Capital Adequacy (E) Task Force
RBC Proposal Form

[ ] Capital Adequacy (E) Task Force   [ ] Health RBC (E) Working Group   [ ] Life RBC (E) Working Group

[ ] Catastrophe Risk (E) Subgroup   [ ] Investment RBC (E) Working Group   [ ] Operational Risk (E) Subgroup

[ ] C3 Phase II/ AG43 (E/A) Subgroup   [ ] P/C RBC (E) Working Group   [ ] Longevity Risk (A/E) Subgroup

DATE: January 21,2021	**FOR NAIC USE ONLY**
CONTACT PERSON: Steve Clayburn	Agenda Item #_____
TELEPHONE: (202) 624-2197	Year _____
EMAIL ADDRESS: steveclayburn@acli.com	**DISPOSITION**
ON BEHALF OF: American Council of Life Insurers (ACLI)	[ ] ADOPTED _____
NAME: Steve Clayburn	[ ] REJECTED _____
TITLE: Senior Actuary, Health Insurance & Reinsurance	[ ] DEFERRED TO _____
AFFILIATION: ACLI	[ ] REFERRED TO OTHER NAIC GROUP
ADDRESS:	[ ] EXPOSED _____
	[ ] OTHER (SPECIFY) _____

IDENTIFICATION OF SOURCE AND FORM(S)/INSTRUCTIONS TO BE CHANGED

[ ] Health RBC Blanks   [ ] Property/Casualty RBC Blanks   [X] Life and Fraternal RBC Instructions

[ ] Health RBC Instructions   [ ] Property/Casualty RBC Instructions   [X] Life and Fraternal RBC Blanks

[ ] OTHER _____

DESCRIPTION OF CHANGE(S)

To update the RBC calculation for Real Estate to reflect updated experience and analysis since RBC was first developed.

REASON OR JUSTIFICATION FOR CHANGE **

When RBC was developed, there was limited experience on the default and loss for commercial real estate. Since then data sources have been compiled and tracked in the industry, and can now be accessed to provide more meaningful analysis and information for development of capital standards.

Additional Staff Comments:

** **This section must be completed on all forms.**   **Revised 2-2019**

1. REAL ESTATE

LR007

Basis of Factors

~~Companies that have developed their own risk-based capital factors for real estate have used a range of factors from 5 percent to 20 percent. One study indicated real estate volatility is about 60 percent of common stock, suggesting a factor in the range of 18 percent. Assuming a full tax effect for losses, a pre-tax factor of 15 percent was chosen. Foreclosed real estate would carry a somewhat higher risk at 23 percent pre-tax. Schedule BA real estate also has a 23 percent factor pre-tax because of the additional risks inherent in owning real estate through a partnership. The pre-tax factors were developed by dividing the post-tax factor by 0.65 (0.65 is calculated by taking 1.0 less 0.35). The pre-tax factors are not changing for 2018 due to tax reform.~~ The base factor for equity real estate of **[10%]** was developed by adding a margin for conservatism to the results of an analysis of real estate performance over the period of 1978 – 2012. The analysis was conducted by a group of life insurance company real estate investment professionals coordinated by the ACLI. The data used was a national database of real property owned by investment fiduciaries and supplemented by data on real estate backing mortgage securities. The analysis is documented in a report to the NAIC dated April 9, 2017. In addition to modifying the factor for company owned and investment real estate, this updated factor will also be used for real estate acquired in satisfaction of debt (Foreclosed real estate) and for assets with the characteristics of real held estate (partnership or other structure) reported on Schedule BA. Foreclosed real estate is recognized in the statutory statements as having acquisition cost equal to market value at time of foreclosure. Schedule BA real estate was originally given a higher factor under a presumption that it was more highly levered. Analysis has shown these assets to have experience very similar to directly held and will therefore use the same factor.

While the experience analysis was done based on analysis of fair value impacts, Real Estate is reported at depreciated cost in the Statutory statements. Therefore, beginning in 2021 an adjustment is made to the factor to partially account for the difference between fair value and statutory carrying value on a property by property basis. The adjustment is defined as

$$\text{Adj Factor} = RE\ Factor*(1 – [factor] * (MV-BVg)/BVg)\}$$

factor is [2/3]

The resulting adjusted RBC factor is subject to a minimum of zero.~~equal to the factor for a Baa bond.   In the RBC calculation,~~ see Figure 7, fair value is taken from Schedule A Column 10 plus encumbrances, or from Schedule BA column 11 plus encumbrances, respectively, while BVg is the net Book Adjusted Carrying Value plus the encumbrance.

Encumbrances have been included in the real estate base since the value of the property is held net of the encumbrance, but the entire value is subject to loss ~~would include encumbrances~~. Encumbrances receive a~~the~~ base real estate factor of [10%] reduced by the average factor for commercial mortgages of 1.75~~2~~ percent pre-tax. In the past this was computed as a base factor applied to the net real estate value plus a separate factor applied to the amount of the encumbrance. Beginning in 2021, the equivalent result will be obtained by applying a base factor to the gross statutory value of the property, and a credit provided for the amount of the encumbrance. ~~for real estate encumbrances not in foreclosure and 20 percent pre-tax for real estate encumbrances in foreclosure and encumbrances on Schedule BA real estate.~~

The final RBC amount is subject to a minimum of the Baa bond factor (1.30%) applied to the BACV, and a maximum of 45% of the BACV.

~~All references to involuntary reserves as it relates to real estate were removed to comply with the codification of statutory accounting principles.~~

Specific Instructions for Application of the Formula

Column (1)

Calculations are done on an individual property or joint venture basis in the worksheets and then the summary amounts are entered in this column for each class of real estate investment. Refer to the real estate calculation worksheet (Figure 7) for how the individual property or joint venture calculations are completed.

Line (1) should equal Page 2, Column 3, Line 4.1.
Line (2) should equal Page 2, inside amount, Line 4.1.
Line (4) should equal AVR Equity Component Column 1 Line 20.

Line (5) should equal AVR Equity Component Column 3 Line 20.
Line (7) should equal AVR Equity Component Column 1 Line 19.
Line (8) should equal AVR Equity Component Column 3 Line 19.
Line (14) should equal Schedule BA, Part 1, Column 12, Line ~~1799999~~ 2199999 plus Line ~~1899999~~2299999, in part.
Line (15) should equal Schedule BA, Part 1, Column 12, Line 1799999 plus Line 1899999, in part.
Line (17) should equal AVR Equity Component Column 1 Line 75.
Line (18) should equal AVR Equity Component Column 1 Line 76.
Line (19) should equal AVR Equity Component Column 1 Line 77.
Line (20) should equal AVR Equity Component Column 1 Line 78.
Line (21) should equal AVR Equity Component Column 1 Line 79.

Low income housing tax credit investments are reported in Column (1) in accordance with *SSAP No. 93—Low Income Housing Tax Credit Property Investments*.

Column (2)
The average factor column is calculated as Column (3) divided by Column (1).

Column (3)
Summary amounts are entered for Column (3) based on calculations done on an individual property or joint venture basis. Refer to Column (8) of the real estate calculation worksheet (Figure 7).

Line (17)
Guaranteed federal low-income housing tax credit (LIHTC) investments are to be included in Line (17). There must be an all-inclusive guarantee from an ARO-rated entity that guarantees the yield on the investment.

Line (18)
Non-guaranteed federal LIHTC investments with the following risk mitigation factors are to be included in Line (18):
   a) A level of leverage below 50 percent. For a LIHTC Fund, the level of leverage is measured at the fund level.
   b) There is a tax credit guarantee agreement from general partner or managing member. This agreement requires the general partner or managing member to reimburse investors for any shortfalls in tax credits due to errors of compliance, for the life of the partnership. For an LIHTC fund, a tax credit guarantee is required from the developers of the lower-tier LIHTC properties to the upper-tier partnership.

Line (19)
State LIHTC investments that at a minimum meet the federal requirements for guaranteed LIHTC investments.

Line (20)
State LIHTC investments that at a minimum meet the federal requirements for non-guaranteed LIHTC investments.

Line (21)
State and federal LIHTC investments that do not meet the requirements of lines (17) through (20) would be reported on Line (21).

(Figure 7)

Real Estate Worksheet

Fair value adjustment factor   [*factor*]

	(1)	(2)	(3)	(4)	(54)	(65)	(7)	(86)	(97)	(108)
	Description	Book/Adjusted Carrying Value	Encumbrances	Fair Value	Book/Adjusted Carrying ValueBase Factor	Encumbrances credit Factor	Adjusted RBC Factor&	Gross RBC Book/Adjusted Carrying Value Requirement‡	Encumbrances Requirement$ Credit	RBC Requirement*
	Company Occupied Real Estate									
(1)	All Properties Without Encumbrances†	XXX			0.1050	XXX			XXX	
(1)										
(2)										
	All Properties With Encumbrances:									
(32)					0.1050	0.0175120				
(43)					0.1050	0.01750.120				
(199)	Total Company Occupied Real Estate									
	Foreclosed Real Estate									
(1)	All Properties Without Encumbrances†All Properties Without Encumbrances‡	XXX			0.10230	XXX			XXX	
(1)										
(2)										
	All Properties With Encumbrances:All Properties With Encumbrances:									
(3)(2)					0.10230	0.01750.200				
(4)(3)					0.10230	0.01750.200				
(299)	Total Foreclosed Real Estate									
	Investment Real Estate									
(1)	All Properties Without Encumbrances†All Properties Without Encumbrances‡	XXX			0.10150	XXX			XXX	
(1)										
(2)										
	All Properties With Encumbrances:All Properties With Encumbrances:									
(3)(2)					0.10150	0.01750.120				

(4)(3)			0.10150	0.01750.120				
(399)	Total Investment Real Estate							
(499)	Total Real Estate (Line (199) + Line (299) + Line (399))							

	Schedule BA Assets with characteristics of Real Estate						
(1)	All Assets Without Encumbrances†All Joint Ventures w/o Encumbrances‡	XXX	0.10230	XXX		XXX	
(1)							
(2)							
	All Assets With Encumbrances:All Properties With Encumbrances:						
(3)(2)			0.10230	0.01750.200			
(4)(3)			0.10230	0.01750.200			
(899)	Total Schedule BA Real Estate						

Note that column (2) is the book/adjusted carrying value net of any encumbrances, while column (4) is the fair value of the property not reduced for any encumbrances.

† For each category, each property Line (1) should also exclude properties or joint ventures that have a negative book/adjusted carrying value. These should be listed individually, including those for which there is no encumbrance.

& Column (7) is Column (5) times (1-(*factor*) * (Column (4) – (Column (2) + Column (3))) / (Column (2) + Column (3)))

‡ Column (86) is calculated as (Column (2) plus Column (3)) multiplied by Column (74).

§ Column (97) is calculated as Column (3) multiplied by Column (65).

* Column (108) is calculated as the sum of Column (86) minusplus Column (97), but not less than zero or more than Column (2).1.3% nor more than 45% of column (2), and not less than zero.

<p style="text-align:center"><u>Proposal</u>
Risk Based Capital for
Real Estate Assets
April 9, 2017</p>

Executive Summary

The following recommendations are the product of analyses conducted or sponsored by ACLI/NAIC/Industry real estate specialists. Implementation of these recommendations will ensure that the RBC assessment methodology and charges for the real estate sector more accurately reflect the sector's underlying risks and will promote consistency with the methodology used in other asset sectors.

A. Revise the C-1 factor for real estate assets held on Schedule A to be a base factor of ***[10%]***. This factor was estimated based on an 8.0% factor at 95th percentile confidence level, using data and methodology consistent with other sectors. The additional ***[2.0%]*** charge is meant to account for potential disparity in individual life company real estate portfolio composition, and to address concerns regarding the modeled holding periods and length of the data history series. Refer to Page 3, Price Variation Model of NCREIF Property Index, and page 7, Applicability of Index to Individual Life Company Portfolios, for detailed support and rationale. The proposed factor would be applicable for all categories of real estate reported in Schedule A of the Life and Health Annual Statement. (See Section A)

B. Revise the RBC factor for real estate encumbrances following the principles of the current RBC with factors to be consistent with the commercial mortgage RBC framework adopted in 2013. (See Section B)

C. Recognizing the statutory accounting basis of depreciated cost, implement an adjustment within RBC to reflect the impact of unrealized gains / losses on the potential for loss of statutory surplus.   (See Section C)

D. Revise the factor for Schedule BA real estate to ***[10%]*** *on a look-through basis,* equivalent to the proposed factor for Schedule A. All other mechanics would parallel the proposal for Schedule A Real Estate. (See Section D)

Scope

This proposal is developed for the Life Risk Based Capital and the Fraternal Benefit RBC formulas. This proposal does not address possible adjustment to the Asset Valuation Reserve (AVR) or Tax Adjustments for these assets. This proposal does not directly address the factors for the Health Risk Based Capital or for the Property & Casualty Risk Based Capital.

Background

RBC is used to measure potential future excess losses to statutory capital. The goal is to help regulators identify weakly capitalized companies, given risks that individual companies are taking. This proposal is consistent in methodology with recent RBC development work for common stock and bonds in areas such as confidence levels for statistical analyses, while recognizing real estate's unique characteristics.

There is limited historical perspective available on the original construction methodology supporting the currently applied RBC factors for real estate investments. The following general description is taken from a 1991 report covering RBC C-1 (default) factors:

> "There is little data upon which to base requirements for this asset group. Company practice, as shown by the 1990 intercompany survey, indicates factors in the range of 5 percent to 20 percent. An article in the May-June 1991 Financial Analysts Journal (Ennis and Burk) proposes that real estate volatility is about 60 percent of that for common stock, suggesting a factor in the range of 18 percent. If one assumes full tax credit for losses, this converts to a factor of about 10 percent which is the Subcommittee's recommendation for all real estate subcategories, except real estate acquired by foreclosure for which the factor is 15 percent. This is one of several asset groups which deserve continuing study to assure that risk-based capital requirements are adequate and appropriate."

Since the original real estate factor estimation, which was based on the somewhat rudimentary analysis described above, there has been a very significant improvement in the availability of performance data for the sector. While there have been additional analyses conducted for this sector since the initial methodology and factor adoption (i.e. AAA proposals in September and December 2000), to date there have been no significant changes made to the C-1 factor.

Since 2000, the pre-tax base C-1 factor applied in the sector has been 15%. The derivation of this factor, as described above, was based on 60% of the common stock factor, adjusted for taxes. The logic at the time was that the volatility of real estate was assumed to be around 60% of common stock volatility[1]. This assumption was reportedly based on inferences made from historical REIT performance, as a robust private market performance history was not available. REITs are shares of companies that use debt in owning and managing properties, and have performance characteristics that are different than that of the underlying commercial real estate[2]. The same 15% C-1 factor currently applies to virtually all directly held real estate, including company occupied properties, investment properties for long-term hold, and properties held for sale, but excludes properties acquired through foreclosure.

It is also important to note that while real estate is considered equity, statutory accounting requires it to be valued at depreciated cost. Any capital improvements are added to the statutory book value, and then depreciated from that time. If and when there is an other-than-temporary impairment, the book value is revised down to then market value, if lower, and then depreciated going forward. Throughout this document this is referred to as depreciated cost.

A. Review of Base C-1 RBC Factor – Support for Change to 8%

---

[1] Various studies have since shown that equity real estate in general has volatility well less than 60% of that of the S&P 500.

[2] The volatility of REIT performance is sharply higher than the volatility of direct property performance primarily because REITs are leveraged investments, which results in greater volatility of results.   Further, property held directly by life insurers is not marked-to-market daily, trades infrequently, and tends to exhibit price changes rather slowly.

Analyses conducted or sponsored by ACLI/NAIC/Industry specialists suggest that the base C-1 RBC factor applicable to Schedule A real estate (including investment, foreclosed and held for sale real estate) should be set at 8%.[3] This recommendation is based primarily upon the NCREIF National Property Index (NPI) Price Variation Analysis (section A.1) [4]. This result is supported by an Academic Consultant's analysis of simulated performance under statutory accounting rules (section A.2). Analysis shows that the industry's actual loss experience was below this threshold (section A.3). In the latter two analyses, simulated statutory accounting based performance of properties in the NPI and analysis of actual life company reported real estate losses during the most recent downturn both provide compelling evidence that statutory accounting requirements serve to lessen the frequency and severity of real estate equity investment losses recognized by life insurance companies, thus providing further support to the conservatism of the primary methodology.

1. *Price Variation Model of NCREIF Property Index ("NPI")*

	Cumulative Yr 1	Cumulative Yr 2	Cumulative Yr 3	Cumulative Yr 4	Cumulative Yr 5	Worst Cumulative Returns
90-CTE	-3.3%	-5.3%	-5.7%	-3.3%	1.5%	-7.5%
95-PCT	-3.5%	-7.3%	-5.9%	-3.5%	0.6%	**-8.0%**
90-PCT	1.4%	2.9%	2.2%	3.9%	5.6%	-3.5%

The primary methodology employed to determine the recommended change is stochastic analysis based on historical data from the NCREIF Property Index (NPI). The above table presents the results of an analysis of historical NPI total return data using a price variation based approach. This NPI Price Variation analysis provided the primary basis for the recommendation. The highlighted recommendation of -8.0% is based upon the 95th percentile ("PCT") worst cumulative return across any holding period since inception, which corresponds to a 2.25 year holding period in this analysis (this falls between the 2-year and 3-year results of -7.3% and -5.9% in the table above). The recommendation was further supported by the Academic Consultant's analysis of simulated performance under statutory accounting (section A.2) and actual industry experience (section A.3).

In this NPI Price Variation analysis, 1,000 historical quarterly start dates were randomly selected from the history of the NCREIF Property Index and forward 10-year total return data was assembled from the start date, creating 1,000 sample "paths". The 1,000 paths were then examined for cumulative returns (since path inception) across various assumed holding periods at the 90-CTE[5], 90-PCT[6], and 95-PCT levels. The resulting 1-year through 5-year values are shown in the table above. Returns improved by duration beyond 3 years, so the amounts beyond 5 years were increasingly positive and are not shown.

For the 1-year through 5-year cumulative returns, the worst cumulative loss is found to be between years 2 and 3, reflecting a typical real estate down cycle duration of 2 to 3 years. A scenario was also run that selected the worst cumulative return during each 10 year holding period regardless of the duration over which the loss occurred. Based on the above analyses of the historical NPI total return data, we can say that at a 95% confidence level,

---

[3] While the recommended decrease in RBC charge is material, we believe it is unlikely that insurance companies will make large changes to their Commercial Real Estate (CRE) allocations in response to changes in the RBC factor as allocation decisions are based on a number of factors including asset-liability management, taxation, sector investment expertise and experience.

[4] See Appendix 1 for a detailed description of NCREIF and the NPI.

[5] CTE is Conditional Tail Expectation. This is a statistical measure in which the worst results are averaged. For example, in CTE 90 the 10% worst results would be averaged. While this would typically be equal to a 95th or 96th percentile, it could be different for a high risk distribution.

[6] PCT is the confidence level based on a percentile result. If a series of models is run, and the results ranked, this looks at the point under which the xx percent results are covered. It is also used to establish the factor that does not cover extreme 'tail events'. The ACLI taskforce, composed of representatives from the commercial real estate investment groups of several major life companies, believes it to be a credible approach to tail losses.

cumulative total return losses at any point during any ten year holding period would be no greater than 8%[7]. Further, assuming the "worst" average duration holding period of around 2 years, which roughly corresponds to the average duration of value declines during past market downturns, we can say that at 95% confidence level, cumulative losses during a 2 year holding period would be no greater than 7.3%. Note that these losses are shown with no consideration of the tax impact to the investor. It is noted that there are historical circumstances of losses in excess of the 8% recommended, but infrequent enough to not be counted in the 95th percentile.

The use of actual historic quarterly returns across almost 36 years of history provides for the incorporation of the impact of several economic cycles on supply and demand for commercial real estate and the impact on market values. This lengthy time period also allows for incorporation of the effects from earlier governmental impact on prices, such as from changes in the tax code in the 1980s.

While we used random draws of 10 year periods from the full available data history, a fully stochastic model was deemed inappropriate by the working group due in large part to the limited amount of quarterly historical observations (limited when compared to the amount of data available for stocks and bonds). It is our understanding that the common stocks RBC analyses had access to around 66 years of data, and the bonds analyses used data from the 1970s forward.

It is possible that a stochastic analysis could be performed wherein an algorithm would be built and calibrated to actual history. However, if the algorithm is calibrated to historical performance we believe that the results of such an analysis would be consistent with our work, which includes two significant downturns in the historic period. Note that the work performed in both common stocks and bonds excluded significant periods of stress in those markets, given changes in the economy from the advent of the creation of the Federal Reserve. Both asset classes have public data going back to early in the 19th century, though of varying quality. We used the full historic track record for Commercial Real Estate (CRE) that is available, and includes the downturn in CRE from the S&L crisis in the 1990s and the recent recession beginning in 2008.

---

[7] We are not forecasting the future distribution of CRE returns but are using historic performance to estimate likely future return distributions.

2. Examination of Simulated Life Company Portfolio Performance Under Statutory Accounting

In addition to the results of the NPI Price Variation primary analysis (refer to section A.1), which is based on real estate sector performance recognizing market value changes, a simulation was also constructed to analyze hypothetical life company portfolio performance given statutory accounting. The ACLI/NAIC/Industry real estate specialists engaged Jeff Fisher ('Academic Consultant'), who is a special academic consultant to NCREIF, to use the historical property level performance data in the NPI to construct simulated historical performance under statutory accounting rules. This analysis was performed to provide additional insight around the impact of statutory accounting (recognition of depreciation, impairment rules, etc.) on the historical performance and risk to capital for insurance companies.

The simulation used the actual historical market experience of the NPI at the individual property level, wherein estimates of statutory accounting were applied. This hypothetical exercise was not intended to serve as the primary basis for determination of an appropriate RBC factor. Rather, the results of this hypothetical exercise illustrate the effect that statutory accounting (i.e., with depreciating book values and impairment rules/requirements) can have on the timing and severity of loss recognition relative to market value changes and provide additional evidence that the primary analysis is reasonable, if not conservative, given the effect of statutory accounting.

The simulation made the following assumptions:
- Beginning Book Value for statutory accounting when properties enter the data set is set equal to then current market value.
- For Book Value projections, depreciation is over 20 years (5% per year) for all properties
- Properties are tested for impairment quarterly, with impaired properties removed from index after recognizing the loss from the impairment. Any income received to that point is retained in the modeling.
- As in statutory accounting, there is no accounting for property value increases, only losses are recognized in the analysis
- There is no offset related to expected loss (i.e. there is no accounting for AVR)

Example of Simulated Statutory Property Performance: *In the simulation, individual asset market values are recorded in the quarter a property enters the index. At this beginning quarter, book value is set equal to market value, which is assumed to be the cost to acquire and is therefore consistent with statutory accounting. Every quarter forward, NCREIF has updated estimates of market value for the asset.[8] Future statutory carrying value of the asset (depreciated book value) is estimated using the generic depreciation assumptions listed above. In every quarter, we estimate whether an impairment would have been recognized using statutory accounting rules, the then current market value, anticipated future property cash flows as implied from that market value, and then current statutory carrying value. Aggregate impairment rates by quarter are tracked through time, which are useful for comparison to actual market value losses reported for the index.*

Using the above assumptions in the simulation model, and including all properties over the entire history of the NPI, the following chart presents quarterly total losses as a percent of market value. As the chart below illustrates, the largest quarterly loss rate for the simulated index performance was just slightly over 2% during the recent Great Recession. Further, over this entire simulated history there are only a few quarters with significant simulated statutory losses. Losses were concentrated in the real estate market downturns of the early 1990s and in 2009 following the Great Recession.

---

[8] The NCREIF database relies on appraisals to establish value where there has not been a transaction. The simulation projected market value could be viewed as projected appraised value.   Various studies of CRE appraisals have been performed and show that the appraisals are good estimates of market value, though they may lag actual market changes. This assumption does not affect the validity or applicability of the results.

The largest one-year loss for the full history of the simulated data occurred during the Great Recession, when the simulated one-year cumulative statutory loss was approximately 7% during the year 2009[9]. During 2009, the actual recorded total return for properties in the NPI was a cumulative loss of 17%. This decline occurred amid the most severe downturn in history, based on its intensity. However, the value decline during this period was relatively short-lived, as the negative quarterly total returns persisted for only six quarters. Given the event was an extreme outlier in the history of real estate performance, the probability of it reoccurring is extremely low within the modeled random sampling. In simple terms, since the 17% decline in one year occurred once in the 36 year exposure, the implied frequency is 2.8% probability (i.e. one year out of 36) while RBC is set to a 5% (or 95% confidence) level. In addition, this temporary reduction in market value would not necessarily have led to equal statutory impairments both since market value is typically in excess of book value, and requirements for statutory impairments do not immediately recognize all changes to market price. Thus statutory accounting can lessen the severity of recognized losses during market downturns.
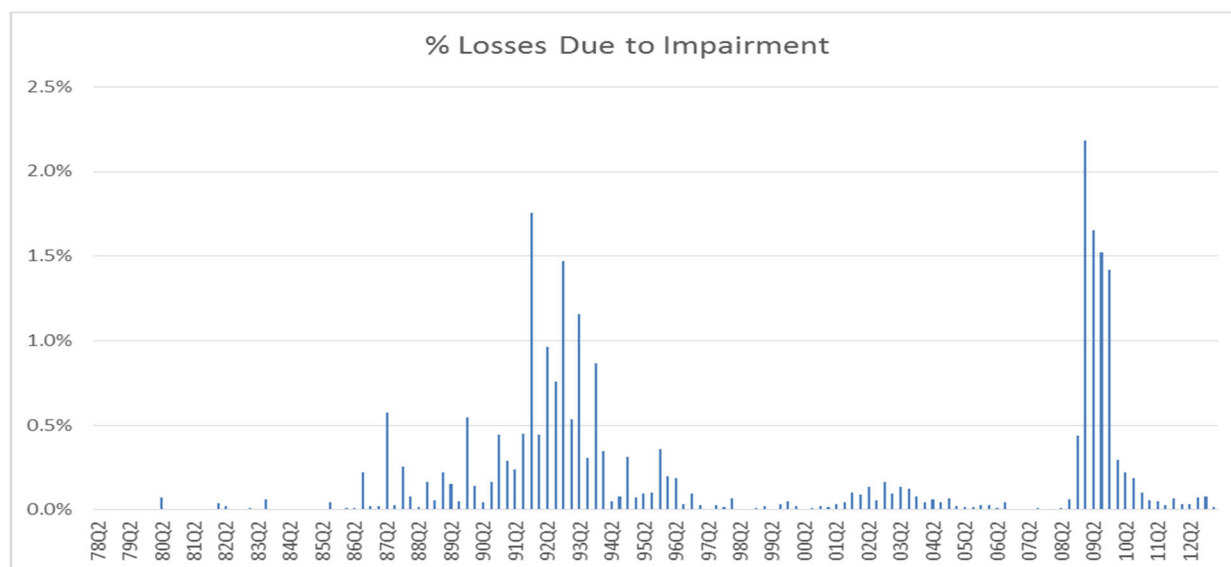
[9] While the 7% maximum simulated loss should provide a degree of comfort in the reasonableness of the proposed factor, it is not directly comparable in concept to either the proposed factor or the cited actual historic market value based index returns.

3. Actual Industry Experience

As further evidence of the potential impact of statutory accounting, we examined actual losses incurred during the most recent downturn. The ACLI conducted an analysis of the life insurance industry's actual performance during 2008 through 2012. The industry reported cumulative losses of about 3.5% over that 5 year period, significantly lower than the 8% cumulative losses that were estimated using the simulation methodology described in section A.1. These reported industry losses include Other-Than-Temporary Impairments and losses on sale from possibly earlier impairments. This compares to the Academic Consultant's work which more simply included impairments that wouldn't have been taken as they may have been considered temporary, such as declines in value that were reversed in the short term.

Considerations
1. Applicability of Index to Individual Life Company Portfolios

The recommended decrease in the RBC factor for Real Estate is based on the performance of a large and well diversified commercial real estate benchmark performance index (i.e. NCREIF-National Property Index, NPI). The index includes quarterly data from all the major property types (office, retail, industrial, multifamily and hotel) across all regions of the US, which makes it broadly applicable to all of these major property types nationwide. Additionally, we compared the distribution of properties by type and by geographical region in the NCREIF database to the distribution of those held by the life insurance companies, and found the distributions to be quite similar.

The question of the potential need for increased granularity for the RBC factor was considered thoroughly. In particular, we considered a different factor for company occupied as a class with lower risk than investment properties. However, granularity beyond the single factor representative of all US commercial real estate was deemed inappropriate due to 1) the relatively small size of the asset class, 2) the alignment of composition between the NPI and the life industry portfolio, and 3) regulations separate from RBC factors that address concentration risks and assure diversification of life company real estate portfolios.

Additionally, segmenting the NPI dataset into smaller granularities can be problematic. The NPI as of 2nd Quarter 2013 consisted of just over 7,000 properties but roughly 30,000 properties have been in the index at some point during its 30+ year history. Over that history, the geographic and property type distribution of NPI has been constantly evolving. While the database of properties is large in total, segmenting it into more granular levels can produce sample sizes too small to be statistically sound. Beyond this, segmenting can add only limited additional value. The primary driver of real estate property performance is the national real estate cycle[10] as portrayed in the NPI. The pattern of real estate losses for both the industry and for individual companies is aligned with that cycle. In other words, the overall real estate cycle tends to dominate other effects including geography and property type. The strength of that national real estate cycle has been found in academic research to explain roughly 50% of the variation in property performance across all properties in the index.

2. Impact of Select Key Assumptions

- **Loss Horizon:** The period of time assumed for the accumulation of losses in the analysis (loss horizon) plays an important role in determining the appropriate amount of required capital. In the initial proposal, we suggested an 8.5% RBC factor, which is based on roughly a 2 year loss horizon within a 10 year modeling period, including additional conservatism to offset risk associated with individual portfolio concentrations. In past real estate cycles, the duration of losses typically span a 2-3 year period, with the majority of losses

---

[10] Risk and Returns of Commercial Real Estate: A Property Level Analysis, Liang Peng, Leeds School of Business, April, 2010, http://www.reri.org/research/article_pdf/wp173.pdf

during past downturns being materially concentrated within one year. Average holding periods for real estate assets are typically much longer than one year, averaging 10 years or longer, based on analysis periods and investment targets for most institutional investors. As such, and given the statutory accounting for the asset class with declining book value and rigorous impairment requirements, it is normal for the actual recognized impairment rates by insurance companies to be lower in both frequency and severity than market averages. This is primarily related to the existence of unrealized gains that must be exhausted prior to any recognition of losses.

- **Confidence Level:** The confidence level also plays an important role in determining the appropriate amount of required capital. The 8% factor generally corresponds to the losses modeled at the 95th percentile (PCT). The initially recommended 8.5% factor generally corresponds to the losses modeled at the 97th percentile (PCT) and 10.0% factor generally corresponds to losses modeled at the 99th percentile (PCT).

- **Reserve Offset:** The development of the bond factors includes an offset for expected losses based on the principle that expected losses are covered by reserves. Real estate and common stock are both treated as equity assets which are generally to support surplus and not reserve, and for which expected loss is not considered. The current RBC methodology for real estate equity does not include an offset for the expected loss, as the basic contribution to AVR used as a proxy for expected loss is zero. Similarly, this proposal does not include an offset for expected loss[11]. The rationale for excluding the mitigating effects of the expected loss include:
    - There is no basic contribution to AVR for real estate investments.
    - Real estate is a small asset class, and analyses required to develop appropriate offsets for expected loss are deemed unnecessary.
    - Discussions around the appropriate relationship between expected loss, AVR, and RBC are ongoing. In the future, as precedent is set in the other larger asset classes where the effects are likely even more important, the potential integration of an offset in the real estate equity sector should be reconsidered.

---

[11] There are currently discussions at the NAIC regarding whether RBC assessments should be adjusted to remove the expected losses for sectors. In real estate equity's case, we are uncertain as to the materiality of adjusting for expected losses. The same could be said for common stock, as expected loss is a fixed income concept and would be difficult to apply to equities.

- **Income**: In the development of RBC factors for bonds, income in excess or the expected loss offset discussed above is not included in the modeling, and is assumed to be used for policyholder liabilities and not available as a loss offset. For common stock, and for real estate as equity investments, the total return is used. First, since the equity assets are generally presumed to back surplus and not policyholder reserves, the policyholder does not have claim to the income. Consistent with the lack of offset for expected loss, the income is available. When bonds default there is no subsequent income available to the investor.   Real estate does not default, and even if subject to impairment, continues to produce income. The Real Estate values were therefore developed consistent with common stock using a total return view of the assets.
- **Taxes:** All of the modeling discussed in this project was done on a 'cash' basis. No consideration has been given to the effect of these losses on the tax liability of the investor. Since losses reduce taxes that otherwise would be paid by the investor, this will result in a lower post-tax RBC factor than the recommended level.
- **Property acquired through foreclosure:** Property acquired through foreclosure should be treated the same as any other real estate. If the insurer forecloses on a mortgage and obtains the property, statutory accounting requires the property to be brought onto the company's books at then current market value. As a result, the value is no different than any other property purchased in the course of business. If the property has low income potential, that will be reflected in its market value.

B. Revise RBC charge on real estate encumbrances

Under Statutory Accounting rules, real estate is held at depreciated cost net of encumbrances. RBC looks at the risk of the property by assessing risk on the total property, then providing a credit for the value of the encumbrance based on the equivalent risk of the mortgage. The rationale for this is that the total underlying risk of loss on the property is the same whether or not there is an encumbrance, but the holder of the encumbrance bears part of the risk and the holder of the property bears the balance. Therefore, the risk is split by effectively developing the risk for the entire real estate value, then subtracting the amount of risk ascribed to the mortgage. We chose the approach of a reduced factor based on the average factor for mortgages in light of the small size of the real estate asset class, and the even smaller amount of encumbrances. For implementation, we recommend changing the RBC worksheet to show the RBC for the entire real estate, then a credit for the amount of the encumbrance. The final RBC will be subject to a minimum of the NAIC factor for a Baa bond (currently 1.30%) of the gross value of the real estate, and not more than 45% of the net book adjusted carrying value.

The current encumbrance factors were based on the current RE factor of 15% reduced by the average RBC for commercial mortgages, which was 3.00% under the prior RBC formula. The proposed factor for RE is 10.0%, and the average commercial mortgage factor that was developed as part of the Commercial Mortgage proposal in 2013 was 1.75%.

As an example, consider the following:

Property Value	Amount	RBC factor	RBC
No encumbrance	100	10.0%	10.0
With 60% LTV mortgage			
- Property Value	100	10.0%	10.0
- Equity value	40		
- Encumbrance	60	- 1.75%	-1.05
- Real Estate RBC	40	22.38%[*]	8.95
- Mortgage RBC[1]	60	1.75%	1.05
- Total	100		10.0

* Equals the RBC value (8.95) divided by the real estate equity value (40).
[1] This is an estimate of the value of the risk attributable to the mortgage by assuming that the mortgage were held by a life insurance company and estimating the resulting RBC.

This table illustrates our suggestion that the same amount of total capital be held whether a property is held with no encumbrance, or if it has an encumbrance, to reflect the constant level of risk of loss at the property irrespective of the capital stack. The RBC calculated on the encumbrance derives from the price risk of the property. It is to reflect that there is more risk as a percent of the equity investment, though not in total risk, to the equity investment of an investor in a property when leverage is used compared to when there is no leverage and a property is owned outright. In the case of having an encumbrance, the RBC held by the lender, when added to the RBC held by the owner on its equity and its encumbrance, sum to the same amount as if the property was held with no encumbrance.

In the current RBC, the result of this formula on encumbrances includes a maximum amount equal to 100% of the book adjusted carrying value of the real estate. While recognizing that the loss is generally limited to 100% of the carrying value, we believe that an RBC factor of 100% is excessive, and that the limit should be set at 45% of the carrying value. We note that for common stock, the combined factor at the maximum Beta is 45%.

C. Adjust RBC to account for unrealized gains - adjustment for market vs. book value

It is also recommended that a portion of the difference between market value and carrying value of a property be used to adjust RBC. Fair value of real estate assets held by Life Companies is reported in Schedule A for each individual property.   This fair value includes the changing market value of the asset and the impact of any improvements that have been capitalized. This excess of market value over the statutory value is a cushion against loss of statutory capital. Rather than adjust for the entire difference, only 2/3 of the difference is proposed to be recognized by this adjustment.

In the modeling described above, the first (A.1.) is based solely on changes to the market values, while the second (A.2.) presumes that market and book are equal at the beginning of the period. Statutory accounting calls for the properties to be held at depreciated cost, providing a cushion against loss of statutory value in situations where the market value exceeds that statutory value. Over time, that difference can become substantial. It is proposed that the applied base RBC factor be adjusted by 2/3 of the percentage difference between the market and book value, but not resulting in an RBC lower than NAIC bond factor for a Baa equivalent (currently 1.30%).[12] Note that in

---

[12] See Appendix 2 for sample calculation

situations where market value is less than statutory, the RBC factor will be increased, but not resulting in an RBC higher than that for common stock, where the combined factor at the maximum Beta is 45%.

The examples presented below are hypothetical. If a market value were lower than book value, that property would be reviewed for possible impairment. If the value were down temporarily, this adjustment would provide a short term increase in RBC. If the value is down on a permanent basis, this will provide an early increase in RBC prior to taking the impairment.

The specific formula including adjustment would be:
RBC% = *Max [NAIC2% , 10.0%*(1 - 2/3*(MV-BVg)/BVg)]*

BV	MV	RBC
100	50	13.4%
100	100	10.0%
100	150	6.7%
100	200	3.3%
100	250	1.3%
100	300	1.30%

BVg is the book value gross (prior to netting the encumbrances)
NAIC2 is the NAIC2 corporate bond RBC charge

D. Schedule BA Real Estate

Real Estate held in joint ventures, LLC's or similar structures are recorded in Schedule BA, on lines 1799999 and 1899999. Currently, these assets' RBC is assessed with a factor (23%) that is 50% higher than the factor for wholly owned real estate reported in Schedule A. The documentation from the original RBC development articulates a premium for the Schedule BA assets was originally assessed to account for presumed additional risk associated with potentially lower information transparency and control within the structures. However, since this presumption, data availability and industry experience has provided evidence that this premium is overly conservative, if not altogether unnecessary for the assets classified as real estate. We propose that the factor for Schedule BA real estate be adjusted to *[10%]*, equivalent to the proposed factor for Real Estate recorded on Schedule A. All of the other mechanics and components described above for Schedule A real estate would also apply consistently for the real estate recorded on Schedule BA. This proposal is supported by the following:

- Real estate investments today are very often executed through corporate structures such as Limited Liability Companies (LLCs) simply to mitigate risks. Institutional investors regularly use these structures to reduce the risk of loss from contingent liabilities. Contingent liabilities could be associated with the operations of the property (e.g., slip-and-falls), disputes with vendors or tenants, or debt. LLCs insulate investors from losses above the value of the net equity in an individual investment. Institutional investors also often use LLCs as holding companies for a series of single-asset LLCs, in order to better organize a portfolio in a manner that limits liabilities along each level of the corporate ownership structure.

- The NAIC recently approved the reclassification of certain wholly owned single owner, single asset LLCs to be reported on Schedule A. This was due to the recognition that the LLC structure itself did not produce additional risk. In this approval, the NAIC also agreed that additional reclassification could be proposed and approved when additional supporting materials were submitted. Rather than seeking a change in the accounting, we are proposing to adjust the RBC to reflect the risk.

- Partnership structures are often used to align interests between the Life Insurance Company and local partners who have superior access to the market and property development, asset management and property management skills, while still maintaining control of significant investment decisions, especially around liquidity. This better execution and alignment of interest can result in better investment performance and even lower market risk.

- Partnership structures reduce the capital commitment of the life insurance company to an individual transaction, and thus can improve potential portfolio diversification.

- A study was performed to compare the actual realized risk of institutional real estate investments held through JV's to those of directly-held real estate investments. Jeffrey Fisher, a Ph.D. and consultant for NCREIF, broke down all properties in the NCREIF Property Index into joint venture and wholly-owned properties to compare the performance since 1983. Mr. Fisher's analysis found:
  - Since 1983, the average quarterly return for JV properties was 2.35% versus wholly-owned properties at 1.97%. This performance gap widened over time.
  - The standard deviation of returns for JV properties (2.4%) was only modestly higher than the standard deviation of wholly-owned properties (2.2%).
  - Values of the wholly-owned properties fell greater than the JV properties from peak-to-trough during the Global Financial Crisis (GFC).
  - In terms of return dispersion during the GFC's worst quarter, wholly-owned properties had the largest negative return and JV properties had the highest positive return.

- JV properties were found to have shorter average holding periods than wholly-owned properties, suggesting potentially higher liquidity in JV structures.

In summary, real estate held through joint ventures has performed consistently with and perhaps even slightly better than, wholly-owned real estate. Based on this research, and in recognition of the several legitimate risk/return benefits of ownership through structures, we propose that real estate held on schedule BA uses the same factor as wholly-owned real estate held on schedule A.

<u>Appendix 1</u>

The historical National Council of Real Estate Investment Fiduciaries (NCREIF) database goes back to December 31, 1977, and as of 2nd Quarter 2013 consisted of approximately 7,000 properties. NCREIF collects 67 data fields each quarter that consist of financial information such as Market Value, NOI, Debt, and Cap Ex, as well as descriptor data such as Property Type and Subtype, Number of Floors, Square Footage, Number of Units, and Location.

The flagship index of NCREIF is the NCREIF Property Index (NPI), which is a quarterly index tracking the performance of core institutional property markets in the U.S. The objective of the NPI is to provide a historical measurement of property-level returns to increase the understanding of, and lend credibility to, real estate as an institutional investment asset class. The NPI is comprised exclusively of operating properties acquired, at least in part, on behalf of tax-exempt institutions and held in a fiduciary environment. Each property's return is weighted by its market value. The NPI includes properties with leverage, but all returns are reported on an unleveraged basis. The NPI includes Apartment, Hotel, Industrial, Office and Retail properties, and sub-types within each type. The index covers all regions of the US, which makes it broadly applicable to all of these major property types nationwide. Additionally, we have also done a comparison of the distribution of properties by type and by geographical region between those in the NCREIF database and those held by the life insurance companies, and found them to be quite similar.

Over the history of the NPI data, there have been two severe downturns, in the 1990s and the recent GFC; as well as a shallow recession corresponding to the 2001 economic recession that did not produce negative total returns for real estate. Given the time series of the data, the index does reflect 'tail events' such as the Great Recession thus appropriately capturing the downturn in the employed primary methodology for estimation of the appropriate RBC charge.

Additional information on NCREIF and the NCREIF Property Index (NPI) can be found here:
https://www.ncreif.org/public_files/NCREIF_Data_and_Products_Guide.pdf

Asset sector performance prior to the initiation of the NCREIF Property Index in 1977 was not considered in the analyses. No broad market data on U.S. CRE is available for this period and inferences of performance during these earlier periods would be inappropriate. The real estate sector has matured significantly in the last 30 plus years, as institutional investment has become prevalent and public capital markets have become more developed. Information transparency has increased materially and the market has become much more "efficient". Valuation and accounting policies and standards, and increased regulation, have also increased standardization and invest ability. Ownership of CRE is now much more widespread across institutions, including pension funds, than in the earlier period.

<u>Appendix 2</u>

The difference between market value and statutory value (depreciated cost) is not included in surplus within statutory accounting. As a result, the risk of future impairments of statutory value would be much less for a company where the current market value of its portfolio of properties is well in excess of statutory carrying value, especially compared to one where market value is much closer to statutory carrying value.

Our primary analysis was based on market values, and therefore overstates the risk relative to statutory accounting. We are not proposing that statutory accounting for commercial real estate should change, but rather partially leveling the playing field for properties that have been held for extended periods with market value well in excess of statutory carrying value, versus recent acquisitions with no such unrealized gains. And we are proposing a floor charge equal to that for an NAIC 2 bond (currently 1.30%) so that capital will never be lower.

The following provides a numerical example. Assume a property held at a book value of $100 with a market value of $150. The NCREIF data measures changes in market value, and the *[10%]* proposed factor would make provision for a loss of value to a value down to $135. Under the RBC process, factors are applied to the book value and normally do not recognize that unrealized gain. Since real estate is held at book value which in this case is $100, and is below this market value, effectively there an increased margin against the loss of statutory capital in excess of the amount of RBC.

For an asset with a market value well in excess of the carrying value, the reduction in RBC is minimal compared to the large implied reserve. Similarly, in those relatively few circumstances where an asset will have a market value less than book value, the RBC amount would increase, to reflect the increased likelihood of a loss to carrying value.

L ESTATE

	Annual Statement Source	(1) Book / Adjusted Carrying Value		(2) Average Factor		(3) RBC Requirement ‡
Real Estate						
Company Occupied Real Estate	AVR Equity Component Column 1 Line 18	$0				
Company Occupied Encumbrances	AVR Equity Component Column 3 Line 18	$0				
Total Company Occupied Real Estate	Line (1) + (2)	$0	X	0.0000 †	=	$0
Foreclosed Real Estate	AVR Equity Component Column 1 Line 20	$0				
Foreclosed Encumbrances	AVR Equity Component Column 3 Line 20	$0				
Total Foreclosed Real Estate	Line (4) + (5)	$0	X	0.0000 †	=	$0
Investment Real Estate	AVR Equity Component Column 1 Line 19	$0				
Investment Encumbrances	AVR Equity Component Column 3 Line 19	$0				
Total Investment Real Estate	Line (7) + (8)	$0	X	0.0000 †	=	$0
Total Real Estate (pre-MODCO/Funds Withheld)	Lines (3) + (6) + (9)	$0				$0
Reduction in RBC for MODCO/Funds Withheld						
Reinsurance Ceded Agreements	Company Records (enter a pre-tax amount)					$0
Increase in RBC for MODCO/Funds Withheld						
Reinsurance Assumed Agreements	Company Records (enter a pre-tax amount)					$0
Total Real Estate (including MODCO/Funds Withheld.)	Lines (10) - (11) + (12)					$0
Schedule BA Real Estate						
Schedule BA Real Estate	Schedule BA Part 1 Column 12 Line **2199999** + Line **2299999**, in part	$0				
Schedule BA Real Estate Encumbrances	Schedule BA Part 1 Column 12 Line **2199999** + Line **2299999**, in part	$0				
Total Schedule BA Real Estate Excluding Low Income Housing Tax Credits Included Below	Line (14) + (15)	$0	X	0.0000 †	=	$0
Federal Guaranteed Low Income Housing Tax Credits	AVR Equity Component Column 1 Line 75	$0	X	0.0014	=	$0
Federal Non-Guaranteed Low Income Housing Tax Credits	AVR Equity Component Column 1 Line 76	$0	X	0.0260	=	$0
State Guaranteed Low Income Housing Tax Credits	AVR Equity Component Column 1 Line 77		X	0.0014	=	$0
State Non-Guaranteed Low Income Housing Tax Credits	AVR Equity Component Column 1 Line 78		X	0.0260	=	$0
All Other Low Income Housing Tax Credits	AVR Equity Component Column 1 Line 79		X	0.1500	=	$0
Total Schedule BA Real Estate (pre-MODCO/Funds Withheld)	Lines (16) + (17) + (18) + (19) + (20) + (21)	$0				$0
Reduction in RBC for MODCO/Funds Withheld						
Reinsurance Ceded Agreements	Company Records (enter a pre-tax amount)					$0
Increase in RBC for MODCO/Funds Withheld						
Reinsurance Assumed Agreements	Company Records (enter a pre-tax amount)					$0
Total Schedule BA Real Estate (including MODCO/Funds Withheld)	Lines (22) - (23) + (24)					$0

Column (2) is calculated as Column (3) divided by Column (1).

The RBC requirement is calculated for each individual property and then summarized on this page. Refer to the worksheet included in the Real Estate portion of the instructions.

Company Occupied Real Estate

Fair Value adjustment factor | 66.67%

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Name / ID / Line	Book/Adjusted Carrying Value	Encumbrances	Fair Value	Base Factor	Encumbrances credit Factor	Adjusted RBC Factor	Gross RBC Requirement	Encumbrances Credit	RBC Requirement
Total for All Lines	$0.00	$0.00	$0.00				$0.00	$0.00	$0.00
Properties Without Encumbrances: Enter individually, add lines as needed									
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
Properties With Encumbrances: Enter individually, add lines as needed									
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0

Property Acquired in satisfaction of Debt

Fair Value adjustment factor | 66.67%

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Name / ID / Line	Book/Adjusted Carrying Value	Encumbrances	Fair Value	Base Factor	Encumbrances credit Factor	Adjusted RBC Factor	Gross RBC Requirement	Encumbrances Credit	RBC Requirement
Total for All Lines	$0.00	$0.00	$0.00				$0.00	$0.00	$0.00

Properties Without Encumbrances:
Enter individually, add lines as needed

	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0

Properties With Encumbrances:
Enter individually, add lines as needed

	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0

Company Name									Cocode: 00000

Investment Real Estate   including held for sale

Fair Value adjustment factor   66.67%

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Name / ID / Line	Book/Adjusted Carrying Value	Encumbrances	Fair Value	Base Factor	Encumbrances credit Factor	Adjusted RBC Factor	Gross RBC Requirement	Encumbrances Credit	RBC Requirement
Total for All Lines		$0.00	$0.00	$0.00				$0.00	$0.00	$0.00

Properties Without Encumbrances:
Enter individually, add lines as needed

	Book/Adjusted	Encumbrances	Fair Value	Base Factor	Encumbrances credit	Adjusted RBC	Gross RBC	Encumbrances	RBC
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0

Properties With Encumbrances:
Enter individually, add lines as needed

	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0

real3

1/27/2021

Company Name									Cocode: 00000

Schedule BA Real Estate

Fair Value adjustment factor: 66.67%

(1) Name / ID / Line	(2) Book/Adjusted Carrying Value	(3) Encumbrances	(4) Fair Value	(5) Base Factor	(6) Encumbrances credit Factor	(7) Adjusted RBC Factor	(8) Gross RBC Requirement	(9) Encumbrances Credit	(10) RBC Requirement
Total for All Lines	$0.00	$0.00	$0.00				$0.00	$0.00	$0.00

Properties Without Encumbrances:
Enter individually, add lines as needed

	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0
	$0	XXX	$0	0.1	0.0175	0.0000	$0	XXX	$0

Properties With Encumbrances:
Enter individually, add lines as needed

	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0
	$0	$0	$0	0.1	0.0175	0.0000	$0	$0	$0

1/27/2021