

IT-2: Property Risk Exposure Rating Options

CARe Seminar, June 4-5, 2018 Brooklyn, NY

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During this session we will cover a comprehensive introduction of rating elements, standard data collection, General Insurance Research Organization (GIRO) reference paper materials, and new PSOLD smoothed component pricing basics and implementation. Comparisons of various industry first loss scales, large policy analysis, actual vs. expected layer frequency testing and International ground-up and excess pricing extensions will be covered as well.

CARe INT-2 Property Risk Exposure Rating - Agenda

- Introduction
- Property Exposure Rating Overview*
 - Rating methodologies
 - 1st loss scales
 - Issues such as premium allocation, occupancy definition, BI/TE
- A Deeper Dive
 - 1st loss scales additional background, definitions, comparisons and data sources
 - Sample high hazard application including large deductible / shared layering
 - Scale testing: actual vs expected layer frequency / return periods and COPE impacts
 - International ground-up and excess pricing

More Advanced Issues

- HPR Blending, Component, GIRO / Energy Working Party (2018/19)
- Q&A

* Using materials from Steve White, Guy Carpenter

To the extent there is time, will pause for questions after each of the main sections. Otherwise, will have questions at the end.

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[Don-25]

[Shing-5]

[Kevin-25]

[5 minutes]

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[Kevin-15]

Property Per Risk A Deeper Dive



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First Loss Scale Illustration

Linking Amount of Insurance to Loss Size for Layering

	% of AOI	% of Loss
	0.0%	0.0%
	10.0%	40.0%
	20.0%	50.0%
>	25.0%	60.0%
	30.0%	65.0%
	40.0%	70.0%
>	50.0%	75.0%
	60.0%	80.0%
	70.0%	85.0%
	80.0%	90.0%
	90.0%	96.0%
	100.0%	100.0%

AOI = \$20,000,000 (insured value)

What is the charge for \$5M excess of \$5M?

• Layer attachment point: \$5M / \$20M = 25%; per scale, 60% of losses are less than or equal to 25% of AOI. Therefore, 60% of the total ground-up loss costs pays for losses related to the first \$5M of building value

 Layer limit: \$10M / \$20M =50%; per scale, 75% of the ground-up losses pays the losses for the first \$10M of building value

• Layer charge: would want to collect 15% (75.0%-60.0%) of the total ground-up expected loss costs for the \$5M excess of \$5M layer.

Therefore, if the total expected losses for this building was \$40,000, then the amount for the excess layer would be \$6,000 (15% x \$40,000)

A Survey of Property Size of Loss Curves

- The Issues:
 - Plausible curves need to rely on link between losses and their exposed amounts of insurance
 - Curves vary substantially by Amount of Insurance, occupancy, peril, territory, etc.
 - How are submission profiles produced and how are the curves applied AOI, TIV, MPL, PML,...
- Lloyd's Scales (World War II-unknown)
- Salzman Scales (1960 personal property)
- Ludwig Tables (mid 1980s one company HO and small CP)
- Various Reinsurer Based Scales
 - Swiss Re, Munich Re, Skandia, Frankona, Cologne Re, Employers Re, brokers,...
- MBBEFD Approximations (1990s S. Bernegger)
 - Modeling loss severity with distributions from Physics (aka Swiss Re Y1 to Y4,...)
- Extreme Value Theory (1990s- G. Ramachandran)
 - Factors affecting Fire Loss Multiple regression models
- ISO PSOLD
 - First issued late 1990s
 - Based on 25 years of collected premium and loss information that is linked to original AOI, etc.
 - Uses over 50M individual policies, 235B ground-up losses, 38T AOI, 230 ISO class codes, 60 AOI bands up to 1B and 5M individual claims
 - Now contains over 7M curves, including component curves by coverage / peril

Source: CS2 International Property – June 2013 Perspectives from America: The Missing link: Rating property exposure globally – May 2012 by John Buchanan

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Many different curves, with varying levels of credibility and transparency, have been used over the decades

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A Survey of Property Amount of Insurance Definitions

6.1 What Is Meant by Amount of Insurance

The exposure value is meant to represent the upper bound of the risk transferred, or the largest payment that the insurer or reinsurer would be required to make in response to a covered loss. However, the concept of AOI can represent many different amounts. The manner in which the exposure value is represented also often depends on how it is being used and on what questions are being investigated.

6.2 Varying Terminology: AOI, TIV, MPL, MFL, PML, SOV

A short-hand summary of the various definitions used for AOIs is shown in Figure 4.

Acronym	Short For:	Meaning
AOI TSI	Amount of Insurance Total Sum Insured	The amount of insurance (AOI) purchased, the policy limit, the total sum insured (TSI), or total insured value (TIV) (but TIV could have two meanings as below). Includes direct loss such as buildings and business personal property (contents), as well as indirect loss such as business interruption (also called time element). Different policy limits are typically purchased for buildings, contents, and business
TIV	Total Insured Values Or Total Insurable Values	interruption. Total Insured Values can be defined as the total AOI or policy limit. Or Total Insurable Values can be a reduction to the full AOI values and relates to the MPL and other estimated values. Statistically, buildings and contents are unlikely to suffer a total loss. The MFL, PML, EML, and NLE are all percentages less than the MPL. Estimating these values will depend on many variables specific to the risk including combustibility of the building, various COPE attributes and may include complex engineering scenarios with extensive exposure and loss simulations.
MPL	Maximum Possible Loss	The MPL is the maximum amount of loss possible. From a direct loss perspective, the MPL of a building and the business personal property (contents) within the building is 100% of the total values at risk which are measurable. From an indirect loss perspective, the MPL of business income can only be estimated because there is no definitive measure of the period of restoration (POR) following a worst-case, business closing loss. The MPL may be larger than the AOI or policy limits issued.
MFL	Maximum Foreseeable Loss	The MFL is the worst loss that is likely to occur if a key loss reduction system fails such as automatic fire alarms and sprinklers, watchman services, public fire suppression, etc.
PML	Probable Maximum Loss	The PML is an estimate of the largest loss the risk is likely to suffer when critical protection systems are functioning as expected and takes into account any relevant COPE attributes.
EML	Estimated Maximum Loss	The EML can and usually will ignore any particularly unlikely events or "remote coincidences" even if they are possible.
NLE	Normal Loss Expectancy	The NLE may assume that all active and passive protection systems and features are fully operating as expected under normal conditions.

IFoA / CAS International Research Working Party - August 2017 (reprint) 22

First Loss Scales Comparisons - Illustrative Scales should vary by AOI, Occupancy, etc.



China Re-CPCR curve comparison MBBEFD (Swiss Re Y1-Y4 parametric approximation) Lloyd's empirical from unknown data source



PSOLD uses over 5M individual linked losses and exposures to generate curves for 60 AOI bands, 38 occupancies, 4 sets of perils, 50 states, gross/net of deductible, etc.

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Commercial:

- agricultural—greenhouses
- air/airplane hangars
- auto repair
- billboards
- churches
- emergency services
- entertainment and recreation
- gasoline stations
- government services
- hospitals and nursing homes
- hotels and motels—other
- hotels and motels—with restaurant
- offices and banks
- other mercantiles—other
- other mercantiles—retail/wholesale
- personal and repair services
- restaurants and bars
- schools

Manufacturing:

- agricultural-grain elevators
- buildings under construction
- chemical manufacturing
- food processing—other
- food processing—severe
- general industry/metal manufacturing
- heavy manufacturing—other
- heavy manufacturing—wood
- light manufacturing—other
- light manufacturing—printing
- severe manufacturing/petroleum
- storage

Highly Protected Risks:

- highly protected risks—low
- highly protected risks—medium
- highly protected risks—heavy

Residential:

- apartments/condos over 10 units
- apartments/condos under 10 units
- dwelling
- aroup institutional housing

Using ISO's base of over 50 million individual policies, 5 million individual claims, 235 billion estimated ground-up losses, from 230 CP class codes, we estimate ground-up loss costs and excess layering for 38 occupancy groups. Including for each of 7 various coverage and peril components.

ISO Rapid Valuator includes the following **coverages and peril** components:

- buildings—BG1 (fire)
- buildings—BG2 (wind)
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business interruption (time element)

- contents—BG1 (fire)
- contents—BG2 (wind)
- buildings-special causes of loss contents—special causes of loss

- parking



		PSOLD			PSOLD Curve Fits:		
	Number	Rating			Gross Attritional		Estimated Total
	Filed	Group #	PSOLD Rating Group	# of Policies	Claims	Total Gross AOI	Gross Loss
	4/6	1	Apartments/Condos under 10 Units	1,456,563	177,350	2,188,514,991,488	8,667,517,326
	8/8	2	Apartments/Condos over 10 Units	1,108,575	182,545	4,475,899,827,489	13,809,526,596
	3/4	3	Dwelling	3,678,104	181,386	582,319,606,386	6,172,130,448
	3/3	4	Group Institutional Housing	22,194	4,282	27,175,764,331	158,293,793
	2/2	5	Hospitals and Nursing Homes	290,925	92,053	1,313,198,374,560	4,978,212,056
in ines	4/4	6	Hotels and Motels - With Restaurant	111,833	32,000	549,499,840,918	3,029,847,303
Std	7/7	7	Hotels and Motels - Other	676,147	112,348	704,382,561,595	4,835,980,728
	13/14	8	Entertainment and Recreation	2,234,863	311,829	1,180,498,996,192	11,314,666,791
	2/3	9	Restaurants and Bars	1,874,013	285,002	1,433,009,466,729	8,379,123,468
	2/2	10	Emergency Services	468,334	87,054	1,997,950,832,459	2,823,535,858
	1/1	11	Government Services	250,679	48,551	1,199,682,970,709	2,059,435,939
	1/1	12	Churches	2,319,314	369,447	1,639,494,902,428	12,425,571,875
	1/1	13	Schools	729,620	203,794	4,719,460,408,719	7,991,316,743
	1/1	14	Offices and Danks	0,324,637	075,706	5,309,907,703,410	29,140,680,126
	0/4	15	Other Mercantiles - Retail/Wholesale	1,288,735	156,276	1,172,406,451,416	8,674,743,903
	17/17	16	Other Mercantiles - Other	12,163,707	824,102	3,443,301,869,294	32,019,918,262
	1/1	17	Gasoline Stations	1,306,653	98,342	126,777,663,900	2,529,666,821
	3/3	18	Auto Repair	2,323,011	202,611	731,690,566,894	7,978,928,652
	1/1	19	Parking	780.748	74.687	173.388.031.531	1.665.873.572
Non-Std Lines	0/1	20	Billboards	282,137	6,437	2,695,812,822	114,264,334
	6/6	21	Personal and Repair Services	1,788,427	152,873	972,047,531,755	5,702,121,732
	1/1	22	Buildings Under Construction	243,698	8,030	121,821,688,249	457,879,316
	2/2	23	Airplane Risks	169,363	9,088	30,290,081,206	358,608,181
	4/10	24	Storage	3,841,458	143,538	524,815,373,120	4,502,235,237
	1/1	25	Agricultural - Greenhouses	90,834	5,888	16,403,456,444	234,628,914
	0/6	26	Agricultural - Grain Elevators	46,900	22,556	124,270,144,380	1,644,710,697
	3/7	27	Food Processing Other	235,037	33,474	203,599,561,035	3,281,079,928
	0/3	28	Food Processing - Severe	35,051	3,186	31,861,075,939	523,322,604
	1/3	29	General Indu/Metal Manufacturing	1,327,155	145,344	1,116,015,426,226	9,878,754,933
	0/5	30	Chemical Manufacturing	306,784	33,635	228,028,792,553	4,153,367,453
	1/1	31	Light Manufacturing - Printing	205,324	25,778	111,085,097,756	1,114,529,689
	2/5	32	Light Manufacturing - Other	201,938	22,194	145,544,632,592	2,267,674,644
HPP	0/4	33	Heavy Manufacturing - Wood	636,526	44,594	184,442,987,992	4,939,421,047
	3/1	34	Heavy Manufacturing - Other	694,713	/0,4/6	542,306,957,925	4,237,858,963
	1/6	35	Severe Manu/Pertroleum	18,685	7,947	97,670,982,847	4,091,707,567
	0/17	30	nigniy Protected Risks - Low	/1,8/8	13,045	51,921,039,063	1,458,952,431
	0/15	37	Highly Protected Risks - Medium	556,702	66,246	258,205,967,270	1,128,595,756
F	0/46	38	Highly Protected Risks - Heavy	250,059	47,412	185,119,645,537	10,768,656,579
	99/229		Grand lotal	52,411,324	5,181,188	38,002,713,685,168	235,513,340,263

Note: IRV 15 years # of policies and counts net of deductibles for E&S Customization (from 230 ISO CSPs) PSOLD - 24 years for ground-up curve fits (excluding minor cat); includes countrywide override

Std Lines

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We have over 400,000 gross claims linked to AOIs larger than 10,000,000. With this information, including the underlying occupancy, coverage, and peril details, we produce over 7 million PSOLD first loss scales. We have different scales for each of the 60 AOI bands up to 1B, 38 occupancy groups, 7 coverage component, etc.

Our all-industry validation, indicates that our results are credible up to about 200-250M AOI.

		PSOLI Cumulative Clain	D-2016 n Counts by AOI
	Amount of Insurance (US\$)	Net of Deductible	Gross of Deductible
1	Ground-Up	2,951,769	5,181,188
	1,000,000	782,069	1,751,576
	5,000,000	223,449	638,413
	10,000,000	128,204	405,675
_	25,000,000	57,089	199,913
	50,000,000	33,055	117,412
	75,000,000	24,470	85,064
	100,000,000	19,892	68,186
	150,000,000	13,075	56,093
	200,000,000	9,856	31,890

The above claim counts are total number of claims regardless of size, linked to the underlying AOI All policies and claims from 1991 to 2014; AOI's and claims are trended to 2017 for 2016 PSOLD All occupancies, states, non-cat perils combined (excluding both minor and major cat) Gross of deductible counts for ground-up curves use ISO's underlying deductible distributions

Layering Example 5 Risks / 4 Layers Each with Ground-up Loss Estimates

			Total AOI:	890,000,000	3,560,000,000	Deductible:	0	Total Gross LS:	720,523	2,882,090
							PSOLD:	PSOLD:	PSOLD:	IR¥ Total
Orig			Building	Contents	Total B&C	Time Element	Syndication	Syndication	Syndication %	Gross Loss
Sort	Country - Region	Description/Record Index	AOI (\$)	AOI (\$)	AOI (\$)	AOI (\$)	Entry Point	Exit Point	Share	Costs
1	United States	Office - Layer 1	20,000,000	5,000,000	25,000,000	5,000,000	-	50,000,000	20.0%	18,513
2	United States	Office - Layer 2	20,000,000	5,000,000	25,000,000	5,000,000	50,000,000	100,000,000	20.0%	18,513
3	United States	Office - Layer 2	20,000,000	5,000,000	25,000,000	5,000,000	100,000,000	250,000,000	20.0%	18,513
4	United States	Office - Layer 4	20,000,000	5,000,000	25,000,000	5,000,000	250,000,000	500,000,000	20.0%	18,513
5	United States	Storage - Layer 1	30,000,000	20,000,000	50,000,000	10,000,000	-	50,000,000	20.0%	47,521
6	United States	Storage - Layer 2	30,000,000	20,000,000	50,000,000	10,000,000	50,000,000	100,000,000	20.0%	47,521
7	United States	Storage - Layer 3	30,000,000	20,000,000	50,000,000	10,000,000	100,000,000	250,000,000	20.0%	47,521
8	United States	Storage - Layer 4	30,000,000	20,000,000	50,000,000	10,000,000	250,000,000	500,000,000	20.0%	47,521
9	United States	Medium Manufacturing - Layer 1	150,000,000	50,000,000	200,000,000	50,000,000	-	50,000,000	20.0%	170,303
10	United States	Medium Manufacturing - Laver 2	150.000.000	50.000.000	200.000.000	50.000.000	50.000.000	100.000.000	20.0%	170.303
11	United States	Medium Manufacturing - Layer 3	150,000,000	50,000,000	200,000,000	50,000,000	100,000,000	250,000,000	20.0%	170,303
12	United States	Medium Manufacturing - Layer 4	150,000,000	50,000,000	200,000,000	50,000,000	250,000,000	500,000,000	20.0%	170,303
13	United States	High Hazard HPR - Layer 1	150,000,000	50,000,000	200,000,000	50,000,000	-	50,000,000	20.0%	142,550
14	United States	High Hazard HPR - Layer 2	150,000,000	50,000,000	200,000,000	50,000,000	50,000,000	100,000,000	20.0%	142,550
15	United States	High Hazard HPR - Layer 3	150,000,000	50,000,000	200,000,000	50,000,000	100,000,000	250,000,000	20.0%	142,550
16	United States	High Hazard HPR - Layer 4	150,000,000	50,000,000	200,000,000	50,000,000	250,000,000	500,000,000	20.0%	142,550
17	United States	Energy - Layer 1	200,000,000	50,000,000	250,000,000	50,000,000	-	50,000,000	20.0%	341,635
18	United States	Energy - Layer 2	200,000,000	50,000,000	250,000,000	50,000,000	50,000,000	100,000,000	20.0%	341,635
19	United States	Energy - Layer 3	200,000,000	50,000,000	250,000,000	50,000,000	100,000,000	250,000,000	20.0%	341,635
20	United States	Energy - Layer 4	200,000,000	50,000,000	250,000,000	50,000,000	250,000,000	500,000,000	20.0%	341.635

PSOLD Layering – Before Shares / Deductibles

Overwrite PSOLD Cap	x													
Please Define the PSOLD Cap. 150	0				Experien	ce I	Period (adj):	5.0						
Note lif the PSOLD can is altered PSOLD wi	ill need to be			Expec	ted Claim Counts	:- E	xper Period	0.33	0.20	0.08	0.04	0.04	0.02	0.01
recalculated. Click the Calc Excess button I	below to recalculate.				100.0%		37.5%	9.2%	13.9%	10.4%	2.8%	8.3%	14.4%	3.5%
This will not change the general Percent Ca will only calculate BSOLD one time this way	ap for PSOLD. This					Re	turn Period:	15.1	25.1	59.7	120.8	140.3	214.6	748.7
Calc Excess View	Lavers				La	yer	Frequency:	0.066	0.040	0.017	0.008	0.007	0.005	0.001
	Layers -		\$	2,882,090	Layer Deductible	-								
OK Ca	ncel		s	2,882,090	\$0	Р	articipation	Percentage (Using PSO	LD detail r	esults - All	Years)		
	TOTALS]	s	-	\$ 55,112,980		100%	100%	100%	100%	100%	100%	100%	100%
	20	\$ 3,560,000,000	\$	2,755,649	\$ 2,755,649	Ş	ŝ 1,032,647	\$ 253,775	\$382,704	\$ 285,332	\$ 76,632	\$ 229,590	\$ 397,630	\$ 97,339
				PSOLD	PSOLD									
	ISO Rapid Valuator	- Outputs 🛛 📋		Input	Output		Р	SOLD O	utputs	- Attrit	ional (l	.ayers i	n 000s)	
			F	PSOLD-Gross			Base -	Sub1 -	Sub2 -	Sub3 -	Laver1 -	Laver2 -	Laver3 -	Laver4 -
		Buildings +		Attritional	P\$OLD-Net		5,000	5,000	15,000	25,000	10,000	40,000	150,000	750,000
	Description/Record Index	Content AOI		Losses	Attritional Losses		XS O	XS 5,000	XS 10,000	XS 25,000	XS 50,000	XS 60,000	XS 100,000	XS 250,000
	1: Office - Layer 1	\$ 25,000,000	\$	16,879	\$ 16,879	Ş	\$	\$ 1,316	\$ 972	\$ 309	\$ -	\$ -	\$ -	\$ -
	2: Office - Layer 2	\$ 25,000,000	\$	16,879	\$ 16,879	\$	\$ 14,281	\$ 1,316	\$ 972	\$ 309	\$-	\$-	\$-	\$-
	3: Office - Layer 2	\$ 25,000,000	\$	16,879	\$ 16,879	5	\$ 14,281	\$ 1,316	\$ 972	\$ 309	\$-	\$-	<u>s</u> -	<u>s</u> -
	4: Office - Layer 4	\$ 25,000,000	\$	16,879	\$ 16,879	\$	\$ 14,281	\$ 1,316	\$ 972	\$ 309	\$-	\$-	\$-	s -
	5: Storage - Layer 1	\$ 50,000,000	\$	44,279	\$ 44,279	\$	\$ 32,796	\$ 3,694	\$ 3,906	\$ 2,392	\$ 562	\$ 929	\$ -	\$ -
	6: Storage - Layer 2	\$ 50,000,000	\$	44,279	\$ 44,279	\$	\$ 32,796	\$ 3,694	\$ 3,906	\$ 2,392	\$ 562	\$ 929	\$-	s -
	7: Storage - Layer 3	\$ 50,000,000	\$	44,279	\$ 44,279	\$	\$ 32,796	\$ 3,694	\$ 3,906	\$ 2,392	\$ 562	\$ 929	s -	s -
	8: Storage - Layer 4	\$ 50,000,000	\$	44,279	\$ 44,279		<u> </u>	÷ • • • • • •	ەەدرد د	÷ 2,002	¢ 560	\$ 929	\$-	\$-
	9: Medium Manufacturing - Layer 1	\$ 200,000,000	\$		\$ 161,123	\$	5 123,824	\$ 14,851	\$ 14,750	\$ 5,514	\$ 695	\$ 1,044	\$ 450	6
	10: Medium Manufacturing - Layer 2	\$ 200,000,000	5	161,123	\$ 161,123	\$	\$	\$ 14,851	\$ 14,750	\$ 5,514	\$695	\$ 1,044	\$ 436	\$8
	11: Medium Manufacturing - Layer 3	\$ 200,000,000		161,123	\$ 161,123	\$	5 123,824	\$ 14,851	\$ 14,750	\$ 5,514	\$695	\$ 1,044	\$ 436	\$ <u>8</u>
	12: Medium Manufacturing - Layer 4	\$ 200,000,000	\$	101,123	\$ 161,123	\$	\$ 123,824	\$ 14,851	\$ 14,750	\$ 5,514	\$ 695	\$ 1,044	\$	\$ 8
	13: High Hazard HPR - Layer 1	\$ 200,000,000	\$	133,370	\$ 133,370	3	> 20,001	÷,	+,	, 10,101	ə 5,092	\$ 15,708	\$ 28,017	\$ 5,022
	14: High Hazard HPR - Layer 2	\$ 200,000,000	\$	133,370	\$ 133,370	\$	\$ 26,064	\$ 12,951	\$ 22,356	\$ 18,161	\$ 5,092	\$ 15,708	\$ 28,017	\$ 5,022
	15: High Hazard HPR - Layer 3	\$ 200,000,000	\$	133,370	\$ 133,370	\$	\$ 26,064	\$ 12,951	\$ 22,356	\$ 18,161	\$ 5,092	\$ 15,708	\$ 28,017	\$ 5,022
	16: High Hazard HPR - Layer 4	\$ 200,000,000	\$	133,370	\$ 133,370	\$	\$ 26,064	\$ 12,951	\$ 22,356	\$ 18,161	\$ 5,092	\$ 15,708	\$ 28,017	\$ 5,022
	17: Energy - Layer 1	\$ 250,000,000	\$	333,261	\$ 333,261	\$	\$	\$ 30,632	\$ 53,691	\$ 44,957	\$ 12,810	\$ 39,717	\$ 70,954	\$ 19,304
	18: Energy - Layer 2	\$ 250,000,000	\$	333,261	\$ 333,261	\$	61,196	\$ 30,632	\$ 53,691	\$ 44,957	\$ 12,810	\$ 39,717	\$ 70,954	\$ 19,304
	19: Energy - Layer 3	\$ 250,000,000	\$	333,261	\$ 333,261	\$	\$ 61,196	\$ 30,632	\$ 53,691	\$ 44,957	\$ 12,810	\$ 39,717	\$ 70,954	\$ 19,304
	20: Energy - Layer 4	\$ 250,000,000	\$	333,261	\$ 333,261	\$	61,196	\$ 30,632	\$ 53,691	\$ 44,957	\$ 12,810	\$ 39,717	\$ 70,954	\$ 19,304

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PSOLD Layering – After Shares / Before Deductibles

		\$ 2,882,090	Tot IRV value														
		\$ 2,882,090	Att + Minor		Layer De	ductible:	\$0	Pa	articipation	Percentage	(Using PSO	LD detail r	esults - All	Years)			
TOTALS		\$ -	Major Cat			Check:	\$ 2,755,649		100%	100%	100%	100%	100%	100%	10	0%	100%
20	\$ 3,560,000,000	\$ 2,755,649	\$ 126,441	Net after s	hares, partic, d	eductibles:	\$ 137,782	\$	51,580	\$ 12,663	\$19,090	\$14,229	\$ 3,821	\$11,446	\$ 19,82	:1 \$	5,133
ICO Denid Maluator	Outrouto	PSOLD	PSOLD				PSOLD					A ++:+	ionol (I				
	- Outputs	Input	Input				Output		r	50100	utputs	- Attrit	ionai (i	ayers.		2	
	Desiled in an a	PSOLD-Gross	PSOLD-Gross						Base -	Sub1 -	Sub2 -	Sub3 -	Layer1 -	Layer2 -	Layer3		Layer4 -
	Buildings +	Attritional	Minor Cat			Percent	PSOLD-Net		5,000	5,000	15,000	25,000	10,000	40,000	150,000	1 7	750,000
Description/Record Index	Content AOI	Losses	Losses	Entry Point	Exit Point	Share	Attritional Losses		XS O	XS 5,000	XS 10,000	XS 25,000	XS 50,000	XS 60,000	XS 100,0)0 X	\$ 250,000
1: Office - Layer 1	\$ 25,000,000	\$ 16,879	\$ 1,634		\$ 50,000,000	20.0%	\$ 3,376	\$	2,856	\$ 263	\$ 194	\$62	\$-	\$ -	\$-	\$	-
2: Office - Layer 2	\$ 25,000,000	\$ 16,879	\$ 1,634	\$ 50,000,000	\$100,000,000	20.0%	s -	\$	-	s -	<u>s</u> -	\$ -	<u>s</u> -	\$ -	\$ -	\$	-
3: Office - Layer 2	\$ 25,000,000	\$ 16,879	\$ 1,634	\$ 100,000,000	\$250,000,000	20.0%	\$-	\$	-	\$ -	\$-	\$ -	\$-	\$ -	\$-	\$	-
4: Office - Layer 4	\$ 25,000,000	\$ 16,879	\$ 1,634	\$ 250,000,000	\$500,000,000	20.0%	s -	\$	-	s -	S -	\$ -	s -	\$ -	\$-	\$	-
5: Storage - Layer 1	\$ 50,000,000	\$ 44,279	\$ 3,243		\$ 50,000,000	20.0%	\$ 8,558	\$	6,559	\$ 739	\$ 781	\$ 478	\$ -	\$ -	\$ -	\$	-
6: Storage - Layer 2	\$ 50,000,000	\$ 44,279	\$ 3,243	\$ 50,000,000	\$100,000,000	20.0%	\$ 298	\$	-	\$-	\$-	\$-	\$ 112	\$ 186	\$-	\$	-
7: Storage - Layer 3	\$ 50,000,000	\$ 44,279	\$ 3,243	\$ 100,000,000	\$250,000,000	20.0%	\$-	\$	-	\$-	\$-	\$-	\$-	\$ -	\$-	\$	-
8: Storage - Layer 4	\$ 50,000,000	\$ 44,279	\$ 3,243	\$ 250,000,000	\$500,000,000	20.0%	s -	\$	-	\$-	\$-	\$ -	\$ -	\$ -	\$-	\$	-
9: Medium Manufacturing - Layer 1	\$ 200,000,000	\$ 161,123	\$ 9,180		\$ 50,000,000	20.0%	\$ 31,788	\$	24,765	\$ 2,970	\$ 2,950	\$ 1,103	> -	÷	¢ -	\$	-
10: Medium Manufacturing - Layer 2	\$ 200,000,000	\$ 161,123	\$ 9,180	50,000,000	\$100,000,000	20.0%	\$ 348	\$	-	\$ -	\$ -	\$ -	\$ 139	\$ 209	\$-	2	-
11: Medium Manufacturing - Layer 3	\$ 200,000,000	\$ 161,123	\$ 9,130	\$ 100,000,000	\$250,000,000	20.0%	\$ 87	\$	-	\$-	\$-	\$-	\$-	\$ -	\$	37 \$	
12: Medium Manufacturing - Layer 4	\$ 200,000,000	\$ 161,123	\$ 9,180	⇒ 150.000.000	\$500,000,000	20.0%	\$2	\$	-	s -	\$-	\$ -	\$-	\$ -	\$-	-	2
13: High Hazard HPR - Layer 1	\$ 200,000,000	\$ 133,370	\$ 9,180		\$ 50,000,000	201070	45,000	c	5 242	¢ 2,500	C 1.174	<u> </u>		S -	\$ -	\$	-
14: High Hazard HPR - Layer 2	\$ 200,000,000	\$ 133,370	\$ 9,180	\$ 50,000,000	\$100,000,000	20.0%	\$ 4,160	\$	-	s -	\$ -	\$ -	\$ 1,018	\$ 3,142	\$-	\$	-
15: High Hazard HPR - Layer 3	\$ 200,000,000	\$ 133,370	\$ 9,180	\$ 100,000,000	\$250,000,000	20.0%	\$ 5,603	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 5,6	J3 \$	-
16: High Hazard HPR - Layer 4	\$ 200,000,000	\$ 133,370	\$ 9,180	\$ 250,000,000	\$500,000,000	20.0%	\$ 1,004	\$	-	\$ -	\$ -	s -	\$ -	s -	\$-	\$	1,004
17: Energy - Layer 1	\$ 250,000,000	\$ 333,261	\$ 8,374		\$ 50,000,000	20.0%	\$ 37,934	\$	12,187	\$ 6,100	\$ 10,693	\$ 8,953	s -	s -	s -	\$	-
18: Energy - Layer 2	\$ 250,000,000	\$ 333,261	\$ 8,374	\$ 50,000,000	\$100,000,000	20.0%	\$ 10,461	\$	-	\$-	\$ -	\$ -	\$ 2,551	\$ 7,910	\$-	\$	-
19: Energy - Layer 3	\$ 250,000,000	\$ 333,261	\$ 8,374	\$ 100,000,000	\$250,000,000	20.0 %	\$ 14,131	\$	-	s -	\$-	\$ -	\$-	\$ -	\$ 14,1	31 \$	-
20: Energy - Layer 4	\$ 250,000,000	\$ 333,261	\$ 8,374	\$ 250,000,000	\$500,000,000	20.0%	\$ 4,127	\$	-	s -	\$ -	\$ -	\$ -	\$ -	\$ -	\$	4,127

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PSOLD Layering – After Shares / After \$10M Policy Deductible

										• •								
		\$	2,882,090	Tot IRV value														
	_	\$	2,882,090	Att + Minor		Layer De	ductible:	÷	Pa	articipation	Percentage	(Using PSC	DLD detail	results - All	Years)			
TOTALS		s	-	Major Cat			Chron:	\$ 1,470,783		0%	0%	100%	100%	100%	10	0%	100%	TUN
20	\$ 3,560,000,000	s	2,755,649	\$ 126,441	Net after sl	hares, partic, d	eductives:	\$ 73,539	\$	51,580	\$ 12,663	\$19,090	\$14,229	\$ 3,821	\$11,44	6 \$	19,821	\$ 5,133
	_		PSOLD	PSOLD	1			10LD								<u> </u>		
ISO Rapid Valuator	· - Outputs		Innut	Innut				Output		D	SOLDO	utputs	- Attrit	ional (ayor) in	-000S)	
			al D. Caraca	mput				σατρατ		-						_		
	Buildings +	1.0								Base -	Sub1 -	Sub2 -	Sub3 -	Layer1 -	Layer2	- I I	Layer 3 -	Layer 4 -
	Buildings	A	ttritional	Minor Lat			Percent	PSULD-Net		5,000	5,000	15,000	25,000	10,000	40,000	1	150,000	750,000
Description/Record Index	Content AOI		Losses	Losses	Entry Point	Exit Point	Share	Attritional Losses		XS O	XS 5,000	XS 10,000	XS 25,000	XS 50,000	XS 60,0	70 X	(S 100,000	XS 250,000
1: Office - Layer 1	\$ 25,000,000	\$	16,879	\$ 1,634		\$ 50,000,000	20.0%	\$ 256	\$	2,856	\$ 263	\$ 194	\$ 62	\$-	\$-	\$; - 1	\$-
2: Office - Layer 2	\$ 25,000,000	\$	16,879	\$ 1,634	\$ 50,000,000	\$100,000,000	20.0%	\$-	\$	-	\$ -	\$ -	\$-	\$-	\$-	\$	-	\$-
3: Office - Layer 2	\$ 25,000,000	\$	16,879	\$ 1,634	\$ 100,000,000	\$250,000,000	20.0%	\$-	\$	-	\$-	\$-	\$ -	\$-	\$-	\$, -	\$-
4: Office - Layer 4	\$ 25,000,000	\$	16,879	\$ 1,634	\$ 250,000,000	\$500,000,000	20.0 %	\$-	\$	-	s -	\$-	\$-	\$-	\$-	\$	-	\$-
5: Storage - Layer 1	\$ 50,000,000	\$	44,279	\$ 3,243		\$ 50,000,000	20.0%	\$ 1,260	\$	6,559	\$739	\$ 781	\$ 478	\$ -	\$-	\$	-	\$ -
6: Storage - Layer 2	\$ 50,000,000	\$	44,279	\$ 3,243	\$ 50,000,000	\$100,000,000	20.0%	\$ 298	\$	-	\$-	\$ -	\$-	\$ 112	\$ 18	36 \$	-	\$-
7: Storage - Layer 3	\$ 50,000,000	\$	44,279	\$ 3,243	\$ 100,000,000	\$250,000,000	20.0%	s -	\$	-	\$-	\$-	\$-	\$-	\$-	\$, -	\$-
8: Storage - Layer 4	\$ 50,000,000	\$	44,279	\$ 3,243	\$ 250,000,000	\$500,000,000	20.0%	\$-	\$	-	\$-	\$-	\$-	\$-	\$-	\$	-	\$-
9: Medium Manufacturing - Layer 1	\$ 200,000,000	\$	161,123	\$ 9,180		\$ 50,000,000	20.0%	\$ 4,053	\$	24,765	\$ 2,970	\$ 2,950	\$ 1,103	s -	s -	\$		s -
10: Medium Manufacturing - Layer 2	\$ 200,000,000	\$	161,123	\$ 9,180	\$ 50,000,000	\$100,000,000	20.0%	\$ 348	\$	-	s -	\$ -	\$ -	\$ 139	\$ 20	J9 \$	-	\$ -
11: Medium Manufacturing - Layer 3	\$ 200,000,000	\$	161,123	\$ 9,180	\$ 100,000,000	\$250,000,000	20.0%	\$87	\$	-	s -	\$-	\$-	\$-	\$-	\$	87	\$ -
12: Medium Manufacturing - Layer 4	\$ 200,000,000	\$	161,123	\$ 9,180	\$ 250,000,000	\$500,000,000	20.0%	\$ 2	\$	-	s -	\$ -	\$ -	\$-	\$ -	\$	-	\$2
13: High Hazard HPR - Layer 1	\$ 200,000,000	\$	133,370	\$ 9,180		\$ 50,000,000	20.0%	\$ 8,103	\$	5,213	\$ 2,590	\$ 4,471	\$ 3,632	\$-	\$-	\$; -	\$-
14: High Hazard HPR - Layer 2	\$ 200,000,000	\$	133,370	\$ 9,160	\$ 50,000,000	\$100,000,000	20.0 %	\$ 4,160	\$	-	\$ -	\$-	\$-	\$ 1,018	\$ 3,14	łZ \$	-	\$-
15: High Hazard HPR - Layer 3	\$ 200,000,000	\$	133,370	\$ 9,180	\$ 100,000,000	\$250,000,000	20.0%	\$ 5,603	\$	-	\$-	\$ -	\$-	\$-	\$-	\$	5,603	\$-
16: High Hazard HPR - Layer 4	\$ 200,000,000	\$	133,370	\$ 9,180	\$ 250,000,000	\$500,000,000	20.0%	\$ 1,004	\$	-	\$ -	\$ -	\$ -	\$ -	\$-	\$	-	\$ 1,004
17: Energy - Layer 1	\$ 250,000,000	\$	333,261	\$ 8,374		\$ 50,000,000	20.0%	\$ 19,646	\$	12,187	\$ 6,100	\$ 10,693	\$ 8,953	\$ -	\$ -	\$		s -
18: Energy - Layer 2	\$ 250,000,000	\$	333,261	\$ 8,374	\$ 50,000,000	\$100,000,000	20.0%	\$ 10,461	\$	-	\$-	\$-	\$ -	\$ 2,551	\$ 7,91	10 \$	-	\$-
19: Energy - Layer 3	\$ 250,000,000	\$	333,261	\$ 8,374	\$ 100,000,000	\$250,000,000	20.0%	\$ 14,131	\$	-	\$-	\$ -	\$-	\$-	\$-	\$	14,131	\$-
20: Energy - Layer 4	\$ 250,000,000	\$	333,261	\$ 8,374	\$ 250,000,000	\$500,000,000	20.0%	\$ 4,127	\$	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$	-	\$ 4,127

Layering Example 5 Risks / 4 Layers – Including \$10M per Layer Deductible

			Total AOI:	890,000,000	3,560,000,000	Deductible:	10,000,000	Total Gross LS:	720,523	2,882,090	66,854
Orig Sort	Country - Region	Description/Record Index	Building AOI (\$)	Contents AOI (\$)	Total B&C AOI (\$)	Time Element AOI (\$)	PSOLD: Syndication Entry Point	PSOLD: Syndication Exit Point	PSOLD: Syndication % Share	IRV Total Gross Loss Costs	PSOLD: Net Attritional
1	United States	Office - Layer 1	20,000,000	5,000,000	25,000,000	5,000,000	10,000,000	50,000,000	20.0%	18,513	256
2	United States	Uffice - Layer 2	20,000,000	5,000,000	25,000,000	5,000,000	60,000,000	100,000,000	20.0%	18,513	-
3	United States	Office - Layer 2	20,000,000	5,000,000	25,000,000	5,000,000	110,000,000	250,000,000	20.0%	18,513	-
- 4	United States	Office - Layer 4	20,000,000	5,000,000	25,000,000	5,000,000	260,000,000	500,000,000	20.0%	18,513	-
5	United States	Storage - Layer 1	30,000,000	20,000,000	50,000,000	10,000,000	10,000,000	50,000,000	20.0%	47,521	1,260
6	United States	Storage - Layer 2	30,000,000	20,000,000	50,000,000	10,000,000	60,000,000	100,000,000	20.0%	47,521	186
7	United States	Storage - Layer 3	30,000,000	20,000,000	50,000,000	10,000,000	110,000,000	250,000,000	20.0%	47,521	-
8	United States	Storage - Layer 4	30,000,000	20,000,000	50,000,000	10,000,000	260,000,000	500,000,000	20.0%	47,521	-
9	United States	Medium Manufacturing - Laver 1	150,000,000	50,000,000	200,000,000	50,000,000	10,000,000	50.000.000	20.0%	170,303	4,053
10	United States	Medium Manufacturing - Laver 2	150,000,000	50,000,000	200,000,000	50,000,000	60,000,000	100,000,000	20.0%	170,303	209
11	United States	Medium Manufacturing - Laver 3	150,000,000	50.000.000	200.000.000	50.000.000	110.000.000	250.000.000	20.0%	170,303	66
12	United States	Medium Manufacturing - Layer 4	150,000,000	50,000,000	200,000,000	50,000,000	260,000,000	500,000,000	20.0%	170,303	1
13	United States	High Hazard HPR - Layer 1	150,000,000	50,000,000	200,000,000	50,000,000	10,000,000	50,000,000	20.0%	142,550	8,103
14	United States	High Hazard HPR - Layer 2	150,000,000	50,000,000	200,000,000	50,000,000	60,000,000	100,000,000	20.0%	142,550	3,142
15	United States	High Hazard HPR - Laver 3	150,000,000	50,000,000	200,000,000	50,000,000	110.000.000	250,000,000	20.0%	142,550	4,977
1b	United States	High Hazard HPK - Layer 4	150,000,000	50,000,000	200,000,000	50,000,000	260,000,000	500,000,000	20.0%	142,550	823
17	United States	Energy - Layer 1	200,000,000	50,000,000	250,000,000	50,000,000	10,000,000	50,000,000	20.0%	341,635	19,646
18	United States	Energy - Layer 2	200,000,000	50,000,000	250,000,000	50,000,000	60,000,000	100,000,000	20.0%	341,635	7,910
19	United States	Energy - Layer 3	200,000,000	50,000,000	250,000,000	50,000,000	110,000,000	250,000,000	20.0%	341,635	12,552
20	United States	Energy - Layer 4	200,000,000	50,000,000	250,000,000	50,000,000	260,000,000	500,000,000	20.0%	341,635	3,670

PSOLD Layering – After Shares / After \$10M Per Layer Deductible

		\$ 2,	,882,090	Tot IRV value																	
	_	\$ 2,	,882,090	Att + Minor		Layer De	ductible:	\$10,000,000	Pa	articipation	Percentage	(Using	a PSO	LD detail r	esults	- All Y	'ears)				
TOTALS		\$	-	Major Cat	_		Check:	\$ 1,337,075		12 -1	100%		100%	100%		D. V	100	%	100%	1	009
20	\$ 3,560,000,000	\$ 2,	,755,649	\$ 126,441	Net after sl	hares, partic, d	eductibles:	\$ 66,854	\$	· ·	\$ -	\$19	,090	\$14,229	\$.		\$11,44	5\$	17,596	\$ 4,4	94
ISO Rapid Valuator	- Outputs	PS In	SOLD nput	PSOLD Input				PSOLD Output			SOLD O	ıtp	uts -	Attriti	iona	I (L	yers	; in (000s)		
Description/Record Index	Buildings + Content AOI	PSOL Attr Lo	.D-Gross ritional osses	PSOLD-Gross Minor Cat Losses	Entry Point	Exit Point	Percent Share	PSOLD-Net Attritional Losses		Base - 5,000 XS 0	Sub1 - 5,000 XS 5.000	Sul 15, X 1	62 - 000 0.000	Sub3 - 25,000 XS 25,000	Layer 10,00 XS 50.	1 - 30 000	ayer2 0,000 x 60.00	1 1 10 XS	ayer3 - 50,000 100.000	Layer4 750,00 XS 250.	1 - 00 .001
1: Office - Laver 1	\$ 25.000.000	s	16.879	\$ 1.634	\$ 10.000.000	\$ 50.000.000	20.0%	\$ 256	5	-	\$ -	s	194	\$ 62	ŝ	-		s	-	S	-
2: Office - Layer 2	\$ 25,000,000	\$	16,879	\$ 1,634	\$ 60,000,000	\$100,000,000	20.0%	\$ -	\$	-	\$ -	\$	-	\$ -	\$	- ?	ŝ -	\$	-	\$	-
3: Office - Layer 2	\$ 25,000,000	\$	16,879	\$ 1,634	\$ 110,000,000	\$250,000,000	20.0%	\$-	\$	-	\$-	\$	-	\$-	\$	- !	\$ -	\$	-	\$	-
4: Office - Layer 4	\$ 25,000,000	\$	16,879	\$ 1,634	\$ 260,000,000	\$500,000,000	20.0%	s -	\$	-	s -	\$	-	\$-	\$	- !	\$ -	\$	-	\$	-
5: Storage - Layer 1	\$ 50,000,000	s	44,279	\$ 3,243	\$ 10,000,000	\$ 50,000,000	20.0%	\$ 1,260	\$	-	s -	\$	781	\$ 478	\$	- !	s -	\$	-	\$	-
6: Storage - Layer 2	\$ 50,000,000	\$	44,279	\$ 3,243	\$ 60,000,000	\$100,000,000	20.0%	\$ 186	\$	-	\$-	\$	-	\$ -	\$	- !	\$ 18	6\$	-	\$	-
7: Storage - Layer 3	\$ 50,000,000	\$	44,279	\$ 3,243	\$ 110,000,000	\$250,000,000	20.0%	\$ -	\$	-	\$-	\$	-	\$-	\$	- !!	ŝ <mark>-</mark> -	\$	-	\$	-
8: Storage - Layer 4	\$ 50,000,000	\$	44,279	\$ 3,243	\$ 260,000,000	\$500,000,000	20.0%	\$-	\$	-	\$-	\$	-	\$-	\$	- ;	\$ -	\$	-	\$	-
9: Medium Manufacturing - Layer 1	\$ 200,000,000	\$	161,123	\$ 9,180	\$ 10,000,000	\$ 50,000,000	20.0%	\$ 4,053	\$	-	s -	\$,950	\$ 1,10	\$	- !	\$ -	\$		\$	-
10: Medium Manufacturing - Layer 2	\$ 200,000,000	\$	161,123	\$ 9,180	\$ 60,000,000	\$100,000,000	20.0%	\$ 209	\$	-	\$-	\$	-	\$ -	\$	- 1	\$ 20	9\$	-	\$	-
11: Medium Manufacturing - Layer 3	\$ 200,000,000	\$	161,123	\$ 9,180	\$ 110,000,000	\$250,000,000	20.0%	\$ 66	\$	-	s -	\$	-	\$-	\$	- !	\$ -	\$	66	\$	-
12: Medium Manufacturing - Layer 4	\$ 200,000,000	\$	161,123	\$ 9,180	\$ 260,000,000	\$500,000,000	20.0%	\$ 1	\$	-	s -	\$	-	\$-	\$	- !	ŝ <u>-</u>	\$	-	\$	1
13: High Hazard HPR - Layer 1	\$ 200,000,000	\$	133,370	\$ 9,180	\$ 10,000,000	\$ 50,000,000	20.0%	\$ 8,103	s.	-	s -	\$	4,471	\$ 3,632	\$	- !	ŝ -	\$	- ,	\$	-
14: High Hazard HPR - Layer 2	\$ 200,000,000	\$	133,370	\$ 9,180	\$ 60,000,000	\$100,000,000	20.0%	\$ 3,142		-	s -	\$	-	\$ -	\$	- 5	\$ 3,14	2\$	-	\$	-
15: High Hazard HPR - Layer 3	\$ 200,000,000	\$	133,370	\$ 9,180	\$ 110,000,000	\$250,000,000	20.0%	\$ 4,977		-	\$-	\$	-	\$ -	\$	- !!	\$ -	\$	4,977	\$	-
16: High Hazard HPR - Layer 4	\$ 200,000,000	\$	133,370	\$ 9,180	\$ 260,000,000	\$500,000,000	20.0%	\$ 823	s	-	s -			\$-	\$	- !	s <mark>.</mark> -	\$	-	\$ F	823
17: Energy - Layer 1	\$ 250,000,000	s	333,261	\$ 8,374	\$ 10,000,000	\$ 50,000,000	20.0%	\$ 19,646	\$	-	s -	\$ 1	0,693	\$ 8,953	5	- !	-	\$	-	\$	-
18: Energy - Layer 2	\$ 250,000,000	\$	333,261	\$ 8,374	\$ 60,000,000	\$100,000,000	20.0%	\$ 7,910	\$	-	\$ -	\$	-	\$-		-	7,91	0\$	- (\$	-
19: Energy - Layer 3	\$ 250,000,000	\$	333,261	\$ 8,374	\$ 110,000,000	\$250,000,000	20.0%	\$ 12,552	\$	-	\$ -	\$	-	\$-	4	-	-	\$	12,552	\$	-
20: Energy - Layer 4	\$ 250,000,000	\$	333,261	\$ 8,374	\$ 260,000,000	\$500,000,000	20.0%	\$ 3,670	\$	-	s	\$	-	\$ -	\$	-	\$ -	\$	-	\$ 3,6	670

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PSOLD Layering – After Shares / After \$25M Per Layer Deductible

		¢ 2,992,000	Tot IBV uplue														
		\$ 2,002,090			Law an Da	ما بمغالما م	405 000 000				41.1 DC						
	7	\$ 2,882,090	Att + Minor		Layer De	auctible:	\$26,000,000	Par	ticipation	Percentage	(Using PS	ULD detail r	esults - All	Yeare)			
TOTALS		\$ -	Major Cat			Check:	\$ 780,275		100%		100%	6 <mark>100%</mark>		10	<mark>/0%</mark>	100%	100%
20	\$ 3,560,000,000	\$ 2,755,649	\$ 126,441	Net after sl	nares, partic, d	eductibles:	\$ 39,014	\$		\$.	\$ -	\$14,229		\$ 6,5	63 \$	14,593	\$ 3,629
		PSOLD	PSOLD				PSOLD					A				000-1	
ISO Rapid Valuator	· - Outputs	Input	Input				Output			PSOLDO	utputs	- Attrit	phai (i	ayer	s in	UUUSJ	
		PSOLD-Gross	PSOLD-Gross				•		B se -	Sub1 -	Sub -	Sub3 -	Laver1 -	Laver2	2-	Laver3 -	laver4 -
	Buildings +	Attritional	Minor Cat			Percent	PSOLD-Net		.000	5.000	15.0 0	25.000	10.000	40.00		150.000	750.000
Description/Record Index	Content AOI	Losses	Losses	Entry Point	Exit Point	Share	Attritional Losses		XS O	XS 5,000	XS 10,000	XS 25,000	XS 50,000	5 60,0	X 000	\$ 100,000	XS 250,000
1: Office - Layer 1	\$ 25,000,000	\$ 16,879	\$ 1,634	\$ 25,000,000	\$ 50,000,000	20.0%	\$ 62	\$	-	<u>ls</u> -	\$ -	\$ 62	\$ -	ş -	\$	-	\$ -
2: Office - Layer 2	\$ 25,000,000	\$ 16,879	\$ 1,634	\$ 75,000,000	\$100,000,000	20.0%	\$-	\$	-	* -	\$ -	\$ -	\$ -	\$ -	\$	-	\$-
3: Office - Layer 2	\$ 25,000,000	\$ 16,879	\$ 1,634	\$ 125,000,000	\$250,000,000	20.0%	\$-	\$	-	\$-	\$-	\$-	\$-	\$ -	· \$	-	\$-
4: Office - Layer 4	\$ 25,000,000	\$ 16,879	\$ 1,634	\$ 275,000,000	\$500,000,000	20.0%	s -	\$	-	\$ -	\$-	\$ -	\$-	\$ -	· \$	-	\$ -
5: Storage - Layer 1	\$ 50,000,000	\$ 44,279	\$ 3,243	\$ 25,000,000	\$ 50,000,000	20.0%	\$ 478		-	\$ -	\$ -	\$ 47	s -	s -	. s	-	s -
6: Storage - Laver 2	\$ 50,000,000	\$ 44,279	\$ 3,243	\$ 75,000,000	\$100,000,000	20.0%	\$ 56		-	s -	\$ -	S -	s -	S	56 S	-	s -
7: Storage - Layer 3	\$ 50,000,000	\$ 44,279	\$ 3,243	\$ 125,000,000	\$250,000,000	20.0%	\$-		-	\$-	\$ -	S -	\$-	\$ -	· \$	-	\$-
8: Storage - Layer 4	\$ 50,000,000	\$ 44,279	\$ 3,243	\$ 275,000,000	\$500,000,000	20.0%	s -		-	\$-	S -	S -	S -	S -	· \$	-	\$-
9: Medium Manufacturing - Layer 1	\$ 200,000,000	\$ 161,123	\$ 9,180	\$ 25,000,000	\$ 50,000,000	20.0%	\$ 1,103		-	s -	s -	\$ 1,10	s -	s -	. s	-	s -
10: Medium Manufacturing - Layer 2	\$ 200,000,000	\$ 161,123	\$ 9,180	\$ 75,000,000	\$100,000,000	20.0%	\$ 93	\$	-	\$-	\$-	S -	\$-	\$	93 \$	-	\$-
11: Medium Manufacturing - Layer 3	\$ 200,000,000	\$ 161,123	\$ 9,180	\$ 125,000,000	\$250,000,000	20.0%	\$ 44	\$	-	\$ -	\$-	\$ -	\$-	\$ -	· \$	44	\$ -
12: Medium Manufacturing - Layer 4	\$ 200,000,000	\$ 161,123	\$ 9,180	\$ 275,000,000	\$500,000,000	20.0%	\$1	\$	-	\$ -	\$-	\$ -	\$-	\$ -	· \$	-	\$1
13: High Hazard HPR - Layer 1	\$ 200,000,000	\$ 133,370	\$ 9,180	\$ 25,000,000	\$ 50,000,000	20.0%	\$ 3,632	\$	-	\$-	\$ -	\$ 3,63.	\$ -	s -	· \$	-	\$ -
14: High Hazard HPR - Layer 2	\$ 200,000,000	\$ 133,370	\$ 9,180	\$ 75,000,000	\$100,000,000	20.0%	\$ 1,822	\$	-	\$-	\$ -	\$ -	\$ -	\$ 1,8	22 \$	-	\$ -
15: High Hazard HPR - Layer 3	\$ 200,000,000	\$ 133,370	\$ 9,180	\$ 125,000,000	\$250,000,000	20.0%	\$ 4,131	\$	-	s -	\$	\$ -	\$ -		· \$	4,131	\$ -
16: High Hazard HPR - Layer 4	\$ 200,000,000	\$ 133,370	\$ 9,180	\$ 275,000,000	\$500,000,000	20.0%	\$ 578	\$	-	\$-	\$ -	\$ -	\$ -		\$	-	\$ 578
17: Energy - Layer 1	\$ 250,000,000	\$ 333,261	\$ 8,374	\$ 25,000,000	\$ 50,000,000	20.0%	\$ 8,953	\$.	\$ -	s -	\$ 8,953	s -	 -	. s	-	\$ -
18: Energy - Layer 2	\$ 250,000,000	\$ 333,261	\$ 8,374	\$ 75,000,000	\$100,000,000	20.0%	\$ 4,593	\$	-	\$ -	\$ -	\$ -	s -	\$ 4,5	.93 \$	-	\$ -
19: Energy - Layer 3	\$ 250,000,000	\$ 333,261	\$ 8,374	\$ 125,000,000	\$250,000,000	20.0%	\$ 10,418	\$		\$-	9 -	\$-	-	\$ -	· \$	10,418	\$ -
20: Energy - Layer 4	\$ 250,000,000	\$ 333,261	\$ 8,374	\$ 275,000,000	\$500,000,000	20.0 %	\$ 3,051	\$	-	s -	\$ -	S -	s -	\$-	\$	-	\$ 3,051
						-		•									

Layering Example – Lloyds – Before Shares / Deductibles

		\$ 2,882,090	Layer Deductible								
	_	\$ 2,882,090	\$0	Particip	ation Percen	ntage (Using PS)	OLD detail (results - All	Years)		
TOTALS		s -	\$ 55,112,980		100%	100% 100%	i <mark>100</mark> %	100%	100%	100%	100%
20	\$ 3,560,000,000	\$ 2,755,649	\$ 2,755,649	\$ 86	2,541 \$ 293	7,010 \$443,960	\$ 352,980	\$103,727	\$ 218,366	\$ 477,064	<u>s</u> -
ISO Rapid Valuator	Outputs	PSOLD Input	PSOLD Output			Lloyds	Scale - I	Layer R	esults		
Description/Record Index	Buildings + Content AOI	PSOLD-Gross Attritional Losses	P\$OLD-Net Attritional Losses	Base 5,00 XS (e - Sub: 00 5,00 0 XS 5,1	1 - Sub2 - 00 15,000 ,000 X\$ 10,000	Sub3 - 25,000 XS 25,000	Layer1 - 10,000 XS 50,000	Layer2 - 40,000 XS 60,000	Layer3 - 150,000 XS 100,000	Layer4 - 750,000 XS 250,000
1: Office - Layer 1	\$ 25,000,000	\$ 16,879	\$ 16,879	\$ 1	1,056 \$ 3	2,363 \$ 3,460	\$-	\$-	\$ -	\$ -	\$ -
2: Office - Layer 2	\$ 25,000,000	\$ 16,879	\$ 16,879	\$ 1:	1,056 \$ 2	2,363 \$ 3,460	\$-	\$ -	\$ -	\$ -	\$ -
3: Office - Layer 2	\$ 25,000,000	\$ 16,879	\$ 16,879	\$ 1:	1,056 \$ 2	2,363 \$ 3,460	\$-	\$ -	\$ -	\$ -	\$ -
4: Office - Layer 4	\$ 25,000,000	\$ 16,879	\$ 16,879	\$ 1:	1,056 \$.	2,363 \$ 3,460	\$-	\$ -	\$ -	\$-	\$-
5: Storage - Layer 1	\$ 50,000,000	\$ 44,279	\$ 44,279	\$ 2	3,911 \$!	5,092 \$ 7,616	\$ 7,660	\$ -	\$ -	\$ -	\$ -
6: Storage - Layer 2	\$ 50,000,000	\$ 44,279	\$ 44,279	\$ 2	3,911 \$!	5,092 \$ 7,616	\$ 7,660	\$ -	\$ -	\$-	\$-
7: Storage - Layer 3	\$ 50,000,000	\$ 44,279	\$ 44,279	\$ 2	3,911 \$!	5,092 \$ 7,616	\$ 7,660	\$-	\$ -	\$-	\$-
8: Storage - Layer 4	\$ 50,000,000	\$ 44,279	\$ 44,279	\$ 2	3,911 \$!	5,092 \$ 7,616	\$ 7,660	\$-	\$ -	s -	\$-
9: Medium Manufacturing - Layer 1	\$ 200,000,000	\$ 161,123	\$ 161,123	S 4	7,612 \$ 20	0,865 \$ 23,121	\$ 23,121	\$ 5,800	\$ 12,729	\$ 27,874	s -
10: Medium Manufacturing - Layer 2	\$ 200,000,000	\$ 161,123	\$ 161,123	\$ 4	7,612 \$ 20	0,865 \$ 23,121	\$ 23,121	\$ 5,800	\$ 12,729	\$27,874	\$-
11: Medium Manufacturing - Layer 3	\$ 200,000,000	\$ 161,123	\$ 161,123	\$ 4	7,612 \$ 20	0,865 \$ 23,121	\$ 23,121	\$ 5,800	\$ 12,729	\$ 27,874	\$-
12: Medium Manufacturing - Layer 4	\$ 200,000,000	\$ 161,123	\$ 161,123	\$ 4	7,612 \$ 20	0,865 \$ 23,121	\$ 23,121	\$ 5,800	\$ 12,729	\$ 27,874	\$-
13: High Hazard HPR - Layer 1	\$ 200,000,000	\$ 133,370	\$ 133,370	\$ 3	9,411 \$ 17	7,271 \$ 19,139	\$ 19,139	\$ 4,801	\$ 10,536	\$ 23,073	s -
14: High Hazard HPR - Layer 2	\$ 200,000,000	\$ 133,370	\$ 133,370	\$ 35	9,411 \$ 17	7,271 \$ 19,139	\$ 19,139	\$ 4,801	\$ 10,536	\$ 23,073	S -
15: High Hazard HPR - Layer 3	\$ 200,000,000	\$ 133,370	\$ 133,370	\$ 3	9,411 \$ 1	7,271 \$ 19,139	\$ 19,139	\$ 4,801	\$ 10,536	\$ 23,073	\$-
16: High Hazard HPR - Layer 4	\$ 200,000,000	\$ 133,370	\$ 133,370	\$ 3	9,411 \$ 1	7,271 \$ 19,139	\$ 19,139	\$ 4,801	\$ 10,536	\$ 23,073	\$ -
17: Energy - Layer 1	\$ 250,000,000	\$ 333,261	\$ 333,261	\$ 9	3,646 \$ 20	8,660 \$ 57,654	\$ 38,325	\$ 15,330	\$ 31,327	\$ 68,319	s -
18: Energy - Layer 2	\$ 250,000,000	\$ 333,261	\$ 333,261	\$ 9	3,646 \$ 2	8,660 \$ 57,654	\$ 38,325	\$ 15,330	\$ 31,327	\$ 68,319	\$ -
19: Energy - Layer 3	\$ 250,000,000	\$ 333,261	\$ 333,261	\$ 9	3,646 \$ 2	8,660 \$ 57,654	\$ 38,325	\$ 15,330	\$ 31,327	\$ 68,319	\$ -
20: Energy - Layer 4	\$ 250,000,000	\$ 333,261	\$ 333,261	Ş 9:	3,646 \$ 2	8,660 \$ 57,654	\$ 38,325	\$ 15,330	\$ 31,327	\$ 68,319	S -



C MBBEFD (Y1-Y4) Set

All Components-PSOLD

C PSOLD C Lloyds

C Custom

Cap

Display Components

 Select CAT Treatment

 ✓ Attritional

 ✓ Minor CAT

 Select PSOLD Curve

 ③ Stable (All Years)

 ⑦ Stable (All Years)

 Select Coverage

 Ø Buildings

 Ø Contents

 Ø Time Element

 Select Peril

 Ø BG2

 Ø SCL

×

SERVE | ADD VALUE | INNOVATE

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Layering Example – MBBEFD Combined (including PML Usage Concepts)

	Display Comp	onents	×												
	- Select CA	T Treatment	_			Expec	ted Claim Counts	s - Exper Perio	d 0.56	0.34	0.15	0.04	0.04	0.02	
		al					100.0%	18.1	% 11.8 %	20.4%	23.0%	2.9%	9.2%	14.7%	0.0%
	Minor CA	AT						Return Period	l: 9.0	14.7	33.5	127.3	137.6	222.8	
	Coloct DC						La	ayer Frequency	<i>r</i> : 0.111	0.068	0.030	0.008	0.007	0.004	
	G Stable (\$ 2,882,090	Layer Deductible								
		tive (5 Vears)				¢ 3,003,000	¢n.	Dorticipatio	Doroontago	(lloing DSC	UD dotail r	noulto All	Yeare)		
	ПСэронз				1	\$ 2,882,090	Ş U	Farucipatio	I Fercentage	(USING F 30			realsj	1004	1001
	Select Co	verage		IUIALS		\$ -	\$ 55,112,982	100	100%	100%	100%	100%	100%	100%	100%
	Buildings	5		20	\$ 3,560,000,000	\$ 2,755,649	\$ 2,755,649	\$ 498,361	. \$ 324,087	\$561,688	\$634,326	\$ 78,554	\$253,768	\$ 404,864	\$-
	Content	5 mont		ICO Denid Malueter	Outroute	PSOLD	PSOLD			.	hin ad C		aver D	معدالهم	
		menc		ISO Rapid Valuator	outputs	Input	Output		IVIDDEFI	D: Com	pined 3	cale - L	ayer R	esuits	
	Select Per	ril				PSOLD-Gross		Base -	Sub1 -	Sub2 -	Sub3 -	Layer1 -	Layer2 -	Layer3 -	Layer4 -
	BG1				Buildings +	Attritional	PSOLD-Net	5,000	5,000	15,000	25,000	10,000	40,000	150,000	750,000
	I BG2			Description/Record Index	Content AOI	Losses	Attritional Losses	XS O	XS 5,000	XS 10,000	XS 25,000	XS 50,000	XS 60,000	XS 100,000	XS 250,000
	M SCL			1: Office - Layer 1	\$ 25,000,000	\$ 16,879	\$ 16,879	\$ 9,283	\$ 2,869	\$ 4,726	\$-	\$-	\$-	\$-	\$-
	🔽 All Comp	onents-PSOLD		2: Office - Layer 2	\$ 25,000,000	\$ 16,879	\$ 16,879	\$ 9,283	\$ 2,869	\$ 4,726	\$-	\$ -	\$-	\$-	\$-
	- Select Lay	yer Source	_	3: Office - Layer 2	\$ 25,000,000	\$ 16,879	\$ 16,879	\$ 9,283	\$ 2,869	\$ 4,726	<u>s</u> -	\$ -	\$ -	\$ -	\$ -
	C PSOLD	Caj	P	4: Office - Layer 4	\$ 25,000,000	\$ 16,879	\$ 16,879	\$ 9,283	\$ 2,869	\$ 4,726	\$ -	ş -	\$ -	<u>s</u> -	ş -
	C Lloyds	_	-	5: Storage - Layer 1	\$ 50,000,000	\$ 44,279	\$ 44,279	\$ 14,169	\$ 10,184	\$ 10,184	\$ 9,741	\$ -	\$ -	s -	\$ -
	MBBEFD	(Y1-Y4) Sel	t	6: Storage - Layer 2	\$ 50,000,000	\$ 44,279	\$ 44,279	\$ 14,169	\$ 10,184	\$ 10,184	\$ 9,741	\$ -	\$ -	\$ -	\$ -
	C Custom			7: Storage - Layer 3	\$ 50,000,000	\$ 44,279	\$ 44,279	\$ 14,169	\$ 10,184	\$ 10,184	\$ 9,741	ş -	<u>ş</u> -	\$ -	ş -
		1 .	1	8: Storage - Layer 4	\$ 50,000,000	\$ 44,279	\$ 44,279	\$ 14,169	\$ 10,184	\$ 10,184	\$ 9,741	ş -	ş -	\$ -	ş -
	ОК	Cancel		9: Medium Manufacturing - Layer 1	\$ 200,000,000	\$ 161,123	\$ 161,123	\$ 29,808	\$ 15,307	\$ 35,850	\$ 35,850	\$ 5,639	\$ 16,112	\$ 22,557	\$ -
				10: Medium Manufacturing - Layer 2	\$ 200,000,000	\$ 161,123	\$ 161,123	\$ 29,808	\$ 15,307	\$ 35,850	\$ 35,850	\$ 5,639	\$ 16,112	\$ 22,557	\$ -
Define MBBEFD Ci	urve		×	11: Medium Manufacturing - Layer 3	\$ 200,000,000	\$ 161,123	\$ 161,123	\$ 29,808	\$ 15,307	\$ 35,850	\$ 35,850	\$ 5,639	\$ 16,112	\$ 22,557	\$ -
	Total B&C AOI	PML Factor	PMI %	12: Medium Manufacturing - Layer 4	\$ 200,000,000	\$ 161,123	\$ 161,123	\$ 29,808	i \$ 15,307	\$ 35,850	\$ 35,850	\$ 5,639	\$ 16,112	\$ 22,557	ş -
C All Y1	1.000	1	.9	13: High Hazard HPR - Layer 1	\$ 200,000,000	\$ 133,370	\$ 133,370	\$ 24,673	\$ 12,670	\$ 29,675	\$ 29,675	\$ 4,668	\$ 13,337	\$ 18,672	\$-
C All Y2	1,000,000	1.4	.9	14: High Hazard HPR - Layer 2	\$ 200,000,000	\$ 133,370	\$ 133,370	\$ 24,673	\$ 12,670	\$ 29,675	\$ 29,675	\$ 4,668	\$ 13,337	\$ 18,672	\$-
C ALV3	10.000.000	1.6	.9	15: High Hazard HPR - Layer 3	\$ 200,000,000	\$ 133,370	\$ 133,370	\$ 24,673	\$ 12,670	\$ 29,675	\$ 29,675	\$ 4,668	\$ 13,337	\$ 18,672	\$ -
C All Y4	100,000,000	1.8	.9	16: High Hazard HPR - Layer 4	\$ 200,000,000	\$ 133,370	\$ 133,370	\$ 24,673	\$ 12,670	\$ 29,675	\$ 29,675	\$ 4,668	\$ 13,337	\$ 18,672	ş -
Combined	1	1		17: Energy - Layer 1	\$ 250,000,000	\$ 333,261	\$ 333,261	\$ 46,657	\$ 39,991	\$ 59,987	\$ 83,315	\$ 9,331	\$ 33,993	\$ 59,987	\$-
	OK	Ca	ncel	18: Energy - Layer 2	\$ 250,000,000	\$ 333,261	\$ 333,261	\$ 46,657	\$ 39,991	\$ 59,987	\$ 83,315	\$ 9,331	\$ 33,993	\$ 59,987	\$ -
				19: Energy - Layer 3	\$ 250,000,000	\$ 333,261	\$ 333,261	\$ 46,657	\$ 39,991	\$ 59,987	\$ 83,315	\$ 9,331	\$ 33,993	\$ 59,987	\$ -
				20: Energy - Layer 4	\$ 250,000,000	\$ 333,261	\$ 333,261	\$ 46,657	\$ 39,991	\$ 59,987	\$ 83,315	\$ 9,331	\$ 33,993	\$ 59,987	\$ -

Defin

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PSOLD vs. Alt Scales Lloyd's, MBBEFD PSOLD Curves vs. Lloyds, MBBEFD, Custom Sample exposures \$3,000,000 \$2,500,000 \$2,000,000 \$1,500,000 \$1,000,000 \$500,000 \$-Lloyds PSOLD 300 PSOLD 150 PSOLD 100 MBBEFD Y1 MBBEFD Y2 MBBEFD Y3 MBBEFD Y4 MBBEFD Custom Combo Sub1-Sub2-Sub3-Layer4-Layer1-Layer2-Layer3-Base-5,000 750,000 5,000 15,000 25,000 10,000 40,000 150,000 XS 0 XS 5,000 XS 10,000 XS 25,000 XS 50,000 XS 60,000 XS 100,000 XS 250,000

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Sample PSOLD Curve Volumes and Average Severities by AOI Band 2014 vs. 2017 – Apts/Condos <10 Units

2017

Smooth

2014

iew

Illustrative

Avg Sev 2,041 3,218 3,464 Avg Sev 2,499 2.001 2,696 3 000 44 174 54 176 3.001 2.850 4.000 108 152 220 180 188 4.001 5.000 107 3,044 3,662 3,883 4,103 4,311 12,000 3,223 3,414 3,597 3,767 5,001 6,001 6,000 166 200 221 221 214 579 209 967 760 766 7,001 8,000 8.001 9.000 4.538 10,000 3,965 4,258 4,400 4,646 4,759 5,091 5,274 5,508 9,001 10,000 222 488 912 958 646 692 1,501 1,313 2,911 10.001 10.001 10.001 15.001 13,000 20.000 8,000 20,001 4,996 25,000 5,858 30,000 6 211 30,001 1,526 5,809 6,724 40,000 40,001 50,000 60,000 1,323 6,494 7,108 7,424 6.000 60,001 75,000 2,071 2,046 7,975 9,004 3,440 75.001 100.000 3,386 9,308 10,404 4.000 3,289 3,091 7,839 100,001 125,000 10,827 11,995 150,000 3,403 7,348 11,207 11,793 12,459 13,176 125.001 150.001 200.000 200.001 250,000 5,964 6,010 6,309 12,592 13,370 14,118 15,076 2,000 300.000 14,551 16,141 17,655 19,593 300,001 400,000 12,627 12,675 16,484 9,376 7,301 7,910 7,271 6,839 2,900 4,273 3,333 400.001 500.000 9,920 8,245 9,093 18.353 20,238 500.001 600.000 600.001 750.000 3 1,000,000 9,028 22,622 26,375 26,710 27,199 27,819 26,183 750,001 1.000.001 1.250.000 8,261 3,929 30,685 30,685 30,981 31,435 32,049 1,500,000 1,500,001 2,000,000 4,675 200.000 1,719 2,566 1,966 1,722 2,113 3,522 500,001 3,000,000 2,216 28,509 32,671 180,000 3.000.001 3,123 2,616 29,435 30,757 33,560 34,833 4 000 000 .000.000 160,000 5 000 001 6 000 000 2,251 3,106 32,103 33,671 36,091 37,594 6,000,001 7,500,000 7.500.001 10.000.000 5,139 36,335 40,080 140,000 10_000_001 12,500,001 12 500 000 2,879 2,724 5,175 3,839 39,418 40,543 42,958 43,919 15,000,000 120.000 45,272 47,275 49,188 52,105 15,000,001 20,000,000 4,263 8,404 42,117 20.000.001 25.000.001 5,882 4,414 6,497 44,487 46,663 25,000,000 2,880 2,152 2,424 1,861 914 1,267 950 339 408 433 137 84 161 68 57 47 137 30,000,000 100,000 20 000 001 40 000 000 50,050 40,000,001 50,000,000 3,469 54,526 55,866 80,000 59,860 64,586 71,802 50.000.001 60.000.001 60.000.000 75.000.000 59,053 64,914 1,997 1,979 1,970 734 654 489 181 104 226 74 47 47 42 149 73,968 75,000,001 100,000,000 60,000 100,000,001 125,000,000 91,320 125,000,001 150,000,000 86,306 83,602 40,000 150 000 001 88,938 93,233 200 000 000 87.018 200,000,001 250,000,000 92,031 20,000 250,000,001 300,000,001 97,588 96,302 102,896 300 000 000 102,703 400,000,000 112,511 122,220 132,933 152,179 400,000,001 500,000,000 110,894 500.000.001 118.319 600.000.000 3 600,000,001 750,000,001 750,000,000 128,427 98 101 172,368 60 1,000,000,001 and above 159,642 142,708 177,350 23,968 29,643 Note: PSOLD CP 2017 = PSOLD 2016 with smoothing (released with IRV v5-1/2018)

2017

Smooth

Occurrence

199

2014

хCV

Occurrence 214



Rating Group: Anartments/Condos under 10 units

Note: Values shown may not match options selected

SERVE | ADD VALUE | INNOVATE

AOI Group Min AOI Group Max

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PSOLD 2017 – Sample Counts and Curve Comparison

Apts<10 units vs. Severe Manufacturing

Illustrative



Rating Group: Apartments/Condos under 10 units

800.0 Occurrence Count 700.0 600.0 500.0 400.0 300.0 200.0 100.0 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39 41 43 45 47 49 51 53 55 57 2014 xCW 2016 Smooth 7,000,00 Gross Average Severity 6,000,000 Severe Manufacturing/Petroleum 5,000,000 4,000,000 3,000,000 2,000,000 ,000,000 9 11 13 15 17 19 21 23 25 27 29 31 2 2016 Smooth

Rating Group: Severe Manufacturing/Petroleum

Note: Values shown may not match options selected SERVE | ADD VALUE | INNOVATE

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PSOLD 2017 Curve Fit Compare – Original vs. Smooth Curves

Illinois Billboards – All years – All Perils – Ground Up

-							•			Illustrativ	/e	THE LAND OF LINCO	DLN tols
PSOLD-All Yrs -	Stability	Billboards -	- Illinois									Constant Street Street	STREET, STREET
AOI Group Min	AOI Group Max	W(1)	W(2)	W(3)	W(4)	W(5)	W(6)	W(7)	W(8)	W(9)	W(10)	W(11)	Occs.
0	2,000	0.525219	0.390553	0.080733	0.003363	0.000132	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.3
2,001	3,000	0.498510	0.398020	0.096088	0.007103	0.000278	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.5
3,001	4,000	0.452433	0.410902	0.122579	0.013554	0.000531	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	19.3
4,001	5,000	0.417644	0.420628	0.142581	0.018425	0.000722	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	12.2
5,001	6,000	0.375239	0.432484	0.166960	0.024362	0.000955	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	17.6
7,500,001	10,000,000	0.000000	0.319104	0.428863	0.145610	0.061953	0.031103	0.008461	0.003976	0.000929	0.000000	0.000000	0.3
10,000,001	12,500,000	0.000000	0.319104	0.419978	0.145777	0.066422	0.034140	0.008978	0.004489	0.001113	0.000000	0.000000	0.1
12,500,001	15,000,000	0.000000	0.319104	0.419978	0.145777	0.066422	0.033980	0.009084	0.004542	0.001113	0.000000	0.000000	0.1
15,000,001	20,000,000	0.000000	0.319104	0.419978	0.145777	0.066422	0.033574	0.009355	0.004677	0.001113	0.000000	0.000000	0.3
100,000,001	125,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
125,000,001	150,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
150,000,001	200,000,000	0.000000	0.319104	0.419978	0.145776	0.063220	0.026168	0.016782	0.007859	0.001113	0.000000	0.000000	0.0
200,000,001	250,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
250,000,001	300,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
300,000,001	400,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
400,000,001	500,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
500,000,001	600,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
600,000,001	750,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
750,000,001	1,000,000,000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-
1,000,000,001	and above	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-

PSOLD-All Yrs - Stability Billboards - Illinois

AOI Group Min	AOI Group Max	W(1)	W(2)	W(3)	W(4)	W(5)	W(6)	W(7)	W(8)	W(9)	W(10)	W(11)	Occs.
0	2,000	0.525219	0.390553	0.080733	0.003363	0.000132	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.3
2,001	3,000	0.498510	0.398020	0.096088	0.007103	0.000278	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	3.5
3,001	4,000	0.452433	0.410902	0.122579	0.013554	0.000531	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	19.3
4,001	5,000	0.417644	0.420628	0.142581	0.018425	0.000722	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	12.2
5,001	6,000	0.375239	0.432484	0.166960	0.024362	0.000955	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	17.6
7,500,001	10,000,000	0.000000	0.319104	0.428863	0.145610	0.061953	0.031103	0.008461	0.003976	0.000929	0.000000	0.000000	0.3
10,000,001	12,500,000	0.000000	0.319104	0.419978	0.145777	0.066422	0.034140	0.008978	0.004489	0.001113	0.000000	0.000000	0.1
12,500,001	15,000,000	0.000000	0.319104	0.419978	0.145777	0.066422	0.033980	0.009084	0.004542	0.001113	0.000000	0.000000	0.1
15,000,001	20,000,000	0.000000	0.319104	0.419978	0.145777	0.066422	0.033574	0.009355	0.004677	0.001113	0.000000	0.000000	0.3
100,000,001	125,000,000	0.000000	0.319104	0.419978	0.145776	0.065355	0.025809	0.015360	0.007504	0.001113	0.000000	0.000000	0.0
125,000,001	150,000,000	0.000000	0.000004	0.419978	0.145776	0.064288	0.025988	0.016071	0.007682	0.001113	0.000000	0.000000	0.0
150,000,001	200,000,000	0.000000	0.319104	0.419978	0.145776	0.063220	0.026168	0.016782	0.007859	0.001113	0.000000	0.000000	0.0
200,000,001	250,000,000	0.000000	200222	0.414044	0.161906	0.068077	0.028347	0.017334	0.008384	0.001510	0.000066	0.000000	0.0
250,000,001	300,000,000	0.000000	0.281562	0.408110	0.178035	0.072933	0.030527	0.017886	0.008909	0.001907	0.000131	0.000000	0.0
300,000,001	400,000,000	0.000000	0.262791	0.402176	0.194165	0.077789	0.032706	0.018438	0.009434	0.002304	0.000197	0.000000	0.0
400,000,001	500,000,000	0.000000	0.225250	0.590309	0.226424	0.087502	0.037066	0.019542	0.010484	0.003097	0.000328	0.000000	0.0
500,000,001	600,000,000	0.000000	0.187708	0.37 3441	0.258683	0.097214	0.041425	0.020646	0.011533	0.003891	0.000459	0.000000	0.0
600,000,001	750,000,000	0.000000	0.150166	0.36 7574	0.290942	0.106926	0.045784	0.021751	0.012583	0.004685	0.000590	0.000000	0.0
750,000,001	1,000,000,000	0.000000	0.093854	0.249772	0.339330	0.121495	0.052323	0.023407	0.014157	0.005875	0.000786	0.000000	0.0
1,000,000,001	and above	0.000000	0.000000	0.319104	0.419978	0.145776	0.063220	0.026168	0.016782	0.007859	0.001113	0.000001	0.0

Note: Upper AOI extrapolation uses 1-column jog

Values shown may not match options selected

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ILINO

IRV / PSOLD 2017 Component Pricing – 5 Risks / 4 Layers- gross Coverages / Perils including Business Interruption (TE) (7)

Illustrative

		-									
IRV Component	T _4_1 AU	5,000	5,000	15,000	25,000	10,000	40,000	150,000	750,000		
	lotal All	xsu	XS 5,000	XS 10,000	XS 25,000	XS 50,000	XS 60,000	XS 100,000	XS 250,000		
Loss Costs	Layers									No Layer	No Layer
BG1 - Buildings	\$1,035,430	\$ 480,296	\$ 114,897	\$ 160,386	\$ 110,593	\$ 25,658	\$ 63,158	\$ 72,743	\$7,699	\$ -	\$-
BG1 - Contents	\$ 488,090	\$ 217,449	\$ 67,182	\$ 88,088	\$ 68,675	\$ 19,319	\$ 27,377	\$-	\$ -	\$-	\$ -
BG2 - Buildings	\$ 102,205	\$ 42,546	\$ 5,152	\$ 8,922	\$ 10,329	\$ 3,374	\$ 10,686	\$ 18,925	\$ 2,272	\$-	\$-
BG2 - Contents	\$ 52,335	\$ 30,588	\$ 5,849	\$ 8,551	\$ 5,189	\$ 1,003	\$ 1,154	\$-	\$-	\$-	\$ -
SCL - Buildings	\$ 227,029	\$ 107,593	\$ 16,119	\$ 30,336	\$ 28,631	\$ 7,337	\$ 17,783	\$ 17,883	\$ 1,347	\$-	\$-
SCL - Contents	\$ 205,224	\$ 104,027	\$ 13,954	\$ 27,647	\$ 32,840	\$ 10,801	\$ 15,955	\$ -	s -	\$ -	\$ -
Time Bement	\$ 645,337	\$ 274,192	\$ 89,728	\$ 135,504	\$ 92,499	\$ 22,694	\$ 30,721	\$-	\$-	\$-	\$-
								-		-	
Buildings - BG1+BG2+SCL	\$1,364,663	\$ 630,435	\$ 136,168	\$ 199,643	\$ 149,553	\$ 36,368	\$ 91,626	\$ 109,551	\$ 11,318	s -	s -
Contents - BG1+BG2+SCL	\$ 745,649	\$ 352,065	\$ 86,985	\$ 124,286	\$ 106,703	\$ 31,124	\$ 44,486	\$ -	s -	\$ -	\$-
BG1 - Buildings+Contents	\$1,523,520	\$ 697,745	\$ 182,080	\$ 248,474	\$ 179,268	\$ 44,977	\$ 90,535	\$ 72,743	\$ 7,699	s -	ş -
BG2 - Buildings+Contents	\$ 154,539	\$ 73,134	\$ 11,001	\$ 17,473	\$ 15,518	\$ 4,377	\$ 11,839	\$ 18,925	\$ 2,272	\$-	\$-
SCL - Buildings+Contents	\$ 432,252	\$ 211,621	\$ 30,073	\$ 57,982	\$ 61,471	\$ 18,138	\$ 33,738	\$ 17,883	\$ 1,347	\$ -	\$ -
B+C+TE+All Perils-Components	\$ 2,755,649	\$1,256,691	\$ 312,881	\$ 459,433	\$ 348,755	\$ 90,186	\$ 166,833	\$ 109,551	\$ 11,318	\$ -	\$ -
B+C+TE+All Perils-PSOLD	\$ 2,755,649	\$1,032,647	\$ 253,775	\$ 382,704	\$ 285,332	\$ 76,632	\$ 229,590	\$ 397,630	\$ 97,339	\$ -	\$-
Difference	\$ 0	\$ 224,045	\$ 59,106	\$ 76,730	\$ 63,423	\$ 13,554	\$ (62,757)	\$ (288,079)	\$ (86,022)	\$ -	\$ -
Note: Parallel display option: kee	ps layered valu	ues in original	syndicated col	umns.							

Coverage & Peril Component Summary (Attritional Only) - Stable (All Years)

Note: Values shown may not match options selected

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PSOLD Components – Gross All Occupancies (including smoothed curves)

PSOLD 2017 Excess Claims Frequency per \$1B Premium by Peril - All Occupancies - Gross

	Att							
	All Perils	All Perils	All Perils	All Perils	BG1	BG1	BG1	BG1
	B+C+TE	Buildings	Contents	B+C	B+C+TE	Buildings	Contents	B+C
Layer Width XS Retention	Excess Claims							
Total Occurrence Count	5,181,247	2,693,416	1,922,312	5,188,674	1,983,599	1,093,199	521,963	1,804,090
5,000 XS 10,000	2.392	1.857	1.881	2.276	3.107	2.379	2.570	2.953
10,000 XS 15,000	1.174	0.872	0.905	1.114	1.470	1.076	1.201	1.388
25,000 XS 25,000	0.478	0.349	0.348	0.447	0.575	0.417	0.432	0.536
30,000 XS 50,000	0.133	0.103	0.067	0.117	0.137	0.111	0.069	0.123
20,000 XS 80,000	0.066	0.051	0.022	0.053	0.062	0.049	0.024	0.054
50,000 XS 100,000	0.048	0.037	0.012	0.037	0.044	0.033	0.016	0.039
50,000 XS 150,000	0.024	0.018	0.003	0.018	0.022	0.015	0.006	0.019
50,000 XS 200,000	0.014	0.011	0.001	0.010	0.013	0.008	0.003	0.011
150,000 XS 250,000	0.008	0.007	0.001	0.006	0.008	0.005	0.002	0.007
100,000 XS 400,000	0.002	0.002	0.000	0.001	0.002	0.001	0.000	0.002
500,000 XS 500,000	0.001	0.001	0.000	0.001	0.001	0.000	0.000	0.001

			Att								
			BG2	BG2	BG2	BG2	SCL	SCL	SCL	SCL	
			B+C+TE	Buildings	Contents	B+C	B+C+TE	Buildings	Contents	B+C	
Layer Wi	dth X	S Retentio	Excess Claims	l							
Total	Decur	rence Cour	t 1,125,114	690,842	228,561	1,031,397	2,739,098	947,110	1,209,420	2,510,137	
5,0	00 X	S 10,000) 1.766	0.944	2.983	1.705	1.000	1.130	0.725	0.950	
10,0	00 X	S 15,000) 1.004	0.542	1.802	0.983	0.536	0.645	0.403	0.501	
25,0	00 X	S 25,000	0.572	0.327	0.939	0.584	0.263	0.336	0.167	0.244	
30,0	00 X	S 50,000	0.283	0.162	0.285	0.274	0.097	0.105	0.047	0.086	
20,0	00 X	S 80,000	0.165	0.092	0.098	0.147	0.042	0.041	0.021	0.033	
50,0	00 X	S 100,000	0.128	0.070	0.057	0.110	0.027	0.024	0.014	0.019	
50,0	00 X	S 150,000	0.070	0.036	0.017	0.056	0.010	0.008	0.006	0.005	
50,0	00 X	S 200,000	0.041	0.022	0.007	0.033	0.005	0.003	0.003	0.002	
150,0	00 X	S 250,000	0.024	0.013	0.003	0.019	0.002	0.002	0.002	0.001	
100,0	00 X	S 400,000	0.005	0.003	0.001	0.004	0.000	0.000	0.000	0.000	
500,0	00 X	S 500,000	0.002	0.001	0.000	0.001	0.000	0.000	0.000	0.000	

Note: Total Gross AOI = \$38.0T, Total Gross Loss \$235.5B

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All Classes (230) - Premium All Filed Classes (99) - Premium Non-Filed (E&S) Classes (131) - Premium 7 4% .2% Underlying the ground-up pricing and curves is significant amount of information for larger 61.7% 10.1% policies. About 11% of total 68.3% 70.6% premium is related to policies greater than 100 million AOI, with about 16% of the non-filed Total Premium = \$110.7B Total Premium = \$82.1B Total Premium = \$28.7B categories being from these largest policies. About 26% of Residential Classes (21) - Premium Commercial Classes (72) - Premium Manufacturing Classes (136) - Premium the total premium collected 8.3% and analyze is in the Non-filed (E&S) categories. 5.6% About 18% of the premium is for 9 4% 11.1% 136 manufacturing 59.2% occupancies, including 78 HPR, 66.7% 71.9% 10.1% are related to policy sizes larger than 100M is. Total Premium = \$15.8B Total Premium = \$25.4B Total Premium = \$69.5B 10-25M 25-50M 50-100M 100-500M >500M 0-10M

Large Policy Analysis

Note: Data underlying IRV / PSOLD ground-up and excess loss costs; all 230 ISO CSP Occupancies, 38 IRV/PSOLD Rating Groups - Filed / Non-filed (E&S) Policy Years 2000-2015 - Net of deductibles, Undeveloped, Untrended, Stat data; Manufacturing including 78 HPR categories

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9

US to International Property Risk Excess Loss Factors COPE Assessment Matrix – Steps

1.Start with a list of potential differences between the US and target countries

- Standard in Property Underwriting is COPE Construction, Occupancy, Protection, and Exposure
- To this list, we add ARM: Amounts of Insurance, Rebuilding costs, Miscellaneous (social, etc.)

2.Assess whether each item would favorably or unfavorably impact expected loss results compared to the US

- expected to **reduce (positive)** or **increase (negative)** the excess losses, no impact or unknown

3.Attempt to evaluate magnitude of the impact of each item

- Low, Medium, High, or unknown

4. Tally the expected cumulative effect of each of the COPE (ARM) items

- Include direction and magnitude of all items
- Could vary for example by groups of occupancies (e.g. Facilities)

5. Reconcile total impact assessment to historical excess loss layers vs. US

- Review actual number of large claims to US, using exposure base such as \$B of subject premium
- Review cross country comparisons

6.Can do the same for Ground-up Loss Costs as proxy outside the US

US to International Property Risk Excess Loss Factors PSOLD International: COPE Assessment Matrix (for illustration only)

(Comm	ercial / Ind	us	trial						
		US		Country A	Country B	Country C	Country D	Country E	Country F	Country G
Construction	С			н	M	L		M	M	M
Occupancy	Ο			L	н		M		н	L
Protection	Ρ				M	M	M	н	M	н
Exposure (e.g. industrial facilities)	Е				M	L	Н			L
Amount of Insurance	Α			M			M	L	Н	M
Replacement Costs	R			M	L	H	L.	L	н	M
Miscellaneous	м				M		L		н	
Total Indicated (before validation)					Н		М	L	L	Н
		Impact K	ey	(compare	ed to US)	1. With	US as base	e, compare	each COPE	E+ attribute
		Direction	I	Wo	rse	2. Tally	up expecte	ed impacts	and qualita	tively weigh
				Be	tter	them b	y COPE+ a	ttribute		
					erence	3. See	how compa	ires to actu	al large los	s experience
		Magnitud	le	H = 1	High	4. Use	same proce	edure for G	round-up L	oss Costs, DE±E∧DM
				M = Mo	derate	But Inc	iuue Fiequ	ency comp		FETFARM

L = Low

•

Deeper Analysis into Ground-up Pricing Basics - COPE

More Info - Individual Exposure and Loss Cost (LC) Information

Ground-up pricing involves using AOIs from statement of values, and incorp[orating many other factors and COPE adjustments. Estimates on total, or by coverage/peril component can be estimated.

If using component curves, the individual coverage and peril loss costs including time element can be run together as one unit, or separately and then combined via relevant statistics and simulation.

IEIELL LUUIIILI VI UIILLIUIIAIILV	Additional Assumption:	5
US - Full Portal Detail	Minimum Burn (by peril)	C Yes 🛈 No
C Intl + US - Countrywide	Missing Construction Mappin	IG: (🖲 Yes (C) No
C Intl + US - Full Portal Detail	Sprinkler Credits:	G Yes C No
Select Submission Type	HPR Override Selection:	Yes C No No
Individual Exposure Detail Banded Profile	State/Multi-State Replaceme	ent: 🖲 Yes 🔿 No
Exposure Only C Banded Only	CSP/Occupancy Replacement	nt: 🖲 Yes 🔿 No
Including Syndication Incl Syndication Bands	Conflagration Potential:	Yes C No
Select Loss Cost Source	Coinsurance Factors:	Yes C No No
C Filed/Non-admitted C Premium × ELR	State/Region Default PPC:	C 165 C 190
Excess + Surplus C GLM*	CAT Allocations:	Yes O No No
Select Loss Cost Type	COPE Excess Override:	C Yes 🔍 No
Class Lost Costs	Time Element (BI) Override:	
Specific Loss Costs (Prometrix - Manual Input)*	International Adjustments:	C Yes 🔎 No
C Specific Loss Costs (Prometrix - API)*	Select Occupancy Sour	ce (for mapping)
C Replacement Costs (XactWare - 360 Value)*	ISO Class Code C SIC	C IBC_Canada C AIR
Select Peril	C PSOLD C NAICS C ATC	○ IICI_Lloyds ○ Other
Total cat/noncat ⊂ BG1 (Fire) ⊂ SCL Only Total xBG2 Hurricane ⊂ BG2 (Wind) ⊂ BG2 (xHU)	C Duildings (D) C Contents	(C) C TE (DI) C D+C+TE
🗌 Run PSOLD XS Coverage & Peril components	🔲 Include Alternate Occupa	ncy Source Automatically
Calc Calc All:	Curve Sel	tings More Info
round Up Excess GU & <u>P</u> SOLD API	DB/exe P	aths <u>D</u> iagnostics

A - Exposure Int	0							
Exposure Number	1	Sprinkler Stal	tus Part		Description	1: Office		
Building AOI	40,000,000	Construction Ty	rpe Joisted Masonry		Occupancy	0702: Non-Governmental	l Offices and Banks	
Contents AOI	5,000,000	BG2 Sym	bol Ordinary		City, State/Region	Alabama		
Time Element AOI	10,000,000	P	PC 10		Zip Code	35004		
Deductible	1,000	Prometrix Risk	.ID		Address			
BG1 C	lircular Number	LI-CF-2016-057			Latitude/Longitude			
BG	1 Circular Date	2/1/2017		Cor	nflagration Potential	TBD		
B - LC Details		BG1 (Fire et a	al)	iHU BG2 (Wi	nd et al)	SCL (Ice/	snow, theft, et al)	
	Bui	ilding	Contents	Building	Contents	Building	Contents	A A A A A A A A A A A A A A A A A A A
LC Factor	0	0.122	0.165	0.091	0.077	0.047	0.141	A HULL P
LOL Factor	0	0.469	0.427	0.455	0.434	0.350	0.153	
Scalar Adjustment	1	1.000	1.000	1.000	1.000	1.000	1.000	
Sprinkler Credit	0	0.150	0.150					
PPC Factor	t	1.580	1.580					
Loss Cost	27	,664	4,258	14,906	1,504	5,922	971	
– C - LC Summarie	s							
Peril Total	5 E8	x5 Peril Scalars	Coveraç	je Totals	Total Groce	Loss Cost - Clips	62 210	
Total BG1 LC	31,922	BG1 1.00	Total Building LC	48,492	Attrition		40.271	
Total BG2 LC	16,410	BG2 1.00	Total Contents LC	6,733	Attrition	al Not Loss Cost*	20 742	
Total SCL LC	6,893	SCL 1.00	Time Element LC	8,095	Attrition	al Net Loss Cost	20,745	
Total TE LC	8,095	TE: % 15.0						
	55 224		Total LC	63,319				

Note: Values shown may not match options selected

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IRV - Initial Settings

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Illustrative

Importance of Occupancy – Ground-up and Excess

	More Info Image				×		More Info Image				×
	309 PARK A	VENUE	Sicop in Leeding Mar Pillows	the Patk nufacturer of 5 in NVC			209 PARK AVI	ENUE Bes	t Blasting Caps Under New Munt		
Info - Individual Ex	(p					X More Into - Individual E					<u>×</u>
- Exposure Info Exposure Number						A - Exposure Info Exposure Number	<u> </u>				
Building A(1)	30,000,000 Construction Lyne Joisted I										
ballang rior .	Sologood Consercent type Solsteen	dasonry Origin	nal Occupancy 2800: I	lextile Mill Products - Natural and Synthetic		Building AOI	30,000,000 Construction Type Joisted	Masonry Original C	CCUPANCY 5100: Chemicals and Pharm	naceuticals - High Hazard	
Contents AOI	5,000,000 BG2 Symbol Ordinary	Masonry Origin Mapped IS	nal Occupancy 2800: 1 SO Occupancy 2800: 1 State Danian Country	Textile Mill Products - Natural and Synthetic Textile Mill Products - Natural and Synthetic		Building AOI Contents AOI	30,000,000 Construction Type Joisted I 5,000,000 BG2 Symbol Ordinary	Masonry Original C / Mapped ISO C	Coupancy 5100: Chemicals and Pharm Coupancy 1400: Waste and Reclaimer	naceuticals - High Hazard d Material, including Yards	
Contents AOI Time Element AOI Deductible	5,000,000 Construction rype Statech 5,000,000 BG2 Symbol Ordinar: 5,000,000 PPC 6 1,000 Prometrix Risk ID	Masonry Origin Mapped ISI City,	nal Occupancy 2800: 1 SO Occupancy 2800: 1 State/Region Countr Zip Code 00099	Textile Mill Products - Natural and Synthetic Textile Mill Products - Natural and Synthetic rywide		Building AOI Contents AOI Time Element AOI Deductible	30,000,000 Construction Type Joisted I 5,000,000 BG2 Symbol Ordinary 5,000,000 PPC 6 1,000 Prometrix Risk ID	Masonry Original C y Mapped ISO C City, Sta	Iccupancy 5100: Chemicals and Pharm Iccupancy 1400: Waste and Reclaime te/Region Countrywide Zip Code 00099	naceuticals - High Hazard d Material, including Yards	
Contents AOI Time Element AOI Deductible 1 Circular Number 0	5,000,000 BG2 Symbol Ordinarr 5,000,000 BG2 Symbol Ordinarr 5,000,000 PPC 6 1,000 Prometrix Risk ID Conflagration TRD	Nasonry Origin Mapped IS City,	nal Occupancy 2800: 1 SO Occupancy 2800: 1 State/Region Countr Zip Code 00099 Address	Lextle Mill Products - Natural and Synthetic Textile Mill Products - Natural and Synthetic rywide		Building AOI Contents AOI Time Element AOI Deductible BG1 Circular Number 0	30,000,000 Construction Type Joisted I 5,000,000 BG2 Symbol Ordinary 5,000,000 PPC 6 1,000 Prometrix Risk ID Conflagration	Masonry Original C y Mapped ISO C City, Sta	Iccupancy 5100: Chemicals and Pharm Iccupancy 1400: Waste and Redaimed te/Region Countrywide Zip Code 00099 Address	naceuticals - High Hazard d Material, including Yards	
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