

The Broader Solution for Commercial Underwriting from AIR and Verisk Analytics

Managing Catastrophe Risk in Commercial Underwriting Webinar Series
Peter Bingenheimer, Vice President



Webinar Series Agenda

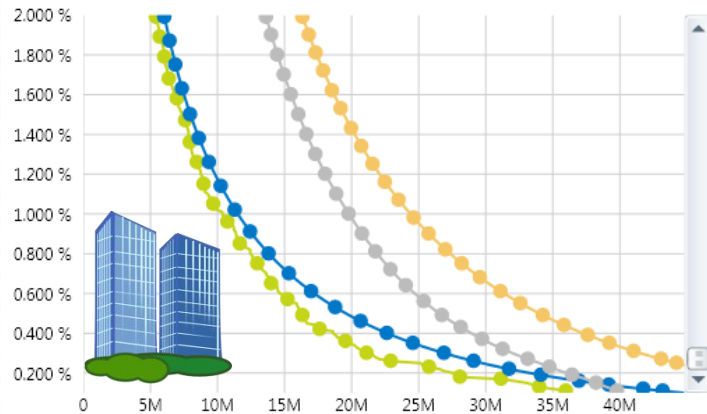


June 2	Own the Risk in Commercial Underwriting in Touchstone
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June 23	Using Touchstone for Accumulation Management and Advanced Geospatial Analysis
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July 14	The Broader Solution Set for Commercial Underwriting from AIR and Verisk Analytics
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AIR's Models and Software Are Widely Accepted for Commercial and E&S Underwriting

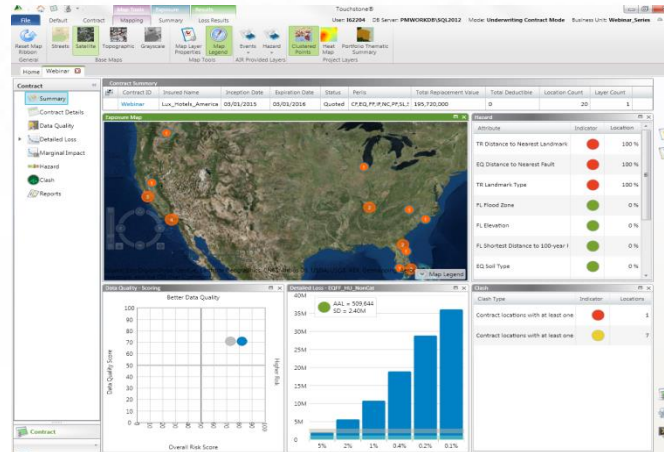


Enhanced Modeling Capabilities for Commercial Risks



Verisk Analytics®

Access to Verisk Analytics Assets



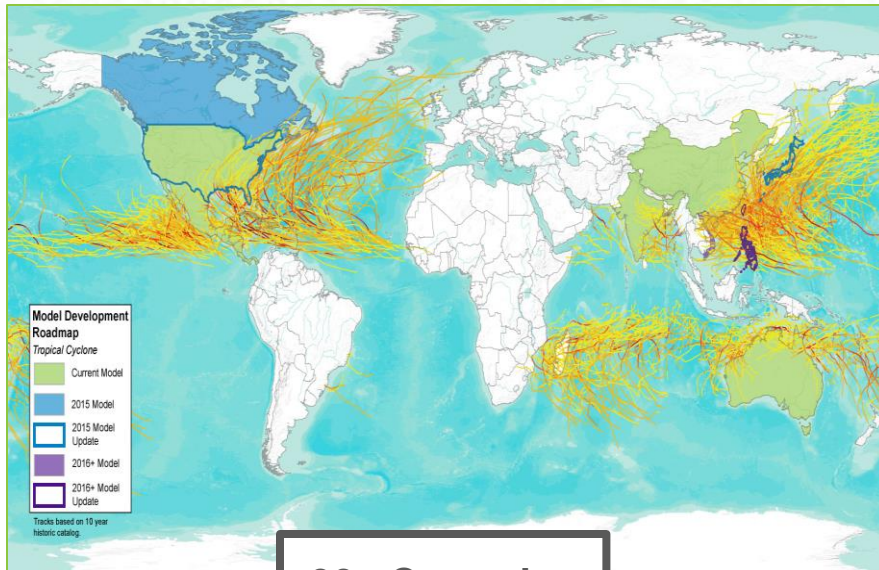
Touchstone®

AIR's Comprehensive Risk Management Platform

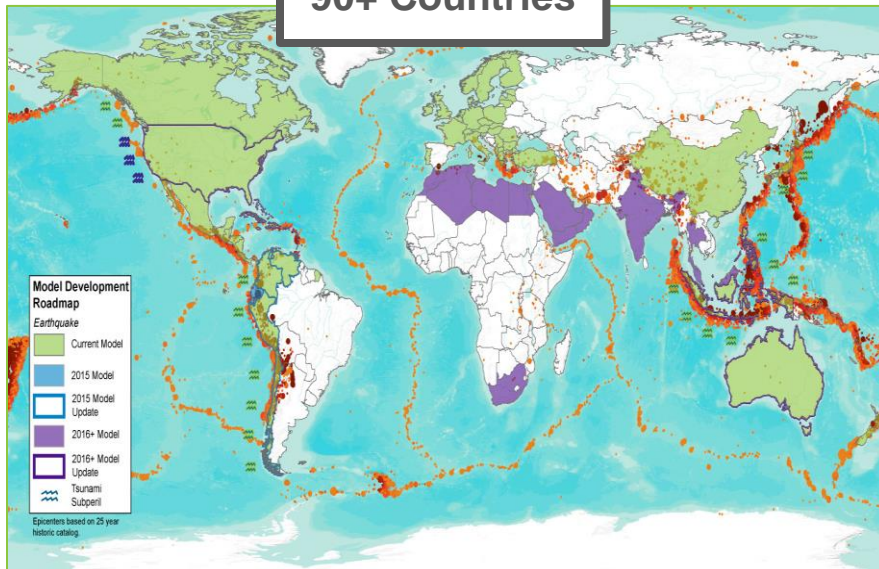
Suitability of AIR's Models for Modeling Commercial Risks



AIR Delivers the Most Robust Models for Risks of All Types Across the Globe

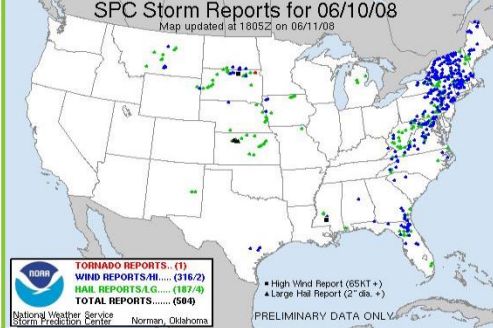


90+ Countries





- 2007
- Terrorism
- Commercial vulnerability

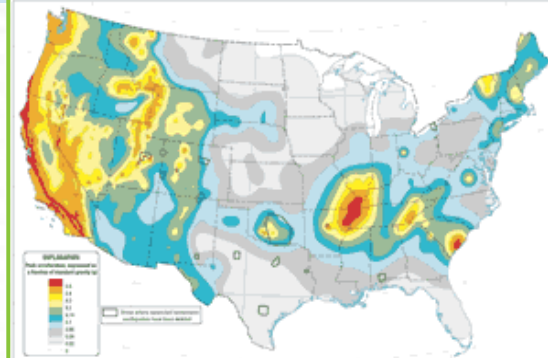


- 2009
- U.S. Earthquake
- Latest hazard maps
 - Vulnerability enhancements
 - Intro of Industrial Facilities model

- 2006 & 2007
- U.S. Hurricane
- Storm surge
 - Commercial vulnerability
 - Business interruption



- 2008
- U.S. Hurricane
- GOM hurricane initial model release
- Severe Thunderstorm
- Commercial vulnerability



- 2011
- Terrorism
- Commercial vulnerability



- 2014
- Severe Thunderstorm
- Vulnerability enhancements
- U.S. Flood Model
- Initial model release



- 2010
- U.S. Hurricane
- Commercial vulnerability
 - Intro of industrial facilities model



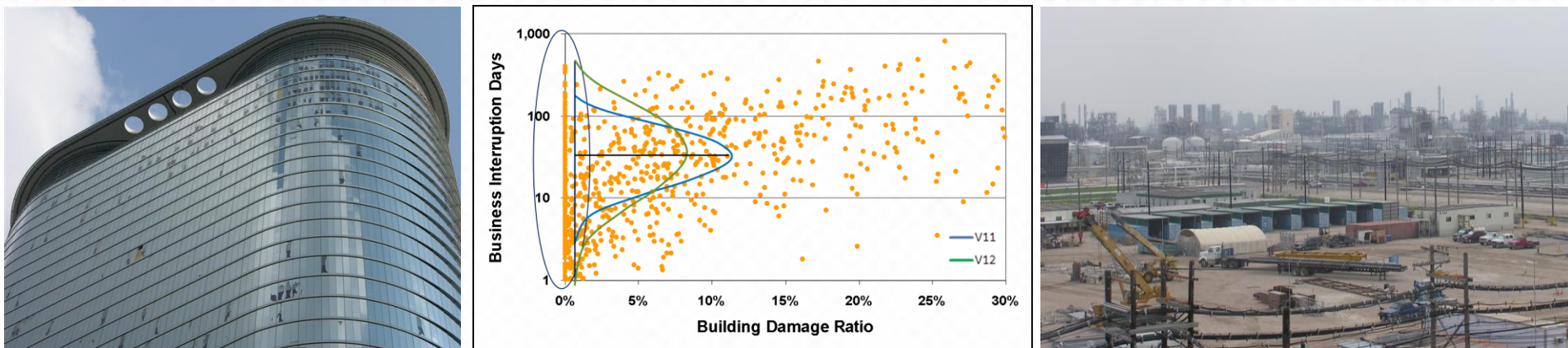
- 2012
- U.S. Hurricane
- Intro of builder's risk
- U.S. Earthquake
- Intro of builder's risk



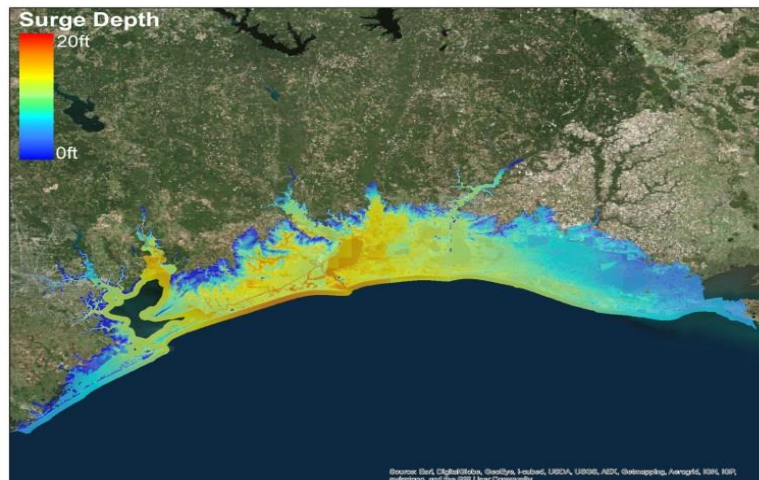
- 2015
- U.S. Hurricane
- Storm surge update

Recent Enhancements to Commercial Lines Modeling for U.S. Hurricane Are Informed by Extensive Claims Data

Significant enhancements to commercial vulnerability in 2010

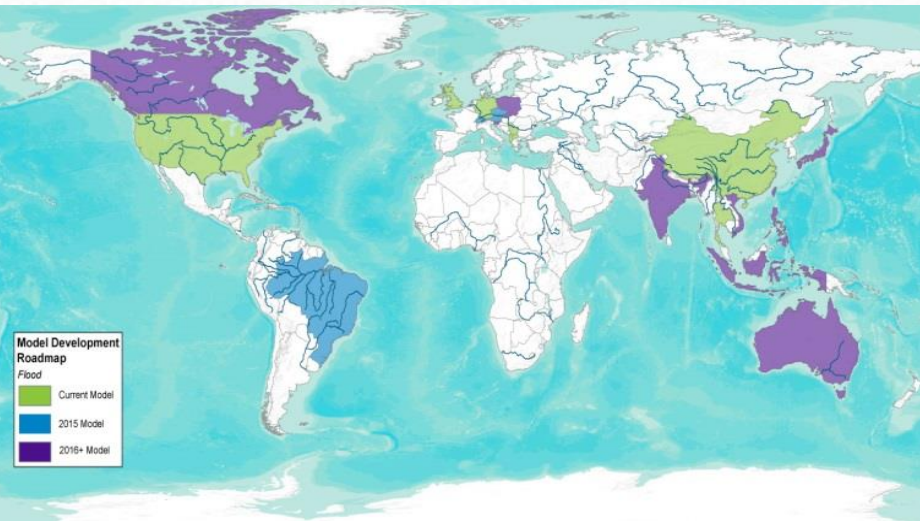


Significant enhancements to storm surge module in 2015



Our Growing Support for Commercial Lines Extends Far Outside North America

Focus on water perils globally



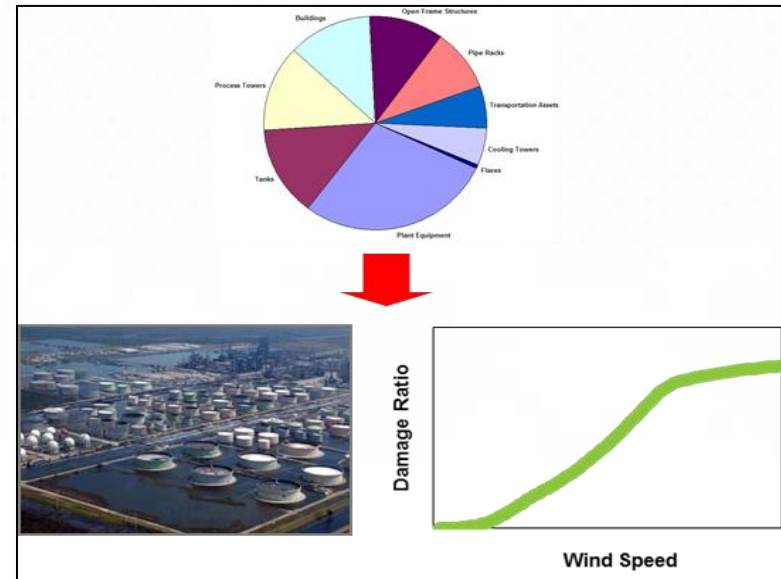
Expanded support for specialized risks



AIR's Catastrophe Risk Engineering Practice Extends Our Capabilities in Commercial Modeling

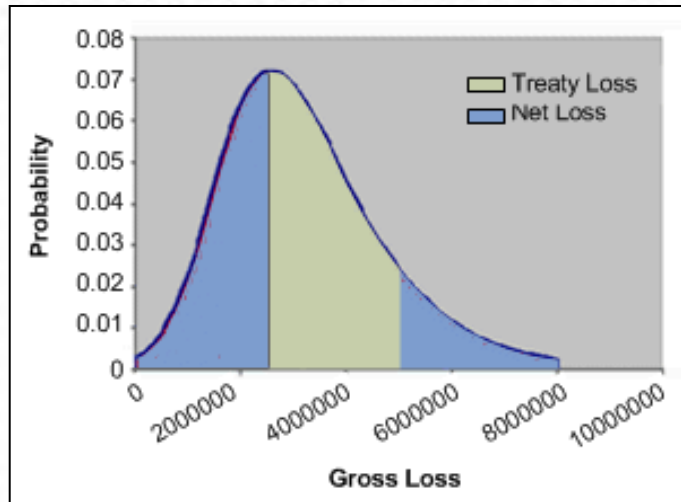
Catastrophe Risk Engineering consulting practice offers supplemental services that can help you reduce uncertainty for individual risks and get the best estimate of risk

Expertise developed through these services are being leveraged to enhance AIR's off-the-shelf models

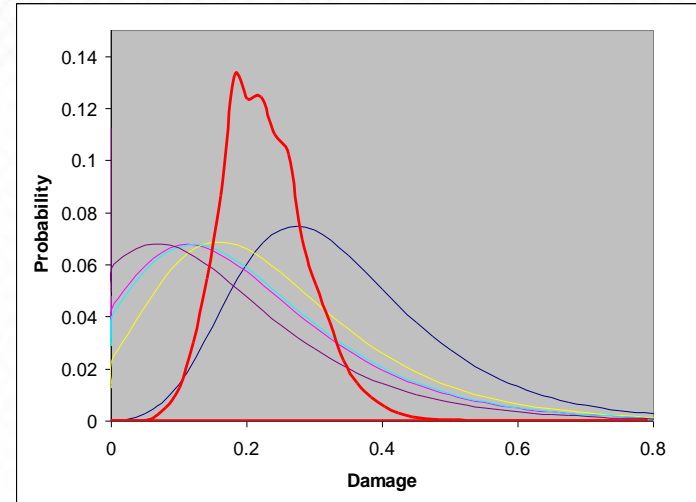


AIR's Financial Module Offers Superior Handling of Uncertainty and Supports a Broad Range of Terms

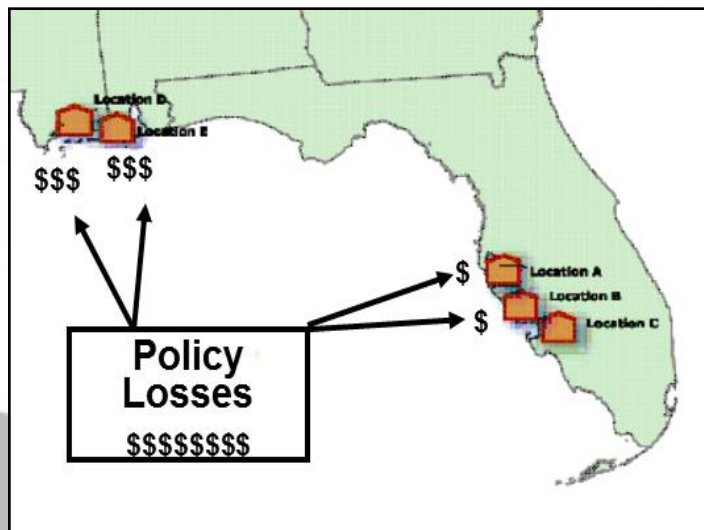
Probabilistic application of terms



Numerical convolution



Back allocation



Breadth of supported terms

Section 1

USD 75,000,000 per occurrence and in the annual aggregate in respect of Flood and Earth Movement separately

Excess of

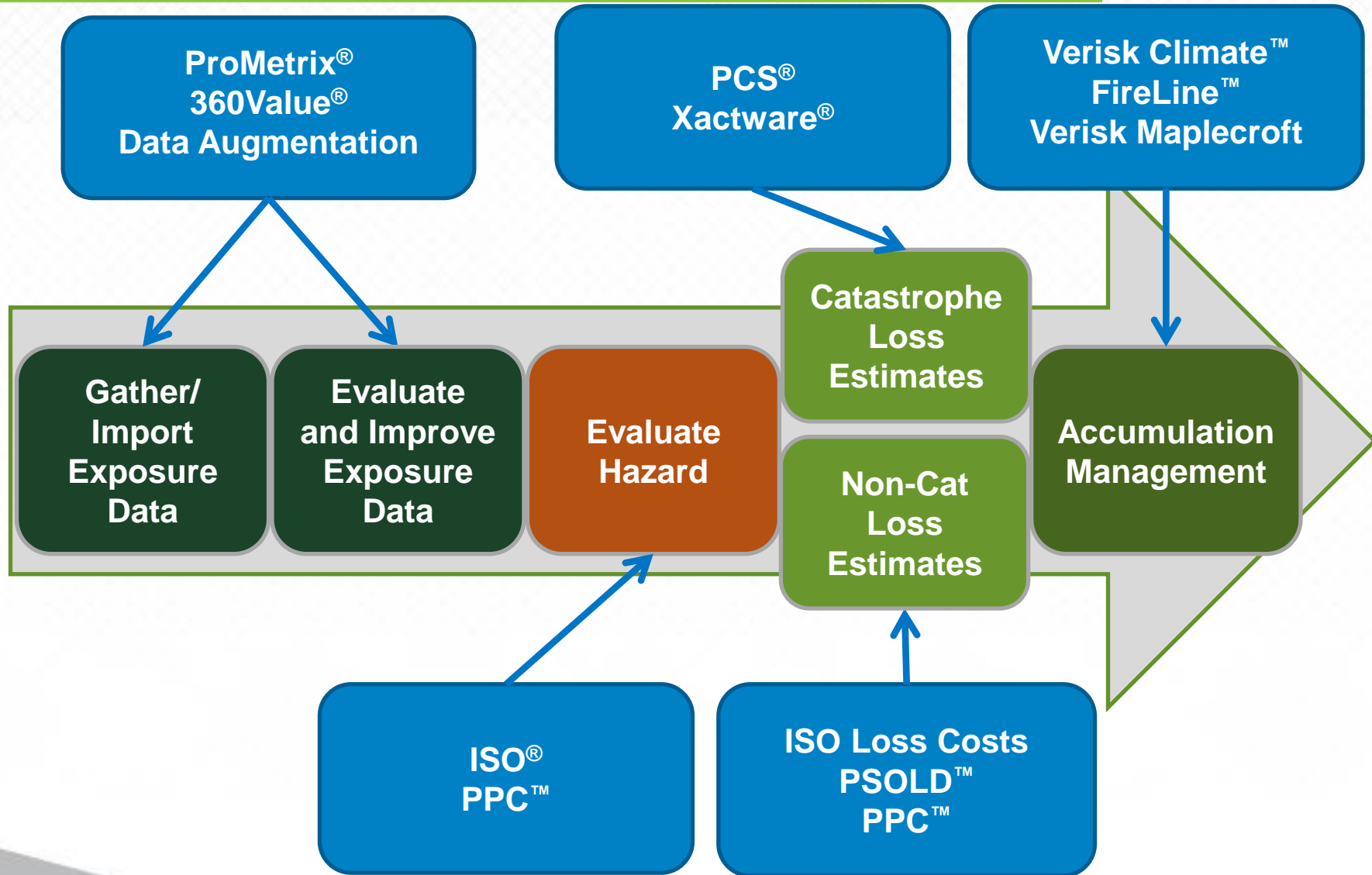
USD 25,000,000 per occurrence and in the annual aggregate in respect of Flood and Earth Movement separately

Excess of program deductibles as defined in the wording
Subject to program sub-limits as defined in the wording

Benefits and Additional Capabilities Enabled by Verisk



Verisk Assets Enhance Capabilities Across the Entire Touchstone Workflow



Evaluating Exposure Data Is a Critical in Risk Assessment



Occupancy: Unknown

Construction: ISO Fire Class 4

Year Built: Unknown

Number of Stories: Unknown



Occupancy: Temporary Lodging

Construction: Reinforced Concrete

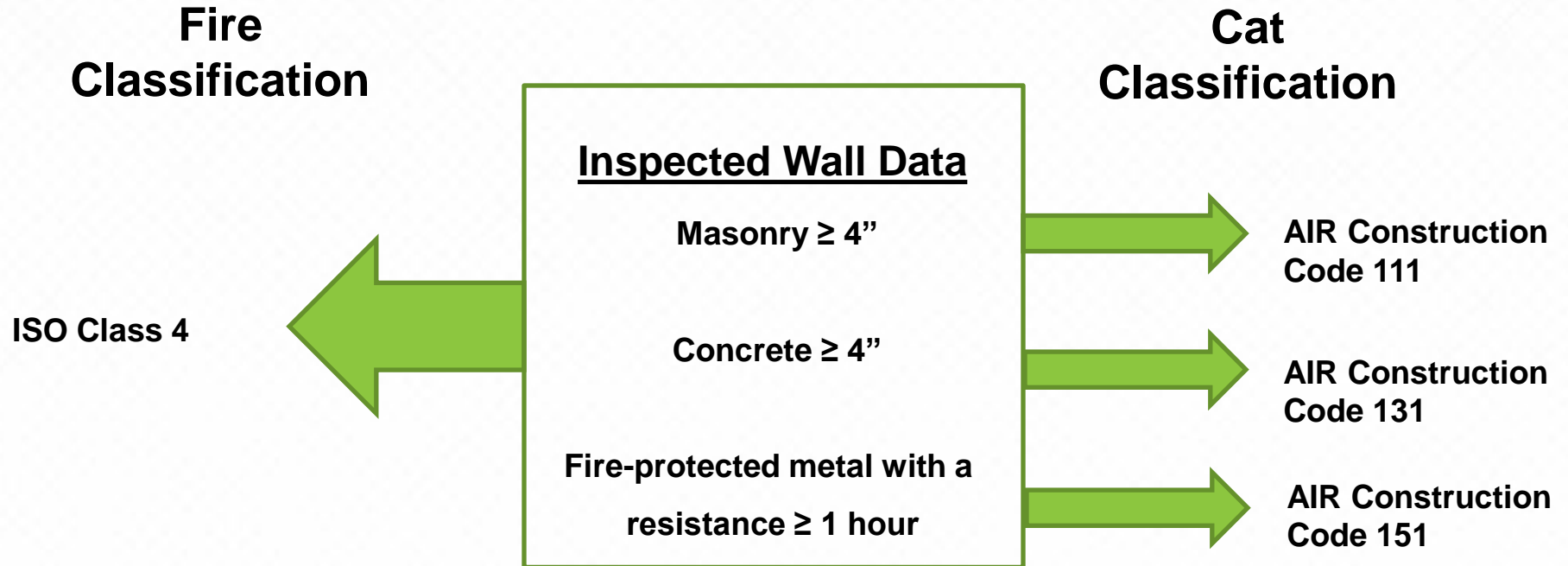
Year Built: 1991

Number of Stories: 3

Improve Your Data with Site-Verified Information to Build Confidence in Your Modeling Results

ProMetrix		BUILDING UNDERWRITING REPORT DATA SUMMARY	
BUILDING INFORMATION			
BAIN & COMPANY, (11S) 131 DARTMOUTH ST BOSTON, MASSACHUSETTS 02116 County : SUFFOLK FPA : BOSTON		ISO Risk ID : 20 MA99 013152 On-Site Survey On : 09/2008 Schedule Applied Date : 11/22/2014 Year Built: 2001 Approx	
RELATIVE HAZARD GRADING			
Occupancy: Office and banks		Building Fire Protection: Sprinklered	
This Building State Average ProMetrix Database Average	1.2 5.3 5.0		
BUILDING CONSTRUCTION			
ISO Fire Class : 5 - Modified Fire Resistive			
OCCUPANCY SUMMARY			
Number of Occupants : 6			
	Number	% of Area	Hazards
Habitational			
Mercantile			
Restaurants	2	.7	YES
Vacancies	1	1.9	NO
Offices	1	63.7	NO
Non-Manufacturing	2	33.1	NO
Manufacturing			
Building Services		.6	
Overall Combustibility :		2(MEDIUM-LOW)	
BUILDING FIRE PROTECTION DETAILS			
SPRINKLER SYSTEM INSTALLED - RECEIVING CREDIT SPRINKLER GRADING = 65 EXTINGUISHER CREDIT APPLIES			
PUBLIC PROTECTION CLASSIFICATION			
Public Protection Class : 01		Fire Protection Area : BOSTON	

AIR Adds Insight to ProMetrix Data Available in Touchstone's Data Quality Analytics Module



Are You Modeling Adequate Building Replacement Values?

360Value®

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Attachments

Risk Reports

Edit Policy

Calculate ACV

CAT Risk Assessment

RMI XMLs

Debug Info

Regenerate Report

RESULTS FOR AB6ID6U.1

OWNER INFORMATION

Name:	AIR	Date Entered:	11/13/2014
Street:	131 DARTMOUTH ST	Date Calculated:	03/31/2015
City, State ZIP:	BOSTON, MA 02116	Created By:	Dennis Costello (dcostello)
Country:	USA	Owner:	Dennis Costello (dcostello)
Seismic Zone:	2A		

PROPERTY INFORMATION

Name:	AIR	Bldg #:	
Street:	131 DARTMOUTH ST		
City, State ZIP:	BOSTON, MA 02116		
Country:	USA		

ESTIMATED REPLACEMENT COST

Calculated Value: **\$95,733,326.18**

[Pricing Research for 02116](#)

[Provide feedback on this value](#)

The replacement cost amount(s) above represents the estimated cost for a contractor/repair company to rebuild the structure(s) described herein in the referenced geographic market in accordance with current building codes following a total loss. This information is provided on the condition and understanding that it represents only an estimate and that the provider is not responsible for good faith errors. The replacement cost amount(s) includes pricing for labor, materials and contractor's overhead and profit; it does not include costs for excavation or land value.

(Replacement cost includes all applicable permits, fees, overhead, profit, and sales tax)

[Adjust Value](#)

[Edit](#)

[Finish](#)

[Copy Valuation](#)


Touchstone Can Be Seamlessly Updated With 360Value Replacement Values

AIR Touchstone – 360Value
Replacement Value Estimator

Underwriting Business Unit
Default

Contract
Gruppo_Lux

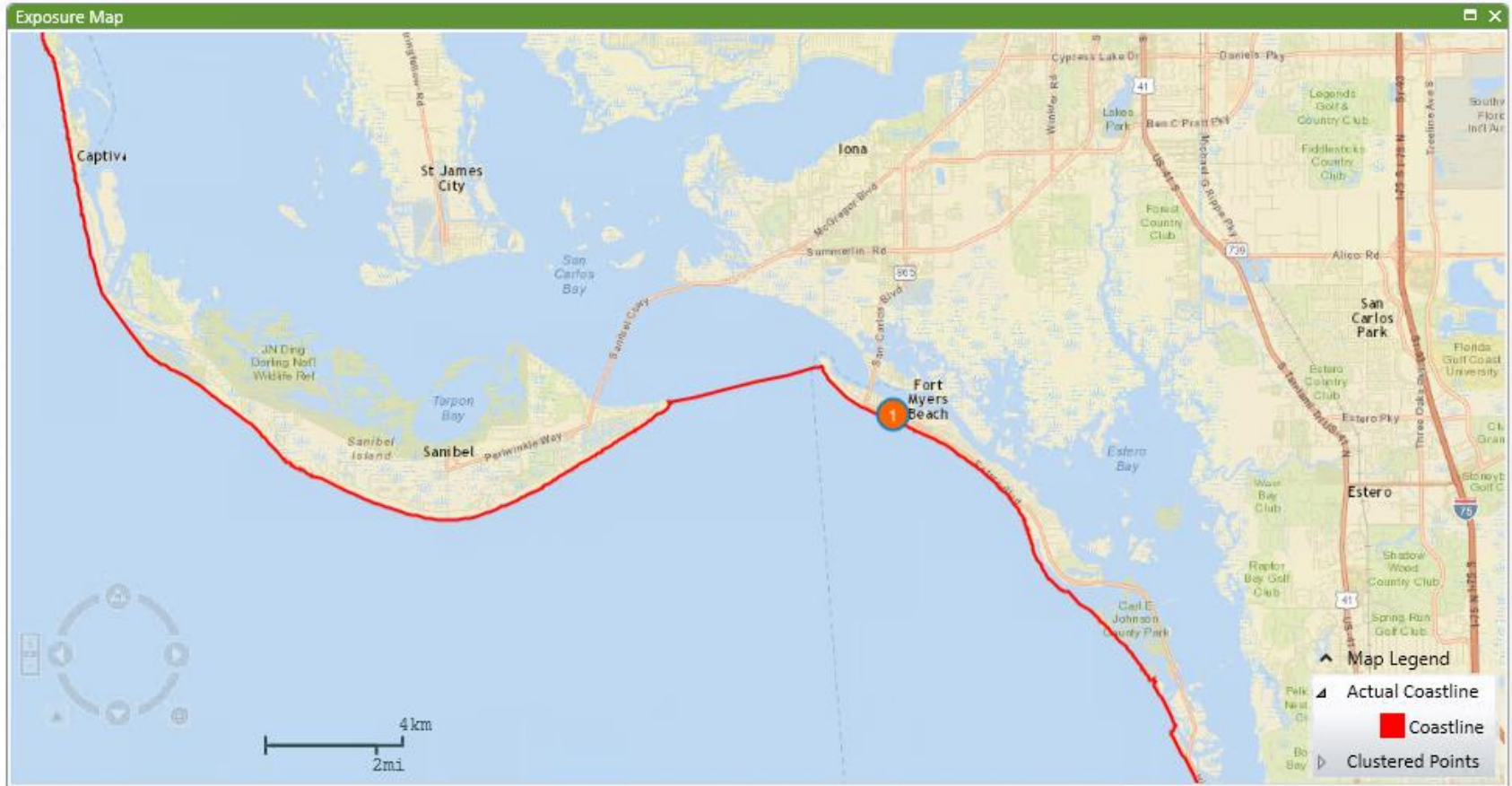
Get Locations

 verisk
Insurance Solutions

Touchstone Can Be Seamlessly Updated With 360Value Replacement Values

AIR Touchstone – 360Value								
Replacement Value Estimator								
Processing 20/20								
Home								
Address	Construction	Occupancy	Year Built	Stories	Area (SqFt)	Building Rep. Val.	360 Building Rep. Val.	Replace?
42200 ALBRAE ST CA,FREMONT 94538	Wood frame	Temporary lodging	2000	4	75924	\$8,893,811	\$8,038,552.45 \$106	<input type="checkbox"/>
1020 S FIGUEROA ST CA,LOS ANGELES 90015	Reinforced concrete	Temporary lodging	1964	10	143954	\$20,151,200	\$22,608,182.1 \$157	<input checked="" type="checkbox"/>
433 W PICO BLVD CA,LOS ANGELES 90015	Masonry	Temporary lodging	1914	4	73625	\$9,307,326	\$7,206,524.99 \$98	<input type="checkbox"/>
1100 EL CAMINO REAL CA,MILLBRAE 94030	Reinforced concrete	Temporary lodging	1950	3	23616	\$4,843,135	\$3,993,615.06 \$169	<input type="checkbox"/>
2066 BIRD ST CA,OROVILLE 95965	Reinforced masonry	Temporary lodging	1929	0	56211	\$6,426,259	\$5,971,340.82 \$106	<input type="checkbox"/>
2550 ERRINGER RD CA,SIMI VALLEY 93065	Wood frame	Temporary lodging	1985	3	58000	\$6,118,157	\$5,335,610.53 \$92	<input type="checkbox"/>
8822 CYNTHIA ST CA,WEST HOLLYWOOD 90069	Wood frame	Temporary lodging	1979	4	68715	\$5,901,123	\$6,373,672.41 \$93	<input checked="" type="checkbox"/>
Showing 1 to 20 of 20 entries								
							Update Locations	

Verisk Offers a Variety of Hazard Analytics



ISO Distance to Coast

Future additions of PPC, FireLine

Touchstone Provides a Full View of Risk



Cat Risk



Tropical Cyclone
(Hurricane, Typhoon)



Severe Thunderstorm
(Tornado, Hail,
Straight-Line Wind)



Extratropical Cyclone
(Winter Storm)



Earthquake



Flood



Terrorism

TOUCHSTONE[®]



**Understanding
Risk**



Non-Cat Risk



Fire



Vandalism



Lightning

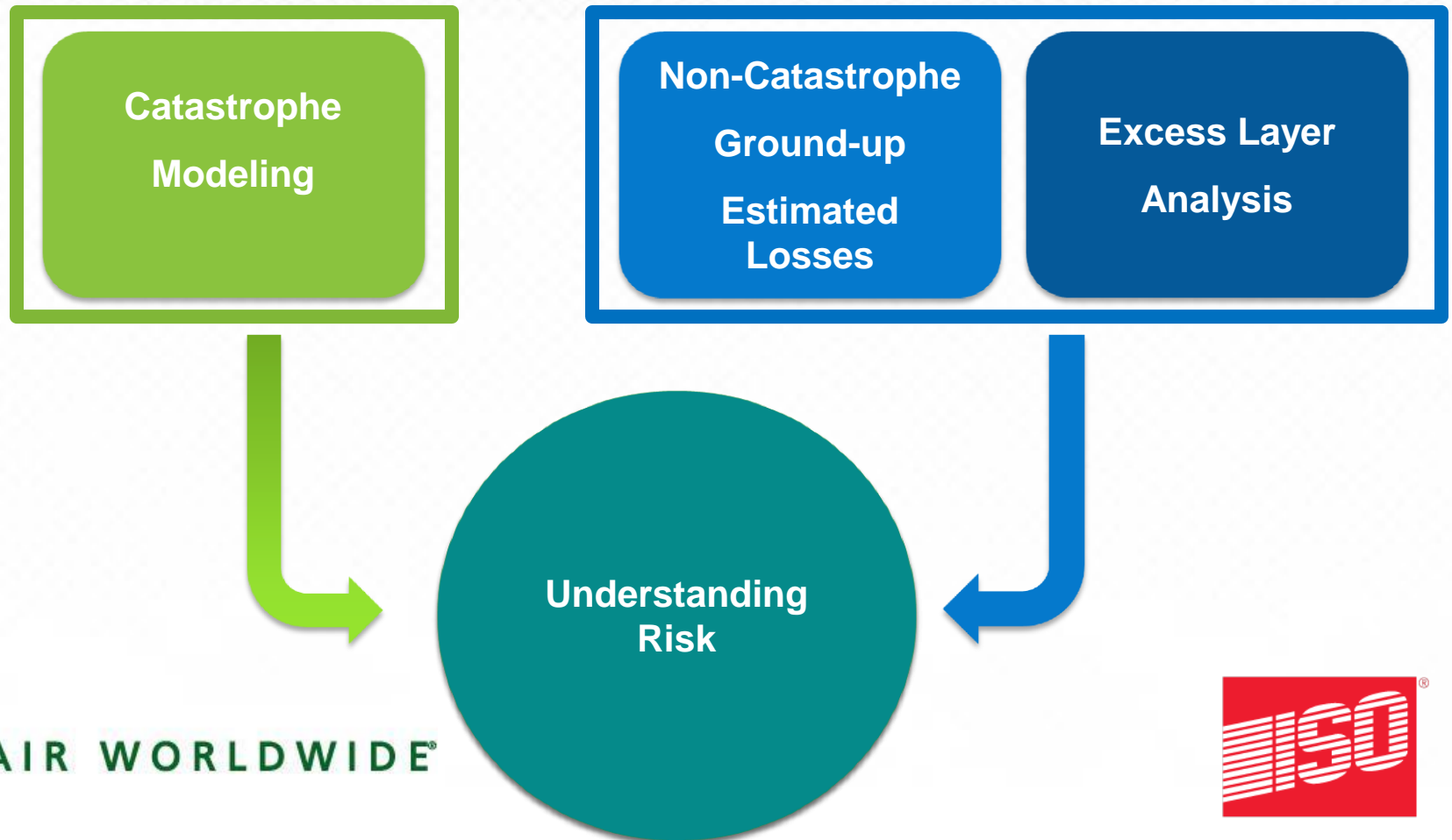


Explosion



Sprinkler Leakage

Touchstone Offers Ground-Up and Excess Layer Non-Catastrophe Loss Analytics

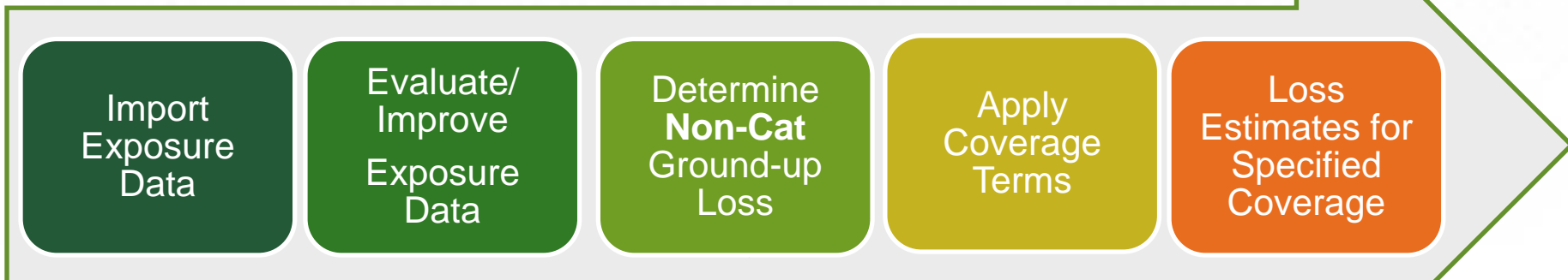


Availability of Non-Cat Analysis Capabilities in Touchstone Offer Significant Workflow Efficiencies

Touchstone Workflow

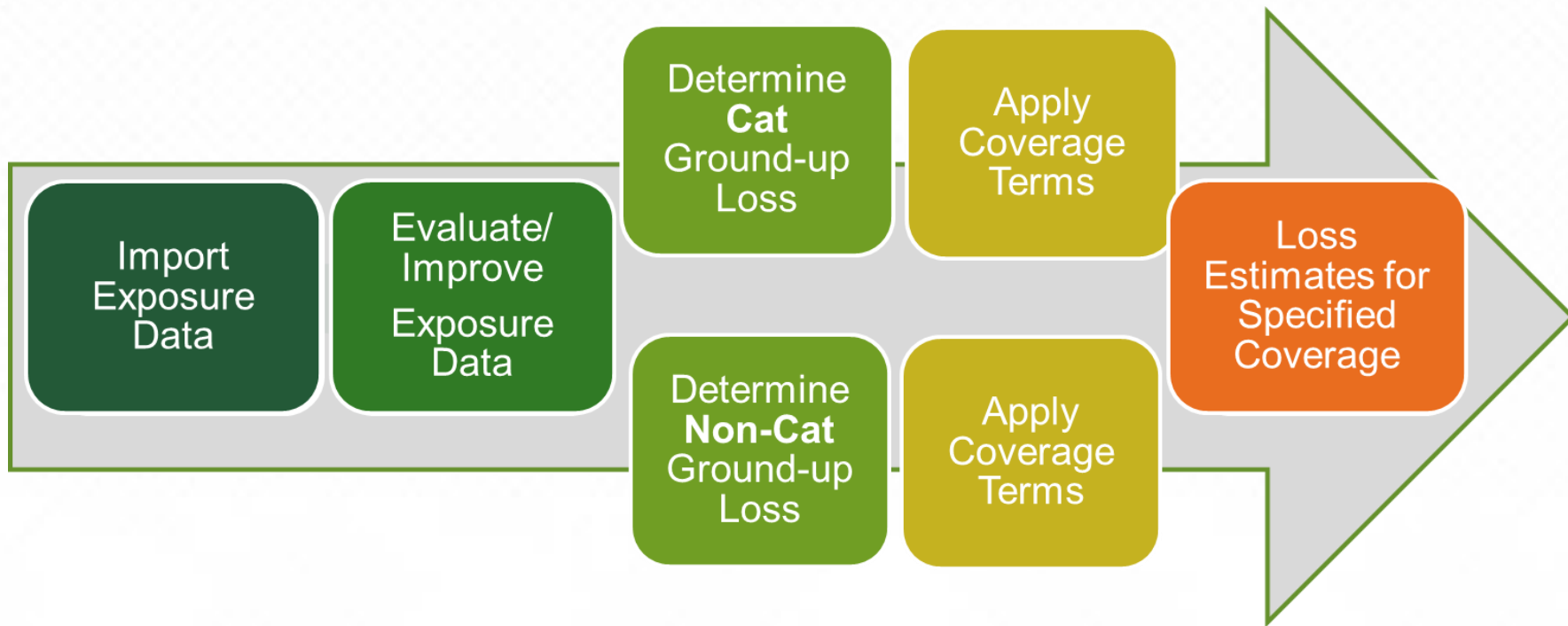


Non-Cat Workflow



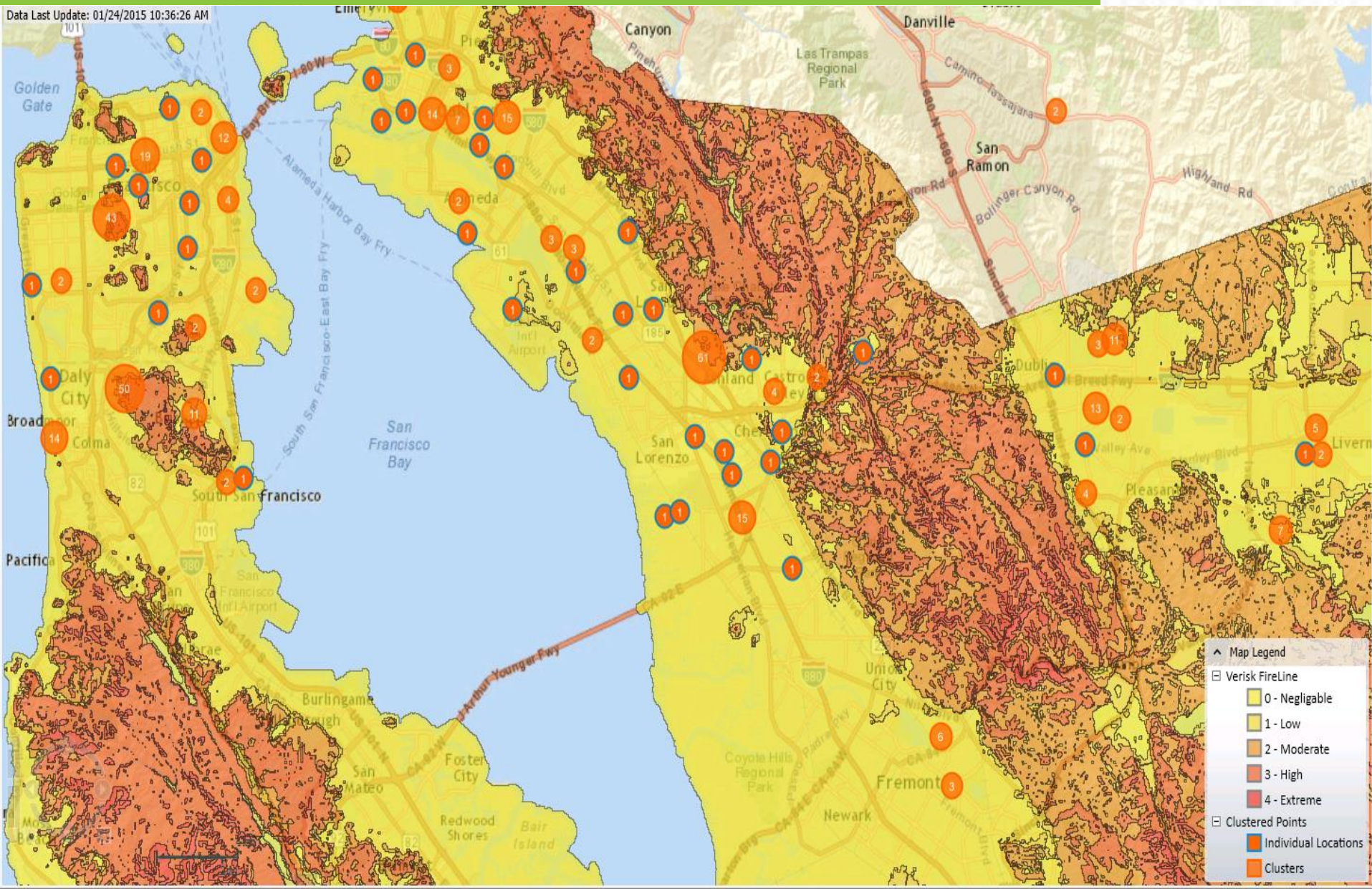
Availability of Non-Cat Analysis Capabilities in Touchstone Offer Significant Workflow Efficiencies

Touchstone Workflow

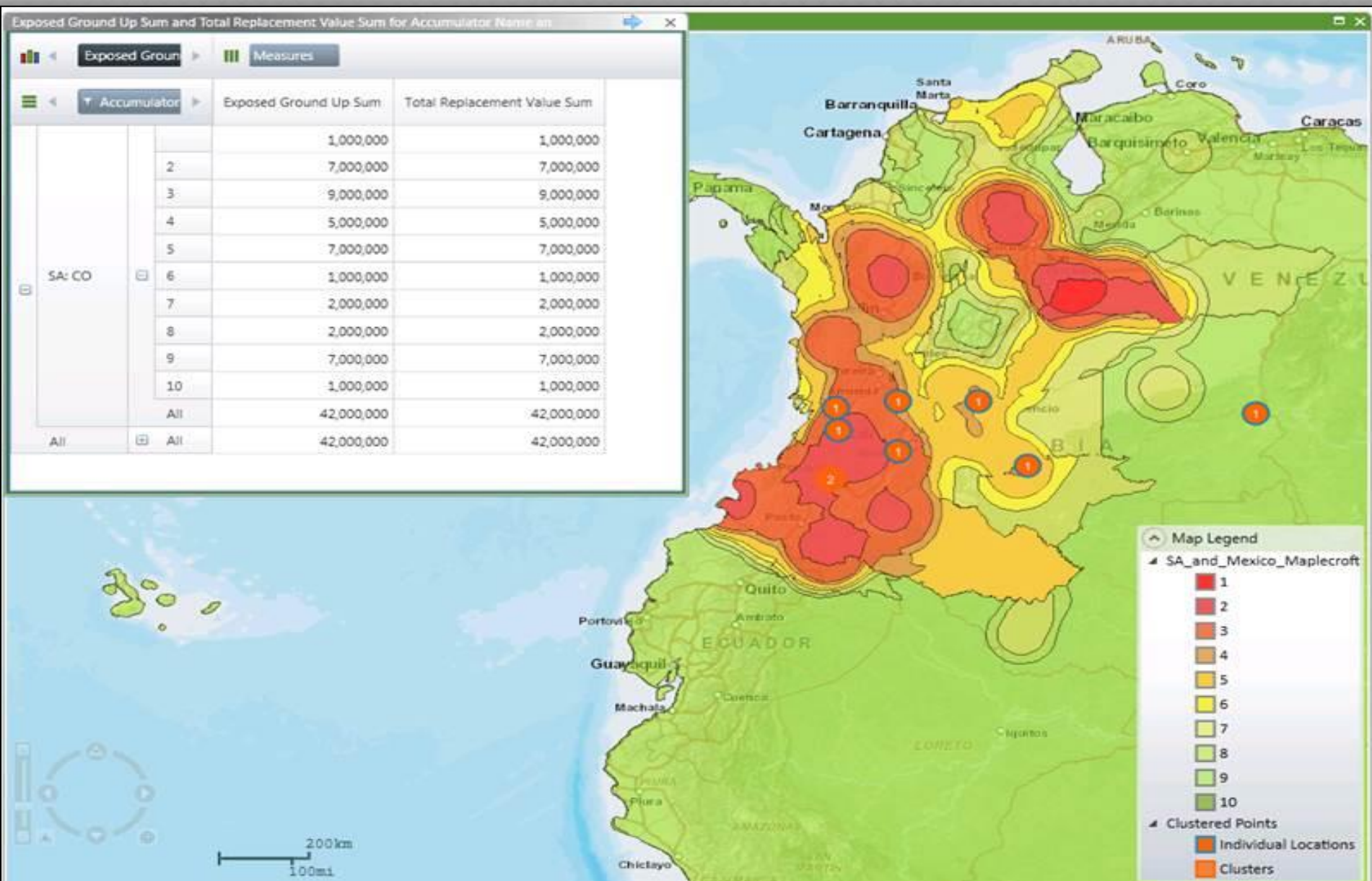


FireLine Layers Can Be Used in Touchstone For Underwriting and Accumulation Management

Data Last Update: 01/24/2015 10:36:26 AM



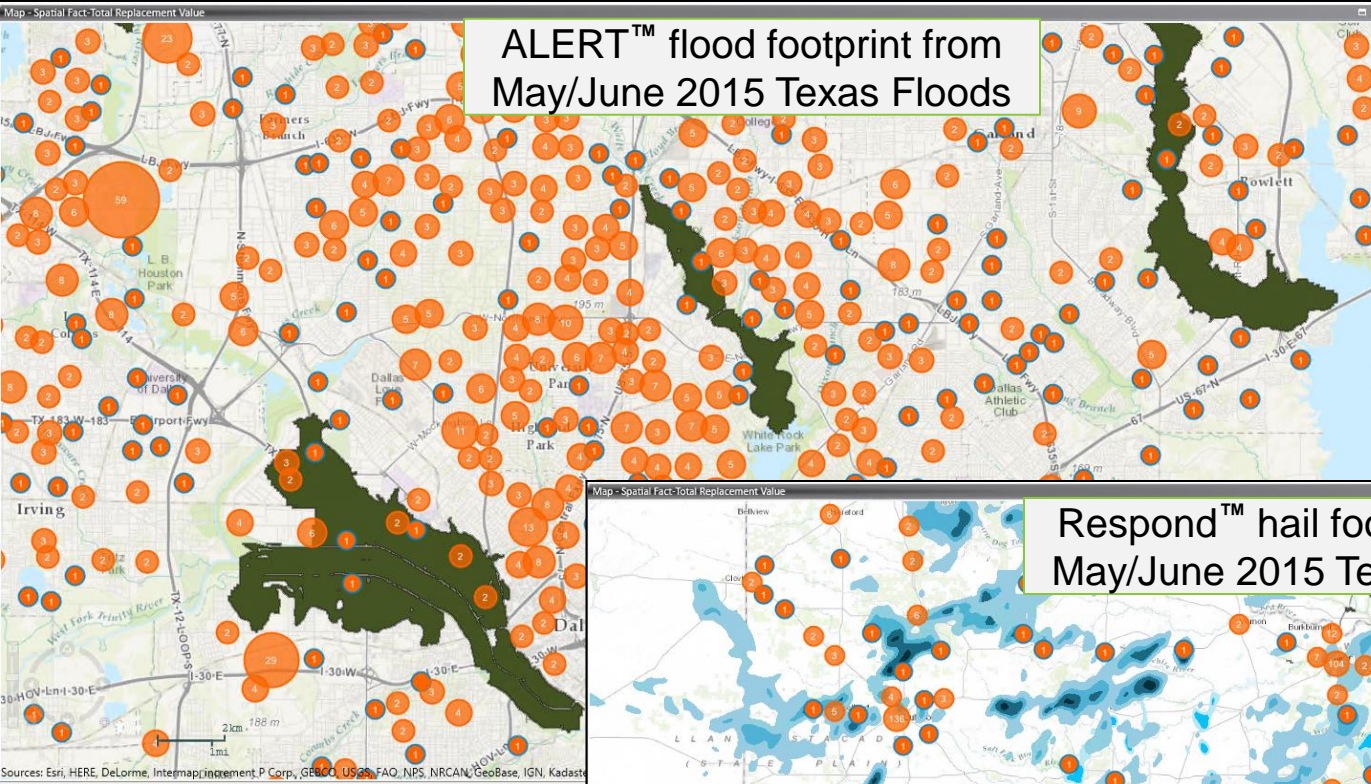
...As Can Maplecroft Layers



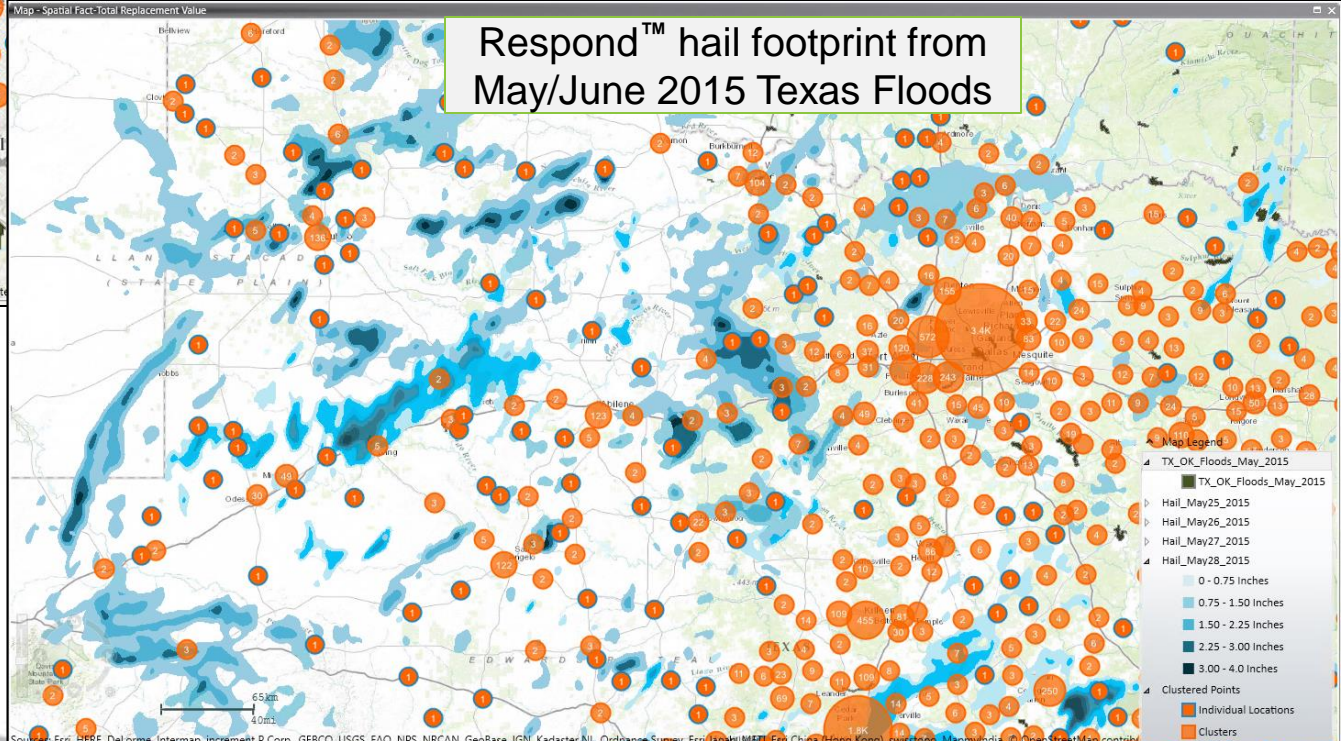
ALERT and Respond Layers Can Be Used in Touchstone to Assess Exposure in Real Time

Map - Spatial Fact-Total Replacement Value

ALERT™ flood footprint from May/June 2015 Texas Floods

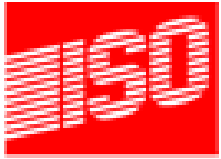


Respond™ hail footprint from May/June 2015 Texas Floods



Sources: Esri, HERE, DeLorme, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, MapmyIndia, © OpenStreetMap contributors

Leveraging Verisk Data



PSOLD™

FireLine™



XACTWARE.

360Value®

Case Study – IFG Successfully Implements the Underwriting Mode in Touchstone

CASE STUDY

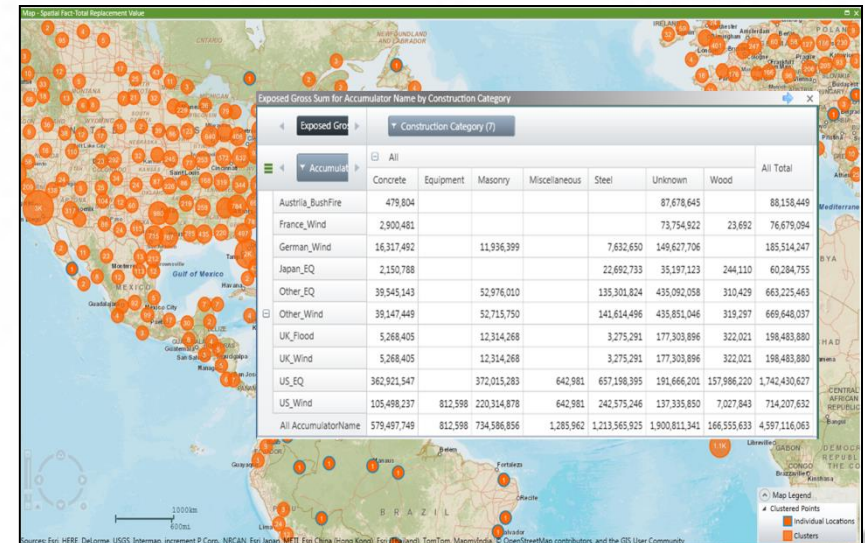
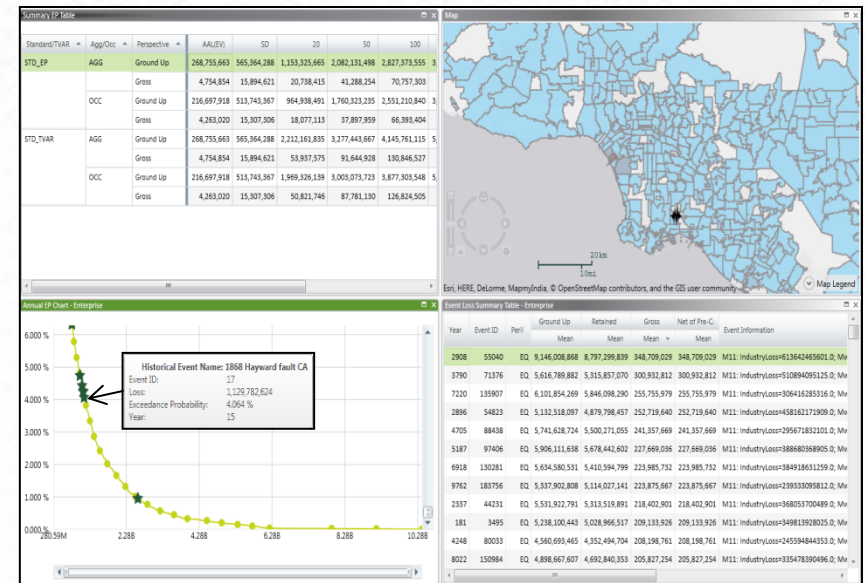
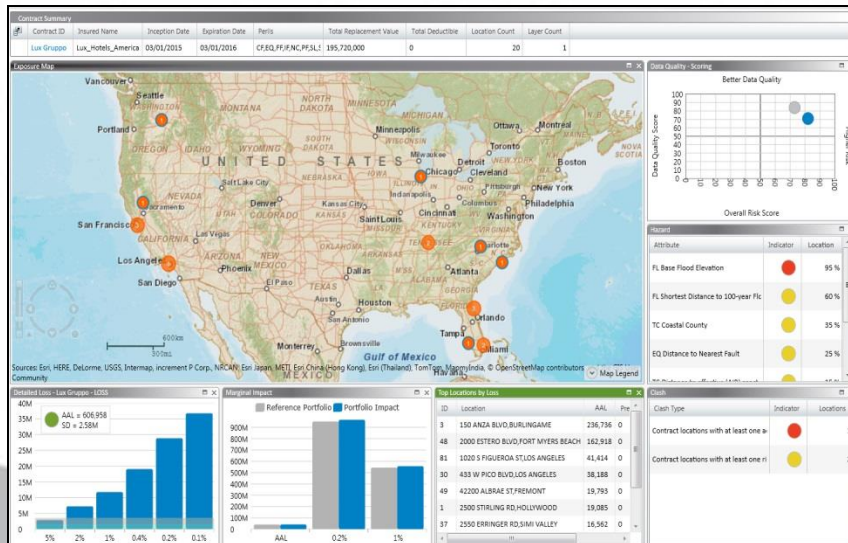
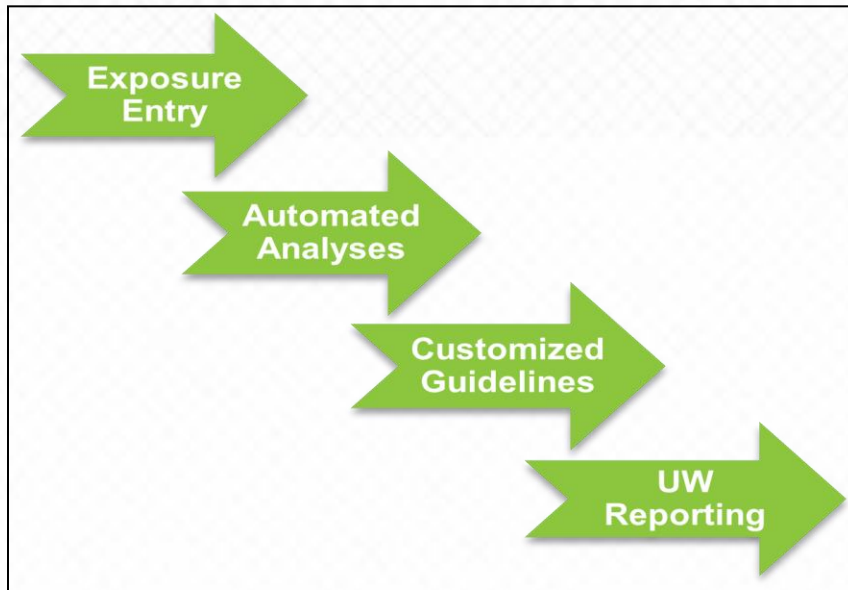
IFG Companies Successfully Implements the Underwriting Mode in Touchstone

To expand its business with a new commercial property line, IFG Companies (IFG) chose Touchstone as the foundation for its commercial underwriting workflow. With a comprehensive analytics solution provided by both AIR and Verisk, IFG now has the capabilities needed to execute its strategic growth plans.

Touchstone for Underwriting and Portfolio Management



Touchstone Offers Streamlined Account Underwriting and Portfolio Management Capabilities in a Single, State-of-the-Art Platform



AIR Has a Proven Track Record of Execution in Delivering a Growing Suite of Analytics in Touchstone...

Multi-Modeling and Non-Modeled Perils



Model Transparency

S_{α}^{mph} PGA m/s

Account Underwriting



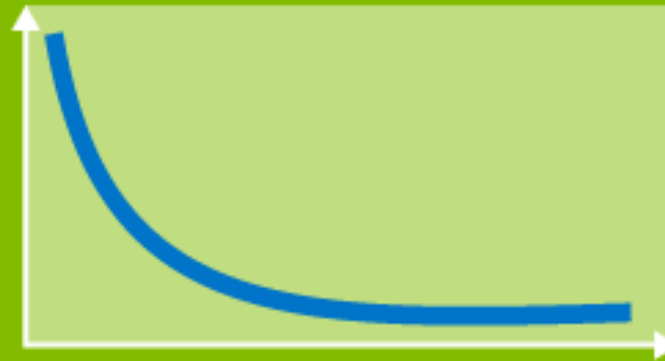
Non-Cat Analytics



Flexibility to Adjust Model Output and Parameters



CAT Loss Analytics



Verisk Data



Data Quality Analytics



Enterprise Portfolio and Exposure Management



Hazard Analytics

Name	Date	Intensity	Distance	Intensity
Hugo	9/23/1989	4	3	4
Glenn	9/29/1959	3	35	3
Unlabeled	8/11/1940	2	40	2
Irene	10/13/1969	1	54	2
Unlabeled	10/11/1943	2	62	2

Geospatial Analytics



More to Come



APIs, Mobile and External Apps



...and a Clear Product Roadmap that Responds to Market Needs

Account Underwriting,
360 Value Integration

Mapping and Analytics

Loss Blending

AIR Cloud



Deterministic Models

Action (MPP)

Verisk/ISO Data and
Analytics

Enterprise Portfolio and
Exposure Management

Touchstone Has Been Widely Adopted by the Market

**120+ companies across the industry
have implemented Touchstone**

TOUCHSTONE®