



American Appraisal's first engagement in 1896 was a property insurance appraisal of the Joseph Schlitz Brewing Company. Since then, we have been the leading provider of valuation services for property insurance purposes. Over the past 120 years, we have served clients in virtually all private and public sectors.

Duff & Phelps acquired American Appraisal in February 2015 to serve more companies, in more countries, across virtually every asset class. Duff & Phelps' technical excellence coupled with American Appraisal's leadership in insurance valuation enables us to deliver fresh perspectives and added value to clients around the world. We look forward to providing our insurance valuation services – as well as this newsletter - under the Duff & Phelps brand.

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### **UPCOMING EVENTS**

**APRIL 10 - 13:** 

RIMS, San Diego, California Visit us at Booth 1930.

MAY 26 - 27:

NARIM (Dutch Association of Risk & Insurance Managers), The Hague, Netherlands. Join us as we sponsor this year's conference and mark NARIM's 20th anniversary.

JUNE 13 - 15:

AIRMIC, Harrogate, England. Visit our booth and take time to attend lan Gough's seminar, "Fixed Asset Management and Insurance Valuation the 21st Century Approach."

JUNE 5 - 8:

PRIMA, Atlanta, Georgia, United States. Visit our booth and take time to attend Nigel Wilson's presentation with Donna Allard-Flett of Aon, "Valuation Challenges Pre and Post Construction and the Complexities of Construction Exposures and Insurances."

# Transportation Systems and Hubs: Insurance Appraisal Challenges

Transportation hubs are not the "average" insurance occupancy. They evolve with time as transportation needs change with demographics. They are renovated, added to, and sometimes completely replaced or rebuilt. Thus, tracking changes for their current replacement costs can be challenging, with different types of transportation systems/ hubs presenting particular challenges.

Airport facility upgrades are typically achieved by rebuilding rather than renovating in order to avoid the constraints of existing rail and road infrastructure. Major projects are currently underway at Dulles, LaGuardia, Los Angeles, Chicago O'Hare, Atlanta, and Philadelphia, among others. In fact, the March 2015 report¹ by Airports Council International, North America, identified an estimated \$15.1 billion annualized capital development need for airports from 2015 through 2019 - a total of \$75.7 billion over five years, and a 6.2% increase since the 2013 report. Primarily, the capital development addresses increased passenger and cargo activity, with a secondary need for rehabilitation and maintenance of existing infrastructure.

Many grand railroad stations built in the late 19th and early 20th centuries (e.g., 30th Station in Philadelphia; the Union Stations in Washington, D.C. and Denver, Colorado; and Grand Central Station in New York) have been restored to their former glory. These hubs now act as advertising for the transportation systems they serve as well as sources of prestige for their cities. Modern facilities such as food courts, bars, and shopping malls further enhance today's integrated transportation hubs, many of which serve train, subway, light rail, and bus systems. Tracking insurable costs when historic buildings undergo so many renovations, restorations, and additions is not possible, especially considering that renovations may not add value – they may simply cure physical depreciation. Adding the cost of renovations to the base cost of a historical structure will exaggerate its insurable value. Also, the cost to renovate a building can actually exceed the cost to reproduce it new when all aspects of renovation costs, including the preparation/demolition costs, are considered.

Transportation system risk managers face the same basic challenge as any other risk manager – maintaining an accurate property listing and current insurable values for buildings, contents and infrastructure. However, various unique issues affect insurance appraisals of transportation hubs/airports. Here, we address the steps in the appraisal process and some related challenges.

### Determine the Scope of the Appraisal

The first step is determining inclusions and exclusions.

Transportation hubs encompass numerous assets, including:

- Major structures parking, terminals, and concourses
- Minor structures maintenance, fire/police, glycol facilities, power generation, waste/storm water treatment, electrical substations, hangars, etc.
- Movable equipment
- Land improvements lighting, fencing, signage, canopies, covered walkways, etc.
- Infrastructure runways, aprons, roads, rail track and bed, bridges, runway lighting, traffic lights, transformers, fuel farms, track, catenary, etc.

However, the insurance appraisal process does not include the research and attestation of the ownership of the assets to be appraised or the related insurance coverage. Hence, it is critical for management of the hub/airport to determine the ownership of assets, their insurance coverage, and which assets should be subject to the appraisal process. This can cover multiple entities, including:

- Federally owned property, such as:
  - FAA control tower
  - TSA screening area/equipment
  - Customs and immigration areas/equipment
- Property owned or leased by other parties, including:
  - Amtrak/regional/local rail operators
  - Airlines
  - Interstate/local bus services
  - Federal/state/local governments
  - Restaurants/bars/retail
  - Rental car companies
  - Hotels

1. Airport Capital Development Needs 2015 - 2019, March 2015, Airports Council International, North America

#### Request Data

Once the scope of the appraisal is determined, the valuation consultant submits a request for data such as:

- Statement of insurable values
- Fixed asset listing
- Current/planned or recently completed capital project cost data
- Access to blueprint/CAD files

### Perform On-site Inspection

Professionals conducting the on-site inspection will typically require security clearance and badges (which may involve U.S. Customs and Border Protection depending on access requirements), as well as fingerprinting, and safety training certification to access the facilities, both land and air-side. Logistics for the inspection will include arranging for escorts and access to controlled areas. Due to the logistics involved with an on-site inspection, particularly at an international airport, the amount of lead time to begin a project can easily be a few months at a minimum.

During on-site inspection of the buildings, the appraiser will calculate each building's area and perimeter by measuring the structure or through an analysis of the as-built blueprints; identify and record data of the major construction components (type of structure, walls, roof, etc.); determine the construction class; record data of major service systems (electrical, plumbing, security, elevators, heating, ventilation, cooling, etc.); photograph the building; and record the GPS coordinates as well as any requested secondary COPE data.

The appraisal of personal property/contents is typically segregated into specific areas at hubs and airports, and can include:

- Ticket counters
- Gates
- Jet ways
- Airline offices/clubs
- Baggage claim

On-site transportation systems can include:

- People movers (moving walkways)
- Elevators/escalators
- Trains/trams
  - Underground
  - Ground level
  - Elevated

The above items can also be treated as special features of buildings, as they are built-in and have become "fixtures" without which the building could not perform its intended function.

Often the scope of the appraisal will include transportation system properties beyond the main hub, including:

- Stations commuter rail stations, above- and below-ground transit system stations, and simple suburban stations (often nothing more than asphalt grade-level platforms, but may also include historic stations)
- Maintenance yards

- Administrative office and control centers.
- Parking decks
- Tunnels and bridges



### Determine insurable values

Once the on-site portion of the engagement concludes, the challenge becomes the valuation of these specialized structures and their associated equipment. Factors to consider when concluding insurable values include:

- Buildings that do not fit standard software models,
- Elaborate designs and specialized materials,
- Working within the constraints of an operating transportation complex,
- Job site security, and
- Logistics for confined urban locations.

The vast majority of personal property (equipment) is also customized; transportation hubs feature high-value assets that require specialized research including baggage handling, security systems, system control centers, training simulators, vehicle wash stations, passenger communications/annunciators, ticketing systems, signaling systems, people movers including moving walkways and guided vehicles, and vehicle/rolling stock spare parts.

#### Conclusion

Transportation systems and hubs are high-value occupancies – typically in the billions of dollars. Determining their insurable values requires technical expertise and experience with similar occupancies. Our insurance valuation professionals can help you review your current values and recommend a structured property insurance appraisal program to keep your critical, high-value assets adequately insured.

For more information, contact Nigel Wilson at +1 617 378 9485 and <a href="mailto:nigel.wilson@duffandphelps.com">nigel.wilson@duffandphelps.com</a>, or Bradley Schulz at +16305414656 and bradley.schulz@duffandphelps.com.

# Saudi Arabian Monetary Authority Initiative

Beginning April 1, 2016, all Saudi Arabian businesses that have property policies written by locally licensed insurance companies must ensure that they are able to produce a professional insurance valuation report that does not exceed three years in age.

Whether an existing client or new business for the insurance company, if the total sum insured for the property should exceed the understated limits, the replacement cost value should be substantiated by a valid insurance valuation report.

The limits are SR40m for non-industrial properties, SR20m for industrial properties and SR10m for warehouses.

Duff & Phelps has reviewed the Saudi Arabian Monetary Authority (SAMA) guidelines and tailored insurance valuations in the region to suit. From February 1, 2016, all Duff & Phelps insurance

valuations will report primary Construction, Occupancy, Protection and Exposure (COPE) data in addition to the following requisites of the SAMA guidelines:

- Name, address and nature of use for all properties covered by the policy
- GPS coordinates (longitude and latitude) for each location
- Location map
- Current Sums Insured broken down into major components; property, plant and machinery, fixtures and fittings, and any other contents
- Digital photographs of all properties

Duff & Phelps can also provide the business interruption component, which also must be obtained to satisfy the new guidelines.

Should you require any further information about our valuation services please contact Rebecca Fuller, Director at +44 (0) 207 778 0807 and rebecca.fuller@duffandphelps.com..

# Will Your Valuations Satisfy the New Insurance Act?

The biggest change to English insurance law in over 100 years occurred on February 12, 2016 when the Consumer Insurance (Disclosure and Representations) Act 2015 was given Royal Ascent. The Act goes into effect in August 2016 and applies to insurance and reinsurance contracts governed by the laws of England, Wales, Scotland and Northern Ireland.

The Act established new provisions for insurance contract warranties and basis clauses that replace outdated provisions from the Marine Insurance Act of 1906 that were not aligned with modern insurance practice. Generally, the Act represents a rebalancing of the former provisions and the new provisions are more favorable for policyholders and less favorable for insurers. However, the Act also imposes a new duty of fair presentation on policyholders, meaning that before the insurance contract is entered into, the insured must make a fair presentation of the risk to the insurer. Broadly, this requires disclosure of all material circumstances, that the information disclosed does not materially misrepresent matters, and that the disclosure (e.g., the underwriting submission) is reasonably clear and accessible. There is an additional protection in that a presentation will be fair if it provides sufficient information to put the insurer on notice to ask questions regarding the risk data.

Senior management is at the heart of the insured's compliance with this new duty. An insured company will be fixed with the knowledge of individuals who are part of senior management (including, generally speaking, board members) or responsible for the insured's insurance. If senior management fails to disclose material information, the insured may breach the duty of fair presentation and cover could be lost or reduced, depending on a number of factors including the policy terms, the circumstances of the breach and what the insurer would otherwise have done.

Significantly, an insured will also be fixed with knowledge of what they ought to know, meaning that – as a new requirement under the Act – they must undertake a reasonable search of information available to them and disclose any information which should reasonably have been revealed. In practical terms, therefore, it will be necessary for insureds to demonstrate that a reasonable search has been conducted.

For property insurance, a key declaration when presenting the risk to an insurer is the disclosure of tangible asset values and related data. A number of factors can affect real and personal property values, including fluctuations in commodity prices, market forces in pricing of construction contracts, and changes in industry indices. In order to minimize the risk of breaching the duty of fair presentation, consider the following questions in relation to any material disclosure to property insurance underwriters.

- Has the insured had a valuation for insurance purposes within the last three years?
- For newly acquired businesses, from where have the declared values originated? For example, Cost Replacement as New (CRN) is a commonly accepted basis for insurance. However, we have noted some instances where Net Book Value (NBV) and Fair Market Value (FMV) have mistakenly been used. There may also be a more suitable basis of value depending on the risk, such as functional replacement cost or actual cash value.
- Can the insured provide the relevant primary construction, occupancy, protection and exposure (COPE) data in a clear and accessible format that is compliant with the new Act?
- Global businesses can maintain multiple fixed asset registers in a number of formats. The insured should confirm what data is required by their carriers and take the opportunity to update and consolidate the fixed asset register across the entire business. On average, ghost assets make up to 20% to 40% of a fixed asset register, and insuring these assets would be misrepresentation.

The Act's requirement that disclosure must be made in a manner that is reasonably clear and accessible means that a mass 'data dump' of electronic files sent to an insurer, with no clear signposting of what is material, will no longer be acceptable. We recommend the development of a structured property insurance valuation program (including the inspection of properties on a periodic basis by an independent valuation firm) for capital-asset-intensive businesses. A structured valuation program represents a quality assurance process for the property insurance underwriting function and facilitates reporting in compliance with the new duty regarding a fair representation of the risk. Property inspections and the valuation process determine the completeness of the property listing submitted to the underwriters, the accuracy of the underwriting data, and the reasonableness of the insurable values (replacement cost).

Duff & Phelps has extensive experience in tangible asset valuation. We recommend that all businesses develop a standard property insurance valuation policy employing a valuation cycle of no longer than five to seven years (depending upon the type of business and the related capital assets). Contact us now to request our assistance in preparing your business for the changes affected by the Act.

For more information, contact Rebecca Fuller at +44 (0) 207 778 0807 and <a href="mailto:rebecca.fuller@duffandphelps.com">rebecca.fuller@duffandphelps.com</a>.

# **U.S. Inflation Tracker**

### **Construction Cost Indices**

After a decade of dramatic volatility for construction costs, the last four years have been relatively stable, with some indices showing increases of less than 1% for the last 12 months. Steel prices are a leading indicator of construction indices, and they declined from an average of \$820¹ per tonne in 2014 to \$619 per tonne in September 2015.

The continued fall in fuel prices has also been a significant contributor to stabilization of construction costs. With labor prices predicted to increase from 2.6% to 3.0% in 2016, overall annual construction cost trends are anticipated to be in the range of 1.8% to 2.5% for 2016, though they may end up below that level if material prices continue to decline.

	2012	2013	2014	2015
ENR – Building Cost Index <sup>2</sup>	+1.9%	+2.2%	+2.7%	+1.7%
FM Global – U.S. Industrial Buildings Average <sup>3</sup>	+2.8%	+3.7%	+2.9%	+1.9%
RS Means – 30-City Average <sup>4</sup>	+1.5%	+3.1%	+0.5%	+1.8%
Marshall & Swift, U.S. Average <sup>5</sup>	+1.8 to +4.2%	+1.7 to +3.2%	+2.1 to +2.4%	+0.2 to 0.9%

Note: The range of change shown by Marshall & Swift represents different classes of construction.

### Sources

- 1. MEPS (International), Ltd, All carbon steel products composite price and index
- 2. Engineering News-Record, Monthly Construction Economics Report
- 3. FM Global, Industrial Cost Trends
- 4. RS Means, Construction Cost Indices, 30-City Average

# **Equipment Cost Indices**

Equipment cost indices have not shown the same volatility as construction cost indices. After a slight increase in the inflation rate in 2011, average equipment cost indices have fallen back to a very moderate range with current year-on-year increases in the -1.0% to 0.8% range.

	2012	2013	2014	2015
Marshall & Swift/Boeckh – Industrial Equipment Avg. <sup>5</sup>	+1.1%	+0.9%	+2.0%	-1.0%
U.S. Bureau of Labor Statistics – Producer Price Index for Finished Goods, Capital Equipment <sup>6</sup>	+1.4%	+1.2%	+1.2%	+0.6%
FM Global – Industrial Equipment Composite <sup>7</sup>	+1.7%	+1.7%	+1.6%	+0.8%

#### Sources

- 5. Marshall & Swift/Boeckh, Marshall Valuation Service, Quarterly Cost Index
- 6. U.S. Bureau of Labor Statistics, Producer Price Index for Finished Goods Capital Equipment
- 7. FM Global, Industrial Cost Trends

Take care when selecting an index to track the rate of cost change for your company's capital equipment. The three indices in the table above all track average capital equipment cost change percentages, and indicate the differences that have occurred over the past four years. Developers – as well as insurance brokers, underwriters and valuation professionals – can all recommend appropriate indices for your particular facilities. Select one that represents your

capital equipment as closely as possible; there are significant differences between the average indices shown here and specific industrial-sector indices.

Always remember that cost indices are just average indicators of change; they are not absolutes, and there is no average building or average assemblage of equipment. After five to seven years, you should establish a new replacement cost basis by using a qualified valuation professional.



For more information about our global locations and expertise, visit www.duffandphelps.com

## **About Duff & Phelps**

Duff & Phelps is the premier global valuation and corporate finance advisor with expertise in complex valuation, dispute and legal management consulting, M&A, restructuring, and compliance and regulatory consulting. The firm's more than 2,000 employees serve a diverse range of clients from offices around the world.

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