

# 2014 TERRORISM RISK INSURANCE REPORT

APRIL 2014



# CONTENTS

- 2 EXECUTIVE SUMMARY
- 4 THE POTENTIAL EXPIRATION OF TRIPRA
- 6 INSURANCE IMPACT OF TRIPRA'S POTENTIAL EXPIRATION
- 11 BOSTON MARATHON ATTACK
- 13 CYBER TERRORISM RISKS
- 13 THE PROPERTY TERRORISM INSURANCE MARKET
- 17 THE COST OF PROPERTY TERRORISM INSURANCE
- 20 THE TERRORISM REINSURANCE MARKET
- 22 INTERNATIONAL SCHEMES — GOVERNMENT POOLS AND TRIPRA
- 23 IMPLICATIONS FOR MEETING LENDER REQUIREMENTS
- 23 MANAGING THE RISK — POTENTIAL APPROACHES TO TERRORISM INSURANCE PROGRAMS
- 25 CONCLUSION
- 26 APPENDIX

## ■ INTRODUCTION

The past year has been challenging for insurers that offer terrorism insurance and for organizations that purchase the coverage. The current uncertainty around the potential expiration of the Terrorism Risk Insurance Program Reauthorization Act (TRIPRA) — scheduled to expire on December 31, 2014 — has significantly affected the property/casualty insurance industry. In 2014, some employers with large concentrations of workers and companies with property exposures in major US cities have experienced limited terrorism insurance capacity and increased pricing, while others have not been able to purchase it at all. If Congress does not extend or renew TRIPRA, the market dynamics for terrorism insurance will be further disrupted and may result in increased pricing as capacity shrinks.

Originally enacted as the Terrorism Risk Insurance Act (TRIA) in 2002, the law was created in response to a severe insurance market shortage after the September 11, 2001, terrorist attacks. TRIA provides reinsurance coverage to insurers in the event of a certified terrorist act. The law was reauthorized in 2005 and again in 2007 as TRIPRA. This year's decision to extend TRIPRA as is, extend with modifications, or allow it to expire has been debated in and out of Congress. Congressional activity in the late winter and early spring 2014 indicates that lawmakers likely will extend the federal terrorism insurance backstop with modifications before it expires.

This report summarizes the current outlook regarding TRIPRA's potential expiration, provides benchmarking related to terrorism insurance take-up rates and pricing, and offers insights on alternative insurance and risk management solutions for terrorism risks that will be useful for organizations even if TRIPRA is renewed or extended.

## I EXECUTIVE SUMMARY

The pending expiration of the Terrorism Risk Insurance Program Reauthorization Act — the federal insurance terrorism backstop that is set to expire December 31, 2014 — is a key issue facing the insurance industry and organizations that buy terrorism coverage. The resulting uncertainty around TRIPRA has affected the availability and price of terrorism insurance. While recent congressional activity suggests that the law likely will be extended — when and with what type of modifications remains in question. This report examines TRIPRA’s impact on property/casualty insurance, take-up rates, pricing, alternative insurance and risk management approaches for terrorism risks, and related issues.

Among the key findings:

- ▶ The US Senate Committee on Banking, Housing, and Urban Affairs recently introduced a bill to reauthorize TRIPRA – with reforms to the program – for an additional seven years. The chairman of the US House Financial Services Committee, and a bipartisan group of its members expressed a desire to quickly move legislation that extends the law. These, among other developments, have begun to shift the debate from whether Congress will reauthorize the program to what reforms will be made to TRIPRA as it is extended.
- ▶ The cost of terrorism insurance coverage is expected to become volatile if the federal terrorism insurance backstop is not extended. TRIPRA’s uncertainty already has affected organizations that purchase property/casualty insurance.
- ▶ Workers’ compensation insurers are evaluating what their business will look like absent TRIPRA, causing some to stop underwriting risks of employers in certain high-profile industries with large employee concentrations or in certain major cities.
- ▶ Many property insurance policies in 2014 were endorsed with sunset clauses that cancel terrorism coverage effective December 31, 2014, if TRIPRA expires. According to interviews conducted by Marsh in 2013 and 2014, approximately one-third of property insurers will include full-term terrorism coverage for policies extending into 2015. And almost half of the property insurers surveyed indicated that they will not offer standalone terrorism coverage after TRIPRA’s scheduled expiration.
- ▶ The Boston Marathon attacks in 2013 highlight the potential importance of including noncertified acts of terrorism on coverage forms and of corporate preparedness to maintain readiness in the event of a crisis.
- ▶ Larger companies are more likely to purchase property terrorism insurance, and also to see the lowest cost as a percentage of overall property premiums.
- ▶ Among industry sectors, education organizations had the highest take-up rate for terrorism insurance in 2013.
- ▶ Nearly all of the organizations that purchased terrorism insurance in 2013 did so as part of their property policies.
- ▶ Uncertainty around TRIPRA has caused some organizations to consider alternatives for their terrorism insurance programs. Many of these options can apply even if TRIPRA is extended, providing more options to better manage risks.

# I THE POTENTIAL EXPIRATION OF TRIPRA

The pending expiration of TRIPRA caused many insurance and risk management professionals throughout 2013 and into 2014 to question whether Congress — in an election year — could agree to extend the federal terrorism insurance backstop. The resulting uncertainty has affected the availability and price of terrorism insurance, particularly for workers’ compensation for organizations with large concentrations of employees. However, recent congressional action suggests that Congress will act to reform and reauthorize the program prior to its expiration.

## CURRENT STATUS OF TRIPRA LEGISLATION

Recent legislation introduced in the US Senate would reauthorize and reform TRIPRA for an additional seven years. The Senate bill increases the insurer co-participation requirement from 15% to 20% and the recoupment level from \$27.5 billion to \$37.5 billion. It is important to note that the increases to the insurer co-participation and recoupment levels would be phased in over five years.

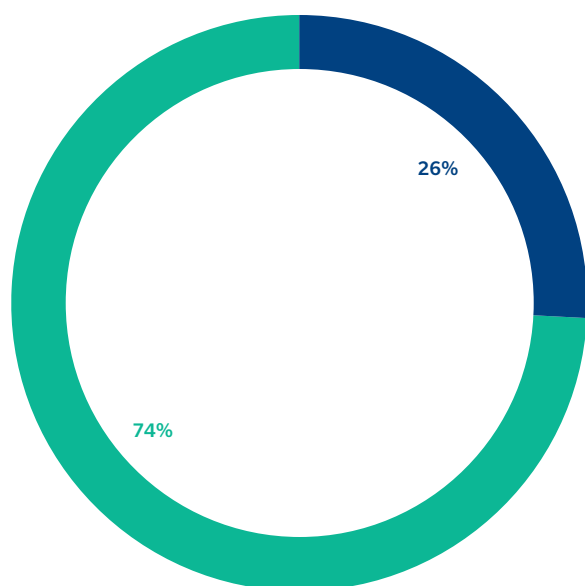
There are three TRIPRA reauthorization bills in the US House of Representatives that were introduced by Financial Services Committee and Homeland Security Committee members, with a collective 114 cosponsors at the time this report was published (see **FIGURE 1**).

**FIGURE 1** | SUMMARY OF PROPOSED TRIPRA REAUTHORIZATION LEGISLATION AS OF APRIL 10, 2014  
Source: Marsh

STIPULATIONS	US HOUSE OF REPRESENTATIVES			US SENATE
	TERRORISM RISK INSURANCE ACT OF 2002 REAUTHORIZATION ACT OF 2013 (HR 508)	TERRORISM RISK INSURANCE PROGRAM REAUTHORIZATION ACT OF 2013 (HR 2146)	FOSTERING RESILIENCE TO TERRORISM ACT OF 2013 (HR 1945)	TERRORISM RISK INSURANCE PROGRAM REAUTHORIZATION ACT OF 2014
Sponsorship	86 cosponsors: 47 Democrats and 39 Republicans	44 cosponsors: 43 Democrats and 1 Republican	7 cosponsors, all Democrats	9 cosponsors: 5 Democrats and 4 Republicans
Term (Expiration)	December 31, 2019	December 31, 2024	December 31, 2024	December 31, 2021
Recoupment Deadline	September 30, 2024	September 30, 2027	September 30, 2024	September 30, 2024
Reporting Requirements	None	2013, 2017, 2020, and 2023 on the findings of the President’s Working Group on Financial Markets to determine long-term affordability/availability of terrorism insurance.	2013, 2017, 2020, and 2023 on the findings of the President’s Working Group on Financial Markets to determine long-term affordability/availability of terrorism insurance.	None

**FIGURE 2** | US HOUSE OF REPRESENTATIVES COSPONSORS OF TRIPRA REAUTHORIZATION BILLS (HR 508, HR 2146, HR 1945)

Source: Marsh



**■ COSPONSORS**

Of the 114 members in the US House of Representatives that have cosponsored a TRIPRA bill, 32 are part of the House Financial Services Committee, consisting of 23 Democrats and 9 Republicans.

**■ HAVE NOT SPONSORED A BILL**

The number of cosponsors represents more than a quarter of the US House of Representatives and reflects in part the insurance industry’s success in demonstrating the importance of extending TRIPRA. While there are more Democratic than Republican members backing the law, support is sizeable for extending the legislation, with 32 of the 61 total members of the House Financial Services Committee among the bills’ cosponsors (see **FIGURE 2**).

But if the law’s reauthorization efforts in 2005 and 2007 shed light on this year’s potential TRIPRA extensions, reform will likely not take place immediately.

## DEBATED REFORMS

During the four pre-legislative hearings held by the House Financial Services and Senate Banking Committees since the fall of 2013, the insurance, broking, and policyholder communities were united in support of the current program and a long-term extension, with some organizations calling for a permanent extension. Conversely, some Democrats and Republicans were skeptical of the need for and the current level of the federal government’s role in TRIPRA.

Republican lawmakers and some of their Democratic counterparts also questioned whether it would be feasible to have greater private market participation, possibly by increasing TRIPRA’s federal backstop trigger and insurer retention levels. The program’s co-sharing arrangement and recoupment level are addressed in the Senate bill and it appears that the House Financial Services Committee may press for similar reforms. Other ideas from lawmakers that could amend legislation included requiring insurers to pay premiums to the federal government in exchange for the TRIPRA backstop.

Marsh & McLennan Companies provided testimony at several hearings and other venues regarding the purchase of coverage and offered suggestions for reform. These included the need to clarify the TRIPRA certification process, a point that was supported by many interest groups and lawmakers, and that TRIPRA should be more affirmative in stating that coverage for nuclear, biological, chemical, and radiological (NBCR) and cyber-related acts of terrorism are covered by TRIPRA.

Although the Senate recently has introduced a bill to extend TRIPRA, and members of the Financial Services Committee have advocated for quickly reauthorizing the program, Congress will likely pass TRIPRA legislation in the final weeks of this year. Despite likely committee action in the second quarter of 2014, due to the congressional calendar and the November congressional elections, lawmakers have a limited amount of days in session to consider and pass a reauthorization bill.

# INSURANCE IMPACT OF TRIPRA'S POTENTIAL EXPIRATION

The cost of terrorism insurance is expected to become extremely volatile if TRIPRA is not extended. For organizations that heavily rely on the federal terrorism insurance backstop, the current period of uncertainty has been challenging. At 2014 renewals, some organizations experienced increased pricing and limited available capacity — particularly for some workers' compensation insurance programs.

## WORKERS' COMPENSATION

Many organizations with large concentrations of insured employees are experiencing significant pressure on their workers' compensation insurance programs — from rate increases to the possibility that insurers will not renew coverage — due to uncertainty over TRIPRA's future.

### THE POTENTIAL ABSENCE OF TRIPRA

That uncertainty has a different effect on workers' compensation coverage than on other lines of insurance due to the nature of the coverage. Workers' compensation is regulated by state laws that preclude the ability to put a policy limit on the coverage, or exclude any perils — including terrorism-related perils — that could give rise to workplace injuries. Further, employers in nearly all US states are required to secure workers' compensation coverage, resulting in terrorism insurance take-up rates for workers' compensation to be effectively 100%.

Simply put, employers must purchase workers' compensation insurance, and insurers that provide it cannot limit or exclude any form of terrorism coverage on the policies they issue. Due to its compulsory nature, employers will always have the ability to secure workers' compensation coverage through some combination of private market solutions, state funds, assigned risk pools, or as a qualified self-insured. Without TRIPRA, the private market choices likely would be significantly

reduced for buyers with large concentrations of insured employees, and demand for coverage could outpace the supply of available capacity. This would cause challenges for some employers, and it is possible that the markets of last resort — those that cannot decline to write workers' compensation coverage — would experience an increase in applications for coverage.

### CATASTROPHE MODELS

After the September 11, 2001, terrorist attacks, workers' compensation insurers and reinsurers became more diligent in gaining an understanding of employee concentrations as a method of assessing their potential exposure to terrorist events.

Catastrophe (CAT) models used to estimate losses on certain terrorism event types now allow insurers to better gauge their potential exposures to loss in a selected geographic area, with a particular focus on employee concentrations in large cities that are deemed high-risk terrorism targets. With this information, insurers have generally adjusted their underwriting in an effort to limit potential exposures — they do this by declining to offer coverage for some accounts with exposures in certain geographies. Some examples of the type of terrorism loss scenarios that insurers are modeling include different sized truck bombs, aircraft attacks like the events on September 11, and NBCR attack scenarios.

In addition to individual risk characteristics, insurers also review their exposures to terrorism loss on a portfolio basis. Some insurers will decline a risk outright simply because they are "over-lined" or have deployed the maximum amount of capacity they are willing to provide in a particular ZIP code or city for workers' compensation and/or across multiple lines of business. The insurer might also impose a surcharge on the premium for the use of its limited available capacity.



Insurers purchase reinsurance as one way to reduce the possibility of incurring an outsized catastrophic loss, and also manage their modeled worst-case scenario within their financial risk tolerance. However, reinsurers similarly set a maximum amount of capacity they will offer in a particular geographic area and for catastrophic terrorism loss scenarios. The available reinsurance capacity for NBCR events is even more limited.

Workers' compensation insurers are evaluating what their business would look like absent the federal terrorism backstop, causing some to stop underwriting risks of employers in certain high-profile industries — such as financial institutions, hospitals, defense contractors, higher education, hotels, and professional services — with large employee concentrations or in certain major cities. Such organizations are faced with less insurance capacity and an acceleration of rate increases on 2014 renewals. Furthermore, some insurers are setting policy expiration dates to coincide with the anticipated expiration of TRIPRA, or attaching policy endorsements that will allow for a unilateral mid-term increase in premium if TRIPRA is allowed to sunset or is materially changed. These actions push the risk and challenges created by the uncertainty around the future of the federal terrorism backstop onto the original insurance buyers.

## PROPERTY

If TRIPRA is not renewed by Congress, the property insurance industry will be left with no federal backstop for losses from certified acts of terrorism. As policies with effective dates after December 31, 2013, may extend beyond the expiration date of the legislation, insurers must determine in advance how to deal with their terrorism exposures as of that date. Insurers may either accept the terrorism liability on all in-force policies on a fully net basis or place sunset clauses on policies written after December 31, 2013. Such a clause would cancel the terrorism coverage effective December 31, 2014, if legislation extending TRIPRA is not passed by Congress and signed by the president.

So far in 2014, many policies have been endorsed with sunset clauses. However, this is not a universal approach. Depending on the risk and insurer, coverage has been placed with full-term terrorism included.

## IMPACT OF TRIPRA'S POTENTIAL EXPIRATION

If Congress does not renew or extend the federal backstop, the market dynamics for terrorism insurance will be disrupted and will likely result in increased pricing and limited capacity, especially for risks in the central business districts of major cities. Commercial property lines are especially sensitive. Property insurers likely will exclude or dramatically reduce terrorism coverage from policies. The private insurance market is unlikely to be an adequate substitute to TRIPRA; what limited coverage is available will be met with increased pricing.

Since its enactment in 2002, terrorism insurance has been widely available for property and other qualifying lines of insurance as insurers are mandated to offer TRIPRA as part of their original quote and the coverage must substantially follow the terms and conditions of the policy to which the TRIPRA cover attaches. The federal backstop does not charge insurers for the protection offered by TRIPRA. Therefore, the terrorism premium charged by insurers without TRIPRA in place is likely to be considerably higher.

Additionally, in the absence of TRIPRA, companies with single-carrier property insurance programs and large limits (\$100 million or more) in high-risk areas or those in standard fire policy (SFP) jurisdictions may require insurance programs to be shared and layered in order to achieve desired limits. This will increase the number of carriers needed to provide the same level of insurance, and likely will increase the total cost to insureds.

Without a reauthorization of TRIPRA, shared and layered property insurance programs likely will be subject to substantial differences by layers of insurance on the extent and terms of terrorism coverage. The main implications of such potential differences are using higher cost standalone terrorism capacity to fill gaps in insurance programs, increased risk if self-insuring gaps, and non-concurrent coverage in the event of a loss.

### STANDARD FIRE POLICY (SFP) STATUTES

An SFP can cover direct losses from fire and lightning. It sets forth the conditions under which such a loss is deemed to have occurred. In some situations, where terrorism is excluded under a property policy covering the peril of fire, the issue is whether losses are covered if they arise from a fire caused by a terrorist attack.

It is also important to note that state insurance regulations in 15 of 29 states where SFPs are mandated do not permit property terrorism exclusions or sublimits for fire caused by a terrorism event (see **FIGURE 3**). The absence of substantial market reinsurance capacity to offer insurers an alternative reinsurance mechanism to TRIPRA would likely impact the level of fire or “all risk” property capacity these insurers could offer in areas or cities where they are concerned about the aggregation of terrorism risk. For companies with locations in those areas or cities, this will result in less available fire/“all risk” property insurance, as well as terrorism coverage if TRIPRA is materially changed or not reauthorized.

If TRIPRA is not reauthorized or is reauthorized without the make-available provision — a stipulation within the law whereby insurers must make terrorism coverage available at the same coverage terms they offer on other lines — the number of property insurers willing to continue offering terrorism insurance will likely decrease. In interviews conducted by Marsh’s property and terrorism experts in 2013 and 2014, approximately:

- ▶ 33% of property insurers indicated that they will include full-term terrorism coverage for policies extending into 2015.

- ▶ 57% of property insurers said they would include sunset clauses on policies extending into 2015.
- ▶ 48% of property insurers indicated that they will not offer standalone terrorism coverage should TRIPRA expire.

### STANDALONE PROPERTY TERRORISM AND POLITICAL VIOLENCE INSURANCE MARKET

Terrorism and political violence events remain a real and present threat worldwide. Only recently, political turmoil in Thailand, Venezuela, and Ukraine has disrupted commerce, destroyed infrastructure, and created difficult business environments. Unstable governing situations in Syria, Libya, and Egypt have created regional uncertainty and an opportunity for terrorist groups to strengthen and thrive. As a result, demand for terrorism and political violence insurance coverage has grown in the Middle East, Africa, Asia, and Latin and South America.

The absence of a major US terrorism event has reduced upward pricing pressure in the standalone property terrorism market for US-based companies, and capacity can vary considerably, primarily due to:

- ▶ The location of risk. The demand for coverage in major metropolitan areas has a substantial effect on the available capacity.
- ▶ An insurer’s accumulation of exposure. Insurers have aggregate limits on the risks they can take and capacity can be limited in certain locations, particularly in major metropolitan areas such as New York, Chicago, Washington, and San Francisco.
- ▶ The concentration of exposure. Terrorists typically attack targets of opportunity. Although it is possible that an attack could occur anywhere — including a remote town or small city — demand for coverage will likely be higher in major metropolitan areas simply because there is a greater concentration of exposures and a higher perception of risk.

FIGURE 3 SFP STATES

Source: Marsh

3

THE SFP IS MANDATED IN THE FOLLOWING STATES:	
ALASKA (PERSONAL LINES ONLY)	NEBRASKA*
ARIZONA*	NEW HAMPSHIRE*
CALIFORNIA	NEW JERSEY*
CONNECTICUT*	NEW YORK
GEORGIA	NORTH CAROLINA
HAWAII	NORTH DAKOTA*
IDAHO*	OKLAHOMA*
ILLINOIS	OREGON
IOWA	PENNSYLVANIA*
LOUISIANA*	RHODE ISLAND*
MAINE	VIRGINIA*
MASSACHUSETTS	WASHINGTON
MICHIGAN*	WEST VIRGINIA
MINNESOTA*	WISCONSIN
MISSOURI	

\*This state has passed legislation to exclude (or allow insurers to exclude) acts of terrorism from SFP policies.

FIGURE 4 STANDALONE PROPERTY TERRORISM INSURANCE MARKET CAPACITY (IN \$MILLIONS)

Source: Marsh

4

INSURER/REINSURER	CAPACITY
AIG	\$1,000
BERKSHIRE HATHAWAY	\$1,000
LLOYD'S	\$1,200
LANCASHIRE INSURANCE GROUP	\$200
AXIS SPECIALTY	\$200
HISCOX USA	\$125
TALBOT US	\$200
WESTERN RE	\$85
ACE GLOBAL MARKETS	\$50
MONTPELIER RE	\$50
TRANSATLANTIC RE	\$50
BEAZLEY US	\$75
TORUS	\$40
IRI/WESTPORT	\$40
ASPEN RE	\$30
INTER HANNOVER	\$50

Note: The theoretical marketwide capacity would be difficult to acquire at a reasonable cost for any individual client, and few clients seek coverage above \$1.5 billion. For a client with significant exposures in central business districts of Tier 1 cities or those with exposure schedules with properties perceived as targets for terrorism attacks or where there have been instances of foiled plots, the available capacity is lower. Insurer capacity (and pricing) is also affected by accumulation of aggregates within ZIP codes including Tier 1 cities such as New York, Chicago, Washington, and San Francisco.

## STANDALONE PROPERTY TERRORISM INSURANCE MARKET CAPACITY

Standalone capacity has remained stable for exposures outside central business districts. Approximately \$850 million to \$2.5 billion per risk in standalone capacity is available to companies that do not have sizeable exposures in locations where standalone insurers have aggregation problems (see **FIGURE 4**). Capacity excess of \$2.5 billion is available but can be more expensive.

For locations where standalone insurers have aggregation issues, the estimated market capacity is approximately \$850 million, or lower in some instances. Additional capacity can be accessed at significantly higher rates.

Standalone terrorism rates are competitive and markets aggressively compete with the embedded terrorism in property programs. Clients with significant catastrophe exposure or locations in central business districts can find the standalone markets to be an alternative and stable source of terrorism capacity. Standalone terrorism contracts are not susceptible to sunset clauses and offer clients a level of certainty and continuity. Insurers actively manage their available aggregates and pricing is heavily dependent on this variable.

## CAPTIVES

Organizations with captive insurance companies are likely to be affected in the event that TRIPRA is allowed to expire or is significantly changed. Currently, captives are widely used to supplement what is available in the commercial market. Captive insurers are typically the only available option for certain high excess coverage layers and/or certain perils. This is most common in areas of higher perceived risk such as for property or employee-related coverages in major cities and for nonconventional acts of terrorism such as NBCR.

Generally, captives are capitalized at levels best suited to underwriting primary operating layers, or used as a mechanism for accessing risk transfer solutions; it is very likely that, absent TRIPRA, captive utilization for terrorism coverage would decrease significantly. Without TRIPRA, captives will likely revert to their traditional role of providing commercial reinsurance access to the captive sponsor (where such reinsurance exists) or simply as a mechanism for funding lower level losses or for retaining only a share of the risk more consistent with the net retentions that are currently in effect under TRIPRA.

# I BOSTON MARATHON ATTACK

On April 15, 2013, two bombs exploded at the finish line of the Boston Marathon, killing three people and injuring approximately 260 others. The bombings are a sensitive reminder of the ever-present threat of mass violence in the US. The event also sheds light on how and when TRIPRA is triggered. While the attack has not been classified as an act of terrorism under TRIPRA's requirements — that the event is certified by the Secretary of the Treasury, the Secretary of State, and the Attorney General, and that losses exceed \$5 million — the event was described to reporters as an “act of terrorism” by President Barack Obama and law enforcement officials. This highlights the need for a reauthorization bill to include a streamlined TRIPRA certification process that can clarify what type of event may or may not be certified and the time frame for certification after an event occurs.

As TRIPRA covers certified acts of terrorism, this event highlights the potential importance of including noncertified acts of terrorism on coverage forms. Noncertified terrorism coverage can provide protection for:

- ▶ Events that are not intended to coerce the civilian population, to influence US government policy, or affect the conduct of the US government by coercion. Such events can include attacks from animal rights groups and/or where an individual or corporation is the target and not the public.
- ▶ Events that take place outside of large civilian centers where a very limited section of the public may be the target — such as a group of employees — and not the civilian population in general.
- ▶ Acts of terrorism that resulted in less than \$5 million in insured losses across all lines of insurance and from all insurers.

Regardless of whether an event is certified as an act of terrorism, organizations should be prepared to respond.

## THE BOSTON ATTACKS AND CORPORATE PREPAREDNESS

Corporate preparedness refers to an organization's overall program to maintain readiness through aligned and integrated plans, teams, and capabilities. An organization should be prepared to respond proactively and effectively to any potential crisis whether a physical event or emerging issue.

The Boston Marathon bombings illustrated how an unexpected external event could potentially impact a company's people, infrastructure, systems, property, operations, and reputation. To effectively manage and recover from both actual and potential crises, companies should take a holistic view of their risks and develop plans and procedures that can respond to and manage a full range of risks, including terrorism. Using the Boston Marathon bombing as a backdrop to examine risk management response plans, such an approach should include:

- ▶ **Crisis management:** Provides an overall framework for management, response, and recovery from a crisis or potential crisis. After the Boston Marathon bombing and city-wide lockdown, organizations needed to understand potential impacts to people, property, operations, and reputation, and make policy/strategy decisions to address and manage those impacts.
- ▶ **Crisis communications:** Defines the process and guidelines for how an organization will communicate proactively with all internal and external audiences. In Boston, organizations potentially had to reach out to employees, customers, investors, and others. During a crisis, it is critical that a company's messages and communications are linked to reinforce the overall strategies and decisions made by the company's crisis management team.

- ▶ **Emergency response:** Outlines the tactical process designed to respond to physical incidents, focusing on life safety, mitigation of the event, and the protection of physical assets. In Boston, organizations near the bombing needed to evacuate and fully account for all employees during the event.
- ▶ **Humanitarian assistance:** Defines the provision of support during and after an incident to address and meet all human impacts and needs — physical, social, emotional, and financial. In Boston, some organizations had staff that was directly or indirectly impacted by the bombing. Making professional counseling and support services available is just one example of how organizations can support their employees.
- ▶ **Business continuity:** Defines the management and logistical process and plan for how an organization will continue or resume, restore, and recover partially or completely interrupted critical business functions. In Boston, some organizations implemented business continuity plans in response to the initial attack and many more implemented procedures during the city-wide lockdown.
- ▶ **Information technology (IT)/disaster recovery (DR):** Provides a detailed technical plan and process focused on ensuring the availability of networks, applications, and data. In Boston, ensuring that technology networks were up and running efficiently may have helped support business continuity or work from home strategies.

All of the above efforts should be integrated and linked to provide organizations with a strong corporate preparedness program that aims to:

- ▶ Safeguard and protect people.
- ▶ Avoid environmental, community, customer, or other stakeholder impacts.
- ▶ Minimize business impacts.
- ▶ Protect operations, finances, business strategy, and objectives.
- ▶ Protect brand and reputation and maintain good corporate governance.

Once established, a corporate preparedness program can help ensure an organization is ready to meet and effectively manage whatever challenge or incident may occur.

## I CYBER TERRORISM RISKS

A cyber weapon used in a terrorist attack could arguably trigger TRIPRA as any other form of terrorist attack would so long as TRIPRA's statutory requirements were met. However, there has been no precedent where TRIPRA responded to a cyber-terrorist attack, leaving room for debate as to whether the federal terrorism insurance backstop would or could apply.

Yet the risks of such an attack have never been so real. With little financing, adversaries develop and persistently attempt cyber-attacks against the US, often from the safe harbor of a foreign nation. Such threats can grow more dangerous with a greater ability to inflict physical destruction, as was demonstrated with the Stuxnet computer virus attack on the Iranian Natanz nuclear facility in 2010. Such an attack seems less remote in light of publicly available retorts made by foreign entities to

continue to probe the networks of critical infrastructure sectors like chemical producers, electricity, water plants, and transportation systems.

The reauthorization of TRIPRA presents an opportunity for Congress to clarify that TRIPRA will respond and apply to acts of cyber terrorism falling under the TRIPRA-covered lines, provided that statutory prerequisites are met. Such clarification could be instrumental in providing stability in the event of a cyber-terrorist attack that results in catastrophic damages. Clarification from Congress could also address the parameters under which the Secretary of Treasury, the Secretary of State, and the Attorney General could certify a cyber-attack as an "act of terrorism." The ability to use external networks as proxies can complicate the ability to determine attribution for an attack.

## I PROPERTY TERRORISM INSURANCE MARKET

Terrorism insurance market take-up rates in 2013 generally remained steady. Most companies that purchased terrorism insurance in the past still do so as insurers continue to underwrite the risk with the support of TRIPRA. However, if TRIPRA is not extended, and insurers do not have to make the coverage available, this trend could drastically change, with lower take-up rates resulting from fewer insurers that will provide terrorism insurance coverage, and increased pricing, particularly for locations in major metropolitan cities.

Property insurers in 2014 typically were able to include terrorism insurance in their risk portfolios at nominal rates to insureds. Clearly, the demand for terrorism risk insurance remains and the existence of TRIPRA plays a major role in the availability and affordability of the coverage.

### TERRORISM INSURANCE TAKE-UP RATES BY YEAR

The terrorism insurance take-up rate – the percentage of companies buying property terrorism insurance – has remained constant in the low-60% range since 2009 (see **FIGURE 5**). In 2003, the first full year TRIA was in effect, the take-up rate was 27% but increased thereafter and has since remained steady.

**FIGURE 5** | TERRORISM INSURANCE  
TAKE-UP RATES BY YEAR  
Source: Marsh

	2013	2012	2011
TAKE-UP RATE	62%	62%	64%

## TAKE-UP RATES BY COMPANY SIZE

When looking at take-up rates by company size (see **FIGURE 6**), it is useful to consider four categories of total insured value (TIV):

- ▶ Companies with TIV in excess of \$1 billion typically work with several insurers and likely pay large premiums. The majority of this group consists of companies that use their existing captives or establish new ones to access TRIPRA.
- ▶ Companies with TIV between \$500 million and \$1 billion are large organizations that also typically work with multiple insurers and have layered programs.
- ▶ Companies with TIV between \$100 million and \$500 million tend to have no more than three insurers involved in their insurance programs.
- ▶ Companies with TIV less than \$100 million generally have a smaller spread of risks, lower overall premiums, and often work with a single insurer.

Changes in take-up rates by company size have been marginal since 2011. Companies with TIV less than \$100 million had the lowest take-up rates among those

analyzed, with 60% purchasing property terrorism insurance in 2013. The take-up rates for companies with TIV between \$100 million and \$500 million slipped from 64% in 2012 to 61% in 2013.

As was the case in previous years, the take-up rates for companies with TIV higher than \$500 million was approximately 68% in 2013. This may be due to a perception that larger organizations are more susceptible to an attack or because smaller companies typically have lower budgets for purchasing insurance.

## TAKE-UP RATES BY INDUSTRY

Education organizations purchased property terrorism insurance at a higher rate — 81% — than did those in any other industry segment in 2013.

Health care organizations, financial institutions, and media companies had the next highest take-up rates among the 17 industry segments surveyed, all above 70%. This may be due in part to concentrations in those sectors of organizations in central business districts and in major metropolitan areas, which are likely perceived as being at higher risk for terrorism. The construction, manufacturing, and food and beverage sectors were among the industry segments with the lowest take-up rates, all in the mid-40% range (see **FIGURE 7**).

**FIGURE 6** | TERRORISM INSURANCE TAKE-UP RATES BY TOTAL INSURED VALUE (TIV)  
Source: Marsh

TIV RANGE	2013	2012	2011
<\$100M	60%	59%	60%
\$100M - \$500M	61%	64%	64%
\$500M - \$1B	68%	66%	70%
>\$1B	64%	64%	65%

## TAKE-UP RATES BY REGION

A higher percentage of companies in the Northeast — 77% — purchased property terrorism insurance than in any other region. This is likely attributed to the Northeast's concentration of large metropolitan areas, including Washington and New York City; the perception that major cities may be at higher risk of a terrorist attack; population density; and that the region was the site of the 2001 attacks. The West saw the lowest take-up rate in 2013, at 55% (see **FIGURE 8**).



**FIGURE 7** | **TERRORISM INSURANCE TAKE-UP RATES BY INDUSTRY**  
Source: Marsh

REPORT INDUSTRY	2013	2012	2011
EDUCATION	81%	75%	75%
HEALTH CARE	75%	72%	73%
FINANCIAL INSTITUTIONS	74%	75%	79%
MEDIA	70%	81%	74%
TECH/TELECOM	69%	69%	67%
POWER AND UTILITIES	68%	65%	68%
REAL ESTATE	68%	69%	75%
TRANSPORTATION	66%	66%	73%
PUBLIC ENTITY AND NON-PROFIT ORGANIZATIONS	66%	71%	68%
LIFE SCIENCES	64%	59%	63%
RETAIL/WHOLESALE	61%	55%	61%
HOSPITALITY AND GAMING	60%	60%	63%
ENERGY AND MINING	47%	43%	55%
CHEMICALS	47%	42%	43%
MANUFACTURING	45%	48%	49%
FOOD & BEVERAGE	45%	50%	49%
CONSTRUCTION	44%	56%	56%

**FIGURE 8** | **TERRORISM INSURANCE TAKE-UP RATES BY REGION**  
Source: Marsh

REGION	2013	2012	2011
MIDWEST	57%	58%	59%
NORTHEAST	77%	77%	78%
SOUTH	61%	63%	63%
WEST	55%	53%	56%

## TYPES OF TERRORISM COVERAGE PURCHASED

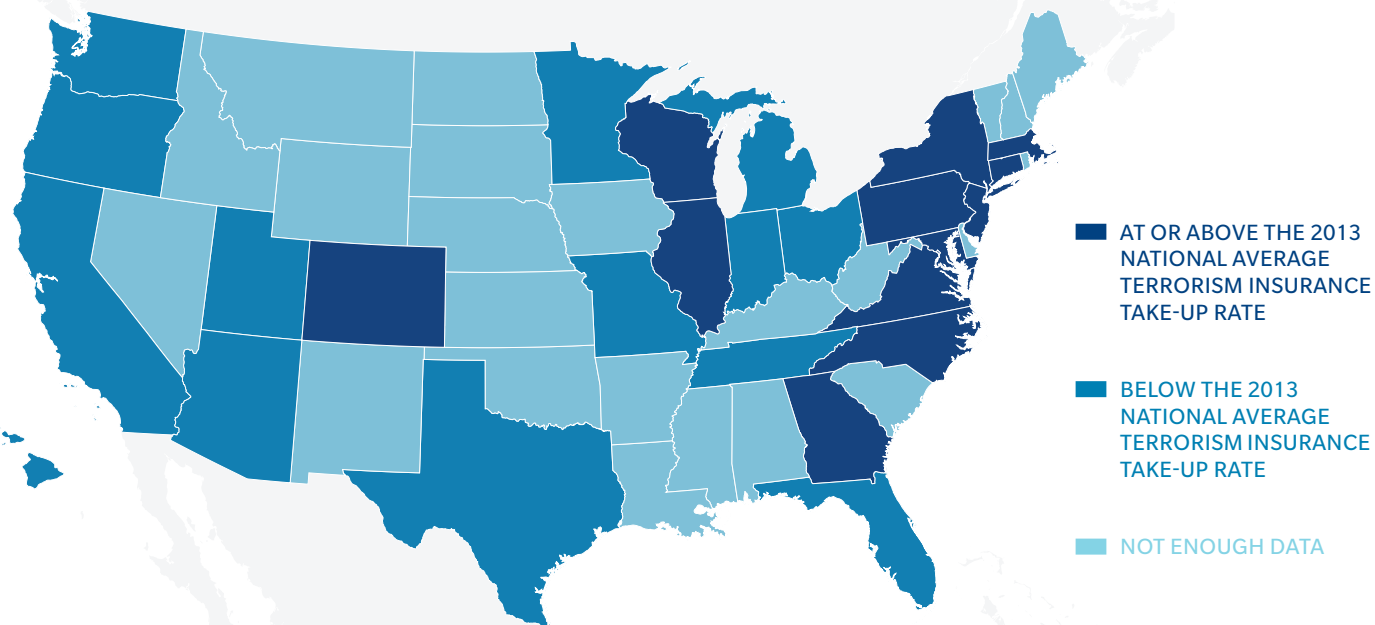
Approximately 95% of clients that purchased terrorism insurance in 2013 did so as part of their property policies rather than as standalone placements. Standalone terrorism policies can be an important alternative and/or supplement to TRIPRA coverage for some companies, especially with the uncertainty surrounding its expiration. The primary industry segments purchasing standalone policies have been hospitality, real estate, manufacturing, and financial institutions. Significant amounts also were purchased in the retail, media, transportation, public entity, and utility segments.

Before the 2007 extension, companies that purchased terrorism coverage as part of their property policies generally purchased both TRIPRA coverage and noncertified acts coverage. However, because TRIPRA expanded the definition of covered acts to include domestic terrorist events, many companies since have elected not to purchase noncertified terrorism insurance in addition to purchasing TRIPRA coverage as part of their property policies. Nevertheless, certain events may still be considered noncertified, although to a more limited extent than before TRIPRA, which removed the foreign terrorism requirement to trigger certification.

Companies securing terrorism insurance through their captives generally purchase reinsurance to cover their retention or liabilities under TRIPRA. Typically, those captives that purchase reinsurance often also secure coverage for noncertified terrorism exposures in addition to TRIPRA coverage. In 2014, some captives are building in a pre-agreed conversion premium and capacity to restructure capacity and obtain some certainty due to the potential expiration of TRIPRA. Additionally, organizations are increasingly using a reservation approach with standalone terrorism capacity to prepare for changes to TRIPRA or a non renewal of the law.

FIGURE 9 | TERRORISM INSURANCE STATE INDUSTRY TAKE-UP RATES

Source: Marsh



- AT OR ABOVE THE 2013 NATIONAL AVERAGE TERRORISM INSURANCE TAKE-UP RATE
- BELOW THE 2013 NATIONAL AVERAGE TERRORISM INSURANCE TAKE-UP RATE
- NOT ENOUGH DATA

ARIZONA	CALIFORNIA	COLORADO	CONNECTICUT	DISTRICT OF COLUMBIA	FLORIDA
53%	56%	62%	71%	79%	47%
GEORGIA	HAWAII	ILLINOIS	INDIANA	MARYLAND	MASSACHUSETTS
73%	36%	73%	42%	81%	84%
MICHIGAN	MINNESOTA	MISSOURI	NEW JERSEY	NEW YORK	NORTH CAROLINA
41%	57%	50%	79%	80%	62%
OHIO	OREGON	PENNSYLVANIA	TENNESSEE	TEXAS	UTAH
44%	45%	74%	61%	54%	47%
VIRGINIA	WASHINGTON	WISCONSIN			
77%	60%	80%			

The 27 states listed met the minimum threshold of available 2013 peer data.

## TERRORISM INSURANCE STATE INDUSTRY TAKE-UP RATES

In 2014, for the first time, Marsh's *Terrorism Risk Insurance Report* includes property terrorism insurance take-up rates by state. Among US states that purchased

property terrorism insurance, 13 were at or above the national average take-up rate of 62% (see **FIGURE 9**). Organizations headquartered in Massachusetts purchased property terrorism insurance at the highest rate — 84% in 2013. Maryland, New York, and Wisconsin followed with the next highest take-up rates, all in the low-80% range.

# THE COST OF PROPERTY TERRORISM INSURANCE

It is useful to measure the cost of terrorism insurance both as a premium rate — premium divided by TIV — and as a percentage of a company's overall property premium. Analyzing costs by premium rate allows companies to track what they paid in absolute terms; evaluating the cost as a percentage of their total premium shows how terrorism coverage affected their overall property insurance budgets.

## COST BY COMPANY SIZE

Property terrorism insurance rates typically decrease as the size of the company increases (see **FIGURE 10**). On an overall basis, companies with TIV less than \$100 million experienced slight rate increases from \$49 per million in 2011 to \$51 per million in 2013 and their terrorism premium rates remained significantly higher than those of

larger companies. Median rates for the largest companies stood at \$18 per million in 2013. This generally reflects overall insurance pricing patterns: Larger companies typically purchase more insurance, which leads to lower rates when compared with smaller companies.

The cost as a percentage of overall property premiums (see **FIGURE 11**) was similar for all companies, regardless of TIV. Modest changes — no more than 2 percentage points per year — were seen across the board, although companies with TIV between \$100 million and \$500 million and in excess of \$1 billion remained flat over the past three years at 4% and 5%, respectively. Only companies with TIV between \$500 million and \$1 billion experienced an increase from 2012 to 2013. No companies experienced a decrease in the cost of terrorism insurance as a percentage of property premiums.

**FIGURE 10** TERRORISM INSURANCE TAKE-UP — MEDIAN RATES BY TIV (RATE PER MILLION)  
Source: Marsh

TIV RANGE	2013	2012	2011
<\$100M	\$51	\$49	\$49
\$100M - \$500M	\$23	\$25	\$27
\$500M - \$1B	\$16	\$20	\$19
>\$1B	\$18	\$19	\$21

**FIGURE 11** TERRORISM INSURANCE PRICING AS A PERCENTAGE OF PROPERTY PREMIUM BY TIV  
Source: Marsh

TIV RANGE	2013	2012	2011
<\$100M	4%	4%	3%
\$100M - \$500M	4%	4%	4%
\$500M - \$1B	5%	3%	4%
>\$1B	5%	5%	5%

**FIGURE 12** | TERRORISM INSURANCE PRICING —  
MEDIAN RATES BY INDUSTRY (RATE PER MILLION)

Source: Marsh

REPORT INDUSTRY	2013	2012	2011
CONSTRUCTION	\$66	\$63	\$60
POWER AND UTILITIES	\$48	\$53	\$49
TRANSPORTATION	\$46	\$42	\$53
ENERGY AND MINING	\$45	\$38	\$30
FINANCIAL INSTITUTIONS	\$42	\$45	\$54
PUBLIC ENTITY AND NON PROFIT ORGANIZATIONS	\$39	\$29	\$31
CHEMICALS	\$37	\$49	\$38
MEDIA	\$36	\$50	\$33
REAL ESTATE	\$32	\$34	\$40
LIFE SCIENCES	\$28	\$30	\$26
TECH/TELECOM	\$24	\$24	\$26
HOSPITALITY AND GAMING	\$22	\$41	\$31
RETAIL/WHOLESALE	\$21	\$22	\$22
FOOD & BEVERAGE	\$18	\$14	\$25
MANUFACTURING	\$17	\$20	\$19
EDUCATION	\$17	\$16	\$16
HEALTH CARE	\$14	\$17	\$18

## COST BY INDUSTRY

Compared with rates in 2012, median property terrorism insurance premium rates decreased in 2013 for 10 of the 17 industry categories: financial institutions, real estate, retail/wholesale, media, manufacturing, health care, power and utilities, hospitality and gaming, chemicals, and life sciences. Organizations in the hospitality and gaming, media, and chemicals sectors experienced the most significant decreases.

Rates increased most significantly for public entity and nonprofit organizations, while transportation, technology/telecom, education, energy and mining, construction, and food and beverage companies also experienced increases

**FIGURE 13** | TERRORISM INSURANCE PRICING AS A PERCENTAGE  
OF PROPERTY PREMIUM BY INDUSTRY

Source: Marsh

REPORT INDUSTRY	2013	2012	2011
FINANCIAL INSTITUTIONS	7%	4%	6%
TRANSPORTATION	6%	7%	6%
REAL ESTATE	6%	5%	5%
RETAIL/WHOLESALE	5%	3%	3%
MEDIA	6%	4%	5%
PUBLIC ENTITY AND NONPROFIT ORGANIZATIONS	5%	5%	7%
MANUFACTURING	3%	2%	3%
TECH/TELECOM	2%	3%	4%
EDUCATION	4%	4%	5%
HEALTH CARE	5%	5%	5%
POWER AND UTILITIES	5%	4%	5%
HOSPITALITY AND GAMING	3%	7%	10%
ENERGY AND MINING	2%	1%	1%
CONSTRUCTION	2%	3%	2%
FOOD AND BEVERAGE	2%	4%	3%
CHEMICALS	3%	4%	4%
LIFE SCIENCES	4%	3%	4%

in their median rates (see **FIGURE 12**). Although each company's policy is priced based on its unique exposures, it is possible that a combination of prior CAT losses and location — namely business located in a central business district — may have contributed to any increases.

Overall, construction companies again paid the most for their terrorism insurance in 2013, at a median rate of \$66 per million, up from \$63 per million the previous year. Companies in the food and beverage, health care, education, and manufacturing sectors paid the least for coverage, with median rates less than \$20 per million.

When analyzing terrorism insurance pricing as a percentage of overall property premiums, financial institutions paid the largest share, allocating 7% of their total property programs (see **FIGURE 13**). Transportation, real estate, and media companies paid 6% of their total property programs. In 2013, seven industry groups saw an increase in their terrorism insurance pricing as percentage of overall property premiums. That compares with three industry groups in 2012 that experienced an increase in their terrorism insurance pricing as a percentage of overall property premiums. Over the last three years, energy companies paid the lowest, allocating only 2% of total property premium in 2013 to terrorism insurance.

## COST BY REGION

Companies in the Midwest paid the lowest rates for property terrorism insurance in 2013, followed by companies in the West (see **FIGURE 14**). Based on median premium rates, terrorism insurance was the most expensive in the Northeast at \$32 per million.

Terrorism insurance pricing as a percentage of property premium values varied slightly in the four US regions analyzed (see **FIGURE 15**), accounting for an average of 3% for companies in the South and West, and 5% and 6% for companies in the Midwest and Northeast, respectively. Much of this difference can be explained by variation in terrorism exposure. Companies in major metropolitan areas — for example, New York, Washington, and Boston — are likely to pay a higher premium for their terrorism coverage, which results in a larger percentage of their overall property insurance costs being dedicated to terrorism coverage.

**FIGURE 14** | TERRORISM INSURANCE PRICING —  
MEDIAN RATES BY REGION (RATE PER MILLION)

Source: Marsh

REGION	2013	2012	2011
MIDWEST	\$21	\$24	\$26
NORTHEAST	\$32	\$31	\$31
SOUTH	\$28	\$31	\$34
WEST	\$27	\$26	\$27

**FIGURE 15** | TERRORISM INSURANCE PRICING AS A PERCENTAGE  
OF PROPERTY PREMIUM BY REGION

Source: Marsh

REGION	2013	2012	2011
MIDWEST	5%	3%	4%
NORTHEAST	6%	6%	6%
SOUTH	3%	3%	4%
WEST	3%	6%	6%

Robust flows of capital in both the insurance and reinsurance segments and moderate CAT losses have combined to create pricing conditions favorable to most insureds. The 2013 hurricane season began with predictions for an active year that did not pan out. Floods in Germany, Colorado, and Alberta and typhoons in China and India did not result in losses that would impact the supply of capital dedicated to global property insurance. Most insureds are seeing rate decreases and program improvements driven by competition and the effects of an oversupply of capacity.

# THE TERRORISM REINSURANCE MARKET

Prior to the September 11, 2001, terrorist attacks, standard catastrophe reinsurance agreements did not exclude terrorism. Total reinsurance market losses from the attacks were approximately \$20 billion. The catastrophe reinsurance market capacity after September 11, 2001, incorporated terrorism exclusions and terrorism reinsurance capacity was minimal and only developed over time. Since its inception in 2002, the federal terrorism risk insurance program has helped increase private market involvement and private market terrorism reinsurance capacity has increased every year since.

Several factors in 2013 resulted in additional reinsurance capacity bound at January 1, 2014, for coverages that included terrorism. Some of these factors include:

- ▶ The incursion of alternative/nontraditional reinsurance capacity for natural hazard property CAT programs in 2013. This resulted in traditional reinsurers seeking additional opportunities and possibly being more supportive of terrorism reinsurance opportunities.
- ▶ The scheduled expiration of TRIPRA and lack of confidence of a successful replacement. This compelled a number of insurers to initiate or increase trading relationships with reinsurers that offer terrorism reinsurance solutions in efforts to be “in the market already” if TRIPRA is allowed to expire or drastically changed.
- ▶ Market pricing for CAT coverages remaining soft, with year-on-year pricing reductions for a majority of program renewals at January 1, 2014. For example, workers’ compensation CAT programs that included terrorism coverage were renewed on average with a 10% rate reduction.
- ▶ Warnings to insurers from rating agencies. In late 2012, rating agencies warned insurers that an overreliance on TRIPRA in their risk management strategy would cause additional rating agency scrutiny. For companies that took the warning seriously:
  - ▷ Risk management departments were motivated to improve data sets and refine aggregations, which in most cases reduced the projected losses from large individual locations.
  - ▷ The new aggregation profile resulted in a more efficient gauge for determining required reinsurance capacity.
  - ▷ The improved data sets resulted in improved pricing from reinsurers.

## INDUSTRY CAPACITY

Should TRIPRA be allowed to expire without a replacement, insurers that have the option may select where to deploy their terrorism capacity and can be expected to do so at preferred locations and pricing. The private reinsurance market may be pressed to provide additional capacity for insurers to find a balance between their chosen exposure and available capital, and bound reinsurance capacity.

According to a Guy Carpenter insurance/reinsurance capital study, global reinsurance dedicated capital is estimated to be approximately \$700 billion. Dedicated capital for North American reinsurance is estimated to be \$100 billion. To scale the estimated reinsurance capital, reinsurance losses from the September 11, 2001, terrorist attacks is estimated at \$25 billion (2014 dollars) or 25% of the total dedicated North American reinsurance capital.

The largest 10-ton truck bomb loss scenario is approximately \$39 billion — nearly 40% of the estimated reinsurance capital — and a nuclear detonation in a large urban central business district is more than \$900 billion (the projected losses are from a central business district in Manhattan, assuming a 100% take-up rate for conventional and NBCR coverage). There are large NBCR event scenarios that produce loss estimates that would potentially erode a significant share of the dedicated North American insurance/reinsurance capital, suggesting that the insurance/reinsurance industry does not have the capital necessary to withstand a large NBCR event.

FIGURE 16 | TRIPRA STATISTICS BY  
POLICYHOLDER SURPLUS

Source: Guy Carpenter

POLICYHOLDER SURPLUS	<\$50M	\$50M TO \$100M	\$100M TO \$300M	\$300M TO \$500M	\$500M TO \$1B	\$1B TO \$5B	>\$5B
APPLICABLE TRIPRA PREMIUM	\$7,993	\$40,872	\$88,920	\$191,811	\$354,906	\$847,944	\$3,913,612
AVG. TRIPRA DEDUCTIBLE	\$1,598	\$8,174	\$17,784	\$38,362	\$70,981	\$169,589	\$769,862
AVG. TRIPRA DEDUCTIBLE AS A PERCENTAGE OF SURPLUS	17.03%	11.65%	10.29%	9.63%	10.42%	7.90%	6.51%

## RELIANCE ON TRIPRA

In 2012, there were more than 850 insurers writing \$183 billion in premium for lines of business applicable to TRIPRA, with a combined policy holder surplus of \$589 billion. Using the current 20% deductible requirement of TRIPRA and policyholder surplus as a filter, Guy Carpenter found that small to midsize insurers will be the most affected by an increase in the deductible of any program that replaces TRIPRA (see **FIGURE 16**).

Insurers with less than \$300 million in surplus will likely need to incorporate additional private reinsurance market capacity to protect capital and satisfy rating agencies and regulators if TRIPRA is allowed to expire or is renewed with significant modifications.

Reinsurance capacity for terrorism can differ by reinsurers' preference, appetite, and expertise for the various applicable lines of business. For conventional

weapon loss scenarios, reinsurers can deploy multiple aggregates to individual geographical footprints. However, the loss footprints for NBCR events are much larger and "net" to reinsurers as typical retrocessional facilities do not typically cover NBCR losses.

It is important to note that the alternative/nontraditional reinsurance market that recently emerged for natural hazard property CAT risk has not yet widely deployed to the risk of terrorism. This appears to be because of less confidence in the probability component of terrorism models, the tail risk/payout patterns for workers' compensation, and the possible correlation of a downturn in the equity/investment market to a large-scale terrorism event.

It is expected that the alternative nontraditional reinsurance market will be addressing these challenges and will likely offer additional terrorism capacity in the future.

## INTERNATIONAL SCHEMES — GOVERNMENT POOLS AND TRIPRA

Terrorism pools have been created to help organizations manage the global threat of terrorism. The pools were established in response to specific terrorist threats within each country. Typically, each pool requires a declaration by the national government that a terrorist event has occurred to trigger coverage. In 2013, those terrorism pools that purchase reinsurance experienced broad price decreases due to increased capacity in the marketplace and the absence of a recent, major terrorism loss.

In the countries where compulsory or optional terrorism reinsurance pools exist, property insurance policies can be extended to include terrorism coverage in accordance with the local pool (see **FIGURE 17**). In such situations, the application of the standalone terrorism, sabotage, and/or political violence policy should be either difference in conditions (DIC), difference in conditions and limits (DIC/DIL), or primary of the locally issued property policy pool coverage depending on the pool being accessed.

**FIGURE 17** COUNTRIES OPERATING COMPULSORY OR OPTIONAL TERRORISM POOLS  
Source: Guy Carpenter

COUNTRY	COMPULSORY POOL (Y/N)	NAMES OF TERRORISM POOL OR REINSURANCE MECHANISM
AUSTRALIA	N	AUSTRALIAN REINSURANCE POOL CORPORATION (ARPC)
AUSTRIA	N	ÖSTERREICHISCHER VERSICHERUNGSPOL 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 COMPENSACIÓN 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 PROGRAM REAUTHORIZATION ACT OF 2007 (TRIPRA)



## IMPLICATIONS FOR MEETING LENDER REQUIREMENTS

Terrorism insurance for real estate companies and construction firms is often required as part of their mortgage agreements and a critical component for meeting lender requirements. The impact of not meeting the mortgage requirements varies from client to client and can include minimum premium spends, which are considered punitive.

The absence of a federal backstop for terrorism insurance would likely cause severe market disruption for property owners. It is estimated that over the next five years, commercial real estate loans valued at \$1.7 trillion are scheduled to mature. These loans are at risk of not being

eligible for refinancing and could possibly default without terrorism insurance.

Lenders often require proof of terrorism insurance in the loan covenant for commercial real estate borrowers, which underscores the importance of congressional action. If banks cease to provide loans, real estate owners, developers, construction companies, and business startups may be directly impaired. Furthermore, the difficulty for property owners to acquire and manage properties and to refinance loans would be exacerbated by the unaffordability of terrorism coverage if prices spike and available capacity is reduced.

## MANAGING THE RISK — POTENTIAL APPROACHES TO TERRORISM INSURANCE PROGRAMS

For some terrorism insurance buyers with large concentrations of insured employees, the pending expiration of TRIPRA has reduced the available private market options and rate increases on their programs have accelerated. Mounting uncertainty around TRIPRA's extension has caused some organizations to consider alternatives for their terrorism risk transfer programs. Many of these options apply even if TRIPRA is extended, providing risk professionals with more options to better manage terrorism risks.

### WORKERS' COMPENSATION SOLUTIONS

The importance of providing a differentiated view of an organization's terrorism risk profile to insurers is

crucial. Employers should work with their risk advisors to develop communication strategies and tactics around all key exposures, including modeling and risk analytics in support of their renewal objectives.

Employers also should be prepared to start their renewal process early — 120 days or more in advance of renewal — and offer underwriters more accurate and detailed information regarding their exposures and operations, including loss trends, safety programs, and risk management practices.

Insurers have significantly increased the number of questions focused on the risks associated with a potential terrorist event. Employers with large concentrations of employees — especially in major metropolitan areas — should be prepared to provide insurers with detailed information, including:

- ▶ Employee marital/dependency status.
- ▶ Employee telecommuting/hospitality practices and impact on concentration.
- ▶ Physical security of the building, including guards, surveillance cameras, parking areas, and HVAC protections.
- ▶ How access to the building is controlled.
- ▶ Construction of the building and location of the offices.
- ▶ Management policies around workplace violence, weapons, and employment screening.
- ▶ Employee security procedures.
- ▶ Emergency response/crisis management plan and procedures.
- ▶ Fire/life safety programs.
- ▶ Security staff.

As insurers and reinsurers focus on catastrophe models and their strategies around the possibility that they will need to adjust to a market without the protections of TRIPRA, it is important that employers provide the highest quality of employee-accumulation data to ensure their risk is differentiated by underwriters. High-quality data can more accurately demonstrate a company's risk profile for insurers. Such data includes:

- ▶ The total number of employees and the number of employees working during peak shifts.
- ▶ The actual buildings where the employees are located on campus settings.
- ▶ The percentage of the workforce in the field or telecommuting, rather than in the office where payroll is assigned.

Providing this type of information to insurers will help to more accurately reflect an employer's actual exposure to potential losses and could serve to reduce the magnitude of potential pricing increases, while also overcoming some of the pitfalls with CAT models.

As employers in the course of their business consider strategies such as the consolidation of employees from multiple locations in a city to a single location or the impact of closing or consolidating satellite locations and relocating employees in major metropolitan areas, it is important to review and consider the potential impact on workers' compensation insurance pricing and available capacity.

## PROPERTY SOLUTIONS

Organizations that may face canceled or limited terrorism insurance if TRIPRA is not renewed or extended can seek alternative ways of insuring their assets. Even with a federal terrorism insurance backstop in place, organizations may find these options worth exploring. Alternatives such as standalone terrorism placements can provide risk professionals more options to better manage terrorism risks.

### STANDALONE POLICIES

The main alternative for property terrorism risk transfer if TRIPRA is not reauthorized would be the standalone terrorism insurance market. Standalone terrorism contracts — either 100% or partial — may provide immediate coverage in the absence of a federal backstop program. Maximum achievable limits in the standalone market for terrorism risks were approximately \$2.5 billion in the third quarter of 2013; available capacity is typically lower for exposures in major cities.

## I CONCLUSION

### RESERVING CAPACITY POST-TRIPRA

Standalone capacity can be reserved for either a short-term period — designed to fill in the gaps in an existing property program if terrorism coverage is canceled — or for a full-term renewal. This option provides organizations with the ability to lock in capacity and pricing.

Risk professionals can also consider commitment contracts, which can provide organizations with terrorism insurance capacity at a future date — for example, January 1, 2015 — that can be accessed if TRIPRA expires. Another method to reserve capacity at a lower upfront cost compared to buying full terrorism coverage in the standalone market is through secured noncertified terrorism contracts, known as “flip/flop contracts.” Such contracts can convert, or “flip,” to full terrorism contracts if TRIPRA expires and can also drop or “flop” down to primary or excess coverages.

### CAPTIVES SOLUTIONS

Organizations with existing relationships with commercial terrorism insurers that are currently using a captive for terrorism coverage should consider working on options to cover any reduction in risk transfer that might result from TRIPRA’s sunset or extension with reduced benefits. Organizations without existing commercial terrorism insurer relationships should seek to establish such relationships. The most viable commercial risk transfer option involving a captive will generally take the form of reinsurance of some or all of the risk underwritten by the captive, especially if an extension occurs that still allows some risk transfer via the captive to the government program.

If TRIPRA is allowed to sunset, the best solutions will likely be to directly purchase commercial terrorism insurance for layers not involving the captive (and keeping a portion of the risk in the captive) or replacing the captive entirely with a commercial terrorism option.

The availability and affordability of terrorism insurance for organizations in the US that purchase the coverage has in large part been due to the implementation of TRIPRA. If the federal terrorism insurance backstop is allowed to expire on December 31, 2014, or is materially changed, insureds likely will experience a volatile market with increased pricing and limited availability.

Congressional activity in late 2013 and early 2014 indicates an increased likelihood that lawmakers will extend TRIPRA, with modifications. While private market capacity for terrorism insurance is available, it may not be enough to meet the demand of the marketplace should TRIPRA not be reauthorized or is extended without the make-available provision. Insureds should prepare for any modifications to TRIPRA and consider exploring alternative solutions for terrorism insurance.

The potential for adverse economic consequences due to limited or unavailable terrorism insurance should be an impetus for quick congressional action to reauthorize TRIPRA. Globally, long-term solutions to terrorism insurance depend on risk transfer options that are supported by governments. This should be reiterated by all constituents that would be impacted by TRIPRA’s expiration.

# I APPENDIX

## INDUSTRY CATEGORIES

This report examined property terrorism insurance purchasing patterns for 17 industry sectors, selected based on such criteria as sample population size, perceived exposures, take-up rates, and premium rates. Other industry groups were part of the overall analysis but not reported on individually. The industry groupings included, but were not limited to, the following lines of business:

- ▶ Chemicals: specialty chemicals, agrochemicals, distributors, industrial gases, and personal care and household companies.
- ▶ Construction: contractors, homebuilders, and general contractors.
- ▶ Education: colleges, universities, and school districts.
- ▶ Energy: oil, gas, and pipelines.
- ▶ Financial institutions: banks, insurers, and securities firms.
- ▶ Food and beverage: manufacturers and distributors.
- ▶ Hospitality: hotels, casinos, sporting arenas, performing arts centers, and restaurants.
- ▶ Health care: hospitals and managed-care facilities.
- ▶ Life sciences: research, manufacturers, biotechnology, and pharmaceuticals.
- ▶ Manufacturing: all manufacturers, excluding aviation.
- ▶ Media: print and electronic media.
- ▶ Public entity and nonprofit: city, county, and state entities and nonprofit organizations.
- ▶ Real estate: real estate and property management companies.
- ▶ Retail and wholesale: retail entities of all kinds.
- ▶ Technology/telecom: hardware and software manufacturers and distributors, telephone companies, and internet service providers.
- ▶ Transportation: trucking and bus companies.
- ▶ Power and utility: public and private gas, electric, and water utilities.

## METHODOLOGY

The report analyses relied on data from Marsh clients that purchased property terrorism insurance across the United States. Purchasing patterns were examined in the aggregate and were also based on client characteristics such as size, industry, and region.

The 2013 data came from property insurance placements incepting during calendar year 2013. The study population does not include placements in the US for foreign-based multinationals or for small-firm placements made through package policies.

The 2013 study was based on a sample of 2,538 firms with the following characteristics:

	1ST QUANTILE	MEDIAN	3RD QUANTILE
TIV	\$41 M	\$182 M	\$785 M
PROPERTY PREMIUM	\$56,984	\$201,864	\$636,082
TERRORISM PREMIUM	\$1,071	\$5,000	\$17,088

It is important to note:

- ▶ The sample size for the energy industry sector was relatively small and therefore may not be statistically significant. There may be a larger margin of error in the data analyzed, which may result in property terrorism take-up rates and pricing for energy companies varying more widely than the data indicates.
- ▶ For some companies, insurers quoted only a nominal terrorism premium of \$1. These \$1 premiums were omitted from the calculations of the median terrorism premium rates.
- ▶ Companies were assigned to regions based on the locations of the Marsh offices that served them. Generally, this was the Marsh office most closely located to a company's headquarters. Many clients have multiple facilities across the US and the world, meaning the potential risk for a terrorist attack may not be fully represented by where a company is headquartered. That said, the decision as to whether to purchase terrorism insurance is typically made at headquarters.





## ■ ABOUT THIS REPORT

This report is a coordinated effort among Marsh's Property Practice, Marsh's Casualty Practice, Marsh Captive Solutions, Marsh Global Analytics, Guy Carpenter, and Marsh & McLennan Companies Government Relations.

For more information, please contact your Marsh or Guy Carpenter or other Marsh & McLennan Companies representative, send an email to [questions@marsh.com](mailto:questions@marsh.com), or visit [marsh.com](http://marsh.com) and [guycarp.com](http://guycarp.com).

---

## ■ ABOUT MARSH

Marsh is a global leader in insurance broking and risk management. We help clients succeed by defining, designing, and delivering innovative industry-specific solutions that help them effectively manage risk. We have approximately 27,000 colleagues working together to serve clients in more than 100 countries. Marsh is a wholly owned subsidiary of Marsh & McLennan Companies (NYSE: MMC), a global professional services firm offering clients advice and solutions in the areas of risk, strategy, and human capital. With more than 54,000 employees worldwide and approximately \$12 billion in annual revenue, Marsh & McLennan Companies is also the parent company of Guy Carpenter, a global leader in providing risk and reinsurance intermediary services; Mercer, a global leader in talent, health, retirement, and investment consulting; and Oliver Wyman, a global leader in management consulting. Follow Marsh on Twitter [@Marsh\\_Inc](https://twitter.com/Marsh_Inc).



MARSH IS ONE OF THE MARSH & McLENNAN COMPANIES, TOGETHER WITH GUY CARPENTER, MERCER, AND OLIVER WYMAN.

This document and any recommendations, analysis, or advice provided by Marsh (collectively, the "Marsh Analysis") are not intended to be taken as advice regarding any individual situation and should not be relied upon as such. This document contains proprietary, confidential information of Marsh and may not be shared with any third party, including other insurance producers, without Marsh's prior written consent. Any statements concerning actuarial, tax, accounting, or legal matters are based solely on our experience as insurance brokers and risk consultants and are not to be relied upon as actuarial, accounting, tax, or legal advice, for which you should consult your own professional advisors. Any modeling, analytics, or projections are subject to inherent uncertainty, and the Marsh Analysis could be materially affected if any underlying assumptions, conditions, information, or factors are inaccurate or incomplete or should change. The information contained herein is based on sources we believe reliable, but we make no representation or warranty as to its accuracy. Except as may be set forth in an agreement between you and Marsh, Marsh shall have no obligation to update the Marsh Analysis and shall have no liability to you or any other party with regard to the Marsh Analysis or to any services provided by a third party to you or Marsh. Marsh makes no representation or warranty concerning the application of policy wordings or the financial condition or solvency of insurers or re-insurers. Marsh makes no assurances regarding the availability, cost, or terms of insurance coverage.

In the United Kingdom, Marsh Ltd is authorised and regulated by the Financial Conduct Authority.

Copyright © 2014 Marsh LLC. All rights reserved. Compliance MA14-12812 6307