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財團法人住宅地震保險基金







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Origins and Development

雜設立緣起





















設立緣起

1999年9月21日發生於南投集集芮氏規模7.3的大地震(又稱921集集地震),舉國傷痛難忘。 政府為建立地震保險,隨即於1999年底提出「保險法部份條文修正草案」,增訂保險法第一三八條 之一,明訂保險業應承保住宅地震危險,並納入建立地震危險承擔機制之規定。保險法修正條文於 2001年7月9日公布,我國政策性住宅地震保險制度之於焉建立。

2001年11月30日主管機關依據保險法第一三八條之一規定,頒訂「住宅地震保險共保及危險承擔機制實施辦法」,運作方式為經由各產物保險公司承保之住宅地震保險全數分予當時為國營之專業再保險公司-中央再保險公司,該公司接受後再分予國內保險業、地震保險基金、國外再保險業及政府等分層承擔,總危險承擔限額為新臺幣500億元,明確建構我國住宅地震保險危險承擔機制。

2002年4月1日起於財產保險業現有之住宅火災保險單下擴大保障住宅地震基本保險,每戶保險金額最高新臺幣120萬元,採全國單一費率,每年每單保費新臺幣1,459元(自2009年4月1日起每年每單保費調降為新臺幣1,350元)。保障範圍為承保住宅因地震震動或地震所引起之火災、爆炸、山崩、地層下陷、滑動、開裂、決口或地震引起之海嘯、海潮高漲、洪水等事故導致之全損。

本保險制度實施初期之全損定義係指符合下列情事者:指經政府機關或專門之建築、結構、土 木等技師公會出具證明鑑定為不堪居住必須拆除重建或非經修建不能居住且補強費用為重建費用百 分之五十以上者。



20191102 金融服務愛心公益嘉年華(新竹場)(居中者為前金管會主委顧立雄)

Origins and Development

On September 21, 1999, a magnitude 7.3 earthquake, known as the "Chi-Chi" or "921" earthquake, struck Nantou County in central Taiwan, causing a great disaster which the people of Taiwan will never forget. The earthquake prompted the government to set up an earthquake insurance and hence at the end of 1999, the competent authority introduced amendments to Article 138-1 of the Insurance Act to include provisions on underwriting residential earthquake insurance by the insurers and establishment of a mechanism for assuming earthquake risk. The amendment of Insurance Act was promulgated on July 9, 2001, and the Taiwan residential earthquake insurance program came into existence.

In accordance with Article 138-1 of the Insurance Act, the competent authority announced the "Enforcement Rules for Coinsurance and Risk Assumption Mechanism of Residential Earthquake Insurance" on November 30, 2001. The rules stipulate all residential earthquake insurance policies issued by non-life insurers to be ceded to Central Reinsurance Corporation (Central Re), a then state-owned reinsurer which in turn spread the risk to domestic non-life insurers, TREIF, foreign reinsurers and the government with the limit of total risk assumption set at NTD 50 billion. The structure of the residential earthquake insurance risk assumption mechanism was thus established.

Effective from April 1, 2002, all residential fire insurance policies issued must extend the coverage to include the basic residential earthquake insurance, with a maximum sum insured of NTD 1.2 million per household. The annual flat premium was set at NTD 1,459 (reduced to NTD 1,350 starting from April 1, 2009). The scope of coverage includes total loss of insured residential building due to earthquake shake, or fire, explosion, landslide, land subsidence, land movement, land fissure, land rupture, or tsunami, sea surge and flood caused by an earthquake or its seismic activity.

During the initial implementation stage of the residential earthquake insurance, "total loss" refers to any case in which the following condition is met: upon being determined and certified by a government agency or a professional association for architecture, building structure, civil engineering or alike that the residence is uninhabitable or the repair costs would equal or exceed 50% of the replacement cost.

On December 1, 2005, the competent authority promulgated the amended "Enforcement Rules for Coinsurance and Risk Assumption Mechanism of Residential Earthquake Insurance," adjusting the risk assumption system from four tiers to two tiers. The first NTD 2 billion of the NTD 50 billion liability in the first tier was assumed by the residential earthquake Co-insurance Pool, and the remaining NTD 48 billion liability in the second tier was assumed and/or ceded by TREIF. The maximum risk assumption of residential earthquake insurance was raised from NTD 50 billion to NTD 60 billion in 2007.

In accordance with revisions to Article 138-1 of the Insurance Act on July 18, 2007, TREIF was entrusted with the responsibility to manage the risk spreading mechanism set up by the competent authority. On November 26, 2007, under the amendment for the Insurance Act, the "Enforcement Rules for the Coinsurance and Risk Assumption Mechanism of Residential Earthquake Insurance" was renamed as the "Enforcement Rules for the Risk Spreading Mechanism







20191129 住宅地震保險天災風險研討會(演講嘉賓與本基金代理董事長張玉煇(左四)及保險局副局長王麗惠(左五)合影)

2005年12月1日主管機關修正發布「住宅地震保險共保及危險承擔機制實施辦法」,將危險承擔機制由四層改為二層。第一層新臺幣20億元,由住宅地震保險共保組織承擔,超過新臺幣20億元以上之新臺幣480億元,由地震保險基金承擔及分散。自2007年起將住宅地震保險之危險承擔限額,由新臺幣500億元調高至新臺幣600億元。

2007年7月18日保險法第一三八條之一修正,明訂地震保險基金負責管理主管機關建立之危險分散機制,並於2007年11月26日配合保險法修正將「住宅地震保險共保及危險承擔機制實施辦法」更名為「住宅地震保險危險分散機制實施辦法」。自2008年起,各產物保險公司承保之住宅地震保險業務須全部分予地震保險基金,地震保險基金接受所有危險後再予承擔及分散,建構完成現行住宅地震保險營運模式。

2008年12月30日主管機關修正發布「住宅地震保險危險分散機制實施辦法」,將住宅地震保險危險分散機制危險承擔限額自2009年起提高至新臺幣700億元。2012年1月1日起,住宅地震基本保險之保險金額調高為最高新臺幣150萬元,臨時住宿費用調高為新臺幣20萬元,費率仍為新臺幣1,350元。本保險保單條款中關於「地震」之定義修正為:我國或其他國家之地震觀測主管機關觀測並記錄之自然地震,以擴大因海嘯致本保險住宅建築物遭受損壞之保障範圍。另「全損」定義修正為:「全損」係指符合下列情事之一者:一、經政府機關通知拆除、命令拆除或逕予拆除;或二、經本保險合格評估人員評定、或經建築師公會或結構、土木、大地等技師公會鑑定為不堪居住必須拆除重建、或非經修復不適居住且修復費用為危險發生時之重置成本百分之五十以上者。



20191129 住宅地震保險天災風險研討會(代理董事長張玉煇致詞)

of residential Earthquake Insurance". Since 2008, all residential earthquake insurance underwritten by non-life insurers has been ceded to TREIF, which then retained or transferred the risk, thus laying the foundation for the current residential earthquake insurance operation.

On December 30, 2008, the competent authority promulgated the revised "Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance," raising the risk assumption limit of the residential earthquake insurance's risk spreading mechanism to NTD 70 billion starting in 2009. The maximum sum insured per subject matter insured under the residential earthquake insurance has been increased to NTD 1.5 million effective from January 1, 2012, and the maximum contingent living expense has also been increased to NTD 200,000. Meanwhile, the annual flat premium for the insurance maintains at NTD 1,350 per policy. The definition of "earthquake" under the policy has been revised as natural earthquake, which is observed and recorded by the seismic observatory competent authority of Taiwan and other nations to extend to cover any loss or damage caused by the tsunami. The definition for the term of "total loss" has also been revised, referring to any of the following conditions - (1) The subject matter insured is demolished as informed, ordered or acted by the government agency; or (2) The subject matter insured has been assessed by a qualified adjuster, or by an association of professional architect, structural engineer, civil engineer, or geotechnical engineer, that the insured building has been assessed uninhabitable and in need of demolition and rebuilding; or has been assessed that it could be inhabitable after repairing and the repairing cost equals to or exceeds 50% of the replacement cost at the time when the insured risk occurs.





自 2013 年 1 月 1 日起危險分散機制各層危險承擔限額調整如次:

第一層:新臺幣 30 億元危險部分,由住宅地震保險共保組織承擔。

第二層:新臺幣 670 億元危險部分,由地震保險基金承擔及分散,並依下列方式辦理:

- (一)新臺幣 530 億元以下部分,由地震保險基金視業務需要及市場成本狀況,安排 於國內、外再保險市場或資本市場分散或自留,前述危險分散方式,應報經主 管機關備查;修正時,亦同。
- (二)超過新臺幣 530 億元至新臺幣 670 億元部分,仍由政府承擔,損失發生時由主 管機關編列經費需求報請行政院循預算程序辦理。

新臺幣 140 政 府 億元 (美金4.7億元)

新臺幣 160 地震保險基金 億元 (美金5.3億元)

新臺幣 200 再保險市場 億元 (美金6.6億元)

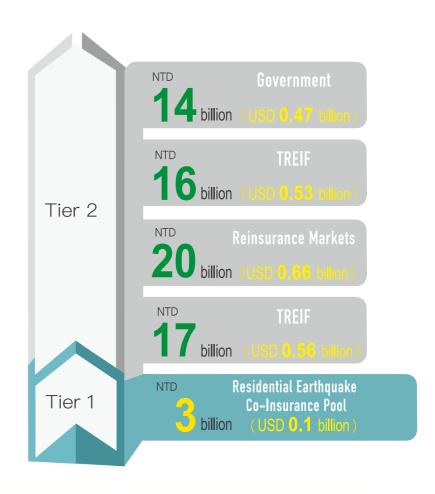
新臺幣 170 地震保險基金 億元 (美金5.6億元)

第一層 住宅地震保險共保組織 億元 (美金1億元)

The risk liabilities for each tier have been adjusted, effective from January 01, 2013, as follows:

Tier 1: NTD 3 billion shall be assumed by the Co-insurance Pool.

- Tier 2: NTD 67 billion shall be assumed by TREIF. This portion of the risk should be assumed or spread in the following manner:
 - (1) The portion equal and up to NTD 53 billion shall be spread in domestic, and/or overseas reinsurance markets and/or capital markets and/or retained by TREIF in accordance with business needs and/or market costs. The aforementioned risk spreading mechanisms shall be reported to the competent authority for recordation. The preceding provision also applies to any subsequent changes thereto.
 - (2) The portion over NTD 53 billion and up to NTD 67 billion shall be assumed by the government. When a loss occurs, the competent authority shall prepare a funding requirement report and submit it to the Executive Yuan, which shall handle funds appropriation in accordance with the budget process.





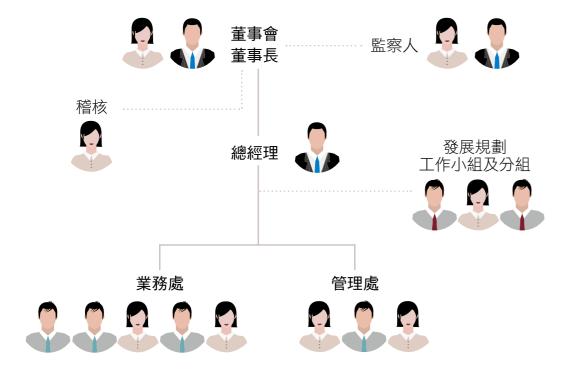




組織概況

財團法人住宅地震保險基金(以下簡稱地震保險基金)係屬公益財團法人,不具營利性質,於 2002年1月17日正式成立,為繼日本及土耳其之後,亞洲第三個由國家主導而成立之政策性住宅 地震保險機構。

■ 組織架構圖



◆ 董事會

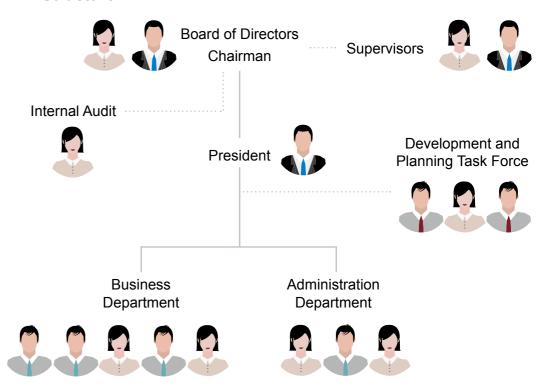
董事會為地震保險基金最高決策單位,董事長為地震保險基金之代表人,董事會由董事十一 人組成,均由主管機關自下列人員聘免之:

- ●目的事業主管機關代表三人。
- ●財政部國庫署代表一人。
- ●目的事業主管機關指定之專家學者三人。
- ●住宅地震保險共保組織會員代表三人。
- ●地震保險基金總經理。

Organization

Taiwan Residential Earthquake Insurance Fund (TREIF) is a public service, non-profit organization officially established on January 17, 2002. It is the third national residential earthquake insurance organization initiated by government in Asia, following the examples of Japan and Turkey.

■ TREIF Structure



♦ Board of Directors

The Board of Directors is TREIF's highest decision-making body. The chairman is the legal representative of TREIF. The Board of Directors comprises 11 members appointed or dismissed by the competent authority.

- Three representatives from the competent authority.
- One representative from the National Treasury Agency, Ministry of Finance.
- Three experts / scholars.
- Three representatives from the Residential Earthquake Co-insurance Pool.
- President of TREIF.







屏東縣 內埔國中 張莉晨、廖玉蓮

◆ 監察人

地震保險基金目前設置監察人三人,由目的事業主管機關聘免之,監督地震保險基金之 業務及財務狀況。

◆ 稽核

地震保險基金為健全業務發展,特制定「財團法人住宅地震保險基金內部控制及稽核制度實施辦法」,並於2014年設立專任稽核,隸屬董事會,負責稽核業務之規劃及執行,並定期評估各單位自行查核辦理績效。

◆ 住宅地震保險制度發展規劃工作小組

2008年3月成立住宅地震保險制度發展規劃工作小組,其下設危險分散與費率、承保 理賠與法制及資訊統計與教育推廣等三個工作分組,協助地震保險基金檢討改善現行保險制 度,強化地震保險基金中樞組織之功能。該工作小組由地震保險基金總經理擔任總召集人, 工作小組委員由地震保險基金延聘產、官、學界之專家學者及地震保險基金人員組成。

◆ 業務範圍

依「財團法人住宅地震保險基金捐助章程」第七條規定地震保險基金之業務範圍如下:

- 辦理住宅地震保險之再保險、危險承擔與分散事宜。
- 收取住宅地震保險分進之純保險費、附加費用收入及資金運用收益。
- 依據財源籌措計畫向國內、外貸款或融資。
- 處理與前三款有關之其他相關業務。
- ●辦理目的事業主管機關指定事項。
- 辦理符合本基金設立目的之公益活動。
- 其他依保險法或其他法令規定地震保險基金得辦理之業務。



♦ Supervisors

TREIF has three supervisors who are designated or dismissed by the competent authority to supervise the business operation and financial affairs of TREIF.

♦ Internal Audit

In accordance with the "Enforcement Rules for Internal Control and Audit Systems of the Taiwan Residential Earthquake Insurance Fund," an internal audit was established in 2014 under the Board of Directors. The Internal Audit is responsible for auditing the business planning and execution of each department, as well as periodically evaluating the results of the self-assessments performed by each department.

♦ Residential Earthquake Insurance Program Development and Planning Task Force

The Residential Earthquake Insurance Program Development and Planning Task Force was established in March 2008 to assist TREIF in improving the existing program and strengthening its core functions. It was divided into three subcommittees: Risk Spreading and Premium Rate Subcommittee, Underwriting, Claim and Legal Subcommittee, and IT, Statistics and Educational Promotion Subcommittee. The president of TREIF serves as convener of the task force, and the members are comprised of staffs of TREIF as well as experts and scholars from the private, public and academic sectors.

◆ Scope of Business

In accordance with Article 7 of TREIF Articles of Incorporation, the scope of TREIF's business is as follows:

- Managing reinsurance, risk assumption and risk spreading for the residential earthquake insurance.
- Receiving pure premium ceded from residential earthquake insurance, loadings and revenue by this insurance and proceeds derived from fund utilization.
- Obtaining domestic or overseas loans in accordance with the financing plans.
- Handling other business in relation to the preceding three subparagraphs.
- Taking care of matters assigned by the competent authority.
- Organizing public welfare activities that are in line with the goals of TREIF.
- Conducting business that TREIF is permitted to undertake in accordance with the Insurance Act or other laws and regulations.









運作中樞

2001年11月30日主管機關頒訂「財團法人住宅地震保險基金捐助章程」及「財團法人住宅 地震保險基金管理辦法」賦予地震保險基金成立之法令依據。地震保險基金成立初期,為節約支出 俾快速累積基金規模,委由中央再保險公司經營管理並兼辦所有相關業務。

住宅地震保險實施初期,中央再保險公司為住宅地震保險制度之經理人,負責共保事務及國外 再保安排,對住宅地震保險初期之建制作出貢獻。2002年中央再保險公司移轉民營後,考量住宅地 震基本保險係政策性保險,中樞組織當由非營利機構擔任,且鑑於當時住宅地震保險制度相關法規 並未明定住宅地震保險制度之中樞組織,因此承擔機制之國內產險公司或國外再保公司倘發生信用 危險,致無法支付保險費或再保賠款無法攤回時,將影響本保險制度之順利運作,並損及被保險人 權益,主管機關乃於 2005 年 12 月 1 日修正發布「住宅地震保險共保及危險承擔機制實施辦法」, 將地震保險基金定位為住宅地震保險制度之中樞組織,並積極推動地震保險基金之獨立運作。

2006年7月1日地震保險基金正式獨立運作,地震保險基金之角色由單純之風險承擔與分散, 轉換為制度管理之中樞組織,獨立運作後除由原中央再保險公司兼辦人員轉任外並延聘專職人員承 辦相關業務,負責住宅地震保險承保、理賠機制之建立與改善、共保業務之處理、再保險安排、業 務宣導、與合格評估人員及專業技師等之訓練及講習等事項。鑑於住宅地震保險為政策性保險、制 度改革尤與民眾權益息息相關,因之相關議題之決策允宜周延縝密,乃於 2008 年 3 月成立住宅地震 保險制度發展規劃工作小組,延聘產、官、學界之專家學者連同地震保險基金人員,以召開會議方 式逐一檢討改善現行地震保險制度,並提供主管機關政策建言,以強化地震保險基金中樞組織之功 能, 俾符合主管機關、保險業界與投保大眾之殷切期待。



屏東縣 玉田國小 鄒蕎伊、藍慧萱

屏東縣 瓦磘國小 李翊甄、王怡文

Pivotal Role in the Taiwan Residential **Earthquake Insurance Program**

On November 30, 2001, the competent authority announced "Taiwan Residential Earthquake Insurance Fund Articles of Incorporation", and "Regulations Governing Taiwan Residential Earthquake Insurance Fund", laying a legal foundation for the establishment of TREIF. To save cost and accelerate the accumulation of fund, Central Re was entrusted to manage the fund and handle all of its related business during the initial stage.

During the initial implementation stage of the Program, Central Re was designated as the program manager, responsible for managing the Co-insurance Pool and overseas reinsurance placement. It contributed greatly to the residential earthquake insurance program. Central Re was privatized in 2002. Considering that the residential earthquake insurance is a statutory insurance, it ought to be managed by a non-profit organization to avoid the possible credit risks that private insurers or reinsurers face, which could hinder the implementation of the Program and sabotage policyholders' rights. Hence, on December 1, 2005, the competent authority revised and promulgated "Enforcement Rules for the Coinsurance and Risk Assumption Mechanism of Residential Earthquake Insurance" to designate TREIF as the pivotal role of program manager and actively to promote the operational independence of TREIF.

As the result, TREIF assumed the pivotal role in Taiwan's residential earthquake insurance program and officially began independent operations on July 1, 2006. Its function no longer limited to risk assumption and risk spreading, but to cover all affairs relating to the program, including the establishment and improvement of underwriting and claim settlement mechanism, coinsurance management, reinsurance placement, business promotion, and training for qualified adjusters and professional engineers. To support the growing responsibility, relevant staffs were transferred to TREIF from Central Re and additional employees were recruited. Considering that the residential earthquake insurance is a statutory insurance, any reform of the program could significantly impact the public interest, and therefore, any future decision making must be thoroughly and meticulously evaluated. Consequently, TREIF established the Residential Earthquake Insurance Program Planning and Development Task Force in March 2008 to assist TREIF in formulating relevant policy plans for the competent authority's consideration. Combining the efforts of experts and scholars that TREIF invited from private, public, and academic sectors together with its staffs, the Task Force convened meetings to probe into improvement plans for each and individual items under the program. The Task Force strengthens the functionality of TREIF to fulfill the expectations of the competent authority, the insurance industry and the policyholders.











■ 承保作業

◆ 有效保單及投保概況

自 2002 年住宅地震保險開辦以來,住宅地震保險業務即穩定成長,截至 2019 年底止,有效 保單件數約 310 萬件,以全國住宅總戶數 8,861,497 戶計算,投保率為 35.01%,件數較前一年成長 3.33%。歷年來,住宅地震保險有效保單件數、簽單保費收入及成長率詳如下表。

住宅地震保險有效保單件數及簽單保費收入

年 度	有效保單件數	簽單保費收入
2002(4月~12月)	455,498	661,231
2003	859,213	1,242,788
2004	1,173,082	1,702,959
2005	1,447,545	2,101,527
2006	1,672,043	2,425,076
2007	1,872,195	2,722,298
2008	2,029,369	2,947,698
2009	2,168,528	2,951,981
2010	2,294,738	3,057,970
2011	2,390,202	3,193,562
2012	2,459,152	3,202,554
2013	2,553,337	3,336,938
2014	2,637,811	3,463,141
2015	2,707,256	3,523,412
2016	2,795,766	3,646,940
2017	2,885,973	3,805,245
2018	3,002,475	3,973,195
2019	3,102,381	4,040,314

單位:新臺幣仟元

*註: 1.2009年4月1日起每單保費由1,459元調降為1,350元。 2. 2012年1月1日起保險金額由120萬元調高為150萬元。

Business Overview

Underwriting Operation

♦ Overview of Policies in Force and Insurance Take-Up rate

Since the launch of the residential earthquake insurance in 2002, it has experienced steady growth. At the end of 2019, the total policies in force reached 3.1 million, which accounted for 35.01% of the total national households of 8.86 million, up by 3.33% when compared with previous year. A more detailed data of the written premium income and policies in force over the past years are listed in the following charts:

Taiwan Residential Earthquake Insurance Policies in Force and Written Premium

Year	Policies In Force	Written Premium Income
2002 (April-December)	455,498	661,231
2003	859,213	1,242,788
2004	1,173,082	1,702,959
2005	1,447,545	2,101,527
2006	1,672,043	2,425,076
2007	1,872,195	2,722,298
2008	2,029,369	2,947,698
2009	2,168,528	2,951,981
2010	2,294,738	3,057,970
2011	2,390,202	3,193,562
2012	2,459,152	3,202,554
2013	2,553,337	3,336,938
2014	2,637,811	3,463,141
2015	2,707,256	3,523,412
2016	2,795,766	3,646,940
2017	2,885,973	3,805,245
2018	3,002,475	3,973,195
2019	3,102,381	4,040,314

Unit: NTD1,000

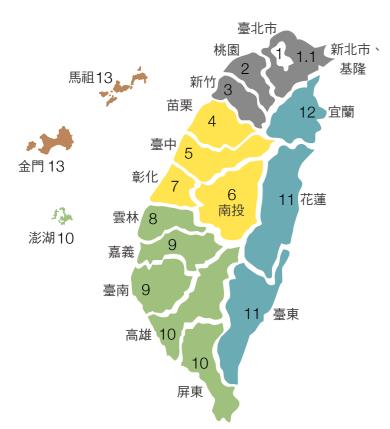




^{*}Note: 1. Effective from April 1, 2009, the annual flat premium has been reduced from NTD 1,459 to NTD 1,350 per policy.

^{2.} Effective from January 1, 2012, the maximum sum insured has been increased from NTD 1.2 million to NTD 1.5 million per policy.





◆ 累積責任額及投保率

截至 2019 年 12 月 31 日止住宅地震保險全國累積責任額達新臺幣 5 兆 1,217 億元,累積責任額較高區域為臺北市、新北市(含基隆)、桃園、新竹、臺中及高屏等都會區;投保率以新竹以北地區及臺中較高,全國投保率最高區域為新竹,達 42.69%。

住宅地震保險累積責任額及投保率

		累積責任額	田珪丰石姓	<i>→</i> ±5/□ ==	 	
	地區	(新臺幣元)	累積責任額 比率(%)	有效保單 件數(件)	住宅戶數	投保率
1	臺北市	607,098,677,395	11.85%	372,268	955,270	38.97%
1.1	新北市、基隆	1,248,831,950,975	24.38%	753,436	1,828,756	41.20%
2	桃園	603,353,592,653	11.78%	361,175	855,085	42.24%
3	新竹	267,784,883,582	5.23%	162,109	379,723	42.69%
4	苗栗	90,819,388,722	1.77%	54,711	186,419	29.35%
5	臺中	672,507,749,156	13.13%	406,332	1,039,360	39.09%
6	南投	60,588,684,575	1.18%	36,670	170,400	21.52%
7	彰化	143,838,227,313	2.81%	86,598	411,483	21.05%
8	雲林	68,254,854,894	1.33%	40,907	227,151	18.01%
9	嘉義、臺南	464,671,791,504	9.07%	281,850	990,841	28.45%
10	高雄、屏東、澎湖	712,954,955,822	13.92%	435,395	1,409,779	30.88%
11	花蓮、臺東	83,351,112,741	1.63%	51,238	202,339	25.32%
12	宜蘭	88,743,979,970	1.73%	54,211	179,230	30.25%
13	金門、其他列嶼	8,936,746,700	0.17%	5,481	25,661	21.36%
	合計	5,121,736,596,002	100.00%	3,102,381	8,861,497	35.01%



Cumulative Liability & Insurance Take-Up Rate

As of December 31, 2019, the cumulative liability of Taiwan's residential earthquake insurance amounted to NTD 5.1217 trillion. Cities with higher amount of cumulative liability were metropolitan cities like Taipei City, New Taipei City (including Keelung), Taoyuan, Hsinchu, Taichung, and Kaohsiung-Pintung. The take-up rates were higher in cities north of Hsinchu and in Taichung. The highest take-up rate of 42.69% was reported in Hsinchu.

Taiwan Residential Earthquake Insurance Cumulative Liability & Take-up Rates

	CRESTA Zone	Cumulative Liability (NTD)	Ratio (%)	Policies in Force	Households	Take-Up Rate(%)
1	Taipei City	607,098,677,395	11.85%	372,268	955,270	38.97%
1.1	New Taipei City, Keelung	1,248,831,950,975	24.38%	753,436	1,828,756	41.20%
2	Taoyuan	603,353,592,653	11.78%	361,175	855,085	42.24%
3	Hsinchu	267,784,883,582	5.23%	162,109	379,723	42.69%
4	Miaoli	90,819,388,722	1.77%	54,711	186,419	29.35%
5	Taichung	672,507,749,156	13.13%	406,332	1,039,360	39.09%
6	Nantou	60,588,684,575	1.18%	36,670	170,400	21.52%
7	Changhua	143,838,227,313	2.81%	86,598	411,483	21.05%
8	Yuanlin	68,254,854,894	1.33%	40,907	227,151	18.01%
9	Chiayi, Tainan	464,671,791,504	9.07%	281,850	990,841	28.45%
10	Kaohsiung,Pintung,Penghu	712,954,955,822	13.92%	435,395	1,409,779	30.88%
11	Hualien, Taitung	83,351,112,741	1.63%	51,238	202,339	25.32%
12	Yilan	88,743,979,970	1.73%	54,211	179,230	30.25%
13	Kinmen and other isles	8,936,746,700	0.17%	5,481	25,661	21.36%
	合計	5,121,736,596,002	100.00%	3,102,381	8,861,497	35.01%













20190828 住宅地震保險理賠機制模擬演練(代理董事長張玉煇致詞(左))

◆ 辦理住宅地震保險業務稽查

為期住宅地震保險共保組織會員公司能確實遵循住宅地震保險相關規範辦理本保險業務,地震保險基金依據「住宅地震保險業務稽查作業規定」,執行簽單公司之住宅地震保險業務實地稽查,並將稽查意見及缺失情形製成稽查報告書後,函報主管機關,並於當年度將業務稽查受稽查公司之缺失事項改善情形函報主管機關。

■ 理賠作業

◆ 辦理理賠機制模擬演練

(一)地震保險基金每年辦理理賠機制模擬演練,主要在協助各簽單公司相關人員熟悉住宅地 震基本保險理賠作業,俾地震損害發生時能迅速自行動員其公司人員,正確且有效率地 給付保險金予受災保戶,以發揮本政策性保險安撫人心之作用,簽單公司亦因善盡其企 業社會責任進而提升其公司之無形商譽價值。

(二)2019年度理賠機制模擬演練

- 1. 新增特色如下:
- (1)納入 0206 臺南及 0206 花蓮地震之理賠處理經驗;
- (2) 北部山腳斷層大規模地震情境演練;
- (3) 電腦安裝災損建築物柱、梁、結構牆 3D 模擬畫面。
- 2. 各情境狀況演練方式及重點摘要如下:





屏東縣 歸來國小 王佩蓉

屏東縣 公館國小 楊阜橙

♦ Auditing of Residential Earthquake Insurance Business

To ensure that the Co-insurance Pool members are complying with the rules and guidelines related to the residential earthquake insurance when operating the business, TREIF formed an auditing team every year in accordance with the "Operating Rules for the Auditing of Residential Earthquake Insurance Business" to conduct onsite residential earthquake insurance business audits in the insurers' offices and submit audit reports containing audit opinions and non-conformities to the competent authority as well as reports on the progress of the corrective actions taken in the same year.

Claim Operation

♦ Claim Simulation Drill

- 1. TREIF holds a claim simulation drill every year. This aims at helping insurers to familiarize with the insurance claim procedures of TREIF, so that their own personnel could be swiftly dispatched during a disaster and appropriately settle the claims to the stranded ones in an efficient way. This could appease people's mood, and bring a positive image to insurers as an enterprise that is responsible toward the society.
- 2. 2019 claim simulation exercises
- (1) New features were as follows:
 - a. Included 2016 Tainan and 2018 Hualien claim settlement experience;
 - b. Simulation exercise for the scenario of a large-scale earthquake in Northern Taiwan's Sanchiao Fault;
 - c. Computers are installed with three-dimensional simulated images of the earthquake damaged building columns, beams and structural walls.
- (2) The simulation exercise approach for each scenarios and the key summary were as follows:









第

段

第

2

階段

地震災害事件實際模擬演練



情境狀況:

假設臺灣北部山腳斷層錯動發生芮氏規模 6.2 地震

演練重點

演練方式

- 災情彙整/緊急應變
- 緊急會議:

內部會議

- 召集各簽單公司報告災損 協調統合資源
- 理賠中樞小組會議

- 各簽單公司於地震發生第一時間啟動各自緊 急應變計畫、召開內部會議討論其緊急應變 計畫及須協助事項。
- 地震保險基金於地震發生第一時間啟動本基 金緊急應變計畫,召開內部會議,報告災損
- 決定是否成立理賠中樞小組。
- 建議是否國庫擔保及特別措施方案。
- 轄下3個分組之應辦理事項。
- 決定成立災區聯合理賠服務中心設置數目、

通報回報演練

以不預警方式,利用資訊系統通知簽單公司 理賠窗口上線選取可報到之進駐人員及合格 評估人員,並通知其依指示時間、地點報到。

- 第 3 段
- 實地報到等狀況演練 (簽單公司理賠服務中心及 災區聯合理賠服務中心)
- 成立 4 處災區聯合理賠服務中心。
- 簽單公司於災區辦公處所成立 16 處理賠服務

第 4 階段

- 模擬災損建築物之損失評 定及相關系統操作演練
- 建置災損模型供合格評估人員進行全損評定。



- 模擬災損模擬演練頒獎典 禮及檢討會
- · 檢討本年度模擬演練缺失及改善建議。
- ·頒獎典禮。

Realistic simulation exercise on earthquake disaster

Scenario: an earthquake measuring 6.2 magnitude on the Richter scale hit Sanchiao Fault Dislocation in northern Taiwan

Key Points

Simulation exercise approach

- Gather earthquake related information / Kick off emergency response
- Convene internal meetings

Emergency Meeting:

- Call underwriting insurers to report
- Coordinate and integrate resources
- **Core Team for Claims Meeting**

- Each insurer is to activate its emergency response plan on the first instance of the disaster and convene internal meeting to discuss about the plan and supports required.
- TREIF is to activate its emergency response plan on the first instance of the disaster, convene internal meetings give damage briefings and report the execution progress for various plans.
- Decide whether to establish a core team for claims.
- Propose whether to reduce claim payment or proportion
- Propose whether guarantee from National Treasury is needed and special measures.
- The Work and tasks to be covered by the three sub-
- shed in the disastrous areas, their locations and service
- Use information system to notify the insurers' claims teams without warning to go online, select stationed Rehearse on responding to notice personnel and qualified adjusters who can report for duty and notify them the time, place to report to duty according to the instruction indicated.
- Scenario exercise on report for duty (claim service center of the insurers and joint claim service center of disastrous site)
- Set up 4 joint claim service centers in disastrous
- The insurers established 16 claim service centers at the offices in the disastrous areas and simulates claim settlement procedures for the residential earthquake insurance.
- Simulation of building damage evaluation and drill exercises for related system operations
- Establish a damaged building module for the qualified adjusters to conduct loss assessment.



2

- Post-exercise award ceremony and review meeting
- Examine the annual simulation exercise to find deficiencies and draft an improvement plan.
- Award ceremony.









- (三)各簽單公司及本基金於 108/8/14-8/28 分四階段演練:
 - 1. 災情彙整、緊急應變、相關會議演練;
 - 2. 不預警之通報回報演練;
 - 3. 理賠服務中心演練;
 - 4. 合格評估人員實地模擬災損評定演練。
- (四)於108/11/6舉辦檢討會暨頒獎典禮,完成向與會者簡報,並頒獎給表現優異之簽單公司 及合格評估人員。主要檢討內容包括:
 - 1. 資訊設備異地備援復原時間是否過長;
 - 2. 部分簽單公司對理賠服務分組之前置作業未臻熟練;住宅地震保險理賠詢答參考 Q&A, 平常須討論及更新;
 - 3. 設計更貼近理賠實務之情境;
 - 4. 加強合格評估人員之評定能力。

■ 住宅地震保險危險分散機制檢討

完成本保險危險分散機制架構之危險總承擔限額、各層限額及共保組織特別準備金收回門檻之 檢討報告函報主管機關,及研議「住宅地震保險危險分散機制實施辦法」建議修正草案,建議事項 如下:

- (一)本保險保險金額調高至 170 萬元。
- (二)本保險危險分散機制總承擔限額調高至950億元。
- (三)第一層底層限額 42 億元由共保組織承擔,第二層限額 908 億元由地震保險基金承擔及 分散,其中718億元以下部分,由地震保險基金視業務需要及市場成本狀況,安排於國 內、外再保險市場或資本市場分散或自留。超過718億元至908億元之190億元部分, 由政府承擔。

配合危險分散與費率分組檢討本保險危險分散機制架構之危險總承擔限額及保險金額,修正住 宅地震保險危險分散機制實施辦法部分條文。

■ 檢討共保組織特別準備金收回門檻

完成檢討共保組織特別準備金收回門檻,建議維持現行共保組織會員特別準備金收回門檻規 定,即特別準備金累積提存總額超過當年度所認受之承擔限額之三倍時,其超過部分之十五分之一, 得收回以收益處理。

■ 辦理住宅地震保險超額賠款再保險安排

有關 2019 年度住宅地震保險危險分散機制之風險分散,地震保險基金業完成安排承擔限額超 過新臺幣 200 億元之 100 億元及超過新臺幣 300 億元之 100 億元之兩層超額賠款再保合約續約。

- 3. TREIF and the insurers conducted the simulation exercise in four phases during August 14 to 28, 2019:
 - (1) Drills for information gathering on the disaster and emergency response as well as related meeting rehearsals;
 - (2) Drills on responding to notice without prior warning;
 - (3) Drills for claim service center:
 - (4) Simulation of qualified adjusters conducting claim evaluations on site.
- 4. A review meeting and an award ceremony were held on November 6, 2019. Presentations were made to participants and awards were presented to outstanding insurers and qualified adjusters. Key focuses of the review were as follows:
 - (1) Whether the recovery time for offsite backup information system was too long;
 - (2) Some insurers were unfamiliar with the preparation work for dividing the claim service groups; good maintenance of the residential earthquake claims Q&A requires regular discussion and update;
 - (3) Design scenarios that are closer to the actual claim practices;
- (4) Enhance qualified adjusters' evaluation capability.

■ Review the Risk Spreading Mechanism of Residential Earthquake Insurance

Reviewed the framework of the risk spreading mechanism for the insurance, including the total risk assumption amount, the risk liability limit for each tier, and the threshold for the Co-insurance Pool to recover special reserve, and submitting the review reports to the competent authority. Reviewed and proposed amendments for the "Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance." The suggested changes were:

- 1. Raising the insured amount for the insurance to TWD 1.7 million.
- 2. Raising the maximum risk assumption in the risk spreading mechanism for the residential earthquake insurance to NTD 95 billion.
- 3. The first-tier risk liability limit of NTD 4.2 billion shall be assumed by the residential earthquake Co-insurance Pool. The second-tier risk liability limit of NTD 90.8 billion shall be assumed or ceded by TREIF: the portion below NTD 71.8 billion may be ceded to domestic or offshore reinsurance market or capital market or retained based on the business evaluation or cost of capital determined by TREIF; and the portion in between NTD 71.8 billion to NTD 90.8 billion, risk liability of NTD 19.0 billion, shall be assumed by the government.

Cooperate with Risk Spreading and Premium Rate Subcommittee to review the total risk assumption amount and the insured amount under the framework of the risk spreading mechanism for the insurance and amend several articles in the "Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance".

■ Reviewing the threshold for the Co-Insurance Pool to recover special reserve

After reviewing the threshold for the Co-insurance Pool to recover special reserve, TREIF suggested to keep the current rules on the threshold. That is when the accumulated total special reserve exceeds three times of the assumed liability limit for the year, the one-fifteenth of the exceeding amount shall be recovered and treated as income.









20191129 住宅地震保險天災風險研討會

■ 辦理再保經紀人評選

2019 年再保經紀人服務評選,本基金籌組採購評選委員會,依實際需求規劃再保經紀人評選 作業與擬定參選招標文件與公告,並於9月19日完成評選,並擇優選任再保經紀人辦理2020年與 2021年再保相關服務工作。

■ 舉辦 2019 年天災風險研討會

地震保險基金業於 2019 年 11 月 29 日下午假國泰金融會議廳舉辦「走過 921,臺灣住宅地震 保險之回顧與展望」研討會,出席情況相當踴躍,包括主管機關代表、保險及再保險業高階主管、 學術研究單位、及業務相關同仁等共約 120 人參加。

鑒於今年洽逢 921 震災 20 週年,本次研討會邀請曾參與過 921 震災查勘經驗且受邀為住宅地 震保險理賠教育訓練師資之專業技師及建築師與產險公會擔任講者,研討會簡報及擷取新知與經驗 分享,可作為地震保險基金及與會保險業者等未來經營天災風險之決策參考。

■ 研究發展

◆ 住宅地震保險制度發展規劃工作小組

2019 年住宅地震保險制度發展規劃工作小組召開 2 次會議,確認其轄下各分組所擬各項重要 工作內容與進度:

◆ 危險分散與費率分組

危險分散與費率分組召開 4 次會議,完成檢討本保險危險分散機制架構之危險總承擔限額、本 保險危險分散機制各層限額及本保險共保組織特別準備金收回門檻等工作項目。

◆ 承保理賠與法制分組

承保理賠與法制分組召開 3 次會議,完成研議檢討修正本保險理賠標準作業處理程序、本保險 危險分散機制實施辦法條文及保險條款、本保險合格評估人員及災區聯合理賠服務中心進駐人員人 力需求暨訓練計畫之研擬等工作項目。



■ Management of Reinsurance Placement for Excess of Loss for the **Residential Earthquake Insurance**

Based on the Risk Spreading Mechanism of Residential Earthquake Insurance, in 2019, TREIF transferred risk to reinsurance market by renewing excess of loss reinsurance contract in two layers, namely the layer of NTD 10 billion in excess of NTD 20 billion and the layer of NTD 10 billion in excess of NTD 30 billion.

Selecting reinsurance broker

TREIF organized the tender selection committee to review and select the reinsurance brokers to deal with reinsurance matters in 2020 and 2021. Based on the need, TREIF planned the selection process, created tender submission documents and announcement, and completed the selection process by September 19, 2019.

■ Organizing the 2019 Natural Catastrophe Risks Conference

TREIF organized "Taiwan's Residential Earthquake Insurance beyond 921 Earthquake – a Retrospect and Outlook" Conference on November 29, 2019. The event was well attended by more than 120 participants, including representatives from the competent authority, senior managers of insurance and reinsurance companies, scholars and researchers and colleagues in the related fields.

2019 marks the 20th anniversary of the 921 Earthquake. TREIF invited Non-Life Insurance Association as well as the professional technicians and architects who participated in the damage survey for the Earthquake and have been the trainers of the residential earthquake insurance claim training program to be the speakers. The presentations and new knowledge and experience sharing provided good reference for TREIF's and insurers' future decision-making on managing natural disaster risks.

■ Research & Development

♦ Residential Earthquake Insurance Program Development and Planning Task Force

In 2019, the Residential Earthquake Insurance Program Development and Planning Task Force convened 2 meetings to validate the major tasks that each subcommittee had planned and the progress of each task.

◆ The Risk Spreading and Premium Rate Subcommittee

The Risk Spreading and Premium Rate Subcommittee convened 4 meetings, completing tasks such as: reviewing the framework of the risk spreading mechanism for the insurance, including the total risk assumption amount, the risk assumption amount for each tier, as well as the threshold for the Co-insurance Pool to recover special reserve.

◆ The Underwriting, Claim and Legal Subcommittee

The Underwriting, Claim and Legal Subcommittee convened 3 meetings to achieve the following: studying and reviewing the standard operating procedure for the residential earthquake insurance's claim settlement, articles of the Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance and insurance clauses, the manpower plan and training programs for the qualified adjusters and the stationed personnel for the joint claim service centers in disastrous area.









◆ 資訊統計與教育推廣分組

資訊統計與教育推廣分組召開 1 次會議,配合內政部「原住民姓名並列羅馬拼者應使用完整姓 名之因應作為 , 及本基金業務需求,完成傳輸平台修正以提高本保險保單資料正確性;完成公益宣 導計畫之擬定,及年度公益官導執行成果報告等工作項目。

■ 法令修正

◆ 住宅地震保險危險分散機制實施辦法部分條文修正草案

(一)研議緣由

配合危險分散與費率分組檢討本保險危險分散機制架構之危險總承擔限額及保險金額, 修正住宅地震保險危險分散機制實施辦法部分條文。

(二)結論與建議

本辦法現行條文共十三條,本次修正四條。

◆ 住宅地震基本保險條款修正草案

(一)研議緣由

配合住宅火災及地震基本保險保單新增第五章住宅颱風及洪水災害補償保險,修正本保 險條款。

(二)結論與建議

住宅火災及地震基本保險保單中本保險條款原列第五章,配合108年10月22日主管機 關核准新增第五章住宅颱風及洪水災害補償保險,爰修正本保險條款為第六章,並配合 修正各條款條次。



20190806 原民會921震災20週年暨莫拉克風災10週年論壇

◆ The IT, Statistics and Educational Promotion Subcommittee

The IT, Statistics and Educational Promotional Subcommittee convene 1 meeting. To fulfill the Ministry of Interior's request to list the indigenous peoples' name in both Chinese characters and Romanization letters, and to meet TREIF's business needs, the Subcommittee corrected the data platform and enhanced the accuracy of the insurance policy information. It also completed the plan to advocate public welfare and the implementation performance report.

■ Revisions of Laws and Regulations

♦ Amendment for the "Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance"

1. Background of the study

Amending several articles in the "Enforcement Rules for the Risk Spreading Mechanism of Residential Earthquake Insurance" in alignment with Risk Spreading and Premium Rate Subcommittee's review on the total risk assumption amount and the insured amount under the framework of the risk spreading mechanism for the insurance.

2. Conclusions and suggestions

Four out of the 13 articles of the Enforcement Rules amended.

Amendment for the residential earthquake insurance clauses

1. Background of the study

Amending the insurance clause to align with the newly added "Chapter 5: Residential Typhoon and Flood Compensation Insurance" in the residential Fire and Earthquake Basic Insurance Policy.

2. Conclusions and suggestions

The residential earthquake insurance was original listed as chapter 5 in the Residential Fire and Earthquake Basic Insurance Policy. On October 22, 2019, the competent authority added "Chapter 5: residential typhoon and flood compensation insurance", thus shifting the Insurance to chapter six.



20190120 臺北市消防局119防災宣導活動



20190720 基隆市消防局108年度暑期親子消防體驗營









■ 訓練與宣導

◆ 合格評估人員訓練

為培養適足之本保險合格評估人員,俾期地震後有充足人力進行本保險毀損建築物之評定作 業,地震保險基金每年辦理住宅地震保險全損評定及鑑定人員新訓及複訓課程,並檢討修正訓練教 材。主要課程內容為本保險理賠作業介紹、住宅建築物地震毀損程度評估方法及判定準則(含案例 解說)、繪圖解說及實作及全損評定及鑑定資訊系統介紹,使受訓學員熟稔本保險理賠相關評定作業。 2019年辦理臺北、臺中及高雄共計 15 場次訓練課程,培訓合格評估人員新訓 325 人,複訓 410 人。

◆ 災區理賠及聯合理賠服務中心進駐人員訓練

為期地震後有充足且熟悉本保險理賠作業處理程序之理賠服務中心進駐人員能迅速協助受災保 戶申請理賠及提供相關諮詢服務,地震保險基金每年辦理住宅地震保險災區理賠及聯合理賠服務中 心進駐人員新訓課程,並檢討修正訓練教材。2019年辦理臺北、臺中及高雄共3場次訓練課程,培 訓進駐人員新訓 59 人,複訓 88 人。

◆ 專業技師及建築師講習

為期震後有適足之本保險毀損建築物之專業鑑定人力及參與住宅地震保險鑑定之專業技師及建 築師充分瞭解住宅地震保險理賠流程及理賠標準,俾順利完成受託建築物鑑定作業,地震保險基金 每年與建築師、專業技師公會共同辦理講習課程。2019年於臺北市、臺中市及高雄市辦理 5 場專業 技師及建築師講習會,共有172位技師及建築師參與講習,增進其對本保險毀損建築物評定作業之 了解及擔任震後損失鑑定人員之意願。

◆ 業務官導

加強辦理各項盲導活動,呼籲計會大眾正視地震風險,提升其對住宅地震保險之正確認知。 2019年地震保險基金辦理之宣導活動:

- (一)與縣市政府或其他機關合作宣導活動:與屏東縣政府合辦師生地震防災海報競賽、線上 有獎徵答及 108.9.21 防災嘉年華會闖關遊戲等多元活動,各活動並加入地震防災及政策 性住宅地震保險等觀念,以達成宣導效益;協辦原住民族委員會、臺南市政府、新北市 政府等機關之「921 震災 20 週年暨莫拉克風災 10 週年」相關活動,以主視覺揭示本基 金為協辦單位、活動紀念品加印本基金logo、設置本保險宣導攤位、「本保險通關密語」 抽大獎等方式宣導本保險。
- (二)辦理民眾、學校講座式及攤位等官導活動,共計46場。
- (三)辦理媒體宣導活動:經濟日報「921地震20週年住宅地震保險專題報導」廣告,包括平 面報紙專題報導(2次)、電子新聞、冠名廣告、2019年自動化工業總覽半頁全彩廣告; 現代保險雜誌全頁廣告。

■ Training & Promotion

◆ Training for Qualified Adjusters

TREIF organizes trainings and retraining sessions each year, so that more qualified adjusters could devote themselves to loss assessment. TREIF also reviews and modifies its training materials each year. The trainings include presentations on insurance claim settlements, assessment methods on the damage level of buildings and loss criteria (including case studies). The trainings include commentary with charters, hands-on practice, total loss determination, and introduction to the evaluation system. Such trainings aim at letting trainees familiarize with the claim settlement determinations and operations. In 2019, a total of 15 training classes were held in Taipei, Taichung and Kaohsiung to train 325 new qualified adjusters and 410 incumbent qualified adjusters.

♦ Trainings for Stationed Personnel of Joint Claim Service Centers of Disastrous Areas

Qualified and experienced adjusters stationed at the claim settlement service center who are themselves familiar with the claim settlement procedures are able to quickly help stranded people apply for a settlement and provide related consultation services. Each year, TREIF trains new personnel to be stationed at the joint claim settlement service center, and to provide residential earthquake insurance. The training textbooks are also reviewed every year. In 2019, a total of 3 training classes were held in Taipei, Taichung and Kaohsiung to train 59 new stationed personnel and 88 incumbent stationed personnel

◆ Professional Engineer Workshops

TREIF strives to provide enough professionals to evaluate losses and to ensure that professional engineers and architects participating in the assessment operations could fully understand the claims adjustment process and standards, thus are able to complete the assessment on damaged buildings that are commissioned to the engineers/ architects. TREIF holds these workshops along with the architect associations and professional technician associations each year. In 2019, a total of 5 professional engineer and architect workshops were held in Taipei, Taichung, and Kaohsiung. A total of 172 engineers and architects attended the workshops. This increases participants' interest in becoming a post-disaster adjuster, and enhances their knowledge on TREIF's evaluation operations.

♦ Business Promotion

TREIF organized numerous promotional events to call for public's attention on earthquake risk and disseminate people's correct knowledge about residential earthquake insurance.

TREIF's promotional activities in 2019 include:

(1) Co-organizing promotional activities with county/city governments and other agencies: co-organizing with Pingtung County Government in "Poster Contest," "Fun Quiz with Prizes," and "Fun Fair Game Booths" to advocate about earthquake disaster risk reduction and residential earthquake insurance; co-organizing the events related to "20th Anniversary of 921 Earthquake and 10th Anniversary of Typhoon Morakot" with Council of Indigenous Peoples, Tainan City Government and New Taipei City Government, to increase TREIF's exposure by printing logo in the event's key visual designs, raising awareness about the insurance by setting up advocacy booth, game booth and lucky draw.







■ 資訊作業

◆ 電腦異地備援機制及演練

為確保地震保險基金資料庫及資訊系統之安全,地震保險基金於 2007 年建置電腦異地備援機制,提供業務永續運作之基礎,不因設備異常或災難發生而中斷營運,備援地點為桃園龍潭(宏碁渴望園區),建置初期備援範圍為網域控制伺服器、主資料庫伺服器、電子郵件伺服器、檔案伺服器及網站伺服器,另為強化地震保險基金異地備援系統之完整性,分別於 2009 年 12 月、2010 年 12 月完成複保險查詢平台、及其點對點機制之異地備援機制。

地震保險基金每年進行異地備援模擬演練,2019年1月及2019年8月於本基金進行演練,以確保當大災難發生導致重要電腦設備毀損無法運作因而需啟動異地備援機制時,各項系統切換作業能順利進行。

◆ 電腦環境安全強化作業

配合資通安全法於 2019 年 1 月 1 日實施,本基金就臺北機房及異地備援機房之整體軟硬體設施及系統環境進行分析,並於 2019 年 9 月經本基金個人資料保護暨資通安全推動暨專家會議討論後,完成本基金「整體資訊環境現況檢討暨風險改善規劃報告」。

依上述改善規劃報告,於 2019 年 11 月開始辦理複保險平台及震後民眾查詢服務平台之系統改 善作業;另於 2019 年 12 月開始辦理機房伺服器虛擬化環境及作業系統升級作業。

為提高同仁良好的資訊安全意識,依本基金分散式阻斷服務防禦與應變作業程序辦理通報演練,另於2019年4月進行電子郵件攻擊方式之社交工程演練,且於演練後進行資安宣導課程,以期降低社交工程攻擊風險。

另於 2019 年 12 月辦理網站弱點掃瞄作業,以利事先偵查網站及網頁程式存在漏洞,俾改善弱點,強化整體網站與系統安全。





20191106 住宅地震保險理賠機制模擬演練檢討會暨頒獎典禮(左)代理董事長張玉煇致詞(右)





屏東縣 建興國小 蘇俞安

- (2) TREIF organized 46 sessions of other promotional activities in public and school lecture or fair booth formats.
- (3) Media activities: featured an advertisement in Economic Daily newspaper for "Residential Earthquake Insurance Special Report 20th Anniversary of 921 Earthquake", which included two newspaper reports, one online report, sponsored advertisement, a half-page color advertisement in the 2019 Automation Industry Directory; launched a full-page advertisement in RMIM Magazine.

■ Information Operation

◆ Disaster Recovery Mechanism System and Simulation Drills

To ensure the security of TREIF database and the information system, in 2007 TREIF established an IT remote backup system, building a foundation for sustainable operation while preventing business disruption due to an equipment malfunction or natural disaster. The IT remote backup system is located in Lungtan, Taoyuan County (Acer Aspire Park). In the initial stage, the scope of the recovery covers domain controller servers, primary database servers, email server, file server and web site server. Moreover, as part of an effort to strengthen the comprehensiveness of the IT remote backup system, TREIF completed the building of a recovery system for double insurance verification platform and the Host-to-Host System for its disaster recovery platform in December, 2009 and December 2010, respectively.

Every year, TREIF conducts disaster recovery system simulation drills to ensure system transitions to disaster recovery system can be done smoothly in case that computer equipment is damaged when an earthquake hits. In January and August 2019, drills were conducted in TREIF.

♦ Computer environment security enhancement work

In alignment with the implementation of the Cyber Security Management Act on January 1, 2019, TREIF conducted an analysis on software and the systems in the Taipei's server room and offsite backup system's server room. In September, TREIF completed "Cyber Security Management Review and Risk Improvement Planning Report" after reviewing the analytical reports and discussing with experts.

Based on the abovementioned improvement planning report, TREIF began upgrading the systems for the double insurance verification platform and the post-earthquake public inquiry service platform in November 2019. In December 2019, TREIF activated the environment and operation system enhancement plan for building virtual servers.

To raise our colleague's awareness on information security, TREIF conducted Distributed Denial of Service and response operating procedures drill. Aiming to reduce the risk of social cyber-attack, TREIF organized malicious email attack drill and held a post-drill information security training class in April 2019.

In December 2019, TREIF conducted web vulnerability assessment in order to strengthen the overall website and system security by detecting vulnerabilities in the website and webpage programming.





財務概況

■ 收入概況

2019年再保費收入新臺幣 40.78 億元較 2018年度之新臺幣 39.55 億元成長 3.11%,主要係 2019年度實際有效保單件數較預期增加,致再保費收入增加。此外,利息收入亦隨著各項準備金累 積而成長;綜計地震保險基金 2019 年總收入新臺幣 45.35 億元較 2018 年成長 0.98%。

各年度收入 2015~2019

年 度	2015	2016	2017	2018	2019
再保費收入	3,531,024	3,667,243	3,797,659	3,954,677	4,078,404
利息收入	344,710	386,674	391,922	433,078	451,668
其他收入	4,445	169,164	6,309	103,860	5,342
收入合計	3,880,179	4,223,081	4,195,890	4,491,615	4,535,414
成長率	2.96%	8.84%	-0.64%	7.05%	0.98%

單位:新臺幣仟元

■ 準備金累積

地震保險基金係依下列規定提存特別準備金:

- 1. 每年年底應就分進之純保險費收入總額,扣除共保組織及國內、外再保險市場或資本市場危 險分散成本、淨自留賠款、未滿期保費準備淨變動、賠款準備淨變動及支付融資貸款利息後 之餘額,全數提存特別準備金。
- 2. 每年年底應就本保險附加費用收入及不含資金運用收益之其他各項收入總額,扣除各項成本 費用後之餘額,全數提存特別準備金。

Financial Overview

Revenue

In 2019, the reinsurance premium revenue totaled NTD 4.078 billion, up by 3.11% when compared to last year's NTD 3.955 billion mainly because of the number of policy in-force in 2019 was higher than expected. In addition, interest income increased as various reserves accumulated. In summary, the total revenue of TREIF for 2019 amounted to NTD 4.535 billion, by 0.98% from previous year.

Annual Revenue 2015~2019

Revenue Interest Revenue 344,710 386,674 391,922 433,078 451,668 Others Revenue 4,445 169,164 6,309 103,860 5,342 Total 3,880,179 4,223,081 4,195,890 4,491,615 4,535,414	Year	2015	2016	2017	2018	2019
Revenue 344,710 386,674 391,922 433,078 451,668 Others Revenue 4,445 169,164 6,309 103,860 5,342 Total 3,880,179 4,223,081 4,195,890 4,491,615 4,535,414	Premiums	3,531,024	3,667,243	3,797,659	3,954,677	4,078,404
Revenue 4,445 169,164 6,309 103,860 5,342 Total 3,880,179 4,223,081 4,195,890 4,491,615 4,535,414		344,710	386,674	391,922	433,078	451,668
		4,445	169,164	6,309	103,860	5,342
Growth Rate 2.96% 8.84% -0.64% 7.05% 0.98%	Total	3,880,179	4,223,081	4,195,890	4,491,615	4,535,414
	Growth Rate	2.96%	8.84%	-0.64%	7.05%	0.98%

Unit: NTD1,000

Accumulation of Various Reserves

TREIF shall set aside special reserve pursuant to the following provisions:

- 1. At the end of each year, TREIF shall set aside the balance of the total amount of pure premium received after deduction of premium allocated to the Pool, the costs in connection with spreading of risk on domestic, oversees reinsurance or capital markets, net retained loss, net change in unearned premium reserve, net change in loss reserve, and interest paid for financing loans as special reserve.
- 2. At the end of each year, TREIF shall set aside the balance of the income from expense loading plus the sum of various incomes excluding the financial income after deduction of operating costs and expenses as a special reserve.







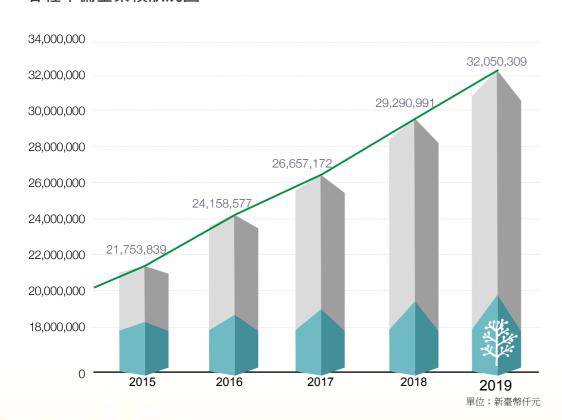
截至 2019 年底, 地震保險基金累計提存之特別準備為新臺幣 294.1 億元, 未滿期保費準備 14.8 億元,預留調整準備為新臺幣 7.4 億元,信用風險準備為新臺幣 4.2 億元,各項準備金之累積 餘額達新臺幣 320.5 億元,與 2018 年底新臺幣 292.9 億元相較,成長率為 9.42%,近年來累積狀況 如下:

各種準備金累積狀況

年度	2015	2016	2017	2018	2019
特別準備	19,715,519	21,984,954	24,339,252	26,813,324	29,409,788
未滿期保費準備	1,277,242	1,319,941	1,368,375	1,428,222	1,484,403
預留調整準備	505,370	560,932	618,450	678,390	740,200
信用風險準備	255,708	292,750	331,095	371,055	415,918
合計	21,753,839	24,158,577	26,657,172	29,290,991	32,050,309
成長率	11.38%	11.05%	10.34%	9.88%	9.42%

單位:新臺幣仟元

各種準備金累積狀況圖



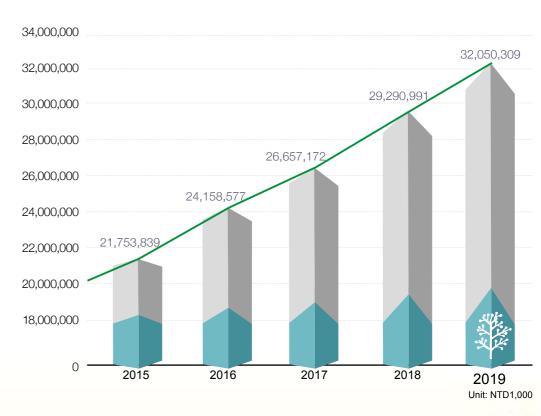
As of the end of 2019, TREIF's cumulative special reserve was NTD 29.41 billion, net unearned premium reserve was NTD 1.48 billion, reserve against adjustment of premiums was NTD 740 million, and credit risk reserve was NTD 420 million. Total reserves reached NTD 32.05billion, up by 9.42% in comparison to NTD 29.29 billion in 2018. The details of the accumulation of various reserves in recent years are recorded in the following charts:

Accumulation of Various Reserves

Year	2015	2016	2017	2018	2019
Special Reserve	19,715,519	21,984,954	24,339,252	26,813,324	29,409,788
Net Unearned Premium Reserve	1,277,242	1,319,941	1,368,375	1,428,222	1,484,403
Reserve Adjustment	505,370	560,932	618,450	678,390	740,200
Credit Risk Reserve	255,708	292,750	331,095	371,055	415,918
Total	21,753,839	24,158,577	26,657,172	29,290,991	32,050,309
Growth Rate	11.38%	11.05%	10.34%	9.88%	9.42%

Unit: NTD1,000

Accumulation of Various Reserves









■ 財源籌措計畫

地震保險基金依據各項收支及投保率 之預估、危險分散機制、累積特別準備金及 相關法令等之變動,推估未來可能成長的規 模,並考量國內外金融市場的籌資方式,擬 訂地震保險基金因應資金不足支應賠款時之 財源籌措計畫。

一旦發生大地震, 地震保險基金即依產 險公司統計之實際理賠損失, 儘速估算地震 保險基金應攤付之賠款及資金缺口,並就資 金缺口研擬財源籌措因應方式。如果賠款金 額不大,由地震保險基金之累積資金支應或 向銀行信用借款方式自行籌資,若資金缺口 過大致地震保險基金無法自籌財源解決時, 為保障被保險人權益,即依保險法第138-1 條規定報請主管機關會同財政部報請行政院 核定後,由國庫提供擔保,以取得必要之資 金來源。



20190921 臺南市政府「108年度921國家防災日全民健走 活動」



20190921 屏東縣防災嘉年華會

■ Financing Plan

TREIF forecasts its growth based on estimated annual revenue, expenditure and take-up rate, as well as changes in the risk spreading mechanism, cumulative reserves and relevant laws. TREIF prepares a financing plan in case when the cumulative reserves are insufficient to cover the claim payments by taking into account the financing methods in domestic and overseas financial markets.

When a major earthquake occurs, TREIF could calculate an estimated payable claims and possibly fund shortfall according to the actual loss assessment by Nonlife insurers and formulate a financing plan to tackle the fund shortfall. If the payable claims can be managed by TREIF alone, TREIF will finance it by utilizing its cumulative funds, or seek bank credit. However, if the payable claims exceed the amount that TREIF can manage, in order to protect the interests of the insured TREIF may first request the competent authority and the Ministry of Finance to jointly apply for Executive Yuan's approval, based on Insurance Act Article 138-1, then obtain necessary financial resource using National Treasury as a guarantor.



屏東縣 潮州國小 楊加禔



20190705 臺北市政府消防局108年消防營





■ 資金運用

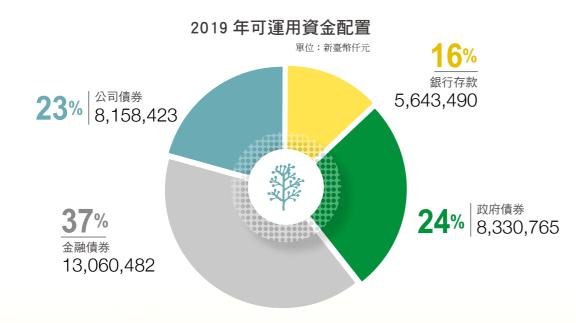
地震保險基金資金之運用,以安全性為首要考量,同時兼顧投資標的之流動性及收益性,並本 風險分散原則作最妥適之配置。

截至 2019 年底,地震保險基金可運用資金總額較前一年底增加新臺幣 31.68 億元,累計已達新臺幣 351.98 億元,其中銀行存款新臺幣 56.43 億元,政府債券新臺幣 83.31 億元,金融債券新臺幣 130.60 億元,公司債新臺幣 81.58 億元,證券(ETF)新臺幣 487 萬元。

可運用資金配置狀況表

-5 0	2018年		2019年		上較增減
項目	金額	比例	金額	比例	金額
銀行存款	5,061,890	15.8%	5,643,490	16.1%	581,600
政府債券	8,145,447	25.4%	8,330,765	23.7%	185,318
金融債券	11,701,854	36.5%	13,060,482	37.1%	1,358,628
公司債券	7,114,226	22.2%	8,158,423	23.2%	1,044,197
證券 (ETF)	6,456	0.02%	4,874	0.01%	(1,582)
總計	32,029,873	100.00%	35,198,034	100.00%	3,168,161

單位:新臺幣仟元



■ Investment Management

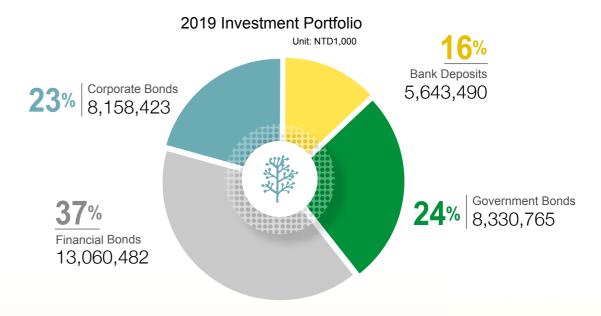
The top concern of TREIF's investment management is safety while keeping a good balance of liquidity and profitability, as well as risk diversification to achieve optimal portfolio.

Up to the end of 2019, TREIF has accumulated as much as NT\$35.19 billion of available funds, up NT\$3.16 billion from the same period in the previous year. This includes NT\$5.64 billion savings in bank accounts, NT\$8.33 billion in government bond, NT\$13.06 billion in financial bond, NT\$8.16 billion in corporate bond, and NT\$4.87 million in ETF.

Investment Portfolio

	2018		2019		Change in	
Item	Amount	%	Amount	%	Amount	
Bank Deposits	5,061,890	15.8%	5,643,490	16.1%	581,600	
Government Bonds	8,145,447	25.4%	8,330,765	23.7%	185,318	
Financial Bonds	11,701,854	36.5%	13,060,482	37.1%	1,358,628	
Corporate Bonds	7,114,226	22.2%	8,158,423	23.2%	1,044,197	
Securities(ETF)	6 , 456	0.02%	4,874	0.01%	(1,582)	
Total	32,029,873	100.00%	35,198,034	100.00%	3,168,161	

Unit: NTD1,000







Major Events-2019

大事紀錄















雷腦系統界协備接演練:第一次演練

2019/1/18 電腦系統異地備援演練:第一次演練 First Disaster System Recovery Drill.

日 期 Date

2019/1/20 参與臺北市政府 119 防災宣導活動
Participating in the "119 Disaster Risk Reduction Advocacy Event" organized by the Taipei City Fire Department.



2019/3/7 参與臺北市松山區民權防災公園收容安置演練 Participating in the Mingchuan Disaster Risk Reduction Park's shelter placement exercise in Songshan District of Taipei City.

2019/3/8 参與「全國震不倒盃抗震模型大賽暨地震防災教育活動」 宣導住宅地震保險
Participating in "National Earthquake-Resistance Building Model Contest and Earthquake Disaster Risk Reduction Education Program" to raise awareness

2019/3/31 完成住宅地震保險超額賠款再保合約 2019 年第二層續約

about the residential earthquake insurance.

Completing contract renewal of 2019 2nd layer excess of loss reinsurance.

Subsidizing schools in rural areas to visit the 921 Earthquake Museum.

補助學校地震防災知識之旅活動

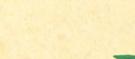
2019/4/17 進行電子郵件攻擊方式之社交工程演練 Conducting the Drill on Social Engineering - Email attacks.

evacuation drill.

2019/4~11

2019/4/20 參與新北市政府年度多元防災宣導日活動

Participating in the annual disaster risk reduction advocacy event organized by New Taipei City Government.









日期 Date	大事紀 Major Events
2019/5~11	與屏東縣政府合辦「師生地震防災及住宅地震保險海報競賽暨有獎徵答及 防災嘉年華會活動」
	Co-organizing "Poster Contest", "Fun Quiz with Prize", and "Local Fair" with Pingtung County Government to advocate earthquake disaster risk reduction and residential earthquake insurance.
2019/5/16	參與臺北市文山區年度(景華)防災公園開設收容安置與教育訓練宣導活動
	Participating in the Jinghua Disaster Risk Reduction Park's shelter placement exercise and related training program in Wenshan District of Taipei City.
2019/5/17	參與臺北市信義區公所「防災(松德)公園開設測試暨教育宣導活動」 Participating in "Pilot Run of the Disaster Risk Reduction Park & Education Activities" in Xinyi District, Taipei City.
	★
2019/5/22	參與安定基金「2019 好險有你」系列講座 - 「財經練工坊」進行宣導 Participating in Taiwan Insurance Guaranty Fund's "Financial Knowledge Workshop" to promote the residential earthquake insurance.
2019/6/12	赴臺灣銀行進行宣導 Holding a business promotion event in Bank of Taiwan.

日 期 Date	大事紀 Major Events
2019/6/29	參與臺灣金融服務業聯合總會與臺南市政府共同主辦之「2019 年金融服務愛心公益嘉年華」活動 Participating the "2019 Financial Sector Charity Festival" co-organized by Taiwan Financial Services Roundtable and Tainan City Government.
2019/6/30	完成住宅地震保險超額賠款再保合約 2019 年第一層續約 Completing contract renewal of 2019 1st layer excess of loss reinsurance.
2019/7	參與臺北市政府消防局舉辦之消防營活動 Participating in the "Fire Rescue Camp activities" organized by the Taipei City Fire Department.
2019/7	參與基隆市消防局舉辦之暑期親子消防體驗營」 Participating in the "Fire Rescue Camp activities" organized by the Keelung city Fire Department.
2019/7/26	合格評估人員第 61 期北區新訓 Conducting the 61th Qualified Adjuster Retraining Program in northern region.
2019/8/1	進駐人員第 13 期中區新訓 Conducting the 13th Retraining Program for Stationed Personnel in central region.
2019/8/6	參與原住民族委員會「921 震災 20 週年暨莫拉克風災 10 週年論壇」 Participating in the Conference on the "20th Anniversary of 921 Earthquake and 10th Anniversary of Typhoon Morakot" organized by the Council of Indigenous Peoples.
2019/8/6	合格評估人員第 76 期北區複訓 Conducting the 76th Qualified Adjuster Retraining Program in northern region.
2019/8/15	合格評估人員第 62 期南區新訓 Conducting the 62st Qualified Adjuster Training Program in southern region.



日期 Date	大事紀 Major Events
2019/8/16~28	理賠機制模擬演練情境演練 Conducting claim settlement simulation drill.
2019/8/20	合格評估人員第 77 期北區複訓 Conducting the 77th Qualified Adjuster Retraining Program in northern region.
2019/8/22	合格評估人員第 63 期中區新訓 Conducting the 63h Qualified Adjuster Training Program in central region.
2019/8/23	大地技師講習會 Conducting workshop for geotechnical engineers.
2019/8/24	電腦系統異地備援演練:第二次演練 Second Disaster System Recovery Drill.
2019/9/3	進駐人員第 14 期南區複訓 Conducting the 14th Retraining Program for Stationed Personnel in southern region.
2019/9/4	合格評估人員第 64 期中區新訓 Conducting the 64h Qualified Adjuster Training Program in central region.
2019/9/5	合格評估人員第 78 期南區複訓 Conducting the 78th Qualified Adjuster Retraining Program in southern region.
2019/9/7	北區土木 / 結構 / 大地技師講習會 Conducting workshop for civil engineers, structural engineers, and geotechnical engineers in northern region.
2019/9/10	合格評估人員第 65 期北區新訓 Conducting the 65th Qualified Adjuster Retraining Program in northern region.
2019/9/16	完成本基金「整體資訊環境現況檢討暨風險改善規劃報告」。 Completing the "Cyber Security Management Review and Risk Reduction Planning Report.

日期 Date	大事紀 Major Events
2019/9/17	合格評估人員第 79 期中區複訓。 Conducting the 79th Qualified Adjuster Retraining Program in central region.
2019/9/19	完成再保險經紀人評選。 Completing the selection of reinsurance brokers.
2019/9/19	依本基金分散式阻斷服務防禦與應變作業程序辦理通報演練。 Proceeding to drills on reporting about a situation according to the TREIF's
2019/9/21	Decentralized blocking service defense and emergency management procedure. 参與臺北市政府「108 年度 921 國家防災日活動」 Participating in the advocacy event of National Disaster Prevention Day organized by Taipei City Government.
	在全地區 是 TAT File 18
2019/9/21	參與臺南市政府「108 年度 921 國家防災日全民健走活動」 Participating in the "2019 Annual 921 National Disaster Risk Reduction Day – Walking Event" organized by the Tainan City Government.
2019/9/24	合格評估人員第 80 期北區複訓 Conducting the 80th Qualified Adjuster Retraining Program in northern region.
2019/9/28	參與新北市政府「108 年國家防災日暨健行祈福活動」 Participating in the "2019 Annual National Disaster Risk Reduction Day – Walking for Blessing Event" organized by the New Taipei City Government.
2019/9/30	完成傳輸平台修正及上線作業 Completing the improvement of the Transmission Platform and its activation.
2019/10~12	參與「私有建築物耐震階段性補強說明會」進行宣導 Participating in the lecture of reinforcement on private buildings.
2019/10/5	赴臺東縣辦理「保護宅生活」宣導講座 Organizing the "Protecting Your Home" advocacy lecture in Taitung County.



日 期 Date	大事紀 Major Events
2019/10/8	合格評估人員第 81 期北區複訓 Conducting the 81th Qualified Adjuster Retraining Program in northern region.
2019/10/15	合格評估人員第 82 期中區複訓 Conducting the 82th Qualified Adjuster Retraining Program in central region.
2019/10/20	赴雲林縣辦理「保護宅生活」宣導講座 Organizing the "Protecting Your Home" advocacy lecture in Yuenlin County.
	Character (Call Right) of Section 1
2019/10/28	進駐人員第 15 期北區複訓 Conducting the 15th Retraining Program for Stationed Personnel in northern region.
2019/11/2	參與臺灣金融服務業聯合總會與新竹市政府共同主辦之「2019 年金融服務愛心公益嘉年華」活動 Participating the "2019 Financial Sector Charity Festival"co-organized by Taiwan Financial Services Roundtable and Hsinchu City Government.
2019/11/5	合格評估人員第 83 期北區複訓 Conducting the 83th Qualified Adjuster Retraining Program in northern region.
2019/11/6	理賠機制模擬演練 - 檢討會暨頒獎典禮 Conducting claim settlement simulation drill – review meeting and award ceremony.
2019/11/19	合格評估人員第 84 期北區複訓 Conducting the 84th Qualified Adjuster Retraining Program in northern region.
2019/11/19	依本基金分散式阻斷服務防禦與應變作業程序辦理通報演練 Proceeding to drills on reporting about a situation according to the TREIF's Decentralized blocking service defense and emergency management procedure.

日期 Date	大事 紀 Major Events
2019/11/22	合格評估人員第 66 期北區新訓 Conducting the 66th Qualified Adjuster Retraining Program in northern region.
2019/11/25	開始辦理複保險平台及震後民眾查詢服務平台之系統改善作業 Launching the operation to upgrade the double insurance verification platform and the post-earthquake public inquiry service platform.
2019/11/29	舉辦第 12 屆天災風險研討會 Organizing the 12th Natural Catastrophe Risks Conference – 2019.
2019/11/30	北區土木 / 結構 / 大地技師講習會 Conducting workshop for civil engineers, structural engineers, and geotechnical engineers in northern region.
2019/12/5	開始辦理機房伺服器虛擬化環境及作業系統升級作業 Activating the virtualization of System Servers and upgrade Operation Systems.
2019/12/7	南區土木 / 結構 / 大地技師講習會 Conducting workshop for civil engineers, structural engineers, and geotechnical engineers in southern region.
2019/12/7	開始辦理網站弱點掃瞄作業 Conducting vulnerability Assessment to TREIF websites.
2019/12/14	中區土木 / 結構 / 大地技師講習會 Conducting workshop for civil engineers, structural engineers, and geotechnical engineers in central region.
2019/12/26	拜訪災害防救辦公室 Visiting Office of Disaster Management.
2019/12/31	完成住宅地震保險共保組織合約 2020 續約 Completing the 2020 Residential Earthquake Insurance Co-insurance contract renewals.



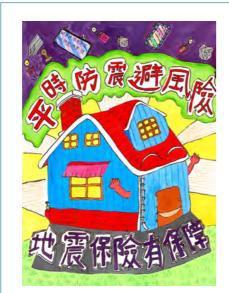




2019 年本基金與<mark>屏東縣</mark>政府合辦 地震防災教育宣導藝文比賽



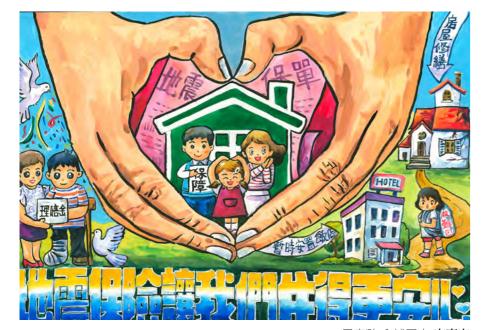
屏東縣 和平國小 潘昱安



屏東縣 民和國小 鄒祥新



屏東縣 東隆國小 陳歆嫙



屏東縣 內埔國中 宋庭安



屏東縣 忠孝國小 朱家孟



2019 年本基金與<mark>屏東縣</mark>政府合辦 地震防災教育宣導藝文比賽



屏東縣 大潭國小 莊育婷、夏嘉宏



屏東縣 鶴聲國中 謝沛儒、吳妙純





屏東縣 潮州國小 戴妏晏



屏東縣 歸來國小 王靜怡









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本年報封面及內頁作品選自於地震保險基金與屏東縣政府合辦之國中小學地震教育藝文競賽得獎作品。

The art works inside the pages of this annual report were selected from the award winning pieces of Earthquake Education Art and Culture Contests for Elementary and Junior High School students, which were co-organized by TREIF and Governments of Pingtung County.

