

**CBRE**

**CBRE GROUP, INC.**

**Second Quarter 2018: Earnings Conference Call**

**AUGUST 2, 2018**

## 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, investment levels and expectations for our financial performance and that of our acquisitions. 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 second quarter earnings release, furnished on Form 8-K, our most recent annual report filed on Form 10-K and our most recent quarterly report filed on Form 10-Q, and in particular any discussion of risk factors or forward-looking statements therein, which are available on the SEC's website ([www.sec.gov](http://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.

# CONFERENCE CALL PARTICIPANTS

## **Bob Sulentic**

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**PRESIDENT AND  
CHIEF EXECUTIVE OFFICER**

## **Jim Groch**

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**CHIEF FINANCIAL OFFICER AND  
HEAD OF CORPORATE DEVELOPMENT**

## **Brad Burke**

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**INVESTOR RELATIONS**

## Q2 2018 OVERVIEW

- Double-digit revenue and 10% adjusted EPS<sup>1</sup> growth
  - Global leasing revenue grew by 18%
  - Occupier outsourcing fee revenue<sup>2</sup> up 20%
  - Particularly strong quarter for development services
- Investing in digital & technology and strategic acquisitions to drive differentiated client outcomes
- Raising 2018 guidance after strong first half performance
  - Adjusted EPS \$3.10 to \$3.20, +15% at the midpoint versus 2017

See slide 25 for footnotes.

## Q2 2018 FINANCIAL RESULTS

- Fee revenue<sup>1</sup> up 15% in USD and 12% local currency
  - M&A contributed 2% to fee revenue growth, local and USD
- Adjusted EPS<sup>2</sup> growth of 10%
- Lower interest and tax rate, partially offset by higher D&A, contributed \$0.03 to adjusted EPS
- EMEA and APAC profitability impacted by incremental investments and softness in property sales versus an exceptional prior-year
- Even with drags on profits in EMEA and APAC, adjusted EBITDA would have increased 13% (14% USD) for the combined regional services business, absent the incremental investments

See slide 25 for footnotes.

# Q2 2018 BUSINESS LINE REVENUE

CONTRACTUAL REVENUE AND LEASING, WHICH IS LARGELY RECURRING OVER TIME<sup>1</sup>, IS 76% OF FEE REVENUE

**Revenue** (\$ in millions)

	Contractual Revenue Sources					Leasing	Capital Markets		Other		Total
	Occupier Outsourcing <sup>2</sup>	Property Management <sup>2</sup>	Investment Management	Valuation	Loan Servicing	Leasing	Sales	Commercial Mortgage Origination	Development Services	Other	

## Gross Revenue

<b>Q2 2018</b>	\$ 3,184	\$ 304	\$ 99	\$ 138	\$ 44	\$ 744	\$ 437	\$ 120	\$ 15	\$ 26	\$ 5,111
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## Fee Revenue<sup>3</sup>

<b>Q2 2018</b>	\$ 762	\$ 151	\$ 99	\$ 138	\$ 44	\$ 744	\$ 437	\$ 120	\$ 15	\$ 26	\$ 2,536
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76% of total fee revenue

## % of Q2 2018

<b>Total Fee Revenue</b>	30%	6%	4%	5%	2%	29%	17%	5%	1%	1%	100%
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## Fee Revenue Growth Rate (Change Q2 2018-over-Q2 2017)

<b>USD</b>	▲ 24%	▲ 13%	▲ 7%	▲ 7%	▲ 10%	▲ 20%	▲ 1%	▲ 15%	▲ 13%	▲ 34%	▲ 15%
<b>Local Currency</b>	▲ 20%	▲ 9%	▲ 2%	▲ 4%	▲ 10%	▲ 18%	▼ -2%	▲ 15%	▲ 13%	▲ 30%	▲ 12%

See slide 25 for footnotes.

# OCCUPIER OUTSOURCING

## 2018 TOTAL CONTRACTS\*

	Q2	YTD
New	<b>44</b>	<b>77</b>
Expansions	<b>79</b>	<b>115</b>
Renewals	<b>34</b>	<b>61</b>

\*Does not include contracts from the Heery business acquired in Q4 2017

## HIGHLIGHTS

- Fee revenue growth of 20% reflects strong momentum
- Continued strong EMEA and APAC contract activity in Q2
- Outsourcing pipeline remains robust
- FacilitySource strengthens facilities management capabilities

## Q2 2018 Representative Clients

### Facilities Management

**CORNING**



### Transaction Services

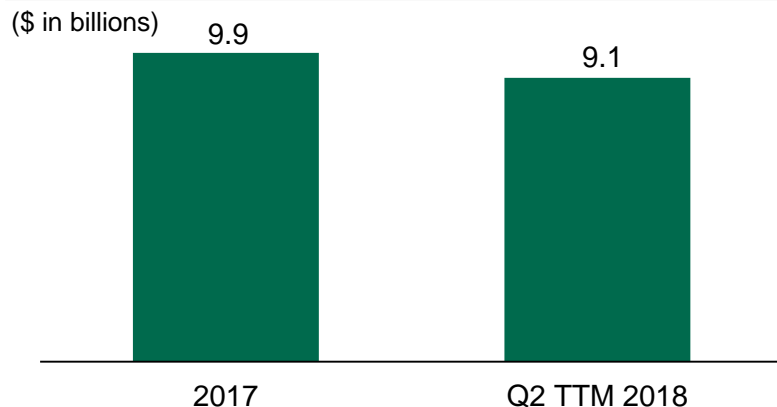


### Project Management



# GLOBAL INVESTMENT MANAGEMENT

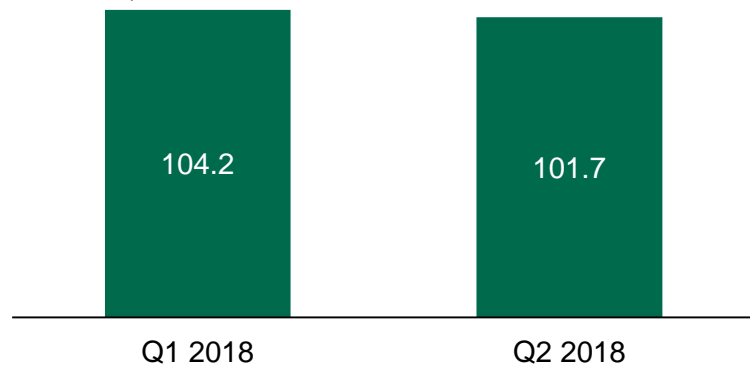
## CAPITAL RAISED<sup>1</sup>



- Capital to deploy: approximately \$6.1 billion<sup>2</sup>
- Co-Investment: \$181.4 million<sup>2</sup>

## ASSETS UNDER MANAGEMENT (AUM)

(\$ in billions)

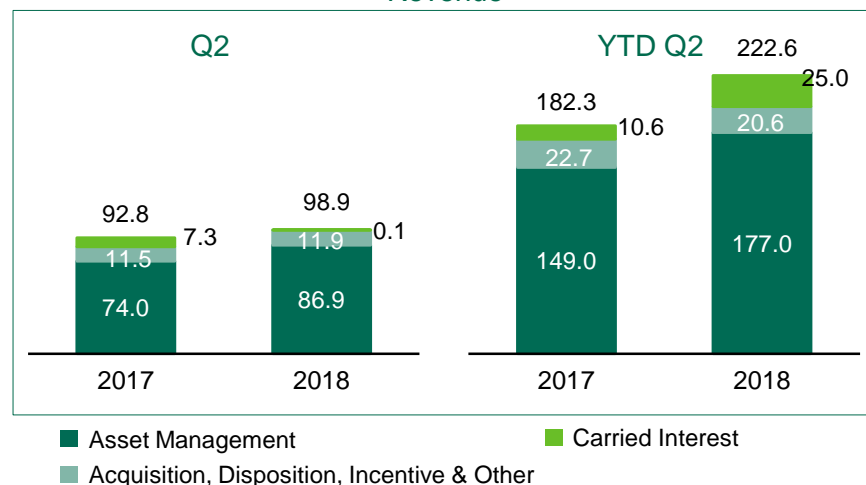


- AUM is down \$2.5 billion in USD from Q1 2018 (up \$0.7 billion in local currency)

## FINANCIAL RESULTS

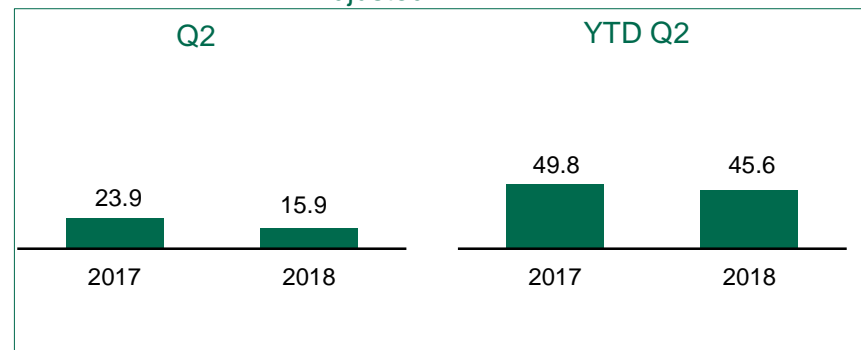
(\$ in millions)

### Revenue



- Asset Management
- Acquisition, Disposition, Incentive & Other
- Carried Interest

### Adjusted EBITDA<sup>3</sup>



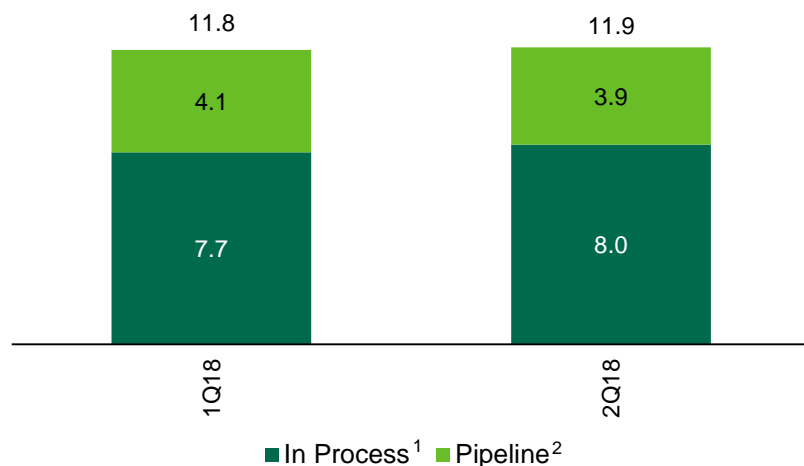
See slide 26 for footnotes.



# DEVELOPMENT SERVICES

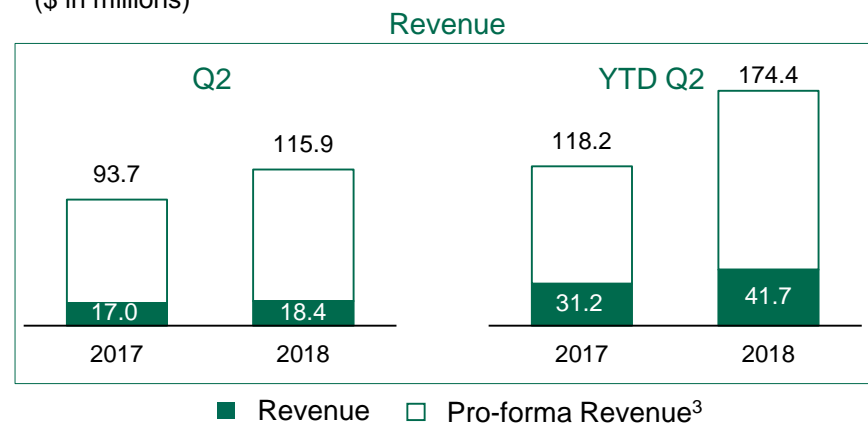
## PROJECTS IN PROCESS/PIPELINE

(\$ in billions)

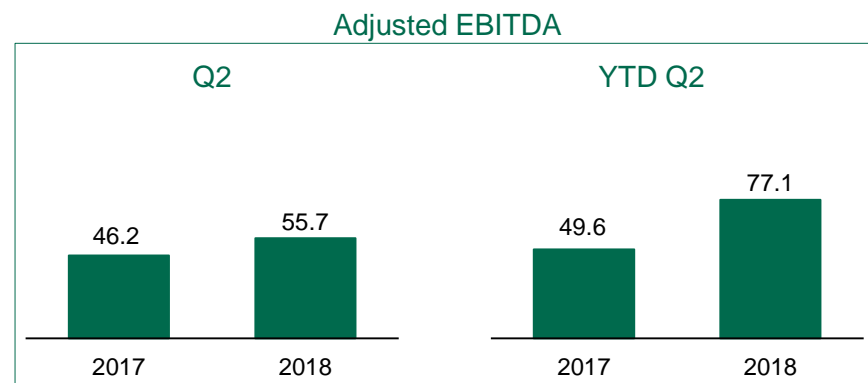


## FINANCIAL RESULTS

(\$ in millions)



- \$99.7 million of co-investments at the end of Q2 2018
- \$9.8 million in repayment guarantees on outstanding debt balances at the end of Q2 2018



See slide 26 for footnotes.

## CBRE GROWTH SINCE U.S. INVESTMENT SALES PEAK

- US investment sales volumes down approximately 6% on TTM basis since 2<sup>nd</sup> quarter 2015, according to Real Capital Analytics
- CBRE adjusted EBITDA grew more than 40% over the same period
- Speaks to the strength of CBRE's globally diversified business

See slide 20 for reconciliation of adjusted EBITDA.

## SUMMARY

- Positive momentum in our business, macro environment remains favorable
- Raising 2018 adjusted EPS outlook to range of \$3.10 to \$3.20
  - Implies 15% adjusted EPS growth at midpoint and 9<sup>th</sup> consecutive year of double-digit adjusted EPS growth
  - Unfavorable FX shifts negatively impact 2018 adjusted EPS outlook by approximately \$0.08 to \$0.10 from time of initial 2018 guidance

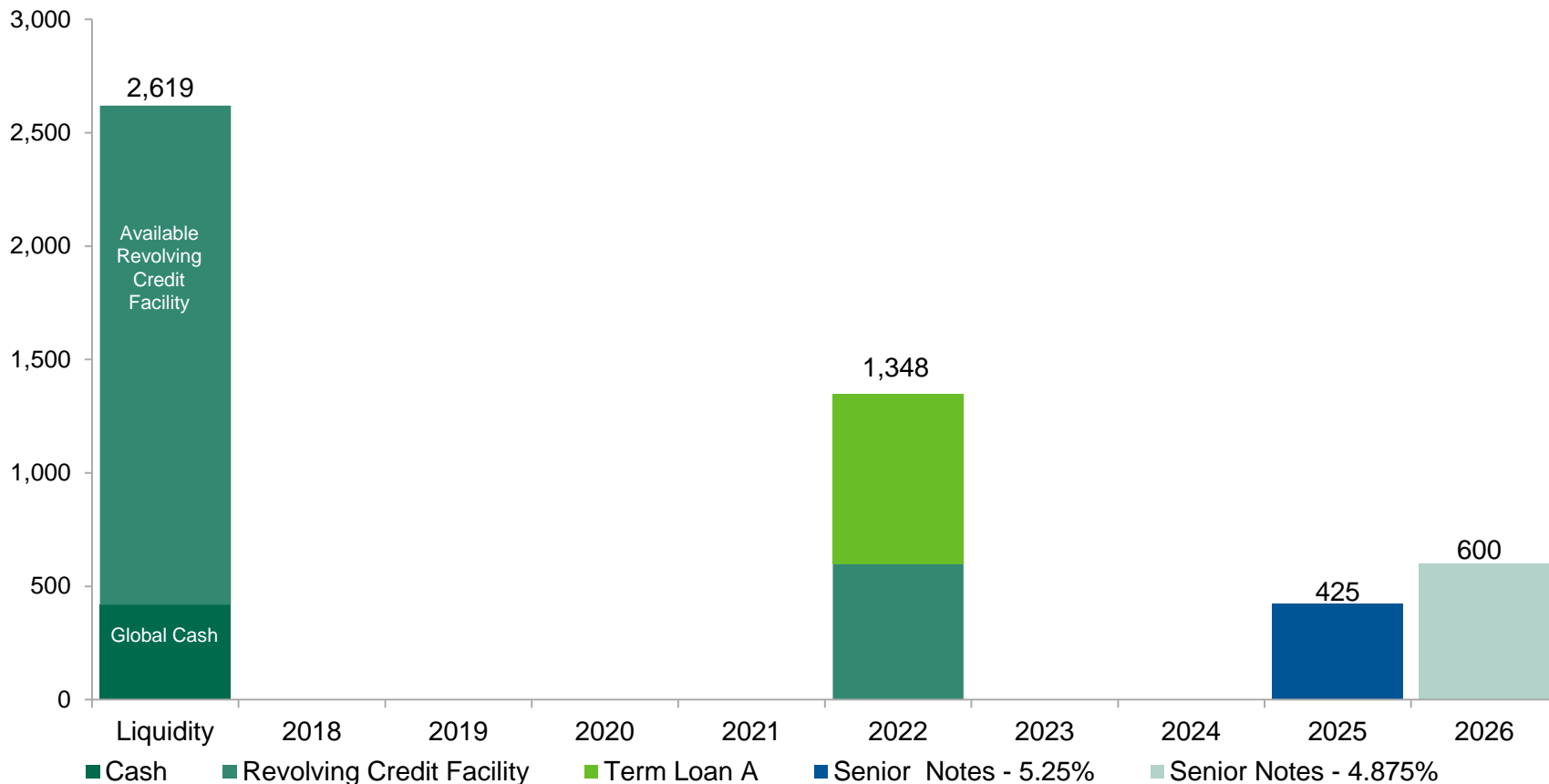


**SUPPLEMENTAL SLIDES, GAAP  
RECONCILIATION TABLES AND  
FOOTNOTES**

# MANDATORY AMORTIZATION AND MATURITY SCHEDULE

AS OF JUNE 30, 2018<sup>1</sup>

(\$ in millions)



1. \$2,800 million revolving credit facility matures in October 2022. As of June 30, 2018, the revolving credit facility balance was \$598 million.

# DEBT & LEVERAGE

	<b>June 30, 2018</b>
(\$ in millions)	
Cash <sup>1</sup>	\$ 419
Revolving credit facility	598
Senior term loans <sup>2</sup>	744
Senior notes <sup>2</sup>	1,015
Other debt <sup>3,4</sup>	5
<b>Total debt</b>	<b>\$ 2,362</b>
<b>Total net debt<sup>5</sup></b>	<b>\$ 1,943</b>
TTM Adjusted EBITDA <sup>6</sup>	\$ 1,772
<b>Net debt to TTM Adjusted EBITDA</b>	<b>1.10x</b>

1. Excludes \$112.7 million of cash in consolidated funds and other entities not available for company use at June 30, 2018.

2. Outstanding amount is reflected net of unamortized debt issuance costs.

3. Excludes \$1,471.6 million of warehouse facilities for loans originated on behalf of the FHA and other government sponsored enterprises outstanding at June 30, 2018, which are non-recourse to CBRE Group, Inc.

4. Excludes non-recourse notes payable on real estate, net of unamortized debt issuance costs, of \$3.1 million at June 30, 2018.

5. Total net debt is calculated as total debt (excluding non-recourse debt) less cash available for company use, as disclosed above.

6. Adjusted EBITDA excludes (from EBITDA) certain carried interest compensation expense to align with the timing of associated revenue.

# AMERICAS REVENUE

## Q2 2018 FEE REVENUE UP 13% IN USD AND LOCAL CURRENCY

(\$ in millions)	Contractual Revenue Sources									
	Occupier Outsourcing <sup>1</sup>		Property Management <sup>1</sup>		Valuation	Loan Servicing	Leasing	Sales	Commercial Mortgage Origination	Other
	Gross	Fee <sup>2</sup>	Gross	Fee <sup>2</sup>						
<b>Q2 2018</b>	\$ 1,924	\$ 311	\$ 172	\$ 77	\$ 64	\$ 41	\$ 537	\$ 270	\$ 118	\$ 14
<b>Q2 2017</b>	\$ 1,742	\$ 273	\$ 161	\$ 69	\$ 62	\$ 37	\$ 450	\$ 262	\$ 102	\$ 11
<b>USD<sup>3</sup></b>	▲ 10%	▲ 14%	▲ 7%	▲ 12%	▲ 4%	▲ 11%	▲ 19%	▲ 3%	▲ 16%	▲ 26%
<b>Local Currency<sup>3</sup></b>	▲ 10%	▲ 14%	▲ 7%	▲ 12%	▲ 4%	▲ 11%	▲ 19%	▲ 3%	▲ 16%	▲ 26%

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

2. 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.

3. Growth rate for Q2 2018 versus Q2 2017.

# EMEA REVENUE

Q2 2018 FEE REVENUE UP 24% IN USD OR 15% IN LOCAL CURRENCY

(\$ in millions)	Contractual Revenue Sources									
	Occupier Outsourcing <sup>1</sup>		Property Management <sup>1</sup>		Valuation	Loan Servicing	Leasing	Sales	Commercial Mortgage Origination	Other
	Gross	Fee <sup>2</sup>	Gross	Fee <sup>2</sup>						
<b>Q2 2018</b>	\$ 995	\$ 378	\$ 61	\$ 48	\$ 43	\$ 2	\$ 107	\$ 98	\$ 1	\$ 8
<b>Q2 2017</b>	\$ 727	\$ 281	\$ 59	\$ 41	\$ 37	\$ 3	\$ 88	\$ 94	\$ 2	\$ 6
<b>USD<sup>3</sup></b>	▲ 37%	▲ 35%	▲ 2%	▲ 16%	▲ 16%	▼ -12%	▲ 21%	▲ 4%	▼ -39%	▲ 41%
<b>Local Currency<sup>3</sup></b>	▲ 27%	▲ 25%	▼ -6%	▲ 7%	▲ 8%	▼ -18%	▲ 12%	▼ -3%	▼ -42%	▲ 32%

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

2. 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.

3. Growth rate for Q2 2018 versus Q2 2017.



# ASIA PACIFIC REVENUE

Q2 2018 FEE REVENUE UP 10% IN USD OR 7% IN LOCAL CURRENCY

(\$ in millions)	Contractual Revenue Sources									
	Occupier Outsourcing <sup>1</sup>		Property Management <sup>1</sup>		Valuation	Leasing	Sales	Commercial Mortgage Origination	Other	
	Gross	Fee <sup>2</sup>	Gross	Fee <sup>2</sup>						
<b>Q2 2018</b>	\$ 265	\$ 74	\$ 68	\$ 23	\$ 31	\$ 100	\$ 69	\$ 1	\$ 4	
<b>Q2 2017</b>	\$ 236	\$ 60	\$ 57	\$ 20	\$ 31	\$ 82	\$ 78	\$ 1	\$ 2	
<b>USD<sup>3</sup></b>	▲ 12%	▲ 24%	▲ 23%	▲ 15%	▼ -1%	▲ 23%	▼ -12%	▼ -63%	▲ 57%	
<b>Local Currency<sup>3</sup></b>	▲ 10%	▲ 20%	▲ 20%	▲ 12%	▼ -2%	▲ 20%	▼ -14%	▼ -63%	▲ 50%	

1. Occupier Outsourcing and Property Management revenue excludes associated leasing and sales revenue, most of which is contractual.
2. 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.
3. Growth rate for Q2 2018 versus Q2 2017.

# OPERATING RESULTS SUMMARY FOR Q2 2018

	GAAP Consolidated	Adjustments to			Adjusted Consolidated
		Depreciation & Amortization	Carried Interest	Taxes	
Fee revenue	\$ 2,535.6				\$ 2,535.6
Pass through costs also recognized as revenue <sup>1</sup>	2,575.8				2,575.8
Total revenue	5,111.4				5,111.4
Cost of services	3,958.7				3,958.7
Operating, administrative and other	826.3		(1.5)		824.8
Depreciation and amortization	113.4	(29.4)			84.0
Total costs and expenses	4,898.4	(29.4)	(1.5)		4,867.5
Gain on disposition of real estate	12.3				12.3
Operating income	\$ 225.3	29.4	1.5		\$ 256.2
Equity income from unconsolidated subsidiaries	96.0				96.0
Other income	4.0				4.0
Interest income	1.5				1.5
Interest expense	26.9				26.9
Income before provision for income taxes	299.9	29.4	1.5		330.8
Provision for income taxes	70.3			7.0	77.3
Tax rate <sup>2</sup>	23.5%				23.4%
Net income	229.6	29.4	1.5	(7.0)	253.5
Less:					
Net loss attributable to non-controlling interests	0.9				0.9
Net income attributable to CBRE Group, Inc.	\$ 228.7	\$ 29.4	\$ 1.5	\$ (7.0)	\$ 252.6
Less:					
Interest income	1.5				1.5
Add:					
Interest expense	26.9				26.9
Provision for income taxes	70.3			7.0	77.3
Depreciation and amortization	113.4	(29.4)			84.0
EBITDA	\$ 437.8	\$ -	\$ 1.5	\$ -	\$ 439.3
Weighted avg. shares outstanding for diluted EPS	343,471,513				343,471,513
Diluted EPS attributable to CBRE Group, Inc.	\$ 0.67				\$ 0.74

# NON-GAAP FINANCIAL MEASURES

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

- i. fee revenue
- ii. organic fee revenue (which we also refer to as fee revenue excluding M&A contributions)
- iii. contractual fee revenue
- iv. net income attributable to CBRE Group, Inc., as adjusted (which we also refer to as “adjusted net income”)
- v. 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”)
- vi. EBITDA and adjusted EBITDA

These measures are not recognized measurements under United States generally accepted accounting principles, or “GAAP.” When analyzing our operating performance, investors 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. 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. Fee revenue excludes costs reimbursable by clients, and as such provides greater visibility into the underlying performance of our business. Organic fee revenue for the three months ended June 30, 2018 further excludes contributions from all acquisitions completed after the second quarter of 2017.

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 their 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

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,		Twelve Months Ended June 30,	
	2018	2017	2018	2017	2018	2015 <sup>1</sup>
Net income attributable to CBRE Group, Inc.	\$ 228.7	\$ 201.8	\$ 379.0	\$ 338.8	\$ 737.3	\$ 529.4
Add:						
Depreciation and amortization	113.4	100.4	221.6	194.4	433.3	277.0
Interest expense	26.9	35.4	55.8	69.4	123.2	107.8
Write-off of financing costs on extinguished debt	-	-	28.0	-	28.0	25.8
Provision for income taxes	70.3	69.9	116.5	123.7	460.4	295.2
Less:						
Interest income	1.5	1.4	5.2	3.7	11.2	7.2
EBITDA	437.8	406.1	795.6	722.6	1,771.0	1,228.0
Adjustments:						
Carried interest incentive compensation (reversal) expense to align with the timing of associated revenue	1.5	(2.8)	(8.5)	(18.0)	1.0	19.1
Integration and other costs related to acquisitions	-	15.4	-	27.3	-	8.0
Adjusted EBITDA	\$ 439.3	\$ 418.7	\$ 787.1	\$ 731.9	\$ 1,772.0	\$ 1,255.1

See slide 26 for footnotes.

# RECONCILIATION OF NET INCOME TO ADJUSTED NET INCOME AND ADJUSTED EARNINGS PER SHARE

(\$ in millions, except per share amounts)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Net income attributable to CBRE Group, Inc.	\$ 228.7	\$ 201.8	\$ 379.0	\$ 338.8
Non-cash depreciation and amortization expense related to certain assets attributable to acquisitions	29.4	27.3	58.4	54.3
Write-off of financing costs on extinguished debt	-	-	28.0	-
Carried-interest incentive compensation expense (reversal) to align with the timing of associated revenue	1.5	(2.8)	(8.5)	(18.0)
Integration and other costs related to acquisitions	-	15.4	-	27.3
Tax impact of adjusted items	(7.0)	(14.8)	(18.6)	(23.2)
Impact of U.S. tax reform	-	-	0.5	-
Adjusted net income	\$ 252.6	\$ 226.9	\$ 438.8	\$ 379.2
Adjusted diluted earnings per share	\$ 0.74	\$ 0.67	\$ 1.28	\$ 1.11
Weighted average shares outstanding for diluted income per share	343,471,513	340,882,603	343,031,189	340,214,246

# RECONCILIATION OF REVENUE TO FEE REVENUE, CONTRACTUAL FEE REVENUE AND ORGANIC FEE REVENUE

(\$ in millions)	Three Months Ended June 30,	
	2018	2017
Consolidated revenue	\$ 5,111.4	\$ 4,439.6
Less:		
Client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients	2,575.8	2,238.6
Consolidated fee revenue	\$ 2,535.6	\$ 2,201.0
Less:		
Non-contractual fee revenue	1,342.0	1,191.9
Contractual fee revenue	\$ 1,193.6	\$ 1,009.1
 Consolidated fee revenue	 \$ 2,535.6	
Less:		
Acquisitions	(51.2)	
Organic fee revenue	\$ 2,484.4	

# RECONCILIATION OF REVENUE TO FEE REVENUE

(\$ in millions)	Three Months Ended June 30,	
	2018	2017
Occupier Outsourcing revenue <sup>1</sup>	\$ 3,183.6	\$ 2,705.3
Less:		
Client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients	2,421.4	2,091.9
Occupier Outsourcing fee revenue <sup>1</sup>	\$ 762.2	\$ 613.4
Property Management revenue <sup>1</sup>	\$ 304.6	\$ 280.0
Less:		
Client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients	154.4	146.7
Property Management fee revenue <sup>1</sup>	\$ 150.2	\$ 133.3

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

## DEVELOPMENT SERVICES RECONCILIATION OF REVENUE TO PRO-FORMA REVENUE

(\$ in millions)	Three Months Ended June 30,		Six Months Ended June 30,	
	2018	2017	2018	2017
Revenue	\$ 18.4	\$ 17.0	\$ 41.7	\$ 31.2
Add:				
Equity income from unconsolidated subsidiaries	85.7	65.4	120.6	74.3
Gain on disposition of real estate	12.3	11.3	12.3	12.7
Less:				
Non-controlling interest	0.5	-	0.2	-
Pro-forma Revenue	\$ 115.9	\$ 93.7	\$ 174.4	\$ 118.2



# FOOTNOTES

Notes – In the first quarter of 2018, the company adopted new revenue recognition guidance. Certain restatements have been made to 2017 financial statements (and thus 2017 financial information included in this presentation) to conform with the 2018 presentation. This impacts slides 4, 5, 6, 9, 10, 14, 15, 16, 17, 20, 21, 22, and 24. Local currency percent changes versus prior year is a non-GAAP measure noted on slides 4, 5, 6, 8, 15, 16, and 17. These percent changes are calculated by comparing current year results at prior year exchange rates versus prior year results. We have not reconciled the (non-GAAP) adjusted earnings per share guidance referenced in this presentation to the most directly comparable GAAP measure because this cannot be done without unreasonable effort due to the variability and low visibility with respect to costs related to acquisitions, carried interest incentive compensation and financing costs, which are potential adjustments to future earnings. We expect the variability of these items to have a potentially unpredictable, and a potentially significant, impact on our future GAAP financial results.

## Slide 4

1. Adjusted EPS excludes depreciation and amortization expense related to certain assets attributable to acquisitions, 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. All EPS information is based on diluted shares.
2. 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 5

1. 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. Organic fee revenue (fee revenue less M&A contributions) further excludes contributions from all acquisitions completed after Q2 2017.
2. Adjusted EPS excludes depreciation and amortization expense related to certain assets attributable to acquisitions, 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. All EPS information is based on diluted shares.

## Slide 6

1. Contractual revenue refers to revenue derived from our Occupier Outsourcing, Property Management, Investment Management, Valuation and Loan Servicing 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 even if delayed by a year or two during an economic downturn.
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.

# FOOTNOTES

## Slide 8

1. Excludes securities business.
2. As of June 30, 2018.
3. Adjusted EBITDA excludes (from EBITDA) certain carried interest incentive compensation expense (reversal) to align with the timing of associated revenue.

## Slide 9

1. In Process figures include Long-Term Operating Assets (LTOA) of \$0.1 billion for 2Q 18 and \$0.2 billion for 1Q 18. LTOA are projects that have achieved a stabilized level of occupancy or have been held 18-24 months following shell completion or acquisition.
2. Pipeline deals are 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 12 months out.
3. Pro-forma revenue is revenue plus equity income from unconsolidated subsidiaries and gain on disposition of real estate, net of non-controlling interests. The company believes that investors may find this measure useful to analyze the financial performance of our Development Services segment because it is more reflective of its total operations. See slide 23 for calculation.

## Slide 18

1. Pass through costs also recognized as revenue are client reimbursed costs largely associated with employees dedicated to client facilities and subcontracted vendor work performed for clients.
2. Calculation of tax rate adjusts profit before taxes to remove the portion attributable to non-controlling interests.

## Slide 20

1. These figures have not been updated for the impact of the new revenue recognition guidance.