



Behavioral Change Monetized

SHIPMENTS TO SOUTH CENTRAL US FROM MANUFACTURING
FACILITY IN DFW, TEXAS



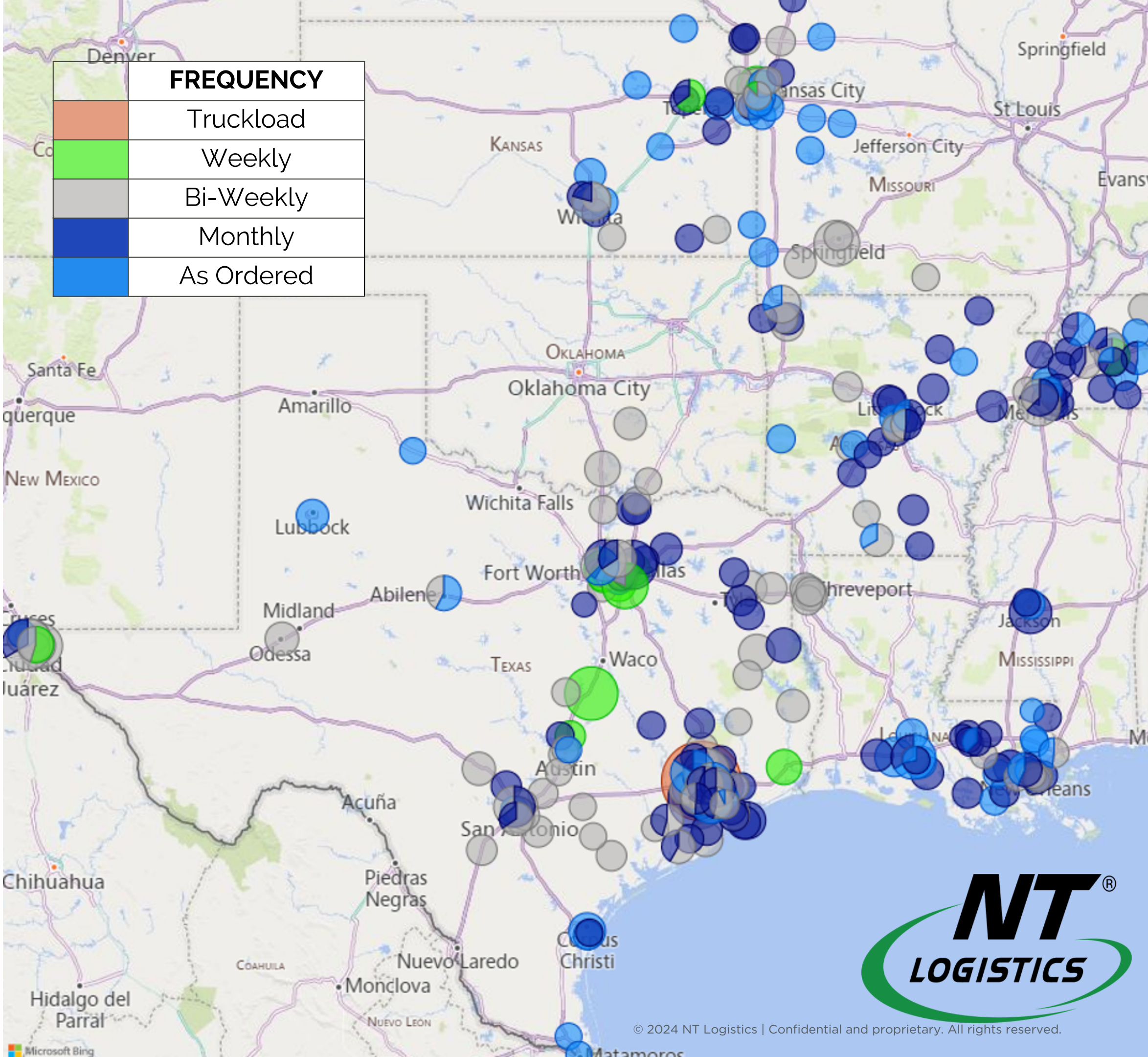


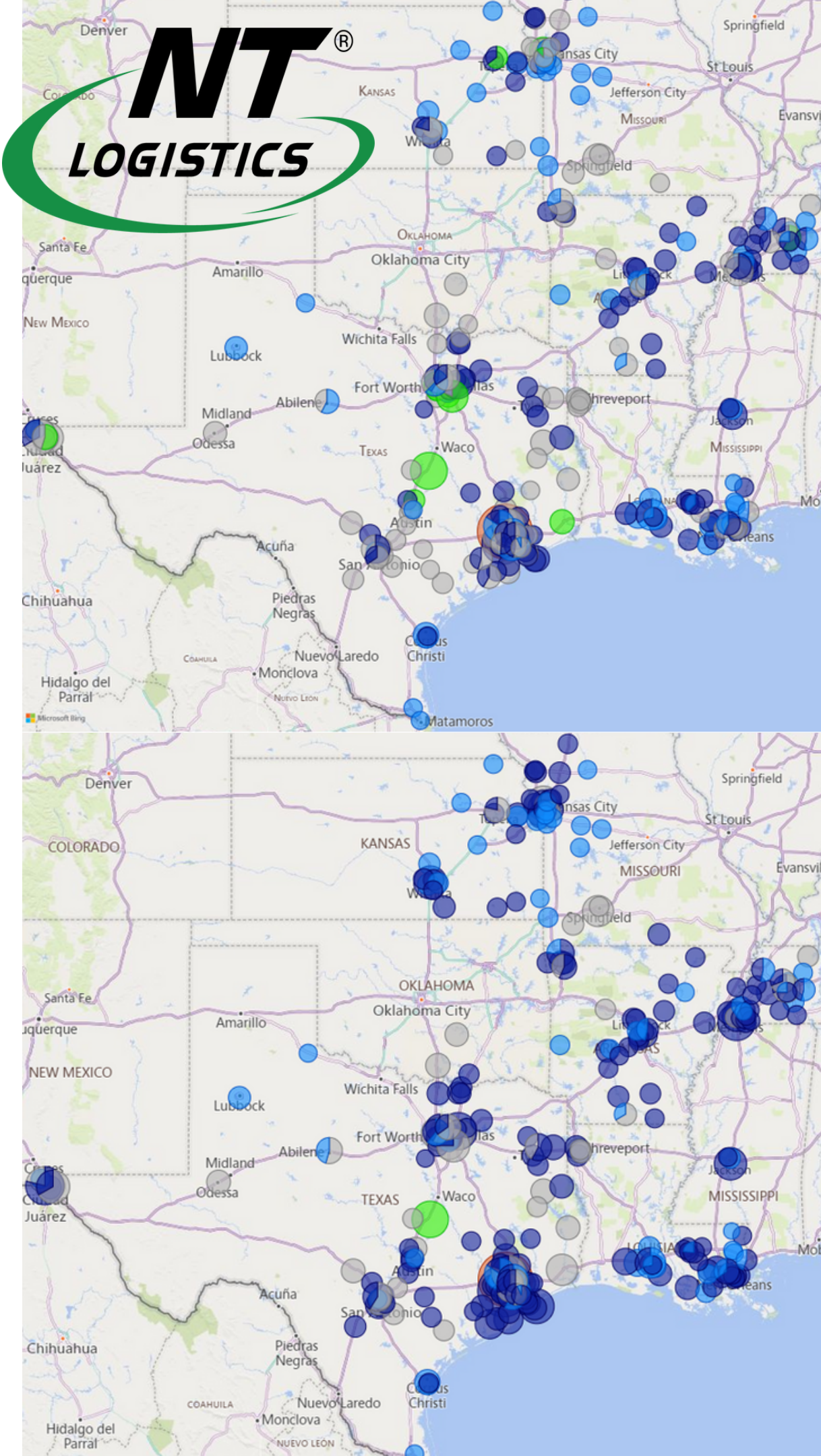
South Central Network Study

We analyzed 3,597 shipments for a medical supply company over a six-month timeframe, which included 7,990 pallets, each with a maximum weight of 2,200 lbs. Initially presented with raw sales data, we had to meticulously sift through and decipher the relevant information. Our first task was to categorize the shipments by frequency: truckload, weekly, bi-weekly, monthly, and as ordered.

Our goal: a leaner, smarter distribution network.

To reduce costs, we reengineered the client's shipping strategy from the ground up. That meant analyzing every aspect of their process—delivery frequency, pallet weight, and mileage. We increased shipment efficiency by adjusting delivery schedules, fully maximizing pallet capacity, and minimizing unnecessary miles. In short, we broke down their order system and rebuilt it for maximum efficiency and measurable savings.





Existing Data

	Delivery Count	Weight	Pallet Count	Weight / Pallet	Weight / Stop
Truckload	26	840,942	390	2,156	32,344
Weekly	499	2,186,881	1,269	1,723	4,383
Bi-Weekly	1,991	6,578,382	4,110	1,601	3,304
Monthly	897	3,031,961	1,854	1,635	3,380
As Ordered	184	554,658	367	1,511	3,014
TOTAL	3,597	13,192,824	7,990	1,651	3,668

Optimized Data

	Delivery Count	Weight	Pallet Count	Weight / Pallet	Weight / Stop
Truckload	26	840,942	390	2,156	32,344
Weekly	19	303,446	147	2,064	15,971
Bi-Weekly	848	5,212,217	2,684	1,942	6,146
Monthly	1,456	6,267,375	3,415	1,835	4,305
As Ordered	184	568,844	371	1,533	3,092
TOTAL	2,533	13,192,824	7,007	1,883	5,208

The Results

With six months of sales data in hand and a blank slate for redesigning the network, we moved beyond our initial considerations. We zeroed in on out-of-area customers, testing regional delivery groupings and pallet optimization strategies. We also explored the potential for shifting certain customers to a more efficient high-density, low-frequency delivery model. Along the way, we weighed how delivery consistency influenced both satisfaction and day-to-day operations.



Delivery Count

Pre-Optimization: 3,597

Post Optimization: 2,533

29.58% Decrease

Pallet Count

Pre-Optimization: 7,990

Post Optimization: 7,007

12.30% Decrease

Weight / Pallet

Pre-Optimization: 1,651

Post Optimization: 1,883

14.05% Increase

Weight / Stop

Pre-Optimization: 3,668

Post Optimization: 5,208

41.98% Increase

11.04% Annualized Mileage Savings

The mileage savings from this study were substantial.

By optimizing routes, consolidating shipments, and regionalizing deliveries, we significantly cut total miles traveled—lowering transportation costs, reducing fuel use, and shrinking the network's carbon footprint.

These strategic changes made each delivery more efficient and contributed to a leaner, more sustainable operation.



Existing Mileage: 225,010

Optimized Mileage: 200,168

Mileage Saved: 24,842

Annualized Savings: 49,684 / 11.04%