TERRORISM THREATS AND THE INSURANCE MARKET

JOINT HEARING

BEFORE THE

SUBCOMMITTEE ON
OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON FINANCIAL SERVICES

AND THE

SUBCOMMITTEE ON
INTELLIGENCE, INFORMATION SHARING,
AND TERRORISM RISK ASSESSMENT

OF THE

COMMITTEE ON HOMELAND SECURITY

U.S. HOUSE OF REPRESENTATIVES

ONE HUNDRED NINTH CONGRESS

SECOND SESSION

JULY 25, 2006

Printed for the use of the Committee on Financial Services and the Committee on Homeland Security

Committee on Financial Services
Serial No. 109–111

Committee on Homeland Security
Serial No. 109–93

U.S. GOVERNMENT PRINTING OFFICE

31–540 PDF WASHINGTON : 2007

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2250 Mail: Stop SSOP, Washington, DC 20402–0001

HOUSE COMMITTEE ON FINANCIAL SERVICES

MICHAEL G. OXLEY, Ohio, *Chairman*

JAMES A. LEACH, Iowa
RICHARD H. BAKER, Louisiana
DEBORAH PRYCE, Ohio
SPENCER BACHUS, Alabama
MICHAEL N. CASTLE, Delaware
EDWARD R. ROYCE, California
FRANK D. LUCAS, Oklahoma
ROBERT W. NEY, Ohio
SUE W. KELLY, New York, *Vice Chair*
RON PAUL, Texas
PAUL E. GILLMOR, Ohio
JIM RYUN, Kansas
STEVEN C. LATOURETTE, Ohio
DONALD A. MANZULLO, Illinois
WALTER B. JONES, JR., North Carolina
JUDY BIGGERT, Illinois
CHRISTOPHER SHAYS, Connecticut
VITO FOSSELLA, New York
GARY G. MILLER, California
PATRICK J. TIBERI, Ohio
MARK R. KENNEDY, Minnesota
TOM FEENEY, Florida
JEB HENSARLING, Texas
SCOTT GARRETT, New Jersey
GINNY BROWN-WAITE, Florida
J. GRESHAM BARRETT, South Carolina
KATHERINE HARRIS, Florida
RICK RENZI, Arizona
JIM GERLACH, Pennsylvania
STEVAN PEARCE, New Mexico
RANDY NEUGEBAUER, Texas
TOM PRICE, Georgia
MICHAEL G. FITZPATRICK, Pennsylvania
GEOFF DAVIS, Kentucky
PATRICK T. MCHENRY, North Carolina
CAMPBELL, JOHN, California

BARNEY FRANK, Massachusetts
PAUL E. KANJORSKI, Pennsylvania
MAXINE WATERS, California
CAROLYN B. MALONEY, New York
LUIS V. GUTIERREZ, Illinois
NYDIA M. VELÁZQUEZ, New York
MELVIN L. WATT, North Carolina
GARY L. ACKERMAN, New York
DARLENE HOOLEY, Oregon
JULIA CARSON, Indiana
BRAD SHERMAN, California
GREGORY W. MEEKS, New York
BARBARA LEE, California
DENNIS MOORE, Kansas
MICHAEL E. CAPUANO, Massachusetts
HAROLD E. FORD, JR., Tennessee
RUBÉN HINOJOSA, Texas
JOSEPH CROWLEY, New York
WM. LACY CLAY, Missouri
STEVE ISRAEL, New York
CAROLYN MCCARTHY, New York
JOE BACA, California
JIM MATHESON, Utah
STEPHEN F. LYNCH, Massachusetts
BRAD MILLER, North Carolina
DAVID SCOTT, Georgia
ARTUR DAVIS, Alabama
AL GREEN, Texas
EMANUEL CLEAVER, Missouri
MELISSA L. BEAN, Illinois
DEBBIE WASSERMAN SCHULTZ, Florida
GWEN MOORE, Wisconsin,

BERNARD SANDERS, Vermont

Robert U. Foster, III, *Staff Director*

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

SUE W. KELLY, New York, *Chair*

RON PAUL, Texas, *Vice Chairman*
EDWARD R. ROYCE, California
STEVEN C. LATOURETTE, Ohio
MARK R. KENNEDY, Minnesota
SCOTT GARRETT, New Jersey
J. GRESHAM BARRETT, South Carolina
TOM PRICE, Georgia
MICHAEL G. FITZPATRICK, Pennsylvania
GEOFF DAVIS, Kentucky
PATRICK T. MCHENRY, North Carolina
MICHAEL G. OXLEY, Ohio

LUIS V. GUTIERREZ, Illinois
DENNIS MOORE, Kansas
CAROLYN B. MALONEY, New York
STEPHEN F. LYNCH, Massachusetts
ARTUR DAVIS, Alabama
EMANUEL CLEAVER, Missouri
DAVID SCOTT, Georgia
DEBBIE WASSERMAN SCHULTZ, Florida
GWEN MOORE, Wisconsin
BARNEY FRANK, Massachusetts

COMMITTEE ON HOMELAND SECURITY

PETER T. KING, New York, *Chairman*

DON YOUNG, Alaska
LAMAR S. SMITH, Texas
CURT WELDON, Pennsylvania
CHRISTOPHER SHAYS, Connecticut
JOHN LINDER, Georgia
MARK E. SOUDER, Indiana
TOM DAVIS, Virginia
DANIEL E. LUNGREN, California
JIM GIBBONS, Nevada
ROB SIMMONS, Connecticut
MIKE ROGERS, Alabama
STEVAN PEARCE, New Mexico
KATHERINE HARRIS, Florida
BOBBY JINDAL, Louisiana
DAVE G. REICHERT, Washington
MICHAEL T. MCCAUL, Texas
CHARLIE DENT, Pennsylvania
GINNY BROWN-WAITE, Florida

BENNIE G. THOMPSON, Mississippi
LORETTA SANCHEZ, California
EDWARD J. MARKEY, Massachusetts
NORMAN D. DICKS, Washington
JANE HARMAN, California
PETER A. DEFAZIO, Oregon
NITA M. LOWEY, New York
ELEANOR HOLMES NORTON, District of Columbia
ZOE LOFGREN, California
SHEILA JACKSON-LEE, Texas
BILL PASCRELL, JR., New Jersey
DONNA M. CHRISTENSEN, U.S. Virgin Islands
BOB ETHERIDGE, North Carolina
JAMES R. LANGEVIN, Rhode Island
KENDRICK B. MEEK, Florida

SUBCOMMITTEE ON INTELLIGENCE, INFORMATION SHARING, AND TERRORISM RISK ASSESSMENT

ROB SIMMONS, Connecticut, *Chairman*

CURT WELDON, Pennsylvania
MARK E. SOUDER, Indiana
DANIEL E. LUNGREN, California
JIM GIBBONS, Nevada
STEVAN PEARCE, New Mexico
BOBBY JINDAL, Louisiana
CHARLIE DENT, Pennsylvania
GINNY BROWN-WAITE, Florida
PETER T. KING, NEW YORK *(Ex Officio)*

ZOE LOFGREN, California
LORETTA SANCHEZ, California
JANE HARMAN, California
NITA M. LOWEY, New York
SHEILA JACKSON-LEE, Texas
JAMES R. LANGEVIN, Rhode Island
KENDRICK B. MEEK, Florida
BENNIE G. THOMPSON, Mississippi *(Ex Officio)*

CONTENTS

	Page
Hearing held on:	
July 25, 2006	1
Appendix:	
July 25, 2006	29

WITNESSES

TUESDAY, JULY 25, 2006

DeBoer, Jeffrey D., President and CEO, The Real Estate Roundtable	13
Fleming, Terry, Director of External Affairs, Risk and Insurance Management Society	9
Lewis, Christopher M., Vice President, Alternative Market Solutions, P&C Capital Management, The Hartford Financial Services Group, Inc.	14
Ulrich, Peter, Senior Vice President, Model Management, Risk Management Solutions, Inc.	11

APPENDIX

Prepared statements:	
DeBoer, Jeffrey D.	30
Fleming, Terry	48
Lewis, Christopher M.	66
Ulrich, Peter	70

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Kelly, Hon. Sue W.:	
Statement of the American Insurance Association	80
Statement of the Independent Insurance Agents & Brokers of America	88
Statement of the RAND Corporation	97
Dent, Hon. Charlie:	
Responses to questions submitted to Peter Ulrich	104

TERRORISM THREATS AND THE INSURANCE MARKET

Tuesday, July 25, 2006

U.S. HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS,
COMMITTEE ON FINANCIAL SERVICES,
AND SUBCOMMITTEE ON INTELLIGENCE, INFORMATION SHARING, AND TERRORISM RISK ASSESSMENT,
COMMITTEE ON HOMELAND SECURITY,
Washington, D.C.

The subcommittees met, pursuant to notice, at 10:00 a.m., in room 2128, Rayburn House Office Building, Hon. Sue Kelly [chairwoman of the Subcommittee on Oversight and Investigations] presiding.

Present: Representatives Kelly, Royce, Kennedy, Garrett, Dent, Simmons, Gutierrez, Moore of Kansas, Maloney, Cleaver, Scott, Frank, Lofgren, Lowey, and Thompson.

Also present: Representatives Israel and Crowley.

Chairwoman KELLY. This hearing will come to order. Without objection, all members' opening statements will be made a part of the record.

Today, this joint hearing of the Subcommittee on Oversight and Investigations and the Subcommittee on Intelligence, Information Sharing, and Terrorism Risk Assessment is going to examine terrorism threats and the insurance market.

We are fast approaching the 5th anniversary of the September 11, 2001, attacks on our country. That series of attacks on New York and Washington, D.C., cost this country more than $60 billion in losses. Hundreds of billions more was lost in the economic activity from the fear and uncertainty unleashed by these acts of terror. In response to that attack, Congress passed the Terrorism Risk Insurance Act (TRIA) to ensure the supply of insurance against terrorism in areas where that supply had been destroyed by the attacks.

Last December, Congress authorized TRIA for 2 additional years while a permanent solution to the problem of terrorism insurance supply was developed by insurance providers, consumers, and government stakeholders. Insurance supply has been a focus of these efforts, but insurance demand created the need. Too often, the debate on terrorism insurance focuses on supply side questions and forgets the needs that drove us to this point.

In the 5 years since the September 11th attacks, efforts to perpetrate another large-scale terrorist activity within the United States have not succeeded, but the threat remains. The U.S. Government and the private sector must operate based on a certainty of a terrorist attack in the near to medium term. We do not know what form the next attack will take but we have every reason to believe our enemies are seeking to inflict mass casualties, mass economic attacks, and multiple targets to maximize damage and weaken the first response capacities.

The terrorist risk, while unknown, is not outside the scope of reason, though through threat assessment and correlation with previous attacks, the size and scope of future attacks can be imagined. Risk can also be measured both geographically and countrywide. Countries and companies both can measure risk.

Pre-attack mitigation can also reduce vulnerabilities; modeling an assessment of risk can create a situation that allows the demand for terrorism insurance to be quantified. Modeling of terrorism risk must be based on accurate data and the assessments must not be limited by a failure of imagination.

Two examples from my home State of New York are illustrative. The Department of Homeland Security used the National Asset Data Base to help assess risk and thus share funds with vulnerable communities. Unfortunately, this database was full of activities such as petting zoos, popcorn packers, pizza parlors, and, of course, the famous Mule Day in Tennessee. While the Homeland Security Department disputes the notion that this database is flawed, no one disagrees that local politics help create a list of negligible utility.

Failures of imagination are equally dangerous. Our enemies can think and they have constantly shown that they are willing to try new attack methods and target sets. Accepting the status quo for recognizing the threat is no longer good enough. For instance, in my district, the Indian Point Nuclear Power Plant sits on the Hudson River in the middle of the largest urban area in the country. No one at the Department of Homeland Security had ever questioned whether an attack by a high-speed boat was possible despite suggestions that Al Qaeda has shown an increasing interest in the sea as an attack vector. When I asked the Coast Guard admiral responsible for planning to meet the threat about this, he admitted that this was a threat that was not being assessed. What other threats are we not preparing for because we have not asked the proper questions? How do unaddressed threats change discussions of what needs to be insured and how much insurance we need?

I now yield to the ranking member from Illinois for his opening statement. We are raising questions here. We hope that this panel will help us find some answers.

Mr. Gutierrez?

Mr. GUTIERREZ. Good morning and thank you, Chairwoman Kelly, and Chairman Simmons, who will join us shortly. I am pleased to be here today along with our colleagues on the Homeland Security Committee to review and discuss the effects of terrorism on the insurance market. A strong, viable insurance market is vital to the overall health of our national economy. Nearly 5 years ago, the stability of the insurance industry was put in jeop-

ardy when insurers and re-insurers lost more than $30 billion as a result of the 9/11 attacks. Following the substantial losses, insurers were unable to make terrorism insurance available, which left many of our Nation's businesses vulnerable to unacceptable financial risk. In response, Congress enacted the Terrorism Risk Insurance Act or TRIA to provide a temporary, limited Federal backstop in the event of another terrorist attack in the United States. I am a strong supporter of TRIA and believe it is necessary to provide stability for our economy in the post-9/11 world.

I was pleased that we passed legislation late last year that extended TRIA until the end of 2007, but the 2007 deadline is only 17 months away. And at this point, the market is not yet stabilized, and the need for TRIA remains. I do not, however, believe that TRIA is perfect in its current form; some changes should be made to improve the legislation. We should be mindful that TRIA is not intended to be a permanent program and that eventually the private market must adjust. I do not want to see the Federal Government as a permanent re-insurer of last resort, at least not at the liability levels that exist under the current version of TRIA.

In order for this to happen, however, the industry needs to make substantial progress with its prediction models. I would like to hear from our industry witnesses what they believe are the specific weaknesses in the current prediction models, and any suggestions they may have to improve the ability to access and price terrorism risks. From our risk management experts, I am interested in hearing about the progress they have made in making models more accurate and what information they believe they need to further improve accuracy. For example, in written testimony, RMS proposes allowing the insurance industry or risk management experts access to classified information. I am curious about how this information can be kept secure while at the same time used to improve prediction models. Finally, I am interested in hearing our witnesses' opinions on improvements to TRIA if and when another extension is considered. The bottom line is terrorism insurance must continue to be available in a comprehensive and affordable manner. Whether that includes TRIA, another form of Federal backstop, or the private sector assuming full liability remains to be seen. What we do know is that strong markets require certainty and 17 months is a short time in the forward-looking insurance industry. Therefore, we must all act with deliberate speed in developing a more long-term solution.

I yield back the balance of my time.

Chairwoman KELLY. Thank you, Mr. Gutierrez. I yield to the gentleman from Connecticut.

Mr. SIMMONS. Thank you, Madam Chairwoman, and thank you everybody for being here today. As chairman of the Committee on Homeland Security's Subcommittee on Intelligence, Information Sharing, and Terrorism Risk Assessment, I understand how vital information sharing and risk assessment can be to understanding the nature of the terrorist threat. The insurance industry faces many challenges when attempting to model terrorism risks. As a private sector entity, one of the key challenges is getting information on the nature of the threat. In simplest terms, risk assessment is the result of weighing vulnerability, consequence, and the likeli-

hood that an event may occur. But without information on the nature of the threat, measuring risk becomes extremely difficult. Often information related to terrorism is sensitive, classified, and locked in a vault somewhere. And while this secrecy culture is slowly changing, some information on threats and vulnerabilities must remain secret.

Many in private industry, including the insurance industry, believe that they lack some of the very basic terrorist-related information that would help them evaluate the likelihood of future terrorist events. So one of the things that I would like to understand, and that I hope our witnesses can help us to understand here today, is where do you get your information? Do you rely on open sources of information, for example? And what kind of information could you use from the Federal Government that might enhance your capabilities of assessing risk?

In addition to the difficulties associated with access to information, measuring terrorism risk is, by its very nature, more difficult than measuring the risk of a natural disaster. I live in Connecticut and we have hurricanes. Hurricanes have no motives—they come, they damage, and they go. But terrorists are different. They rely on secrecy and unpredictability to accomplish their task and even a seasoned intelligence professional with access to our Nation's most compartmented secrets may or may not be successful in predicting where terrorists will strike.

In order to play their part in this country's counterterrorism mission, private industry must rely on risk assessment to determine what kinds of protective measures should be taken at their facilities and what kind of insurance should be purchased for their most important assets.

So we look forward today to hearing from our witnesses and hope that they can shed further light on how to address some of these concerns. I think you all for being here. I thank Chairwoman Kelly for calling this important hearing, and I yield back.

Chairwoman KELLY. Thank you. I yield now to the ranking member from California.

Ms. LOFGREN. Thank you, Madam Chairwoman, and Chairman Simmons. As we know, the Committee on Homeland Security has jurisdiction over issues relative to homeland security under the House rules and nowhere in the House rules is there an explicit or implicit mention of the Committee on Homeland Security's jurisdiction over insurance. I am raising this issue to point out striking inconsistencies in the interpretation of the Committee on Homeland Security's jurisdiction.

On April 6th of this year, I sent Mr. Simmons and Chairman King a letter explaining why I believe that the Committee on Homeland Security has jurisdiction over matters involving the National Security Agency, homeland security, and potentially illegal eavesdropping by the NSA. In an April 25th response to my letter, Mr. Simmons and Chairman King disagreed that the Committee on Homeland Security had jurisdiction over the potentially illegal eavesdropping by the NSA. As Chairman King stated in his letter, "The House rules empower the Committee on Homeland Security to review and study on a continuing basis all government activities relating to homeland security, including the interaction of all de-

partments and agencies with the Department of Homeland Security." Nevertheless, Chairman King seemed to have parsed words to conclude that the Committee on Homeland Security does not have jurisdiction over eavesdropping by the NSA. It seems to me that if the Subcommittee on Intelligence does not have jurisdiction to take a look at the NSA and the potential illegal activities that they are engaging in, it is quite a stretch to say that we have jurisdiction over insurance. So I am hoping, and formally will be asking with a later letter, that the issue of review of NSA and the Intelligence Subcommittee's jurisdiction be revisited by the chairman of the full committee as well as the chairman of the subcommittee. And I believe that while this insurance issue certainly is of interest to the committee of jurisdiction, certainly the committee of jurisdiction over intelligence should be taking up the NSA matter. And I yield back.

Chairwoman KELLY. Thank you. I will turn now to the ranking member of the full committee, Mr. Frank.

Mr. FRANK. I thank the gentlewoman. And let me say preliminarily that I am no longer on the Homeland Security Committee because when it became a standing committee in the House, by Democratic Caucus rules as the ranking member of this full committee, I wasn't eligible to serve, but I was interested, and I am supportive of the gentlewoman's concern. I would say I think probably the response you would get from some quarters is that the reason that the Committee on Homeland Security doesn't have any jurisdiction over the NSA wiretapping is that in the opinion of the Administration, Congress doesn't have any jurisdiction over this. So the lesser is shut out by the greater in this case. And if they don't think it is any of our business, then it is no committee's business.

I am pleased that the two committees are working together in this hearing. We have too much turf consciousness in this Congress and sometimes that gets in the way of substantive considerations. I think it is a good idea that we are having this joint hearing. And I want to talk particularly about the public policy rationale for terrorism risk insurance. I want to address some of my friends in the consumer movement, some of whom have been critical of this. I was struck, as I read through the testimony—because I am not going to be able to stay, as we have bills on the Floor from this committee today—by Mr. Lewis' remarks about the public policy implications here. I want to stress that in addition to the argument that after all, in many cases when you are the insured, we tell you that you have an obligation to reduce your risk. You have an obligation to reduce your risk of theft, of fire, and of vandalism. However, it is very hard to tell private sector people to reduce their risk from terrorism. Now I know they try. I wish sometimes they wouldn't. I think it has become a sign of ego that you make it hard to get into your building. It cannot be that every office building in Washington and New York is a target for terrorism, but I think if you don't have someone there to harass your visitors, then you feel like you are not important. And if no one wants to blow you up, then you must not be a big deal, and therefore you have somebody who is sitting there and looking at people's driver's licenses to no practical effect whatsoever if there was a serious problem.

But there is nothing you can do to protect yourself against being the victim of terrorism. You might be able to mitigate the effects somewhat, but that is the minor part of it. And that reduces the argument that the cost of this should be borne by the insured because you are asking people to bear a cost over which they have no control. But even more than that, as people have indicated, and the gentleman from Connecticut indicated, we are talking here about a situation where there are bad people and elements within the United States consciously seeking to inflict harm on the United States. To the extent that we allow the individual victims to bear the cost, we are implicitly cooperating with the terrorists. That is, the cost of terrorism ought to be borne by the whole country, and we should not allow terrorists to pick and choose which Americans are going to bear the cost. We should not allow them to say, well, the big cities will be more vulnerable. And, again, when you take into account the fact that we have a situation where the victims may not have a very good ability to stave off the damage and where it is a conscious decision by evil people to inflict harm on us, then we ought to all be willing to bear the cost. I don't want to have a situation where, if a terrorist attacks some place in America, the rest of us can say, "Boy, we sure are lucky that we weren't hit. That poor so-and-so has to bear the cost." No, let's say that America has been attacked and we will together bear the cost of that.

Now, obviously, there are some cases in which you can't do that; nobody can share the loss of life or other factors. But to the extent that we can make these costs go across the board, we ought to do that. Now there is also, of course, a particular economic effect, it is not just the whole economy as people mentioned, but when we were doing terrorism risk insurance and we were encountering, I think, a kind of free market fundamentalism, I don't think it is a violation of the principles set forward by Adam Smith to take into account a phenomenon, terrorist bombings, that he could not possibly have known. This is not something that the market was ever intended to deal with. But it does not fall equally on the whole country. It is obviously particularly a problem for people who would be doing large projects in big cities. And I do not think we ought to say that in addition to the other problems that some of our bigger cities have, that we ought to leave them entirely on their own for bearing the cost of terrorism risk insurance. And it is very much, as it has been presented to us, a big city issue. The Department of Homeland Security's lists of terrorist targets notwithstanding, there aren't going to be that many amusement parks outside that are going to be targeted.

So I think there was every public policy reason for us to go forward with this. It is a national obligation to help people respond to a threat that is against the whole Nation and against which they cannot be expected themselves to defend. I think we did the right thing in going forward with terrorism risk insurance. I hope we will put it on a permanent basis and those who inaccurately think that this is something that can be left to the market when no theory of the market I have ever read provides for this kind of phenomenon that we will reject their views.

Thank you, Madam Chairwoman.

Chairwoman KELLY. Thank you, Mr. Frank. Mr. Garrett.

Mr. GARRETT. Yes, thank you, Madam Chairwoman. I was going to do opening remarks but the ranking member raises an interesting analysis of how we should be spreading the risk or who should be actually bearing it, as to whether it is a risk that you can insure against or not. I will just throw out this one question because I have also looked through some of your testimony, Mr. Ulrich. Risk Management Solutions makes a statement, I don't want to preempt your statements here since it is a good statement, regarding the terrorist activity, "It isn't a matter of if but when with hurricanes. And it isn't a matter of when but how many." I think that is an interesting analysis to go along with this. But with the ranking member's comments, I agree with you as far as the minimalist effect that industry or individuals or insurers may do as far as putting that individual in front of the store or the business office, but on the other hand, there are certain cases where we know that elements are a higher risk. Just reading about today in New Jersey as to what we can do to protect tanker cars along the New Jersey Turnpike and whether the homeland security chief there says we should be building walls to protect them so you can't see those tanker cars all along the turnpike so you can't shoot them or whatever else and blow them up. In certain instances, you know that you are at a greater risk than somebody else. And from an insurance point of view, (A), should there be safety remediations and should risk factors come into play in that case; and (B), should we be looking to see whether risk premium rates should be higher for some individuals than others. Because I see—I will conclude on this—at the bottom line, looking at all your testimony, everyone agrees on the panel, I think, that some version of TRIA must be there as a backstop, but what obligation is there still on the insured in these cases, I guess, is my ultimate question?

Thank you. I yield back.

Chairwoman KELLY. Thank you, Mr. Garrett. Mr. Moore.

Mr. MOORE OF KANSAS. I want to thank you, Madam Chairwoman, for convening this hearing. I do not have an opening statement. I look forward to the testimony of the witnesses. Thank you.

Chairwoman KELLY. Thank you. Ms. Lowey.

Mrs. LOWEY. Thank you, Madam Chairwoman, and I look forward to the testimony of the witnesses, and I will hold my comments until that time. Thank you.

Mr. GUTIERREZ. Madam Chairwoman, I ask unanimous consent that Congressman Israel, who is not a member of the Oversight and Investigations Subcommittee, be allowed to participate in today's hearings.

Chairwoman KELLY. So ordered. Mr. Scott?

Mr. SCOTT. I think we should get right to the witnesses. I will not have an opening statement. Thank you.

Chairwoman KELLY. Thank you. Mr. Israel?

Mr. ISRAEL. Thank you, Madam Chairwoman. Let me thank you and the ranking member for allowing me to participate in this hearing. As was indicated by the ranking member, I am not a member of this subcommittee but I did work very closely with Chairwoman Kelly on the full Financial Services Committee on TRIA, and we were able to arrive at a bipartisan consensus that

has been helpful. Of course, the clock is ticking. We have 17 months left and although I very strongly and fully support TRIA, and it has been one of my priorities over the past 3 years, I do not believe that there is much of an appetite to give TRIA yet another extension under the terms that it currently includes. We need to begin developing consensus now because, as we all know, Congress is not known for moving at lightning speed. So it is critically important that we begin to develop this consensus, and that folks in industry begin to weigh in so that we can develop a sensible policy in this country.

The premise of TRIA is quite simple: An attack on this country is not an attack on a building. It is an attack on this country. It is not an attack on bricks and mortars and glass, it is an attack on the lives inside that building. It is not an attack on a bunch of companies. It is not an attack on the insurance industry. It is an attack on the United States of America and its citizens. And the Federal Government does have an obligation to help defend against the economic consequences of that attack. This is critically important. And I am very concerned that we not have deja vu all over again, in the immortal words of Yogi Berra, that as we begin to approach the deadline where TRIA will in fact expire, at the very last minute, suddenly people begin to scramble. That gets very messy when you are working against a ticking clock. It gets very messy in a climate of partisanship. And so I would strongly urge all concerned parties to begin working now, sooner rather than later, begin to weigh in with both sides of the aisle on the Financial Services Committee so that we can produce a product that keeps my constituents and all of my colleagues' constituents safe from another attack.

I want to again thank the chairwoman and the ranking member for their hospitality, and I yield back my time.

Mr. GUTIERREZ. Madam Chairwoman, I ask unanimous consent that Congressman Crowley be allowed to participate in the hearing.

Mr. CROWLEY. Thank you, Madam Chairwoman. I also want to thank you and the ranking member for holding this hearing. I think it is important that we get this right. It is too important for industry, not only in my city but throughout this country, that terrorism risk insurance and a way forward with a Federal backstop that is workable, that is something that encompasses the needs of industry as well as developers to do the work that they need to do to keep our economy viable. And I thank you for holding this hearing today and look forward to hearing the testimony this morning.

Chairwoman KELLY. Thank you very much. We turn now to our witnesses.

Terry Fleming is the director of Risk Management for Montgomery County, Maryland. The county's self-insurance program provides property and casualty coverage for 14 agencies covering more than 40,000 employees. Mr. Fleming and the county's self-insurance program have been recognized as reputational leaders by the American City and County Magazine. Mr. Fleming has over 35 years experience in insurance and risk management in the public and private sectors.

Peter Ulrich is the senior vice president of RMS' model management team. He has been with RMS since 1993. Prior to joining RMS, Peter spent 8 years with Peterson Consulting. Peter earned a B.S. in accounting and finance from the University of California at Berkeley and a MBA from the University of Southern California.

Jeff DeBoer is president and CEO of the Real Estate Roundtable, an organization that represents the leadership of the Nation's top 100 privately owned and publicly-held real estate ownership development, lending, and management firms, as well as the elected leaders of the 15 major national real estate industry trade associations. He also serves as co-chairman of the advisory board of the Rand Corporation's Center for Terrorism Risk Management Policy and is chairman of the National Real Estate Organizations, a coalition of real estate trade associations working together to enhance the coordination of the industry's overall Washington advocacy efforts. A native of Rapid City, South Dakota, Mr. DeBoer has earned a law degree from Washington and Lee University in Lexington, Virginia, and an undergraduate degree from Yankton College in Yankton, South Dakota.

And finally, Christopher M. Lewis. I am going to yield to the gentleman from Connecticut, for the purpose of introducing our final witness.

Mr. SIMMONS. I thank the Chair for that courtesy. And I am especially pleased today that Chris Lewis is with us to testify at this hearing. Mr. Lewis is the vice president of Alternative Market Solutions and Capital Management at the Hartford Financial Services Group and lives in the wonderful town of Tolland, Connecticut, which I am pleased to represent. He is also responsible for the Hartford's risk management initiatives and works with policymakers on issues related to the risk of manmade and natural disasters. Prior to joining The Hartford, Mr. Lewis was managing director and global head of Advisory Services for Fitch Risk Management, and he also spent 5 years as a senior economist at the Office of Management and Budget where he was a member of the White House Working Group on Natural Disasters. Welcome, Chris. We look forward to your testimony.

Chairwoman KELLY. Thank you. Now, without objection, the witnesses' written statements will be made a part of the record, and you are each going to be recognized for a 5-minute summary of your testimony. I believe all of you understand the function of the small black box with the lights on the table. Please note that the red light doesn't mean sum up, it means that it is time to finish your 5-minute statement. With that, we turn first to you, Mr. Fleming. And thank you all for being here.

STATEMENT OF TERRY FLEMING, DIRECTOR OF EXTERNAL AFFAIRS, RISK AND INSURANCE MANAGEMENT SOCIETY

Mr. FLEMING. Chairwoman Kelly, Chairman Simmons, and members of the subcommittees, good morning. My name is Terry Fleming. I am a director of External Affairs for the Risk and Insurance Management Society, RIMS, and I am also director of risk management for Montgomery County, Maryland. I am pleased to be here today to talk about terrorism concerns and the insurance market, particularly from a risk management perspective.

RIMS represents commercial consumers of insurance. As the country's largest professional risk management organization, RIMS represents nearly 4,000 industrial, service, non-profit, charitable, and governmental entities, including 83 percent of the Fortune 500 companies. As a risk manager, it is my responsibility to identify exposures to financial loss that my employer might suffer and to mitigate those exposures using a variety of techniques. The principal techniques used to manage the terrorism exposure on the part of an individual company or self-insured entity are control—taking steps internally to reduce the threat to employees and property; retention or self-funding a portion of any loss; and the purchase of commercial insurance.

Prior to September 11, 2001, terrorism was a mere blip on the radar screen for risk managers. We were certainly aware of the Oklahoma City bombing and previous attacks on the World Trade Center. But terrorism was not an issue prior to 9/11 quite simply because it was covered by virtually every insurance policy that was issued. After 9/11, it was covered by virtually no insurance policies until the enacting of the Terrorism Risk Insurance Act. And while I understand that this meeting is not specifically about TRIA, any discussion about terrorism and insurance must include the recognition that TRIA is vitally important to business and the economy. It is only because of TRIA that the insurance market calmed down and businesses can obtain terrorism insurance at affordable rates. As explained in detail in our written statement, unless a permanent solution to the terrorism risk is developed and implemented prior to the sunset of TRIA, there will be a significant impact on the economy.

Along these lines, RIMS recently conducted an informal survey of its membership asking about terrorism insurance coverage to get an idea of current market conditions. Eighty-six percent of respondents to our survey said that if TRIA or some other Federal backstop were not in place, they do not believe that they would be able to obtain sufficient coverage for acts of terrorism at affordable prices. Eighty-two percent said that coverage should be available for nuclear, biological, chemical, and radiological—the so-called NBCR exposures. But 91 percent said they do not have coverage for this currently. Coverage for NBCR exposures is typically excluded from commercial insurance policies with the notable exception of worker's compensation insurance.

As an indicator of what might be expected if a TRIA-like program were not in effect, 75 percent of our member respondents said that prior to the extension of TRIA, their insurance policies contained coverage conditioned on the extension of TRIA. Seventy-six percent stated that they believe the terrorism coverage limits would have been decreased had TRIA not been extended, and 82 percent believe their insurance premiums would have increased. In this regard, for example, one of our members reported that insurance premiums for a property they own in a large metropolitan area went from $200,000 in 2005, to $500,000 in 2006, with a reduction in policy limits. Furthermore, the member's insurance broker has stated that insurance companies are unwilling to commit to insuring construction projects with terrorism coverage if the

completion date goes beyond December 31, 2007, the sunset date of TRIA.

RIMS believes that it is critical that a program be developed to ensure continued coverage for acts of terrorism, including NBCR coverage, and our written statement itemizes the principles that we think should apply to the development of a long-term solution.

Thank you for the opportunity to testify on this extremely important issue. RIMS appreciates your committees holding this joint hearing and looks forward to working with you to address the issue of terrorism and insurance. Thank you.

[The prepared statement of Mr. Fleming can be found on page 48 of the appendix.]

Chairwoman KELLY. Thank you very much, Mr. Fleming.

Mr. Ulrich.

STATEMENT OF PETER ULRICH, SENIOR VICE PRESIDENT, MODEL MANAGEMENT, RISK MANAGEMENT SOLUTIONS, INC.

Mr. ULRICH. Thank you for the opportunity to testify here today. For those of you who do not know who Risk Management Solutions is, RMS is the world's leading provider of technology and services for the managing of catastrophic risk, both natural perils, such as earthquakes and hurricanes, as well as terrorism risks. We first released our terrorism model in 2002 and today have over 100 insurers and re-insurers actively using the model to manage risk.

Just to clarify what a terrorism model is, we do not try to predict the time and place of the next terrorist attack. What we do—for a location or portfolio of hundreds of thousands of locations, we assess the likelihood that any of those may sustain property, business interruption damage, or human casualties under a spectrum of possible terrorist attacks from small bombs to large truck bombs, airplane hijackings, nuclear power plant sabotage, or CBRN attacks. And our model is built totally with open source information, which I understand about 80 percent of intelligence information is open source today. But the types of sources we rely on are, for example, we have a statistical database of over 20,000 terrorist attacks around the world since 2001. Over 1,000 of these are what we would call macro attacks, car bombs or larger. And focusing on Jihadist attacks in this database, you can see that 45 percent of the attacks around the world come against the major political or economic capital of the country, a New York or Washington, D.C., type city. If you look at the top five cities where attacks occur, that is 67 percent of the likelihood. Looking at this database, you can also see the types of weapons used. For example, over 75 percent of the attacks around the world are improvised explosion devices, IED's. You can also see the distribution of small bombs versus large bombs. The types of attacks the jihadists prefer is at government buildings, hotels, infrastructure, and train stations. This is all valuable information that is available.

We also look at academic literature on the motivation and objectives of the terrorist threat groups. We work with weapons experts on understanding the cost and logistics of the different attack modes. How hard is it to build a two ton bomb? How hard is it to get it to detonate efficiently? If you want to sabotage a nuclear

power plant, what kind of skills do you need? How realistic a threat is that?

And, finally, we also rely on expert opinion. We have formed a group of some of the world's leading experts in terrorism threats to help advise us on understanding current trends, people like Bruce Hoffman, Rohan Guneratna, and Magnus Ranstorp, who are all key advisers to the U.S. Government. We have not had access to any classified information and, frankly, the most sensitive information probably wouldn't help us. We don't need to know that you have someone under surveillance at 123 Main Street in San Francisco. Classified information is the big unknown. I don't know what you have that we aren't privy to, but if I had a wish list, the type of things that would be helpful would be information on interdicted attacks that is not public domain. For example, how many attacks have been stopped that the public is not aware of, what types of targets were they after, what type of weapons were they planning to use, how many terrorists were involved, how close to success did they come, and how were they caught? Any indication of change in MO. Al Qaeda has been very focused on very low frequency, high severity attacks, spectacular attacks, such as the World Trade Center, that had a spectacular impact, high economic loss, high human casualties, and great symbolic value. If they want to change to where they are going to have 100 people go out into the public with explosive vests and there is intelligence that indicates that, that would be very helpful to us.

Finally, capability assessments. There is certainly information out there about how there are nuclear warheads unaccounted for from the former Soviet Union. And if it was confirmed that, yes, they are missing, and they are in fact in the hands of terrorists, that would be very helpful information to know. Other information might just be intelligence on the effectiveness of our border security, land borders, air borders, sea, and cargo shipments, as well as security ratings of various cities or individual targets. And all this would help improve the models and reduce uncertainty in the models.

And on the topic of uncertainty, I was asked to comment on the uncertainty of terrorism versus natural catastrophe. I think it is interesting that last year there were 27 named storms in the Atlantic Basin, unprecedented, whereas with terrorism there has not been a terrorist attack since 9/11. And it is partly controllable. If you tried to hijack a plane after 9/11, you couldn't do it the next day because there were no planes flying. And eventually if there was a successful attack, the United States does have the ability to raise defenses. And you can bet that it would not be possible to hijack a plane again.

So with that, I will close. Thank you.

[The prepared statement of Mr. Ulrich can be found on page 70 of the appendix.]

Chairwoman KELLY. Thank you very much.

Mr. DeBoer?

STATEMENT OF JEFFREY D. DeBOER, PRESIDENT AND CEO, THE REAL ESTATE ROUNDTABLE

Mr. DEBOER. Thank you, and good morning, Chairwoman Kelly, Chairman Simmons, and members of the two subcommittees. Thank you very much for holding this joint hearing today. My name is Jeff DeBoer, and I am president and CEO of the Real Estate Roundtable. As was mentioned, I also serve as co-chair of the Advisory Board for the Rand Center for Terrorism Risk Management. I am also chairman of the Real Estate Information Sharing and Analysis Center or ISAC, and I participate as a steering committee member for the Coalition to Insure Against Terrorism.

From the policyholder perspective, obtaining terrorism insurance is critical to developing, financing, and transferring business property. The amount of needed terror insurance is dictated by lenders and by rating agencies. They have historically taken the position that all risk coverage requires terrorism insurance. Loan amounts must be covered by terror insurance to be approved and bond issuance must have adequate terror insurance to be attractively rated. And this view has been supported by the courts and it in effect creates a high demand for this product. Without terrorism insurance, we believe economic transactions will be smothered and jobs will be at risk. A Real Estate Roundtable survey taken in the post-9/1l, pre-TRIA days indicated that about $15 billion worth of real estate transactions had been stalled or completely canceled nationwide. The Council of Economic Advisors at the time stated approximately 300,000 jobs were lost during this period. Almost overnight, it is worth remembering, upon enactment, TRIA filled the re-insurance crater. Insurance capacity returned and transactions resumed. In particular, stalled construction projects moved forward to the benefit of countless workers in the construction trades.

Today, I would like to say that demand for terrorism insurance is extraordinary. Studies of take-up rates show a higher terror take-up rate than the take-up rate in almost any other product where Federal or State Government is providing a capacity backstop in effect. And that includes flood, crop, earthquake, or previous riot and crime control programs. A Mortgage Banker's Association survey has revealed that about 84 percent of commercial loans surveyed had terror insurance in place. I am sometimes asked, who is buying this coverage? Financial institutions, real estate firms, and health care facilities have the highest take-up rates. But right behind them are media companies, education institutions, energy companies, and transportation firms.

Having said that, Roundtable members today report to me that the insurance markets are increasingly difficult. The multiple catastrophic exposures of hurricane, flood, wind, and earthquake, on top of terrorism, plus the high retention rates of TRIA and the pending expiration date that has been mentioned, have caused many insurers who are concerned about aggregation risks to leave markets.

Also, as has been mentioned, according to a Moody's report, a high percentage of all policies written prior to TRIA's enactment contained the springing exclusions, which would automatically void coverage if TRIA had not been done on January 1, 2006. This is happening again in the marketplace. Businesses now shopping for

policies that run past 2007 year end are being once again asked to accept these springing exclusions. We believe this is strong evidence that without Federal involvement, insurance availability would drop substantially.

The ultimate victims of all of this, of no Federal program, would not be the insurance industry, although they are frequently talked about, it would be the American economy; it would be bond holders, pension investors, and jobs. America's industries are highly concerned with nuclear, biological, chemical, and radiological exposures. Even though TRIA does cover these perils, we see no evidence in the marketplace today that this is being written except where mandated in worker's compensation coverage.

Regarding risk mitigation, I share many of the concerns that Mr. Frank mentioned. Having said that, however, the industry is spending large sums on security measures. It is important to note also that terrorism risk management strategy is now at the board level for large-scale property owners. Building tenants are being urged to have emergency protocols and owners are urging all tenants to coordinate their plans within the buildings.

Our industry has also undertaken an unprecedented multi-sector initiative to share information on related terror risks. I would conclude on this point by saying that our industry standard benchmarking reference shows that the industry as a whole is spending about 20 percent more on security related measures than they were pre-9/11.

But mitigation is not enough nor is it being appropriately reflected in insurance premiums. A long-term policy solution to this long-term risk must be found. TRIA and TRIEA both have been good programs, and perhaps they can be extended, but they are not the only potential answer. I would invite you to look at a program that we have attached to our statement.

In conclusion, without Federal involvement, we don't think there will be adequate insurance capacity to protect the economy in the face of a terrorist attack or to allow an economy to recover after an attack.

Thank you again for the opportunity to be with you this morning.

[The prepared statement of Mr. DeBoer can be found on page 30 of the appendix.]

Chairwoman KELLY. Thank you, Mr. DeBoer.

Mr. Lewis.

STATEMENT OF CHRISTOPHER M. LEWIS, VICE PRESIDENT, ALTERNATIVE MARKET SOLUTIONS, P&C CAPITAL MANAGEMENT, THE HARTFORD FINANCIAL SERVICES GROUP, INC.

Mr. LEWIS. Thank you. Chairwoman Kelly, Chairman Simmons, Ranking Member Gutierrez, Ranking Member Lofgren, and members of the subcommittees, thank you for the opportunity to appear before you today to discuss the challenging issue of managing the threat of terrorism to the U.S. economy. My goal today is to provide perspective on the difficulties faced by the insurance industry as financial intermediaries helping companies to pool and manage risks, including the risk of terrorism. If it pleases the subcommittees, I will submit my full testimony in writing for the record and restrict my oral testimony to a summary of two key observations.

First, terrorism is an uninsurable risk. Terrorism fails to meet the fundamental requirements for insurance. The risk of terrorism does not impact policyholders in a manner that is homogeneous, random, and independent across other policyholders. Moreover, the risk of terrorism is not well understood. Unlike the case of natural catastrophes, the insurance industry has no credible data or models that can be used to quantify the likelihood of a terrorism attack, the form of such an attack, and the location at which such an attack could take place. As a result, the industry cannot effectively price terrorism insurance and is forced to manage the risk of terrorism through exposure limits on entire commercial policies, often to the detriment of our policyholders.

Second, the disappearance of Federal terrorism re-insurance could result in major coverage disruptions for policyholders. To see this, we need look no farther than the largely unregulated markets for traditional re-insurance and capital market insurance securitizations. Despite extremely high primary insurance company retentions under TRIA, the traditional reinsurance market has restricted reinsurance capacity for terrorism to de minimis levels. We have virtually no coverage provided where it counts, for terrorist losses caused by nuclear, biological, chemical, or radiological weapons.

In the area of insurance link securitization, I can assure the subcommittees that virtually no meaningful capacity exists today to securitize terrorism risk. Having established and maintained an insurance link securitization program for natural catastrophes since 2004, The Hartford has spent considerable time and energy attempting to leverage this technology to help finance the risk of terrorism. Not surprisingly, the same obstacles that impede the insurability of terrorism for the primary insurance and the reinsurance companies are preventing the development of an insurance link securitization market for terrorism. Therefore, in conclusion, I firmly believe that any credible solution for financing the risk of terrorism in the U.S. economy will require a continued partnership between the private insurance industry and the Federal Government.

Thank you.

[The prepared statement of Mr. Lewis can be found on page 66 of the appendix.]

Chairwoman KELLY. Thank you, Mr. Lewis. I ask unanimous consent that the statements of the Independent Insurance Agents and Brokers of America, the Rand Corporation, and the American Insurance Association be entered into the record. So moved.

I would like just a yes or a no answer from each member of the panel to the following question: Do you believe that the threat of terrorism increases or decreases as we move away from 9/11? Just say increase or decrease, so I have some kind of picture of what your thinking is. Mr. Fleming?

Mr. FLEMING. Increase.

Chairwoman KELLY. Mr. Ulrich? Real simple, one word.

Mr. ULRICH. Increase.

Chairwoman KELLY. Mr. DeBoer?

Mr. DEBOER. Given those two choices, increase.

Mr. LEWIS. Same, increase.

Chairwoman KELLY. Well, we will get to the nuances now. I would like to ask you whether a distinction between foreign and domestically-inspired acts of terror is meaningful from a risk assessment point of view? Mr. Fleming?

Mr. FLEMING. RIMS believes that the distinction should be eliminated. Just looking at what happened in England last summer, they were homegrown terrorists but citizens of Great Britain, and we are concerned that the same kind of situation is going to occur here. If it happened in America, the distinction may have eliminated coverage under TRIA if they were homegrown domestic terrorists.

Chairwoman KELLY. Thank you. Mr. Ulrich?

Mr. ULRICH. From a threat standpoint, there is an extreme difference between the foreign threat and the domestic threat.

Chairwoman KELLY. Would you like to elaborate on that?

Mr. ULRICH. Well, there is no reason to believe right now that there is a Timothy McVeigh lurking out there right now but Al Qaeda has stated that they want to attack the United States. So the domestic threat exists but it is relatively minor. It is mostly people like the Animal Liberation Front, and the Earth Liberation Front, who are more after publicity than massive destruction, while Al Qaeda's objectives are to create as much havoc and destruction as possible.

Chairwoman KELLY. Mr. DeBoer?

Mr. DEBOER. I think asking the Secretary of the Treasury to make a distinction of whether an act has been perpetrated by a foreign movement or by a domestic movement is artificial and irrelevant, and I think it should be eliminated.

Chairwoman KELLY. And I think it should be eliminated. Mr. Lewis?

Mr. LEWIS. I think given events overseas and trends that we see in the overall threat assessment, it is going to be increasingly difficult to distinguish whether or not an event is a certified or noncertified event. And I think the distinction is no longer going to be relevant going forward.

Chairwoman KELLY. Thank you. Terrorists assess the likelihood of completing an attack and the amount of damage they will cause when selecting targets. So, consequently, pre-attack mitigation can help deter attacks or change the target set. Where do you think Congress can do more to encourage pre-attack measures in the private sector? Mr. Fleming?

Mr. FLEMING. Well, the Federal Government has been very supportive of local governments in this area. Montgomery County has received a number of grants, helping us to harden our buildings, and to make people more aware of terrorism. I think that the Federal support, as more targets, the softer targets, become recognized by the people who are identifying exposures to terrorism coverage, that it needs to trickle down to a much bigger part of the economy.

Chairwoman KELLY. Mr. Ulrich?

Mr. ULRICH. They can help by prioritizing spending on the targets at greatest risk. But it is important to note that terrorism risk is like a balloon where if you squeeze the risk in one place, it pops out somewhere else. So as you protect one target, it just makes a neighboring target that is unprotected more likely to be attacked.

Chairwoman KELLY. So you would think that we should encourage pre-attack measures everywhere?

Mr. ULRICH. Not everywhere, starting with the high-priority targets, the targets at greatest risk.

Chairwoman KELLY. Risk assessed?

Mr. ULRICH. Yes.

Chairwoman KELLY. Okay, thank you. Mr. DeBoer?

Mr. DEBOER. Well, mitigation is a big concern of the real estate industry and, as I mentioned, we have, as an industry, spent substantial sums already on security personnel, barriers, other surveillance techniques. Our HVAC systems are now much more secure than they were before and the industry is spending a huge amount, both at the board level and on the ground making things more secure.

Having said that, I think the most important thing, and it was mentioned earlier, I think by Chairman Simmons, and that has to do with information. What could mitigate the risk for a lot of buildings and building owners and their tenants is a proper flow of information from the Federal Government through the ISAC system back down to the ground.

Chairwoman KELLY. Mr. Lewis?

Mr. LEWIS. I think when assessing the threat of terrorism, it is important to keep in mind the interdependent nature of the terrorist threat so that for any given property, while you could try to harden that property, you can't harden the property next door where if a terrorist attack occurs there, it is still damaging your property. So it is a challenge to try to establish effective mitigation for such a wide ranging threat that is dynamically evolving. I am not qualified to understand where the government should align its resources to counter terrorism based on the information that they have. I just think it is important to keep in mind the dynamic nature of that threat.

Chairwoman KELLY. Thank you. I am out of time. I turn now to Mr. Gutierrez.

Mr. GUTIERREZ. Thank you. The first question is for Mr. DeBoer. The Real Estate Roundtable's proposal to create a Homeland Security mutual pool is an idea that I believe deserves some consideration. I want your assurance, however, that you do not anticipate any direct appropriation for this program. Another concern I have is the creation of another even larger GSE-type organization that creates a "two big to bail problem." Would you please address that issue?

Mr. DEBOER. Well, the appropriation issue, the way that this program would be funded would be by assessments of all insurance companies up-front, and then an ongoing assessment for insurers who want to participate in the program, and they pay a premium to get it up and running. To the extent that there is an appropriation, there is probably going to have to be a backstop continued during the early years while that pool builds up. So in effect, as the pool builds up, the backstop stands down, to coin a phrase. So there is not any direct appropriation involved. Obviously, over a period of time the pool would be built up, and we would anticipate that building up to $30- or $35 billion would provide the kind of layer that needs to exist between the taxpayer and loss coverage.

Above that amount, I think that most everyone would admit that it gets to be a catastrophic loss, and the Federal Government is probably going to have step in. But, no, we are not talking about a GSE. We are not talking about too big to fail. We are not talking about an appropriation.

Mr. GUTIERREZ. Thank you. Mr. Ulrich, in your testimony you proposed adding intelligence information to risk modeling to produce greater accuracy. This raises many red flags, for instance you mentioned the need for careful management of real time intelligence information to avoid what you refer to as a commercial asymmetry. That may be true, but I have other concerns. If real time information is made available to many different entities, how can we possibly expect this information not to be made public? Even if we don't allow real time information to be used by the insurance industry, how do you propose to protect the information in general?

Mr. ULRICH. That is a very good question. Our models are used by insurers around the world, so if it is incorporated into our model, it would essentially become public information. I think it would require that classified information become declassified because we couldn't protect it, since people would be using it.

Mr. GUTIERREZ. Mr. Lewis, you seem to be the most pessimistic of our witnesses regarding the ability to accurately assess terrorism risks. Mr. Ulrich, on the other hand, seems to have a little more confidence in our ability to predict and assess risks. In his testimony, Mr. Ulrich proposes that declassifying of certain information or even allowing the industry access to classified information would allow the industry to improve its model. Do you agree with this proposition? If so, would such a move substantially increase your confidence in the models? If you disagree, what, if anything, can be done to improve the reliability of predictive models?

Mr. LEWIS. Thank you. That is a very good question. Not knowing the classified information that exists, it is difficult to comment on what value that information would add. I think it is important though that even if that information, at a certain point in time, helps us to understand the nature of the risk at that point in time, as we have discussed, the nature of the terrorist threat is constantly evolving and changing. So as soon as we know how to protect against a certain type of attack, the terrorists change their attack modes; they change the delivery mechanisms to bypass that. So I am still challenged to understand how having that information could create materially more confidence in our ability to understand and price for the threat of terrorism. Clearly, more information is generally good, we have seen that on the hurricanes side with respect to cooperation with NOAA. But I still don't see with respect to the threat of terrorism, given its dynamic nature, how much further along that actually pushes us.

Mr. GUTIERREZ. Mr. Ulrich, do you have anything to add to the comment just made by Mr. Lewis?

Mr. ULRICH. No, I would agree that until I saw what information was available, classified information that could be made available, I would be unable to tell you what kind of changes would go to the model.

Mr. GUTIERREZ. That is fair. Mr. Fleming, in your testimony you state that it is unreasonable to expect that the insurance market is going to respond to the need for terrorism insurance when it is having difficulty responding to the need for more predictable risk, like natural disasters. This sounds like you believe that the Federal Government will be the permanent re-insurer of terrorism risks. Is that the case? And do you believe that a voluntary mutual re-insurance entity, as proposed by The Real Estate Roundtable, might work in shifting the primary backstop burden away from the Federal Government?

Mr. FLEMING. RIMS believes that the private insurance market is not capable of responding by itself and that there needs to be some form of either a public/private partnership or some form of a backstop.

I was in a meeting recently with some senior underwriters from the largest insurance companies. They indicated that the capacity in today's market is anywhere between $60- and $85 billion to respond to a terrorist attack or any catastrophe. Obviously, looking at Hurricane Katrina, we are approaching the $60 billion range and much of that damage was uninsured and backed up by the Federal Government. So we are of the opinion—and in the event that the insurance market had to pay for a catastrophe to the magnitude of $60 to $85 billion, it would put some companies out of business and they would be unable to pay claims for other types of coverage. So we think that a public/private partnership or some form of Federal backstop is required.

Mr. GUTIERREZ. I thank all of the witnesses.

Chairwoman KELLY. Thank you. Chairman Simmons.

Mr. SIMMONS. Again, I would like to thank Chairwoman Kelly and Ranking Member Gutierrez for inviting our subcommittee to participate in this very interesting and important hearing. The Subcommittee on Intelligence has among its responsibilities to oversee the Department of Homeland Security for a terrorism-related threat, vulnerability, and risk analysis, and also the integration, analysis, and dissemination of Homeland Security information to public and private sector entities. And that would be the focus of my questions. Is the insurance industry at this point in time receiving any dissemination of terrorism risk related reporting from the Department of Homeland Security? If not, should they? If not, should we be focusing on some mechanism where this new component of our government, this new agency of our government, with this new and important mission should be reaching out to your industry as a private sector entity to assist in the analyses that you conduct? Any of the witnesses can respond.

Mr. ULRICH. I can't speak for the insurance industry because I am not part of it but we certainly make great efforts to disseminate all the information we gather through our work with various terrorism experts—changes in threat, what type of attack modes to expect, and the likelihood of attack. And we do that through seminars for all our clients and in quarterly bulletins that we send out. So we do attempt to disseminate.

Mr. SIMMONS. But what are you getting from the Department of Homeland Security, if anything? And, if not, should you be getting something from them?

Mr. ULRICH. We do not get anything from DHS.

Mr. SIMMONS. Any of the other witnesses get anything from the Department of Homeland Security?

Mr. DEBOER. Yes, sir, in the real estate industry we have an ISAC that involves the 15 major real estate trade associations, as well as the facility managers group from around the country and stadium operators and so forth. We have an ongoing relationship with the Department of Homeland Security. We get information from them on a regular basis. In some ways, it is almost too much information. We receive bulletins, alerts, and so forth almost daily. We then disseminate that information out to the industry. We send things sometimes to hundreds of thousands of people about certain information that comes from the Homeland Security Department.

If I had a criticism, I might say that some of the information is almost too general, too broad to be of any use. Some of our members respond—and I don't want to be too pejorative here—but almost treat it as spam in the sense that you get so much information, what is really relevant? So our message on this front, Mr. Chairman, is more relevance, more timely information, more actionable information, if you will.

Mr. SIMMONS. Then if I could follow-up on that a little bit. Is this information classified, unclassified, sensitive but unclassified, official use only; what is the nature?

Mr. DEBOER. A variety of all of the above. We do have two staff people who have received clearance, and they do get information that would not then be disseminated outward. But most of this information is unclassified—sensitive information, I guess is what you would call it.

Mr. SIMMONS. Anybody else?

Mr. LEWIS. Just to further elaborate on that. We do get a lot of information. It is all open source information that we get. And for the most part, we rely on outside modeling experts, including RMS, to try to translate that information into something that is in fact actionable that we can actually use to support the management of the terrorist risk ourselves.

Mr. SIMMONS. And in the information that you receive, is there any value in incorporating any of this into your modeling?

Mr. ULRICH. We use information from all sources. A lot of the experts we work with are privy to classified information. They obviously don't turn that over to us, but it certainly helps them to form their opinions, and then that is incorporated into our model.

Mr. SIMMONS. And you said, Mr. Ulrich, on page 5 that there are two options available to you. One is declassifying the information, and the other is extending security clearances to those people who do your modeling. Which do you prefer?

Mr. ULRICH. Declassifying the information. I don't know the logistical challenge between giving everybody security clearance and maintaining the classified nature of the data, I don't know if that would be possible.

Mr. SIMMONS. And do any of your people have security clearances?

Mr. ULRICH. Not that I am aware of.

Mr. SIMMONS. Thank you.

Chairwoman KELLY. Thank you. Ms. Lofgren?

Ms. LOFGREN. Thank you. I am reminded that there are really two kinds of information, at least, that can come out of the Department of Homeland Security. One is the information that is gathered primarily not by DHS but accumulated, analyzed, and disseminated about threats that we learned. But the other is something that is more ongoing. What steps can we take to mitigate those vulnerabilities? And I think all of us saw the newspaper articles in the last several weeks about the popcorn factory that made it onto a list and the mule run and the flea markets and the like. And I remember last year we had a miniature golf course that made it on the list in my district. And although people teased about that, we recently had a briefing on it and obviously it was classified so I will not discuss that briefing at all. But I will say as a general matter, that there are really two things, and I think we have seriously mishandled this. One is the critical infrastructure of the United States and the other is just the National Asset Database, basically a dump truck that lists every supermarket, lists every check cashing office or the like, and the two are not the same. As I listened to you, Mr. Ulrich, it seems to me that you may have actually, and this is a question not a statement, gotten farther towards mapping the critical infrastructure of the United States than the Department of Homeland Security. Can you really let us know in a general way whether you have mapped out, for example, the cyber issues and the utility issues and the like that would make up the critical infrastructure of the United States?

Mr. ULRICH. Yes, well, we have a very different target list in our model. We have a very small list, in fact it is only about 3,800 targets in the whole country, so I hope we don't have petting zoos and miniature golf courses on ours.

Ms. LOFGREN. Correct.

Mr. ULRICH. We are much more focused on targets of extreme high value or dense population. So we have gone through that, and we continue to go through that, and that is the type of thing we look through attacks around the world to see what are the trends. The Madrid bombing was a great example of—it was very successful so you expect to see that kind of thing again. So we prioritized train stations and subway stations. And, sure enough, you saw that attack occur again in London. So that is the way we use that information to prioritize.

Ms. LOFGREN. This is proprietary but I wonder have you shared this with the Department of Homeland Security? Maybe we could get some help from you.

Mr. ULRICH. We would be happy to. We don't publish it because our model is essentially a terrorism optimization model.

Ms. LOFGREN. Right.

Mr. ULRICH. It tells the terrorists where to go attack but we would be happy to work with you on that.

Ms. LOFGREN. Well, I may follow-up with you if I could on that. I want to talk a little bit about cyber security. A number of years ago when cyber was still in the White House, there was a national strategy to secure cyberspace. And some have criticized that it is not being ambitious enough but the truth is here we are it is 2006, towards the end, we haven't implemented the strategy. There is really nobody in charge at the Department of Homeland Security.

With a strong bipartisan effort a few years ago, we pushed to get an assistant secretary for cyber security so somebody would be paying attention. That position has never been filled. It is over a year that it has been empty. And so we really haven't done anything on cyber, and I continue to believe—I represent Silicon Valley, we have some very substantial vulnerabilities. And certainly industries that are outside of the high-tech space have recently contacted me very concerned of the vulnerabilities that exist. Is that something that you have taken a look at in terms of our cyber vulnerabilities and is it something that—any of you if you could answer—that you might be able to move us forward on through an insurance mechanism?

Mr. ULRICH. Well, the short answer is we haven't looked at it, not from a lack of interest but it definitely does not fit into the mold, the Al Qaeda desired attack is something where there is massive destruction of property and human casualties.

Ms. LOFGREN. Well, you could destroy lots of property with it.

Mr. ULRICH. Right, it is in a very different way. And we have talked to experts about it. There is a question of whether the skills are there.

Ms. LOFGREN. They are for sale.

Mr. ULRICH. And certainly their funding terrorist activities through petty theft of credit cards and all. So there is a lot of that going on but we have not pursued further the potential for cyber terrorism.

Ms. LOFGREN. I see my time has expired, Madam Chairwoman.

Chairwoman KELLY. Thank you. Ms. Jackson Lee.

Ms. JACKSON LEE. Thank you very much, Madam Chairwoman, and thank you very much for the invitation to this hearing. I would be interested in tracking the same line of questioning. We have spent every day since 9/11, and many of course have spent that time before 9/11, concerned about preventative measures. There was much second-guessing after 9/11 and one of the chief issues, I think, of the 9/11 Commission Report was the importance of intelligence. Might you share with me your concepts, if you will, on modeling. What would you perceive to be the limitations of predictive modeling for acts of terrorism? If I could get all of you to take a stab at that question. And what can be modeled and what can't be modeled so that we can begin—or not begin but continue to find ways of improving our securing intelligence and finding the right models to work. I pose those two questions if all of you could begin to answer that.

Mr. FLEMING. The inherent problem with terrorism is its unpredictability. We can't predict what weapon will be used, where it will be used, or how often it will be used. As a local government, we take steps to harden our buildings, to secure our employees through identification badges and that type of step to prevent as best we can a terrorist attack at a local government. We feel that we are not particularly a target. And RIMS being a consumer of insurance doesn't have the scientific ability to do modeling, and we depend on Mr. Ulrich and companies like his to provide modeling to insurance companies to make these products available for consumers.

Ms. JACKSON LEE. Mr. Ulrich, it comes to you and you have modeling in your title, can you help us because beyond the private sectors, the governmental sector, we are engaged in how people can predict risk insurance but can we do that and how should we effectively try to enhance that model?

Mr. ULRICH. Sure, well, we obviously think we can do a good job of assessing the likelihood of different targets being attacked, the type of weapons that will be used, and we know the terrorists have limited resources in terms of how many attacks they can pull off in a year. But the challenge is you can't make any location terrorist-proof. So at the end of the day, the money best spent is the money that catches the terrorists before they ever get to the point where they have built the bomb because once they have the bomb, it is tough to stop.

Ms. JACKSON LEE. Intelligence on the front end as opposed to the back end.

Mr. ULRICH. Exactly.

Ms. JACKSON LEE. Gentlemen, anyone want to comment further?

Mr. DEBOER. Well, I guess I am a little bit unqualified on some of this but I would say that we are the consumers of the product that is being delivered here. And we look at why this thing can't be priced and it strikes us that it is very logical that it can't be priced. This is a manmade threat. It is an evolving threat. Its goal is to alter governmental policies in the United States and the way of life here so it is constantly changing. There are potential catastrophic losses at the top end and that makes it difficult to model. What has been mentioned is that as you harden some buildings, other buildings become more open to an attack. It is certainly true, as we have seen, where governmental facilities have been hardened, creating greater exposure for privately owned facilities. So I think it is very, very difficult to respond to your question in a way that would make this modeling work when I think a lot of us believe on its face it can't.

Ms. JACKSON LEE. So can you give your cities and counties any comfort in their determinations on insurance, what they should do?

Mr. DEBOER. Well, what we can do as far as building owners is take steps to inform ourselves as to what the current mode of attack might be. We can take steps to mitigate against those risks that we know about. And we can share information with our colleagues around the country as to what we are seeing in our locations that might increase exposure.

Ms. JACKSON LEE. Thank you.

Mr. LEWIS. If I may follow-up on that.

Ms. JACKSON LEE. Yes, thank you.

Mr. LEWIS. In terms of what we feel comfortable modeling today, given the technology of RMS and others, would be the severity of a conventional terrorism attack at a specific location. We feel that we can understand, given an attack takes place at a certain building, what the loss could be. We do not feel comfortable that we can in any way model the frequency or likelihood of an attack in general, the attack mode, or where that attack could take place. Moreover, for an attack using weapons involving nuclear, biological, chemical, or radiological weapons, we do not feel comfortable that we can fully gauge the severity of that attack or what the ramifica-

tions would be for the clean-up after that attack. If one goes back to the anthrax attacks a few years ago, the length of time it took to identify the source, identify what was involved in the clean-up, for that scale, if one can imagine on a broader scale, it is very difficult for someone to get their arms around, what the true magnitude of those losses could be. In contrast, for hurricanes or earthquakes, we have hundreds of years of actual events and thousands of years of data to support the information that is coming out of the modeling to give us some comfort that what we are seeing in terms of modeled output actually can be corroborated with history. And there is no clearer view of the difficulty than if you look again at the reinsurance markets, who have every incentive that if you can price this and if you can quantify it, that they would actually trade on that. And there is virtually no market there. That is the best indication of the lack of comfort in the ability to model this risk.

Chairwoman KELLY. Thank you, very much.

Ms. JACKSON LEE. Thank you, very much.

Chairwoman KELLY. Mr. Cleaver.

Mr. CLEAVER. Thank you, Madam Chairwoman. All of you agreed earlier about the inevitability of another terrorist attack. I would like to get a similar response on your belief that we will have another killer hurricane?

Mr. FLEMING. I think that is inevitable.

Mr. ULRICH. Guaranteed.

Mr. DEBOER. I would estimate that it will probably happen.

Mr. LEWIS. I think in responding to that, if one looks at the history in the United States and goes back to prior events, you can go back to the hurricane in Miami in 1926, and if you adjusted for property values and exposures that exist there today, it would be well in excess of the losses that we incurred for Katrina. So with all the build-up in property values along the coastline today and the fact that we do have a lot of hurricane activity, it is inevitable that we will have more hurricanes.

Mr. CLEAVER. Then it would seem to me that what happened on the Gulf Coast should provide some analysis of our ability to respond to another terrorist attack. And based on what happened down in the Gulf Coast and the problems that citizens are having even today, including Members of Congress who lost their homes, should the American public believe that in the event of another terrorist attack, or if the terrorists are able to create hurricanes, what should the American public expect from the insurance industry with the problems that we are having even at this very hour with insurance companies.

Mr. LEWIS. Let me respond. I think with respect to hurricanes, I think we feel like we understand with some degree of uncertainty what the risk of the hurricane threat is, and we try to make sure that we respond to our policyholders very quickly to pay those claims. I think what you are hearing today is that there is a real challenge when it comes to the threat of terrorism because we do not feel that we can fully understand what that risk is and what would be involved in responding. And we think to come up with a solution that provides the best response for everybody, for policyholders, for taxpayers, requires a partnership between the private

industry and the Federal Government to provide that mechanism so that after an event, if it ever happens, there is that immediate response.

Mr. CLEAVER. But you are saying we do know what the risks are with the hurricanes. In spite of the fact that we have that knowledge, we still have not been able to respond adequately to thousands of people in that region. And if you are saying we don't understand the full risk of terrorism, which led me to assume that you were saying we do understand it with hurricanes, then can we expect that the response would be significantly better with a terrorist activity than what has happened in the Gulf region?

Mr. LEWIS. I think if you look at the Gulf, the insurance industry has tried to respond very quickly to our policyholders in that area. I think in terms of the broader threat of natural disasters, there are things that can be done, enforcement of building codes, making sure there is rate adequacy on those underlying policies, education uncovered for individuals. There are a number of things that can improve that, but I think it is a unique challenge when it comes to the threat of terrorism.

Mr. LEWIS. Mr. DeBoer?

Mr. DEBOER. As far as the insurance responding to terrorism, 9/11 obviously was a tragedy from every perspective but one thing that was clear was that the insurance industry stepped up to the plate and paid those losses that came due. The reason they did that was because everybody who carried property and casualty insurance at that time implicitly had terrorism insurance. So they had insurance. When you ask what would be the result of a terrorist attack, I think the question is would there be terrorism insurance available to be purchased? What we are suggesting is that if this Federal program goes away and another program is not put in its place, the insurance industry is not going to be capable and will not have the capacity to offer that product. Therefore, if another 9/11 attack occurs and people do not have insurance, there won't be anyone to pay those losses other than the Federal Government, to the extent that the Federal Government pays them. And that is the big difference.

Now, I don't know down in the Gulf, I think a lot of—there may be a lot of uninsured activity down there and maybe that is—

Mr. CLEAVER. Well, no, actually—

Chairwoman KELLY. Mr. Cleaver, will you sum up, please?

Mr. CLEAVER. Thank you very kindly. I yield back the balance of my time.

Chairwoman KELLY. There isn't any left. Thank you. Mr. Crowley?

Mr. CROWLEY. I thank the chairwoman and the chairman for holding this committee, as I mentioned earlier. And I want to thank our witnesses as well because I think you have brought to light many of the concerns of many of the members here in the committee, both in the Department of Homeland Security community and maybe more particularly the Committee on Financial Services. And I have been disturbed over the year about some of the comments coming from this Administration in regards to terrorism backstop insurance. And what causes me the greatest concern is that I believe we are still at incredible risk of attack. And

I also believe that what gives our economy its greatest strength is that it is viewed worldwide and here at home, that it has the full faith and backing of the U.S. Government. Who doesn't believe that if we were attacked in some catastrophic way, the Federal Government wouldn't step in in some way, any way, it is in the interest of the Federal Government to create, I believe, this backstop provision. If there is a cataclysmic event, who else but the Federal Government can actually step in and provide the real insurance that is needed to give this economy the stability that it needs. Mr. DeBoer, if you could, I want to ask you very specifically about the folks, the clients that you represent. From their perspective, one of your members, just take us briefly through the process of how they would determine whether or not they would go forward with a project. What role does the availability of insurance play in that decision? Does it come into play at the beginning, the middle, or the end? Are there ways to get around a lack of capacity that can allow development to go forward or is it more likely that we would see a halt to development in the absence of terrorism risk insurance?

Mr. DEBOER. I appreciate the question. It really does go to the heart of this. Our view is that if there is not a program, there will not be the capacity for the product. If there is not a product, you can't finance, you can't develop, and you can't transfer large-scale real estate. Now the heart of your question depends on whether you are talking about developing a new project or buying or selling an existing product. If you are developing something, and it is a multi-year project, you need financing that will get you from day one through multiple years and multiple phases of that development. You need to have not only financing in place but to get the financing, you need to have insurance in place. So the individual developer would begin by going through his financier to try and get the financing. He would go to his insurance broker and try to obtain enough insurance to make it through that multi-phase development. He might have to: piece together that insurance from multiple insurance carriers; use some from his existing carrier; go to the standalone market to fill a piece; or go overseas to fill a piece. And so it is all stitched together. If it is a developer who has multiple properties, he might be spreading that risk and spreading that insurance among his entire portfolio and there might be insurers willing to provide insurance because they know that not all properties are going to be subject to a loss at any one time.

But this is an issue that comes up at the start of the project. It is at the start of the project whether you are developing, refinancing, financing, selling, or buying a property. It is a critical part of doing business today. The other thing I would say is this is not just a large city issue. Any property—right now the CMBS market, the commercial backed securities market, is the second largest source of financing for commercial real estate. Loans from all types of property across the country are put into those security pools. They have to be rated and the providers have to look and determine whether there is terrorism insurance on all of those loans or the bond issuance will not receive an attractive rating. So this is a broad-scale issue.

Mr. CROWLEY. I am going to ask another question, I don't want you to answer it right away because I want to get another question

in first. But are your members able to get coverage for nuclear, chemical, biological, or radiological risk? And from a developer's perspective, what impact does that lack of coverage, if you are not able to get it, what risk does that entail for your clientele? Before you answer that though, I don't pretend to know your knowledge of a particular site, but what you do know of the World Trade Center site in New York with 5 years out, we have yet to develop that property. Does that site have particular problems, as you see it, going down the road in terms of its redevelopment, the fact that it was the site of a terrorist attack and the fact that it has not moved forward in the way in which we would like to have seen it in New York. Are there any particular problems that you foresee going down the road? In other words, further requiring for this particular site an extension in some way of determining risk insurance down the road?

Mr. DEBOER. I would prefer to let the Silverstein properties people respond directly to it except to say again that this is a multi-year project. It needs insurance over a long period of time to do this construction. It is also the site that has been the subject of two terrorism attacks so therefore its risk profile is high.

Mr. CROWLEY. I am sure they would appreciate the last part of your question.

Chairwoman KELLY. Thank you, Mr. Crowley.

Mr. CROWLEY. Could he answer the middle question?

Chairwoman KELLY. We will let them finish.

Mr. DEBOER. Mr. Crowley, the answer to your first question is no. On a generally available basis, you cannot get insurance for nuclear, biological, chemical, or radiological attacks. The way that people do it is through captives, their own captives, and that is, to our knowledge, the only broad-scale availability of NBCR coverage in America today. If the backstop goes away, these captives will go away and America won't have this kind of coverage.

Mr. CROWLEY. Thank you. Thank you, Madam Chairwoman.

Chairwoman KELLY. Thank you for being here. Mr. Dent, do you have any questions for this panel?

Mr. DENT. No, I don't. Thank you.

Chairwoman KELLY. Thank you very much. We thank this panel. The Chair notes that some members may have additional questions for this panel, and they may wish to submit those questions in writing. So without objection, the hearing record will remain open for 30 days for members to submit written questions to these witnesses and to place their responses in the record.

I want to assure this panel and other people here that this is an issue that we have been working on—I personally have been working on this issue ever since 9/11, and I want you to know that I will keep working on this issue and we will revisit this question until we get this right for all of America. So thank you very much. This hearing is now adjourned.

[Whereupon, at 11:30 a.m., the subcommittees were adjourned.]

A P P E N D I X

July 25, 2006

The Real Estate Roundtable

Statement

of

Jeffrey D. DeBoer

before a Joint Hearing of the

Financial Services Committee's Subcommittee on Oversight and Investigations

and the Homeland Security Committee's

Subcommittee on Intelligence, Information Sharing

and Terrorism Risk Assessment

regarding

Terrorism Threats and the Insurance Market

July 25, 2006

1420 New York Avenue, N.W. • Suite 1100 • Washington, DC 20005 • Phone: 202-639-8400 • Fax: 202-639-8442 • info@rer.org

Statement

of

Jeffrey D. DeBoer

before a Joint Hearing of the

Financial Services Committee's Subcommittee on Oversight and Investigations

and the Homeland Security Committee's

Subcommittee on Intelligence, Information Sharing and Terrorism Risk Assessment

regarding

Terrorism Threats and the Insurance Market

July 25, 2006

SUMMARY

Chairwoman Kelly, Chairman Simmons, Ranking Member Gutierrez, Ranking Member Lofgren, and Members of the Subcommittees, we commend you and the members of both of these Subcommittees for holding this joint hearing today. Individually, and collectively, you have been extremely focused following 9/11 in working to find solutions to the economic risks associated with terrorism.

From the policyholder perspective, obtaining adequate terrorism insurance is critical to developing, financing or transferring business property. The amount of needed terrorism insurance is typically dictated by lenders and rating agencies that have historically taken the position that "all risk" coverage includes terrorism insurance. This position has been supported by the courts and in effect, creates high demand for the product.

In our view, the risks to the economy posed by the inability of private insurance markets alone to provide adequate terrorism insurance capacity to our nation's businesses is a logical consequence of the nature of the risk itself. We view this inability of private markets alone to meet the needs of our economy as a major risk to our homeland security. Without adequate terrorism insurance capacity, economic transactions will be smothered and jobs will be at risk. Moreover, without adequate terrorism insurance capacity, the ability of the economy to quickly recover following a terrorist attack will be dramatically impeded and our nation's homeland security will be weakened.

The current public-private partnership known as TRIEA has been a worthy short-term solution; however, it is set to expire at the end of 2007 – in less than 17 months. We share the view that the threat of terrorism is not on the decline, and as a consequence the real estate industry has invested vast sums on various mitigation activities and undertaken an unprecedented multi-sector initiative to share information locally and nationally on terror related risks, vulnerabilities and mitigation strategies with government at all levels.

We look forward to working with Congress, and with the Members of these two Subcommittees in particular, to find a long-term solution to this long-term economic risk to homeland security. Among the potential solutions we urge Congress to review as it searches for a long-term solution is one modeled after the United Kingdom's Pool Re program. Such a program, modified to respond to the much more diverse and dynamic U.S. economy, is presented as an attachment to this statement.

BACKGROUND

I am President and CEO of The Real Estate Roundtable, an organization that represents the leadership of the nation's top 100 privately owned and publicly-held real estate ownership development, lending and management firms, as well as the elected leaders of the 15 major national real estate industry trade associations. Collectively, Roundtable members hold portfolios containing over 5 billion square feet of developed property valued at nearly $700 billion, and participating Roundtable trade associations represent more than 1 million people involved in virtually every aspect of the real estate business.

I also serve on the Steering Committee of the Coalition to Insure Against Terrorism (CIAT) which is a broad coalition of 86 major trade and professional associations and businesses. CIAT represents the nation's major consumers of commercial insurance lines such as the United States Chamber of Commerce, the International Council of Shopping Centers, the National Association of Real Estate Investment Trusts, the National Rural Electric Cooperative Association, Major League Baseball, the NFL, the American Resort Development Association and related industries within the travel, tourism, and hospitality sector, to name a few.

I also serve as the co-Chair of the Advisory Board for RAND's Center for Terrorism Risk Management Policy, and as chairman of the Real Estate Industry Information Sharing and Analysis Center (RE-ISAC).

DISCUSSION

Underlying Facts Have Not Changed

As John Adams famously once said: "Facts are stubborn things; and whatever may be our wishes, our inclinations, or the dictates of our passions, they cannot alter the state of facts and evidence."

My message today is simple and straightforward.

The facts which prompted Congress and President Bush in 2002 to work daily to enact the Terrorism Risk Insurance Act (TRIA) unfortunately have not changed. The threat of terrorism continues to be an unpredictable, man-made threat as opposed to natural, somewhat predicable, property and casualty risk. Terrorism continues to be an act against our governmental policies and our "way of life", it is not an attack on an individual business or property owner. Where terrorists might strike, and how they might attempt to do so, continues to be an evolving picture, based somewhat on the mitigation actions of property owners, but more frequently on the "hardening" of governmental targets.

Consequently, in our view, insurers and reinsurers logically continue to be unable to assess and price terrorism risk insurance. Until there is clear evidence that these facts have changed, and the overall risks to our society subside, we see a continuing need for federal involvement in the failed terrorism risk reinsurance market.

This federal governmental involvement may be either in the form of TRIA, TRIEA, or a pooling mechanism along the lines discussed later in this statement.

When terrorists attacked the U.S. on September 11, 2001, American businesses that carried property and casualty insurance, were insured against terrorism. Prior to 9/11, insurers provided terrorism coverage effectively free of charge because the perceived risk from terrorist acts was considered minimal.

After 9/11, the terrorism insurance marketplace dramatically changed.

Reinsurers concluded that they could no longer quantify the risk and effectively withdrew from the terrorism risk reinsurance market. This is important because of the roughly $33 billion in 9/11 related claims paid, including commercial liability and group life, about two thirds of these losses were paid by reinsurers.

To our knowledge, this fact regarding reinsurers remains true today. The reinsurance industry estimates that only about $6 to $8 billion in terrorism capacity is currently available, with reinsurance capacity estimated at only $1 to $2 billion for nuclear, biological, chemical and radiological (NBCR) coverage. This is only a fraction of what is needed to provide adequate insurance to the U.S. economy.

With reinsurers out of the "post 9/11, pre-TRIA" market, primary insurers were not able to effectively manage their exposure to terrorism risk and they withdrew from the market where by law, they could.

This fact regarding primary insurers also remains true today. Without adequate reinsurance availability, primary insurers will not risk the exposure to their company associated with potential catastrophic terrorism losses.

Economic Risks are Great

As a result, prior to TRIA's enactment, the capacity for terrorism risk coverage quickly dropped, leaving America's businesses with few options. A survey The Real Estate Roundtable conducted during the 14 month post 9/11, pre TRIA time period showed that more than $15 billion of real estate related transactions had been either stalled or completely canceled because of a lack of terrorism insurance. Statements attributed to the White House Council of Economic Advisors indicated that approximately 300,000 jobs were lost during this period.

The interwoven nature of America's economy, and evidence that terrorism is a threat to national economic activity, is demonstrated by these statistics as well as by the anecdotal reports that although the 9/11 attacks occurred in New York and Washington, within days, busboys in Seattle and hotel employees in Houston had lost their jobs.

Fortunately, in November 2002, Congress and the President joined together to enact the Terrorism Risk Insurance Act of 2002 (TRIA).

When President Bush signed TRIA, he described the legislation as being a vehicle to move construction projects forward, secure billions of dollars in investments, put citizens back to work, and give investors in markets "*greater confidence that our economy is strong enough to withstand a future attack.*" His assessment was correct.

Almost overnight, TRIA filled the reinsurance crater and provided capacity to insurance markets which in turn yielded the economic confidence for transactions to resume. In particular, stalled construction projects moved forward to the benefit of countless workers in the construction trades.

Terror Insurance Take-up Rate is High

The rapid market penetration following enactment of TRIA is almost unprecedented.

Today, the need and demand for terrorism insurance is *extraordinary*. The various studies of take-up rates (Wharton, MBA, Marsh, Aon) all show a higher percentage of commercial buyers – and not just those in presumed high-risk cities — purchasing terrorism cover than the take-up rate in almost any other field where the Federal (or State governments) have provided capacity, be it flood, crop or earthquake insurance, or under previous programs for riot and crime insurance. In fact, there has been a continuous increase in the so-called "take-up" rate for terrorism insurance. The take-up rate in the fourth quarter of 2004 was more than double the rate in the second quarter of 2003. And, the 2004 annual take-up rate of 49 percent was an 80 percent increase over the 2003 rate. Our information is that this trend has continued under TRIEA.

Who's buying this coverage?

Financial institutions, real estate firms and health care facilities have the highest take-up rates. But right behind them are media companies, educational institutions, energy companies and transportation firms.

Having said that, Roundtable members tell us that the state of the insurance markets is increasingly difficult. The multiple catastrophic exposures (hurricane, flood, earthquake, on top of terrorism) plus the high retentions of TRIEA and its pending expiration have caused many insurers, concerned about "aggregation" risk, to leave certain markets.

We occasionally hear suggestions that a private terrorism insurance market would exist without federal involvement under the theory that the federal government is crowding out the private market. This seems highly questionable. There is evidence that private reinsurers want very little exposure to terrorism risk as our information indicates that the industry has not even met the capacity demand of direct insurers for their deductible and coinsurance layers under the current TRIEA program (amounts that appear quantifiable).

Rating Agencies and Lenders Require Coverage

Rating agencies and lenders play a big role in the economic implications of this issue. Insurers must keep their potential exposure to terrorism losses low or face lower ratings. Likewise, without adequate "all risk" coverage, including terrorism insurance coverage, commercial mortgage backed security (CMBS) borrowers face tough choices, the threat of default and potential bond downgrades. This is critical. The $709 billion U.S. CMBS market is the second largest source of commercial and multifamily real estate credit in the U.S. and now comprises nearly 26 percent of the $2.7 trillion U.S. commercial real estate debt market. In 2005 alone, CMBS provided more than $160 billion in debt capital to the commercial real estate industry, providing 30 to 40 percent of the total annual debt financing to commercial real estate borrowers.

Allow me to quote from reports by two of the nationally recognized rating agencies, Moodys and Fitch Ratings.

Moodys: ... "We are unaware of any viable private market initiative that would take the place of TRIA."

Fitch Ratings: "If TRIEA expires prior to the formulation of a long term terrorism insurance solution, there could be numerous repercussions for the commercial real estate market."

Should the back-stop expire, insurers dependent on the back-stop are likely to withdraw from the market place, resulting in dramatic drop of capacity. Without adequate terrorism insurance coverage, CMBS borrowers face tough choices and the threat of default. As such, it would appear likely that Fitch's concerns of disruption in the CMBS market are well founded. In fact, based on its overview of coverage in place and the ongoing loan requirements for coverage, Fitch has declined to rate certain transactions.

Lenders have a role in the marketplace as well. When commercial insurance carriers excluded terrorism insurance coverage prior to the enactment of TRIA, the risk of a catastrophic terrorism loss shifted from the commercial insurance industry to the commercial real estate industry. For this reason, borrowers, lenders and loan servicers who bear a responsibility, to investors and funding sources, have much at stake in maintaining broad availability and affordability of terrorism insurance. Commercial real estate faces material difficulties if a long-term terrorism insurance solution is not created before TRIEA expires. In fact, a study performed by the Mortgage Bankers Association revealed that 84 percent of the surveyed loans had terrorism insurance in place. This high percentage of properties with terrorism coverage in place countered the misconception that terrorism insurance was only for trophy properties located in high risk markets. Most currently available terrorism risk insurance policies are directly conditioned to the TRIEA "make available" provisions.

The Real Estate Roundtable and CIAT represent the consumers of this product called terrorism insurance. We listen to the manufacturers of this product, the reinsurance and insurance industry. We also listen to market analysts, such as Fitch and Moodys. And, we listen to the requirements of our lenders. Our conclusion is that without a federal terrorism program the economy will go "back-to-the-future" to the "post 9/11- pre TRIA" world when transactions were stalled or canceled and jobs were lost.

Today's Market is Tightening

Even now, with the clock winding down on the current program, America's businesses face the threat of going "bare" on terrorism coverage for our existing portfolios in just a few months.

Remember, unlike private market reinsurance treaties, TRIEA does not provide for a "runoff" period, where primary insurance policies continue after expiration of the reinsurance treaty.

This important point helps to demonstrate what will happen without a federal terrorism program. According to a Moody's report, 50 percent to 75 percent of all policies written prior to TRIEA's enactment adopted springing exclusions that would have automatically voided terrorism coverage beginning January 1, 2006, if TRIEA was not enacted.

Past is prologue.

Policyholders now in the market shopping for policies that run past 2007 year-end are being asked to once again accept "springing exclusions" in their insurance policies. These springing exclusions are strong evidence that without federal involvement, a sharp reduction in insurance availability will result.

The ultimate victims will be the American economy and jobs. The true targets of terrorism.

The adverse consequences of not having coverage available are, more than with almost any other line of insurance, immediate – that is, the effect on the economy would be immediate, not just after an uninsured loss.

In addition to the expected negative drag on economic activity, we would predict "forced placement" litigation if terrorism insurance capacity drops back to pre-TRIA levels. Loan documents have responded to the new terrorism insurance market by conditioning the requirement to procure terrorism insurance on "reasonable rates" and "commercially available" coverage. In recent years commercial mortgage loan servicers have made great efforts to understand terrorism risk and verify the purchasing of terrorism insurance associated with loan financing. Again, according to the national rating agency Fitch Ratings, should there be a sudden constriction in the terrorism insurance market, servicers and borrowers are likely to wind up in court battles over "reasonableness" of rates and availability. Under the current federal back-stop and make-available requirement, Fitch Ratings has observed that the courts have generally found terrorism insurance reasonably priced and available.

America's industries, and many policymakers, are highly concerned with nuclear, biological, chemical and radiological (NBCR) exposures. It is important to note that even though TRIEA does cover these perils, we continue to see no evidence that such coverage is being written, except where mandated in workers compensation coverage. Unfortunately, even with TRIEA, the private markets have failed for this important coverage. Unlike other forms of terrorism insurance, NBCR coverage is not required to be "made available" to commercial property owners and therefore is not widely available.

However, I would point out that Wharton's research last year indicated that there is more than $30 billion of captive capacity for stand-alone terrorism coverage licensed in Vermont alone. Much of this amount provides NBCR coverage and represents capacity that depends on the continuation of the federal back-stop. Should the back-stop expire, this capacity will withdraw and our nation would have virtually no insurance coverage against NCBR attacks.

Capital Markets Offer Limited Assistance

We are also aware that catastrophe bonds (CAT bonds) are sometimes viewed as a potential private sector solution. We support efforts to further investigate this potential. But, unfortunately, to our knowledge no CAT bond has ever been financed solely for an ongoing terrorism risk to property. Such bonds have been used for discreet events of limited duration where massive security precautions have been involved – such as the Olympics or the World Cup – but not to provide the insurance protection needed by an ongoing commercial enterprise. In fact, many capital market experts do not consider the world cup soccer bond (FIFA) or the life insurance bond (VITA) to be true "terrorism" risk bonds. Although both include terrorism as a possible cause of loss, the FIFA bond is primarily an event cancellation bond (also requiring the event to be restaged elsewhere if possible), and the VITA bond was designed more for pandemics than terrorism attacks.

In short, there is no evidence to suggest that rating agencies or capital market investors will be better able to quantify the risk of terrorism than have insurers or reinsurers. Nor is it likely that CAT bonds or other risk transfer mechanisms alone will be able to offer the capacity necessary to insure America's businesses, workers and property owners against the risk of terrorism. The inability of CAT bonds to provide adequate terror insurance capacity is due again to the risk uncertainty associated with man-made terrorism, uncertain potential losses, and asymmetric threat and security information likely to be known only by terrorists and by government.

Mitigation Steps are Underway

Some inquire about steps policyholders have taken to mitigate against the risk of terrorism. In fact, in the real estate industry, vast sums have been spent on security personal, surveillance systems, barriers and all manner of additional protections. Future development and design protocol already call for increased setbacks and strengthened building cores. HVAC and air intake systems are now much more heavily secured. Importantly, terrorism risk mitigation strategy is now at the "Board" level of large scale property owners. In addition, steps have been taken to encourage tenants to implement emergency protocol and to coordinate them within buildings.

More specifically, managing the risk of terrorism in the post 9/11 environment has galvanized our industry's individual and common resources to an unprecedented degree. By our industry's standard benchmarking reference — BOMA's 2005 Experience Exchange Report[1] — we are spending, as an industry, over 20% more on security than we were pre 9/11. And yet, I hesitate to mention that statistic because in the end managing risk is not principally about allocating *additional* resources, it is about strategically using *existing* resources to cost-effectively mitigate risks. Information and experience are two assets that are hard to put a dollar value on and yet they may be the most critical resources we have. Post 9/11, there has been an unprecedented degree of information sharing within our industry and with local, state and federal counter-terrorism and emergency response authorities. This sharing of information – including best practices — is being advanced through various local associations and nationally by the Real Estate Information Sharing and Analysis Center or ISAC (www.reisac.org), and the various committees and task forces of national groups such as BOMA, ICSC, IREM, AHLA, NMHC, NAA, IFMA, and the Real Estate Roundtable. We are also allocating substantial resources as an industry to support the work of Rand Corporation's new Center for Terrorism Risk Management Policy. (http://www.rand.org/ multi/ctrmp)

[1] The Experience Exchange Report is an annual income and expense benchmarking report for the commercial real estate industry performed by the Building Owners and Managers Association International for more information see www.boma.org. The report is based on the weighted average responses of 3,210 buildings, representing approximately 700 million square feet of space.

SOLUTION

Strong markets must have certainty. A long-term solution to the long term terrorism risk problem is essential.

One might ask: other countries have longer-term terrorism insurance solutions, why don't we? Much can be learned from nations such as Australia, Germany, Israel and the United Kingdom, nations that have recognized that private insurers alone cannot underwrite the risk of terror.

TRIA or TRIEA are good programs, and perhaps they can be extended long term. But they are not the only potential answer. For example, we support the authorization of a voluntary mutual reinsurance entity that would be capitalized by insurer premiums and would in turn offer reinsurance coverage for a broad range of terrorism risk. We have developed the framework for one such idea – we call it *Homeland Security Mutual.* This pool would create an incentive for the growth of private capital devoted to terrorism risk.

By creating a layer of private capital between primary insurers and the federal government, this entity would provide continuity to the marketplace so that policyholders could get the coverage they need while diminishing the role of the federal government – and taxpayers – in the terrorism risk insurance market. Under our proposal, the current federal "backstop" would, over time, be shifted away from primary insurers to this new mutual reinsurer. It would only become activated when terrorism insurance losses from a certified act or acts of terrorism exceeded a certain level. A copy of this plan is attached.

CONCLUSION

A functioning economy is a central aspect of sound homeland security. We believe, as many Members of these Committees believe, that protecting America against the economic impact of terrorism – both in the face of terrorist threats and in the aftermath of any future terrorist attack – must be part of an overall pro-active homeland security effort.

In our view, without some form of federal involvement, there will not be adequate private market capacity to insure the American economy against the risk of terrorism, nor will there be adequate insurance to enable the economy to quickly rebound from any future terrorist attack. The facts do not support a different conclusion.

American business, and the real estate industry, is highly competitive and we strongly support private, market-oriented solutions to problems. We want markets to operate freely. But sometimes they are unable to function appropriately. As Alan Greenspan has testified several times before Congress over the recent years, ". . . there is no evidence that a private terrorism insurance market has yet developed, or in fact ever can, develop."

Ensuring that terrorism risk insurance remains available and affordable for policyholders on a long-term basis must be an aspect of overall homeland security efforts. Until a long-term solution emerges for increasing the insurance industry's capacity and willingness to insure terrorism losses, we remain skeptical about the nation's ability to address financial losses in the wake of a future act of terrorism.

The clock is ticking. Our economic security, and we would assert our homeland security, hangs in the balance.

Thank you for the opportunity to participate today.

The Real Estate Roundtable

Major Features of Terrorism Reinsurance Proposal

Feature	Proposal
Overview	The program would utilize a chartered mutual reinsurer modeled largely after the UK's Pool Reinsurance Company, Limited (Pool Re). Pool Re is a mutual reinsurer that provides a layer of reinsurance for terrorism risks relying on (1) reinsurer assets and retained earnings from premium monies, (2) callable contributions from participating members, and (3) a government "backstop." The proposed program is also informed by the experience of the Australian Reinsurance Pool Corporation and the French Gestion de l'Assurance et de la Réassurance des Risques Attentats et Actes de Terrisme (GAREAT), and the 2001 "pool" proposals of the U.S. domestic industry.
Startup	The enabling legislation would authorize federal government support for a qualifying state-chartered mutual reinsurer, referred to herein as Homeland Security Mutual. Homeland Security Mutual would be directed to become operational no later than [12] months after enactment.
Board of Directors	Homeland Security Mutual would be governed by a Board of Directors, at least 40% of which would be representatives independent of member insurers, such as policyholder representatives and federal and state and local government officials. The initial Board would consist of the Treasury Secretary and a group of Directors selected by four Congressional leaders: the majority leader of the Senate; the minority leader of the Senate; the Speaker of the House of Representatives; and the minority leader of the House of Representatives; each leader would be responsible for selecting a specified number of directors. Thereafter, insurer-participants would select 60% of the Board (beginning in year 2), the Secretary would be ex officio Director, and the 40% balance of the Board would continue to be selected by the Congressional leaders. Homeland Security Mutual's Board of Directors would be charged with creating an operating plan for Homeland Security Mutual, employing necessary management and staff, and directing the affairs of Homeland Security Mutual.
Government Backstop	The Secretary of the Treasury would be authorized and required to sell only to Homeland Security Mutual retrocessional reinsurance backed by the full faith and credit of the United States, only on the following terms and conditions:

1420 New York Avenue, N.W. • Suite 1100 • Washington, DC 20005 • Phone: 202-639-8400 • Fax: 202-639-8442 • info@rer.org

Feature	Proposal
	(1) The retrocessional reinsurance would indemnify Homeland Security Mutual for 100% of its ultimate net losses (UNL) (net of any private reinsurance and "call" funds) after UNL losses have reduced its capital and surplus to less than 20% of the capital and surplus existing at the end of the fiscal year preceding the act or acts of terrorism. After soliciting the views of Homeland Security Mutual and other interested parties, the Secretary shall prescribe the terms of the federal retrocessional reinsurance and, as a condition of affording such reinsurance, may require that the terms of the reinsurance coverages offered by Homeland Security Mutual conform to the terms of the federal retrocessional reinsurance. The Secretary would be authorized to pay Homeland Security Mutual's claims against federal retrocessional reinsurance in advance of Homeland Security Mutual's payment of the underlying claims against its reinsurance. (2) The Secretary would determine the prices for the federal retrocessional reinsurance. The premium rates charged would be amounts that are sufficient over the longer term of years to cover the actuarial costs of such coverage consistent with maintenance of sufficient reinsurance capacity to preserve viable insurance markets provided, however, that Homeland Security Mutual would not be required to pay any premium for retrocessional reinsurance until such time as Homeland Security Mutual's surplus accumulates to $30 billion or more. The Secretary would invest any part of the retrocessional reinsurance premiums paid by Homeland Security Mutual, or other amounts obtained by salvage or subrogation or otherwise, in interest-bearing securities of the United States Government. Premiums and other amounts and investment income thereon would be used solely for purposes of the federal retrocessional reinsurance program, including accumulation of surplus and reserves for the payment of future losses.
Dividends	No dividends would be payable until assets and related earnings of Homeland Security Mutual reach $30 billion.
Covered Lines of Business	Homeland Security Mutual would cover the same lines under TRIA as modified by the 2005 Extension Act. Covered lines would include most commercial property and casualty lines, including workers' comp and business interruption. Covered lines would be extended to include group life as in the House passed bill in 2005.

Feature	Proposal
Definition of Act of Terrorism *CBRN*	The definition of an act of terrorism would be as in the 2005 House-passed bill, i.e., it would eliminate the distinction between foreign and domestic terrorism. Covered perils would include chemical, biological, radiological or nuclear attack, as currently under TRIA Pool Re and GAREAT.
Eligible Ceding Insurers	All entities that meet the definition of "insurer" under TRIA. However, the compulsory aggregation of "affiliates" for deductible purposes under TRIA would be eliminated (as per the 2005 House-passed bill) because original "gaming" concern is eliminated with the reinsurance purchase feature of the new program.
Participation in the Program	All direct insurers (and private reinsurers?) writing program covered lines would be subject to start-up assessments to get Homeland Security Mutual operating. Consideration could be given to designing an incentive for the provision of start-up assessments, such as a credit or write-off. They might also be required to pay modest ongoing assessments to cover the cost of administration, and make their policyholders subject to funding losses using a mandatory policyholder surcharge. Purchase of reinsurance from Homeland Security Mutual, however, would be optional. Those insurers that do not purchase the reinsurance would not become owners in Homeland Security Mutual despite any contributions made to Homeland Security Mutual. Premiums paid for reinsurance obtained from Homeland Security Mutual would not be required to be separately reported to policyholders and would be accounted as reinsurance premiums.
Availability of Coverage	Insurer members of Homeland Security Mutual would be required to provide terrorism coverage to policyholders upon request, and must reinsure all of their terrorism coverage with Homeland Security Mutual.
Access to the Federal Program	Homeland Security Mutual would stand between insurers and the federal government. Participation in Homeland Security Mutual would be required in order for any insurer to gain access to the protection offered by the federal program, i.e., **the federal backstop for individual direct insurers under TRIA would be eliminated**.
Insurer Retentions, Underwriting and Pricing	Homeland Security Mutual would establish underwriting guidelines governing eligibility for reinsurance for terrorism-related risks. Such guidelines would include appropriate standards for: (1) requiring or assessing measures to protect against or to mitigate the risk of loss due to acts of terrorism, including security measures, plans for evacuations and warnings, disaster emergency plans, and design or construction features bearing on the risk of loss; (2) protecting against adverse selection; (3) evaluation the financial condition, management qualifications and

Feature	Proposal
	underwriting experience of the insurer; and (4) assessing such other underwriting factors as Homeland Security Mutual shall consider appropriate. Homeland Security Mutual would file its underwriting guidelines with its domiciliary regulatory and the Secretary. Homeland Security Mutual would provide reinsurance to any eligible ceding insurer satisfying Homeland Security Mutual's underwriting guidelines on such terms and conditions as Homeland Security Mutual would determine, provided, however, that Homeland Security Mutual would use standard terms and conditions to the maximum extent possible. Homeland Security Mutual would not provide reinsurance coverage to any insurer or other ceding insurer that is under supervision or rehabilitation or is in insolvency proceedings. Homeland Security Mutual may provide retrocessional reinsurance to any reinsurer in accordance with the same provisions that govern the providing of reinsurance. Homeland Security Mutual would determine the prices for the reinsurance coverages provided. The premium rates charged shall be calculated so as to maintain the availability of insurance for terrorism-related risks and to cover, to the extent practical, the actuarial costs of coverage consistent with that objective. Rates could be an excess of loss premium as done by Pool Re, and could be based on geographical zones of risk as under the British and Australian programs. **T/B/D by Board [Treasury oversight].**
Legal Structure of Program	A not-for-profit statutory reinsurer authorized to transact reinsurance business would be established. This could be accomplished with either a federal or a state charter. If a state charter is employed, Homeland Security Mutual would be organized under the laws of Delaware or another jurisdiction that the Secretary of the Treasury determines is acceptable. A federal charter may have several advantages, however, it is likely to be fiercely opposed by those within and outside government that do not want the federal government to enter directly into the financial regulation of insurers.
Capacity	The capacity of Homeland Security Mutual at any given time would vary depending on several factors including the level of losses paid, the availability of private reinsurance, other sources of capital, lines of business covered, individual insurer retention levels and the permitted level of policyholder surcharges in place.

Feature	Proposal
Program Funding	Initial and ongoing administrative costs of Homeland Security Mutual would be funded by assessments on participating insurers. Homeland Security Mutual could be funded by: (1) premiums paid by participating insurers; (2) initial assessments; (3) the purchase of private retrocessional insurance; (4) pre-event alternative capital sources (e.g., catastrophe bonds); and (5) post-event policyholder surcharges (see note below).
Bonding Authority	Homeland Security Mutual could be authorized to issue post-event bonds to fund losses above the capacity of the first three sources listed above. These bonds would be repaid using the mandatory policyholder surcharge discussed below. Post-event bonds would pay a market-based interest rate and interest would be taxable to private holders of the bonds. In the event that private capital markets were unable or did not purchase all post-event bonds issued, the U.S. Treasury might be required to purchase some or all outstanding post-event bonds with the same repayment terms and conditions as available to private holders.
Policyholder Surcharge	A mandatory post-event policyholder surcharge could be used to repay the bond debt issued. The policyholder surcharge could be limited to 3% of DWP annually. This annual limit could be inclusive of all other terrorism-related surcharges which might be applied under the program and would ensure that policyholders would pay no more than 3% annually. If a policyholder surcharge is included, insurers would be required to apply the post-event surcharge, separately identify it on invoices and policies, and remit all funds collected to Homeland Security Mutual. All participating insurers would be required to apply and collect the surcharge, including those participating insurers would did not purchase reinsurance from Homeland Security Mutual. Insurers would remit to Homeland Security Mutual all funds collected from the surcharge and would not retain any portion for collection expenses or any other purpose. The surcharge would apply to <u>all</u> policyholders of participating insurers offering any covered lines of business, including those who may not have purchased coverage and who did not receive payment for losses they may have suffered.

Feature	Proposal
Program Trigger	The federal program should have an annual program "trigger" established at no more than $100 million in annual covered losses, to be consistent with the TRIA fifth program year (2007). That is, the federal program would become activated whenever industry terrorism insurance losses from a certified event (or events) exceed $100 million during the calendar year. This however creates (as now) a basis risk for smaller insurers. **Note:** To address this, Homeland Security Mutual might be authorized to write (and price) reinsurance that fits the particular loss profile of reinsured members. This could resemble the UK Pool Re cover, although the triggers would need to be adjusted for the U.S. market. Pool Re has a maximum loss retention per event per member, combined with an aggregate limit for each member's annual retention. The amount of the retentions are based on the degree of the members' participation in the Pool Re scheme. The retention for each insurer is set annually, as a proportion of an industry wide figure. For 2006, the maximum industry retentions are £100 million per event, and £200 million per annum.
Program Duration	The program would be of indefinite duration. The government retrocessionary program would expire after 6 years or when capacity of Homeland Security Mutual exceeded $30 billion, whichever comes first.
Program Cap	We suggest a $100 billion annual aggregate cap, as under TRIA. This shifts the risk away from taxpayers and the insurance industry and onto policyholders, which may be more politically expedient.
Make Available Provision	All insurers participating in the program would be required to make terrorism coverage available for covered lines on the same terms and conditions as other coverage is offered.
Amendments to Other Federal Laws	The Internal Revenue Code would be amended to allow Homeland Security Mutual to voluntarily accumulate pre-tax dollars in reserve for handling terrorism losses. Section 501 of the Internal Revenue Code would be amended to make Homeland Security Mutual exempt from federal taxation on income related to the program.

Feature	Proposal
Preemption of Related State Laws	Provisions could include the following: No state could deny or limit the financial credit for reinsurance available to any participating insurer that cedes risk to Homeland Security Mutual. Each state would be required could afford each cedent to Homeland Security Mutual credit for reinsurance on the same basis and to the same extent that financial credit for reinsurance would be available under state law as if obtained from an assuming insurer licensed in that state. Homeland Security Mutual would not be subject to state regulation (except by its domiciliary state), including but not limited to state laws or regulations governing licensing or other authorization to do business, solvency or financial condition, investments, guaranty funds, underwriting, rates, policy forms and endorsements, claims adjustment and handling, residual market plans or facilities, insurance trade practices or unfair methods of competition, or market conduct, and any private right of action arising under any such law. Ceding insurers' reinsurance relationship with Homeland Security Mutual would not be subject to state regulation, including but not limited to state laws or regulations governing rates or terms of coverage. No state could require any member insurer of Homeland Security Mutual to participate in any residual market plan, facility or similar arrangement, or any reinsurance plan or similar arrangement, making coverage available for the risk of loss due to acts of terrorism. The state commissioner of Homeland Security Mutual's domiciliary state would have the exclusive jurisdiction to regulate Homeland Security Mutual, the participation of ceding insurers in Homeland Security Mutual, and the coverages reinsured by Homeland Security Mutual, subject to Treasury Department approval.

HEARING ON TERRORISM THREATS AND THE INSURANCE MARKET
STATEMENT BY TERRY FLEMING ON BEHALF OF
THE RISK AND INSURANCE MANAGEMENT SOCIETY
BEFORE A JOINT HEARING OF THE COMMITTEE ON FINANCIAL SERVICES,
SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
AND THE COMMITTEE ON HOMELAND SECURITY,
SUBCOMMITTEE ON INTELLIGENCE, INFORMATION SHARING,
AND TERRORISM RISK ASSESSMENT

JULY 25, 2006

Good morning, Chairwoman Kelly, Chairman Simmons and members of the Subcommittees. My name is Terry Fleming. I am the Director, External Affairs, for the Risk and Insurance Management Society (RIMS), which is the country's largest professional risk management organization. I am also Director of Risk Management, Montgomery County, Maryland. I appreciate the opportunity to appear before you today on behalf of RIMS to talk about terrorism concerns and the insurance market, particularly from a risk manager's perspective.

RIMS represents the commercial consumers of insurance. As the country's largest professional risk management organization, RIMS represents nearly 4,000 industrial, service, nonprofit, charitable, and government entities, including 83 percent of the Fortune 500 companies. Our members, corporations, public entities, and municipalities, buy insurance and have a strong view on the need for, and availability of, insurance to cover risk against terrorist acts. Risk management is the practice of analyzing an entity's exposures to loss, selecting methods to mitigate the exposures, implementing the selected methods, and monitoring and adjusting the methods depending on the results. Applications for risk management cover all possible exposures to loss, ranging from estimating the number of employees who will be injured in a given period

to how to effectively use arbitrage in a global business. The methods used to mitigate exposures are non-insurance transfers, insurance, control, retention, and avoidance. For terrorism exposure, most businesses use a combination of control, retention, and insurance as mitigation strategies. For example, Entity A owns real property worth $10 billion. Much of the property is located in the central business districts of several large cities that are considered targets of terrorism. In an attempt to control exposure to loss, the company has implemented a security program consisting of cameras, motion detectors, and alarms as well as an employee identification badge program to restrict access to its buildings. Visitors are limited to one entrance where security staff logs them in and out. Redundancy and security are built into all vital computer operations.

Entity A also purchases an all-risk commercial insurance policy to cover the property including coverage for terrorism. Using a large deductible, the company retains some of the exposure. In the event that the Terrorism Risk Insurance Act (TRIA) is allowed to sunset on December 31, 2007, the entity will most likely be unable to obtain the limits of coverage they would like and therefore would have to retain a much higher level of financial risk for losses caused by terrorism.

One of the basic functions of risk management is to identify potential risks for a company in areas such as property, health and safety, and environmental and financial risk, and to identify options to mitigate those risks. Insurance coverage is a critical and necessary part of the process of protecting our companies from risk, especially risk that can produce catastrophic losses. Terrorism is one of those risks that presents catastrophic exposure to companies. Accordingly, it is vital that terrorism insurance continues to be

available to buyers of commercial insurance in a comprehensive and affordable manner when the Terrorism Risk Insurance Act (TRIA) expires.

RIMS considers the availability of adequate insurance for acts of terrorism to be not simply an insurance problem, but a national security and an economic issue. The inability to acquire sufficient insurance for terrorism coverage could result in the inability to secure financing for future construction projects, could affect existing construction projects that require evidence of terrorism coverage, and could result in major uninsured losses in the event of an of terrorism. The last four years have demonstrated that the private insurance market alone will not be able to respond nor provide adequate coverage for acts of terrorism. Acts of terrorism are too difficult to predict and therefore exceedingly difficult to price. To be insurable, expected losses must be reasonably estimable, and terrorism losses simply do not fit this criterion. For this reason, the private market has not provided adequate coverage without the federal government acting as a reinsurer of last resort. With the federal government acting as a reinsurer, there is at least some level of certainty for private carriers in predicting their maximum exposure.

Recent hurricane activity is an indicator of the effects of the industry's inability to appropriately predict and quantify large risk. There are a lot of data (100 plus years) about storms and weather patterns that are used in scientific models to predict storm frequency and severity. Unfortunately, the past four years have been totally out of the loss predictability range. The consequences are significant disruptions in the catastrophe insurance market with reduction of limits, downgrading of insurers financial ratings, insurers and reinsurers reducing their policy writings, and in some cases carriers exiting the market completely. It is significant to note that most of the uninsured portion of these

losses is ultimately picked up by state and/or federal governments without the benefit of insurance premium. Unpredictability of losses is many times greater for terrorism risk than for storms, as there are no credible historical data on losses. It is impossible to predict frequency with any degree of accuracy, and it is extremely difficult to estimate the frequency and severity of a potential terrorist event, as the timing, location and target cannot be identified in advance. Therefore, it is unreasonable to expect that the insurance market is going to respond to the need for terrorism insurance when it is having great difficulty responding to the need for more predictable risk like natural disasters.

Having adequate insurance coverage for U.S. businesses is important to the economic well-being of the nation. Without some form of backstop like TRIA, RIMS believes insurance companies will review their portfolios of business and will refuse to continue covering certain risks in areas where exposure is greatest. This would be true for workers compensation, property, and even third-party liability lines of coverage. Both large and small businesses would be affected. Such reductions in the supply of coverage could result in a significant national economic crisis. Many businesses in the United States rely on global insurance companies for coverage. These insurers decide where to underwrite risk based on their assessment of overall profitability in return to their shareholders. If the risk to write coverage is perceived to be too great, U.S. businesses will be left without the coverage they need.

After September 11, 2001 and prior to the passage of TRIA, RIMS members who have large concentrations of employees had difficulty in purchasing workers compensation insurance. Many RIMS members also found it difficult to purchase property insurance, including coverage for terrorism on buildings and construction

projects. TRIA has provided market support to ordinary employers, not just to owners of potential target buildings or businesses in a few major cities.

RIMS recently conducted an informal survey[1] of its members, asking questions about terrorism insurance coverage to get an idea of current market conditions. Eighty-six percent said that if TRIA or some other federal backstop were not in place, they do not believe that they would be able to obtain sufficient coverage for acts of terrorism at affordable prices. Eighty-two percent believe that coverage should be available for nuclear, biological, chemical, or radiological (NBCR) attacks. However, 91 percent said they did not have coverage for NBCR. Eighty-six percent said they do not think NBCR coverage would be offered by the private sector at all without a TRIA-type backstop in place.

As an indicator of what might be expected if a TRIA-type program were not in effect, 75 percent said that prior to the recent extension of TRIA, their policies contained terrorism coverage conditioned upon the extension of TRIA. Seventy-six percent stated that they believe their terrorism coverage limits would have been decreased had TRIA not been extended, and 82 percent felt their premiums would have increased if TRIA had not been extended. In this regard, one of our members reported that the premiums for coverage of a property in a large metropolitan area went from $200,000 in 2005 to $500,000 in 2006, for one half of the policy limits they had in 2005. Furthermore, the member's broker has stated that carriers are unwilling to commit to insuring projects inclusive of TRIA if the completion dates go beyond December 31, 2007, the sunset date.

RIMS believes it is critical that a program be developed to insure continued coverage for acts of terrorism, including nuclear, biological, chemical, and radiological

[1] A copy is attached.

acts. The federal government has stated that potential acts of terrorism from these sources are likely. RIMS believes that NBCR represents some of the most problematic areas in the ongoing terrorism debate. The stand-alone terrorism insurance market continues to be extremely limited, in that it really only exists for the property line and is very limited in terms of capacity and price. Rating agencies are increasing the capital requirements for reinsurers, which means that they cannot write the same limit of coverage as last year without increasing their capital reserves. The practical impact is that available limits of coverage will be reduced. RIMS believes that it is critical that a long-term solution be developed to insure that terrorism insurance will be available.

RIMS believes that the following principles should apply to development of any long-term solution:

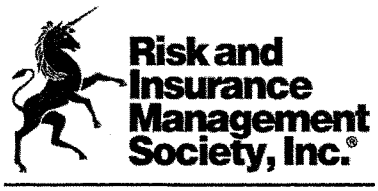
- A completely private market solution in the long term is probably not feasible because of the difficulty in predicting acts of terrorism and thus being able to price the risk properly. Businesses, as part of their corporate governance, need to be able to assess what the business risks are and how they can be quantified and treated. Without a TRIA-type program, many entities will simply be self-insured due to lack of availability or affordability of coverage or both—leaving their companies and their workers exposed to an event that could bankrupt the company.
- As risk managers, we believe that a program should already be in place to ensure an orderly and efficient response to minimize any market disruptions and ensure benefits are available to any victims—individuals or companies from a catastrophic loss scenario.

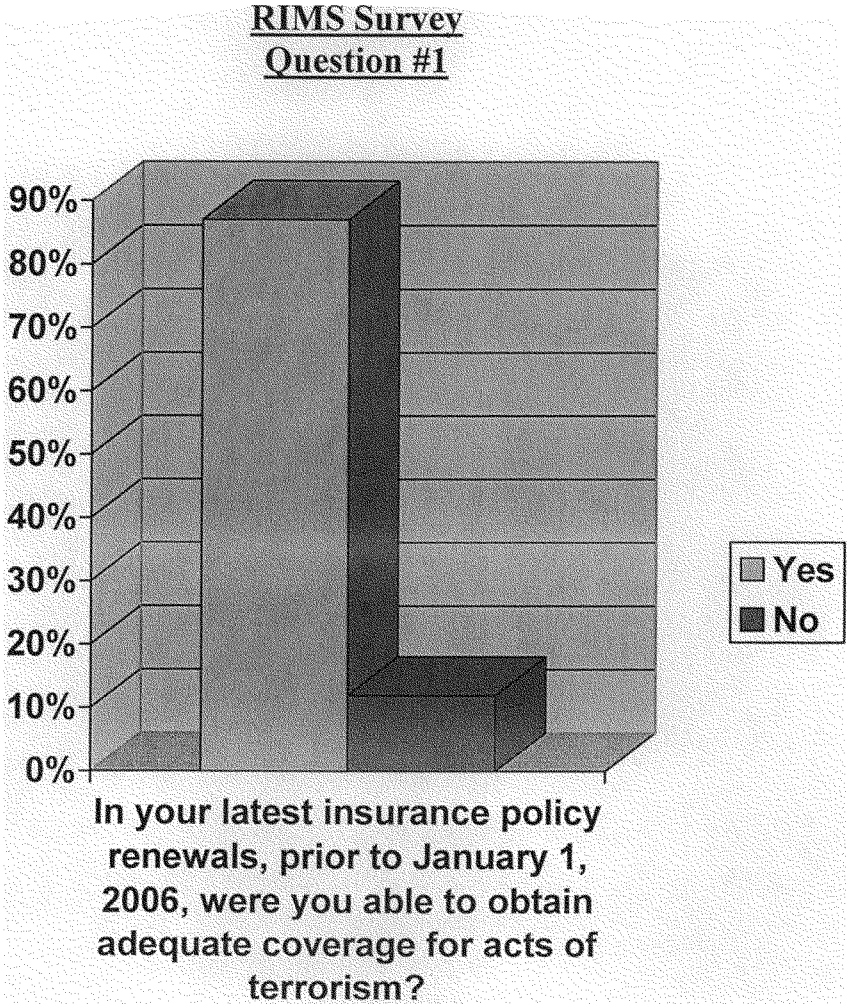
- A private/public partnership provides the best alternative to addressing the long-term needs of availability and affordability of insurance to cover acts of terrorism. Some form of risk pooling may be an appropriate approach. Regardless of the extent of private market involvement, the federal government will likely be required to continue to be involved in a reinsurance capacity at some level with the level of involvement decreasing over time.
- The solution needs to address the long-term availability and affordability of insurance coverage for nuclear, biological, chemical, and radiological (NBCR) events caused by terrorism.
- The distinction between "foreign" and "domestic" acts of terrorism should be eliminated.
- All commercial property, workers' compensation, auto and general liability lines should be included in any new plan.
- Insurance companies writing commercial lines should be required to participate in the program and be required to make coverage available for acts of terrorism.
- Tax incentives and eligibility for participation in the program should be considered to encourage creation of private insurance capacity.

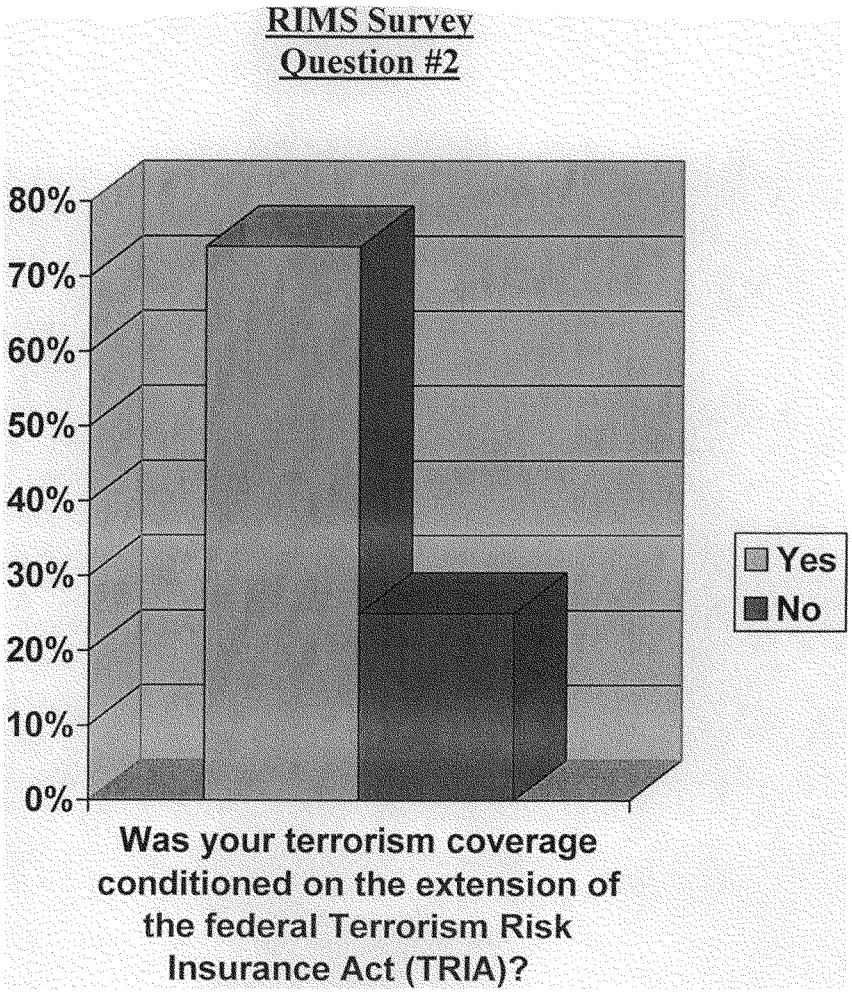
Thank you for the opportunity to testify on this extremely important issue. As we look to the future, it is imperative to find a way to provide effective and reasonable commercial insurance options against catastrophic terrorist attacks. RIMS appreciates your Committees holding this joint hearing and looks forward to working with you to address the issue of terrorism and insurance.

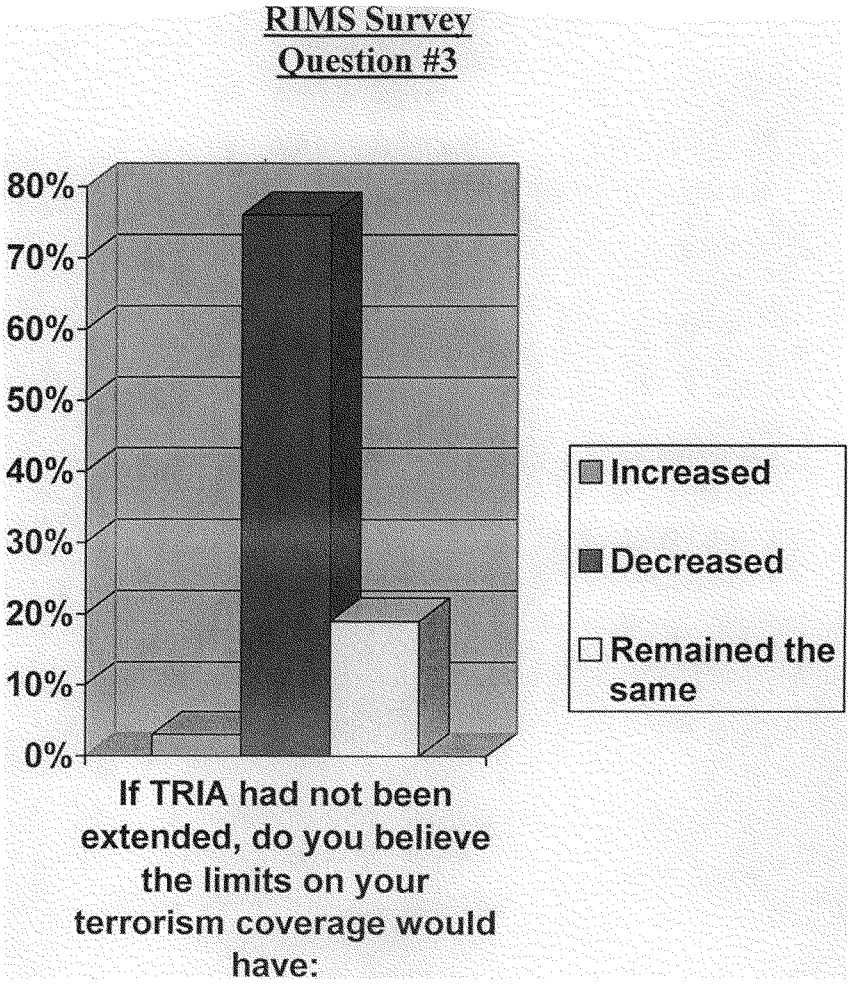
Risk and Insurance Management Society, Inc.
Member Survey: Terrorism Coverage

July 25, 2006

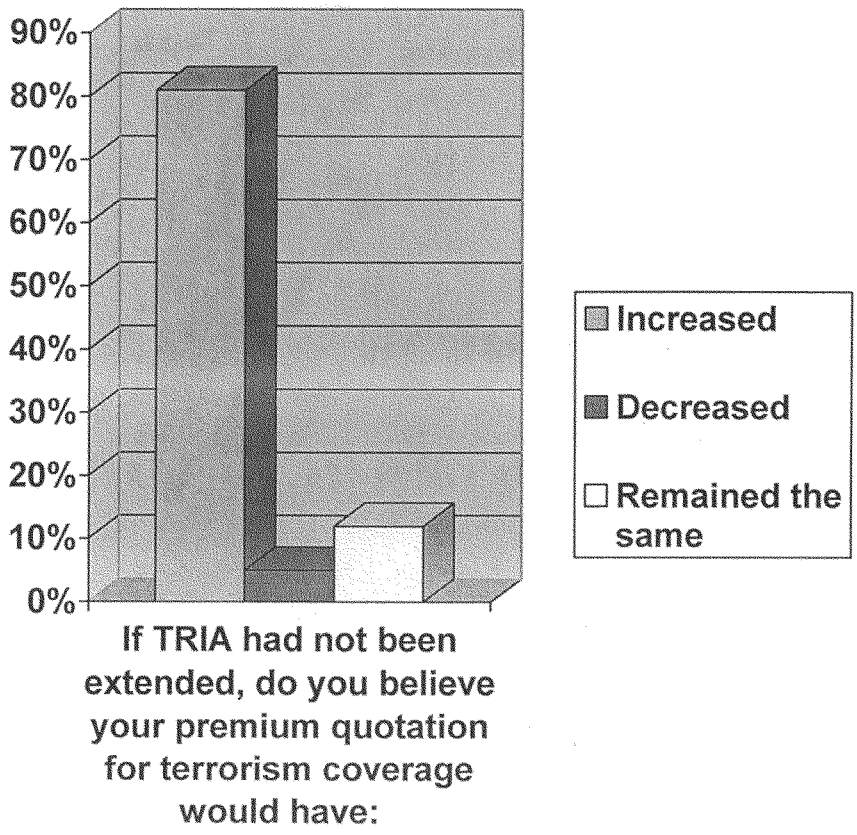



RIMS Survey
Question #1
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Yes
No
In your latest insurance policy renewals, prior to January 1, 2006, were you able to obtain adequate coverage for acts of terrorism?

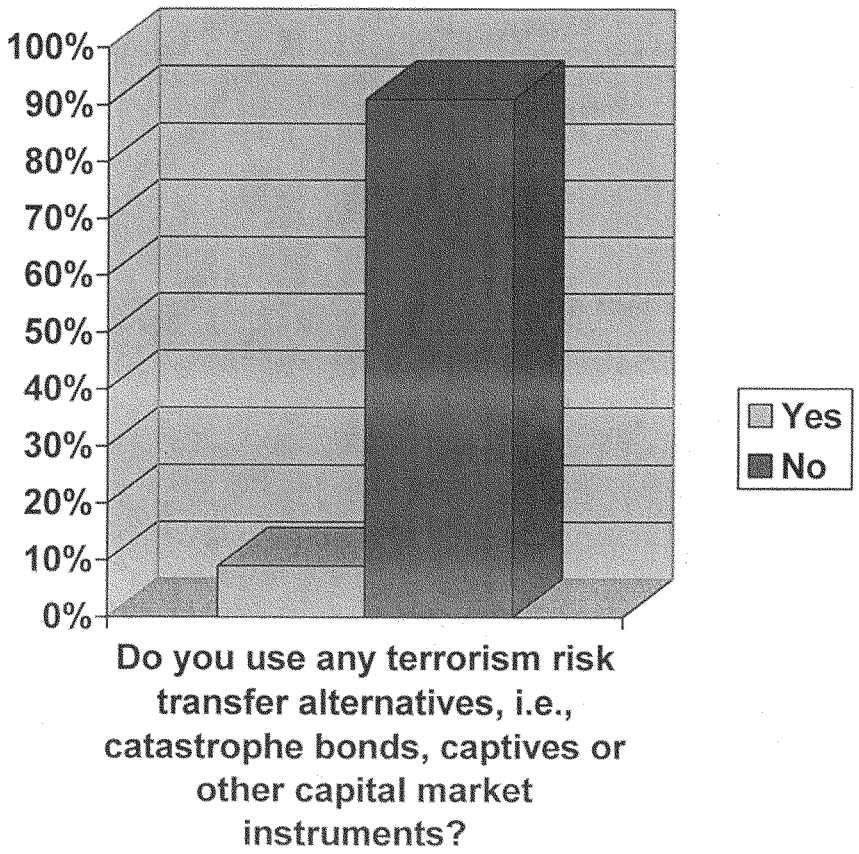

RIMS Survey
Question #2
80%
70%
60%
50%
40%
30%
20%
10%
0%
Yes
No
Was your terrorism coverage conditioned on the extension of the federal Terrorism Risk Insurance Act (TRIA)?


RIMS Survey
Question #3
80%
70%
60%
50%
40%
30%
20%
10%
0%
Increased
Decreased
Remained the same
If TRIA had not been extended, do you believe the limits on your terrorism coverage would have:

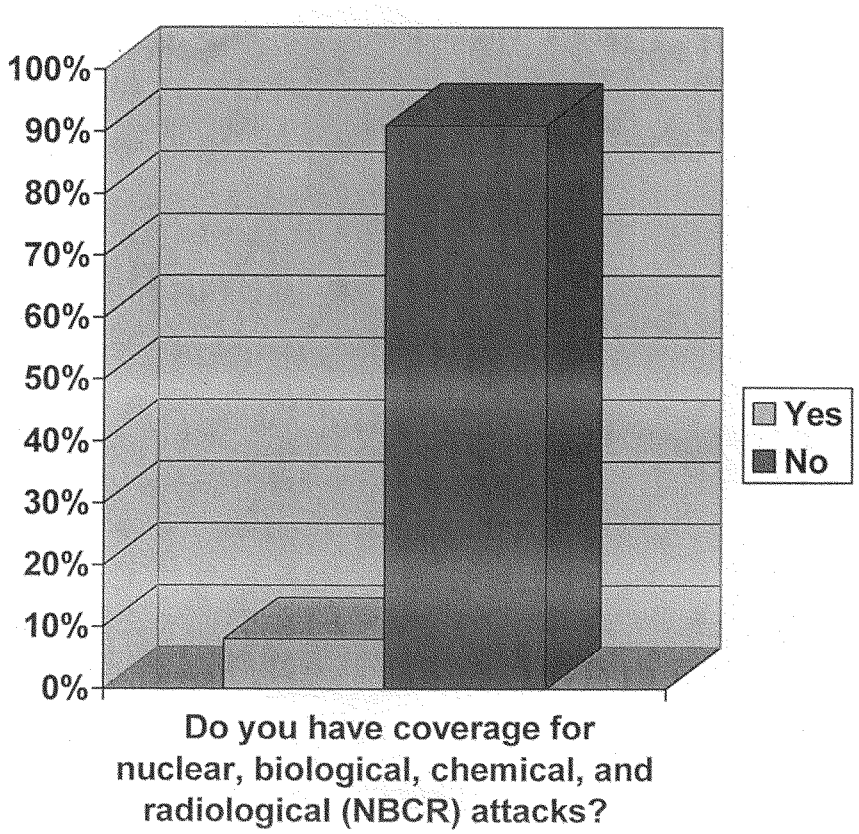
RIMS Survey
Question #4

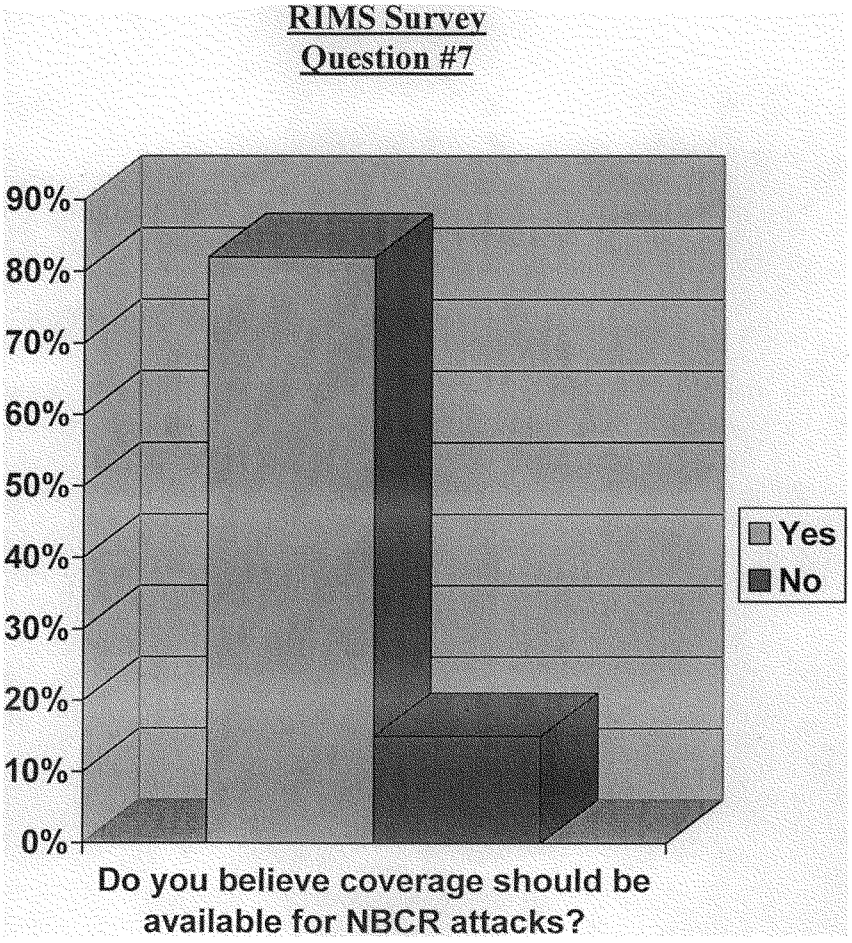


RIMS Survey
Question #5

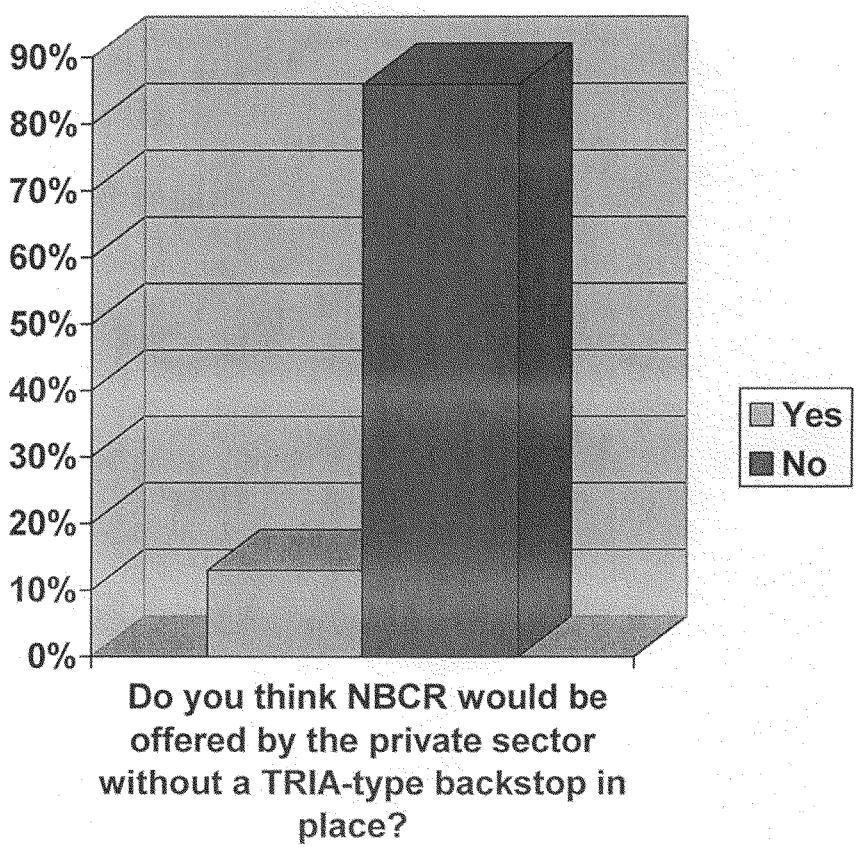


RIMS Survey
Question #6

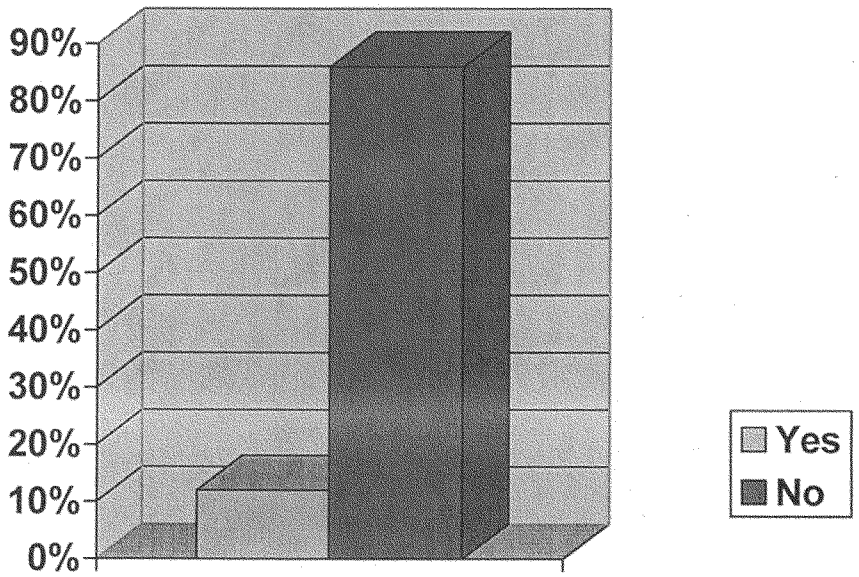



RIMS Survey
Question #7
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Yes
No
Do you believe coverage should be available for NBCR attacks?

RIMS Survey
Question #8

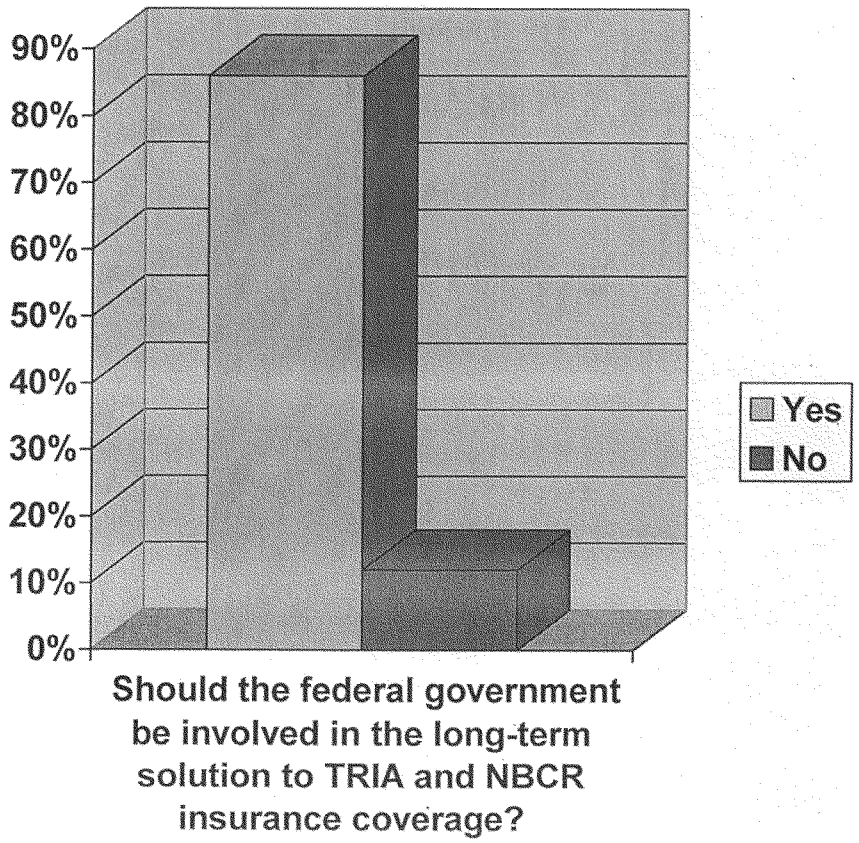


RIMS Survey
Question #9



If TRIA or some similar federal backstop were not in place, do you believe that you would be able to obtain sufficient coverage for acts of terrorism at affordable prices?

RIMS Survey
Question #10



Terrorism Threats and the Insurance Market

July 25, 2006

Testimony before the Subcommittee on Oversight and Investigations of the House Financial Services Committee; and

The Subcommittee on Intelligence, Information Sharing, and Terrorism Risk Assessment of the House Homeland Security Committee.

U.S. House of Representatives

Christopher M. Lewis
Vice President, Alternative Market Solutions
P&C Capital Management
The Hartford Financial Services Group

Chairwoman Kelly, Chairman Simmons, Ranking Member Gutierrez, Ranking Member Lofgren, and Members of the Subcommittees,

Thank you for the opportunity to appear before you today to discuss the challenging issue of managing the cost of terrorism in the U.S. economy. My goal today is to provide perspective on the difficulties faced by the insurance industry, as financial intermediaries helping companies to pool and manage risk, including the risk of terrorism. My main observations are that terrorism is inherently a public risk, that terrorism is a challenging risk to understand and manage in the private markets, and that the risk of terrorism cannot be managed solely within the confines of the private sector but only in partnership with the federal government.

Terrorism Risk is a Public Risk

The primary issue before the Congress with respect to managing the impact of terrorism on the U.S. economy is to identify the most efficient means to finance the risk of terrorism. In private insurance markets, efficiency is achieved by ensuring that the premium charged for each policyholder is based on the amount of risk that each policyholder contributes to the overall pool – in other words, by aligning costs with responsibility. Once premiums reflect the underlying risk of the policyholder, risks can be pooled within an insurance portfolio and all policyholders can benefit from diversification – the reduction in volatility around each policyholder's expected loss.

In the case of terrorism, however, the origins of the terrorist threat obviously are not in the control of individual policyholders, but emanate from terrorist groups intent on launching strikes against the United States. With responsibility for countering the threat of terrorism in the hands of the U.S. Government, the

alignment of cost and responsibility only can be achieved at the federal level, especially since government counterterrorism actions are unobservable. If left unaddressed, these unintended costs can shift production away from high risk areas to locations that are less efficient, creating a drag on the overall economy.

Terrorism is a Unique Risk

The foundation of private insurance rests on the ability to effectively pool the loss experience of policyholders exposed to relatively *homogeneous*, *random* and *independent* risks where the underlying sources of risk are *well understood* and, therefore, appropriately priced. The problem with terrorism is that it fails each of the prerequisites for pooling:

- Risks are not homogeneous – the risk of terrorism varies greatly by such factors as geographical location, industry, company reputation, and level of defensive preparation – with each of these factors dynamically changing over time in response to unobservable counterterrorism efforts,

- Risks are not random – unlike the random arrival of storms or accidents, terrorist attacks involve the purposeful, coordinated selection of targets based on the presumed objective of inflicting the greatest amount of damage while ensuring the highest likelihood of success. Terrorist tactics, methods, and targets are dynamically evolving in response to whatever defensive actions might be taken to protect policyholder assets.

- Risks are not independent – given the stated objective of terrorists to inflict a maximum level of physical destruction, economic disruption and fear, terrorism experts and federal officials have identified a large number of plausible terrorism scenarios that would involve losses of such a large scale that the attack would simultaneously impact a large proportion of any insured portfolio – threatening the very solvency of the insurance industry.

- Risks are not well understood – unlike other catastrophe risks like hurricanes and earthquakes where a tremendous amount of data is available on the probability and severity of loss events, no credible data or models exist to price or manage the risk of terrorism.

In short, large-scale terrorist attacks are not an insurable risk. Today, we simply do not have the ability to assess the likelihood of a terrorist attack, the form of such an attack, and the location at which such an attack could take place. The National Homeland Security's National Asset Database lists over 28,000 possible targets across the United States – suggesting that the next attack could be almost anywhere. At the same time, leading government experts on terrorism continue to assert that the threat of terrorism is real and growing, including the very real risk of terrorist attacks using nuclear, biological, chemical and radiological (NBCR) weapons.

The Challenge for Insurers

So how do insurance companies manage the risk of terrorism today? Insurance companies continue to offer terrorism coverage to customers through the "make available" provision within the Terrorism Risk Insurance Extension Act of 2005 (TRIEA). However, without the ability to model the likelihood of terrorist events, insurance companies cannot determine an actuarially-fair price to charge for terrorism insurance. Instead, insurance companies are forced to manage the risk of terrorism by limiting exposure concentrations in potential "high target areas." If terrorism exposure concentrations get too high relative to surplus, some insurance companies are forced to non-renew entire commercial policies to reduce the terrorism exposure – often creating hardships for the underlying policyholders. These exposure concentrations are especially difficult for certain lines of business like workers compensation and fire following coverage in certain states where exclusions for nuclear, biological, chemical and radiological attacks are not admissible.

With the extension of TRIEA, insurance companies are better able to manage these exposure concentrations, albeit within very large company retentions. The primary benefit of TRIEA for an insurance company like The Hartford is that the program would help finance losses associated with very large-scale terrorist attacks, most notably attacks carried out with NBCR weapons. Without TRIEA, we would be forced to reconsider how much exposure to the threat of terrorism is appropriate, and what additional actions are necessary to further reduce the company's exposure. In fact, with the rating agencies starting to impose implicit limits on insurance company exposures to terrorism, the lapse of TRIEA at the end of 2007 could cause substantial market disruptions and withdrawals of coverage[1].

The best glimpse of a post-TRIEA environment for terrorism insurance may be the current market for terrorism reinsurance, where companies do not face the same level of regulatory oversight or make available provisions. Citing many of the same issues identified above for primary insurance companies, reinsurance companies offer extremely limited capacity for terrorism risks, and generally no coverage for terrorist attacks committed with NBCR weapons. In fact, both the Reinsurance Association of America (RAA) and the 2005 Treasury Report on the Terrorism Risk Insurance Act of 2002[2] estimated that the total market capacity for terrorism reinsurance is only $6-7 billion, less than 10% of the reinsurance market capacity for natural catastrophe events. Moreover, most of this reinsurance is allocated to small and regional companies for portfolios considered to be less exposed to the risk of terrorist attacks.

---

[1] See for example, "Catastrophe Analysis in A.M. Best Ratings," A.M. Best Company, Inc., April 2006.

[2] See Exhibits, 6.6-6.8, Assessment: The Terrorism Risk Insurance Act of 2002, The United States Department of the Treasury, June 30, 2005.

For a national carrier like The Hartford, reinsurance capacity for certified terrorism losses on property coverage ranges from extremely limited to non-existent. For example, The Hartford's 2006 TRIEA retention is just over $1 billion. Within this TRIEA retention, reinsurance protection against property losses from certified terrorism events is effectively unavailable. In contrast, for natural catastrophe losses, The Hartford's principal catastrophe reinsurance treaty alone provides more than $600 million in coverage for individual loss events in excess of a $175 million retention.

What about the Capital Markets?

Finally, I would like to offer some perspective on the oft-made suggestion that "the capital markets" should be able to finance the risk of terrorism. I can assure the subcommittees that virtually no meaningful capacity exists today to securitize terrorism risk in the burgeoning insurance-linked securities (ILS) market. Having established and maintained an insurance-linked securitization program for natural catastrophe risks since 2004, The Hartford has spent considerable time and energy in internal research and in canvassing modeling firms, bankers, and investors to determine whether the same technology can be leveraged to help finance the risk of terrorism. While not foregoing the potential for future development, our conclusion from these efforts was that no material market capacity exists today for terrorism risk-linked securitization. Unfortunately, the same obstacles inhibiting the development of the reinsurance markets – lack of credible modeling, non-insurable nature of the risk, and aversion to the correlation of terrorism risks to the general market – has prevented the development of the terrorism ILS market. As a result, the capital markets have yet to securitize a single terrorism-linked security for property or workers compensation risks. The expiration of TRIEA will do nothing to improve this prognosis.

Conclusion

In conclusion, based on the best information available from terrorism experts on the threat of terrorism, it is apparent that the threat of terrorism is real and is continuing to grow – imposing an unintended cost on the entire U.S. economy. Recent events around the world continue to underscore the dynamic nature of the terrorist threat, making efforts to quantify or manage the risk of terrorism extremely difficult, especially for a private market that does not have the same level of access to information on the nature of the threat as the federal government. Hence, absent a fundamental change in the nature of the terrorist threat, terrorism will remain an uninsurable risk for the private market and any credible solution for financing the risk of terrorism will require a continued public-private partnership with the U.S. Government.

Thank you.

Terrorism Threats and the Insurance Market

Testimony by

Peter Ulrich

Senior Vice President, Model Management

Risk Management Solutions, Inc.

Tuesday, July 25th at 10am

to

The Intelligence, Information Sharing, and Terrorism Risk Assessment Subcommittee of
The Committee on Homeland Security and
The Oversight and Investigations Subcommittee of
The Committee on Financial Services of The House of Representatives

1. Background

Risk Management Solutions, Inc.

Founded at Stanford University in 1988, RMS is the world's leading provider of products and services for the quantification and management of catastrophe risks. RMS grew rapidly in the 1990s, offering technology and services for the management of insurance catastrophe risk associated with natural perils such as earthquakes, hurricanes, and windstorms, as well as products for weather derivatives and enterprise risk management for the P&C insurance industry. Today, RMS is also the leader in risk modeling for man-made disasters associated with acts of terrorism by analyzing the impact of weapons of mass destruction on property and people for many sectors of the insurance industry.

Terrorism Modeling at RMS

RMS developed the first commercially available model of terrorism risk in the U.S. in 2002, a model that was widely acclaimed as ground-breaking. RMS has undertaken a review and updating exercise for the model each year. RMS maintains a team of advisors which includes some of the world's leading authorities on terrorism threat, asymetrical warfare techniques, and security and intelligence issues. RMS was a co-founder with RAND of the RAND Center for Terrorism Risk Management Policy (CTRMP), a policy research think-tank to explore terrorism issues in government and private sector interraction.

The RMS® U.S. Terrorism Risk Model provides a comprehensive analysis of terrorism risk in the U.S., quantifying risk from both foreign and domestic terrorist organizations. It supports multi-line risk analysis for both certified and non-certified events causing property loss, business interruption, workers compensation claims, and losses to Life & Health lines.

The model quantifies the impact of a representative suite of potential terrorist attacks, ranging from various conventional weapons historically used by terrorists including chemical, biological, radiological, and nuclear (CBRN) weapons, also known as "weapons of mass destruction." Attacks are simulated using sophisticated models that analyze the impact of these weapons on property and people. Casualty estimates produced by the model can assist with risk assessment of other insurance lines including life, personal accident, and accidental death and dismemberment.

Attacks are modeled at potential terrorist targets across the U.S., implementing techniques for target prioritization that replicate the processes of target selection known to be employed by terrorist organizations. The numbers and types of attacks incorporated into the model include the potential for multiple synchronized attacks, a signature of Al Qaeda and its associated organizations around the globe.

RMS does **not** attempt to predict the time and place of the next terrorist attack. Our focus is on modeling the ***likelihood*** of an attack occurring at a given target, using a specific weapon, and then determining the ***consequences*** of such an attack.

Terrorism is a rapidly changing risk. RMS regularly assesses and reviews the risk environment, producing a periodic Terrorism Risk Briefing for clients and parameterizes the probabilistic model through the provision of Risk Outlooks. Clients are able to use alternative Risk Outlooks to

perform sensitivity analyses against U.S. exposures and test risk management decisions under different assumptions for potential future developments.

Applications of the RMS Terrorism Model

Well over 100 insurers, reinsurers and brokers in the Property Casualty and Life & Health industries are now actively using the RMS Terrorism Model to manage risk. These companies are using the model to:

- Idenitify and quantify multi-line exposure concentrations
- Quantify the greatest potential losses to portfolios under a management selected benchmark attack scenario
- Generate aggregate exceedance probability (AEP) loss distributions by line of business and in total
- Analyze key drivers of loss by account, location, target type, and city
- Quantify the risk of fire-following terrorist attacks for policies ***without*** terrorism coverage
- Evaluate alternative treaty reinsurance or securitization structures for risk transfer
- Analyze the impact of TRIA under various insurance take-up rates
- Examine the impact of exclusions (e.g. CBRN) on re/insurance offerings
- Pricing re/insurance policies
- Design and implement underwriting guidelines to diversify portfolio risk

There are also a number of corporations and entities outside the insurance industry using the RMS Terrorism Model. For instance the Congressional Budget Office used the model to measure the risk transfer effectiveness of TRIA and evaluate different government/insurer sharing options for the Terrorism Risk Insurance Extension Act.

Terrorism Risk Management Differs from Natural Catastrophe Risk Management

While the management of natural catastrophe perils focuses heavily on probabilistic output, the dynamic nature of terrorism risk requires an approach that focuses on exposure management, scenario modeling and probabilistic loss modeling. This three-pronged approach is used to analyze terrorism risk from a number of angles, allowing risk managers to triangulate on the risk.

The first step in managing terrorism risk is exposure management. Insurers need to identify, understand and control their exposure accumulations across multiple lines of business, especially in urban areas. For example, depending on the size of the company, they may set a guideline that limits the amount of multi-line exposure in any 400 meter radius to $500 million. By limiting business in over-exposed areas or flagging possible non-renewal accounts, companies are able to maintain acceptable levels of risk.

A deterministic approach is then used to quantify loss due to potential attack scenarios. Typically, companies select a benchmark event in order to manage losses to an acceptable loss threshold. A major conventional attack, such as a 2-ton or 5-ton truck bomb, is typically selected given this type of attack mode is relatively likely to occur and will produce a significant amount

of loss. Thus, a company may set a guideline such as the modeled losses from a 2-ton bomb anywhere in the U.S. can not cause multi-line losses to their portfolio of more than $100 million.

While these first 2 methods can help control a companies absolute exposure to terrorism risk, one also needs to factor in the relative likelihood of an attack mode and target location. This is accomplished through use of the probabilistic model. With this step the insurer manages their terrorism risk around probabilistic loss levels such as annual average loss or return period losses (250yr, 500 yr, 1,000 yr)

2. Risk modeling for terrorism insurance

The RMS model of terrorism risk is based on open source material. It relies on the following sources of information:

- Statistical catalogs of terrorism events and open source event reports
- Academic literature on the study of the motivation and modus operandi of terrorism threat groups
- Analysis of the costs and logistics involved in mounting terrorist attacks and theoretical analysis of the potential for carrying out attacks not seen historically
- Expert opinion interpreting latest trends

Wherever possible, RMS models are empirical and derived from objective and quantitative data.

The model represents the motivation of the terrorist threat groups, as interpreted by some of the leading academic experts on terrorism and political violence. It mathematically represents the intent and 'utility' to the terrorist group of carrying out different types of attacks on different targets. It incorporates this within a game theory framework of how actions by the security services, and improving the defenses for different types of targets, will affect the tactical decisions by terrorist groups on the attack modes they choose and the targets they prioritize.

The RMS model draws on a catalog of historical terrorism events. This catalog now includes over 24,000 events, of which 1,000 are 'macro' (i.e. car bombs or worse) terrorist attacks carried out worldwide since September 2001. Statistical analysis of this attack catalog information yields valuable insights into general attack patterns and targeting preferences that can be incorporated in the modeling. For example, the catalog shows that almost half (around 45%) of all jihadists macro attacks occur in the economic or political capital city, and two thirds occur in a major top 5 city of any particular country. This demonstrates the prioritization of major cities for large scale attacks by jihadists, which corroborates their publicized intent to maximize destruction and economic damage. Mapping this kind of prioritization onto the United States, shows risk being concentrated in major cities like New York, Washington, Chicago, Los Angeles, and other cities, far more than if the risk analysis had used only their population statistics as the metric.

Other important information about the likelihood of different attack modes being used in a strike against the U.S. can be gleaned from an analysis of recent attacks in other countries. For example the relative likelihood of vehicle bombs of different yield can be seen in the statistical distribution of different bomb sizes that have been perpetrated or attempted in countries with similar security environments to the U.S. This is supplemented with additional analysis of the relative difficulties ('logistical burden') of putting together attacks of different levels of skill, explosive material, manpower and other equipment.

Where factual data is not easily available, for example to assess the likelihood of an attack types that has never been carried out before – and the obvious example being attacks involving chemical, biological, radiological or nuclear (CBRN) weaponry – then we have to use supposition, informed by additional analysis, background material, expert opinion and other open source material. An example is a survey RMS commissioned for our last parameterization of the terrorism model, reviewing material on jihadist websites referring to CBRN attacks, as input into our estimates of jihadist intent and capability to carry out CBRN attacks within the U.S.

To assess the frequency of terrorist attacks being experienced in the U.S. we calibrate a model of the number of attacks that are likely to be attempted per year, and the number of attempted attacks that are likely to be interdicted. We monitor this component data (attempted attack frequency and interdiction rate) for all relevant countries and also attempt to quantify uncertainty on these parameters. We use expert opinion and trend analysis to estimate this frequency for the next twelve months and for longer periods, such as the average over the next five years.

3. The use of intelligence information in risk modeling

Using classified information in models would limit insurers ability to model and manage risk

RMS has not had access to classified intelligence information in the building of the model, nor sought to attain clearance in order to incorporate it.

Intelligence information could be made available for use in insurance risk models in one of two ways: either by declassifying information so that insurers could use it, or by requiring users of models that incorporate classified information to have security clearance to run the model or to analyze output.

The second option presumably would enable more information to be used, but if insurance companies were required to have employees with security clearance on staff in order to model their terrorism risk, then we could see this being a major obstacle to insurers using classified modeling in the management of terrorism risk.

A better option would be to explore certain data that could be declassified for insurers to have access to.

Risk information is less time sensitive than intelligence information

Terrorism risk analysis is fundamentally different from intelligence operations. Most intelligence information is geared to anticipating and preventing the next terrorist attack. Insurance companies by contrast are assessing the overall landscape or pattern of risk: the frequency and severity of likely losses that may occur, for example which cities and which parts of cities and types of insured asset, are more at risk than others. They also have a very different timescale over which they are interested. Intelligence information is often time-sensitive. Insurance companies are managing insurance policies of a year or more duration, so are assessing a gradual shaping of a portfolio over a period of one or more years. Insurance pricing cycles last several years: insurance risk management is about managing levels of loss and balancing capital across this multi-year cycle.

RMS updates its model once a year, and issues interim 'Briefings' to its clients, alerting them to emerging trends, every three to four months. Insurance clients are reluctant to change their modeled view of risk more often than this.

A lot of the information needed for terrorism modeling becomes public over time

Most of the important information about terrorism activity becomes open source after some time. Actual attacks are known, and salient facts about the target and operational methods used are usually part of public briefings. When alleged attacks are interdicted, RMS tracks indictment papers from arraignment and other public statements, which often detail the evidence for the targets and modus operandi suspected. The fact that there is usually a considerable time delay between an arrest being made and a charge or public disclosure of the suspected plot is not usually an issue for the modeling. RMS accumulates such material for an annual review and updating of its model.

4. Adding intelligence information to risk modeling

As a risk partner with the government, the insurance industry should be fully informed

Insurers' uncertainty about terrorism risk includes concerns about information asymmetry. Classified information is today an "unknown unknown". Declassifying certain information may improve insurer's confidence that they have access to the relevant information about their risk and increase the willingness of the insurance industry to be a risk partner with the government in sharing terrorism risk, for the good of all U.S. industry and commerce.

Insurers do not need real time information

Insurers are not like the security services – they have less need for real-time information. This is due to the fact that even if they knew of a definite, imminent attack, their ability to minimize the risk to their existing portfolio from the attack would be very restricted. They would be unable to cancel insurance policies or to change policy terms. Insurers would perhaps be able to protect their own balance sheets by purchasing reinsurance, but this has the potential to create information asymmetries if their reinsurer was not privvy to the same information.

Real time information provision would need careful management to avoid commercially disadvantageous information asymmetry

Real-time information might potentially be useful for underwriting new policies. For example, if the intelligence services disclosed information that a certain building might be the target of an attack, an insurer being asked to insure that building might chose not to offer coverage, or offer coverage at a very different price than they would have absent the intelligence. A process of disclosing information to the insurer about an imminent attack would presumably have to include a wider process of informing the building owner or other potential purchaser of insurance to avoid commercially disadvantageous information asymmetry.

5. Useful information if classified information was available

Classified information that is not currently available to the insurance industry that might be useful for risk modeling would include the following:

Information on interdicted attacks

The number of attempted attacks or the number of suspected attacks that intelligence services have identified over the past five years that have not been made public – i.e. where suspects have not been arrested or indicted or for other reasons no information has been made public. The stage that the plot had reached and an objective assessment of the degree of confidence with which these attacks are suspected would be helpful. This currently unavailable information would enable insurance companies to make a better assessment of the number of terrorist attack attempts per year, which combined with an assessment of the likely rates of attempted attacks succeeding, provides the likely average annual frequency of experiencing successful terrorist attacks: a key metric for managing the risk.

Identification of changing trends

Where intelligence identifies something that changes the picture of risk, or indicates a new trend in the modus operandi, or targeting patterns of threat groups, it would be useful for the insurance industry to factor this into their risk analysis as early as possible, particularly given the long reaction time required for the insurance industry to reshape its portfolio or change its risk transfer arrangements. An example would be a shift in terrorist groups to go after economic targets as opposed to focusing on high-casualty outcomes, or the employment of a new method of attack.

Capability assessments

The potential for terrorist threat groups to carry out attacks more severe or more sophisticated than others have done historically is an area of expert opinion. This includes the use of very large yield conventional bombs and also the use of chemical, biological, radiological or nuclear weapons (CBRN). Assessments of these using only open source material would not be able to factor in additional circumstantial data, such as known quantities of explosives or other materiel that are missing, or a known missing nuclear weapon from a military arsenal.

Intelligence assessment of the likelihood of an attack using these types of agents using classified sources are likely to be better than those using only open source.

Quantification of other inputs on terrorism risk

Other inputs into the modeling of terrorism risk could also be improved with access to briefings or assessments by those with access to classified information. These would include information such as:

- Assessments of the number of suspected jihadist sympathizers – and their geographical concentrations, to assist with determining the probabilistic distribution of number of active jihadist terrorist operatives, and numbers of attacks that could potentially be attempted

- Intelligence views on the quantitative effectiveness of border security (i.e. the likelihood of a terrorist operative or cargo passing undetected through the current measures in place), including ports and airports.
- Security ratings of individual cities or individual targets
- Internal assessments of weakspots in defenses, high risk areas or problems in security that could cause specific vulnerabilities that may take some time to fix.

Information provision does not need to be highly specific

These information inputs listed here show that significant improvements to the confidence and ability of the insurance industry to model and manage terrorism risk could be achieved without providing highly specific information. For example, it would not be necessary for the data on attempted attacks to contain information on all the operational details known to the intelligence services – it would be sufficient to provide aggregate numbers or summary information about the type and scale of plot suspected and some classification of stage and confidence. Assessments of trends would not need to identify sources of the data that suggested the new assessment. Assessments of numbers of jihadist sympathizers would not need to identify individuals or disclose names or other details.

The insurance industry would benefit from aggregate information that plugged the gaps in the information they currently have access to. The insurance industry is at present unsure what it is that they do not know. They would benefit from a snapshot of the information that at present they do not know.

6. Comparison of Uncertainty in Natural Castrophe Models to Terrorism Models

Frequency Control

Einstein remarked that Nature is subtle, but not malicious. There is no universal definition of terrorism, but all such acts are recognized as being malicious. Does this imply necessarily that the uncertainty in risk assessment for terrorism is far greater than that for natural catastrophes? The answer to this question depends on the political regime against which acts of terrorism are perpetrated. The destructive forces of Nature are beyond human control. But through strengthening counter-terrorism legislation and empowering the intelligence and law enforcement services, there is much that democracies can do to control terrorism, albeit at an increasing cost to civil liberties.

Last year, the Greek alphabet had to be used to name the latter Atlantic tropical storms. Meteorologically, it is possible for both the Latin and Greek alphabets to be exhausted: fifty tropical storms in one hurricane season is a possibility. However, given the post-9/11 diligence of the NSA, CIA, FBI and their intelligence counterparts across the world, it isn't possible for fifty major attacks against the US homeland to be planned without anyone being arrested - one successful terrorist attack alone would be considered an intelligence failure. Thanks to the vigilant security services, the uncertainty in the frequency of successful terrorist attacks is smaller

than the uncertainty in the frequency of land-falling Atlantic hurricanes. Considering future terrorist activity, it isn't a matter of if but when; with hurricanes, it isn't a matter of when, but how many.

Hazard Concentration

Earthquakes can occur anywhere in the U.S., but earthquake hazard is concentrated around active geological faults. Similarly, a terrorist attack can occur anywhere, but terrorism hazard is tightly concentrated within the principal populous urban centers with international name recognition. Since 9/11, Islamist attacks have followed Dr. Ayman Al-Zawahiri's injunction that Al Qaeda should choose targets that the worldwide Muslim community approves. Enormous accumulations of risk in New York and other major cities limit industry capacity to provide terrorism coverage. The accumulation problem would be less acute if there were more uncertainty over terrorist targeting.

CBRN Severity

The biggest source of volatility in terrorism risk assessment is not attack frequency, but the severity of extreme CBRN attacks. The size of the greatest Californian earthquake is limited by the length of the San Andreas Fault. If this maximum earthquake were to occur, the insurance loss would be massive, but the burden of loss could be withstood by the insurance industry worldwide. By contrast, there are realistic CBRN scenarios that are so catastrophic as to ruin utterly the capital base of the global P&C insurance industry. The variability in loss potential from an extreme CBRN attack is far greater than that from a Magnitude 8 earthquake. However, this does not hold for the variability in loss potential from a conventional terrorist attack.

7. The Insurability of Terrorism Risk

RMS is a co-founder with RAND of the RAND Center for Terrorism Risk Management Policy (CTRMP), a policy research think-tank to explore terrorism issues in government and private sector interraction. Through our work with RAND and other clients, RMS analysis has been used and cited in many of the studies published in the debate over TRIA, including:

- 'Cost Estimate for H.R. 4634; Terrorism Insurance Backstop Extension Act of 2004'; Congressional Budget Office, U.S. Department of the Treasury; November 2004.
- 'Issues and Options for Government Intervention in the Market for Terrorism Insurance'; RAND Center for Terrorism Risk Management Policy, Sept 2004.
- 'TRIA and Beyond'; Wharton Risk Management and Decision Processes Center, August, 2005.

In addition, RMS has published an independent, objective study on the government's role in terrorism insurance entitled "A Risk-Based Rationale for Extending the Terrorism Risk Insurance Act". This study can be downloaded in its entirety at http://www.rms.com/Terrorism/Publications/. The executive summary of the document is included below.

Executive Summary: "A Risk-Based Rationale for Extending the Terrorism Risk Insurance Act"

RMS models terrorism risk and assists insurance clients with terrorism risk management. This report provides insights from the modeling of terrorism risk to the debate around the renewal of the Terrorism Risk Insurance Act (TRIA).

The U.S. continues to be the target of political violence from Islamic militant threat groups worldwide, and anti-American sentiment shows no sign of abating. The U.S. has become more secure and improvements in counter-terrorism measures are making it harder for terrorists to succeed in perpetrating large scale attacks. However, the chance of a major terrorist attack in the homeland U.S. still remains. There is a chance that a future terrorist attack could cause catastrophic losses on a scale that far exceeds any losses previously faced by the insurance industry and possibly beyond the resources of the insurance industry to pay.

Terrorism is a unique peril and poses complex risk management issues for insurers. Terrorism risk management challenges include:

1. Terrorism can potentially cause much greater insured loss than from natural catastrophe perils such as earthquakes, hurricanes and floods, and claims could potentially exceed the total capital of the P&C insurance industry
2. Diversification of the risk is problematic – terrorism risk is highest in the places where there is the greatest demand for terrorism insurance and highest concentrations of value
3. State regulations severely limit insurers ability to price and control their exposure
4. Fully pricing for the uncertainties associated with terrorism risk could make insurance prohibitively costly
5. Government is an active player in shaping the risk which insurers cover

A major benefit of having TRIA in place is it has allowed key sectors of the economy to return to "business as usual". TRIA has succeeded in leading to the creation of a relatively stable, viable market for terrorism insurance allowing commercial businesses, real estate owners and construction companies located in areas of perceived high risk to obtain coverage from terrorist attack. Further, TRIA has allowed three years of experience to be gained, to test out market appetites and to explore potential opportunities.

While some view TRIA as a government subsidy, the insurance industry assumes the first dollar loss, and in over 90% of attacks, the industry pays the majority of the loss. The insurance industry bears over 80% of the overall terrorism risk, measured in annual expected loss. TRIA protects the insurance industry only in the case of extreme losses that could force them out of business. It provides the insurance industry with solvency, not subsidy. Without TRIA, many insurance companies will take the same decision as they did in 2002 and quit the market.

The Treasury has proposed a number of modifications to the structure of TRIA in considering its extension, mainly to leave a greater share of terrorism risk to the insurance industry. These include raising the threshold of 'certified' events; raising insurance company retentions; changing the Federal Government co-payment share, and reducing the number of lines covered by TRIA. While revising the TRIA structure may be sensible, the Federal Government should closely analyze the impact of retention increases and co-payment adjustments as these changes could threaten the solvency of some insurers and defeat TRIA's original objective.

An extension of TRIA is needed because the chance of ruinous losses will otherwise force a large majority of insurers to quit the terrorism market. There are many variants in how the Federal Government could participate in a terrorism insurance market. The most practical in the current legislative timescale is to renew TRIA.

UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON FINANCIAL SERVICES
FINANCIAL SERVICES OVERSIGHT SUBCOMMITTEE
COMMITTEE ON HOMELAND SECURITY
HOMELAND SECURITY INTELLIGENCE SUBCOMMITTEE

"TERRORISM THREATS AND THE INSURANCE MARKET"

JULY 25, 2006

AMERICAN INSURANCE ASSOCIATION

The Terrorism Risk Insurance Act (TRIA), as modified and extended through TRIEA (also known as the TRIA Extension Act) provides a federal backstop in the event of a catastrophic terrorist attack on U.S. soil. The President's Working Group on Financial Markets (PWG) currently is conducting a study (due on September 30) of the long-term availability and affordability of insurance for terrorism. This study is likely to initiate congressional debate about the best long-term approach for handling terrorism insurance risk.

The American Insurance Association (AIA) represents approximately 400 major insurance companies that underwrite about one-third of the U.S. commercial insurance market covered by TRIA and TRIEA; the membership includes half of the top ten commercial lines writers in the U.S. Terrorism insurance is among the highest priority public policy and marketplace issues for our members.

AIA members have worked diligently to design workable private sector solutions to managing terrorism risk that could serve as alternatives to the federal backstop in TRIA and its successor, TRIEA. However, the potential magnitude of loss greatly exceeds the available private sector capacity, rendering an ongoing federal program vital to effective management of terrorism risk. With this reality in mind, AIA is proposing a new long-term approach (an outline of which is attached) intended to encourage creation of new private sector capacity while recognizing existing, fundamental constraints, particularly with respect to severe or unconventional acts of terrorism.

This statement briefly describes the dimensions of terrorism risk, the limitations of private sector risk management, and AIA's proposed solution.

The terrorism threat still looms large

Unfortunately, the terrorism threat that came to the fore on September 11, 2001, is grave and uncertain. The tragic July 11, 2006, terrorist attack in the Indian city of Mumbai (almost exactly one year after the London Underground bombing) was the latest example of the physical and economic loss that terrorists can wreak on civilian populations. Earlier this month, the Federal Bureau of Investigations reported publicly that it had broken up the early stages of a plot by terrorists with suspected ties to al-Qaeda to attack the transit tunnels under New York's Hudson River. These recent events underscore that, notwithstanding the government's success to date in preventing another major terrorism strike in the U.S., it may not be a matter of if, but when, another catastrophic attack will occur on U.S. soil. It is against this reality that insurers must grapple with terrorism risk.

Terrorism remains an uninsurable risk

Just as the terrorism threat has not abated, the characteristics that make terrorism an uninsurable risk remain as strong today as they were immediately following September 11, 2001. These include the: 1) difficulty of predicting the likelihood of a major terrorist attack; 2) concentration of insured lives and property values in business centers; 3) magnitude of potential loss from an extreme terrorist attack, particularly those that involve the use of unconventional weapons; 4)

limits of mitigation in reducing terrorism losses; 5) the lack of available public information necessary to analyze the risk; and, 6) legal, regulatory, and financial hurdles inherent in the current state-regulated insurance system. While TRIA and its extension do not erase any of these criteria that make the risk uninsurable or otherwise constrict the free market, they put a box around the volatility associated with terrorism risk and, therefore, facilitate both coverage availability and affordability. Moreover, the statute's "make available" mandate helps assure that terrorism coverage is available for all policyholders that wish to purchase it, and that all workers are protected in the event of death or injury due to a terrorist attack.

CNBR attacks pose insurmountable challenges for insurers

All of the aforementioned concerns are exacerbated with respect to chemical, nuclear, biological and radiological (CNBR) terrorist attacks. The magnitude of potential loss associated with CNBR attacks makes this risk impossible to manage in the absence of some control mechanism. According to modeling conducted by the American Academy of Actuaries, a single, large-scale CNBR event has the potential to cause insured losses of *$700 billion* or more, depending on weapon type and location. Even a medium-scale CNBR attack could result in insured losses in excess of $100 billion in a major U.S. city.

In addition to sheer magnitude, there are several other reasons why CNBR terrorism poses problems even with the private-public loss sharing provided by TRIA and its successor. CNBR attacks are the 21st century equivalent of war in terms of potential for broad physical and psychological damage to individuals and businesses throughout the United States. In addition to huge financial costs of compensating victims, losses could paralyze the economy and shut down sources of insurance industry capital needed to pay current and future claims and to allow continued servicing of a wide range of policyholders. Moreover, CNBR weapons instill a special "fear factor" that exceeds the direct damage they cause. Rational or irrational public reaction can result in widespread, direct and indirect damage that private insurers cannot possibly foresee or develop effective programs to counter.

From a timing perspective, damages from CNBR attacks could take years, if not decades, to quantify. Unlike damages from a major conventional attack, which can be assessed and reasonably quantified within one to three years, CNBR damages would take much longer to determine, in part because of the latent nature of potential injuries. Such long-term uncertainty undermines insurer ability to make knowledgeable underwriting, pricing, and reserving decisions.

Additionally, insurers cannot spread CNBR risks to private sector reinsurers or the capital markets, as discussed below.

Modeling has improved but does not create capacity

Prior to September 11, 2001, insurers did not consider the truly catastrophic aspects of U.S. terrorism risk in their portfolios. Since that time, insurers have improved their ability to measure and manage their accumulation of terrorism risk exposures through the use of catastrophe models. However, one should not confuse the ability to measure and cope with terrorism risk accumulations with the ability to insure terrorism.

Insurers use terrorism risk models to estimate the amount of insured loss from a static event (i.e., a deterministic model), so that they can manage their respective accumulations of risk geographically to a level that is expected to fall within their risk tolerance.

In the terrorism context, deterministic modeling presents significant limitations. First, the technique does not consider the likelihood of the selected event (i.e., provide predictive modeling), which is an essential requirement of sound insurance underwriting. Second, deterministic modeling is based on an assumed event. If the actual event exceeds the assumed event, the insurer's losses would be greater than the model predicts. Third, the technique assumes a single event in the future, but terrorists can strike in multiple venues at the same time. Finally, modeling is generally only available for property, workers compensation and group life insurance – not liability insurance.

Most important, models do not provide insurers with any additional capacity to insure terrorism risk, and in fact may result in reducing the amount of coverage provided by individual insurers in perceived high-risk or high-density locations. While developing this improved understanding of the terrorism loss potential is important to protect solvency, it does not further TRIA's goals of improving availability and affordability of terrorism insurance.

Private reinsurance and capital markets will not fill gaps if TRIA expires

Given continuing grave uncertainty and potentially catastrophic levels of loss, the private market simply lacks the capacity to absorb terrorism risk without a mechanism to spread it beyond the capital of U.S. direct insurers. The two potential private risk-spreading mechanisms – reinsurance and capital market investment – remain largely unavailable and would be wholly inadequate were TRIEA to expire.

According to the Reinsurance Association of America (RAA), there currently is an estimated $6 billion to $8 billion of private terrorism reinsurance available. Most of this capacity specifically excludes coverage for CNBR events and, as a general matter, is most often available for clients deemed to be low hazard.

There is no evidence that the amount of private terrorism reinsurance has increased in response to the higher retention levels required by TRIEA. This is a marked contrast to the recent growth (an estimated $28 billion in new capital) in private reinsurance capacity for natural catastrophes in the U.S.; all of this new capital has entered the market since Hurricane Katrina and the other devastating storms of 2005 hit. Thus, while there is global financial capital available for natural catastrophe risk, the reinsurance sector is not comfortable allocating a significant portion of this capital to terrorism, given the continued difficulty of quantifying and predicting losses from an extreme terrorist attack.

Recognizing the huge gaps in private reinsurance capacity, some market observers have suggested that capital market instruments, particularly so-called "cat bonds," have the potential to create significant private sector financial capacity to manage terrorism risk. However, based on experience to date, as well as an analysis of these markets, it is clear that cat bonds will not provide a meaningful amount of capacity for the foreseeable future.

Despite recent growth in the market for cat bonds for natural catastrophes, these vehicles have transferred only a very small portion of natural disaster risk – and virtually no terrorism risk – to the capital markets. During the first half of 2006, the cat bond market saw record total issuance of about $2 billion, an amount equaling the total for all of 2005 (itself a record). Despite this growth, cat bonds remain a very small part of the estimated $60 billion to $80 billion natural catastrophe reinsurance market.

Moreover, there are fundamental differences between natural catastrophe and terrorism risk; these differences will severely limit growth of terrorism risk bonds for the foreseeable future. The differences include both uncertainty of measuring terrorism risk and the perceived correlation between terrorism risk bonds and the general market risk inherent in investor portfolios. With respect to uncertainty, the lack of predictive modeling is a major cause for concern, especially given that investors putting their capital at risk want to be able to assess the likelihood of a loss. Because bond ratings are driven by frequency of loss, this also makes it difficult for rating agencies to assign ratings to terrorism risk bonds. With respect to diversification, while natural catastrophe risk is relatively uncorrelated with the typical risk in investor portfolios, terrorism risk is more closely linked to the overall economy (i.e., a major terrorist attack can undermine the economy which forms the basis for other investments in a portfolio) and therefore does not provide the same diversification benefits.

Insurers support the further development of terrorism cat bonds, and many have been actively working in this field. However, given the underlying realities of terrorism risk, we do not believe that the potential for long-term development of these instruments is significant or would obviate the need for a federal backstop to protect against catastrophic levels of terrorism loss.

Private sector mitigation will not reduce terrorism insurance losses in a meaningful way

Insurers strongly support risk mitigation efforts and are working with policyholders on terrorism risk analysis. However, mitigation alone cannot remove the terrorist threat or significantly reduce losses from certain types of terrorist attacks, particularly CNBR. There are three main reasons why: 1) hardening targets simply pushes risk from one place to another, but does not reduce the overall probability of attack, as terrorists will simply shift from hardened to soft targets; 2) the cost of increasing security is disproportionate to any incentives that insurers can offer; and, 3) reduction in terrorism risk is most effectively achieved by the government, not individuals, since terrorism is a response national policy, and it is the national government which has all of the sensitive, non-public information about looming threats. Additionally, the interdependence of terrorism risk also limits the potential effectiveness of mitigation; for example, there is nothing that the World Trade Center risk managers could have done to prevent planes from taking off in Boston and elsewhere and being used as missiles to destroy the Twin Towers.

From an underwriting perspective, the volatilities of terrorism and the huge potential costs require insurers to manage exposure concentrations regardless of policyholder mitigation efforts. Availability of property and workers' compensation insurance is driven largely by concentrations of property values/workers. From an insurer's perspective, the most attractive policyholders are those risks that are not in close proximity to other risks, and which do not in and of themselves represent a concentration of values or workers. While it is certainly possible that a mitigation program may make one policyholder more attractive than another in the same geographic area,

those situations are not likely to increase the overall level of terrorism insurance capacity to the extent that insurers must continue to manage their exposure concentrations for these lines of business.

State regulatory restrictions further constrain insurers' ability to manage terrorism risk

Unfortunately, state regulatory approaches that utilize government price and product controls have contributed significantly to the problems that the private market has experienced in managing terrorism risk. While insurers are making terrorism coverage available in accordance with the requirements of TRIA and TRIEA, state insurance regulators generally have not permitted insurers to price terrorism risk adequately to finance their respective backstop deductibles. This problem of terrorism rate inadequacy is exacerbated for workers' compensation insurance, because insurers are not permitted to impose policy limits or exclusions of any nature. Similarly, a number of states - including New York and California - have kept on their books anachronistic "standard fire policy" statutes for property policies that require an insurer to cover fire losses even if those losses result from an otherwise excluded event, such as terrorism.

In the absence of a federal backstop, these coverage mandates may force rationing of terrorism risk capacity and subsidization across different perils, which, in turn, limits availability of both terrorism insurance and insurance generally. These dynamics hurt businesses, as well as insurers, as the regulatory pressure to provide terrorism coverage at suppressed prices leaves carriers with the stark choice of writing or not writing any particular risk, instead of the flexibility to structure terrorism coverage that will suit the business's needs at a price that adequately reflects the shift of risk.

One potential alternative, either standing alone or in combination with other long-term public-private proposals, is federal preemption of state rate and form laws, as well as preemption of compulsory coverage obligations, with respect to terrorism risk. Allowing a "free market" for the purchase and sale of terrorism risk insurance coverage will provide market-based incentives for insurers and policyholders to structure terrorism coverage in a way that is more flexible for both parties. However, given the characteristics of terrorism risk, there is no guarantee that introduction of a free market will create sufficient capital or entice reinsurers or capital markets to supply capacity sufficient to fill the availability gap. Nonetheless, a free market environment for terrorism risk insurance is much more likely to lead to an economically efficient distribution of the insurance capacity that does exist for terrorism exposure than the current state price and form controls and coverage mandates.

Meaningful solutions must augment existing capacity and spread loss beyond current private sector parameters

As noted above, reinsurance and capital markets largely view terrorism risk as unattractive and uninsurable. While they are willing to commit a limited amount of capacity to this risk, once their thresholds of sound risk management are exceeded, they are not willing to commit any further capacity. Moreover, they remain unwilling to commit capital to address CNBR exposure of almost any magnitude. Nor is private sector mitigation a meaningful solution. Because potential insured losses vastly exceed the amount of potential private sector capital, a public

policy solution is still critically needed upon the expiration of the current TRIA extension legislation.

Numerous insurance experts believe a public policy solution to the CNBR problem would help facilitate entry of new capital into insurance markets to cover conventional terrorism risk. This is due both to the characteristics of CNBR risk and its exclusion from the vast majority of reinsurance contracts. Because CNBR risk remains uninsurable at virtually any level of loss, the federal government should assume financial responsibility for all CNBR terrorist attacks, subject to a recoupment mechanism that would provide full or partial reimbursement to the federal government through a post-event policyholder surcharge collected by insurers.

Additionally, there are some conventional attack scenarios – such as so-called "swarm" or other multiple venue attacks – that would overwhelm private sector ability to fund the resulting loss. A high-level federal backstop should remain in place and should be designed to encourage more private sector capacity to fill this space, potentially reducing the role of the federal government over time. Here too, a post-event policyholder surcharge could provide recoupment to the Treasury and minimize any fiscal risk to taxpayers.

Within this framework, some insurers may find it useful to pool their existing capital and mutualize their risk. However, such pools should be purely voluntary and are not expected to build sufficient capacity to obviate the need for the federal program described above. Relaxation of pre-loss reserving requirements (including tax treatment) also should be studied further. Finally, pre-emption of state insurance regulatory requirements and coverage mandates that impede private sector risk management should be part of any long-term solution.

A synopsis of the elements of a meaningful long-term terrorism risk management program is attached.

Synopsis of AIA Long Term Terrorism Insurance Approach

The AIA Long Term Terrorism Insurance Approach is based upon separate but complementary treatment of Chemical, Nuclear, Biological and Radiological ("CNBR") Terrorist Attacks and "Conventional" Terrorist Attacks and is applicable to commercial property & casualty insurance only (same lines as in the TRIA Extension).

CNBR Terrorist Attacks –

- The Federal Government would assume financial responsibility for all CNBR Terrorist Attacks.
- Carriers would continue to provide the level of CNBR terrorism insurance currently available in their policies, but in the event of a CNBR Terrorism Attack, the Federal Government would pay the losses, either directly to the victims or to insurers whose policies responded to the attacks, as reinsurance.
- A mechanism would be enacted that would enable the Treasury to recoup CNBR Terrorism losses, through a policyholder assessment passed through insurers, up to $10.0 Billion.

"Conventional" Terrorist Attacks –

- A long term program similar to the current TRIA extension with per company and industry retention levels similar to those under the current program would be enacted.
- Carriers would continue to make terrorism insurance available under their policies in the same manner as the current program.
- A rigorous and objective procedural mechanism would be created to enable Treasury to periodically review the state of the private market for terrorism insurance, make findings of fact that there ***has been*** an increase/decrease in the amount of private capital available for terrorism, and adjust per company retentions accordingly. The mechanism would be non-discretionary, so that Treasury would be required to act either way:
    - increase retentions if reinsurers or other markets make more capital available; or
    - reduce retentions if the private market became even more restrictive, if for example, a terrorist attack caused private reinsurance or capital markets to further withdraw.
- Incentives would be introduced in an attempt to facilitate entry of additional private capital into the market:
    - Tax incentives.
    - Pre-emption of state insurance coverage requirements and regulatory oversight.
    - Possible creation of strictly voluntary pools.
    - Relaxation of pre-loss reserving requirements.
    - Other as identified.

STATEMENT ON BEHALF OF THE
INDEPENDENT INSURANCE AGENTS & BROKERS OF AMERICA

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS
COMMITTEE ON FINANCIAL SERVICES

SUBCOMMITTEE ON INTELLIGENCE, INFORMATION SHARING AND TERRORISM RISK ASSESSMENT
COMMITTEE ON HOMELAND SECURITY

UNITED STATES HOUSE OF REPRESENTATIVES

July 25, 2006

The Independent Insurance Agents & Brokers of America (IIABA) commend the members of both Subcommittees for holding this joint hearing today. Your efforts are crucial to examining and finding long-term solutions to the economic and physical risks associated with terrorism. As such, our members thank you for your leadership on this important issue that is crucial to our economic and homeland security.

IIABA is the nation's oldest and largest trade association of independent insurance agents and brokers, and we represent a network of more than 300,000 agents, brokers, and employees nationwide. IIABA represents small, medium, and large businesses that offer consumers a choice of policies from a variety of insurance companies. Independent agents and brokers offer a number of insurance products – property, casualty, health, life, employee benefit plans and retirement products – and sell nearly 80 percent of all commercial lines policies in the country. Members of the Big "I", as we are known, write the coverage for America's businesses and serve as the conduit between consumers and insurance companies. Therefore, it is from this unique vantage point that we understand the capabilities and challenges of the insurance market.

In our view, terrorism risk is not just an "insurance" issue. The risks to the economy presented by the failure of private insurance markets to provide adequate terrorism insurance capacity to our nation's businesses are a major hazard to our homeland security, and we are heartened that the Subcommittees are signaling recognition of that fact. Without adequate terrorism insurance capacity, economic transactions could be stifled and, as we saw in the year between 9/11 and enactment of TRIA, jobs may be at risk. Moreover, without adequate terrorism insurance capacity, the ability of the economy to recover quickly following a terrorist attack will be dramatically impaired and our nation's homeland security will be weakened.

American business is highly competitive, and IIABA historically and strongly supports private, market-oriented solutions to problems whenever possible. Our members want markets to operate freely and without intervention from the Federal government, but sometimes they are unable to function appropriately. As Federal Reserve Chairman, Alan Greenspan testified several times before Congress, ". . . there is no evidence that a private terrorism insurance market has yet developed, or in fact ever can, develop."

Ensuring that terrorism risk insurance remains available and affordable for policyholders on a long-term basis must, we submit, be an aspect of overall homeland security efforts. Until a long-term solution emerges for increasing the insurance market's capacity and willingness to insure terrorism losses, we remain skeptical about the nation's ability to address financial losses in the wake of a future act of terrorism without an active government role.

The current public-private partnership created by the Terrorism Risk Insurance Act (TRIA), and now the Terrorism Risk Insurance Extension Act (TRIEA), has been a workable short-term solution;[1] however, it is set to expire at the end of 2007. There is no reason to believe that the threat of terrorism is on the decline, and that the private insurance markets alone can adequately meet our nation's need for coverage. We look forward to working with Congress, and with the Members of these Subcommittees in particular, to find a long-term solution to risks associated with terrorism.

Post-TRIA Availability of Terrorism Risk Insurance

Although potential terrorism losses in the United States have been estimated at over $100 billion, current reinsurance capacity is only estimated at $6 to 8 billion.[2] As former Federal Reserve Chairman Alan Greenspan and other notable experts have asserted, the private insurance market is simply not in a position to handle the unpredictable nature and possible immense size and scope of terrorist attacks.[3] Despite the warnings of these experts, a specific plan for developing a private reinsurance mechanism to spread catastrophic risk from terrorism has yet to emerge.[4] Now is the time to develop a long-term solution.

The original enactment of TRIA in 2002 and its extension late last year have been relatively successful in stabilizing the insurance marketplace and have helped eliminate the market disruptions and

---

[1] *See* Terrorism Risk Insurance Act of 2002, (TRIA), Pub. L. No. 107-297, 116 Stat 2322m as amended by Terrorism Risk Insurance Extension Act of 2005 (TRIEA) Pub. L 109-44, ____Stat.__.

[2] *See* Franklin W. Nutter, President, Reinsurance Association of America, Testimony at the Public Hearing of the Terrorism Insurance Implementation Working Group of the National Association of Insurance Commissioners 5-6 (Mar. 29, 2006), *available at* http://www.naic.org/documents/topics_tria_testimony0603_RAA.pdf. Some industry representatives, however, fear that capacity is much smaller. *See* Warren W. Heck, Chairman and CEO, Greater New York Mutual Insurance Company, Testimony at the Public Hearing of the Terrorism Insurance Implementation Working Group of the National Association of Insurance Commissioners 4 (Mar. 29, 2006), *available at* http://www.naic.org/documents/topics_tria_testimony0603_NY_Mutual.pdf.

[3] *Greater N.Y. Mutual CEO Makes Case for Terror Coverage*, Insurance Journal, July 27, 2005.

[4] In fact, the Department of Treasury's (Treasury) June 30, 2005 report to Congress concerning the terrorism risk insurance program did not analyze this problem. *See* U.S. Dep't. of Treasury Office of Economic Policy, *Report to Congress: Assessment: The Terrorism Risk Insurance Act of 2002* 5 (June 30, 2005).

uncertainties that were witnessed in the immediate wake of September 11. A failure to reauthorize the federal program could have meant economic disaster for countless small and large communities across this country and would have had an especially devastating impact on financial and commercial centers, such as New York. As a result of the enactment of TRIA and TRIEA, our members are currently able to offer consumers options with respect to terrorism coverage.

However, months before the extension of TRIA in December 2005, these interested policyholders were concerned that exclusions and sunset clauses would eliminate their coverage as insurers prepared for the termination of the TRIA backstop. Although TRIA was extended, these policyholders - including small and mid-sized businesses - continue to worry about the impact of terrorist events in this country and their access to insurance coverage to help them get back on their feet should another event occur.

Policyholder concerns are fueled not only by memories of the exclusions that they faced immediately after September 11 and in the months before TRIA's original expiration, but also by their current experiences in the post-2005 hurricane season market. Substantial insured losses during the recent hurricane season have diminished the insurance industry's capacity for catastrophic losses in general. Under pressure from rating agencies to limit exposure, insurers are reevaluating their exposure to catastrophic losses in general and terrorism losses in particular. As underwriters continue to focus on the aggregation of losses, our members and the policyholders they serve remain concerned about how many insurance companies, particularly small and monoline insurers, will continue to write terrorism risk insurance after the expiration of the federal backstop.

Long-term Availability and Affordability of Terrorism Risk Insurance Coverage

In addition to the potential magnitude of losses from a future terrorist attack, a number of other factors will determine the long-term availability and affordability of terrorism risk insurance coverage, including: (1) the ability to accurately predict the severity and frequency of terrorism given the increased threat; (2) the effectiveness of mitigation efforts; (3) the insurance market's capacity for substantial catastrophic losses combined with policyholder take-up rates for terrorism coverage; and (4) whether or not insurers are required to "make available" coverage for terrorism risk. Although most of these factors are considered in the context of many types of perils, their impact on the availability and affordability of terrorism is unique due to the nature of terrorism risk.

While modeling has shown us that the size and severity of a terrorist attack could easily threaten the capacity of the insurance market, the risk cannot be assessed in traditional ways. Insurers lack confidence in modeling terrorism risk due to the lack of past statistical records for such risk.[5] Unlike other types of catastrophic risks, insurers and actuaries know extremely little about where or when terrorism might occur; how it might occur; how often it might occur; or the nature, effects, and costs of such an attack. Much of the information that does exist is available only to governmental agencies that fiercely guard it for security and law enforcement reasons. As a result, underwriters shied away from terrorism risk before the creation of the TRIA backstop. Indeed, since the enactment of TRIA, insurers

[5] *See* Letter from Dennis Fasking, Chairman, Extreme Events Committee, American Academy of Actuaries, to Rep. Richard Baker, Chairman, Subcommittee on Capital Markets, U.S. House of Representatives (August 2, 2005), *available at* http://www.actuary.org/pdf/casualty/tria_080205.pdf.

have proven unable to introduce new products for insuring terrorism risk. There is currently no indication that the ability to accurately predict and underwrite terrorism risk will improve significantly in the future and certainly not before the Act's expiration at the end of 2007.

The unpredictable nature of terrorism also hinders the ability of the consumers who agents and brokers serve to effectively mitigate against acts of terrorism. Although policyholders may invest in increased security measures to thwart the efforts of terrorists, the effectiveness of these measures is limited due to the proven adaptability of terrorists. Moreover, the incentives offered by insurers frequently fail to match the expense of such measures.

Notwithstanding the gap between potential losses and available capacity, policyholder take-up rates for terrorism risk insurance coverage have increased since the enactment of TRIA.[6] Increased take-up rates translate into greater capacity to cover losses and spread risk, in addition to reducing taxpayer exposure to post-event and ad hoc government funding. Likewise, as capacity grows, policyholder take-up rates will continue to increase.

While our members remain opposed to federal intervention in the insurance market in general, they nevertheless acknowledge that the terrorism risk insurance coverage currently available to the policyholders whom they serve would not exist without TRIA. Once the backstop expires, the challenges discussed above will likely paralyze the private insurance market's ability to make terrorism risk insurance coverage available and affordable for policyholders. Federal legislation will be necessary to ensure that policyholders continue to have access to such coverage and that the insurance market's capacity to cover terrorism losses continues to grow.

Potential Solutions to Increase Private-Market Insurer and Reinsurer Capacity for Terrorism Risk

Any analysis of the long-term availability of terrorism risk insurance must acknowledge the unique nature of terrorism risk. Terrorist acts are nearly impossible to predict because they are intentional and heinous acts committed by those who wish to attack our country, our institutions, our livelihood, and our sense of security. Given the unique nature of terrorism risk, the insurance market has proved unable to make meaningful assessments or judgments about possible terrorist events. Accordingly, IIABA believes that increasing private insurance and reinsurance market capacity will depend on the introduction of private capital from non-insurance sources and the continuation of a public-private partnership.

Specifically, IIABA believes that a private-public partnership – in some form – remains essential to the challenge of making terrorism risk insurance available after the expiration of the Act at the end of 2007. Although some potential solutions might allow for the reduction or even elimination of federal involvement in the years to come, it may be difficult to eliminate such a role in the immediate future

---

[6] A survey conducted by the Mortgage Bankers' Association and reports by the RAND Center for Terrorism Risk Management and Marsh suggests that policyholder take-up rates have increased since the enactment of TRIA. *See* Survey: Lack of Terror Coverage Would Hurt Commercial Mortgage Market, *Insurance Journal*, June 8, 2004; Peter Chalk et al., *Trends on Terrorism: Threats to the United States and the Future of the Terrorism Risk Act* 8 (RAND Center for Terrorism Risk Management Policy 2005), *available at* http://www.rand.org/pubs/monographs/2005/RAND_MG393.pdf; Marsh, *Marketwatch: Terrorism Insurance 2005* 6-14 (2005), *available at* http://www.marsh.dk/files/Marketwatch_Terrorism_Insurance_2005.pdf.

without disrupting the market. Indeed, it will take decades for the industry to close the gap between the estimated $6 to 8 billion in current reinsurance capacity and potentially hundreds of billions of dollars in losses from a terrorist attack.[7] As such, public participation is necessary to encourage private markets to get in and stay in the business of insuring terrorism risk.[8] At a minimum, federal legislation is necessary to facilitate private sector solutions, such as risk-sharing mechanisms and capital reserve accounts. We remain optimistic that the industry and policymakers can develop solutions that will reduce the role of the federal government (and taxpayers) over time and enable the private market to build up greater capacity and ultimately shoulder more of the burden.

Tax-incentives could also prove instrumental in encouraging new sources of capital. IIABA supports efforts to allow insurers to proactively build tax-free reserves for terrorist events on a pre-event basis, and we believe that this concept is worth further consideration in the context of a broader long-term solution. This option would help insurers build capacity over time, and, given the national nature of terrorism risk, it is entirely appropriate that federal tax policy be adjusted to encourage the private sector to do so.

The NAIC is appropriately considering the role that pooling and syndication might play in expanding capacity, and we encourage continued exploration in this area. As a key stakeholder in the process, IIABA believes that variations on such mechanisms – whether voluntary or not and whether single or multiple in form – should remain under consideration in the debate as a potentially important, if not exclusive, means of building capacity to insure terrorism risk.

Finally, FAIR Plans and other residual market mechanisms, with appropriate modifications, could potentially play a limited role in the long-term solution to terrorism insurance availability, but this option alone cannot substitute for the participation of the federal government. In addition, terrorism and the risks posed by such attacks are inextricably linked to federal and foreign policy, and this peril cannot be solely addressed at the state level without federal government assistance.

Now is the time to analyze these potential solutions. The creation of an effective and long-term mechanism is essential for managing the risk posed by terrorist events. Without some form of meaningful solution, terrorism coverage will be extremely difficult – if not impossible – for most to obtain after December 31, 2007, and, as noted above, the impact will likely be felt before then. Such an outcome would be especially troubling for small and medium-sized businesses, which are already challenged by the current environment and are not in a position to self-insure. The vast majority of businesses in this country are of this size, and the nonexistence of some form of a terrorism insurance program could have devastating effects on the national economy. For these reasons, IIABA urges Congress to begin analyzing long-term strategies, including the solutions mentioned above, before the expiration of the federal backstop next year.

In order to facilitate a long-term solution for terrorism insurance, the Big "I" also supports H.R. 4619, the Commission on Terrorism Risk Insurance Act of 2005, introduced by Reps. Vito Fossella (R-

---

[7] *See* Marsh, *Marketwatch: Terrorism Insurance 2005* 33 (2005), *available at* http://www.marsh.dk/files/Marketwatch_Terrorism_Insurance_2005.pdf.

[8] Countries such as the U.K., France and Spain, which have a longer history of protecting against terrorist threats, have long accepted that government must play a role in insuring against terrorism losses.

N.Y.) and Carolyn Maloney (D-N.Y.). This legislation would create a national commission on terrorism insurance comprised of 11 stakeholders, including an independent insurance agent and a broker, to review the current program and make recommendations to assist the market after the Act's expiration.

Insurance Coverage for CNBR Events

We believe that any long-term solution to protect the nation's economy in the face of substantial terrorism losses must address potential losses from chemical, nuclear, biological or radiological (CNBR) events. Other than coverage included in statutorily mandated lines (e.g., workers compensation), little coverage is available for CNBR events. Although CNBR losses are perhaps the most catastrophic types of terrorist attacks, coverage for these types of losses is currently excluded from most existing terrorism risk insurance coverage.

The American Academy of Actuaries (AAA) recently estimated that insured losses from a conventional truck bomb attack, as well as medium and large CNBR events caused by terrorism, could total $778 billion.[9] The AAA estimated that losses in four U.S. cities could reach the following levels:[10]

	Losses from a Truck Bomb Attack	**Losses from a Medium CNBR Event**	**Losses from a Large CNBR Event**
New York City	$11.8 billion	446.5 billion	$778 billion
Washington, D.C.	$5.5 billion	$106.2 billion	$196.8 billion
San Francisco	$8.8 billion	$92.2 billion	$171.2 billion
Des Moines	$3 billion	$27.3 billion	$42.3 billion

The difficulties of developing adequate capacity to cover terrorism losses due to terrorism and diversifying risk are aggravated in the context of CNBR events. Currently, there is essentially no reinsurance capacity for CNBR losses. CNBR terrorism risk is even more difficult to predict and underwrite than non-CNBR terrorism risk. Moreover, as discussed during the NAIC Terrorism Insurance Implementation Working Group's public hearing on terrorism insurance availability earlier this year, it could take many years to quantify the damages from a CNBR attack.

During our participation in the development and extension of TRIA, IIABA consistently supported mandatory availability of insurance coverage for CNBR losses. Based on our experience in the market, we know that policyholders desire a long-term solution to the availability of terrorism risk insurance, including coverage for CNBR events. Policyholders want certainty for their business planning and operations, and they clearly do not want to be subject to on-again, off-again terrorism insurance mechanisms, and exclusions for CNBR losses. Terrorism is perhaps the greatest threat to our nation's economic future, and we believe that the reality of potentially large losses from CNBR events must be addressed to protect our economy, as well as policyholders and taxpayers.

Given the potential magnitude of CNBR losses, a catastrophic attack in a line not covered under the TRIA program (e.g., CNBR) would almost certainly lead to a substantial government bailout. In light of the potentially enormous burden that taxpayers could face as a result of CNBR risk, it is imperative that policymakers work to help develop the private insurance market's capacity for losses. As demonstrated with non-CNBR coverage under TRIA, we do not expect the private insurance market to view CNBR

---

[9] *See* Emily Crane, IIABA, *The Potential Costs of Terrorism*, Insurance News & Views, Apr. 6, 2006, *available at* http://www.iiaba.net/IAMag/NewsViews/040606.html.

[10] *Id.*

risks as insurable or move toward developing capacity to cover such risks without encouragement from the federal government. public participation is a vital requirement for any long-term solution for increasing private market capacity to cover these types of events.

We urge policymakers to act now to develop a system of public-private compensation for CNBR losses that offers taxpayer payback protections similar to those currently available with respect to TRIA-covered lines.[11] Otherwise, taxpayers face a much larger, unexpected payout in the wake of a substantial CNBR event.

Nationwide Need for Terrorism Risk Insurance

In addition to the capacity problem, we believe that insurers' ability to diversify risk will also pose challenges to the long-term availability and affordability of terrorism insurance. The nature of the risk presented by terrorism requires that any long-term solution enable the market to spread the risks associated with terrorism and develop as broad a funding base as possible. This means focusing on increasing take-up rates in all communities, which is closely related to the availability and affordability of coverage. As former Washington, D.C. Insurance Commissioner Larry Mirel noted in his testimony to the House Financial Services Committee last summer, businesses in New York City, Washington, and other prominent "target" areas pay very high premiums for terrorism coverage – even with the existence of the federal program – yet they are not the true targets of terrorists.[12] Terrorists, as the Commissioner noted, want to attack America, and an attack on any particular town or city is actually an attack on our nation as a whole.[13] Accordingly, it is both appropriate and fair for policymakers to identify solutions that truly help protect America's national economy and identity through a wide spreading of this distinctive risk.

Domestic v. International Terrorism

Although domestic terrorism is excluded from the current federal terrorism risk insurance program, we would recommend that any long-term response eliminate the distinction between domestic and international terrorism. Domestic terrorism, which presents many of the same characteristics of international terrorism, is a very serious threat and coverage for this risk is largely unobtainable in the marketplace today. IIABA believes that such distinctions are likely to prove irresolvable in the aftermath of an attack. Distinguishing between domestic and international terrorism can be difficult (if not impossible) as the anthrax incidents of 2001 and the London Underground bombings of last summer demonstrated. In short, IIABA continues to believe that the terrorism peril should be treated on a seamless basis without such distinctions.

---

[11] As discussed below, we believe that it is important that such a system avoid distinguishing domestic terrorism from foreign terrorism.

[12] The Future of Terrorism Risk Insurance: Hearing Before the Subcomm. on Markets, Insurance and Government Sponsored Enterprise of the H. Financial Services Comm. 3 (July, 27, 2005) (statement of Laurence H. Mirel, Commissioner, District of Columbia Department of Insurance, Securities and Banking, Testimony before the House Financial Services Committee); *available at* http://financialservices.house.gov/media/pdf/072705lm.pdf.

[13] *Id.*

Conclusion

Although the terrorism insurance program was only recently extended, it is time to start looking ahead. The program was only renewed for a two-year period, and the industry, its regulators, and policymakers in Washington must begin investigating and identifying solutions of a more long-term nature. The need for action is actually more urgent than many might realize, and it will not be long until policyholders are renewing policies with contract terms that extend beyond December 31, 2007. If a solution is not in place well in advance of the end of next year, insurance markets may once again face significant disruption and uncertainty, and we anticipate that insurers would exclude terrorism risks from policies where authorized.

IIABA applauds policymakers for not ending TRIA abruptly last year and for having the foresight to try to "phase-out" the program only as markets are able to develop. This type of thoughtful approach, which recognizes market capabilities and restraints, will be essential to ensuring long-term affordability and availability of terrorism insurance as well as capacity in both the short-term and long-term. IIABA looks forward to working with Congress on this matter that is crucial to our country's economic and homeland security.

97

TESTIMONY

Analyzing Terrorism Risk

HENRY H. WILLIS

CT-265

July 2006

Written testimony submitted to the House Financial Services Committee, Subcommittee on Oversight and Investigations, and the House Homeland Security Committee, Subcommittee on Intelligence, Information Sharing, and Terrorism Risk Assessment on July 25, 2006

This product is part of the RAND Corporation testimony series. RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND®** is a registered trademark.

Published 2006 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213
RAND URL: http://www.rand.org/
To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org

Statement of Henry H. Willis, Ph.D.[1]
The RAND Corporation

Analyzing Terrorism Risk

Before the Committee on Financial Services
Subcommittee on Oversight and Investigations
and
Before the Committee on Homeland Security
Subcommittee on Intelligence, Information Sharing, and Terrorism Risk Assessment
United States House of Representatives

July 25, 2006

I would like to thank the distinguished Chair for the opportunity to present written testimony about terrorism risk assessment at the Department of Homeland Security (DHS). Many of my comments are based directly on a recently released RAND Corporation report entitled, "Estimating Terrorism Risk," which has been made available to Members of the Committee. This report is part of RAND's program of self-initiated research that is funded through the independent research and development provisions of our Federally Funded Research and Development Centers. It is a recent release by the RAND Center for Terrorism Risk Management Policy, which was established in 2002 to study terrorism risk management, insurance, liability, and compensation. I would like to request that this report be made part of the official record.

Over the last four years, Congress and the Department of Homeland Security have made tremendous progress in maturing homeland security policy. Shortly after September 11, 2001, decisions were dominated by the use of crude indicators, such as population, which approximated consequences of terrorist events. Subsequently, policy moved to vulnerability reduction and more recently, Secretary Michael Chertoff has called on the DHS to adopt risk-based decisionmaking. The next step in this process will be to focus on risk reduction and cost effectiveness, but the U.S. Government currently is in the early phases of moving in this direction.

The recently released National Infrastructure Protection Plan (NIPP) reflects this progression by defining an aggressive and comprehensive approach to risk assessment across sectors that

[1] The opinions and conclusions expressed in this testimony are the author's alone and should not be interpreted as representing those of RAND or any of the sponsors of its research. This product is part of the RAND Corporation testimony series. RAND testimonies record testimony presented by RAND associates to federal, state, or local legislative committees; government-appointed commissions and panels; and private review and oversight bodies. The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors.

affect the U.S. economy. As compared to earlier drafts of this document, it reflects adoption of Secretary Chertoff's guidance to use risk-based decisionmaking and represents the state of the Department's thinking on critical infrastructure protection. Specifically, it tries to take a balanced approach to incorporate: risk assessment; information sharing, feedback, and training; organizing and partnership with private sector; resource allocation; and long-range sustainability of protection efforts. Finally, the NIPP describes a framework that follows the best practices of risk analysis that are outlined in, among other places, the National Research Council in its foundational reports *Risk Assessment in the Federal Government: Managing the Process* (1983) and subsequently *Science and Judgment in Risk Assessment* (1994). These best practices require that risk assessments be: a) analytic, b) deliberative, and c) practical. For homeland security policy, these statements have the following translation:

a) Analytic

An analytic process requires addressing all three of the factors that determine terrorism risk: 1) threat, 2) vulnerability, and 3) consequence, and where feasible, to do so quantitatively. Risk assessments must be repeatable so all parties can replicate, analyze, and understand them. However, the uncertainty inherent in this problem, particularly in the terrorist threat, implies that unlike most of our successful experience with these tools in the past, some new thinking about all plausible threats, not just the most likely threat, will need to be taken into account.

b) Deliberative

A deliberative process is necessary because the notion of a cold, analytic risk assessment is a myth. Values and judgment are part and parcel to the process and require transparency and a comprehensive discussion of outcomes. This is the only way to credibly address tradeoffs between risks to people from risks to property and risks from a conventional bomb, nuclear attack, biological attack, or even hurricane or other natural disaster.

c) Practical

Finally, risk assessment must be practical, meaning that data collection and management requirements must not be untenable and estimates should not be overly reliant on a single perspective or tool. This last point is where concerns may arise with the draft NIPP. These concerns relate more to implementing what is outlined rather than concerns with the content of the plan itself. Implementation will need to address natural disasters as well as terrorist threat as the plan is used. Questions remain about the practicality of implementing risk analysis and

information sharing given limitations in the real world as to funding, time, and staff available. These issues have not been ironed out.

With this as background, there are 5 recommendations from our work that are pertinent to today's hearing.

First, the U.S. Government should consistently define terrorism risk in terms of metrics like expected annual consequences. Critical infrastructure risk assessment is too often focused on potential consequences, either ignoring or under emphasizing factors that determine threat and vulnerability. Expected annual consequences take threat, vulnerability and potential consequences into consideration in a rational way. Defining terrorism risk in terms of all of these factors facilitates the incorporation of risk reduction as the goal of homeland security programs.

Second, DHS should seek robust risk estimators that account for uncertainty about terrorism risk and variance in citizen values. Given the tremendous uncertainties surrounding terrorism risk assessment, it is prudent to plan for the range of plausible futures that may play out. Many different models exist and experts disagree on terrorists' capabilities and intentions. Risk assessment should reflect all credible models and expert judgments. The challenge is to support a single decision, while still being able to identify how risk is distributed differently across different outcomes, such as fatalities or property damage, and also explain how the decision would change if more emphasis were given to a single type of outcome or perspective on threats and vulnerabilities.

Third, DHS should use event-based models to assess terrorism risk. Measuring and tracking levels of terrorism risk is an important component of homeland security policy. These data provide insight into how current programs are reducing risk and when and where new terrorist threats may be emerging. Only event-based models of terrorism risk provide insight into how changes in assumptions or actual levels of threat, vulnerability, and consequences affect risk levels. There are many types of event-based models in existence. In our report, we relied on the Risk Management Systems (RMS) Terrorism Risk Model. This and other insurance industry models could also be used to support homeland security policy. The national laboratories have made progress on detailed models of critical infrastructures and their interdependencies. Colleagues in academia are applying economic input-output analysis to understand these same dependencies. Finally, the NIPP points to RAMCAP, or Risk Assessment Methodology for

Critical Asset Protection, which is based on a foundation for risk analysis consistent for methods used in reliability analysis and also with the National Research Council framework.

Fourth, relying on event-based models does not mean relying entirely on a top down process. It is important to differentiate strategic risk assessment from risk assessment to support design or performance assessment or that to support tactical decisions. Strategic assessments might guide the distribution of resources that are not reallocated frequently. Design and performance assessment might be used to optimize or tune a response to a particular threat or protect a specific asset. Think of assessment used to reinforce the design of a nuclear power plant. Tactical assessments might be in response to intelligence regarding specific threats (actionable intelligence) or events that have already occurred.

Of course all are needed. I recommend that a top-down approach is most practical for strategic risk assessment; and estimates need not be as detailed as design or tactical risk assessment. The goal is to distribute resources in roughly the right place and correct proportion. On the other hand, I recommend a bottom-up approach to support design or tactical decisions. Here more detailed models and analysis can be used to authorize spending on specific projects and justify current programs.

Strategic risk assessment ultimately needs event-based models. Until event-based models are more widely used to assess terrorism risk, density-weighted population is preferred over population as a simple risk indicator. Density-weighted population is simply a regions population multiplied by its population density. Our report found this metric to be reasonably correlated with the distribution of terrorism risk across the United States, as estimated by event-based models like the RMS Terrorism Risk Model. In contrast, our results suggest that population offers a remarkably weak indicator of risk, not much superior to estimating risk shares at random.

Finally, the U.S. Government should invest resources to bridge the gap between terrorism risk assessment and resource allocation policies that are cost effective. As I intimated earlier, Congress and DHS are only in the position to estimate risks and distribute resources where the risks are believed to be the largest. Ultimately, the goal should be to distribute those resources where they most effectively reduce risk. The first step in this process is implementing annual, independent risk impact assessments to evaluate how risk reduction funds have succeeded in reducing risk. These assessments will provide a feedback mechanism that will ultimately help increase reduction of risk. Such assessments would benefit the DHS grant

programs as well as border and maritime security programs like US-VISIT, C-TPAT, the MTSA, and TSA's baggage and passenger screening and profiling programs. The second step is a capabilities-based assessment of the nation's homeland security programs to document the unique contribution provided by each program and ensure appropriate balance to the layered defenses that have been put in place.

I would like to thank you again for the opportunity to address the committee on this important subject.

1. **Can you explain the distinction between NBCR and a conventional attack? What unique challenges are associated with NBCR attacks?**

NBCR attacks are terrorist attacks carried out using nuclear, biological, chemical or radiological weapons – attack modes that can create wide area losses of a cataclysmic nature. Examples of these types of attack modes were included in the Department of Homeland Security's National Planning Scenarios:

- **Nuclear Detonation** -- 10-Kiloton Nuclear Device: Terrorists drive a van with a 10-kiloton nuclear bomb into the central business district of a major city and set it off.
- **Biological Attack** -- Aerosolized Anthrax: Terrorists spray aerosolized anthrax from a van in three cities initially, followed by two more cities shortly afterward.
- **Chemical Attack** -- Toxic Industrial Chemicals: Terrorists attack oil refineries with grenades and bombs; exploding cargo containers ignite ships, including one carrying toxic chemicals.
- **Radiological Attack** -- 'Dirty Bombs': Terrorists set off bombs with radioactive cesium-137 in three nearby moderate-to-large cities, contaminating 36 city blocks in each.

Conventional terrorist attacks involve attacks using conventional explosives that range from Improvised Explosive Devices (IEDs), car bombs, arson, triggered building collapse scenarios like 9/11, and truck bombs.

The key distinction between conventional terrorist attacks and NBCR attacks is the potential breadth and scale of the attack. Most single-site conventional attacks would create insured losses that are less than the losses incurred in the WTC attacks on September 11, 2001. (Of course, coordinated multiple conventional attacks would compound such a loss). For attacks with NBCR weapons, the total insured losses to the industry could be 20 times this total, quickly bankrupting the entire insurance industry and throwing our economy into disarray.

Since the magnitude of loss associated with these types of attacks can be many multiples of insurance industry surplus and the period for remediation can be years if not decades, the insurance industry simply does not have the capacity to bear this type of risk – a fact confirmed in a recent General Accountability Office Report, entitled "Terrorism Insurance: Measuring and Predicting Losses from Unconventional Weapons is Difficult, but Some Industry Exposure Exists."

2. Have risk models been developed to account for losses from an NBCR attack? If so, are there estimates for possible losses from such an attack?

Leading catastrophe risk modeling firms have developed first generation models designed to measure the potential severity of NBCR attack modes. While these models are still in the early stages of development, the loss estimates from these early terrorism models illustrate the potential magnitude of NBCR terrorist attacks.

For example, using a terrorism model supplied by Applied Insurance Research, the American Academy of Actuaries estimated that the total insured losses from a large nuclear attack in New York City would be approximately $775 billion, with a mid-sized attack causing approximately $445 billion in insured losses[1]. In a report submitted to the Congress in September of 2005, Risk Management Solutions, Inc. included the following estimates of average loss by attack mode[2].

Table 2. Examples of potential losses to property and workers compensation from CBRN attacks

	Combined P&WC Loss ($Bn)	Property Loss ($Bn)	Workers Comp Loss ($Bn)	# of Fatalities
Sarin gas attack (1,000 kg ground dispersal)	$28	$21	$7	7,000
Dirty bomb (15,000 curies of Cesium-137)	$62	$62	$0.2	Few
Anthrax attack (1 kg anthrax slurry)	$61	$35	$26	40,000
Anthrax attack (10 kg anthrax slurry)	$171	$112	$59	90,000
Anthrax attack (75 kg anthrax slurry)	$340	$266	$74	120,000
Sabotage attack on a nearby nuclear power plant	$217	$202	$15	1,000
Nuclear bomb (battlefield 1 kt)	$240	$140	$100	130,000
Nuclear bomb (tactical 5 kt)	$450	$250	$200	300,000

In addition to the potential insured loss from these events, the resulting economic disruption would likely be many multiples of these estimates.

[1] "Terrorism: Funding the Inevitable," Actuarial Update, American Academy of Actuaries, May 2006.

[2] "A Risk-Based Rationale for Extending the Terrorism Risk Insurance Act", Risk Management Solutions, Inc., September 2005.

O