



Insurance Appraisal Services

Presentation for: **Midwestern Higher Education Compact**

DUFF & PHELPS

Duff & Phelps

Dedicated to Delivering Value

Valuation and Corporate Finance Advisors

- More than 10,000 engagements performed in 2015
- 5,000 clients including more than 40% of the S&P 500

2,000+ Employees in more than 70 offices globally

Advisory Capability

- Valuation Advisory
- Alternative Asset Advisory
- Compliance and Regulatory Consulting
- Disputes and Investigations
- Legal Management Consulting
- M&A Advisory
- Restructuring Advisory
- Tax Services
- Transaction Opinions

HISTORY

- **1932-1994**
Duff & Phelps founded and evolves into diversified financial services firm
- **1994**
Credit ratings business spun-off
- **2005**
Acquired Corporate Value Consulting (CVC) from Standard & Poor's
- **2007-2012**
Listed on the NYSE

Financial advisor to examiner in Lehman Brothers bankruptcy

Engaged by the Congressional Oversight Panel on the Troubled Asset Relief Program

Acquired 14 complementary businesses to expand our service offering
- **2013**
Taken private by an investor consortium led by The Carlyle Group
- **2015**
Acquired Kinetic Partners and launched Compliance and Regulatory Consulting practice
- **Acquired American Appraisal, significantly enhancing our global Valuation practice**
- **2016**
Acquired CounselWorks to expand Compliance and Regulatory Consulting practice

Why an insurance appraisal?

- Determine the adequacy of insurance coverage
 - Accuracy of values
 - Complete property listing – changes in facilities
 - No surprises at the time of loss
- Improved risk management
 - Consistent approach to quantification of risk
- Optimizes CAT modeling performance
- Improved marketability to underwriters and reinsurers
- Basis for preparation of a “proof-of-loss”



Appraisal Data		University Data		Percentage Change	
Square Foot	CRN	CRN	Square Foot	Square Foot	CRN
194394	58,395,000	\$23,816,692	184,467	5%	145%
112548	24,319,000	\$13,494,248	110,529	2%	80%
175842	50,624,000	\$42,784,407	166,742	5%	18%
146790	31,620,000	\$20,040,510	120,839	21%	58%
161754	45,989,000	\$36,498,651	141,281	14%	26%
98672	19,775,000	\$14,185,754	100,151	-1%	39%
53852	11,635,000	\$11,392,407	101,128	-47%	2%
123175	31,495,000	\$16,774,553	124,008	-1%	88%
506972	232,500,000	\$210,895,698	315,821	61%	10%
108483	33,231,000	\$16,957,679	164,562	-34%	96%
81998	19,023,000	\$13,060,903	312,128	-74%	46%
65151	13,423,000	\$11,786,706	259,210	-75%	14%
27957	11,712,000	\$13,816,987	23,565	19%	-15%
377122	30,366,000	\$12,494,359	377,152	0%	143%
350190	95,967,000	\$88,572,517	343,565	2%	8%
825572	63,513,000	\$32,960,045	825,479	0%	93%
147956	39,031,000	\$32,181,702	153,660	-4%	21%
26014	5,851,000	\$5,207,161	26,521	-2%	12%
35902	10,040,000	\$8,244,672	40,733	-12%	22%
4127	425,000	\$209,607	3,948	5%	103%
5973	1,797,000	\$1,735,721	7,903	-24%	4%
82842	29,791,000	\$28,639,387	144,268	-43%	4%
24931	5,860,000	\$5,202,954	25,172	-1%	13%
30231	8,582,000	\$6,123,556	29,581	2%	40%
26117	5,128,000	\$5,296,048	25,576	2%	-3%
59819	14,901,000	\$15,257,170	5,900	914%	-2%
72000	18,091,000	\$16,372,056	71,891	0%	10%

Appraisal Data	University Data	
CRN	CRN	% Change
12,312,000	\$7,500,000	64%
53,374,000	\$51,200,000	4%
16,945,000	\$30,000,000	-44%
35,052,000	\$29,300,000	20%
5,035,000	\$29,300,000	-83%
16,738,000	\$13,900,000	20%
34,225,000	\$33,900,000	1%
12,446,000	\$13,800,000	-10%
13,396,000	\$12,600,000	6%
27,251,000	\$21,300,000	28%
90,290,000	\$110,600,000	-18%
26,517,000	\$20,200,000	31%
36,350,000	\$35,000,000	4%
3,173,000	\$9,400,000	-66%
1,008,000	\$700,000	44%
42,790,000	\$38,900,000	10%
14,159,000	\$9,500,000	49%
22,606,000	\$26,600,000	-15%
47,852,000	\$34,000,000	41%
71,583,000	\$52,900,000	35%
18,980,000	\$26,200,000	-28%

Current Cost Trends - Construction

- **1986-2003** (1% to 3% per year)
- Significant construction inflation in **2004** (10.5%)
- Slowing but not back to normal in **2005** and **2006** (5.5% to 8.0%)
- A definite slowing in **2007** (2.8% to 4.7%)
- Commodities cause increases in **2008** (6.7 to 7.2%)
- Prices fall back with economy in **2009** (-7.0 to -0.3%)
- Inflation stabilizes in **2010** (-1.4% to +4.9%)
- Continued stabilization in **2011** (2.5% to 4.5%) & 2012 (1.5% to 2.8%) & 2013 (2.2% to 3.7%)
- Steady in **2014** (0.5% to 2.9%) & **2015** (0.5 to 1.9%)
- Moderate increases in **2016** ranging from 0.0 to 1.6%
- Slowly increasing in **2017/2018** ranging from 2 to 3%
- Most recent 12 months seeing a larger increase upwards of 5%

Sources cited:

FM Global, Industrial Cost Trends, United States Industrial Building Average
RS Means, 30 City Average Construction Cost Index
Marshall & Swift, Quarterly Cost Index

Definition of Value and Methodology

Definition of Insurable Value

We will develop our opinion of insurable value as cost of reproduction new (“CRN”), defined as the estimated amount required to reproduce a duplicate or a replica of the entire property at one time, in like kind and materials, in accordance with current market prices for materials, labor, and manufactured equipment; contractors’ overhead and profit; and fees, but without provision for overtime, bonuses for labor, or premiums for material or equipment. CRN, as defined, is synonymous with the insurance-industry term “replacement cost new.”

In estimating insurable value, we will allow for national building codes; however, we will not consider any construction codes imposed by state or local municipalities, ordinances, or other legal restrictions, nor will we consider the cost of demolition in connection with reconstruction or the cost of removal of destroyed property.

Current Cost Trends - Construction

What's driving the increase in construction costs?

- Elaborate design
- Green building features
 - Increased initial construction costs to save operational costs
- 21st century learning environments
 - Technology
- Security requirements
- Environmental issues
- Local zoning requirements

Which one costs more to replace?



What impacts replacement cost post an appraisal?

- Square footage
 - Increase/Decrease
- Upgrades to existing building elements
- Inflation
 - Materials
 - Labor
- Architecture/Design
- Location
- IT Integration
- Green Technology
- Ornate/Elaborate Features

Appraisal Approach – MHEC Program

4-PHASE APPROACH

This phased approach is designed to provide cost savings for appraisal services to each member while identifying the buildings with significant impact and exposure on the member property schedule. At the same time the approach sets forth a methodology to carry an up to date property schedule of all buildings. The 4 phases are as follows:

- Phase 1 – Diagnostic Review and Reporting
- Phase 2 – Physical onsite appraisal
- Phase 3 – Trending
- Phase 4 – Property Manager and Web-based Reporting System (eRisk)

Screenshot: Building Inspection and Appraisal Report

DUFF & PHELPS

Building Inspection and Appraisal Report

As of September 11, 2015

CITY AREA SCHOOL DISTRICT
City, State

MEMBER: CBP8 **CITY AREA SCHOOL DISTRICT**
PROPERTY: 007 **HIGH SCHOOL**
BUILDING: 001 **HIGH SCHOOL**

SCHOOL AVENUE
CITY, ST 99999



Valuation Summary

Date of Inspection: 09/10/2015

BUILDING COST OF REPRODUCTION NEW	\$61,798,000	(\$ 209.60 per SF)
CONTENTS COST OF REPRODUCTION NEW	\$5,563,000	(\$ 18.87 per SF)

Construction Components

System ID: 193

ISO Class: 4 - MASONRY NON-COMBUSTIBLE (100 %)

Exterior Wall Type: BRICK, ON MASONRY (85 %) , CONCRETE TILT-UP PANELS (15 %)

Heating: STEAM OR HOT WATER WITH UNIT HEATERS (100 %)

Cooling: CHILLED WATER W/AIR HANDLERS (100 %)

Roof Material: SINGLE-PLY MEMBRANE (100 %)

Roof Pitch: FLAT (100 %)

Elevators: **Passenger:** 1 **Freight:** 0

Description

Year Built: 2001

Number of Stories: 3

Average Story Height: 14 FEET

Square Footage:

Super Structure:	294,833
Sub Structure:	0
Total:	294,833

Construction Square Feet

MASONRY NON-COMBUSTIBLE	100 %	294,833
-------------------------	-------	---------

Protection

Manual Fire Alarm: Y

Automatic Fire Alarm: Y

Sprinklers: P

Entry Alarm: Y

Exposure

Latitude: N 00-00-00.0

Longitude: W 088-19-12.0

Miscellaneous Additional Features

AUDITORIUM SEATING - UPHOLSTERED ; BASKETBALL & WRESTLING SCOREBOARD, WALL TYPE ; BASKETBALL BACKBOARDS & SUPPORTS - FOLDING ; BASKETBALL SCOREBOARD, WALL TYPE ; BLEACHERS & GRANDSTANDS - TELESCOPING ; CANOPIES ; GENERATOR ; GYMNASIUM DIVIDER ; MEZZANINE ; VERTICAL CHAIR LIFT ; WALK-IN COOLERS & FREEZERS ; ROLL UP GATES ; ROLL UP WINDOWS ; SECURITY CAMERAS ; BAY DOORS

For more information about our global locations and services, please visit:



Michael Domin
Managing Director
Michael.domin@duffandphelps.com
+1 630 541 4651

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. For more information, visit

M&A advisory and capital raising services in the United States are provided by Duff & Phelps Securities, LLC. Member FINRA/SIPC. Pagemill Partners is a Division of Duff & Phelps Securities, LLC. M&A advisory and capital raising services in the United Kingdom and Germany are provided by Duff & Phelps Securities Ltd., which is authorized and regulated by the Financial Conduct Authority.