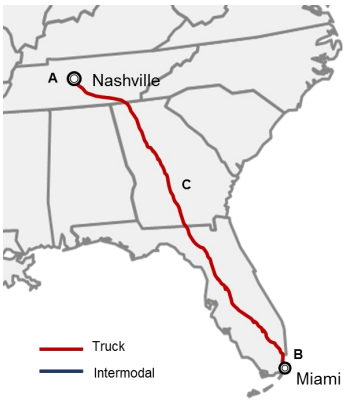
Hours wasted in traffic result in unreliable transit times which are further exacerbated by accidents and construction. For truckers, congestion complicates hours of service (HOS) regulation limitations—forcing drivers to pull off the road short of final destinations, ultimately lengthening transit times.

For carriers, driving into Miami is particularly problematic due to the lack of available backhaul freight and few nearby options – Orlando (235 miles), Tampa (275 miles), and Jacksonville (351 miles). Drivers are forced to accept low outbound rates from Miami or forced to deadhead to an alternate location, underutilizing their assets. By effectively leveraging intermodal, carriers can both maximize profits and asset utilization (Exhibit D).

D Leveraging Intermodal for More Efficient Trucking

Situation: Driver needs to bring load 910 miles from Nashville to Miami

Scenario A: Drives from Nashville to Miami, Waits 24 hours in Miami for Outbound Load, Drives back to Nashville



	Leg	Miles	TnT	Rev.
A	Nash. to Miami	605	11.0	-
	Rest (HOS)	-	10.0	-
	Nash. To Miami (cont.)	305	5.5	$2,807
B	Miami (HOS/Wait)	-	24.0	-
C	Miami to Nashville	605	11.0	
	Rest (HOS)	-	10.0	-
	Miami to Nash. (cont.)	305	5.5	$1,231
Total (Truck)		1,820	77.0	$4,038
Revenue Per Truck Hour of Operation				$52

Scenario B: Drives from Nashville to Atlanta, Drops off load for intermodal to Miami, Retrieves load in Atlanta for Charlotte, Drops off load at Charlotte and Retrieves backhaul For Nashville

	Leg	Miles	TnT	Rev.
A	Nash. to Atlanta	248	4.5	$580
B	Atlanta (Wait)	-	3.0	-
C	Atlanta to Char.	246	4.5	$626
D	Wait (HOS)	-	10.0	-
E	Char. To Nash.	409	7.4	$738
Total (Truck)		903	29.4	$1,944
F	Atl.-Miami (Intermodal)	680	28.5	$1,647
Total (Intermodal)		680	28.5	$1,647
Total (Truck and Intermodal)				$3,591
Revenue Per Truck Hour of Operation				$122

Source: LogCapStrat Time-in-Transit (TnT) model; truckloadrate.com; Assumes: 55 mph truck speed; 11 Hour HOS limitations; Rates include fuel surcharge: $0.47/mile (truck) and 35% of linehaul rate (rail)

In Exhibit D, the carrier that uses intermodal into Miami (Scenario B) is able to generate a revenue intensity ($122/hr) – nearly 135% higher – than the carrier that trucks directly to Miami ($52/hr). By leveraging intermodal in Scenario B, the carrier is able to more effectively utilize assets and resources to yield higher revenue per hour of operation. While the load transits from Atlanta to Miami via rail, the driver can be redeployed from Atlanta to more opportunistic markets rather than risking long-delays or dead-head in Miami (as in Scenario A).

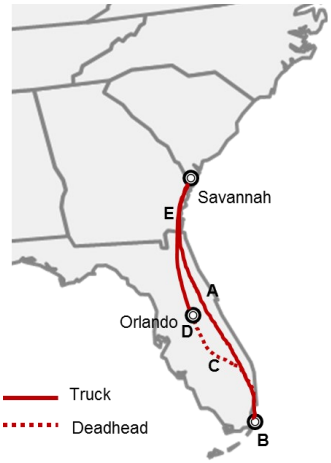
By leveraging intermodal, the carrier more effectively utilizes assets and resources to yield higher revenue per hour of operation

For carriers, the economics of using intermodal are equally, if not more, compelling when utilizing FEC's Savannah Relay service into Miami (Exhibit E).

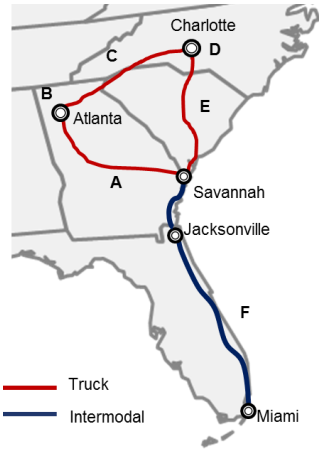
E Using FEC's Savannah Relay for More Profitable Trucking

Situation: Carrier Receives Load in Savannah Destined for Miami (484 miles)

Scenario A: Drives from Savannah to Miami, Waits 24 hours in Miami for Potential Outbound Load, Deadheads to Orlando to Retrieve Backhaul



Scenario B: Carrier sends load via FEC Savannah Relay rather than deploying truck to Miami; Redeploys truck to Atlanta for three city tour



	Leg	Miles	TnT	Rev.
A	Savannah to Miami	484	8.8	$1,019
B	Miami (HOS / Wait)	-	24.0	-
C	Deadhead to Orlando	235	4.3	-
D	Orlando (Wait)		3.0	-
E	Orlando to Savannah	280	5.1	$561
Total Truck		999	45.2	$1,580
Revenue Per Truck Hour of Operation				$35

	Leg	Miles	TnT	Rev.
A	Savannah to Atlanta	248	4.5	$590
B	Atlanta (Wait)	-	3.0	-
C	Atlanta to Charlotte	246	4.5	$581
D	Wait (HOS)	-	10.0	-
E	Charlotte to Savannah	252	4.6	$645
Total (Truck)		745	26.5	$1,816
F	FEC Savannah Relay (FH)	484	17.5	$1,024
Total (Intermodal)		484	17.5	$1,024
Total (Truck and Intermodal)				$2,840
Revenue Per Hour of Operation				$107

Source: LogCapStrat Time-in-Transit (TnT) model; truckloadrate.com; Assumes: 55 mph truck speed; 11 Hour HOS limitations; Rates include fuel surcharge: $0.47/mile (truck) and 35% of linehaul rate (rail)

The carrier that uses FEC's Savannah Relay into Miami (Scenario B) achieves a revenue per hour over 200% greater ($107/ hour) than the carrier trucking directly into Miami ($35/hour) (Scenario A). While the driver in Miami endures a long wait and ultimately deadheads to Orlando, the carrier using FEC's seamless intermodal service maximizes profits by repositioning its truck for a three city (Savannah-Atlanta-Charlotte-Savannah) tour.

Even for long haul trucking segments, carriers can benefit from improved revenue intensity and asset utilization by strategically leveraging intermodal into South Florida (Exhibit F).

F The Benefits of Intermodal for Long Haul Trucking

Situation: Carrier Receives Load in Pittsburgh Destined for Miami (1,175 miles)

Scenario A: Drives from Pittsburgh to Miami, Waits 24 hours in Miami for Outbound Load, Drives Back to Pittsburgh

	Leg	Miles	TnT	Rev.
A	Pittsburgh to Miami	605	11.0	-
	Rest (HOS)	-	10.0	-
	Pitt. To Miami (cont.)	570	10.4	$2,772
B	Miami (HOS/Wait)	-	24.0	-
C	Miami to Pittsburgh	605	11.0	
	Rest (HOS)	-	10.0	-
	Miami to Pitt. (cont.)	570	10.4	$1,965
Total (Truck)		2,350	86.7	$4,737
Revenue Per Truck Hour of Operation				$55

Scenario B: Drives from Pittsburgh to Atlanta, Drops off Load for Intermodal into Miami, Retrieves Load in Atlanta for Columbus, Drops-off Load at Columbus and Retrieves Backhaul for Pittsburgh

	Leg	Miles	TnT	Rev.
A	Pittsburgh to Atlanta	605	11.0	-
	Rest (HOS)	-	10.0	-
	Pitt. To Atlanta (cont.)	80	1.5	$1,130
B	Atlanta (Wait)	-	3.0	-
C	Atlanta to Columbus	525	9.5	-
	Rest (HOS)	-	10.0	
	Atl. to Columbus (cont.)	43	0.8	$1,026
D	Columbus (Wait)	-	3.0	-
E	Columbus-Pittsburgh.	185	3.4	$636
Total (Truck)		1,438	52.1	$2,792
F	Atl.-Miami (Intermodal)	680	28.5	$1,647
Total (Intermodal)		680	28.5	$1,647
Total (Truck and Intermodal)				$4,439
Revenue Per Truck Hour of Operation				$85

Source: LogCapStrat Time-in-Transit (TnT) model; truckloadrate.com; Assumes: 55 mph truck speed; 11 Hour HOS limitations; Rates include fuel surcharge: $0.47/mile (truck) and 35% of linehaul rate (rail)

The carrier that leverages intermodal from Atlanta to Miami (Scenario B) achieves a 55% greater revenue intensity ($85/ hour) than the carrier that trucks directly from Pittsburgh into South Florida ($55/hour) (Scenario A). While the carrier in Scenario A endures delays and HOS constraints in Miami, the carrier in Scenario B simultaneously generates both intermodal revenue and trucking revenue from two backhaul segments (Atlanta-Columbus, Columbus-Pittsburgh).

By using intermodal, carriers can redeploy trucks to more opportunistic markets rather than risk long delays or dead-head in Miami

G Truck Vs. Intermodal Time-In-Transit

	Distance	Time-In-Transit (hours)	
Origin/Destination	(Miles)	Truck	Intermodal
Jacksonville/Miami	351	6.4	9.0
Atlanta/Miami	662	22.0	22.5
Pittsburgh/Miami	1,174	31.3	47.0
Nashville/Miami	909	26.5	29.0
Savannah/Miami	484	8.8	13.5

Source: LogCapStrat TnT model

Because FEC's intermodal service is just as fast, if not faster than trucking into South Florida, carriers can realize significant increases in profit without compromising transit times (Exhibit G). From key Southeastern markets into Miami, FEC offers "truck-like" times — Atlanta (22.5 hours), Nashville (29.0 hours), Savannah (13.5 hours).

By using intermodal, the benefits of asset utilization and profit maximization are not at the sacrifice of slower transit times or unreliable service. Instead, carriers can rely on FEC to avoid the risk of unprofitable backhauls in South Florida and reap significant gains in revenue intensity.

Cost-Effective Economics of Intermodal in South Florida

Trucking into South Florida is becoming increasingly costly as diesel fuel prices continue to rise. This is particularly detrimental to long length of haul journeys that – because of additional fuel requirements – are impacted by fuel increases more so than short haul journeys.

H Rising Fuel Prices As Catalyst for Intermodal in South Florida

"Because of fuel cost we are using intermodal for about 30-35% of our volumes."

- Major Pet Supply Retailer

"The key advantages of intermodal are cost and fuel savings, as well as lower carbon footprint."

- Major National Retailer

"Fuel prices are causing us to consider the use of domestic intermodal. We are in the early stages."

- National Retailer

Source: LogCapStrat Shipper Survey

Fuel prices are a dominant driver in shippers' decisions to turn to intermodal as a more cost effective alternative to trucking into South Florida (Exhibit H).

Intermodal is particularly competitive with trucking on long haul lanes that benefit from intermodal's fuel efficiency. Intermodal can also more economically serve markets where loads are primarily southbound and trucks risk empty northbound backhauls. Not only does intermodal reduce fuel usage, it reduces carbon emissions as freight rail is nearly three times more fuel-efficient than truck.

Conclusion

As fuel prices increase, I-95 congestion yields volatility in transit times, and imbalanced freight flows generate unpredictable backhauls, carriers will increasingly benefit from reliable and cost-effective intermodal service in South Florida.

Intermodal enables carriers to maximize profits and effectively utilize resources by achieving revenue intensities per hour that would not be possible by operating trucks alone. Carriers can rely on FEC's seamless "truck-like" service for their South Florida shipping needs. Without suffering long delays or deadhead in South Florida, carriers can instead redeploy trucks to serve more opportunistic markets and achieve unprecedented revenue intensities and asset utilization.

About the Authors

Caitlin Hanley *Associate*

Caitlin Hanley is an associate at Logistics Capital & Strategy, LLC ("LogCapStrat") and has advised clients across the firm's financial and strategic advisory practices, since joining LogCapStrat in 2011. Ms. Hanley is an expert at developing analytical frameworks, quantitative modeling, market research and valuation analyses. At LogCapStrat, Ms. Hanley has worked on growth strategy, M&A due diligence, product development and customer segmentation engagements serving clients in intermodal, air freight, truckload, less-than-truckload and industrial distribution sectors.

Prior to joining LogCapStrat, Ms. Hanley was a consultant at the Advisory Board Company, conducting strategic research for the firm's national and international portfolios. Ms. Hanley was a formerly a Herchel Smith Fellow at Emmanuel College, Cambridge, where she conducted two-years of graduate research in English Literature.

Ms. Hanley holds an MPhil in English Literature from the University of Cambridge, and a BA in Classics and English magna cum laude from Williams College. She is a member of Phi Beta Kappa and an NCAA All-American in track and field.

Brian Clancy *Managing Director*

Brian Clancy is co-founder and Managing Director of Logistics Capital & Strategy, LLC ("LogCapStrat") and co-founder of MergeGlobal, Inc. Mr. Clancy has 22 years of experience in providing financial and strategic advisory services.

Mr. Clancy has advised clients on a wide range of strategic issues, including: business strategy, mergers & acquisitions due-diligence, bankruptcy support, customer segmentation, price elasticity, network strategy, capital investment decisions and operational improvement. He has worked with numerous clients in the air freight, small package, less-than-truckload, container shipping, third-party logistics, and transportation infrastructure industries. Mr. Clancy's experience is global in scope, where he has directed client engagement teams in North America, Latin America, Europe, Middle East, and Asia.

Mr. Clancy's mergers & acquisition due diligence experience includes advising private equity firm clients on industry economics and competitive position of acquisition targets, providing a third party opinion to the board of directors of a publicly traded cargo company on the strategic rationale and synergy potential for merger with a company in an adjacent sector and advising the board of directors of a government owned airline on the financial feasibility of privatizing its cargo division. He has also provided counsel on the economic feasibility and structuring of several joint ventures between client and partner companies in the freight transportation sector.

Mr. Clancy has been involved in several bankruptcy proceedings and restructurings of transportation companies, where he worked with the debtor to develop a new business plan and advised creditors on the feasibility of debtor restructuring plans. Mr. Clancy specific experience includes: Kitty Hawk Air Cargo-secured creditor (2001), Active Aero-secured creditor (2002), Atlas Air-debtor (2004), US Airways-UCC (2005), ATSG-labor (2009) and YRC-company/labor (2011).

Mr. Clancy is a graduate of James Madison University where he received a Bachelor of Science degree in Policy Analysis. He is also a member of The International Air Cargo Association (TIACA), the Council of Supply Chain Management Professionals (CSCMP), and the Intermodal Association of North America (IANA). He is the author of numerous articles on strategic issues in transportation and logistics industries and is a frequent speaker at key industry conferences and university symposia.

Thomas Guardino *Director*

Thomas Guardino joined Logistics Capital and Strategy LLC ("LogCapStrat") in 2013 as Director, and has over 25 years of experience developing and successfully delivering innovative analytics and enterprise business systems to enhance profitability and asset returns for major 1000 companies in the Transportation, Automotive and Energy sectors.

Mr. Guardino is an expert in creating client business value through practical applications of multivariate regression analysis, competitive market modeling, linear and non-linear optimization, computer simulation, product cost measurement, finance theory, stochastic modeling and risk assessment.

Prior to joining LogCapStrat, Mr. Guardino was a Vice-President and Partner at Cascade Consulting Partners where he was responsible for business development, product design and implementation, and client relationship management for its consulting practice. At Cascade, Mr. Guardino oversaw major client engagements including: the design of an Account Pricing system for privately-held national truckload carrier, the development of a sales management system for a major cargo airline, and R&D technology investment decision support for a major utility research institute in the face of global climate risk.

Mr. Guardino was previously a Senior Consultant and Principal at Decision Focus Incorporated, where he designed and implemented a Promotion Pricing system for a Fortune 100 automotive company. He also led conceptualization, delivery and follow-on business development for a Target Pricing system to support Sales negotiations for a Fortune 500 Transportation company.

Mr. Guardino holds an MBA from Harvard Business School, an MS in Engineering-Economic Systems from Stanford University, and a BA in Human Biology from Stanford University. At Stanford, he earned All-Pacific 8 Conference and Academic All-American honors in baseball.

About Logistics Capital & Strategy, LLC

Logistics Capital & Strategy, LLC ("LogCapStrat") is a financial and strategic advisory firm serving management, private equity and other stakeholders in supply chain-intensive industries.

Located in Arlington, VA, our team of highly experienced professionals – business strategists and investment bankers – provides clients with a uniquely integrated approach to creating value.

Our approach - a fusion of analytical firepower, deep industry expertise and seasoned judgment – generates long-term value for clients in all segments of the transportation and logistics value chain

Capabilities

Strategy

Profitable growth tops the agenda for most business leaders. The reality is, however, that for most executives there exists a significant gap between achieving short-term objectives and driving long-term corporate strategy. We work with business owners, CEOs, business unit executives and private equity firms to deliver actionable strategies – whether organic or acquisition-driven – that deliver profitable growth.

Our strategy framework includes:

- Business Definition & Prioritization of Core Segments
- Cost Structure Assessment
- Customer Demand Analysis
- Competitive Position Assessment
- Performance Gap Analysis
- Implementation Plan

Transaction Services

Given the bleak reality that approximately 80% of M&A transactions fail to create value, or even destroy value, due diligence is a critical step in the acquisition or sale of a business. In a competitive process, it is critical for an acquirer to understand strategic fit of a target, assess potential risks and to quantify both. We work with business owners, CEOs, private equity firms, and development executives to conduct due diligence that is thorough, rigorous, and comprehensive. Grounded in the conviction that valuing non-public companies is about more than numbers, we ensure that private companies pursue the right objectives. Achieving optimal solutions requires industry experts who understand value drivers in complex logistics and transportation companies, and we are committed to success at every stage in an M&A transaction.

Our Transaction Services framework includes:

- Business Definition
- Business Analysis
- Market/Competitive Analysis

Credit Advisory Services

LogCapStrat provides advisory services to creditor groups and other stakeholders with interests in transportation and logistics companies exposed to financial and operational instability or engaged in a restructuring or bankruptcy. Our deep transport industry knowledge combined with our extensive financial and restructuring experience allow us to quickly develop an assessment framework to assist Lenders, Bondholders, Labor Groups and other stakeholders to evaluate both their risk exposure as well as opportunities with alternate strategies.

Our Credit Advisory Services include:

- Drivers of Profitability and Value
- Strategic Alternatives and Valuation
- Transaction Support and Monitoring

Investment Banking Services

LogCapStrat provides expert, objective advice on mergers and acquisitions, private placements and corporate finance issues for privately-held and publicly traded companies, financial sponsors and other institutional investors with respect to supply chain intensive businesses.

We are a Client focused firm. Our Clients always come first. We do not operate trading or investment management businesses that might conflict with our Clients' interests.

We understand our Clients objectives and are value focused. If a transaction does not allow our Client to create value, we will clearly say so. Ultimately, we are about Client relationships and understand we win when our Clients win.

Mergers & Acquisitions

Sell-Side Advisory

LogCapStrat works closely with clients to discreetly and confidentially manage a competitive sale process achieve the best valuation and terms and maximize the likelihood of completing a transaction.

Sometimes, a negotiated transaction with just one or two likely buyers can best meet a client's objectives. A more narrow process can often replicate the economic and structural advantages of a broader auction, while minimizing disruption to the business and reducing the probability of premature disclosure. We'll help you evaluate the implications of your alternatives and recommend the best course of action.

Buy-Side Advisory

LogCapStrat works with public and private corporations and financial sponsors to complete targeted acquisition opportunities. We originate acquisition ideas for our clients, as well as respond to requests to assist with transaction execution.

In many instances, through our research and extensive network of relationships, we can identify and gain access to companies that are otherwise not currently for sale but can be purchased on reasonable terms through a negotiated transaction. In all cases, we assist in evaluating offering materials and structuring and negotiating proposals to successfully complete acquisitions that best meet our clients' objectives.

Capital Raising

Private Placements

LogCapStrat serves as agent on private placements of equity and subordinated debt of at least $10.million. We agent private placements of senior debt of at least $25.million. We also help clients evaluate financing alternatives and negotiate and execute financing plans. We maintain a broad network of relationships with institutional investors aligned with our target.