



 Why you need an insurance appraisal 

Insurance Appraisals

Presented By:

Rick Dettmann, ASA, CGA
Suncorp Valuations

Overview of Suncorp Valuations

SUNCORP VALUATIONS 
Our Business is Value.





What is an Insurance Appraisal?

- Defined as:
- **“the art and science of estimating the insurable cost or value of a property as of a specific date”.**
- An appraisal will include specific insurable property
- Utilizing a premise of value relevant for insurance purposes
- Performed by qualified accredited senior appraisers (ASA) designated by the American Society of Appraisers
- Complies to the Uniform Standards of Professional Appraisal Practice (USPAP) whose guidelines are established by the Appraisal Foundation

Why do we require Insurance Appraisals?

- An Insurance Appraisal should be one component of an overall Program to manage an organization's various risks:





2017 Thomas Fire in California

2015 US Snowstorms and 2017 Hurricanes

Northeast Snowstorms \$3.8 Billion in Losses



Hurricane Harvey \$100 Billion in Losses



Property Loss Experience

How many organizations can achieve their objectives, after a loss, with only 2/3 of their Assets replaced?



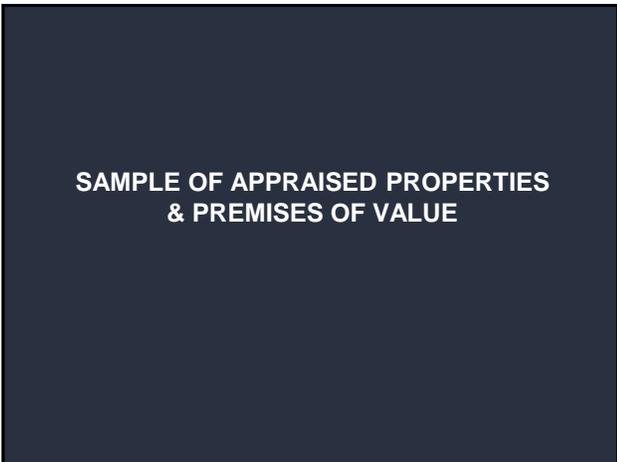
Loss experience has shown that the destroyed property on average is 30% under-insured.

How Were Values Established?









Standard Airport Terminal



Industrial Plant M&E





Historical Landmark Hotel

Appraisal Process – Historically Designated Property



20 Year Old Injection Molding Machine



Example of Value Relationships

Assume we have a 2008 10-year old riding fork lift truck 5,000 lb capacity in good condition.



Original Cost: **\$33,000**
Net Book Value: **\$10,000**
Market Value: **\$13,300**
Orderly Liquidation: **\$6,700**
Replacement Cost: **\$40,000**
Actual Cash Value: **\$18,000**

Construction Cost Changes

U.S. City	% Change Last Year	% Change Last 5 Years	% Change Last 10 Years
Atlanta	3.6%	7.9%	23.1%
Boston	1.6%	11.1%	26.6%
Chicago	3.9%	12.7%	31.1%
Cincinnati	3.2%	11.5%	17.4%
Houston	4.4%	12.5%	21.9%
Los Angeles	3.2%	10.2%	23.6%
New York	2.1%	13.2%	27.0%
Portland	4.7%	11.6%	27.7%
Seattle	6.0%	12.5%	30.5%

Sourced from Marshall Valuation Service – January 2018






Buildings
Site Improvements
Other Infrastructure
Leasehold Improvements

Property Inclusions






Machinery & Equipment
Furnishings & Equipment
Mobile Equipment
Computer Hardware

Property Inclusions

Raw Materials Goods In Progress Finished Goods Supplies & Consumables

Property Inclusions

**INSURANCE APPRAISAL
PROCESS**

Proposal Issuance

- Information provided by client may include:
 - Listing of Assets to be Appraised
 - Premise(s) of Insurable Value
 - Square Footages of Buildings
 - Occupancies of Buildings
 - Quantity & Capacities of M&E
 - Level of Detail Required In Report
 - Specified Date for Final Report Delivery
 - Availability of Construction Drawings
- Fees estimated based on the professional time required to complete the appraisal
- Proposal issued outlining parameters of appraisal service



Project Planning

- Formal written authorization is received from client
- Client is contacted to re-confirm parameters of proposed appraisal service
- Information is requested from client including:
 - Architectural Drawings, Site Plans, Blueprints, Construction Related Data & Property Records
 - Site Contact(s)
- Scheduling of Appraisal Inspection



Site Inspection

For Buildings & Infrastructure:

- Review “As-Built” architectural drawings
- Measure the structures
- Record pertinent architectural features of building construction
- Determine specifications of building systems
- Photograph buildings (if authorization from client is received)
- Assess Physical Condition (for ACV)

Develop Insurable Values

Buildings & Infrastructure:

- Develop CRN, RCN or ACV value using reliable costing sources:
 - Marshall & Swift/Boeckh – Marshall Valuation Service
 - RS means Construction Cost Estimating
 - Advice of Local Contractors
 - Proprietary Database
- Employ valuation approach to suit building under appraisal:
 - Segregated Cost Method
 - Model-Based Method

Develop Insurable Values

Demolition and Debris Removal

- Confirm property loss assumption is in compliance with policy
- Give consideration to pertinent cost factors:
 - Location/Ease of Access
 - Type and Quality of Construction
 - Distance from Dump Site
- Apply benchmark cost:
 - On a per sq. ft. basis; or
 - As a % of Building CRN

Site Inspection & Verification – Machinery & Equipment



Site Inspection

For Machinery & Equipment:

- Inventory assets by location, building and cost center and/or dollar cut off, \$25K, \$50K, \$100K
- Record Manufacturer, Model Number, Capacity and Specialty Features
- Note age and condition (for ACV)
- Review Property Records

Develop Insurable Values

Machinery & Equipment (Continued)

- Give consideration to other applicable costs:
 - Freight
 - Engineering/Design
 - Installation including foundations, controls, piping and electrical connections
 - Start-up and Testing
 - Taxes

Develop Insurable Values

Machinery & Equipment

- Develop RCN or ACV values using reliable costing sources:
 - Current quotes from equipment suppliers
 - Richardson's Process Plant Construction Estimating
 - Equipment manufacturers' catalogues
 - Proprietary Database
 - Comparison to original cost (if recent & available)

Appraisal Process – Develop Insurable Values



BENEFITS OF AN INSURANCE APPRAISAL PROGRAM

Benefits To Property Owners

An appraisal by an accredited appraiser will:

- Avoid a co-insurance penalty, for an under-insured loss
- Avoid paying too much premium, if over-insured
- Rate reduction may apply
- Provide an accurate documentation of the Insured assets
- Transfer risk to appraisal firm
- Expedite claim



Benefits To Insurance Brokers

An up-to-date appraisal will:

- Transfer risk to appraisal firm
- Facilitate placement of insurance with underwriters
- Provide an allocation of insurable value by property class
- Enable implementation of an annual update program

Benefits To Insurers

An appraisal from a reliable source:

- Ensures that insurance is underwritten on current accurate data
- Facilitates assessment of risks
- Provides documented evidence of the specific insured assets
- Avoids under-insured loss scenario
- May avoid unnecessary litigation costs in the event of loss claim dispute

INSURANCE APPRAISAL REPORT MANDATORY REQUIREMENTS

Report Preparation & Issuance

- Report complies to the Uniform Standards of Professional Appraisal Practice (USPAP)
- Report is structured to the terms of the authorized service
- Deliverables provided to client in hard-copy and/or electronic format
- Support data for appraisal is retained on file for at least seven years
- Supplemental information can be provided to client, upon request

Purpose, Effective Date and Intended Users

- Purpose may be primarily for Insurance Purposes but appraisal service can be expanded to meet other purposes such as Property Records & Financial Reporting
- Effective Date - typically the last date of the appraisal inspection.
- Intended Users generally consist of:
 - Client of Record
 - Insurance Broker or Agent
 - Insurer of Property

Premise(s) of Value

- **Replacement Cost New:** "the estimated monetary cost, as at the valuation date, of constructing new, a building or structure that would have a similar utility to the subject property under appraisal, but constructed with modern materials and according to current standards, design and layout"
- **Cost of Reproduction New:** "the monetary amount required to reproduce property of like kind and quality at one time in accordance with current market prices for materials, labor, manufactured equipment, contractor's overhead, profit and fees, but without provisions for overtime, bonuses for labor, or premiums for materials"
- **Actual Cash Value:** "Replacement or Reproduction Cost New Less Physical Depreciation"

Approaches to Value

- Income Approach
- Direct Comparison (Sales Comparison)
- Cost Approach
 - Segregated Cost Method
 - Model Based Method

Benchmarking Current Contents Cost Ranges

Occupancy	Cost Per Square Foot
Pharmaceutical:	\$300 - \$400
Food Processing Plants:	\$250 - \$350
Office Buildings:	\$40 - \$70

Occupancy	Cost Per Operating Capacity Unit (In U.S. Dollars)
Cement Plant:	\$170* - \$350* per Metric Ton
Pulp & Paper Plants:	\$800,000 to \$1,300,000* per Metric Ton

Benchmark Costs For Electricity Generating Plants

Fuel	Technology Type	Nominal Capacity	Cost/KW (US \$)
Coal	Ultra Supercritical Coal	650,000	3,636
Coal	Ultra Supercritical Coal with CCS	650,000	5,084
Coal	Pulverized Coal Converted to Natural Gas	300,000	226
Nat. Gas	Natural Gas Combined Cycle	702,000	978
Nat. Gas	Advanced Combined Cycle	429,000	1,104
Nat. Gas	Conventional Combustion Turbine	100,000	1,101
Nat. Gas	Advanced Combustion Turbine	237,000	678
Nat. Gas	Recip. Internal Combustion Engine	85,000	1,342

* Source – U.S. Department of Energy

Benchmark Costs For Electricity Generating Plants

Fuel	Technology Type	Nominal Capacity	Cost/KW (US \$)
Uranium	Advanced Nuclear	2,234,000	5,945
Biomass	Biomass Fluidized Bed	50,000	4,985
Wind	Onshore Wind	100,000	1,877
Wind	Offshore Wind	100,000	6,628
Solar	Photo Voltaic - Tracking	150,000	2,534
Solar	Photo Voltaic - Tracking	20,000	2,644
Hydro-Electric	Conventional Hydroelectric	500,000	3,123
Battery	Battery Storage	4,000	2,813

* Source – U.S. Department of Energy

Benchmark Costs for Healthcare Facilities

Building Construction	Cost/Sq. Ft. Range
Hospital Building	\$500 - \$600
Clinic Building	\$400 - \$450
Laboratory Building	\$450 - \$550
Administrative Building	\$280 - \$330
Above Ground Parking Garage	\$90 - \$110
Underground Parking Garage	\$90 - \$130

Furnishings & Equipment	
Cost Per Square Foot	\$140 - \$200
Cost Per Bed	\$350,000 - \$450,000

* Cost Source: Suncorp Valuations Internal Data

Thank you

Rick Dettmann, ASA, CGA

Suncorp Valuations

(877) 712-9339

(414) 412-2097 Cell

Rick.Dettmann@Suncorpvaluations.com
