INSURANCE INFORMATION INSTITUTE

TERRORISM RISK: A CONSTANT THREAT

Impacts for Property/Casualty Insurers

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INTRODUCTION

The April 15, 2013 bombing near the finish line at the Boston Marathon marked the first successful terrorist attack on U.S. soil in more than a decade. The attack left three dead and 264 injured.

Three days after the bombing, the suspects—brothers Dzhokhar and Tamerlan Tsarnaev—took to the streets, killing a police officer, carjacking a vehicle, and engaging in a shootout with police in the Boston suburb of Watertown, which left another police officer injured and ultimately left Tamerlan Tsarnaev dead. Suspect Dzhokhar Tsarnaev escaped, but was eventually found hiding in Watertown where he was arrested on the evening of April 19, after an unprecedented manhunt and shutdown of a major city, during which millions of residents had to remain indoors and Boston's entire public transportation system and most businesses were shuttered.

Dzhokhar was charged on April 22 with using and conspiring to use a weapon of mass destruction resulting in death and with malicious destruction of property resulting in death. The ongoing investigation is being led by the Federal Bureau of Investigation (FBI). However, among the facts to emerge so far are that the Tsarnaev brothers planned additional attacks, specifically in New York City's Times Square.

The Boston Marathon attack—twin explosions of pressure cooker bombs occurring within 12 seconds of each other in the Back Bay downtown area—adds to a growing list of international terrorism incidents that have occurred since the terrorist attack of September 11, 2001.

The 2002 Bali bombings, the 2004 Russian aircraft and Madrid train bombings, the London transportation bombings of 2005 and the Mumbai attacks of 2008 all had a profound influence on the 2001 to 2010 decade. Then came 2011, a landmark year, which simultaneously saw the death of al-Qaida founder Osama bin Laden and the 10-year anniversary of September 11.

While the loss of bin Laden and other key al-Qaida figures put the network on a path of decline that is difficult to reverse, the State Department warned that al-Qaida, its affiliates and adherents remained adaptable and resilient, and constitute "an enduring and serious threat to our national security."

The Boston bombing serves as an important reminder that countries also face homegrown terrorist threats from radical individuals who may be inspired by al-Qaida and others, but may have little or no actual connection to militant groups.

In a recent press release, catastrophe modeler RMS assesses that the U.S. terrorist threat will increasingly come predominantly from such homegrown extremists, who due to the highly decentralized structure of such "groups" are difficult to identify and apprehend.[1]

Until the Boston bombing, many of these potential attacks had been thwarted, such as the 2010 attempted car bomb attack in New York City's Times Square and the attempt by Najibullah Zazi to bomb the New York subway system ***(Figure 1)***. Other thwarted attacks against passenger and cargo aircraft indicate the ongoing risk to aviation infrastructure.

Figure 1
RECENTLY THWARTED TERRORIST ATTACK ATTEMPTS IN THE U.S.

Date	Location	Event
April, 2013	New York City, NY-Toronto	Two suspects with al-Qaida links arrested in Toronto, Canada for alleged plot to blow up Amtrak passenger train en route from New York City to Toronto
November, 2012	New York City, NY	Brothers Raees Alam Qazi and Sheheryar Alam Qazi arrested and charged with conspiring to detonate a weapon of mass destruction targeting a New York City landmark
October, 2012	New York City, NY	Quazi Mohammad Rezwanul Ahsan Nafis arrested in plot to blow up Federal Reserve Bank in New York City
August, 2012	Ludowici, GA	Four U.S. soldiers charged in connection with murder and illegal gang activity, linked to foiled plot to commit domestic acts of terrorism, including overthrowing the government and assassinating the President
May, 2012	TBD	Foiled underwear bomb plot to bring down U.S.-bound commercial airliner around the anniversary of bin Laden's death
July 27, 2011	Fort Hood, TX	U.S. Army Pfc Naser Jason Abdo arrested and charged with plotting bomb attack on fellow soldiers at Fort Hood
June 22, 2011	Seattle, WA	Two men arrested in plot to attack military recruiting station in Seattle
May 11, 2011	New York City, NY	Ahmed Ferhani and Mohamed Mamdouh arrested in plot to attack Manhattan synagogue.
February 23, 2011	Lubbock, TX	Foiled plot to bomb military and political targets, including former President George W. Bush in New York, Colorado and California
December 8, 2010	Baltimore, MD	Attempted bombing of Armed Forces recruiting center by U.S. citizen Antonio Martinez, aka Muhammad Hussain
November 26, 2010	Portland, OR	Attempted bombing at Christmas tree lighting ceremony in downtown Portland by naturalized U.S. citizen Mohamed Osman Mohamud
October, 2010	Washington, D.C.	Attempted plot to bomb D.C.-area metro stations
May 1, 2010	New York City, NY	Attempted SUV bombing in Times Square, New York City, by naturalized U.S. citizen Faisal Shahzad
December 25, 2009	Over Detroit, MI	Attempted bombing of Northwest Airlines passenger jet over Detroit by underwear bomber Umar Farouk Abdulmutallab

[1] Bombings at the Boston Marathon Raise Specter of Homegrown Terrorism, RMS press release, April 24, 2013.

Date	Location	Event
September, 2009	New York City, NY	U.S. resident Najibullah Zazi and others charged with conspiracy to use weapons of mass destruction in New York City
September, 2009	Springfield, IL	Attempted plot to detonate a vehicle bomb at the federal building in Springfield.
September, 2009	Dallas, TX	Attempted bombing of skyscraper in Dallas
May, 2009	New York City, NY	Foiled plot to bomb Jewish synagogue and shoot down military planes in New York City
May, 2009	Various U.S. targets	Conviction of Liberty City six for conspiring to plan attacks on U.S. targets, including Sears Tower, Chicago

Source: Federal Bureau of Investigation (FBI); various news reports; Insurance Information Institute.

A 2012 report from the U.S. Department of State highlighted the changing nature of the global terrorism threat, noting that the total number of worldwide terrorist attacks in 2011 was more than 10,000 in 70 countries, resulting in more than 12,500 deaths.[2] While large, that figure represents a drop of 12 percent from 2010. More than 75 percent of the world's attacks occurred in South Asia and the Near East, and 85 percent of attacks in these regions occurred in just three countries: Afghanistan, Iraq and Pakistan.

Counterterrorism success in 2011 came as a number of countries across the Middle East and North Africa saw political demonstrations and social unrest. The movement known as the Arab Spring was triggered initially by an uprising in Tunisia that began back in December 2010. Unrest and instability in this region continues in 2013.

Meanwhile, the July 2011 attack by a lone right-wing extremist in Norway—a country rarely targeted in the past—that left more than 70 people dead and dozens injured, underscores the inability of any country to escape from terrorism, the State Department notes.

Another evolving threat is cyberterrorism. The threat both to national security and the economy posed by cyberterrorism is a growing concern for governments and businesses around the world, with critical infrastructure, such as nuclear power plants, transportation and utilities, at risk.

All these factors suggest that terrorism risk will be a constant, evolving and potentially expanding threat for the foreseeable future.

The looming expiration at the end of 2014 of the government-backed Terrorism Risk Insurance Program Reauthorization Act (TRIPRA) is also prompting

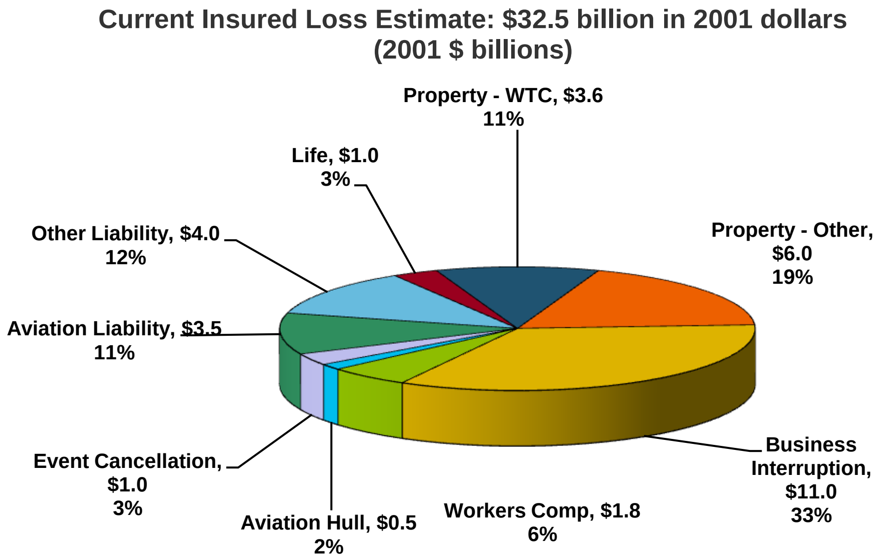
[2] Country Reports on Terrorism 2011, U.S. Department of State, July 31, 2012.

increased dialogue between industry and government about terrorism risk, a discussion that has gained critical importance in the wake of the Boston bombing.

THE IMPACT OF 9/11 ON INSURERS

For property/casualty insurers and reinsurers, the impact of the terrorist attack of September 11, 2001, was substantial, producing insured losses of about $32.5 billion, or $42.1 billion in 2012 dollars. Losses were paid out across many different lines of insurance, including property, business interruption, aviation, workers compensation, life and liability ***(Figures 2 and 3)***. The loss total does not include the March 2010 settlement of up to $657.5 million announced by New York City officials and plaintiffs' lawyers to compensate about 10,000 workers whose health was damaged during the rescue and cleanup at the World Trade Center, or any subsequent settlements (see later section: Ground Zero Workers and Health Claims).

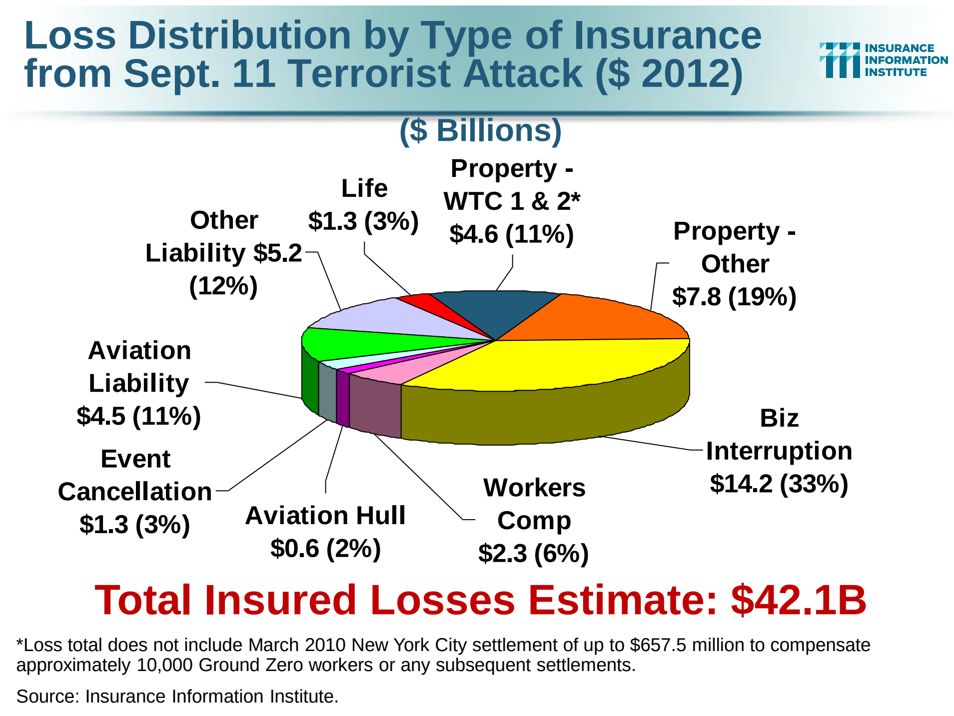
Figure 2
SEPTEMBER 11 INDUSTRY LOSS ESTIMATES*



*Loss total does not include NYC March 2010 settlement of up to $657.5 million to compensate about 10,000 Ground Zero workers.

Source: Insurance Information Institute.

Figure 3



A total of 2,976 people lost their lives in the September 11, 2001 terrorist attacks in New York, Washington, D.C., and Pennsylvania, excluding the 19 hijackers. It remains the worst terrorist attack on record in terms of fatalities and insured property losses, which totaled about $24.6 billion (in 2012 dollars) ***(Figure 4)***. In the more than 10 years since 9/11 insurers have paid out many billions of dollars for other catastrophes, but until Hurricane Katrina in 2005 when insurers paid claims totaling more than $40 billion, 9/11 was the largest loss in the global history of insurance. By way of reference, superstorm Sandy, which impacted the Northeast United States including the New York metropolitan area, produced $18.6 billion in private insured losses.

Figure 4

WORST TERRORIST ACTS, INSURED PROPERTY LOSSES*

(2012 $ millions)

Rank	Date	Country	Location	Event	Insured property loss (1)	Fatalities
1	September 11, 2001	United States	New York, Washington DC, Pennsylvania	Hijacked airliners crash into World Trade Center and Pentagon	$24,364	2,982
2	April 24, 1993	United Kingdom	London	Bomb explodes near NatWest tower in the financial district	$1,176	1
3	June 15, 1996	United Kingdom	Manchester	Irish Republican Army (IRA) car bomb explodes near shopping mall	$966	0
4	April 10, 1992	United Kingdom	London	Bomb explodes in financial district	$870	3
5	February 26, 1993	United States	New York	Bomb explodes in garage of World Trade Center	$810	6
6	July 24, 2001	Sri Lanka	Colombo	Rebels destroy 3 airliners, 8 military aircraft and heavily damage 3 civilian aircraft	$517	20
7	February 9, 1996	United Kingdom	London	IRA bomb explodes in South Key Docklands	$336	2
8	June 23, 1985	North Atlantic	Irish Sea	Bomb explodes on board of an Air India Boeing 747	$209	329
9	April 19, 1995	United States	OK, Oklahoma City	Truck bomb crashes into government building	$189	166
10	September 12, 1970	Jordan	Zerqa, Dawson's Field (disused RAF airstrip in desert)	Hijacked Swissair DC-8, TWA Boeing 707, BOAC VC-10 dynamited on ground	$165	0
11	September 6, 1970	Egypt	Cairo	Hijacked PanAm B-747 dynamited on ground	$143	0
12	April 11, 1992	United Kingdom	London	Bomb explodes in financial district	$125	0
13	November 26, 2008	India	Mumbai	Attack on two hotels; Jewish center	$109	172
14	March 27, 1993	Germany	Weiterstadt	Bomb attack on a newly built, still unoccupied prison	$92	0
15	December 30, 2006	Spain	Madrid	Bomb explodes in car garage at Barajas Airport	$75	2
16	December 21, 1988	United Kingdom	Lockerbie	Bomb explodes on board of a PanAm Boeing 747	$73	270
17	July 25, 1983	Sri Lanka		Riot	$61	0
18	July 7, 2005	United Kingdom	London	Four bombs explode during rush hour in a tube and bus	$61	52
19	November 23, 1996	Comoros	Indian Ocean	Hijacked Ethiopian Airlines Boeing 767-260 ditched at sea	$59	127
20	March 17, 1992	Argentina	Buenos Aires	Bomb attack on Israel's embassy in Buenos Aires	$49	24

(1) Includes bodily injury and aviation hull losses. Updated to 2012 dollars by the Insurance Information Institute using the U.S. Bureau of Labor Statistics' CPI Inflation Calculator.

*Insured losses for the April 15, 2013 Boston Marathon bombings had yet to be determined, as of May 31, 2013.

Source: Swiss Re.

As construction progresses on one World Trade Center (a.k.a. Freedom Tower) insurance claims dollars continue to play an essential and highly visible role in rebuilding lower Manhattan. The many billions of dollars in insurance payouts have also mitigated the overall economic impact of the 9/11 attack—estimated initially by the Milken Institute as approaching $200 billion overall.

Before 9/11 terrorism exclusions were virtually nonexistent in commercial insurance contracts sold in the United States. Following the attack, insurers moved to exclude coverage. Only when the Terrorism Risk Insurance Act (TRIA) was enacted by Congress in November 2002 did coverage for terrorist attacks resume. TRIA established a public/private risk-sharing partnership that allows the federal government and the insurance industry to share losses in the event of a major terrorist attack. The program is designed to ensure that adequate resources are available for businesses to recover and rebuild if they become the victims of a terrorist attack.

Since its initial enactment in 2002 the terrorism risk insurance program has been revised and extended twice. The most recent extension—the Terrorism Risk Insurance Program Reauthorization Act of 2007 (TRIPRA)—ensures its continuation until December 31, 2014. However, the portion of the loss insurers would pay in the event of a terrorist attack has increased significantly over the years. Insurers are also solely responsible for terrorism losses that impact non-TRIA lines, such as private passenger auto and homeowners insurance and group life. Less than half of the property/casualty insurance premiums are written in lines of insurance backstopped by TRIPRA.[3]

By all accounts the terrorism risk insurance program is an unqualified success—a rarity among federal programs—that has achieved all its goals.[4] The program not only succeeded in restoring stability to the country's vital insurance and reinsurance markets in the wake of the unprecedented market dislocations associated with September 11, 2001, terrorist attack, but it continues to deliver substantive, direct benefits to businesses, workers, consumers and the economy overall—all at little or no cost to taxpayers.

More recently, provisions of the terrorism risk insurance program have again come under attack. For example, the Obama administration's 2011 budget plan included

[3] For additional information go to www.marketstance.com. Questions can be emailed to info@marketstance.com or call (888) 777-2587.

[4] TRIA at Ten Years: The Future of the Terrorism Risk Insurance Program, Testimony of Robert P. Hartwig, Insurance Information Institute (I.I.I.) before the House Financial Services Subcommittee on Insurance, Housing, and Community Opportunity, September 11, 2012.

a proposal seeking to scale back federal support for the program, though the administration's latest 2014 budget proposal did not include a cut for the program.

FUTURE OF TRIPRA AND INSURANCE IMPLICATIONS

The government-backed Terrorism Risk Insurance Program Reauthorization Act (TRIPRA) is set to expire at the end of 2014. The program's imminent expiration is prompting increased dialogue between industry and government, a discussion that has gained critical importance in the wake of the Boston bombing.

A February 2013 report for Congress by the Congressional Research Service (CRS) noted that since TRIA's passage, the private industry's willingness and ability to cover terrorism risk have increased.[5] Prices for terrorism coverage have generally trended downward, and some 60 percent of commercial policyholders have purchased coverage over the past few years. However, since this relative market calm has been under the umbrella of TRIA coverage, CRS said it was unclear how the insurance market would react to the expiration of the federal program.

Reinsurance broker Guy Carpenter notes that should TRIPRA not be extended, it would expect terrorism insurance to be greatly reduced in areas of the United States that have the most need for coverage, such as central business districts and other high risk areas.[6] Even in workers compensation, where terrorism insurance is mandated whether or not the backstop is available, Guy Carpenter says it would expect insurers to severely curtail their writings of risks in areas that have the highest risk, and therefore the greatest need for coverage.

Meanwhile, pricing for terrorism insurance could increase dramatically in a number of metropolitan areas and for numerous venues around the U.S. As a result, without the TRIPRA backstop, policyholder needs with regards to terrorism insurance would not be met and many would be left to self-insure the entire risk or portions of the risk, according to Guy Carpenter, meaning that any future terrorist acts could have a negative impact on U.S. economic activity. Ultimately, any dramatic change in TRIPRA could lead to contraction in the marketplace in both insurance and reinsurance, it concluded. It is critical to note, however, that in the absence of the TRIPRA, backstop infrastructure, commercial buildings, shopping malls and sporting venues outside of urban areas are also vulnerable.

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[5] Terrorism Risk Insurance: Issue Analysis and Overview of Current Program, Congressional Research Service (CRS), February 26, 2013.

[6] Tensions Building: The Changing Nature of Terrorism Risk and Coverage, Guy Carpenter, December 2012, and Future of TRIPRA and Implications on the (Re)Insurance Market, GCCapitalIdeas.com, December 24, 2012.

Ratings agency A.M. Best has warned that in the event TRIPRA is not extended, insurer ratings could potentially suffer.[7] Specifically, A.M. Best said insurers that currently would be materially affected by the absence of TRIPRA and that cannot provide a sufficient action plan to reduce exposures to terrorism risks, likely will face rating pressure as the expiration date approaches. Initially, this pressure may result in the assignment of a negative outlook during the latter part of 2013.

Similarly, ratings agency Fitch has said failure by Congress to extend the Terrorism Risk Insurance Act could induce commercial insurers to retreat from larger metropolitan areas, reducing availability of terrorism insurance and potentially raising premium rates.[8] "Insurers' sophistication regarding terrorism risk has evolved significantly since 2001, with a heightened focus on managing risk aggregations in larger metropolitan areas. Still, the industry remains in a challenging position in terms of modeling and underwriting terrorism-related risk," Fitch said.

In its 2010 report on terrorism risk insurance market conditions, the President's Working Group on Financial Markets noted that the program provides incentive to property/casualty insurers and reinsurers who might not otherwise provide terrorism insurance at current capacity levels or prices.[9] A 2009 report by insurance broker Aon estimated that some 70 percent to 80 percent of the commercial property insurance market would revert to absolute exclusions for terrorism if TRIA is changed.[10]

HOW INSURERS TREAT TERRORISM RISK TODAY

In the immediate aftermath of 9/11 the ability of commercial policyholders to purchase adequate limits of terrorism coverage at affordable prices was severely constrained. Commercial property owners and businesses were faced with substantially reduced protection for terrorism related risks, in addition to higher property/casualty rates overall. The situation was particularly acute for owners of high profile "trophy" buildings located in major metropolitan areas. As a result, many were forced to go without coverage or only partly insure their assets.

Prior to the Boston Marathon bombing, reports of property owners, retail outlets or sporting events having problems securing terrorism coverage due to a lack of capacity in the market were no longer making headline news. It remains to be seen

[7] As Expiration of TRIPRA Approaches, Rating Pressure Increases, Best's Briefing, April 1, 2013.
[8] Higher Premiums if Terror Insurance Act Not Renewed, Fitch Wire, Fitch Ratings, May 6, 2013.
[9] *Market Conditions for Terrorism Risk Insurance 2010*, Report of the President's Working Group on Financial Markets.
[10] *Terrorism Update and Key Metrics Report* – May 2009, Aon Risk Services.

how the terrorism insurance market will react to this latest event, but catastrophe modeler RMS has said that the insurance of sports events is likely to be impacted.[11]

In general, insurance capacity may be more limited in certain high-risk cities for terrorism. A 2010 report on terrorism risk insurance market conditions by the President's Working Group on Financial Markets noted that while the availability and affordability of terrorism risk insurance provided by private insurers has improved since 2006, insurance capacity remains constrained for certain high-risk locations and properties. Some commercial insurance policyholders in high-risk urban areas also have difficulty in obtaining coverage at sufficient limits, it said.

The PWG analysis followed a July 2008 report from the U.S. Government Accountability Office (GAO) on the availability and affordability of terrorism coverage in large metropolitan areas.[12] It found that while commercial property terrorism insurance appears to be available nationwide at rates policyholders believe is reasonable, certain types of policyholders may have more difficulty obtaining the coverage amounts they need at prices they view as acceptable. These policyholders are typically owners of high-value properties in urban areas such as Manhattan where there is a high concentration of large buildings that are seen as potential terrorism targets.

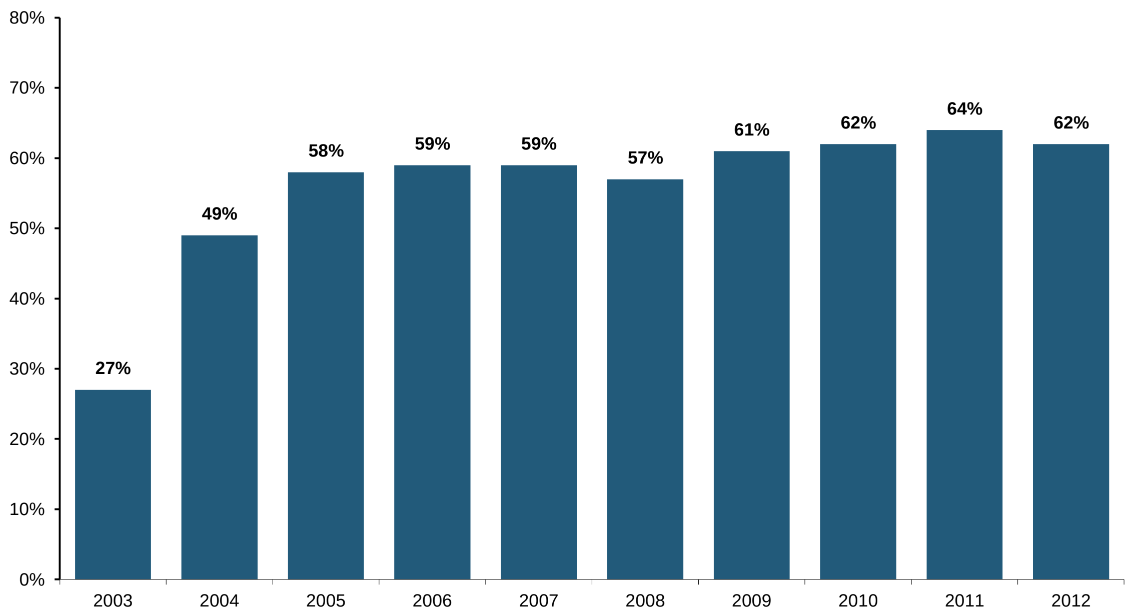
A 2012 report from reinsurance broker Guy Carpenter noted that unrest around the world, including the Arab Spring protests, as well as widespread protests in Europe and other regions, had begun to impact the terrorism (re)insurance market, not only in terms of supply and demand, but also in terms of how risks and coverages are defined.[13] Although it described capacity in the market as abundant, Guy Carpenter noted that civil unrest and/or riot coverages in some international terrorism programs were impacting several reinsurance carriers. The dramatic increase in global unrest had caused an increased frequency of localized or territory-specific losses in the facultative reinsurance market, Guy Carpenter said. As this report went to press, the impact of the Boston Marathon bombing on the market is still to be determined.

Industry data shows that the proportion of businesses buying property terrorism insurance (the take-up rate for terrorism coverage) has generally increased since the enactment of TRIA in 2002, as businesses across the United States had the opportunity to purchase terrorism coverage, usually at a reasonable cost. Take-up rates for workers compensation terrorism coverage are effectively 100 percent as this is a compulsory line of insurance for all businesses.

[11] Boston Marathon Bombing: Running Fear, RMS press release, April 17, 2013.
[12] Initial Results on Availability of Terrorism Insurance in Specific Geographic Markets, GAO-08-919R, July 2008.
[13] Tensions Building: The Changing Nature of Terrorism Risk and Coverage, Guy Carpenter, December 2012.

A May 2013 report from insurance broker Marsh found that the demand for terrorism insurance remains and the existence of TRIA plays a major role in the availability and affordability of coverage.[14] The percentage of companies buying property terrorism insurance—the terrorism take-up rate—has remained fairly constant since 2005. In 2003, the first full year TRIA was in effect, the take-up rate was 27 percent, but has since increased steadily, remaining in the low 60 percent range since 2009 ***(Figure 5)***.

Figure 5
TERRORISM INSURANCE TAKE-UP RATES BY YEAR



Source: Marsh Global Analytics

The companies surveyed by Marsh that bought terrorism coverage came from every industry sector. Of the 17 segments surveyed, media companies were most likely to include terrorism coverage as part of their property insurance in 2012, with the highest take-up rate, 81 percent, of any industry segment. Companies in the health care, financial, education and public entity sectors also had high take-up rates of above 70 percent, Marsh said.

Property terrorism insurance rates typically decrease as the size of the company increases, Marsh noted. Since 2010, companies with total insured value (TIV) less than $100 million experienced moderate median rate decreases, from $54 per

[14] *Marsh Market Update: 2013 Terrorism Risk Insurance Report,* May 2013.

million in 2010 to $49 per million in 2012. However, their terrorism premium rates remained significantly higher than those of larger companies.

Median rates for the largest companies stood at $19 per million in 2012. According to Marsh, this is generally in keeping with overall insurance pricing patterns. Larger companies typically purchase more insurance, which leads to lower rates compared to those for smaller companies.

A stand-alone market for terrorism insurance coverage also exists. The stand-alone market is an important alternative and/or supplement to TRIA coverage for some companies.

In its May 2013 report, Marsh noted that demand for terrorism and political violence insurance coverage has grown in the Middle East, Asia and North Africa following the so-called Arab Spring.

The stand-alone property terrorism insurance market offers coverage for both TRIA-certified and noncertified risks and enables companies to tailor capacity to their coverage needs. The primary industry segments purchasing stand-alone policies were the hospitality sector, large real estate firms and financial institutions. Lesser, but still significant, amounts were purchased in the retail, media, transportation, public entity and utilities segments.

Capacity in the stand-alone terrorism insurance market has increased considerably for exposures outside central business districts, according to Marsh.

Marsh estimates approximately $750 million to $2 billion per risk in stand-alone capacity is available to companies that do not have sizeable exposures in locations where insurers have aggregation problems. Capacity excess of $2 billion is available but more costly.

For locations where stand-alone insurers have aggregation issues, the estimated market capacity is approximately $850 million or lower in some cases. Additional capacity can be accessed, but typically at significantly higher rates.

The primary buyers of stand-alone policies have been hospitality companies, large real estate firms and financial institutions, according to Marsh. Retail companies, media entities, transportation, public entities and utilities also purchased stand-alone terrorism policies, but in lesser amounts. Companies with overseas exposures often look to the stand-alone market to provide solutions not satisfied by local government terrorism insurance schemes.

The latest extension to the terrorism risk insurance program which eliminates any distinction between domestic or foreign acts of terrorism in the definition of a certified act of terrorism has also acted as an impetus for stand-alone markets to offer more competitive terms and conditions to insureds.

ESTIMATING POTENTIAL TERRORISM LOSSES

The fact that acts of terrorism are intentional and that the frequency and severity of attacks cannot be reliably assessed makes terrorism risk extremely problematic from the insurance standpoint. Many insurers continue to question whether terrorism risk is insurable. Large segments of the economy and millions of workers are exposed to significant terrorism risk, but the ability to determine precisely where or when the next attack may occur is limited, as is the ability to predict the type of attack.

At any given time, there is a range of viewpoints among industry analysts and national security experts on where the terrorist threat is highest and which country or location is most at risk. When it comes to estimating losses from potential terrorist attacks there also appears to be significant variability in outcomes, underscoring the degree of uncertainty associated with potential terrorist attacks.

Despite the differing viewpoints, the overall consensus appears to be that terrorism risk is an ongoing, and in some cases growing, threat. Here are some of the most recent projections and predictions on the terrorism threat:

- **Unrest in Middle East:** Since the end of 2010, political demonstrations and unrest have swept across more than a dozen countries in the Middle East and North Africa (MENA) region, including Algeria, Bahrain, Egypt, Iran, Iraq, Jordan, Kuwait, Libya, Morocco, Oman, Saudi Arabia, Syria, Tunisia and Yemen. The movement known as the Arab Spring was initially sparked by an uprising in Tunisia that began in December 2010, and ultimately led to the resignation of the country's president just three months later. The protests then spread to other countries, challenging numerous political regimes and leaderships, and leading to increased tensions in a potentially volatile region of the world. Unrest and instability in this region continues in 2013.

- **Homegrown Terrorist Threat:** Catastrophe modeler RMS notes that the Boston bombing is a strong reminder of the homegrown terrorism threat in the United States.[15] While the two brothers who are suspected to be behind the attack are of Chechen descent and one of them had in recent years visited Chechnya, both had been living in the U.S. for almost a decade and follow a

[15] Bombings at the Boston Marathon Raise Specter of Homegrown Terrorism, RMS press release, April 24, 2013.

pattern of homegrown jihadi terrorism. RMS assesses that the U.S. terrorist threat will increasingly come predominantly from such homegrown extremists and notes that due to the highly decentralized structure of such "groups", they are difficult to identify and apprehend. RMS also states that the technical expertise of such homegrown operatives will be limited, so simple conventional attacks such as IEDs will remain the preferred weapon of choice. While such weapons have limited range, they potentially can cause significant property damage and inflict numerous casualties. Such attacks will occur in densely populated areas, at a time of day selected to cause the most damage and fatalities, RMS predicts. Also in April and May 2013, a spate of letters laced with ricin, one of which was addressed to President Barack Obama, were intercepted at mail facilities in Washington, D.C., and New York City.

- **Transit System Threat:** An alleged terrorist plot to blow up a New York to Toronto passenger train was recently foiled by Canadian law enforcement officials and two suspects with links to Al-Qaeda arrested. The planned attack has renewed concerns over the potential terrorist threat to mass transit systems. Following the March 29, 2010, attacks by suicide bombers on the Moscow subway that killed 39 people, New York City Mayor Michael Bloomberg announced that the New York City Police Department (NYPD) had stepped up its patrol of the subways.

- **Maritime Threat:** Experts warn that maritime piracy terrorism continues to pose a formidable threat. On February 9, 2011, the Irene SL, a Greek-flagged very large crude carrier (VLCC) bound for the United States and carrying about 2 million barrels of crude oil worth an estimated $200 million was hijacked by Somali pirates off the coast of Oman in the northern part of the Arabian Sea. INTERTANKO managing director Joe Angelo said the hijacking marked a significant shift in the impact of the piracy crisis in the Indian Ocean: "The piracy situation is now spinning out of control into the entire Indian Ocean right to the top of the Arabian Sea over 1,000 miles from the coast of Somalia.... If piracy in the Indian Ocean is left unabated, it will strangle these crucial shipping lanes with the potential to severely disrupt oil flows to the U.S. and to the rest of the world."

- **Country Risk:** A global ranking of 197 countries by risk analyst Maplecroft published in June 2012 identifies Yemen, Somalia and Afghanistan as the countries posing the most severe risk from terrorist attacks. Localized insurgencies in the growth economies of Nigeria, the Philippines, Turkey, India and Russia, meanwhile, see them featured among 18 countries classified "extreme risk." Maplecroft's research also reveals that between

September 2011 and August 2012, the 10 most at-risk states accounted for 87 percent of worldwide terrorist attacks (7,765 of the 8,927 logged by Maplecroft and the Worldwide Incidents Tracking System (WITS), while also suffering 85 percent of the 15,219 fatalities recorded over the same period.

- **Regional Terrorism Threat:** Aon's 2013 Political Risk Map measures political risks, political violence and terrorism in 163 countries and territories to help companies assess the risk levels of exchange transfer, legal and regulatory risk, political interference, political violence, sovereign non-payment and supply chain disruption. For 2013, the map shows an increase in the number of countries with upgraded political risk ratings (where the overall country or territory risk is rated lower than the previous year). Some 13 countries were upgraded in 2013, compared to three in 2012. The 2013 map also shows only 12 countries experiencing downgrades compared to 21 in 2012. Countries downgraded in 2013 were: Algeria, Cameroon, Chad, Ethiopia, Madagascar, Mali, Namibia, Moldova, Turkmenistan, Uzbekistan, Panama and Paraguay.

THE CYBER TERRORISM THREAT

The threat both to national security and the economy posed by cyber terrorism is a growing concern for governments and businesses around the world, with critical infrastructure, such as nuclear power plants, transportation and utilities at risk.[16]

U.S. Homeland Security Secretary Janet Napolitano recently warned that a major cyber attack is a looming threat that could have the same type of impact as superstorm Sandy, knocking out power to a large swathe of the Northeast.

Napolitano said a "cyber 9/11" could happen imminently and noted that critical infrastructure—including water, electricity and gas—is very vulnerable to such a strike.[17]

Earlier, in an October 2012 speech U.S. Defense Secretary Leon Panetta warned that the United States was facing a possible "cyber Pearl Harbor" scenario, and increasingly vulnerable to foreign cyber attacks on its critical infrastructure networks.

Such attacks are targeting the computer control systems that operate chemical, electricity and water plants and transportation networks, Panetta said:

[16] *Cyber Risks: The Growing Threat*, March 2013, Robert P. Hartwig and Claire Wilkinson, Insurance Information Institute (I.I.I.)
[17] *Napolitano warns of risk of major cyber attack*, Newsday, January 24, 2013.

> "An aggressor nation or extremist group could use these kinds of cyber tools to gain control of critical switches. They could, for example, derail passenger trains or even more dangerous, derail trains loaded with lethal chemicals.
>
> They could contaminate the water supply in major cities or shutdown the power grid across large parts of the country."

Panetta's speech came in the wake of a cyber attack in August 2012 on state oil company Saudi Aramco, which infected and rendered useless more than 30,000 computers.

The Department of Homeland Security received reports of some 198 attacks on critical infrastructure systems in the U.S. in 2012, a 52 percent increase on 2011.[18]

In 2011, a report from the Pentagon concluded that computer sabotage coming from another country can constitute an act of war.[19] It noted that the Laws of Armed Conflict—which guide traditional wars and are derived from various international treaties such as the Geneva Convention—apply in cyberspace as in traditional warfare.

A recent survey conducted by Tenable Network Security found that the majority of Americans fear that cyber warfare is imminent and that the country will attack or be attacked in the next decade.[20]

An overwhelming 93 percent of respondents to the survey believe that U.S. corporations and businesses are at least somewhat vulnerable to state-sponsored attacks. And 95 percent believe U.S. government agencies themselves are at least somewhat to very, vulnerable to cyber attacks.

Some 94 percent of survey respondents also say they support the President having the same level of authority to react to cyber attacks as he has to respond to physical attacks on the country.

The survey also revealed conflicting results about whether the public or private sector should be held accountable for protecting corporate networks.

[18] *As Hacking Against U.S. Rises, Experts Try to Pin Down Motive*, the New York Times, March 3, 2013
[19] *Cyber Combat: Act of War*, by Siobhan Gorman and Julian E. Barnes, the Wall Street Journal, May 30, 2011.
[20] Tenable Network Security survey, February 2013.

Some 66 percent of respondents believe corporations should be held responsible for cyber breaches when they occur. But an almost equal number of Americans—62 percent—say government should be responsible for protecting U.S. businesses from cyber attacks.

Recent high profile attacks, such as the sabotaging of Iran's nuclear program via the Stuxnet computer worm, malicious infiltration attempts by China and the reported targeting of an Illinois water utility by a remote cyber attack from Russia, highlight the capability and breadth of the cyber risk ***(Figure 6)***.

Figure 6
CYBER RISK THREAT SPECTRUM: TERRORISM IS A CONCERN

Threat	Resources	Methods	Objectives	Examples
Nation-state, sleeper insiders	High	Highly targeted	Strategic sabotage	Stuxnet
Advanced persistent threat	High	Targeted, manual remote control	IP theft	Aurora, Ghostnet
Persistent threat	Medium	Targeted, manual remote control	IP theft, defacement	Night Dragon, "Anonymous"
Disgruntled insider with access to ICS	Low	Targeted: social engineering	Sabotage	Maroochy
Insider with access to IT network	Low	Targeted: social engineering	Sabotage	IT examples
Organized crime	Medium	Highly volume, automated	Identity theft	Zeus, Conflicker

Source: Waterfall Security Systems

A recent study by the Ponemon Institute in collaboration with Bloomberg Government estimated private sector spending on cyber security at roughly $80 billion in 2011, but noted that this was not nearly enough.

The study found that "utilities, banks and phone carriers would have to spend almost nine times more on cyber security to prevent a digital Pearl Harbor from plunging millions into darkness, paralyzing the financial system or cutting communications," according to a report by Bloomberg News.[21] Its findings were

[21] *Cybersecurity Disaster Seen in the U.S. Survey Citing Spending Gaps*, by Eric Engleman and Chris Strohm, Bloomberg News, January 31, 2012.

based on interviews with technology managers from 172 U.S. organizations in six industries and government.

TERRORISM RISK INSURANCE PROGRAM: STRUCTURE AND COVERAGE

The Terrorism Risk Insurance Act of 2002 was adopted by Congress to ensure the widespread availability and affordability of property and casualty insurance for terrorism risk. The act provides a temporary program, or "backstop" for incurred losses resulting from certain acts of terrorism.

The act was extended in 2005 for two years and again in 2007 for another seven years, through December 2014, under the Terrorism Risk Insurance Program Reauthorization Act of 2007 (TRIPRA). Both extensions of the act changed some components of the program, increasing the portion of the loss insurers would pay in the event of a terrorist attack and reducing the types of commercial insurance covered by the program.

It is important to note that the program provides no coverage for personal lines insurers, reinsurers and group life insurance losses (see below).

The major provisions of the terrorism risk insurance program are as follows:

- **Make available requirement:** Only commercial insurers and causes of loss specified in the underlying policies are covered under the program and required to make coverage available. Residual market insurers such as workers compensation pools, captive insurers and risk retention groups are also covered. Personal lines insurers and reinsurers are not covered; neither are group life insurance losses. Most types of commercial insurance lines were covered under the original legislation, except for some specialty coverages such as medical malpractice and crop insurance. Under the 2005 extension, certain additional lines are now excluded:

    - Commercial automobile
    - Burglary and theft
    - Surety
    - Professional liability, except for directors and officers liability
    - Farm owner multi-peril insurance

- **Definition of a certified act of terrorism:** The 2007 extension expanded the definition of a certified act of terrorism to eliminate any distinction between domestic or foreign acts of terrorism. The original act covered only acts of foreign terrorism on U.S. soil.

- **Triggering event:** The threshold for the program to go into effect rose from $5 million under the original act to $50 million after March 2006. In 2007, the triggering event threshold rose to $100 million and remained there under TRIPRA. Federal funds will be paid out only in the event of a terrorist act that produces total insurance industry losses above this threshold.

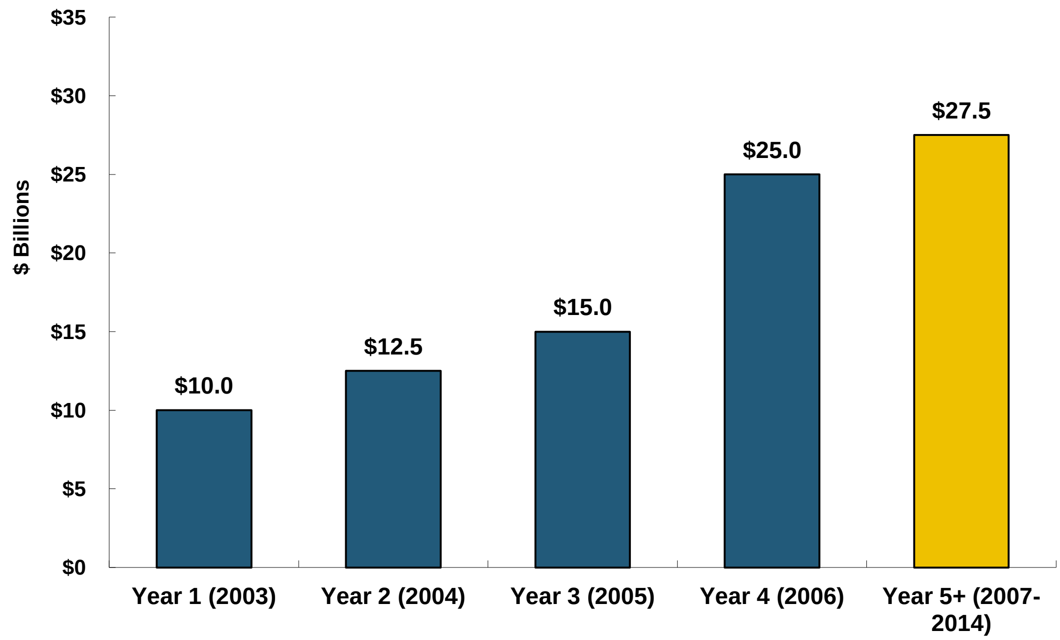
- **Program cap:** The program is capped at $100 billion per year for insured losses (federal and insurer combined). A provision in the law requires the U.S. Department of the Treasury to establish a process for the allocation of pro-rata payments in the event that terrorism-related insured losses exceed the federal government's annual $100 billion cap. The law states that no insurer may be required to make any payment for insured losses in excess of its deductible and its share of insured losses.

- **Individual insurer deductibles:** The amount of terrorism losses that an individual insurer must pay before federal assistance becomes available. The level rose to 20 percent of an insurer's direct earned premiums for commercial property/casualty insurance in 2007 where it currently remains (up from 17.5 percent in 2006 and 15 percent in 2005).

- **Co-payments:** The share of losses that insurers pay above their individual retentions rose to 15 percent in 2007 where it remains today, up from 10 percent in 2006.

- **Industry retention level:** The industry as a whole must cover a certain proportion of the losses through deductibles and copayments before federal assistance kicks in. This amount rose to $27.5 billion in 2007 where it remains today, up from $25 billion in 2006 and $15 billion in 2005 ***(Figure 7)***. If the insured loss is less than the $27.5 billion threshold, the federal government can recoup the difference between the actual amount it paid and the required retention. This comes via a surcharge on commercial insurance policyholders not to exceed 3 percent of premium for insurance coverages that fall under the program. If the insured loss exceeds this threshold, federal expenditures may be recouped for amounts in excess of the threshold at the discretion of the Secretary of the Treasury.

Figure 7
INSURANCE INDUSTRY RETENTIONS UNDER TRIA AND ITS SUCCESSORS
($ Billions)



Source: Insurance Information Institute.

FEDERAL ROLE IN TERRORISM INSURANCE

The Obama administration's 2011 budget plan had included a proposal seeking to scale back federal support for the terrorism risk insurance program. Its justification was that this would "encourage the private sector to better mitigate terrorism risk through other means, such as developing alternative reinsurance options and building safer buildings." The proposal projected savings of $249 million in the course of the following 10 years as a result of the reduction in federal support. However, no planned cuts to the program were included in the administration's 2014 budget plan.

Industry observers noted that any attempts to modify the program would have a detrimental effect on the availability and affordability of terrorism insurance—problems that the program was designed to end.

Studies by various organizations, including the University of Pennsylvania's Wharton School Risk Center, the RAND Corporation and the Organization for

Economic Co-operation and Development (OECD), have supported the idea of a substantive federal role in terrorism insurance. In particular, the Wharton School found that TRIA has had a positive effect on availability of terrorism coverage and also has significantly contributed to reducing insurance premiums.[22] The OECD notes that thus far the financial markets have shown little appetite for terrorism risk.

Terrorism Risk Insurance Programs in Other Countries

A number of countries have established their own terrorism risk insurance programs and these have operated successfully, often for many years. Australia, Austria, Belgium, France, Germany, the Netherlands, Spain, Switzerland and the United Kingdom have all created programs to cover terrorism in the event of an attack on their own soil ***(Figure 8)***.

In 1993, the British government formed a mutual reinsurance pool for terrorist coverage following acts of terrorism by the Irish Republican Army. Insurance companies pay premiums at rates set by the pool. The primary insurer pays the entire claim for terrorist damage but is reimbursed by the pool for losses in excess of a certain amount per event and per year. This is based on its share of the total market. The maximum industry retention increases annually per event and per year. Following 9/11, coverage was extended to cover all risks, except war, including nuclear and biological contamination, aircraft impact and flooding, if caused by terrorist attacks. The British government acts as the reinsurer of last resort, guaranteeing payments above the industry retention.

[22] *Evaluating the Effectiveness of Terrorism Risk Financing Solutions*, Howard C. Kunreuther and Erwann O. Michel-Kerjan, September 2007, National Bureau of Economic Research.

INSURANCE INFORMATION INSTITUTE

Figure 8
COUNTRIES OPERATING COMPULSORY OR OPTIONAL TERRORISM POOLS

Country	Compulsory Pool (Y/N)	Names of Terror Pool or Reinsurance Mechanism
Australia	N	Australian Reinsurance Pool Corporation (ARPC)
Austria	N	Österreichisher Versicherungspool zur Deckung von Terrorisiken (The Austrian Terrorpool)
Bahrain	N	The Arab War Risks Insurance Syndicate (AWRIS)
Belgium	N	Terrorism Reinsurance & Insurance Pool (TRIP)
Denmark	N	Danish Terrorism Insurance Scheme
Finland	N	Finnish Terrorism Pool
France	Y	Gestion de l'Assurance et de la Réassurance des Risques d'Attentats et Terrorisme (GAREAT)
Germany	N	EXTREMUS Versicherungs-AG
Hong Kong - China	N	The Motor Insurance Bureau (MIB)
India	N	The General Insurance Corporation of India
Indonesia	N	Indonesian Terrorism Insurance Pool
Israel	Y	Terrorism (Intifada Risks) – The Victims of Hostile Actions (Pensions) Law and the Property Tax and Compensation Fund Law
Namibia	N	Namibia Special Risks Insurance Association (NASRIA)
Netherlands	N	Nederlandse Herverzekeringsmaatschappij voor Terrorismeschaden (NHT)
Northern Ireland	N	Criminal Damage Compensation Scheme Northern Ireland
Russia	N	Russian Anti-terrorism Insurance Pool (RATIP)
South Africa	N	South African Special Risks Insurance Association (SASRIA)
Spain	Y	Consorcio de Compensacion de Seguros (CCS)
Sri Lanka	N	SRCC/Terrorism Fund - Government
Switzerland	N	Terrorism Reinsurance Facility
Taiwan	N	Taiwan Terrorism Insurance Pool
United Kingdom	N	Pool Reinsurance Company Limited (Pool Re)
United States	N	Terrorism Risk Insurance Reauthorization Act of 2007 (TRIPRA)

Source: Guy Carpenter & Co, LLC

Fire Following

State law has also addressed the issue of terrorism cover. Before 9/11, 31 jurisdictions had laws that required that property policies be based on the 1943 New York Standard Fire Policy (SFP). The SFP does not exclude fire following terrorism and, prior to 2003, the SFP did not permit this exclusion with the result that a policyholder who had rejected terrorism coverage under TRIA would still have coverage for fire following an act of terrorism. Currently, this is still the case in just a handful of states.

However, since 2003, some states have revised their SFP statutes to permit exclusions of fire following terrorism under certain circumstances. Thus, for a policyholder who has rejected terrorism coverage under TRIA, in these states there might be no coverage or limited coverage for fire resulting from an act of terrorism. Many states do not have a standard fire policy statute or have SFPs that unconditionally exclude fire following terrorism. In these states there is no stipulated coverage for fire following terrorism.

NUCLEAR, BIOLOGICAL, CHEMICAL AND RADIOLOGICAL (NBCR) THREAT

Acts of terrorism have the potential to be large, destabilizing events, giving rise to losses of an unquantifiable size and severity. Potential terrorism scenarios often include the likely impact of an incident involving weapons of mass destruction (WMD).

As recently as January 2010 the U.S. Government Accountability Office (GAO) stated that a terrorist's use of either a radiological dispersal device (RDD)—frequently referred to as a "dirty bomb"—or an improvised nuclear device (IND) to release radioactive materials into the environment could have devastating consequences.[23] It noted that the consequences of a terrorist attack using an RDD or IND would include not only loss of life but also enormous psychological and economic impacts.

An April 2006 study by the American Academy of Actuaries explored the insured losses that nuclear, biological, chemical and radiological (NBCR) incidents might give rise to in four U.S. cities. It estimated that in New York a large NBCR event could cost as much as $778.1 billion, with insured losses for commercial property at $158.3 billion and for workers compensation at $483.7 billion. A loss of this magnitude is more than three times the size of the commercial P/C insurance industry's claims-paying capacity. The three other U.S. cities included in the analysis were Washington, DC; San Francisco, CA; and Des Moines, IA.

[23] *Combating Nuclear Terrorism: Actions Needed to Better Prepare to Recover from Possible Attacks Using Radiological or Nuclear Materials*, Government Accountability Office (GA0), January 2010, GAO-10-204.

Nuclear, biological, chemical and radiological attacks are another example of catastrophic events that are fundamentally uninsurable due to the nature of the risk. The Terrorism Risk Insurance Program Reauthorization Act of 2007 (TRIPRA) did not include an earlier controversial provision that would have required insurers to make available coverage for NBCR attacks. There are long-standing restrictions regarding war coverage and NBCR events in both personal and commercial insurance policies.

However, a June 2010 report by Guy Carpenter noted that some two-thirds of reinsurance markets surveyed are now offering coverage for NBCR events, reflecting a true evolution in underwriting appetite since 9/11.[24] An increasing number of reinsurers have entered the market over the last few years, offering new solutions for various large-scale risks such as airports, industrial plants, sports stadiums and shopping centers, Guy Carpenter said. It noted that costs of coverage vary depending on a number of factors, including geographical spread of risk, the location and type of exposure, proximity to other risks and the program's structure (e.g. limit and deductibles).

The reauthorization of the terrorism risk insurance program in 2007 directed GAO to review: the extent to which insurers offer NBCR coverage; factors that contribute to the willingness of insurers to provide NBCR coverage; and policy options for expanding coverage for NBCR risks. In its report, GAO said that commercial property/casualty insurers generally still seek to exclude NBCR coverage per long-standing exclusions for nuclear and pollution risks, although such exclusions may be subject to challenges in court because they were not specifically drafted to address terrorist attacks.[25]

GAO noted that commercial property/casualty policyholders, including companies that own high-value properties in large cities, generally reported that they could not obtain NBCR coverage. Unlike commercial P/C insurers, workers compensation, group life and health insurers reported providing NBCR coverage because states generally do not allow them to exclude these risks. GAO reviewed several proposals but made no recommendations on the NBCR issue.

[24] *Terrorism: Reinsurers Standing By*, Guy Carpenter, June 2010.
[25] *Terrorism Insurance: Status of Coverage Availability for Attacks Involving Nuclear, Biological, Chemical or Radiological Weapons*, U.S. Government Accountability Office (GAO), December 2008.

AVIATION INSURANCE FOR TERRORISM RISKS

Aviation insurance for terrorism risks continues to be an issue of concern for countries around the world. The attempted Christmas Day 2009 attack on a Northwest Airlines flight from Amsterdam to the United States by Umar Farouk Abdulmutallab, who allegedly tried to detonate plastic explosives hidden in his underwear, is one of the latest reminders that terrorists continue to look for opportunities to target international aviation.

Airlines are required to have passenger and third-party liability insurance coverage in order to receive landing rights and as a condition for leases, so the cancellation of insurance cover could affect the industry's ability to operate.[26] In the wake of 9/11, there was a complete withdrawal of coverage for acts of war, terrorism and related perils. As a result a number of governments stepped in and established schemes to temporarily fill the coverage gap. Since then, the private market has partially reinstated coverage, though at a significantly higher cost.

Some countries, like the United States, assist airlines in insuring war risks. The Federal Aviation Administration (FAA) began issuing premium third party liability war risk insurance to U.S. air carriers in the wake of 9/11. The Homeland Security Act of 2002 (HAS) and subsequent legislation mandated the expansion of war risk insurance coverage to include hull loss and passenger liability and required continued provision of the insurance.

The program has been extended several times. As of October 1, 2012, the FAA Aviation Insurance Program Office provides war risk hull loss, as well as passenger and third party liability insurance to regularly scheduled U.S. air carriers for the period through September 30, 2013.

THE LIABILITY FACTOR

Another distinguishing feature of terrorist attacks is their ability to generate enormous liability losses in addition to physical losses. In the immediate aftermath of 9/11 it became clear that thousands of victims and their families were prepared to litigate to recover economic and non-economic (e.g., pain and suffering, emotional distress, etc.) damages.

To minimize the likelihood of a wave of liability claims against the airlines and other likely litigants in the days following 9/11, Congress established the Victims Compensation Fund (VCF). The program was designed to provide a no-fault alternative to tort litigation for these individuals or relatives and provided compensation for losses due to personal physical injuries or death.

[26] *Global Terror Update 2009*, Guy Carpenter.

By the time the VCF ceased operations on June 15, 2004, it had processed nearly 7,400 claims for death and physical injury and provided around $7 billion in payments to families of 9/11 victims. In return, victims' families were required to give up the right to sue the airlines, government agencies or other entities they perceived as responsible parties.

TRIA and its extension legislation contain no provision for handling liability claims in future. As a result, the impact of tort claims following another major terrorist attack on U.S. soil has the potential to be enormous. It is worth nothing that even with the VCF a substantial number of lawsuits were filed in the wake of 9/11. For example, recent media reports suggest that settlements have been reached in 93 of 96 wrongful death and injury lawsuits related to 9/11 and submitted to Federal District Court in Manhattan. Although the amounts are confidential, reports cite a document showing that the defendants have paid out a total of $500 million.[27]

Ground Zero Workers and Health Claims

In addition to the direct liability costs associated with terrorist attacks, ailments and illnesses contracted by workers involved in post-attack rescue and clean-up activities can increase liability losses by hundreds of millions of dollars. These types of suits will add hundreds of millions of dollars to the final cost of a major terrorist attack.

In November 2010, more than 10,000 workers whose health was damaged during the rescue and cleanup at the World Trade Center approved a settlement of at least $625 million with New York City officials. For the settlement to take effect at least 95 percent of the plaintiffs had to agree to its terms. The settlement would have paid out $712.5 million if all of the plaintiffs had opted in. According to reports, the final acceptance rate was 95.1 percent.[28]

The plaintiffs will be compensated according to the severity of their illnesses and the extent of their exposure to contaminants at the site. Under the terms of the settlement, individual payments will range from $3,250 to $1.8 million or more for the worst injuries, according to estimates from lawyers. Payouts to the plaintiffs will come from a federally financed insurance company called the WTC Captive Insurance Company with approximately $1.1 billion in funds to provide coverage to the city.

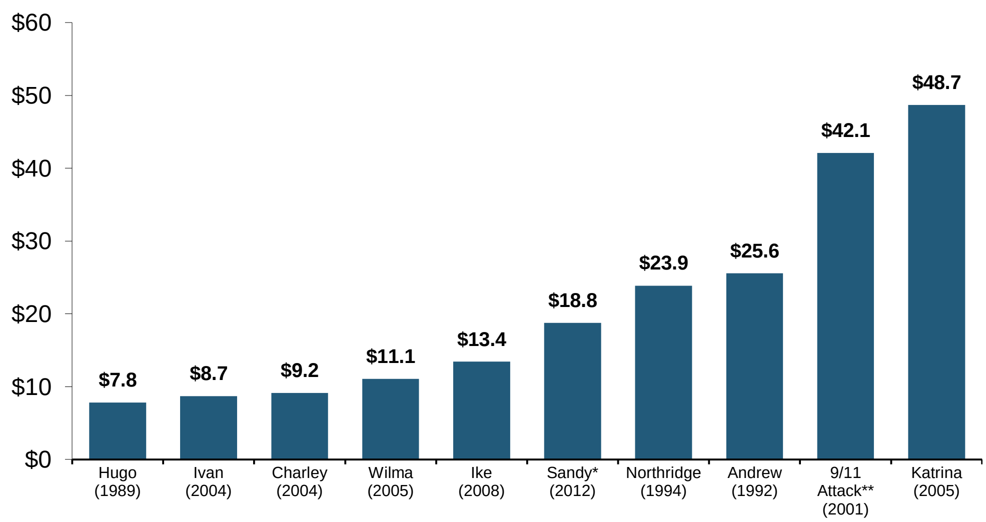
[27] *Judge's Approval Sought in 2 Lawsuits from 9/11*, by Benjamin Weiser, the New York Times, 02/05/2010
[28] *Sept. 11 Workers Agree To Settle Health Lawsuits*, by Mireya Navarro, the New York Times, 11/19/2010

CONCLUSION

The cost of terrorism still looms large in United States history. The $32.5 billion in losses ($42.1 billion in 2012 dollars) paid out by insurers for the terrorist attack of September 11, 2001, places second in an Insurance Information Institute (I.I.I.) ranking of the most costly U.S. catastrophes—just after Hurricane Katrina (2005) ***(Figure 9)***.

More than a decade later, 9/11 also remains the worst terrorist act in terms of fatalities and insured property losses.

Figure 9
THE TEN MOST COSTLY CATASTROPHES, UNITED STATES (1)
(Insured Losses, 2012 dollars, $ billions)



*ISO estimate as of January 2013
** Insured loss estimate for Sep. 11 terrorist attack includes property, business interruption, workers comp, aviation hull, liability, event cancellation and life insurance losses.

Source: ISO's Property Claim Services unit (PCS); Insurance Information Institute inflation adjustments to 2012 dollars using the CPI.

The April 2013 Boston bombing—the first successful terror attack on U.S. soil since 9/11—underscores the fact that, while the risk is changing, terrorism is a constant threat for the foreseeable future.

Failure to focus on and prepare for this threat will come at an enormous cost to the millions of individuals and businesses who rely on insurance contracts to offset the overall economic impact of a terrorist attack.

Meanwhile, the looming expiration at the end of 2014 of the Terrorism Risk Insurance Program Reauthorization Act (TRIPRA), brings to a head the question of whether terrorism risk now, or ever, will be one that can be managed entirely within the private sector.

Industry research suggests that market stability in terms of both pricing and availability of terrorism coverage, as well as the ability to maintain adequate and expanding levels of capacity over time, is contingent on the continued existence of the Terrorism Risk Insurance Program.

For property/casualty insurers, the increasing share of losses that they would have to fund in the event of a major terrorist attack on U.S. soil suggests that now is the time to take stock of their terrorism exposures.

Appendix I

FAQ: TERRORISM INSURANCE—WHAT IT IS AND WHAT IT COVERS

Terrorism insurance provides coverage to individuals and businesses for potential losses due to acts of terrorism.

Businesses

Prior to 9/11, standard commercial insurance policies included terrorism coverage as part of the package, effectively free of charge. Today, terrorism coverage is generally offered separately at a price that more adequately reflects the current risk.

Insurance losses attributable to terrorist acts under these commercial policies are insured by private insurers and reinsured or "backstopped" by the federal government pursuant to the Terrorism Risk and Insurance Act of 2002 (TRIA). TRIA has been renewed twice, and the current law, known as the Terrorism Risk Insurance Program Reauthorization Act of 2007 (TRIPRA) runs until December 2014. Under the program, owners of commercial property, such as office buildings, factories, shopping malls and apartment buildings, must be offered the opportunity to purchase terrorism coverage.

Individuals

Standard homeowners insurance policies include coverage for damage to property and personal possessions resulting from acts of terrorism. Terrorism is not specifically referenced in homeowners policies. However, the policy does cover the homeowner for damage due to explosion, fire and smoke—the likely causes of damage in a terrorist attack.

Condominium or co-op owner policies also provide coverage for damage to personal possessions resulting from acts of terrorism. Damage to the common areas of a building like the roof, basement, elevator, boiler and walkways would only be covered if the condo/co-op board has purchased terrorism coverage.

Standard renters policies include coverage for damage to personal possessions due to a terrorist attack. Again, coverage for the apartment complex itself must be purchased by the property owner or landlord.

Auto insurance policies will cover a car that is damaged or destroyed in a terrorist attack only if the policyholder has purchased "comprehensive" coverage. Most people who have loans on their cars or lease are required by lenders and leasing companies to carry this optional form of coverage. People who buy liability coverage only are not covered in the event their vehicle is damaged or destroyed as the result of a terrorist attack.

Life insurance policies do not contain terrorism exclusions. Proceeds will be paid to the beneficiary as designated on the policy.

Under What Circumstances Is There Coverage?

For the terrorism coverage to be triggered under TRIPRA for commercial policies, a terrorist attack has to be declared a “certified act” by the Secretary of the Treasury.

No such declaration is needed to trigger coverage under homeowners and auto policies because there are no exclusions for terrorism.

In some states a doctrine know as “fire following” applies. This means that in the event of a terrorist-caused explosion followed by fire, insurers could be liable to pay out losses attributable to the fire (but not the explosion) even if a commercial property owner had not purchased terrorism coverage. Insurers have sought to limit fire coverage resulting from a terrorist attack, because commercial policyholders that choose to reject TRIPRA or other terrorism coverage are effectively paying no premium for the protection offered by fire-following coverage. Currently, there is coverage for fire following an act of terrorism in just a handful of states.

What Is Not Covered?

There are long-standing restrictions regarding war coverage and nuclear, biological, chemical and radiological (NBCR) events in both personal and commercial insurance policies.

War-risk exclusions reflect the realization that damage from acts of war is fundamentally uninsurable. No formal declaration of war by Congress is required for the war risk exclusion to apply. Nuclear, biological, chemical and radiological attacks are another example of catastrophic events that are fundamentally uninsurable due to the nature of the risk.

Under the terrorism risk insurance program, if some NBCR exclusions are permitted by a state, an insurer does not have to make available the excluded coverage.

Business Interruption Insurance

Property damage to commercial buildings from a terrorist attack also may include claims for business interruption. Business interruption insurance (sometimes referred to as business income coverage) covers financial losses that occur when a firm is forced to suspend business operations either due to direct damage to its premises or because civil authorities limit access to an area after the attack and those actions prevent entry to the business premises. Coverage depends on the individual policy, but typically begins after a waiting period or “time deductible” of two to three days and lasts for a period of two weeks to several months.

Business interruption losses associated with acts of civil authority (e.g., closure of certain area around the disaster) can only be triggered when there is physical loss or damage arising from a covered peril (e.g., explosion, fire, smoke, etc.) within the area affected by the declaration. The loss/damage need not occur to the insured premises specifically. Reductions in business income associated with fear of traveling to a location, in addition to closure to areas by authorities because of a heightened state of alert, would not be covered by business interruption policies.

Workers Compensation and Other Coverages

Workers compensation—a compulsory line of insurance for all businesses—covers employees injured or killed on the job and therefore automatically includes coverage for acts of terrorism. Workers compensation is also the only line of insurance that does not exclude coverage for acts of war. Coverage for terrorist acts cannot be excluded from workers compensation policies in any state.

There are essentially three types of workers compensation benefits. The first reimburses workers for lost wages while they recover from their injuries. The second covers workers for all medical expenses incurred as a result of the injuries they sustain. The third type of benefit provides payments to the families of workers killed on the job.

Life/health and disability insurance policies may provide coverage for loss of life, injury or sickness to individuals in the event of a terrorist attack.

What Is the Terrorism Risk Insurance Act (TRIA)/Terrorism Risk Insurance Program Reauthorization Act (TRIPRA)?

TRIA is a public/private risk-sharing partnership between the federal government and the insurance industry. The program is designed to ensure that adequate resources are available for businesses to recover and rebuild if they become the victims of a terrorist attack.

TRIA was extended for another two years in December 2005 and for another seven years to 2014 in December 2007. The new law is known as the Terrorism Risk Insurance Program Reauthorization Act (TRIPRA) of 2007.

Specific provisions of the legislation are:

- An event must cause at least $100 million in aggregate property and casualty insurance losses to be certified by the Secretary of the Treasury as an act of terrorism.
- The definition of a certified act of terrorism has been expanded to cover both domestic and foreign acts of terrorism.
- Each participating insurer is responsible for paying out a certain amount in claims (a deductible) before federal assistance becomes available.
- For losses above a company's deductible, the federal government will cover 85 percent, while the insurer contributes 15 percent.
- The aggregate insurance industry retention in 2007 was $27.5 billion, up from $25 billion in 2006 and $15 billion in 2005.
- Losses covered by the program are capped at $100 billion.
- Lines originally excluded from the program are: personal lines (auto and home), reinsurance, federal crop, mortgage guaranty, financial guaranty, medical malpractice, flood insurance provided under the NFIP and life and health. Additional lines now excluded are: commercial auto, professional liability except for directors and officers liability, surety, burglary and theft, and farmowners multi-peril insurance.
- The Terrorism Risk Insurance Program Reauthorization Act (TRIPRA) of 2007 is due to sunset on December 31, 2014.

Does the Terrorism Risk Insurance Program Affect the Availability and Price of Coverage?

Yes, by sharing potential losses from terrorist attacks between private insurers and the government, the terrorism risk insurance program has brought much needed additional capacity to the terrorism market. Before the program existed, businesses were left with little or no terrorism coverage, but since it came into effect they are able to purchase the cover they need.

Terrorism coverage is very difficult to price because the frequency and severity of an attack is so unpredictable. Pricing of terrorism coverage varies according to the individual risk (based on factors such as location and industry, for example), but it is clear that the terrorism risk insurance program has had a stabilizing influence on the market.

Does an Insurer Have to Make Terrorism Coverage Available?

Yes. Under TRIPRA, all property/ casualty insurers in the U.S. are required to make terrorism coverage available. The "make available" provision applies to commercial lines of P/C insurance. Insurers are required to make an offer of coverage for "certified acts" to policyholders. If the insured rejects an offer, the insurer may then reinstate a terrorism exclusion.

What if Terrorism Coverage Is Not Purchased and a Loss Occurs?

A business that has not purchased TRIPRA or other terrorism coverage will not be covered for damage caused to their property by a terrorist attack. An individual who has homeowners or renters coverage may be covered, according to the individual terms of their policy.