

# Quantitative Risk Solutions

## Predictive Modelling for Risk-Based Decision Making

Failing to protect your cargo often has consequences that go far beyond the actual cost of the loss. Lean distribution and production processes mean that even small losses can have big consequences, leaving companies scrambling to replace lost inventory or unable to meet delivery deadlines. Companies are increasingly operating in more dangerous emerging markets where cargo theft is much more common. The presence of man-made and natural disaster risks in emerging markets further increases the risk of disruption and losses. Lacking objective criteria to evaluate these complex risks, companies struggle to effectively allocate their limited security and risk mitigation budget.

BSI's innovative Quantitative Risk Solutions (QRS) methodology models financial loss exposures by country or transportation lane, making it simpler to compare risks and make intelligent decisions about where to focus mitigation measures. The QRS model also produces a cost-benefit analysis of current security spending, allowing security groups to quantify savings based on avoided loss. Armed with this information, BSI's advisors recommend cost-effective risk mitigation measures, map out risks across supply and distribution networks, and help organizations prioritize their risks based on impact. BSI's QRS model incorporates information from our extensive global loss repository along with factors specific to each company, product, and country, ensuring an accurate loss forecast.

Loss forecasting, combined with mapping key risk exposures, helps organizations build resiliency and quantify the risks of moving into new markets. Instead of reacting to disruptions, security organizations proactively anticipate and prevent losses. Accurately assessing risk and quantifying the cost-benefit of security measures demonstrates the value and return on investment to organizational leadership, and is crucial to avoiding expensive losses that prevent you from serving your customers.

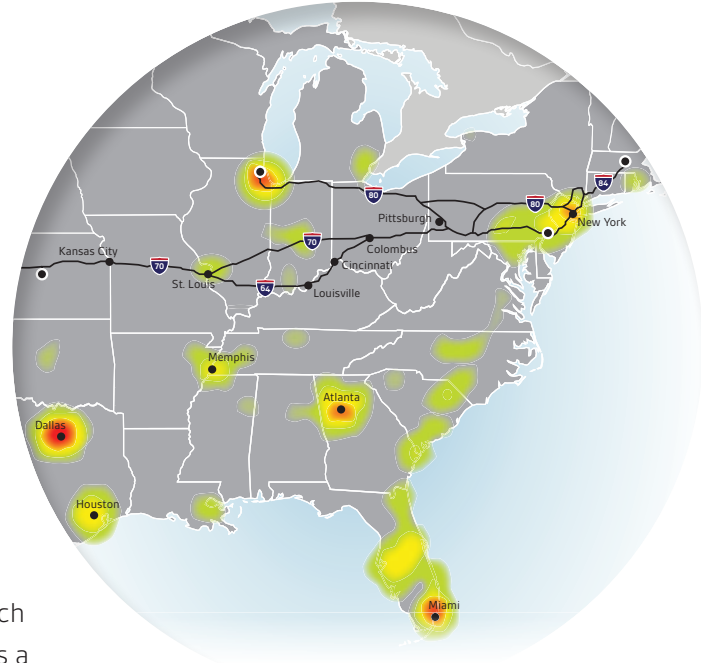


**Cargo Theft Risk and Product Distribution Volumes**

BSI offers 3 standard assessment types that provide information regarding geographic, product distribution and overall enterprise risks to mitigate threats and improve supply chain efficiency and resiliency. Our advisors can also work with you to customize an assessment project to address specific needs.

## Geographic Risk Assessment

Our geographic risk assessment evaluates all of a company's transportation or supply lanes in one country or region. A loss forecast determines, on a lane-by-lane basis, which security measures save money and help prepare for losses. Our advisors will also set up tiers for the use of different security measures and establish "break-even" points – the value of cargo needed on a per-trip basis in order to justify certain security measures. Other threats, including natural and man-made disasters, will also be included in the evaluation of risk for each country or region.



## Product Risk Assessment

Our product risk assessment evaluates all pre and post product launch supply and/or distribution routes for a specific product and generates a forecast of expected losses. We pay special attention to the unique risks that different product types face in generating our loss forecasts, and recommend security measures that are most suited to the product under evaluation. Business continuity risk factors, including natural disasters, social and political unrest, and labor strikes, are also available for inclusion to gauge the likelihood that they will disrupt supply or distribution chains for the product.

## Enterprise Risk Assessment

Our enterprise risk assessment is a holistic look at the entire range of risks an organization faces, prioritization of those risks based on how much harm they are likely to cause, and the creation of actionable plans to prepare for and deal with those threats. This gives companies a complete view of risk throughout their organization to become a more resilient and responsive group.

Severe Impact					
High Impact		Child Labor		Natural Disasters	
Some Impact		Man-Made Disruption	Working Conditions		Cargo Theft
Low Impact		Environment		People Travel	
Insignificant					
	Unlikely	Possible	Probable	Highly Probable	Almost Certain



## Supply Chain Services and Solutions

For more information visit our website at [bsi-supplychain.com](http://bsi-supplychain.com) or contact us at [supplychain@bsigroup.com](mailto:supplychain@bsigroup.com)

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