

# Logix for Sourcing and Risk Assessment, Resiliency, and Sustainability

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### Logix for Sourcing and Risk Assessment, Resiliency, Sustainability



Logistix Solutions constantly tailors its software to meet our users' evolving needs for distribution and transportation excellence. This year alone we have provided **over twenty new updates** to the Logix Supply Chain Optimization software with new features or improvements to existing capabilities often also positively impacting solution speed and ease of use.

- Greenhouse Gas Emissions calculations have long been a feature in Logix, though now, through our Design Center and Analytics tools, scoring alternative supply chains for sustainability are more visible and presentable than ever. In a world that is increasingly considering the impact of supply chain and transportation on the environment, it is important to be able to see these levels in your current network vs an optimized scenario, while also focusing on building a resilient and competitive supply chain.
- Optimizing Sourcing, Ocean Freight Costs and Ports of Entry is a particularly important topic for our Logix users as container ocean freight costs have doubled, tripled, and even quadrupled this year. Our users are scrambling to find solutions including finding alternative ports of entry to solve the log jams at various ports of entry where container ships can wait days or weeks to off load containers creating uncertainty, delays and shortages in the supply chain.





#### Calculating Supply Chain Greenhouse Gas/CO2 Emissions Using Logix

Greenhouse Gas and Carbon Footprint modeling has been part of Logix's capabilities since 2013, however the many updates both graphically and functionally make these calculations and reporting features easier to see and consider in your modeling scenarios than ever before.

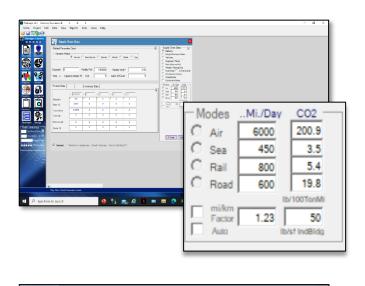
"Logix calculates metric tons of CO2 and other Greenhouse Gas emissions from our users' supply chain and distribution network strategies based on the various transport modes utilized throughout the network", notes Logistix Solutions' President and CEO Robert Camozzo.

"With rising fuel costs and a concern for a cleaner environment throughout the industry, users can now benchmark their current carbon footprint and optimize their distribution network and supply chain utilizing cleaner technology and transport modes such as road, rail, ocean freight and intermodal." Logix provides a scorecard display of CO2 and Greenhouse Gas emission levels with a comparison of your baseline network to any alternative supply chain.

Industry standard metrics for metric tons of emissions for various types of road transport, rail, ocean, and air are part of the data embedded in Logix to provide an estimate of emissions by mode of transport. Logix also calculates average emissions for various sized warehouse and storage facilities using industry standard metrics.

Sourcing standards are often more difficult to define and are left up to the user to input by manufacturing plant, or supplier, in the "Supplier" record to complete the calculation of total emissions for any Logix baseline or alternative solution.





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Users can modify any of these standards in the Logix "Default Record". Logix calculates emissions, adjusting for the size of the vehicle in its fleet sizing and transport optimization solvers, and for the size of the warehouse or distribution facility in its distribution network design solutions.

The end result of any simulation or optimization can be viewed in the Analytics Dashboard with a side by side comparison of any solution.

Score your current supply chain vs any of your optimizations or alternative networks, not only for cost savings or service improvements, but also for CO2/GHG emission for the entire supply chain and for suppliers, inbound transport, facilities, or outbound transport.

Baseline T					~					
\$38,260,982 SvcLevel 100%	CO2	Tons	2		CO2	Tons	7.	CO2/GHG	Diff +-	Diff %
	Sources	5371.8	11	1	Sources	23358.6	9	Sources '	17,986.8	23%
	<b>InbTrans</b>	9166.1	18		InbTrans	177939.4	71	Inb Trans	168,773.3	5.2%
	DCs	30000	59		DCs	45000	18	Facilities	15,000	66.7%
	Out Trans		12		<b>Out Trans</b>		2	Outb Trans	209.6	103.5%
	Total	50657.2	100		Total	252207.6	100	Total	201,550.4	20.1%
								* Product - 7	otal Quantity And Size All Produ	ct Categories





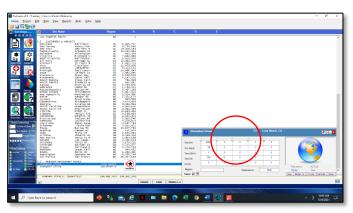
#### Optimizing Sourcing and Ports in Today's Environment of Supply Chain Uncertainty

Risk Assessment should be part of any Supply Chain Optimization or Evaluation and, now more than ever, supply chains are under enormous stress with delays, uncertainty and log jams contributing to higher costs, consumer price increases and product shortages.

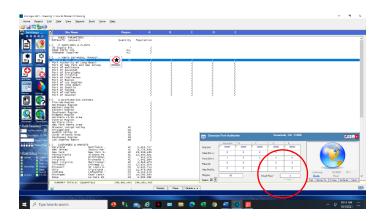
Specifically for Sourcing and Risk Assessment, Logix estimates the service levels and transit times at each point in the supply chain as well as the total lead time for each solution. Users can model alternative sourcing and entry port options to see in advance how each of the solutions can potentially reduce sourcing delays and inherent uncertainty.

This capability was used in one of our recent projects for a large on-line distributor who needed to determine where to locate a new warehouse in their network. With the recent difficulty in inbound transport and port capacity and delays, Logix was used to model alternative and optimal ports of entry in order to mitigate the impact of port delays, while also decreasing overall supply chain costs. Logix users optimize their supply chains for both inbound freight as well as outbound transport, often optimizing both simultaneously for a total solution.

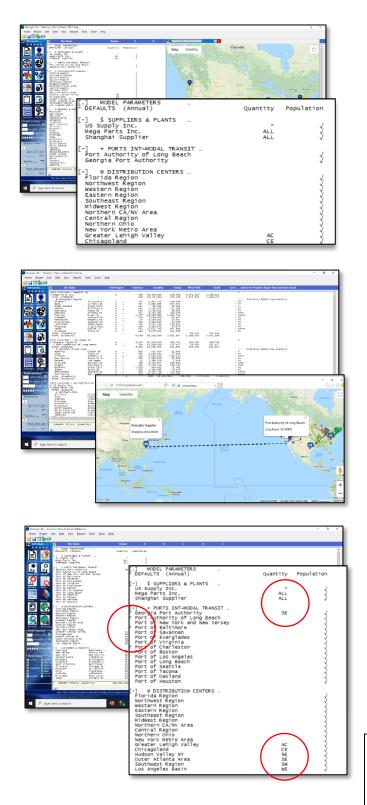
In order to improve the optimization process and provide even more information, users can add service time estimates in the Freight Rate record for any supplier to port, warehouse or distribution center.



In addition, users can add dwell time for any port and, therefore, better guage delays in the supply chain due to log jams at the port. Particularly relevant with the current pandemic-driven backups at ports.







Logix then optimizes the entire supply chain including sourcing using either prescriptive sourcing (i.e., you provide the percentages of each source for inbound product flows based on outbound volume) or optimized sourcing (i.e., Logix optimizes the inbound volumes, suppliers and costs based on inbound freight costs, product pricing and port of entry fees and costs).

We've also recently added the ability to select which ports of entry are to be included in any simulation or optimization. Logix rates each inbound shipment from the supplier through each of the ports of entry you designate in your data. Simply import or enter the allowable ports of entry, "select" any of the ports you want to be evaluated as part of the process or leave them all "unselected" to include all of the ports in the evaluation.

To ensure that Logix only evaluates certain ports tied to only some of your suppliers or distribution centers, use the Region Link to match suppliers, ports and/or distribution centers. You can use "wild card" entries to make this feature even more powerful and flexible (i.e., a supplier with Region Link S<sup>\*</sup> will match a port or distribution center with Region Link "South".

Be sure to contact us at <u>support@logistixsolutions.com</u> if you need any assistance or visit our website for training videos and useful tips.



#### LOGISTIX SOLUTIONS - On-Demand Technology for Logistics Professionals

Logistix Solutions is a software and consulting company with premier technology solutions and in-depth industry knowledge for logistics professionals. We offer award-winning, on-demand Supply Chain Planning and Execution (SCP&E) applications for retailers, manufacturers, third party logistics providers, consultants, food and beverage and other distributors. We support strategic planning and logistics execution requirements at an affordable value for rapid ROI and benefit realization.

Based on extensive development working with Fortune 1000 companies, Logistix Solutions provides full-featured, on-demand supply chain solutions and consulting services for retailers, manufacturers, third party logistics providers, consultants, food and beverage and other distributors to support strategic planning and logistics execution requirements.

Supply Chain Planning and Execution software solutions offered:

- o Distribution Network Design and Supply Chain Optimization
- o Sourcing and Procurement Optimization
- o Driver and Vehicle Scheduling
- o Routing and Scheduling Fleet Optimization

Support, training and consulting services provided by experience supply chain practitioners and logistics software experts.

For more information on the Logistix Solutions suite of products, visit our website at <a href="http://www.LogistixSolutions.com">www.LogistixSolutions.com</a>

or contact Logistix Solutions at 571.426.5951 or e-mail <u>info@LogistixSolutions.com</u>.

