85TH ANNUAL IAAO CONFERENCE & EXPOSITION

Supporting Assessed Opinions of Values After a Natural Disaster

Mitigating risk of improper valuations

CoreLogic®

Presenters

Edward Martinez
Principal, Valuation Industry Solutions
Insurance and Spatial Solutions
CoreLogic

- Started with Marshall & Swift® April 19th 1993
- Worked with the late Joe Marshall and Frank Swift
- Conducted M&S certification classes and training over 15yrs
- Certified IDECC instructor 67612

Today's presentation

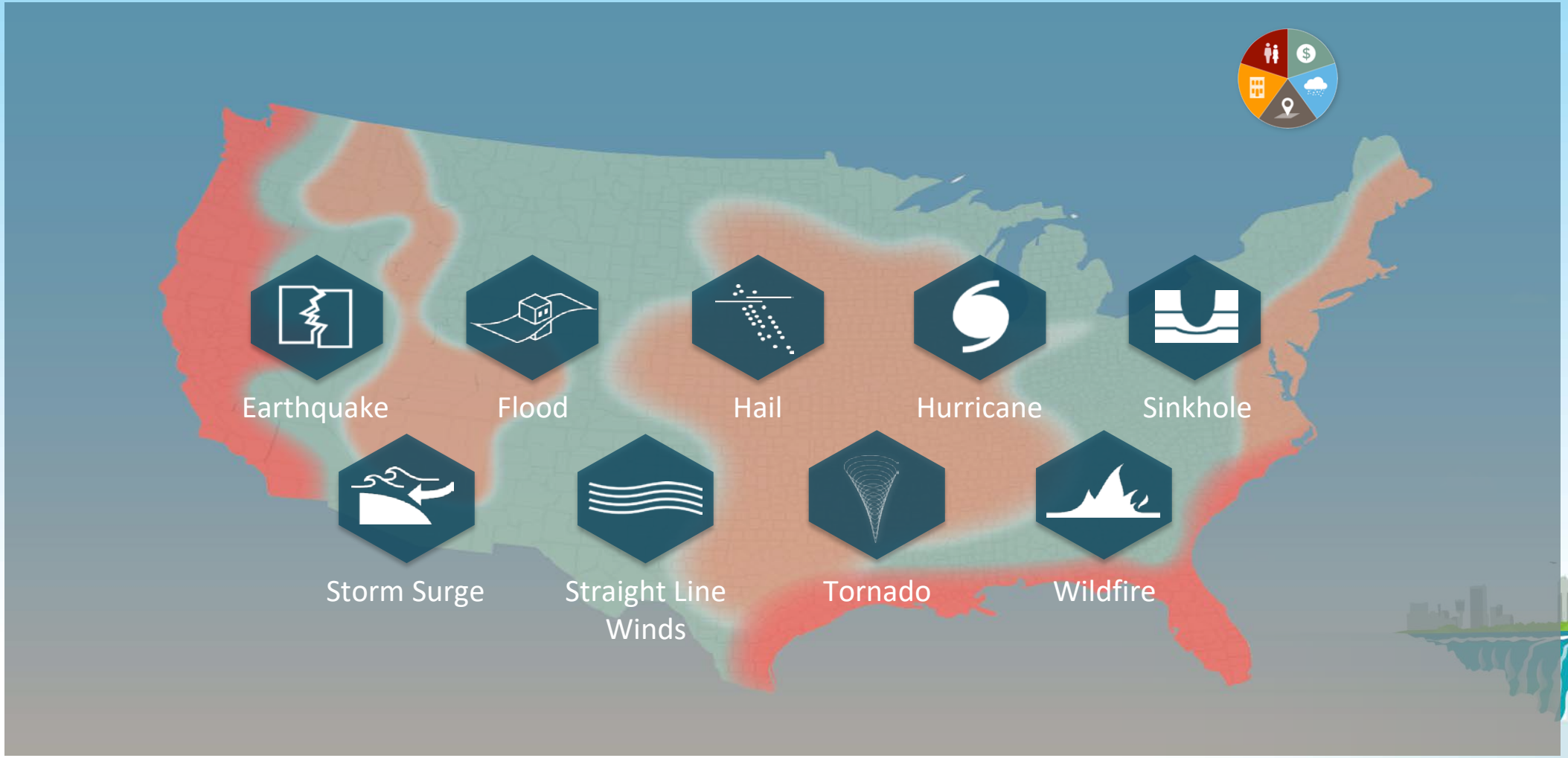
- CoreLogic at a Glance
- Major Catastrophes in Recent Years
- Governor Declared Disasters – (Tax relief) California
- Valuation Challenges
- Valuation Types and Methods
- Understanding the differences between replacement, reconstruction and insurable values
- Rebuilding Process Today
- Post Catastrophe Inflation
- Best practices to support cost data after event

CoreLogic at a Glance

Marshall & Swift Now CoreLogic – Over 85 Years

CoreLogic Hazard Risks

85th ANNUAL IAAO CONFERENCE & EXPOSITION
SEPTEMBER 8-11, 2019
NIAGARA FALLS, ONTARIO, CANADA



Real Time Property-Specific Insights

85th ANNUAL IAAO CONFERENCE & EXPOSITION
SEPTEMBER 8-11, 2019
NIAGARA FALLS, ONTARIO, CANADA

Data-Enabled View of Property Risk and Condition

ENVIRONMENT

- Economic Housing Market Data
- Catastrophe Models
- Weather Forensics
- Construction Cost Trends
- Environmental Hazard Data

FINANCIAL

- Historical & Current Mortgage, Home Equity & Other Financing
- Liens and encumbrances
- Auto Loans & Other Unsecured Lending
- Valuation and Due Diligence

STRUCTURE

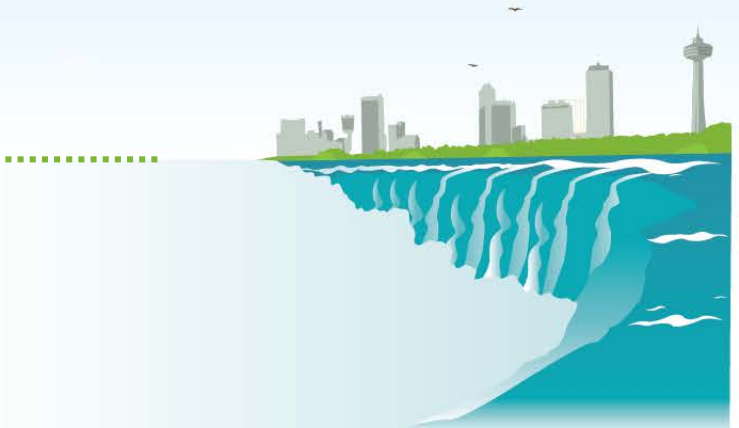
- Building Characteristics
- Reconstruction Costs
- Imagery & 3-D Wireframe
- Structural Risks
- Condition Information
- Historical & Current Property Sales Data

LOCATION

- Parcel Boundary
- Locational Accuracy
- Fire Protection
- Location Intelligence

PEOPLE

- Occupant Risks
- Contents Risks
- Property Maintenance
- Home Business Activities



Major Catastrophes in Recent Years

California Wildfires:

- 2018 Camp Fire (Paradise Fire)
  - Over 18k buildings destroyed
  - Cost was over 16 Billion dollars
- 2017 Tubbs Fire
  - Over 5k structures destroyed
  - Cost was over 1 Billion dollars
- 2017 Woolsey Fire
  - Over 1,500 structures
  - Cost was over 6 Billion dollars

Hurricanes:

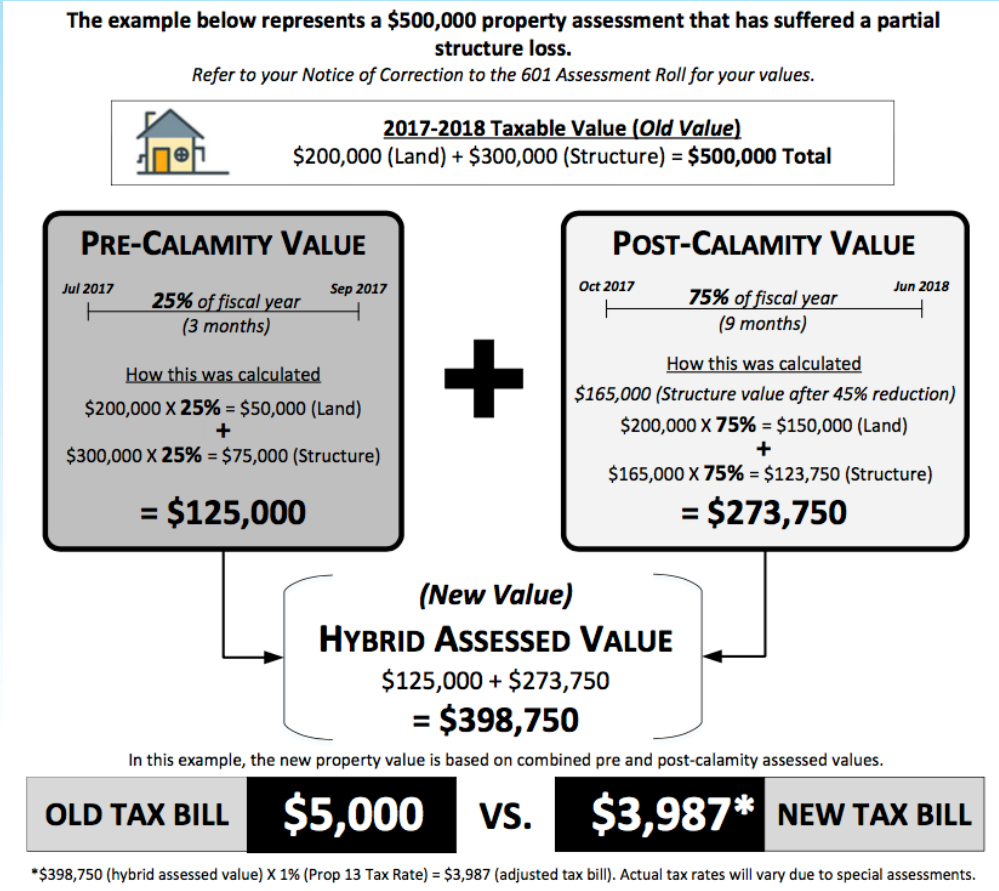
- 2017 Harvey
  - Over 200,000 homes and businesses damaged or destroyed
  - Cost was over 125 Billion dollars
- 2019 Deadly Storms
  - Texas
  - Oklahoma
  - Missouri
  - Arkansas
  - Kansas

Governor Declared Disasters – (Tax relief) California

How prorated Assessments work

- Partial Loss

- Governor – Proclaimed Disasters may qualify for tax relief programs.
- Taxes are prorated based on extend of loss.



Governor Declared Disasters – (Con't)

How prorated Assessments work

- Total Loss

- Some cities allow victims of natural disaster's to relocate to new cities while obtaining previous tax base.
- New properties create higher values that can lead to higher tax revenue.

The example below represents a $500,000 property assessment that has suffered a total loss.

Refer to your Notice of Correction to the 601 Assessment Roll for your values.

2017-2018 Taxable Value (*Old Value*)
$200,000 (Land) + $300,000 (Structure) = **$500,000 Total**

PRE-CALAMITY VALUE

Jul 2017 — ***25%*** *of fiscal year* (3 months) — Sep 2017

How this was calculated

$200,000 X **25%** = $50,000 (Land)
+
$300,000 X **25%** = $75,000 (Structure)

= $125,000

+

POST-CALAMITY VALUE

Oct 2017 — ***75%*** *of fiscal year* (9 months) — Jun 2018

How this was calculated

$130,000 (Land value after 35% reduction)
$130,000 X **75%** = $97,500 (Land)
+
$0 X **75%** = $0 (Structure)

= $97,500

(New Value)
HYBRID ASSESSED VALUE
$125,000 + $97,500
= $222,500

In this example, the new property value is based on combined pre and post-calamity assessed values.

OLD TAX BILL	$5,000	VS.	$2,225*	NEW TAX BILL

*$222,500 (hybrid assessed value) X 1% (Prop 13 Tax Rate) = $2,225 (adjusted tax bill). Actual tax rates will vary due to special assessments.

Valuation Challenges (Post Catastrophe)

85th ANNUAL IAAO CONFERENCE & EXPOSITION
SEPTEMBER 8-11, 2019
NIAGARA FALLS, ONTARIO, CANADA

- Unqualified Appraisers
- Out of town Appraisers unfamiliar with the area
- Dynamic Market Values
- Diminution of value for tax appeals
- Lack of sales comps
- Misuse of replacement vs reconstruction costs

Valuation Types and Methods

Market Value — The price a willing buyer and seller agree to - "Lenders"

Appraised Value — A market value of a property as of a specific time - "Appraisers"

Assessed Value — Used to determine property taxes - "Assessors"

Insured Value — A method used by insurance carriers to help establish coverage and limits on a policy. "Insurance Carriers"

Understanding the differences between replacement, reconstruction and insurable values

85th ANNUAL IAAO CONFERENCE & EXPOSITION
SEPTEMBER 8-11, 2019
NIAGARA FALLS, ONTARIO, CANADA

- **REPLACEMENT COST** – The replacement cost of a building is the total cost of construction required to replace the subject building with a substitute of like or equal utility using current standards of materials and design.

- **REPRODUCTION COST** – The reproduction cost of a building is the total cost of construction required to replace the subject building with an exact replica in all salient characteristics or components.

- **RECONSTRUCTION COST** - Used by insurers to determine homeowner coverage limits. Captures all of the additive costs associated with rebuilding after a loss.

Understanding the differences between replacement, reconstruction and insurable values

Replacement Cost

The replacement cost of a building is the total cost of construction required to replace the subject building with a substitute of like or equal utility using current standards of materials and design.

Replacement cost $300,000

Land value **$325,000**

Market Value $625,000

Appraisers – Lenders - Assessors

Understanding the differences between replacement, reconstruction and insurable values

Reproduction Cost

The reproduction cost of a building is the total cost of construction required to replace the subject building with an exact replica in all salient characteristics or components.

Reproduction cost	$350,000
Land value	**$275,000**
Market Value	$625,000

Appraisers – Lenders -Assessors

Understanding the differences between replacement, reconstruction and insurable values

Reconstruction Cost -

Today's best practice for cost estimating that uses information specific to each home and its location along with detailed and extensive construction knowledge to create an estimate—a method comparable to those used by builders.

Reconstruction cost	$410,000
Land value	**$215,000**
Market Value	$625,000

Insurance Underwriting

Rebuilding Process

Montecito, CA October 2018

- New construction provides current and localized costs to build.
- Older homes may be able benefit from a major renovation, saving thousands in fees, permits and time.

- Demand for local experienced appraisers surge after Cat events due to individual homeowners seeking to lower their tax bases and/or show a loss on income taxes.

Rebuilding Process

2018 Camp Fire: Paradise Recovery Update

- 9,276 (90%) properties cleared
- 4,784 properties certified clean by County
- 227 permits received
- 144 building permits issued
- 2 homes rebuilt

Post Catastrophe Inflation

UNUSUAL CONDITIONS

The following are rough percentage ranges to apply for certain unusual conditions:

(See description on following page.)

ADD FOR THE FOLLOWING:

Abnormal contractor's profit	5% to 15%
Abnormal shortage	2% to 10%
Green buildings	3% to 20%
Hillside buildings	5% to 20%
Remote areas	5% to 15%
Resort locations	15% to 30%

SUBTRACT FOR THE FOLLOWING:

Quantity or development construction	1% to 5%
Abnormal labor surplus	1% to 5%
Amateur workmanship	15% to 30%

Best practices to support cost data after event

Square Foot Method Introduction

- The Calculator Method gives average square meter, square foot, and cubic foot costs for typical buildings.
- Costs are divided into eight sections – Sections 11-18, each dealing with a major occupancy group.
- Refinements are given on the last page or pages of each section, so that the base cost can be modified to fit buildings different from the standard descriptions.

SECTION 15 PAGE 30
November 2017

CALCULATOR METHOD

GOVERNMENTAL BUILDINGS (327)

CLASS	TYPE	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT	COST Sq. M.	COST Cu. Ft.	COST Sq. Ft.
A	Excellent	Highly ornamental, marble, granite, best metal and glass	Plaster, marble trim, ornate detail, terrazzo, carpet, vinyl floors	*Best lighting and outlets, tiled restrooms, many fixtures	Hot and chilled water (zoned)	3541.32	27.41	329.00
	Good	Good metal and glass, concrete, some good stone, good entrance	Plaster or drywall, some paneled offices, vinyl and carpet	*Good lighting and outlets, good tiled restrooms	Hot and chilled water (zoned)	2712.50	20.99	252.00
	Average	Brick, concrete panels, metal and glass, little ornamentation	Plaster or drywall, little paneling, vinyl composition, some carpet	*Adequate lighting and outlets, some tiled restrooms	Warm and cool air (zoned)	1991.32	15.41	185.00
B	Excellent	Highly ornamental, marble, granite, best metal and glass	Plaster, marble trim, ornate detail, terrazzo, carpet, vinyl floors	*Best lighting and outlets, tiled restrooms, many fixtures	Hot and chilled water (zoned)	3422.92	26.49	318.00
	Good	Good metal and glass, concrete, some good stone, good entrance	Plaster or drywall, some paneled offices, vinyl and carpet	*Good lighting and outlets, good tiled restrooms	Hot and chilled water (zoned)	2637.16	20.41	245.00
	Average	Brick, concrete panels, metal and glass, little ornamentation	Plaster or drywall, little paneling, vinyl composition, some carpet	*Adequate lighting and outlets, some tiled restrooms	Warm and cool air (zoned)	1948.27	15.08	181.00
	Low cost	Precast concrete, block, little trim	Plaster or drywall, few paneled offices, vinyl composition	Adequate lighting and outlets, adequate plumbing	Warm and cool air (zoned)	1463.89	11.33	136.00

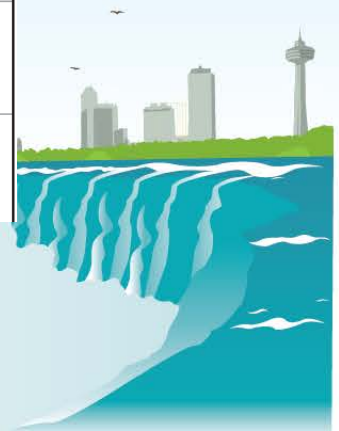
Best practices to support cost data after event

Depreciation

- Depreciation is an opinion of a structure's loss in value in relation to its cost-new estimate.
- Depreciation tables in the Manual were developed from actual case studies of sales and market value appraisals, and formed the basis of the extended life theory.
- The extended life concept starts with the hypothesis that buildings age in much the same manner as people and that the older they get, the greater is their total life expectancy.

OCCUPANCY	CLASS	A	B	C	D	S
SECTIONS 14 & 44, GARAGES, INDUSTRIALS AND WAREHOUSES (Continued)						
Warehouses, distribution, good and excellent		55	55	50	45	45
average		50	50	45	40	40
low cost		-----	-----	40	35	35

EFFECTIVE AGE IN YEARS	TYPICAL LIFE EXPECTANCY IN YEARS									
	70	60	55	50	45	40	35	30	25	20
	DEPRECIATION – PERCENTAGE									
1	0	0	0	0	1	1	1	2	2	3
2	0	1	1	1	1	2	2	3	5	7
3	0	1	1	1	2	3	4	5	7	10
4	1	1	1	2	3	4	5	7	10	14
5	1	1	2	3	4	5	6	9	13	18
6	1	2	2	3	4	6	8	11	16	22
7	1	2	3	4	5	7	10	14	19	26
8	1	2	3	5	6	8	11	16	22	30
9	2	3	4	5	7	10	13	18	25	35
10	2	3	4	6	8	11	15	21	29	40
11	2	4	5	7	9	13	17	24	32	45
12	2	4	6	8	10	14	19	26	36	50
13	2	5	6	9	12	16	22	29	40	55
14	3	5	7	10	13	18	24	32	44	60
15	3	6	8	11	14	20	26	35	48	65
16	3	7	9	12	16	22	28	39	52	69
17	4	7	10	13	18	24	31	42	56	73
18	4	8	11	14	19	26	34	46	60	76
19	4	9	12	16	21	28	36	49	64	78
20	5	9	13	17	23	30	39	53	68	79



Best practices to support cost data after event

Workflow

1. Select the basic cost from the Calculator cost pages.
2. Make refinements to the basic cost from the last pages of each section.
3. Multiply the refined square foot cost by:
   - Current Cost Multiplier (99-3) and Local Multiplier (99-5 to -10).
   - Refined Cost X Current Cost Multiplier X Local Multiplier = Final Cost

- Depreciation is optional and can be applied after the structure has been costed new first.

Quick Tips

READ THE FIRST PAGE OF EACH SECTION TO GAIN GREATER INSIGHT INTO THE OCCUPANCIES LISTED. OCCUPANCY IS THE KEY DRIVER TO ESTABLISHING AN ACCURATE COST REPRESENTATION OF YOUR STRUCTURE. QUALITY SETS THE OVERALL DOLLAR AMOUNT NEEDED TO REPLACE THE STRUCTURE AS NEW TODAY. COST THE STRUCTURE BY ITS DESIGN AND CODE COMPLIANCE AND NOT THE BUSINESS AT HAND.

Questions?

Thank you!