

2016 Securing the Supply Chain Forum Centers of Excellence for Global Trade & Supply Chain Management and Homeland Security & Emergency Management

Global Cargo Theft Overview

April 13, 2016

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Agenda

- Global Cargo Theft Overview
 - Asia, Europe
 - Brazil, Mexico
 - Canada, U.S.
- Major Trends and Evolving Modi Operandi (M.O.)
- Lessons Identified
- Conclusion

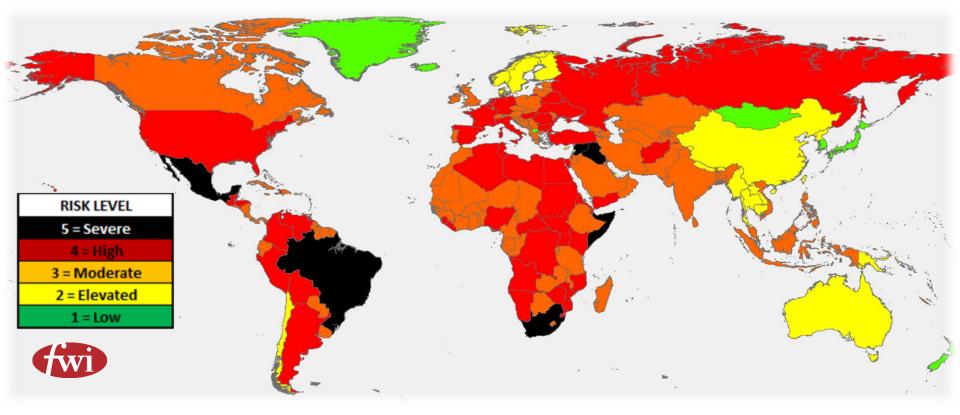
Macro Global Cargo Theft Trends

- The rate at which violence is utilized continues to increase.
- Targeting of pharmaceuticals is expected to increase.
- Food leads the world as the commodity with the highest number of thefts.
- Countries with growing middle class populations are forecasted to see increases in cargo theft rates.
- Industry-led initiatives will be the cornerstone of any successful effort to combat cargo security threats.



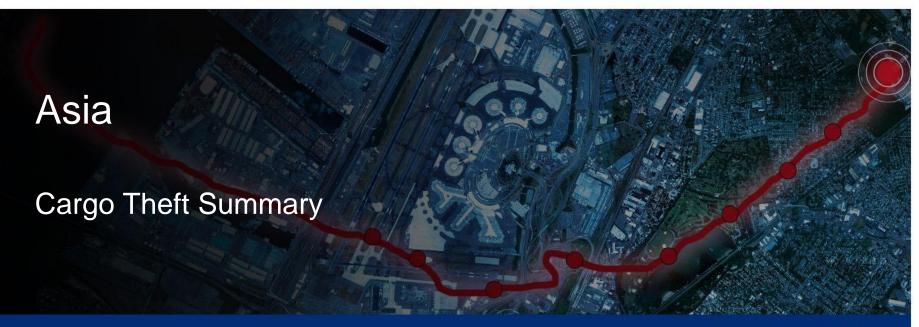
FWI Supply Chain Intelligence Center (SCIC) Global Assessment

United States, Russia, Mexico, Brazil, and South Africa are the countries most at risk for cargo theft.









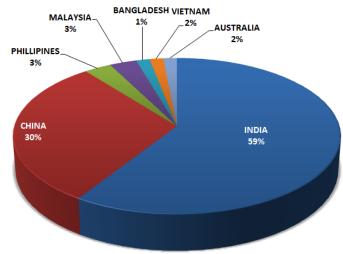
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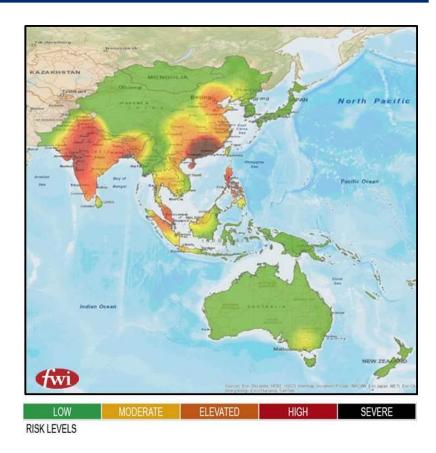


Asia Cargo Theft Summary

Facility Theft Summary:

- Average Loss Q2-FY2015 = \$45,800.
- *Electronics* is the most stolen product type (36%).
- China remained the worst APAC country for facility theft.
- The most costly facility theft recorded was in January where \$220,000 worth of smartphones were stolen from a warehouse in Beijing China.
- FWI Intelligence and Industry sources believe that warehouses at Chinese land borders have suffered from drastically increased cargo crime in recent years with the Russian border being a hotspot of thefts for goods waiting to transit or enter the country.





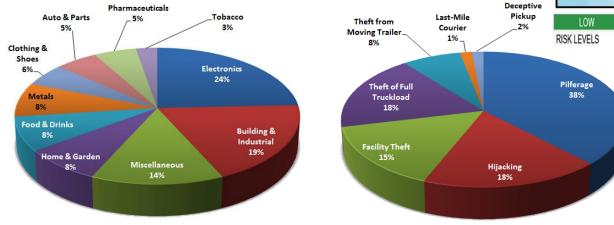
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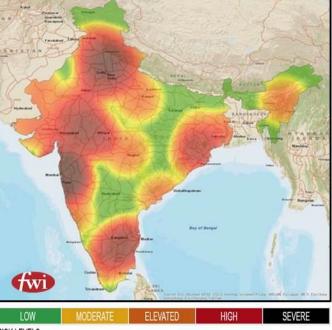
Asia

Cargo Theft Summary – Focus on China & India

• In-Transit Theft Summary:

- Average *In-Transit* loss for 2015 = \$316,000.
- SE Asia continues to be a hotspot from maritime cargo crime with a moderate increase of 10% to 236 with the Singapore Strait being of particular concern.
- *Pilferage* remains a serious concern due to poor infrastructure and low economic development. Unorganized *Pilferage* focuses on sellable goods (*Building & Industrial/Metals* as well as *Food & Drinks*). Thefts of high value goods is usually organized and collusive.
- China, Malaysia, and India have significant issues with *Pilferage*.
- Violence remains a major factor in APAC cargo crime, occurring in 18% of recorded incidents although anecdotal intelligence suggests that this may be much higher.

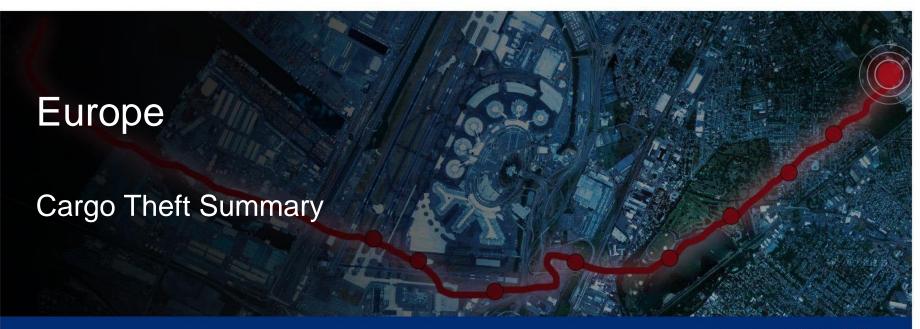






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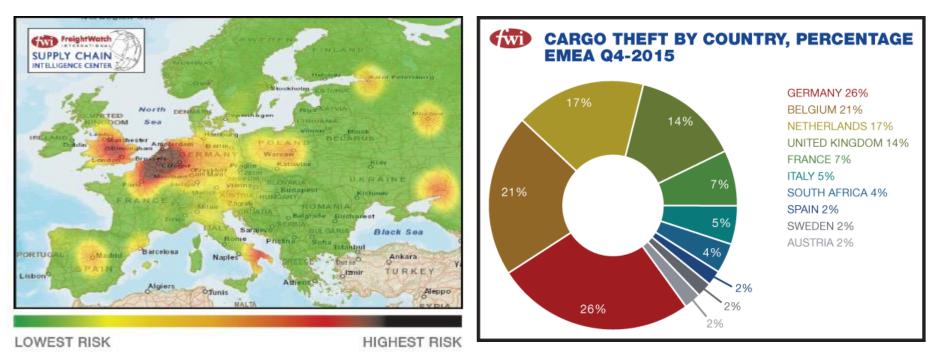




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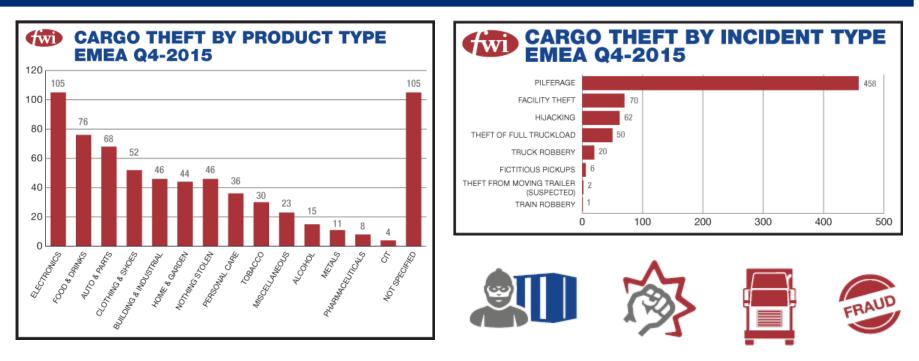
Europe Cargo Theft Summary



- 669 incidents recorded by FreightWatch International (FWI) in Q4-2015 represent a 51% increase from the previous quarter (443 thefts) and a stunning 152% rise compared to Q4-2014 (265 thefts).
- The list of Europe's most targeted countries has not substantially changed compared to Q4-2014: Germany, Belgium, The Netherlands, the United Kingdom, France, Italy, Spain, Sweden, Austria and Russia had, in that order, the most incidents. On a wider EMEA scale, South Africa continued to experience severe levels of cargo theft.
- A very strong final quarter propelled the total number of EMEA cargo thefts recorded by FreightWatch International Supply Chain Intelligence Center (SCIC) in 2015 to 1,970. This is 620 more than in 2014 (+46%).



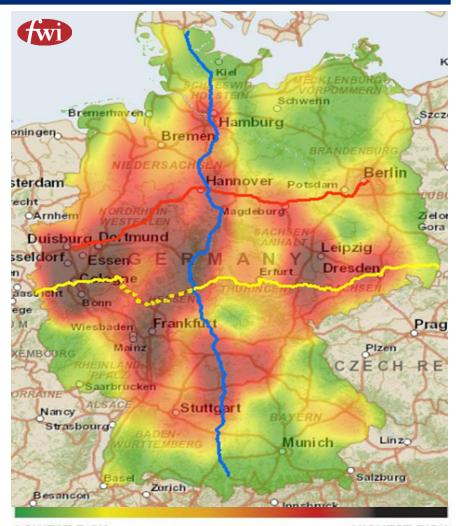
Europe Cargo Theft Summary



- *Electronics* thefts skyrocketed from 46 thefts in Q3 to 105 in Q4 (+128%). Even though the end-of-year period traditionally sees an increase in *Electronics* thefts, such an increase from one quarter to the next is unprecedented.
- *Pilferage* (Theft from Trailer at *Unsecured Parking*, mostly at night while drivers sleep in their vehicles) was by far the most popular M.O. in 2015: 1,199 incidents or 60% of all recorded thefts.
- Cargo theft became more violent in 2015 noting a strong rise in the number of Truck Hijackings (thieves attack shipments in transit and take the vehicle with full load) and Truck Robberies (thieves attack trucks at rest and take part of the load). Whereas Hijackings more than doubled, from 99 recorded incidents in 2014 to 200 in 2015, the number of recorded Truck Robberies in 2015 (51) is more than 4 times higher than in 2014 (12).

Europe Cargo Theft Summary: Focus on Germany

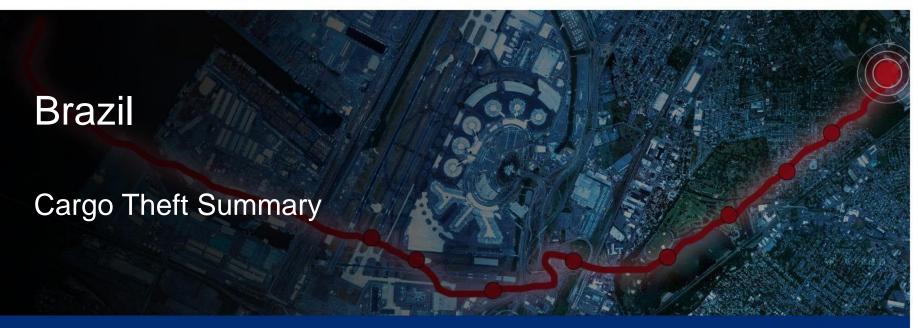
- FWI SCIC recorded 272 cargo theft incidents in the first nine months of 2015; +25% compared to number recorded in same period 2014 (218).
- Vast majority of *Thefts from Trailer* (curtain slashing) are opportunistic: thieves check load before stealing). *Electronics* are most targeted.
- Repeated raids of vulnerable rest areas are frequent, typically at night.
- Strong presence of Eastern European curtain slashing gangs.
- Thefts of Trucks with/without load are also frequent, especially from company yards and industrial estates.
- *Facility Burglaries* are also quite common, notably in more rural areas.
- Violent thefts (*Hijackings*, *Robberies*) are still relatively rare but number of violent attacks against truck drivers has strongly increased in 2015.





HIGHEST RISK





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- *Hijacking* with driver detention continues to be the preferred *Modus Operandi*. In incidents when drivers are detained by cargo criminals, they are generally released after the stolen commodity has been transferred to a different container or hidden.
- Most stolen commodities are Food & Drink, Tobacco, Electronics, Pharmaceuticals, Chemicals, and Auto & Parts.
- The use of large caliber weapons is not uncommon amongst cargo criminals.

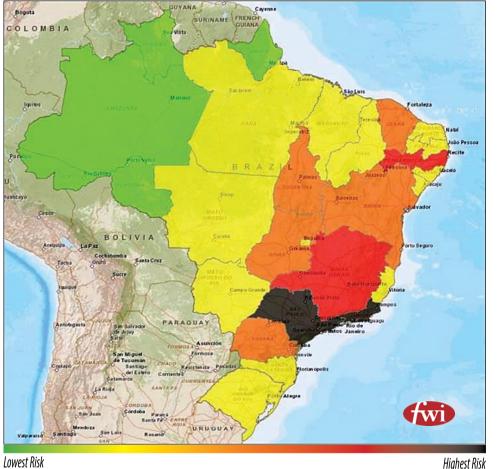




Source: PEP – Pólo Empresarial da Pavuna (Business hub of Pavuna) – Rio de Janeiro

- 85% of all cargo thefts occur in the southeast part of Brazil.
- São Paulo and Rio de Janeiro are the two states where the majority of cargo thefts occur, recording 82% of the total reported cargo theft incidents.
- Due to the vast number of cargo theft incidents in both states, security companies – both private and public – have partnered in an attempt to combat cargo crime.

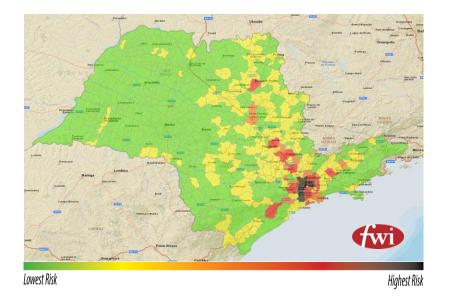


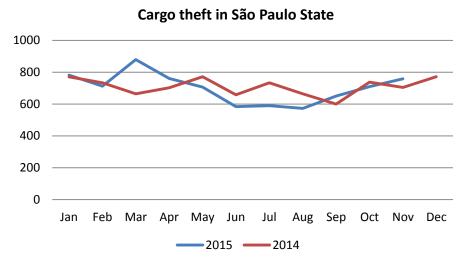


- The State of São Paulo's overall cargo theft incidents decreased 0.4%, from January to November of 2015 when compared with the same time period in 2014.
- The State of Rio de Janeiro, however, experienced a 23% increase in reported cargo theft from January to November of 2015 compared to the same time period in 2014.
- Cargo thefts criminals have also been linked to organized crime in both São Paulo and Rio de Janeiro. In other states the link is seen mainly in higher density cities.
- Large value and large quantity thefts (In-Transit or Warehouse Thefts) are very well planned by organized and heavily-armed gangs sometimes using employee collusion.



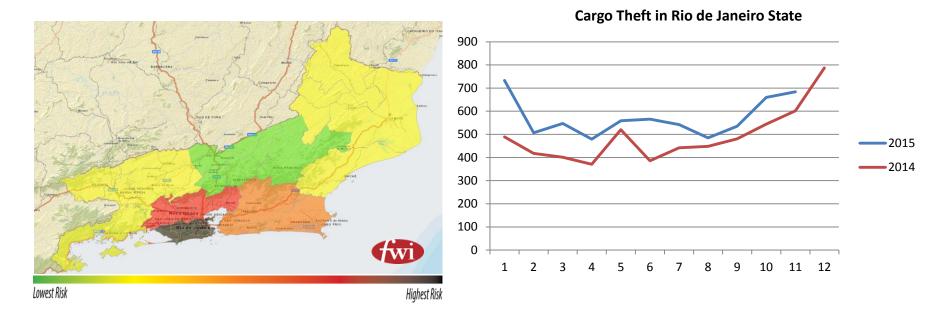






- The areas in/and around the capital and the Greater São Paulo area directly contributed to the state's
 overall reduction in cargo theft rates showing reductions of 0.6% and 4.1 respectively.
- The decrease is attributed to improved intelligence by authorities and increased police activity in high risk areas.
- 90% of the state's cargo theft incidents occur in the São Paulo (Capital), Greater São Paulo, Campinas area, and Santos area.
- Region consists of many large, high-profile companies and distribution centers making it an attractive area for cargo criminals to target.

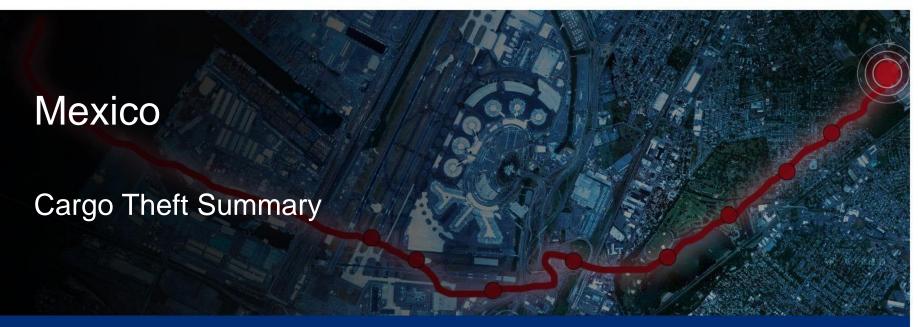




- Approximately 96% of cargo theft occurs in the capital and Lowlands area but not concentrated in one specific area.
- Authorities have increased their activities in order to combat cargo crime but have been unsuccessful in diminishing cargo thefts due to the lack of personnel.
- In the capital the area with the highest risk levels improved communications between companies and authorities have resulted in increased stolen cargo recoveries.
- The majority of cargo theft incidents are reported to occur along the highways.







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Mexico Cargo Theft Summary

CARGO THEFT RISK MAP JAN-DEC 2015

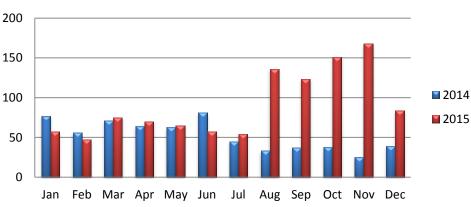


TOP TEN 2015	Thefts	%
Puebla	160	15%
State of Mexico	133	12%
Guanajuato	123	11%
Queretaro	86	8%
Veracruz	73	7%
Tamaulipas	53	5%
San Luis Potosí	48	4%
Michoacán	43	4%
Hidalgo	42	4%
Nuevo León	39	4%

Highest Risk

TOP TEN 2014	Thefts	%
State of Mexico	85	14%
Guanajuato	77	12%
Queretaro	54	9%
Veracruz	53	8%
Puebla	52	8%
Federal District	35	6%
Jalisco	33	5%
Hidalgo	30	5%
San Luis Potosí	25	4%
Chihuahua	24	4%

Lowest Risk

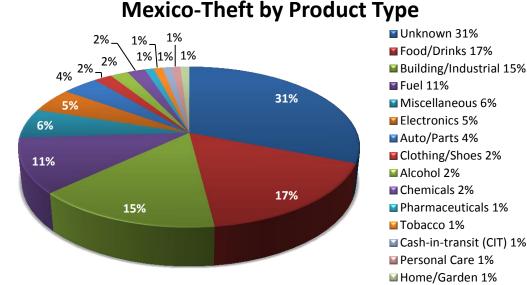


Mexico-Theft Comparison by Month

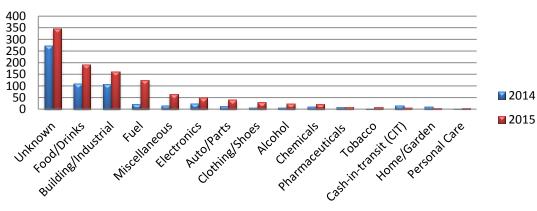
- FWI SCIC recorded 1,087 cargo theft incidents in 2015.
- Recorded theft incidents indicate a 73% increase compared to 2014.
- Central Mexico continues to experience the highest risk levels in the country.
- Increased cargo theft activity has been recorded in the States of Puebla, Tamaulipas, and Nuevo Leon.
 - Highways MEX-150D and MEX-57 are the most affected by cargo theft.



Mexico Cargo Theft Summary



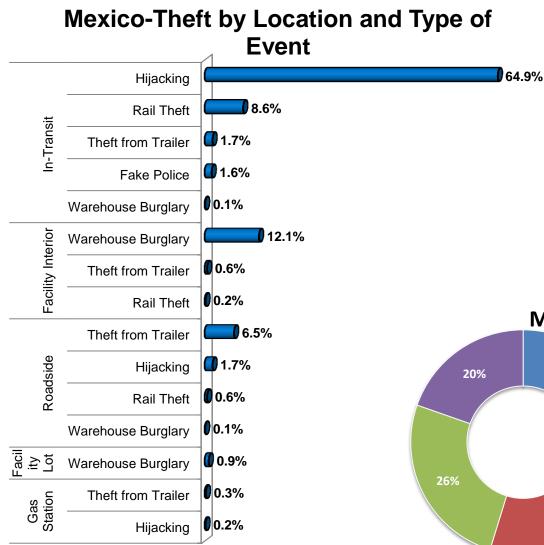
Mexico-Theft Comparison by Product Type



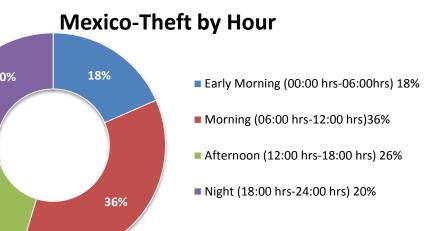
- Open-source intelligence sources provide only partial information on the type of merchandise that was being transported at the time of a theft.
- Of those commodities that are identified the most stolen are: *Food & Drinks* (18%) *Building & Industrial* (15%) *Fuel* (11%)
- The above stated commodities tend to be more easily sold on both the black and gray markets.

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Mexico Cargo Theft Summary



- The most common *Modus Operandi* used by criminals is *Hijacking* while a shipment is *In-Transit*.
- *Hijackers* have become more violent against drivers and federal authorities.
- The highest risk time of day for cargo transport is in the morning (06:00 hrs. - 12:00 hrs.).



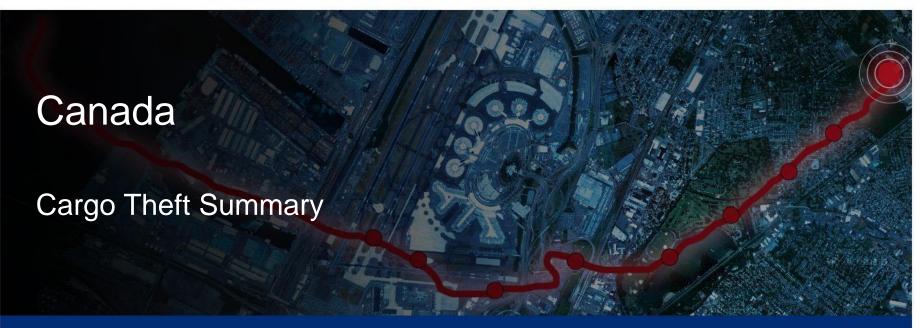


Mexico Ciudad Juarez – The Most Dangerous City in the World?



Source: LaJornada, Mexico City, July 16, 2010



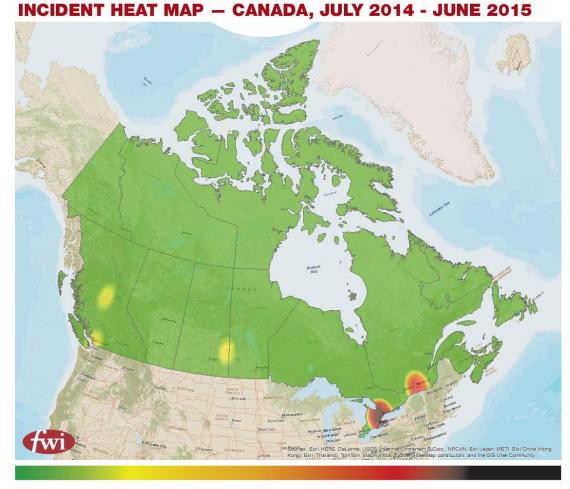


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Canada Cargo Theft Summary

Unless otherwise specified, the following data and analysis is compiled from all FreightWatch International Supply Chain Intelligence Center (FWI SCIC) recorded cargo thefts in Canada during the period of July 2014 through June 2015 (12 months). The heat map presented on the right displays the cargo theft risk throughout for all product types.



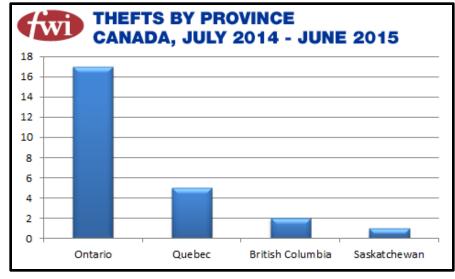
LOWEST RISK

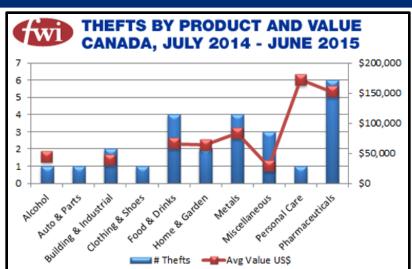
HIGHEST RISK

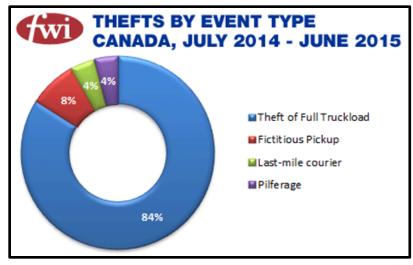


Canada Cargo Theft Summary

- The average value of thefts in Canada during this time was \$76,588 USD.
- With 24% of total thefts, *Pharmaceuticals* is the most stolen product type and has an average value of \$151,738.
- At \$171,767, *Personal Care* is the product type with the highest average value.
- While atypical theft types like *Fictitious Pickup* are seen in Canada, *Theft of Full Truckload* dominates theft types with 84% of the total.
- The 401 highway corridor between Windsor and Montreal is the highest risk area for cargo in Canada.
- Canadian Law Enforcement has recovered cargo stolen from all parts of the country flowing through Mississauga, indicating that cargo theft criminals have an organized redistribution network.

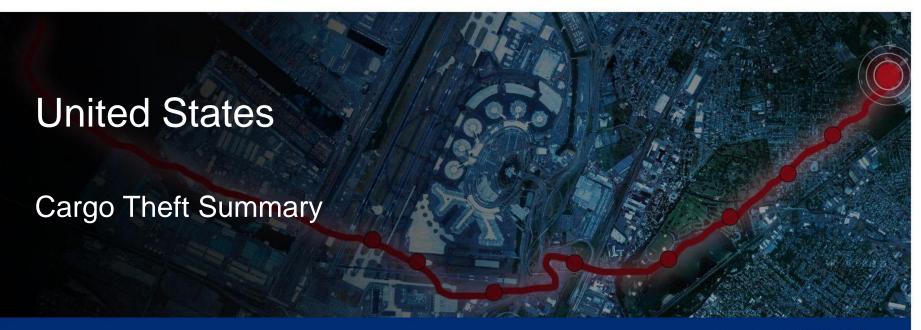










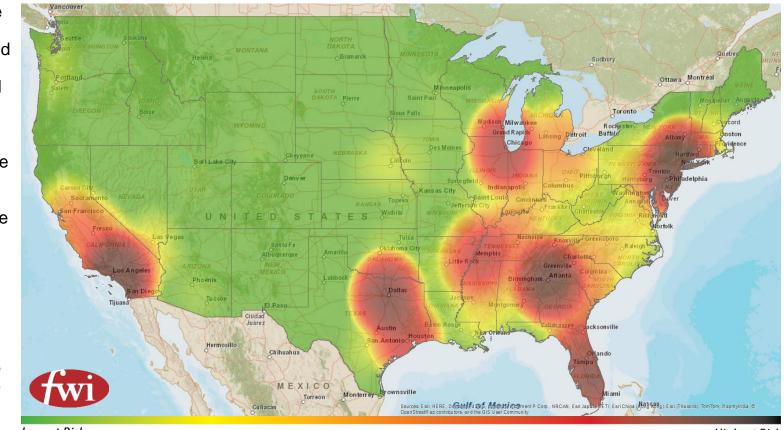


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United States Summary 2015

Unless otherwise specified, the following data and analysis is compiled from all **FreightWatch** International (FWI) recorded cargo thefts in the United States through the year of 2015. This time period will typically be compared to previous years from 2011 through 2014. The heat map presented on the right displays the cargo theft risk throughout the United States for all product types.

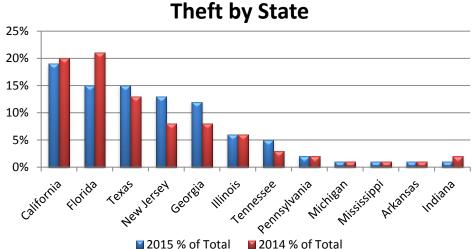


Lowest Risk

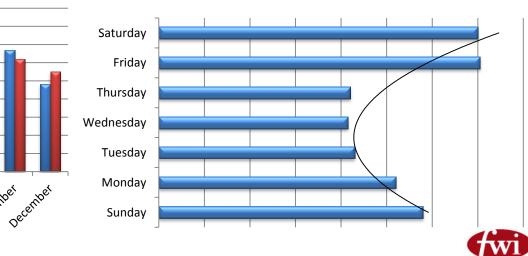
Highest Risk

United States Summary 2015

- The average value of thefts in 2015 was \$184,101; a decrease of 21% from 2014, but a rise of 8% over 2013.
- 2015 reported theft volume decreased 6% from 2014.
- In 2013 and 2014, the top five states accounted for 71% ٠ of all thefts in the United States. In 2015, that rose to 74% with these states mirroring the rankings of 2014.
- In 2015, 37% of Facility Thefts and 36% of Theft of Full • Truckload occurred on a Saturday or Sunday.
- In 2015, January and March were tied for the highest theft • count, just as in 2014. Additionally, there was a lull in September of both years that lead to a spike in October and tapering thefts through the end of the year.



Theft by Day of the Week



Theft by Month

90 80

70 60

50

40 30

20 10

0

January

February

March

APrill

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June

way

September

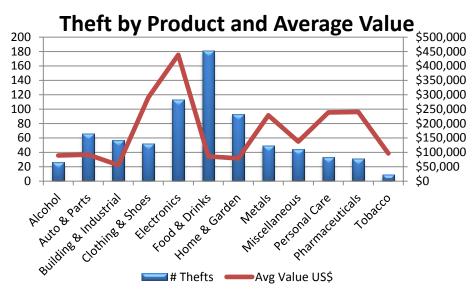
AUBUST

JUNY

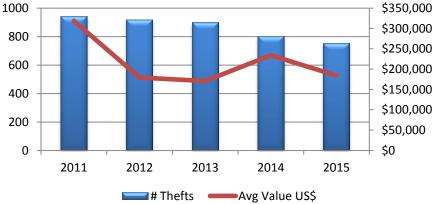
November

october

United States Summary 2015

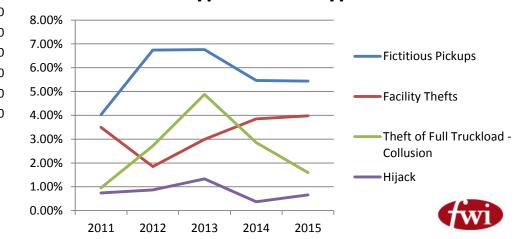


Cargo Theft by Year and Value



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- *Food & Drinks*, the most stolen product with a historically low average value, rose by 15% to record an average value of \$85,851 in 2015.
- Since 2011, theft volumes have fluctuated slightly never falling more than 4% from one year to the next – until 2014 recorded a 12% drop from the 2013 total theft volume. In 2015, we see this trend continue as theft volume fell by another 6% from 2014.
- The FWI SCIC observed an increase in the theft rate of *Facility Thefts* to a record high level of 4% of total thefts, a rate higher than at any other point since the FWI SCIC began data collection in 2006.

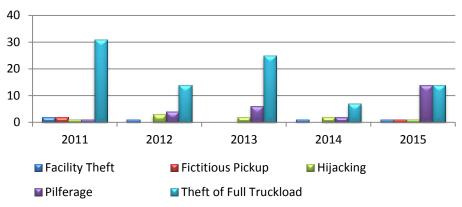


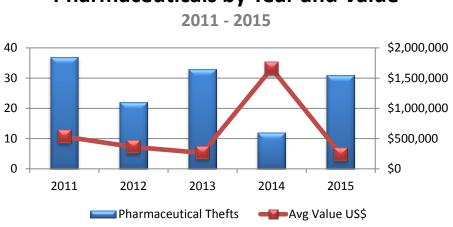
Atypical Theft Types

United States Summary Life Sciences: 2015

- Accounting for 4% of thefts in 2015, Pharmaceuticals theft volume rose 176% over 2014 theft rates.
- The average value has decreased by 86% to \$240,111, in part due to there being no thefts valued at over \$1 million in 2015.
- Florida reported the largest number of *Pharmaceuticals* thefts at 18%; a 20% increase over Florida's rate of theft in 2014.

Pharmaceutical Theft by Type of **Event and Year**





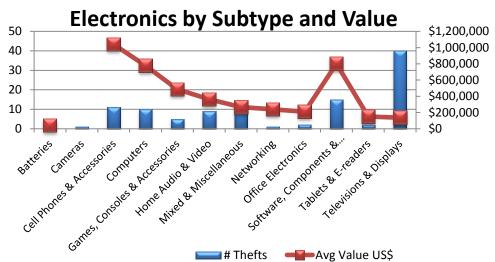
- Pharmaceuticals by Year and Value
- While 2014 recorded 58% of its incidents as Theft of Full Truckload with 17% coming from Pilferage, 2015 saw Theft of Full Truckload drop to 45% of the total, with *Pilferage* accounting for the same share of thefts.
- · As is usual within Pharmaceuticals, Medication was both the most often stolen and most valuable subtype, with 89% of theft volume and an average loss value of \$249,538.



United States Summary Electronics: 2015

- *Electronics* is the second most targeted sector in 2015, recording 15% of total thefts.
- With an average loss value of \$438,389 *Electronics* was the product type with the highest average loss value in 2015.
- Georgia increased its count of *Electronics* thefts by 300%
- Of the 113 thefts in the *Electronics* sector in 2015, 40 incidents (35%) were of *Televisions & Displays*, 15 (13%) were *Software, Components & Peripherals*, and 11 (10%) were *Cell Phones & Accessories*.

Electronics Thefts by Year and Value



Top States for Electronics Thefts



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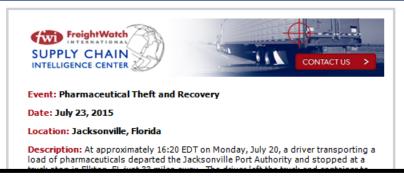


Cargo Theft Trends

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Cargo Theft Trends Unsecure / Unattended Stop Within the Red Zone



Description: At approximately 16:20 EDT on Monday, July 20, a driver transporting a load of pharmaceuticals departed the Jacksonville Port Authority and stopped at a truck stop in Elkton, FL just 33 miles away. The driver left the truck and container to go home and change clothes. When the driver returned to the location around midnight, he discovered both the tractor and container missing and realized all container information was left in the tractor. The driver notified the police of the stolen tractor but omitted the loss of the container due to his lack of documentation. Shortly after 09:00 EDT on

recovery.

Pharmaceuticals continue to be a highly targeted commodity, with Theft of Full Truckload reported in 75% of Pharmaceuticals thefts making it the most common type of event. The average value of Pharmaceuticals thefts over the last 12 months was \$222,000. Violations of security best practices, including stopping within the Red Zone and a solo driver tasked to a Pharmaceuticals shipment left unattended, were major contributors to this theft.

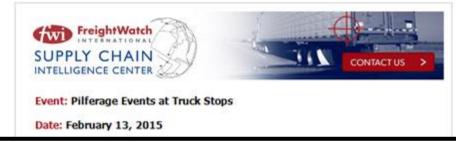
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Cargo Theft Trends Pilferage + Patience = Success



Description: Over the past several weeks, the FreightWatch International Supply Chain Intelligence Center (FWI SCIC) received reports of over 40 pilferage events perpetrated at truck stops and highway pull-offs along I-40 between West Memphis, AR and Forrest City, AR and along I-55 between West Memphis, AR and Turrell, AR. Cargo criminals used the "shopping" technique where they broke the seal on the trailer, opened the door to view the contents, determined if the goods were of value, usually targeting items easily fenced, and sometimes leaving uninteresting loads untouched. Items stolen during these incidents have ranged from poultry to firearms. Law Enforcement has apprehended one suspect in connection with these events; investigation continues. Drivers travelling through this area should be extra vigilant and immediately report any suspicious observations to the police and their dispatch.



Cargo Theft Trends Targeting Unattended Loads In High-Risk Areas



Description: Between 01:00 and 05:00 on August 22, a trailer load of pharmaceuticals was penetrated at a truck stop in Bakersfield, CA. Despite the presence of team drivers, one driver was inattentive while the other left the load for an undetermined period of time. The load was backed to a fence with heavy vegetation during hours of limited visibility. The driver returned to the load and found a hole cut in the fence behind the trailer and the broken seal located on the ground nearby. Product owners conducted extensive inspection and

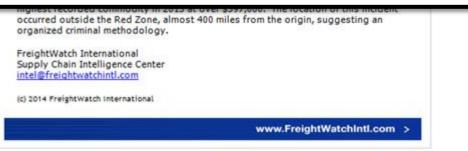


Cargo Theft Trends Targeting Unattended Loads In High-Risk Areas



Description: At approximately 19:45 CST on Friday, August 15, a driver transporting a load of electronics peripherals stopped at a truck stop in Duncan, SC for rest and a shower. When the driver returned to the truck, he discovered both the tractor and trailer missing and realized his cell phone was inoperable. The FreightWatch International (FWI) Command and Control Center was notified of the theft and immediately engaged the FWI

Electronics theft continues to be the second most targeted commodity, averaging 15% of reported theft year-over-year. The average value of stolen *Electronics* was the highest recorded commodity in 2013 at over \$397,000. The location of this incident occurred outside the Red Zone, almost 400 miles from the origin, suggesting an organized criminal methodology.





Cargo Theft Trends Fictitious Pick-Up

Fictitious Pick-Up Risk Mitigation

- Identify risky loads
- Maximize load board tools
- Verify insurance
- Verify the motor carrier number
- Interview the driver
- Develop immediate action drills for theft events



Lessons Identified

Keys To Prevention

- Background investigations.
- Security awareness training.
- In-transit security policy.
- Reducing the time loads are left unattended.
- Assisted-GPS covert tracking technology embedded in loads.
 - Multiple devices per load.
- Locks and seals.
- Driver awareness.
- COMPLIANCE.

Security In Depth

- People
 - Supply chain security management builds compliance into every link.
- Procedures
 - Security must co-exist with operations to ensure efficiencies, on-time arrival, and cost effectiveness.
- Technology
 - Global GPS tracking devices, RFID, e-Seals, tracking and monitoring platforms.





First Rule of Security: Be a harder target than those on your left and right.

Professional Cargo Thieves actively target *any* shipment they can easily move on the black market – specifically high-value goods with minimal traceability and maximum turnover rate. The organized criminal dedicates maximum time in surveillance, preparation, and rehearsals; we must dedicate ample resources to proactively combat this growing threat.



Comments and Questions

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