# CBRE GROUP GLOBAL MARKET LEADER IN INTEGRATED COMMERCIAL REAL ESTATE SERVICES



# **Forward-Looking Statements**

This presentation contains statements that are forward looking within the meaning of the Private Securities Litigation Reform Act of 1995. These include statements regarding CBRE's future growth momentum, operations, market share, business outlook, and financial performance expectations. These statements are estimates only and actual results may ultimately differ from them. Except to the extent required by applicable securities laws, we undertake no obligation to update or publicly revise any of the forward-looking statements that you may hear today. Please refer to our fourth quarter earnings release, furnished on Form 8-K, and our most recent annual report filed on Form 10-K, and in particular any discussion of risk factors or forward-looking statements therein, which are available on the SEC's website (www.sec.gov), for a full discussion of the risks and other factors that may impact any forward-looking statements that you may hear today. We may make certain statements during the course of this presentation, which include references to "non-GAAP financial measures," as defined by SEC regulations. Where required by these regulations, we have provided reconciliations of these measures to what we believe are the most directly comparable GAAP measures, which are attached hereto within the appendix.



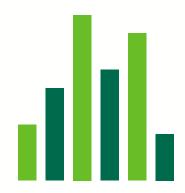
#### The Global Market Leader

CBRE is the premier global provider of integrated services to commercial real estate investors and occupiers





- #1 Leasing
- #1 Property Sales
- #1 Outsourcing
- #1 Appraisal & Valuation
- \$86.6 billion AUM Investment Management<sup>1</sup>



#### **Scale And Diversity**

- 450+ offices worldwide<sup>2</sup>
- Serves clients in over 100 countries<sup>2</sup>
- Serves over 90% of the Fortune 100
- \$322 billion of sales and lease activity and 85,500+ transactions in 2016
- 5.2 billion square feet under management<sup>3</sup>

See slide 34 for footnotes



# The Leading Global Brand

CBRE is recognized as the foremost commercial real estate authority

Barron's 500	<ul> <li>One of only two companies to be ranked in the top 12 of the Barron's 500 in each of the past three years (2014-2016)</li> </ul>
Forbes	<ul> <li>Named America's 15th Best Employer (out of 500 companies)</li> </ul>
Fortune	Ranked among the Most Admired Companies for five consecutive years
Fortune 500	<ul> <li>Fortune 500 company since 2008; ranked #259 in 2016</li> </ul>
International Association of Outsourcing Professionals	<ul> <li>Ranked among the top few outsourcing service providers across all industries for five consecutive years</li> </ul>
S&P 500	• S&P 500 company since 2006
The Lipsey Company	<ul> <li>Ranked #1 brand for 16 consecutive years</li> </ul>
Euromoney	Global Real Estate Advisor of the Year five years in a row
Ethisphere	Named a World's Most Ethical Company three years in a row
Dow Jones Sustainability	<ul> <li>Included in DJSI North America three years in a row</li> </ul>



Indices

# **CBRE Serves Investors And Occupiers**

CBRE's integrated, best-in-class offering creates value for clients at every stage of the life cycle







# Track Record Of Long-Term Growth

2003 To 2016





2015 To 2016





See slide 34 for footnotes



# Positioned For Long-Term Growth

CBRE leads a sector with strong underlying growth dynamics

#### Consolidation

Leasing and capital markets services continue to consolidate but remain highly fragmented

# Occupier Outsourcing

- Recurring contractual revenues
- Still in early stage of penetration with occupiers
- Contributes to largely recurring leasing revenues over time<sup>1</sup>

# Strategic Position

- CBRE has market leading global depth and capability
- Operating platform enhancements, particularly in technology and data analytics

See slide 34 for footnotes



# **Key Strategic Priorities**

Capitalize on our leadership position to widen our competitive advantages in the marketplace

#### Continue to:

- Drive market share gains in our core leasing and capital markets businesses with leadership and innovation
- Enrich our operating platform (Digital & Data Analytics, Research, Marketing, Workplace Strategy, etc.) to support long-term growth
- Acquire leading companies in our sector that enhance our ability to serve clients
- Further enhance depth and breadth of our Occupier Outsourcing business



# Capital Deployment

# Mergers & Acquisitions

- Transactions generally fall into two categories:
  - Strategic in-fill acquisitions sourced principally by lines of business
  - Larger, transformational transactions driven by macro strategy
- Completed over 30 acquisitions since 2013 and over 100 since 2005, including four large, strategic acquisitions
- Proven willingness to step away when markets are frothy

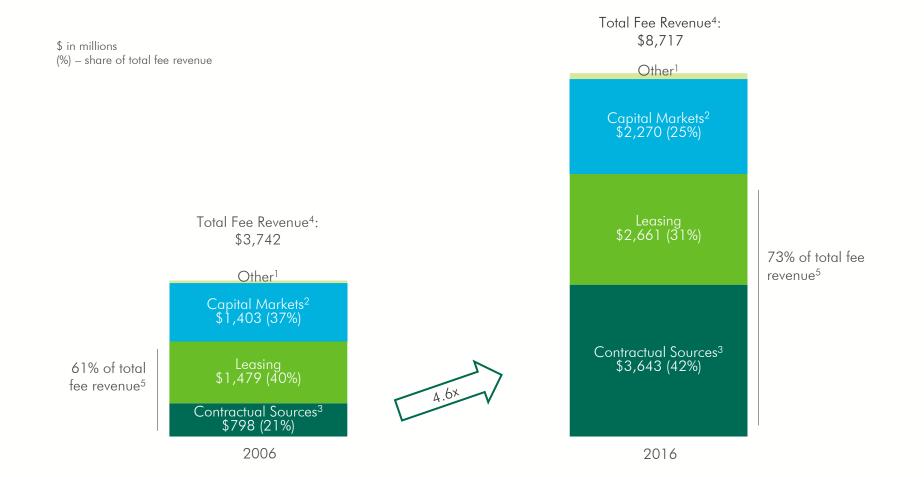
# Stock Repurchase Authorization

Authorization in place to repurchase up to an aggregate of \$250 million of CBRE's Class A common stock over three years (through 2019)



# Fee Revenue Mix (FY 2006 Versus FY 2016)

### Significant growth in contractual revenue



See slide 34 for footnotes



## 2016 Revenue

Contractual revenue & leasing, which is largely recurring over time<sup>1</sup>, is 73% of fee revenue

# Revenue (\$ in millions)

	Contractual Sources		Leasing	Capital Markets Other						
	Occupier Outsourcing <sup>2</sup>	Property Management <sup>2</sup>	Investment Management	Valuation	Leasing	Sales	Commercial Mortgage Services	Development Services	Other	Total
Gross Reve	nue									
2016	\$ 6,079	\$ 1,045	\$ 370	\$ 504	\$ 2,661	\$ 1,699	\$ 571	\$ 57	\$ 86	\$ 13,072
Fee Revenu	ıe <sup>3</sup>									
2016	\$ 2,265	\$ 504 73% of	\$ 370 total fee revenue	\$ 504	\$ 2,661	\$ 1,699	\$ 571	\$ 57	\$ 86	\$ 8,717
% of 201 Total Fe Revenue	e <b>(</b> 26%	6%	4%	6%	31%	19%	6%	1%	1%	100%
Fee Revenu	ue Growth Rate (C	Change 2016-over	2015)							
USD	<b>▲</b> 57%	<b>▲</b> 3%	▼-20%	<b>∢▶</b> 0%	<b>▲</b> 5%	<b>∢▶</b> 0%	<b>▲</b> 19%	<b>▲</b> 6%	<b>▲</b> 11%	<b>1</b> 3%
Local Currenc	y ▲62%	<b>▲</b> 4%	▼-17%	<b>▲</b> 3%	<b>▲</b> 7%	<b>▲</b> 1%	<b>▲</b> 19%	<b>▲</b> 6%	<b>1</b> 4%	<b>▲</b> 15%



#### 2017 Outlook for CBRE

- Capital Markets revenue Property Sales and Mortgage Services expected to increase at a low to midsingle digit rate
- Leasing revenue expected to grow at a mid-single digit rate
- Occupier Outsourcing fee revenue expected to grow by approximately 10%, with a weighting to the second half of the year
- Real estate investment businesses (Investment Management and Development Services) anticipated to produce combined full year adjusted EBITDA that is flat to slightly down from 2016 with a materially reduced contribution from Development Services in Q1 2017 as compared to a very strong Q1 2016
- Adjusted EBITDA margin on fee revenue expected to remain strong at  $17\frac{1}{2}$  % to 18%
- Overall, we expect to achieve earnings-per-share for 2017 in the range of \$2.35 to \$2.45
  - Anticipate 6 cent per share headwind from negative currency movement
  - At the midpoint, our growth rate would be 4% in U.S. dollars, or 7% in local currency



# **Key Takeaways**

#### CBRE:

- Leads an industry with strong underlying growth dynamics
- Is well positioned to continue its track record of long-term growth
- Has developed into a balanced business with a more stable growth profile
- Is an investment grade company with significant liquidity
- Is continuing to extend its competitive advantage in the marketplace

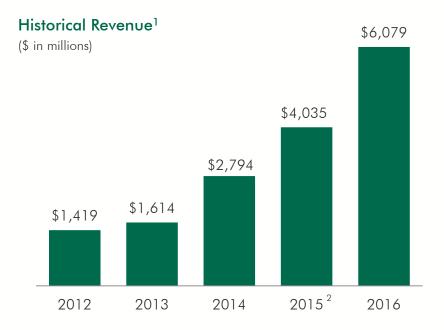


# BUSINESS LINE SLIDES



# **Occupier Outsourcing**

## Integrated Global Solutions for Occupiers



#### Overview

- Full service offering
  - Facilities Management approximately 2.3 billion square feet globally as of 12/31/2015
  - Project Management
  - Transaction Services
  - Strategic Consulting
- Ranked among the top few outsourcing service providers across all industries for five consecutive years<sup>3</sup>

#### 2016 Total Contracts

	Q4	Full Year
New	47	170
Expansions	40	170
Renewals	23	92

#### Representative Clients

Facilities	Transaction
Management	Services











MEMORIAL HEALTH CARE



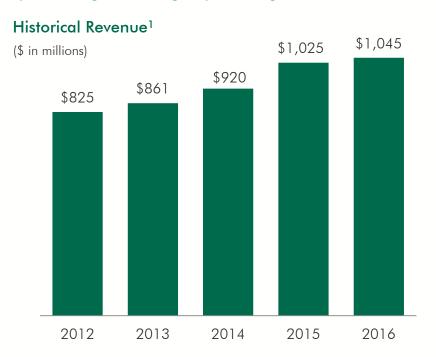


See slide 35 for footnotes



# **Property Management**

#### Optimizing Building Operating Performance for Investors



#### Overview

- Manages buildings for investors
  - Highly synergistic with property leasing
- Manages approximately 2.9 billion square feet globally as of 12/31/15<sup>2</sup>
- 300+ premier properties in major CBDs (approximately 450 million square feet)

#### **Selected Strategic Accounts**









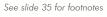














# **Investment Management**

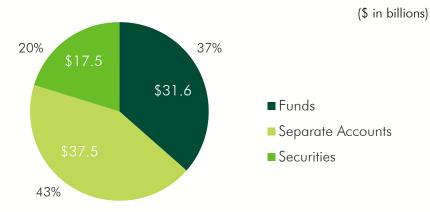
#### Performance Across Risk/Return Spectrum Globally

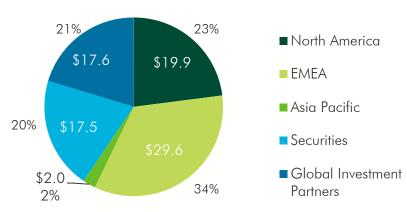


#### Overview

- Performance-driven global real estate investment manager
- More than 500 institutional clients
- Equity to deploy: approx. \$5,500 million<sup>1,2</sup>
- Co-Investment: \$139.3 million<sup>2</sup>

#### Assets under Management (AUM)\* \$86.6B as of 12/31/2016





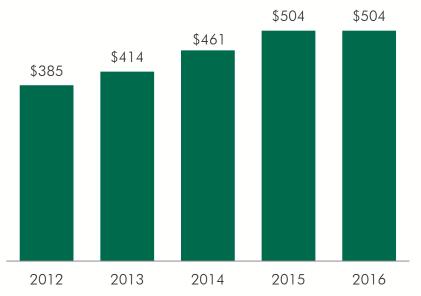


# **Appraisal & Valuation**

#### Serving Clients Globally

#### Historical Revenue

(\$ in millions)



#### Overview

- 467,500+ assignments in 2016<sup>1</sup>
- Euromoney Global Valuation Advisor of the Year for five consecutive years
- Clients include lenders, life insurance companies, special servicers and REITs

**Premier Clients** 























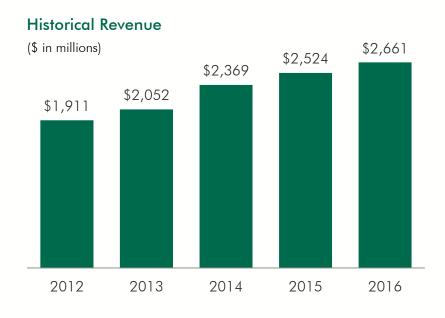


Includes 292,300+ residential valuations in Asia Pacific.



# Leasing

#### Strategic Advisory and Execution



#### Overview

- Advise occupiers and investors in formulating and executing leasing strategies
- Tailored service delivery by property type and industry/market specialization
- Strategic insight and high-level execution driving significant market share gains
- #1 global market position \$110.8 billion lease volume in 2016

- Office: \$74.1 billion - Industrial: \$17.3 billion

- Retail: \$17.4 billion - Other: \$2.0 billion



# U.S. Leasing

Largely Recurring Business Over Time With Increasing Market Share

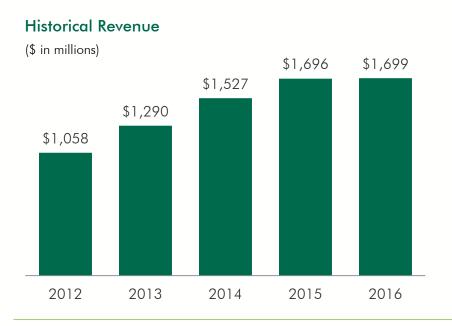
2016 U.S. Leasing Volume - \$82 billion





# **Property Sales**

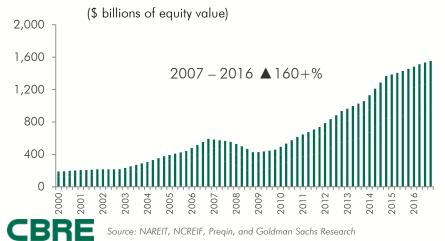
#### Insight and Execution Across Markets & Property Types



#### Overview

- Strategic advisor (sellers and buyers) in commercial real estate
- #1 global market share, based on Real Capital Analytics
  - 780 basis point advantage over #2 firm for full year 2015
- #1 global market position \$211.4 billion sales volume in 2016
  - Office: \$79.4 billion Industrial: \$31.7 billion
  - Retail: \$33.3 billion Other: \$24.8 billion
  - Multi-family: \$42.2 billion

#### Increased Ownership by Active Portfolio Managers Drives Sales Velocity

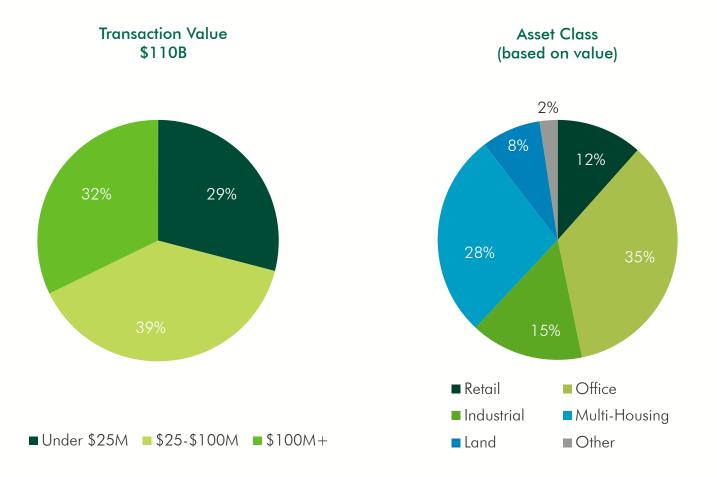


- Private equity firms, REITs and open-end funds are active traders of real estate and account for an increasingly larger portion of the investment market
- Many large, traditional owners do not actively trade their assets
- As a result, transaction volumes should increase over time

U.S. Property Sales

Highly Diverse Business Across Transaction Size and Asset Class

2016 U.S. Sales Transactions





# Commercial Mortgage Services

#### Premier Debt and Structured Finance Solutions

#### Historical Revenue

(\$ in millions)



#### **Recent Transactions**



Southeast Residential Portfolio (SERP)

\$500 Million Acquisition Financing Acquisition Financing



United States Cove Property Group - Baupost Group \$220 Million

FMS-Wertmanagment (FMS) \$660 Million

Germany

Loan Sale

#### Overview

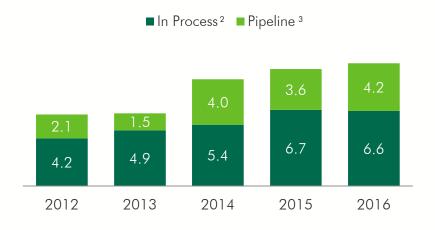
- A leading strategic advisor for debt and structured finance solutions
  - Highly synergistic with property sales
- Key services:
  - Loan origination / debt placement
  - Portfolio logn sales
  - Loan servicing
- \$43.3 billion of global mortgage activity in 2016<sup>1</sup>
- Commercial loan origination with government agencies \$16.0 billion<sup>2</sup> in 2016
- \$145 billion loan servicing portfolio as of 12/31/16

# **Development Services**

Trammell Crow Company - A Premier Brand in U.S.

#### Projects In Process/Pipeline<sup>1</sup>

(\$ in billions)



#### Overview

- A premier brand in U.S. development
  - 65+ year record of excellence
- Partner with leading institutional capital sources
- \$121.6 million of co-investment at the end of 2016
- \$15.7 million in repayment guarantees on outstanding debt balances at the end of 2016

#### **Recent Projects**

#### **Park District**



Dallas, TX Mixed-Use

#### The Boardwalk



Newport Beach, CA Office

#### **LA Plaza**



Los Angeles, CA Mixed-use

#### **Principio Commerce Park**



North End, MD Industrial

# APPENDIX



# **Financial Metrics**

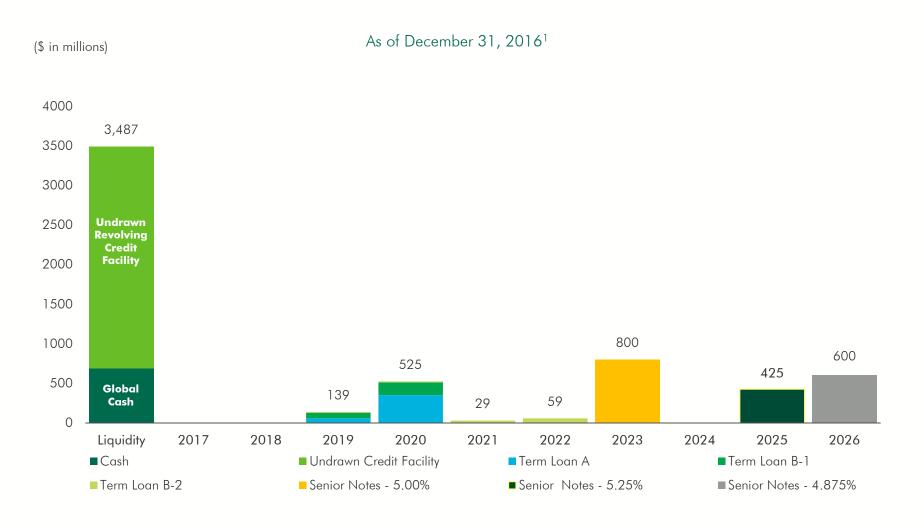
		Twelve Mont Decembe	
(\$ in millions)	2017 Forecast	2016	2015
Depreciation	approx. \$ 165	\$ 152.8	\$ 138.7
Adjusted amortization <sup>1</sup>	approx. \$ 120	103.0	88.8
Net interest expense	approx. \$ 135	136.8	112.6
Adjusted income tax rate <sup>2</sup>	32.0%	33.4%	35.7%
2016	Currency Effects vs. Pr	ior Year	
2016 currency translation as well losses during 2016 against san EBITDA impact)	S .		(\$16.2 million)
2016 marking-to-market of curre year (pre-tax adjusted EBITDA i	(\$16.5 million)		

<sup>2.</sup> Adjusts pre-tax income for portion attributable to non-controlling interests.



<sup>1.</sup> Excludes amortization expense related to certain intangible assets attributable to acquisitions.

# Mandatory Amortization And Maturity Schedule



<sup>1. \$2,800</sup> million revolving credit facility matures in March 2021. As of December 31, 2016, the revolving credit facility balance was \$0.



# Capitalization

(\$ in millions)	As of December 31, 2016				
Cash <sup>1</sup>	\$ 689				
Revolving credit facility	-				
Senior term Ioan A <sup>2</sup>	405				
Senior term Ioan B-1 <sup>2</sup>	229				
Senior term Ioan B-2 <sup>2</sup>	110				
Senior notes – 5.00% <sup>2</sup>	790				
Senior notes – 4.875% <sup>2</sup>	591				
Senior notes – 5.25% <sup>2</sup>	422				
Other debt <sup>3,4</sup>	-				
Total debt	\$ 2,547				
Stockholders' equity	3,019				
Total capitalization	\$ 5,566				
Total net debt	\$ 1,858				
Net debt to TTM Q4 2016 Adjusted EBITDA	1.19x				

Excludes \$73.3 million of cash in consolidated funds and other entities not available for company use at December 31, 2016.

Excludes non-recourse notes payable on real estate, net of unamortized debt issuance costs, of \$22.7 million at December 31, 2016.



Outstanding amount is reflected net of unamortized debt issuance costs.

Excludes \$1,254.7 million of warehouse facilities for loans originated on behalf of FHA and other government sponsored enterprises outstanding at December 31, 2016, which are non-recourse to CBRE Group, Inc.

#### Non-GAAP Financial Measures

The following measures are considered "non-GAAP financial measures" under SEC guidelines:

- i. fee revenue
- ii. contractual fee revenue
- iii. net income attributable to CBRE Group, Inc., as adjusted (which we also refer to as "adjusted net income")
- iv. diluted income per share attributable to CBRE Group, Inc. shareholders, as adjusted (which we also refer to as "adjusted earnings per share" or "adjusted EPS")
- v. EBITDA and adjusted EBITDA

None of these measures is a recognized measurement under United States generally accepted accounting principles, or "GAAP," and when analyzing our operating performance, readers should use them in addition to, and not as an alternative for, their most directly comparable financial measure calculated and presented in accordance with GAAP. Because not all companies use identical calculations, our presentation of these measures may not be comparable to similarly titled measures of other companies.

Our management generally uses these non-GAAP financial measures to evaluate operating performance and for other discretionary purposes, and the company believes that these measures provide a more complete understanding of ongoing operations, enhance comparability of current results to prior periods and may be useful for investors to analyze our financial performance because they eliminate the impact of selected charges that may obscure trends in the underlying performance of our business. The company further uses certain of these measures, and believes that they are useful to investors, for purposes described below.

With respect to fee revenue: the company believes that investors may find this measure useful to analyze the financial performance of our Occupier Outsourcing and Property Management business lines and our business generally because it excludes costs reimbursable by clients, and as such provides greater visibility into the underlying performance of our business.

With respect to contractual fee revenue: the company believes that investors may find this measure useful to analyze our overall financial performance because it identifies revenue streams that are typically more stable over time.

With respect to adjusted net income, adjusted EPS, EBITDA and adjusted EBITDA: the company believes that investors may find these measures useful in evaluating our operating performance compared to that of other companies in our industry because these calculations generally eliminate the accounting effects of acquisitions, which would include impairment charges of goodwill and intangibles created from acquisitions—and in the case of EBITDA and adjusted EBITDA—the effects of financings and income tax and the accounting effects of capital spending. All of these measures may vary for different companies for reasons unrelated to overall operating performance. In the case of EBITDA and adjusted EBITDA, these measures are not intended to be measures of free cash flow for our management's discretionary use because they do not consider cash requirements such as tax and debt service payments. The EBITDA and adjusted EBITDA measures calculated herein may also differ from the amounts calculated under similarly titled definitions in our credit facilities and debt instruments, which amounts are further adjusted to reflect certain other cash and non-cash charges and are used by us to determine compliance with financial covenants therein and our ability to engage in certain activities, such as incurring additional debt and making certain restricted payments. The company also uses adjusted EBITDA and adjusted EPS as significant components when measuring our operating performance under our employee incentive compensation programs.



# Reconciliation Of Adjusted EBITDA To EBITDA To Net Income (Loss)

	Twelve Months Ended			
(\$ in millions)	December 31, 2016 December 31, 2			31,2003
Adjusted EBITDA	\$	1,561.0	\$	183.2
Adjustments:				
Integration and other costs related to acquisitions		125.7		13.6
Cost elimination expenses		78.5		36.8
Carried interest incentive compensation expense <sup>1</sup>	(15.6)			-
EBITDA	1,372.4		132.8	
Add:				
Interest income		8.1		3.8
Less:				
Depreciation and amortization		366.9		92.8
Interest expense		144.9		71.3
Write-off of financing costs on extinguished debt		-		13.5
Provision for (benefit of) income taxes	296.7		(6.3)	
Net income (loss) attributable to CBRE Group, Inc.	\$ 572.0 \$		(34.7)	

<sup>1.</sup> CBRE began adjusting carried interest compensation expense in Q2 2013 in order to better match the timing of this expense with associated carried interest revenue. This expense has only been adjusted for funds that incurred carried interest expense for the first time in Q2 2013 or in subsequent quarters.



# Reconciliation Of Net Income To Adjusted Net Income And Adjusted Earnings Per Share

_		Twelve Months Ended December 31,			
(\$ in millions, except per share amounts)		6	201 <i>5</i>	2015	
Net income attributable to CBRE Group, Inc.	\$	572.0	\$	547.1	
Integration and other costs related to acquisitions		125.7		48.9	
Amortization expense related to certain intangible assets attributable to acquisitions		111.1		86.6	
Cost elimination expenses		78.5		40.4	
Carried interest incentive compensation (reversal) expense to align with the timing of associated revenue		(15.6)		26.1	
Write-off of financing costs on extinguished debt		-		2.7	
Tax impact of adjusted items		(93.2)		(62.6)	
Adjusted net income	\$	778.5	\$	689.2	
Adjusted diluted earnings per share	\$	2.30	\$	2.05	
Weighted average shares outstanding for diluted income per share	33	88,424,563	336	,414,856	



# Reconciliation Of Revenue To Fee Revenue

	Twelve Months Ended					
(\$ in millions)	December 31, 2016	December 31, 2006				
Consolidated revenue	\$ 13,071.6	\$ 4,032.0				
Less: Client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients	4,354.5	289.7				
Consolidated fee revenue	\$ 8,717.1	\$ 3,742.3				
Less:						
Non-contractual fee revenue	5,073.9	798.4				
Contractual fee revenue	\$ 3,643.2	\$ 2,943.9				



# Reconciliation Of Revenue To Fee Revenue And Contractual Fee Revenue

	Twelve N	Twelve Months Ended December 31,		
(\$ in millions)	20	016	2015	
Occupier Outsourcing revenue <sup>1</sup> Less:	\$	6,078.6	\$	4,034.9
Client reimbursed costs largely associated with employees dedicated to client facilities and				
subcontracted vendor work performed for clients		3,814.1		2,591.3
Occupier Outsourcing fee revenue 1	\$	2,264.5	\$	1,443.6
Property Management revenue <sup>1</sup> Less:	\$	1,044.9	\$	1,025.4
Client reimbursed costs largely associated with employees dedicated to client facilities and				
subcontracted vendor work performed for clients		540.4		534.1
Property Management fee revenue 1	\$	504.5	\$	491.3
Consolidated revenue Less:	\$	13,071.6	\$	10,855.8
Client reimbursed costs largely associated with employees dedicated to client facilities and				
subcontracted vendor work performed for clients		4,354.5		3,125.5
Consolidated fee revenue	\$	8,717.1	\$	7,730.3
Less: Non-contractual fee revenue		5,073.9		4,830.9
Contractual fee revenue	\$	3,643.2	\$	2,899.4
		,		, , .



Occupier Outsourcing and Property Management revenue excludes associated leasing and sales revenue, most of which is contractual.

#### **Footnotes**

NOTE: Local currency percent changes versus prior year are non-GAAP financial measures noted on slide 11. These percent changes are calculated by comparing current year results versus prior year results, in each case at prior year exchange rates.

#### Slide 3

- 1. Assets Under Management (AUM) as of December 31, 2016.
- 2. As of December 31, 2016, includes affiliates.
- 3. Property and Corporate Facilities under Management as of December 31, 2015; 7% of this square footage is managed by affiliates.

#### Slide 6

- 1. Adjusted EBITDA excludes (from EBITDA) certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue, cost elimination expenses and integration and other costs related to acquisitions.
- 2. Adjusted EPS excludes amortization expense related to certain intangible assets attributable to acquisitions, the write-off of financing costs on extinguished debt, cost elimination expenses, integration and other costs related to acquisitions, and adjusts certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue, as well as adjusts the provision for income taxes for such charges.

#### Slide 7 and 19

1. We regard leasing revenue as largely recurring over time because unlike most other transaction businesses, leasing activity normally takes place when leases expire. The average lease expires in five to six years. This means that, on average, in a typical year approximately 17% to 20% of leases roll over and a new leasing decision must be made. When a lease expires in the ordinary course, we expect it to be renewed, extended or the tenant to vacate the space to lease another space in the market. In each instance, a transaction is completed. If there is a downturn in economic activity, some tenants may seek a short term lease extension, often a year, before making a longer term commitment. In this scenario, that delayed leasing activity tends to be stacked on top of the normal activity in the following year. Thus, we characterize leasing as largely recurring over time because we expect an expiration of a lease, in the ordinary course, to lead to an opportunity for a leasing commission from such completed transaction.

#### Slide 10

- 1. Other includes Development Services revenue (1% in both 2006 and 2016) and Other revenue (1% in both 2006 and 2016).
- 2. Capital Markets includes Sales revenue (33% in 2006 and 19% in 2016) and Commercial Mortgage Services revenue (4% in 2006 and 6% in 2016).
- 3. Contractual Sources include Occupier Outsourcing and Property Management revenue (7% in 2006 and 32% in 2016; excludes associated sales and lease revenues, most of which are contractual), Global Investment Management revenue (6% in 2006 and 4% in 2016), and Valuation revenue (8% in 2006 and 6% in 2016).
- 4. Fee Revenue is gross revenue less client reimbursed costs largely associated with our employees that are dedicated to client facilities and subcontracted vendor work performed for clients.
- 5. Contractual plus leasing revenues are 64% of 2006 GAAP revenue and 81% of 2016 GAAP revenue.



#### **Footnotes**

#### Slide 11

- 1. Contractual revenue refers to revenue derived from our Occupier Outsourcing, Property Management, Investment Management and Valuation businesses. We regard leasing revenue as largely recurring over time because unlike most other transaction businesses, leasing activity normally takes place when leases expire. The average lease expires in five to six years. This means that, on average, in a typical year approximately 17% to 20% of leases roll over and a new leasing decision must be made. When a lease expires in the ordinary course, we expect it to be renewed, extended or the tenant to vacate the space to lease another space in the market. In each instance, a transaction is completed. If there is a downturn in economic activity, some tenants may seek a short term lease extension, often a year, before making a longer term commitment. In this scenario, that delayed leasing activity tends to be stacked on top of the normal activity in the following year. Thus, we characterize leasing as largely recurring over time because we expect an expiration of a lease, in the ordinary course, to lead to an opportunity for a leasing commission from such completed transaction.
- 2. Occupier Outsourcing and Property Management revenue excludes associated leasing and sales revenue, most of which is contractual.
- 3. Fee revenue is gross revenue less both client reimbursed costs largely associated with employees that are dedicated to client facilities and subcontracted vendor work performed for clients.

#### Slide 15

- 1. Historical revenue for Occupier Outsourcing line of business (formerly Global Corporate Services or GCS, now called Global Workplace Solutions) excludes associated sales and leasing revenue, most of which is contractual.
- 2. 2015 revenue includes four months of contribution from the Global Workplace Solutions business acquired on September 1, 2015.
- 3. Per International Association of Outsourcing Professionals (IAOP).

#### Slide 16

- 1. Property Management (also known as Asset Services) revenue excludes associated sales and leasing revenue, most of which is contractual.
- 2. 13% of this square footage is managed by affiliates.

#### Slide 17

- 1. Excludes global securities business.
- 2. As of December 31, 2016.

#### Slide 23

- 1. Activity includes loan originations and loan sales, and affiliate loan originations.
- 2. As measured in dollar value loaned.

#### Slide 24

- 1. As of December 31 for each year presented
- 2. In Process figures include Long-Term Operating Assets (LTOA) of \$0.2 billion for Q4 2016, \$0.1 billion for Q4 2015, \$0.3 billion for Q4 2014, \$0.9 billion for Q4 2013 and \$1.2 billion for Q4 2012. LTOA are projects that have achieved a stabilized level of occupancy or have been held 18-24 months following shell completion or acquisition.
- 3. Pipeline deals are those projects we are pursuing which we believe have a greater than 50% chance of closing or where land has been acquired and the projected construction start is more than twelve months out.

