UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the Quarterly Period Ended: March 31, 2018
Commission File No. 1-11530

Taubman Centers, Inc.

(Exact name of registrant as specified in its charter)

Michigan	38-2033632
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
200 East Long Lake Road, Suite 300, Bloomfield Hills, Michigan	48304-2324
(Address of principal executive offices)	(Zip code)

(248) 258-6800

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," “accelerated filer," “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer ☒ Accelerated Filer ☐ Non-Accelerated Filer ☐ (Do not check if a smaller reporting company)
Smaller Reporting Company ☐ Emerging Growth Company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by a check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

☐ Yes ☒ No

As of April 26, 2018 , there were outstanding 60,992,212 shares of common stock, par value $0.01 per share.

TAUBMAN CENTERS, INC.
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SIGNATURES

TAUBMAN CENTERS, INC.
CONSOLIDATED BALANCE SHEET
(in thousands, except share data)

	March 31, 2018	December 31, 2017
Assets:		
Properties	$ 4,527,155	$ 4,461,045
Accumulated depreciation and amortization	(1,311,979)	(1,276,916)
	$ 3,215,176	$ 3,184,129
Investment in Unconsolidated Joint Ventures (Note 4)	603,848	605,629
Cash and cash equivalents (Note 13)	53,920	42,499
Restricted cash (Note 13)	126,954	121,905
Accounts and notes receivable, less allowance for doubtful accounts of $13,632 and $10,237 in 2018 and 2017	73,917	78,566
Accounts receivable from related parties	2,235	1,365
Deferred charges and other assets	169,945	180,499
Total Assets	$ 4,245,995	$ 4,214,592
Liabilities:		
Notes payable, net (Note 5)	$ 3,640,128	$ 3,555,228
Accounts payable and accrued liabilities	277,743	307,041
Distributions in excess of investments in and net income of Unconsolidated Joint Ventures (Note 4)	490,485	494,851
	$ 4,408,356	$ 4,357,120
Commitments and contingencies (Notes 5, 6, 7, 8, and 9)		
Redeemable noncontrolling interest (Note 6)	$ 7,500	$ 7,500
Equity (Deficit):		
Taubman Centers, Inc. Shareowners' Equity:		
Series B Non-Participating Convertible Preferred Stock, $0.001 par and liquidation value, 40,000,000 shares authorized, 24,937,221 and 24,938,114 shares issued and outstanding at March 31, 2018 and December 31, 2017	$ 25	$ 25
Series J Cumulative Redeemable Preferred Stock, 7,700,000 shares authorized, no par, $192.5 million liquidation preference, 7,700,000 shares issued and outstanding at both March 31, 2018 and December 31, 2017		
Series K Cumulative Redeemable Preferred Stock, 6,800,000 shares authorized, no par, $170.0 million liquidation preference, 6,800,000 shares issued and outstanding at both March 31, 2018 and December 31, 2017		
Common Stock, $0.01 par value, 250,000,000 shares authorized, 60,991,114 and 60,832,918 shares issued and outstanding at March 31, 2018 and December 31, 2017	610	608
Additional paid-in capital	673,727	675,333
Accumulated other comprehensive inc ome (loss) (Notes 1, 7, and 12)	157	(6,919)
Dividends in excess of net income (Notes 1 and 7)	(667,602)	(646,807)
	$ 6,917	$ 22,240
Noncontrolling interests (Note 6)	(176,778)	(172,268)
	$ (169,861)	$ (150,028)
Total Liabilities and Equity	$ 4,245,995	$ 4,214,592

See notes to consolidated financial statements.

TAUBMAN CENTERS, INC.
CONSOLIDATED STATEMENT OF OPERATIONS AND COMPREHENSIVE INCOME
(in thousands, except share data)

	Three Months Ended March 31	
	2018	2017
Revenues:		
Minimum rents	$ 86,825	$ 84,303
Overage rents	2,625	2,575
Expense recoveries (Note 1)	51,528	53,012
Management, leasing, and development services (Note 1)	794	917
Other (Note 1)	19,720	8,276
	$ 161,492	$ 149,083
Expenses:		
Maintenance, taxes, utilities, and promotion	$ 37,637	$ 39,711
Other operating	23,866	19,319
Management, leasing, and development services	302	579
General and administrative	8,493	10,751
Restructuring charge (Note 1)	(346)	1,896
Costs associated with shareowner activism (Note 1)	3,500	3,500
Interest expense	30,823	25,546
Depreciation and amortization	35,022	37,711
	$ 139,297	$ 139,013
Nonoperating income (expense) (Notes 7, 9, and 11)	(7,143)	2,779
Income before income tax expense and equity in income of Unconsolidated Joint Ventures	$ 15,052	$ 12,849
Income tax expense (Note 3)	(184)	(208)
Equity in income of Unconsolidated Joint Ventures (Note 4)	19,728	20,118
Net income	$ 34,596	$ 32,759
Net income attributable to noncontrolling interests (Note 6)	(9,623)	(9,234)
Net income attributable to Taubman Centers, Inc.	$ 24,973	$ 23,525
Distributions to participating securities of TRG (Note 8)	(599)	(571)
Preferred stock dividends	(5,784)	(5,784)
Net income attributable to Taubman Centers, Inc. common shareowners	$ 18,590	$ 17,170
Net income	$ 34,596	$ 32,759
Other comprehensive income (Note 12):		
Unrealized gain (loss) on interest rate instruments and other	6,419	(2,803)
Cumulative translation adjustment	3,721	9,449
Reclassification adjustment for amounts recognized in net income	774	3,235
	$ 10,914	$ 9,881
Comprehensive income	$ 45,510	$ 42,640
Comprehensive income attributable to noncontrolling interests	(12,793)	(12,115)
Comprehensive income attributable to Taubman Centers, Inc.	$ 32,717	$ 30,525
Basic earnings per common share (Note 10)	$ 0.31	$ 0.28
Diluted earnings per common share (Note 10)	$ 0.30	$ 0.28
Cash dividends declared per common share	$ 0.6550	$ 0.6250
Weighted average number of common shares outstanding – basic	60,917,235	60,555,466

See notes to consolidated financial statements.

TAUBMAN CENTERS, INC.
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY (DEFICIT)
THREE MONTHS ENDED MARCH 31, 2018 AND 2017
(in thousands, except share data)

	Taubman Centers, Inc. Shareowners' Equity								
	Preferred Stock		Common Stock						
	Shares	Amount	Shares	Amount	Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Dividends in Excess of Net Income	Non-Redeemable Noncontrolling Interests	Total Equity (Deficit)
Balance, January 1, 2017	39,529,059	$ 25	60,430,613	$ 604	$657,281	$ (35,916)	$ (549,914)	$ (142,783)	$ (70,703)
Issuance of common stock pursuant to Continuing Offer (Notes 8 and 9)	(75,000)		75,005	1	(1)				—
Share-based compensation under employee and director benefit plans (Note 8)			179,802	2	5,507				5,509
Former Taubman Asia President redeemable equity adjustment (Note 6)					(266)				(266)
Adjustments of noncontrolling interests (Note 6)					(19)	(14)		(159)	(192)
Dividends and distributions							(44,283)	(17,406)	(61,689)
Other					4		137		141
Net income (excludes $192 of net loss attributable to redeemable noncontrolling interest) (Note 6)							23,525	9,426	32,951
Other comprehensive income (Note 12):									
Unrealized loss on interest rate instruments and other						(1,985)		(818)	(2,803)
Cumulative translation adjustment						6,694		2,755	9,449
Reclassification adjustment for amounts recognized in net income						2,291		944	3,235
Balance, March 31, 2017	39,454,059	$ 25	60,685,420	$ 607	$662,506	$ (28,930)	$ (570,535)	$ (148,041)	$ (84,368)
Balance, January 1, 2018	39,438,114	$ 25	60,832,918	$ 608	$675,333	$ (6,919)	$ (646,807)	$ (172,268)	$(150,028)
Issuance of common stock pursuant to Continuing Offer (Notes 8 and 9)	(893)		3,353						—
Share-based compensation under employee and director benefit plans (Note 8)			154,843	2	(1,535)				(1,533)
Adjustments of noncontrolling interests (Note 6)					(71)	9		10	(52)
Dividends and distributions							(46,331)	(17,087)	(63,418)
Other (Note 1)						(677)	563	(278)	(392)
Net income (excludes $52 of net loss attributable to redeemable noncontrolling interest) (Note 6)							24,973	9,675	34,648
Other comprehensive income (Note 12):									
Unrealized gain on interest rate instruments						4,553		1,866	6,419
Cumulative translation adjustment						2,641		1,080	3,721
Reclassification adjustment for amounts recognized in net income						550		224	774
Balance, March 31, 2018	39,437,221	$ 25	60,991,114	$ 610	$673,727	$ 157	$ (667,602)	$ (176,778)	$(169,861)

See notes to consolidated financial statements.

TAUBMAN CENTERS, INC.
CONSOLIDATED STATEMENT OF CASH FLOWS
(in thousands)

	Three Months Ended March 31	
	2018	2017
Cash Flows From Operating Activities:		
Net income	$ 34,596	$ 32,759
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization	35,022	37,711
Provision for bad debts	3,913	2,890
Fair value adjustment for marketable equity securities (Notes 1 and 11)	10,262	
Income from Unconsolidated Joint Ventures in excess of distributions (Note 1)	(3,408)	29,343
Other	4,103	5,866
Increase (decrease) in cash attributable to changes in assets and liabilities:		
Receivables, deferred charges, and other assets	1,428	(6,118)
Accounts payable and accrued liabilities	(35,310)	5,792
Net Cash Provided By Operating Activities	$ 50,606	$ 108,243
Cash Flows From Investing Activities:		
Additions to properties	$ (58,676)	$ (79,436)
Insurance proceeds for capital items at The Mall of San Juan	4,787	
Funding development deposit (Note 2)		(10,998)
Contributions to Unconsolidated Joint Ventures		(1,628)
Distributions from Unconsolidated Joint Ventures in excess of income (Notes 1 and 2)	1,726	39,289
Other	22	21
Net Cash Used In Investing Activities	$ (52,141)	$ (52,752)
Cash Flows From Financing Activities:		
Proceeds from revolving lines of credit, net	$ 13,295	$ 35,300
Debt proceeds	550,000	301,589
Debt payments	(476,654)	(303,951)
Debt issuance costs	(2,925)	(6,595)
Issuance of common stock and/or TRG Units in connection with incentive plans	(2,293)	1,964
Distributions to noncontrolling interests	(17,087)	(17,406)
Distributions to participating securities of TRG	(599)	(571)
Cash dividends to preferred shareowners	(5,784)	(5,784)
Cash dividends to common shareowners	(39,948)	(37,928)
Net Cash Provided By (Used In) Financing Activities	$ 18,005	$ (33,382)
Net Increase In Cash, Cash Equivalents, and Restricted Cash	$ 16,470	$ 22,109
Cash, Cash Equivalents, and Restricted Cash at Beginning of Period (Note 13)	164,404	152,965
Cash and Cash Equivalents, and Restricted Cash at End of Period (Note 13)	$ 180,874	$ 175,074

See notes to consolidated financial statements.

Note 1 - Interim Financial Statements

General

Taubman Centers, Inc. (the Company or TCO) is a Michigan corporation that operates as a self-administered and self-managed real estate investment trust (REIT). The Taubman Realty Group Limited Partnership (the Operating Partnership or TRG) is a majority-owned partnership subsidiary of TCO that owns direct or indirect interests in all of the Company's real estate properties. In this report, the term "Company" refers to TCO, the Operating Partnership, and/or the Operating Partnership's subsidiaries as the context may require. The Company engages in the ownership, management, leasing, acquisition, disposition, development, and expansion of retail shopping centers and interests therein. The Company's owned portfolio as of March 31, 2018 included 24 urban and suburban shopping centers operating in 11 U.S. states, Puerto Rico, South Korea, and China.

Taubman Properties Asia LLC and its subsidiaries (Taubman Asia), which is the platform for the Company's operations in China and South Korea, as well as any developments in Asia, is headquartered in Hong Kong.

The unaudited interim financial statements should be read in conjunction with the audited financial statements and related notes included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017 . In the opinion of management, all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the financial statements for the interim periods have been made. The results of interim periods are not necessarily indicative of the results for a full year.

Dollar amounts presented in tables within the notes to the financial statements are stated in thousands, except share data or as otherwise noted.

Consolidation

The consolidated financial statements of the Company include all accounts of the Company, the Operating Partnership, and its consolidated subsidiaries, including The Taubman Company LLC (the Manager) and Taubman Asia. All intercompany transactions have been eliminated. The entities included in these consolidated financial statements are separate legal entities and maintain records and books of account separate from any other entity. However, inclusion of these separate entities in the consolidated financial statements does not mean that the assets and credit of each of these legal entities are available to satisfy the debts or other obligations of any other such legal entity included in the consolidated financial statements.

In determining the method of accounting for partially owned joint ventures, the Company evaluates the characteristics of associated entities and determines whether an entity is a variable interest entity (VIE), and, if so, determines whether the Company is the primary beneficiary by analyzing whether the Company has both the power to direct the entity's significant economic activities and the obligation to absorb potentially significant losses or receive potentially significant benefits. Significant judgments and assumptions inherent in this analysis include the nature of the entity's operations, the entity's financing and capital structure, and contractual relationship and terms, including consideration of governance and decision making rights. The Company consolidates a VIE when it has determined that it is the primary beneficiary. All of the Company's consolidated joint ventures, including the Operating Partnership, meet the definition and criteria as VIEs, as either the Company or an affiliate of the Company is the primary beneficiary of each VIE.

The Company's sole significant asset is its investment in the Operating Partnership and, consequently, substantially all of the Company's consolidated assets and liabilities are assets and liabilities of the Operating Partnership. All of the Company's debt (Note 5) is an obligation of the Operating Partnership or its consolidated subsidiaries. Note 5 also provides disclosure of guarantees provided by the Operating Partnership to certain consolidated joint ventures. Note 6 provides additional disclosures of the carrying balance of the noncontrolling interests in its consolidated joint ventures and other information, including a description of certain rights of the noncontrolling owners.

Investments in entities not controlled but over which the Company may exercise significant influence (Unconsolidated Joint Ventures or UJVs) are accounted for under the equity method. The Company has evaluated its investments in the Unconsolidated Joint Ventures under guidance for determining whether an entity is a VIE and has concluded that the ventures are not VIEs. Accordingly, the Company accounts for its interests in these entities under general accounting standards for investments in real estate ventures (including guidance for determining effective control of a limited partnership or similar entity). The Company's partners or other owners in these Unconsolidated Joint Ventures have substantive participating rights including approval rights over annual operating budgets, capital spending, financing, admission of new partners/members, or sale of the properties and the Company has concluded that the equity method of accounting is appropriate for these interests. Specifically, the Company's 79% and 50.1% investments in Westfarms and International Plaza, respectively, are through general partnerships in which the other general partners have participating rights over annual operating budgets, capital spending, refinancing, or sale of the property. The Company provides its beneficial interest in certain financial information of its Unconsolidated Joint Ventures (Notes 4 and 5). This beneficial information is derived as the Company's ownership interest in the investee multiplied by the specific financial statement item being presented. Investors are cautioned that deriving the Company's beneficial interest in this manner may not accurately depict the legal and economic implications of holding a noncontrolling interest in the investee.

Ownership

In addition to common stock, there were three classes of preferred stock outstanding (Series B, J, and K) as of March 31, 2018 . Dividends on the 6.5% Series J Cumulative Redeemable Preferred Stock (Series J Preferred Stock) and the 6.25% Series K Cumulative Redeemable Preferred Stock (Series K Preferred Stock) are cumulative and are paid on the last business day of each calendar quarter. The Company owns corresponding Series J and Series K Preferred Equity interests in the Operating Partnership that entitle the Company to income and distributions (in the form of guaranteed payments) in amounts equal to the dividends payable on the Company's Series J and Series K Preferred Stock.

The Company also is obligated to issue to partners in the Operating Partnership other than the Company, upon subscription, one share of nonparticipating Series B Preferred Stock per each unit of limited partnership in TRG (TRG Unit) . The Series B Preferred Stock entitles its holders to one vote per share on all matters submitted to the Company's shareowners and votes together with the common stock on such matters as a single class. The holders of Series B Preferred Stock are not entitled to dividends or earnings. The Series B Preferred Stock is convertible into common stock at a ratio of 14,000 shares of Series B Preferred Stock for one share of common stock .

Outstanding voting securities of the Company at March 31, 2018 consisted of 24,937,221 shares of Series B Preferred Stock and 60,991,114 shares of common stock.

The Operating Partnership

At March 31, 2018 , the Operating Partnership's equity included two classes of preferred equity (Series J and K) and the net equity of the TRG unitholders. Net income and distributions of the Operating Partnership are allocable first to the preferred equity interests, and the remaining amounts to the general and limited partners in the Operating Partnership in accordance with their percentage ownership. The Series J and Series K Preferred Equity are owned by the Company and are eliminated in consolidation.

The Company's ownership in the Operating Partnership at March 31, 2018 consisted of a 71% managing general partnership interest, as well as the Series J and Series K Preferred Equity interests. The Company's average ownership percentage in the Operating Partnership for both the three months ended March 31, 2018 and 2017 was 71% . At March 31, 2018 , the Operating Partnership had 85,943,093 TRG Units outstanding, of which the Company owned 60,991,114 TRG Units. Disclosures about TRG Units outstanding exclude TRG Profits Units granted or other share-based grants for which TRG Units may eventually be issued (Note 8).

Restructuring Charge

The Company has been undergoing a restructuring to reduce its workforce and reorganize various areas of the organization in response to the completion of another major development cycle and the current near-term challenges facing the U.S. mall industry. During the three months ended March 31, 2018 , the Company recorded an adjustment to previously recognized charges resulting in a reversal of expense of $0.3 million . During the three months ended March 31, 2017 , the Company incurred $1.9 million of expenses related to the restructuring. These expenses have been separately classified as Restructuring Charge on the Consolidated Statement of Operations and Comprehensive Income. As of March 31, 2018 , $0.7 million of the restructuring costs recognized during 2017 and 2018 were unpaid and remained accrued.

Costs Associated with Shareowner Activism

During both the three months ended March 31, 2018 and 2017 , the Company incurred $3.5 million of expense in each period associated with activities related to shareowner activism, largely legal and advisory services. Also included in the activism costs for the three months ended March 31, 2018 is a retention program for certain employees. Given the uncertainties associated with shareowner activism and to ensure the retention of top talent in key positions within the Company, certain key employees were provided certain incentive benefits in the form of cash and/or equity retention awards. The Company and the Board of Directors believe these benefits are instrumental in ensuring the continued success of the Company. Due to the unusual and infrequent nature of these expenses in the Company's history, they have been separately classified as Costs Associated with Shareowner Activism on the Company's Consolidated Statement of Operations and Comprehensive Income.

Management’s Responsibility to Evaluate the Company’s Ability to Continue as a Going Concern

When preparing financial statements for each annual and interim reporting period, management has the responsibility to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Company's ability to continue as a going concern within one year after the date that the financial statements are issued. No such conditions or events were identified as of the issuance date of the financial statements contained in this Quarterly Report on Form 10-Q.

Change in Accounting Policies

Recognition and Measurement of Financial Assets and Financial Liabilities

On January 1, 2018, the Company adopted Accounting Standards Update (ASU) No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities", which changed certain aspects of recognition, measurement, presentation, and disclosure of financial instruments. As such, the Company now measures equity investments at fair value through net income, except for those that result in consolidation or are accounted for under the equity method. Upon adoption, the Company applied the modified-retrospective approach and recorded a one-time cumulative-effect adjustment to reclassify $1.0 million of historical unrealized gains on the fair value adjustments as of December 31, 2017 of its 590,124 Simon Property Group (SPG) common shares investment from Accumulated Other Comprehensive Income (Loss) (AOCI) to Dividends in Excess of Net Income on the Company's Consolidated Balance Sheet. Beginning in January 2018, changes in the fair value of any outstanding SPG common shares are being recorded in Nonoperating Income (Expense) on the Company's Consolidated Statement of Operations and Comprehensive Income (Note 11).

Cash Flow Statement Presentation

On January 1, 2018, the Company adopted ASU No. 2016-18, "Statement of Cash Flows - Restricted Cash", which changed the presentation of restricted cash and changes in restricted cash on the Consolidated Statement of Cash Flows. As a result, the Company changed the presentation of its Consolidated Statement of Cash Flows for both the three months ended March 31, 2018 and 2017 to include restricted cash. Refer to Note 13 for a reconciliation of cash, cash equivalents, and restricted cash reported within the Consolidated Balance Sheet that sum to the total of the same such amounts on the Consolidated Statement of Cash Flows. In connection with the adoption this ASU, the Company revisited its accounting policies and presentation in regards to cash, deposits, and other investments subject to restrictions. In doing so, the Company reclassified $119.2 million from Deferred Charges and Other Assets to Restricted Cash on the Consolidated Balance Sheet as of December 31, 2017, to conform to current year classifications.

On January 1, 2018, the Company adopted ASU No. 2016-15, "Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments", which clarified the presentation of certain cash receipts and payments, including the classification of distributions received from equity method investees, on the Consolidated Statement of Cash Flows. In connection with the adoption of this ASU on January 1, 2018, the Company re-evaluated its current methodology and retrospectively changed the presentation of the Consolidated Statement of Cash Flows for the three months ended March 31, 2017 to re-classify prior year balances to correspond with current year classifications, specifically related to distributions received from equity method investees.

Adoption of Accounting Standards Codification (ASC) Topic 606 ("Revenue from Contracts with Customers")

General

On January 1, 2018, the Company adopted ASC Topic 606, Revenue from Contracts with Customers. ASC Topic 606 provides a single comprehensive model to use in accounting for revenue arising from contracts with customers, and gains and losses arising from transfers of non-financial assets including sales of property and equipment, real estate, and intangible assets. The Company adopted ASC Topic 606 for all applicable contracts using the modified retrospective method, which would have required a cumulative-effect adjustment, if any, as of the date of adoption. The adoption of ASC Topic 606 did not have a material impact on the Company's consolidated financial statements as of the date of adoption, and therefore a cumulative-effect adjustment was not required.

The Company applied ASC Topic 606 using certain practical expedients. As a result of this election, the Company will not disclose the aggregate amount of the transaction price for unsatisfied, or partially unsatisfied, performance obligations for all contracts with an original expected length of one year or less and management contracts for which the Company recognizes revenue based on its right to invoice for management, leasing, and development services performed. Refer to the "Nature of Services and Performance Obligations" section for further discussion of these services.

Disaggregation of Revenue

The nature, amount, timing, and uncertainty of individual types of revenues may be affected differently by economic factors. Under ASC Topic 606, the Company is required to disclose a disaggregation of its revenues derived from contracts from customers that considers economic differences between revenue types. The following table summarizes the Company’s disaggregation of consolidated revenues for this purpose.

	Three Months Ended March 31	
	2018	2017
Expense recoveries	$ 51,528	$ 53,012
Shopping center and other operational revenues (1)	10,820	7,644
Management, leasing, and development services	794	917
Total revenue from contracts with customers	$ 63,142	$ 61,573

(1) Represents consolidated Other revenue reported on the Consolidated Statement of Operations and Comprehensive Income excluding lease cancellation income.

Nature of Services and Performance Obligations

Expense recoveries revenue represents reimbursements from mall tenants for (1) services performed by the Company to the benefit of all mall tenants and the property as a whole for common area maintenance, (2) insurance, property taxes, and utilities, and (3) promotion and other miscellaneous charges. As these expense recoveries are provided for under tenant lease agreements, these revenues will not be evaluated under ASC Topic 606 until the Company's adoption of ASU No. 2016-02, Leases, which will be adopted as of January 1, 2019.

Shopping center and other operational revenues represent a collection of non-core revenue streams that are generated through the course of owning and operating a shopping center, including sponsorship, parking, and storage income, as well as revenues from food and beverage operations. The contracts for these revenue streams are predominately short-term in nature and individually do not contain more than one performance obligation. The Company satisfies its performance obligations related to shopping center and other operational revenues either over time or at a point in time, depending on the specific nature of the revenue generating activity. For performance obligations that are satisfied at a point in time, including food and beverage and parking income, the control of the good or service is immediately transferred to the customer upon completion of the performance obligation. Payment terms related to shopping center and other operational revenues vary depending on the nature of the agreement, however, payment is generally due directly upon the satisfaction of the related performance obligation.

Management, leasing, and development services revenue represents income from various services performed by the Company for its third party customers, as provided for under management agreements. These services typically generate fees that are based on operating results of the shopping centers, the execution and opening of mall tenants, and/or the successful completion of other agreed-upon services. As each management agreement provides for a variety of services, significant judgment is required to identify multiple performance obligations. The standalone selling price of each performance obligation is determined based on the terms of the management agreement and the specific services being rendered. Each performance obligation is considered to be satisfied over time as services are rendered. The related revenue is recognized upon billing, as the amounts invoiced generally correspond directly with the value the customer is receiving from the services. Customers are invoiced on quarterly basis and payment is generally due within 30 days of each calendar quarter.

Information about Contract Balances and Unsatisfied Performance Obligations

Contract assets exist when the Company has a right to payment for services rendered that remains conditional on factors other than the passage of time. Similarly, contract liabilities are incurred when customers prepay for services to be rendered. Certain revenue streams within shopping center and other operational revenues may give rise to contract assets and liabilities. However, these revenue streams are generally short-term in nature and the difference between revenue recognition and cash collection, although variable, does not differ significantly from period to period. As of March 31, 2018 , the Company had an inconsequential amount of contract assets and liabilities.

The aggregate amount of the transaction price allocated to the Company's performance obligations that were unsatisfied, or partially unsatisfied, as of March 31, 2018 were inconsequential.

Note 2 - Disposition, Redevelopments, and Developments

Disposition

Valencia Place Office Tower at Country Club Plaza

In March 2017, the Company's joint venture with The Macerich Company sold the Valencia Place office tower at Country Club Plaza for $75.2 million ($37.6 million at TRG's beneficial share), which was a component of the mixed-use property at the center. The joint venture recognized a gain on this sale, of which TRG's beneficial share, net of tax, was $2.1 million . The gain was included within Equity in income of Unconsolidated Joint Ventures on the Consolidated Statement of Operations and Comprehensive Income as the Company's 50% ownership interest in the office tower was accounted for as an Unconsolidated Joint Venture under the equity method.

Redevelopments

The Company has ongoing redevelopment projects at Beverly Center and The Mall at Green Hills, which are expected to be completed in 2018 and 2019, respectively. In total, these two redevelopment projects are expected to cost approximately $700 million . As of March 31, 2018 , the Company's total capitalized costs related to these redevelopment projects were $426.2 million .

Asia Developments

Operating Center

CityOn.Zhengzhou, a shopping center located in Zhengzhou, China, opened in March 2017. This investment is classified within Investment in Unconsolidated Joint Ventures on the Consolidated Balance Sheet.

South Korea Project

The Company was previously exploring a second development opportunity in South Korea with Shinsegae Group, the Company's partner in Starfield Hanam. In March 2017, the Company made a refundable deposit of $11.0 million relating to a potential development site. After performing due diligence, the Company decided not to proceed with the project. The deposit, including a 5% return, was returned to the Company in November 2017.

Note 3 - Income Taxes

Income Tax Expense (Benefit)

The Company's income tax expense (benefit) for the three months ended March 31, 2018 and 2017 consisted of the following:

	Three Months Ended March 31	
	2018	2017
Federal deferred	$ (87)	$ 152
Foreign current	172	88
Foreign deferred	138	(121)
State current	3	86
State deferred	(42)	3
Total income tax expense	$ 184	$ 208

Deferred Taxes

Deferred tax assets and liabilities as of March 31, 2018 and December 31, 2017 were as follows:

	2018	2017
Deferred tax assets:		
Federal	$ 589	$ 503
Foreign	1,620	1,788
State	589	545
Total deferred tax assets	$ 2,798	$ 2,836
Valuation allowances	(1,591)	(1,620)
Net deferred tax assets	$ 1,207	$ 1,216
Deferred tax liabilities:		
Foreign	$ 1,701	$ 1,517
Total deferred tax liabilities	$ 1,701	$ 1,517

During the fourth quarter of 2017, the Tax Cuts and Jobs Act of 2017 was signed into law and reduced the corporate tax rate from 34% down to 21% . All Federal deferred tax assets and liabilities have been reported at the new 21% Federal corporate rate.

The Company believes that it is more likely than not that the results of future operations will generate sufficient taxable income to recognize the net deferred tax assets. These future operations are primarily dependent upon the Manager's profitability, the timing and amounts of gains on peripheral land sales, the profitability of Taubman Asia's operations, and other factors affecting the results of operations of the taxable REIT subsidiaries. The valuation allowances relate to net operating loss carryforwards and tax basis differences where there is uncertainty regarding their realizability.

Note 4 - Investments in Unconsolidated Joint Ventures

General Information

The Company owns beneficial interests in joint ventures that own shopping centers. The Operating Partnership is the sole direct or indirect managing general partner or managing member of Fair Oaks Mall, International Plaza, Stamford Town Center, Sunvalley, The Mall at University Town Center, and Westfarms. The Operating Partnership also provides certain management, leasing, and/or development services to the other shopping centers noted below.

Shopping Center	Ownership as of March 31, 2018 and December 31, 2017
CityOn.Xi'an	50%
CityOn.Zhengzhou	49
Country Club Plaza	50
Fair Oaks Mall	50
International Plaza	50.1
The Mall at Millenia	50
Stamford Town Center	50
Starfield Hanam	34.3
Sunvalley	50
The Mall at University Town Center	50
Waterside Shops	50
Westfarms	79

The Company's carrying value of its investment in Unconsolidated Joint Ventures differs from its share of the partnership or members' equity reported on the combined balance sheet of the Unconsolidated Joint Ventures due to (i) the Company's cost of its investment in excess of the historical net book values of the Unconsolidated Joint Ventures and (ii) the Operating Partnership's adjustments to the book basis, including intercompany profits on sales of services that are capitalized by the Unconsolidated Joint Ventures. The Company's additional basis allocated to depreciable assets is recognized on a straight-line basis over 40 years . The Operating Partnership's differences in bases are amortized over the useful lives or terms of the related assets and liabilities.

In its Consolidated Balance Sheet, the Company separately reports its investment in Unconsolidated Joint Ventures for which accumulated distributions have exceeded investments in and net income of the Unconsolidated Joint Ventures. The net equity of certain joint ventures is less than zero because distributions are usually greater than net income, as net income includes non-cash charges for depreciation and amortization. In addition, any distributions related to refinancing of the centers further decrease the net equity of the centers.

Combined Financial Information

Combined balance sheet and results of operations information is presented in the following table for the Unconsolidated Joint Ventures, followed by the Operating Partnership's beneficial interest in the combined operations information. Beneficial interest is calculated based on the Operating Partnership's ownership interest in each of the Unconsolidated Joint Ventures.

	March 31, 2018	December 31, 2017
Assets:		
Properties	$ 3,762,220	$ 3,756,890
Accumulated depreciation and amortization	(789,714)	(767,678)
	$ 2,972,506	$ 2,989,212
Cash and cash equivalents	140,243	147,102
Accounts and notes receivable, less allowance for doubtful accounts of $5,967 and $4,706 in 2018 and 2017	125,570	121,173
Deferred charges and other assets	121,356	136,837
	$ 3,359,675	$ 3,394,324
Liabilities and accumulated equity (deficiency) in assets:		
Notes payable, net	$ 2,854,469	$ 2,860,384
Accounts payable and other liabilities	441,808	471,948
TRG's accumulated deficiency in assets	(45,562)	(48,338)
Unconsolidated Joint Venture Partners' accumulated equity in assets	108,960	110,330
	$ 3,359,675	$ 3,394,324
TRG's accumulated deficiency in assets (above)	$ (45,562)	$ (48,338)
TRG's advances to CityOn.Zhengzhou	47,359	46,106
TRG basis adjustments, including elimination of intercompany profit	62,929	63,886
TCO's additional basis	48,637	49,124
Net investment in Unconsolidated Joint Ventures	$ 113,363	$ 110,778
Distributions in excess of investments in and net income of Unconsolidated Joint Ventures	490,485	494,851
Investment in Unconsolidated Joint Ventures	$ 603,848	$ 605,629

	Three Months Ended March 31	
	2018	2017
Revenues	$ 155,288	$ 140,600
Maintenance, taxes, utilities, promotion, and other operating expenses	$ 52,790	$ 48,380
Interest expense	32,467	30,369
Depreciation and amortization	32,784	29,767
Total operating costs	$ 118,041	$ 108,516
Nonoperating income, net	347	1,851
Income tax expense	(1,416)	(2,943)
Gain on disposition, net of tax (1)	—	3,713
Net income	$ 36,178	$ 34,705
Net income attributable to TRG	$ 18,706	$ 18,422
Realized intercompany profit, net of depreciation on TRG's basis adjustments	1,509	2,183
Depreciation of TCO's additional basis	(487)	(487)
Equity in income of Unconsolidated Joint Ventures	$ 19,728	$ 20,118
Beneficial interest in Unconsolidated Joint Ventures' operations:		
Revenues less maintenance, taxes, utilities, promotion, and other operating expenses	$ 54,244	$ 51,101
Interest expense	(16,751)	(15,781)
Depreciation and amortization	(17,055)	(15,652)
Income tax expense	(710)	(1,633)
Gain on disposition, net of tax (1)	—	2,083
Equity in income of Unconsolidated Joint Ventures	$ 19,728	$ 20,118

(1) Amount represents the gain related to the sale of the Valencia Place office tower at Country Club Plaza in March 2017 (Note 2).

Related Party

In 2016, the Company issued a note receivable to CityOn.Zhengzhou for purposes of funding development costs. The balance of the note receivable was $47.4 million and $46.1 million as of March 31, 2018 and December 31, 2017 , respectively, and was classified within Investment in Unconsolidated Joint Ventures on the Consolidated Balance Sheet.

Note 5 - Beneficial Interest in Debt and Interest Expense

The Operating Partnership's beneficial interest in the debt, capitalized interest, and interest expense of its consolidated subsidiaries and its Unconsolidated Joint Ventures is summarized in the following table. The Operating Partnership's beneficial interest in the consolidated subsidiaries excludes debt and interest related to the noncontrolling interest in Cherry Creek Shopping Center (50%) and International Market Place (6.5%).

	At 100%		At Beneficial Interest	
	Consolidated Subsidiaries	Unconsolidated Joint Ventures	Consolidated Subsidiaries	Unconsolidated Joint Ventures
Debt as of:				
March 31, 2018	$ 3,640,128	$ 2,854,469	$ 3,346,646	$ 1,456,561
December 31, 2017	3,555,228	2,860,384	3,261,777	1,459,854
Capitalized interest:				
Three Months Ended March 31, 2018	$ 3,293	$ —	$ 3,285	$ —
Three Months Ended March 31, 2017	4,081 (1)	551 (2)	4,039 (1)	551 (2)
Interest expense:				
Three Months Ended March 31, 2018	$ 30,823	$ 32,467	$ 27,812	$ 16,751
Three Months Ended March 31, 2017	25,546	30,369	22,571	15,781

(1) The Company capitalizes interest costs incurred in funding its equity contributions to development projects accounted for as Unconsolidated Joint Ventures. The capitalized interest cost is included in the Company's basis in its investment in Unconsolidated Joint Ventures. Such capitalized interest reduces interest expense on the Consolidated Statement of Operations and Comprehensive Income and in the table above is included within Consolidated Subsidiaries.

(2) Capitalized interest on the Asia Unconsolidated Joint Venture construction financing is presented at the Company's beneficial interest in both the Unconsolidated Joint Ventures (at 100%) and Unconsolidated Joint Ventures (at Beneficial Interest) columns.

2018 Financings

In March 2018, the Company completed a five -year, $ 250 million unsecured term loan. TRG is the borrower under the loan, which bears interest at a range of LIBOR plus 1.25% to LIBOR plus 1.90% based on the Company's total leverage ratio. The proceeds from this financing, in conjunction with the proceeds from the financing for Twelve Oaks Mall (see below), were used to pay off the Company's existing $ 475 million unsecured term loan. The Company's existing swaps on the $ 475 million unsecured term loan were applied to other unsecured debt, including the new $ 250 million unsecured term loan, resulting in an effective interest rate on the new term loan in the range of 2.89% to 3.54% through the remaining swap period ending in February 2019 . The loan includes an accordion feature which would increase the Company's borrowing capacity to as much as $400 million if fully exercised, subject to obtaining additional lender commitments, customary closing conditions, covenant compliance, and minimum asset values for the unencumbered asset pool.

In February 2018, a 10 -year, $ 300 million non-recourse financing was completed for Twelve Oaks Mall. The payments on the loan, which bears interest at a fixed interest rate of 4.85% , began in April 2018 and are amortizing principal based on 30 years . As a result of this financing, Twelve Oaks Mall was removed as a guarantor and an unencumbered asset under the primary unsecured revolving line of credit and the unsecured term loans.

Upcoming Maturities

The construction facility for International Market Place matures in August 2018. As of March 31, 2018 , the outstanding balance of this construction facility was $293.8 million . The Company is currently evaluating options related to refinancing or exercising the initial one-year extension option.

The loan for The Mall at Green Hills matures in December 2018. The Company plans to exercise the initial one-year extension option upon maturity.

Debt Covenants and Guarantees

Certain loan agreements contain various restrictive covenants, including the following corporate covenants on the Company's primary unsecured revolving line of credit, $300 million and $250 million unsecured term loans, and the construction facility on International Market Place: a minimum net worth requirement, a maximum total leverage ratio, a maximum secured leverage ratio, a minimum fixed charge coverage ratio, a maximum recourse secured debt ratio, and a maximum payout ratio. In addition, the Company's primary unsecured revolving line of credit and unsecured term loans have unencumbered pool covenants, which currently apply to Beverly Center, Dolphin Mall, and The Gardens on El Paseo on a combined basis. These covenants include a minimum number and minimum value of eligible unencumbered assets, a maximum unencumbered leverage ratio, a minimum unencumbered interest coverage ratio, and a minimum unencumbered asset occupancy ratio. As of March 31, 2018 , the corporate total leverage ratio was the most restrictive covenant. The Company was in compliance with all of its covenants and loan obligations as of March 31, 2018 . The maximum payout ratio covenant limits the payment of distributions generally to 95% of funds from operations, as defined in the loan agreements, except as required to maintain the Company's tax status, pay preferred distributions, and for distributions related to the sale of certain assets.

In connection with the financing of the construction facility at International Market Place, the Operating Partnership has provided an unconditional guarantee of the construction loan principal balance and all accrued but unpaid interest during the term of the loan. The Operating Partnership has also provided a guarantee as to the completion of construction of the center. The maximum amount of the construction facility is $330.9 million . The outstanding balance of the International Market Place construction facility as of March 31, 2018 was $293.8 million . Accrued but unpaid interest as of March 31, 2018 was $0.9 million . The Company believes the likelihood of a payment under the guarantees to be remote.

In connection with the $175 million additional financing at International Plaza, which is owned by an Unconsolidated Joint Venture, the Operating Partnership provided an unconditional and several guarantee of 50.1% of all obligations and liabilities related to an interest rate swap that was required on the debt for the term of the loan. As of March 31, 2018 , the interest rate swap was in an asset position and had an inconsequential amount of unpaid interest. The Company believes the likelihood of a payment under the guarantee to be remote.

Note 6 - Noncontrolling Interests

Redeemable Noncontrolling Interests

Taubman Asia President

In September 2016, the Company announced the appointment of Peter Sharp (Successor Asia President) as president of Taubman Asia, a consolidated subsidiary, succeeding René Tremblay (Former Asia President) effective January 1, 2017. The Former Asia President was employed by the Company in another capacity through September 30, 2017.

The Former Asia President has an ownership interest in Taubman Asia. This interest entitles the Former Asia President to 5% of Taubman Asia's dividends, with 85% of his dividends relating to investment activities undergone prior to the Successor Asia President obtaining an ownership interest (see below) being withheld as contributions to capital. These withholdings will continue until he contributes and maintains his capital consistent with his percentage ownership interest, including all capital funded by the Operating Partnership for Taubman Asia's operating and investment activities subsequent to the Former Asia President obtaining his ownership interest. The Operating Partnership has a preferred investment in Taubman Asia to the extent the Former Asia President has not yet contributed capital commensurate with his ownership interest. This preferred investment accrues an annual preferential return equal to the Operating Partnership's average borrowing rate (with the preferred investment and accrued return together being referred to herein as the preferred interest). In addition, Taubman Asia has the ability to call, and the Former Asia President has the ability to put, the Former Asia President’s ownership interest upon Taubman Asia's properties reaching certain specified milestones. The redemption price for the ownership interest is the fair value of the ownership interest less the amount required to return the Operating Partnership's preferred interest. The Company has determined that the Former Asia President's ownership interest in Taubman Asia qualifies as an equity award, considering its specific redemption provisions, and accounts for it as a contingently redeemable noncontrolling interest. The Company presents as temporary equity at each balance sheet date an estimate of the redemption value of the ownership interest, therefore falling into level 3 of the fair value hierarchy. As of both March 31, 2018 and December 31, 2017 , the carrying amount of this redeemable equity was $7.5 million . Any adjustments to the redemption value are recorded through equity.

In April 2016, the Company reacquired half of the Former Asia President’s previous 10% ownership interest in Taubman Asia for $7.2 million . The Former Asia President contributed $2 million to Taubman Asia, which may be returned, in part or in whole, upon satisfaction of the re-evaluation of the full liquidation value of Taubman Asia as of April 2016; such re-evaluation will be performed at the Former Asia President's election on or after the third anniversary of the opening of specified Asia projects. The Former Asia President’s current 5% interest is puttable beginning in 2019 at the earliest and was classified as Redeemable Noncontrolling Interest on the Consolidated Balance Sheet.

The Successor Asia President also has an ownership interest in Taubman Asia. This interest entitles the Successor Asia President to 3% of Taubman Asia's dividends for investment activities undergone by Taubman Asia subsequent to him obtaining his ownership interest, with all of his dividends being withheld as contributions to capital. These withholdings will continue until he contributes and maintains his capital consistent with his percentage ownership interest, including all capital funded by the Operating Partnership for Taubman Asia's operating and investment activities subsequent to the Successor Asia President obtaining his ownership interest. The Operating Partnership has a preferred investment in Taubman Asia to the extent the Successor Asia President has not yet contributed capital commensurate with his ownership interest. This preferred investment accrues an annual preferential return equal to the Operating Partnership's average borrowing rate (with the preferred investment and accrued return together being referred to herein as the preferred interest). In addition, Taubman Asia has the ability to call, and the Successor Asia President has the ability to put, the Successor Asia President’s ownership interest upon specified terminations of the Successor Asia President’s employment, although such put or call right may not be exercised for specified time periods after certain termination events. The redemption price for the ownership interest is 50% (increasing to 100% as early as January 2022) of the fair value of the ownership interest less the amount required to return the Operating Partnership's preferred interest. The Company has determined that the Successor Asia President's ownership interest in Taubman Asia qualifies as an equity award, considering its specific redemption provisions, and accounts for it as a contingently redeemable noncontrolling interest. As of March 31, 2018 , the carrying amount of this redeemable equity was zero . Any adjustments to the redemption value are recorded through equity.

International Market Place

The Company owns a 93.5% controlling interest in a joint venture that owns International Market Place in Waikiki, Honolulu, Hawaii, which opened in August 2016. The 6.5% joint venture partner has no obligation and no right to contribute capital. The Company is entitled to a preferential return on its capital contributions. The Company has the right to purchase the joint venture partner's interest and the joint venture partner has the right to require the Company to purchase the joint venture partner's interest after the third anniversary of the opening of the center, and annually thereafter. The purchase price of the joint venture partner's interest will be based on fair value. Considering the redemption provisions, the Company accounts for the joint venture partner's interest as a contingently redeemable noncontrolling interest with a carrying value of zero at both March 31, 2018 and December 31, 2017 . Any adjustments to the redemption value are recorded through equity.

Reconciliation of Redeemable Noncontrolling Interest

	Three Months Ended March 31	
	2018	2017
Balance, January 1	$ 7,500	$ 8,704
Former Taubman Asia President vested redeemable equity		266
Allocation of net loss	(52)	(192)
Adjustments of redeemable noncontrolling interest	52	192
Balance, March 31	$ 7,500	$ 8,970

Equity Balances of Non-redeemable Noncontrolling Interests

The net equity balance of the non-redeemable noncontrolling interests as of March 31, 2018 and December 31, 2017 included the following:

	2018	2017
Non-redeemable noncontrolling interests:		
Noncontrolling interests in consolidated joint ventures	$ (159,654)	$ (160,359)
Noncontrolling interests in partnership equity of TRG	(17,124)	(11,909)
	$ (176,778)	$ (172,268)

Net Income (Loss) Attributable to Noncontrolling Interests

Net income (loss) attributable to the noncontrolling interests for the three months ended March 31, 2018 and 2017 included the following:

	Three Months Ended March 31	
	2018	2017
Net income (loss) attributable to noncontrolling interests:		
Non-redeemable noncontrolling interests:		
Noncontrolling share of income of consolidated joint ventures	$ 1,396	$ 1,636
Noncontrolling share of income of TRG	8,279	7,790
	$ 9,675	$ 9,426
Redeemable noncontrolling interest:	(52)	(192)
	$ 9,623	$ 9,234

Equity Transactions

The following table presents the effects of changes in Taubman Centers, Inc.'s ownership interest in consolidated subsidiaries on Taubman Centers, Inc.'s equity for the three months ended March 31, 2018 and 2017 :

	Three Months Ended March 31	
	2018	2017
Net income attributable to Taubman Centers, Inc. common shareowners	$ 18,590	$ 17,170
Transfers (to) from the noncontrolling interest:		
(Decrease) increase in Taubman Centers, Inc.'s paid-in capital for adjustments of noncontrolling interest (1)	(71)	(19)
Net transfers (to) from noncontrolling interests	(71)	(19)
Change from net income attributable to Taubman Centers, Inc. and transfers (to) from noncontrolling interests	$ 18,519	$ 17,151

(1) In 2018 and 2017, adjustments of the noncontrolling interest were made as a result of changes in the Company's ownership of the Operating Partnership in connection with the Company's share-based compensation under employee and director benefit plans (Note 8), issuances of common stock pursuant to the Continuing Offer (Note 9), and in connection with the accounting for the Former Asia President's redeemable ownership interest.

Finite Life Entities

ASC Topic 480, "Distinguishing Liabilities from Equity" establishes standards for classifying and measuring as liabilities certain financial instruments that embody obligations of the issuer and have characteristics of both liabilities and equity. At March 31, 2018 , the Company held a controlling interest in a consolidated entity with a specified termination date in 2083 . The noncontrolling owners' interest in this entity is to be settled upon termination by distribution or transfer of either cash or specific assets of the underlying entity. The estimated fair value of this noncontrolling interest was approximately $360 million at March 31, 2018 , compared to a book value of $(159.7) million that is classified in Noncontrolling Interests on the Company's Consolidated Balance Sheet. The fair value of the noncontrolling interest was calculated as the noncontrolling interest's effective ownership share of the underlying property's fair value. The property's fair value was estimated by considering its in-place net operating income, current market capitalization rate, and mortgage debt outstanding.

Note 7 - Derivative and Hedging Activities

Risk Management Objective and Strategies for Using Derivatives

The Company uses derivative instruments, such as interest rate swaps and interest rate caps, primarily to manage exposure to interest rate risks inherent in variable rate debt and refinancings. The Company may also enter into forward starting swaps or treasury lock agreements to set the effective interest rate on a planned fixed-rate financing. The Company's interest rate swaps involve the receipt of variable-rate amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount. Interest rate caps involve the receipt of variable-rate amounts from a counterparty if interest rates rise above the strike rate on the contract in exchange for an up-front premium. In a forward starting swap or treasury lock agreement that the Company cash settles in anticipation of a fixed rate financing or refinancing, the Company will receive or pay an amount equal to the present value of future cash flow payments based on the difference between the contract rate and market rate on the settlement date.

The Company does not use derivatives for trading or speculative purposes and currently does not have any derivatives that are not designated as hedging instruments under the accounting requirements for derivatives and hedging.

As of March 31, 2018 , the Company had the following outstanding derivatives that were designated and are expected to be effective as cash flow hedges of the interest payments and/or the currency exchange rate on the associated debt.

Instrument Type	Ownership	Notional Amount	Swap Rate	Credit Spread on Loan	Total Swapped Rate on Loan	Maturity Date
Consolidated Subsidiaries:						
Receive variable (LIBOR) /pay-fixed swap (1)	100%	$ 200,000	1.64%	1.60% (1)	3.24% (1)	February 2019
Receive variable (LIBOR) /pay-fixed swap (1)	100%	175,000	1.65%	1.45% (1)	3.10% (1)	February 2019
Receive variable (LIBOR) /pay-fixed swap (1)	100%	100,000	1.64%	1.45% / 1.60% (1)	3.09% / 3.24% (1)	February 2019
Receive variable (LIBOR) /pay-fixed swap (2)	100%	100,000	2.14%	1.60% (2)	3.74% (2)	February 2022
Receive variable (LIBOR) /pay-fixed swap (2)	100%	100,000	2.14%	1.60% (2)	3.74% (2)	February 2022
Receive variable (LIBOR) /pay-fixed swap (2)	100%	50,000	2.14%	1.60% (2)	3.74% (2)	February 2022
Receive variable (LIBOR) /pay-fixed swap (2)	100%	50,000	2.14%	1.60% (2)	3.74% (2)	February 2022
Receive variable (LIBOR) /pay-fixed swap (3)	100%	12,000	2.09%	1.40%	3.49%	March 2024
Unconsolidated Joint Ventures:						
Receive variable (LIBOR) /pay-fixed swap (4)	50%	129,590	2.40%	1.70%	4.10%	April 2018
Receive variable (LIBOR) /pay-fixed swap (4)	50%	129,590	2.40%	1.70%	4.10%	April 2018
Receive variable (LIBOR) /pay-fixed swap (5)	50.1%	164,803	1.83%	1.75%	3.58%	December 2021
Receive variable (LIBOR) USD/pay-fixed Korean Won (KRW) cross-currency interest rate swap (6)	34.3%	52,065 USD / 60,500,000 KRW	1.52%	1.60%	3.12%	September 2020

(1) The hedged forecasted transaction for each of these swaps is the first previously unhedged one-month LIBOR -indexed interest payments accrued and made each month on a debt principal amount equal to the swap notional amount, regardless of the specific debt agreement from which they may flow. The Company is currently using these swaps to manage interest rate risk on the $ 250 million unsecured term loan and $ 225 million on the $ 1.1 billion primary unsecured revolving line of credit. The credit spreads on these loans can vary within a range of 1.25% to 1.90% on the $ 250 million unsecured term loan and 1.15% to 1.70% on the primary unsecured revolving line of credit, depending on the Company's total leverage ratio at the measurement date, resulting in an effective rate in the range of 2.89% to 3.54% on the $ 250 million unsecured term loan and 2.80% to 3.35% on $ 225 million of the $ 1.1 billion primary unsecured revolving line of credit during the remaining swap period.

(2) The hedged forecasted transaction for each of these swaps is the first previously unhedged one-month LIBOR -indexed interest payments accrued and made each month on a debt principal amount equal to the swap notional amount, regardless of the specific debt agreement from which they may flow. The Company is currently using these swaps to manage interest rate risk on its $300 million unsecured term loan. The credit spread on this loan can vary within a range of 1.25% to 1.90% , depending on the Company's total leverage ratio at the measurement date, resulting in an effective rate in the range of 3.39% to 4.04% during the swap period.

(3) The notional amount on this swap is equal to the outstanding principal balance of the floating rate loan on the U.S. headquarters building.

(4) The notional amount on each of these swaps is equal to 50% of the outstanding principal balance of the loan on Fair Oaks Mall.

(5) The notional amount on this swap is equal to the outstanding principal balance of the floating rate loan on International Plaza.

(6) The notional amount on this swap is equal to the outstanding principal balance of the U.S. dollar construction loan for Starfield Hanam. There is a cross-currency interest rate swap to fix the interest rate on the loan and swap the related principal and interest payments from U.S. dollars to KRW in order to reduce the impact of fluctuations in interest rates and exchange rates on the cash flows of the joint venture. The currency swap exchange rate is 1,162.0 .

Cash Flow Hedges

On January 1, 2018, the Company early adopted ASU No. 2017-12, "Targeted Improvements to Accounting for Hedging Activities", which provided changes in hedge accounting recognition and presentation requirements. The Company now recognizes all changes in fair value for hedging instruments designated and qualifying for cash flow hedge accounting treatment as a component of Other Comprehensive Income (OCI), as opposed to previously recognizing the ineffective portion, if any, directly in earnings. Upon adoption, the Company applied the modified-retrospective approach and recorded a one-time cumulative-effect adjusting entry to reclassify an inconsequential amount of previous hedge ineffectiveness for cash flow hedges from Dividends in Excess of Net Income to AOCI on the Company's Consolidated Balance Sheet.

For derivative instruments that are designated and qualify as a cash flow hedge, the effective portion of the unrealized gain or loss on the derivative is reported as a component of OCI. Prior to the adoption of ASU No. 2017-12 on January 1, 2018, the ineffective portion of the change in fair value, if any, was recognized directly in earnings. Beginning January 1, 2018, all unrealized gains or losses on the derivatives are reported as components of OCI. Net realized gains or losses resulting from derivatives that were settled in conjunction with planned fixed-rate financings or refinancings continue to be included in AOCI during the term of the hedged debt transaction.

Amounts reported in AOCI related to currently outstanding interest rate derivatives are recognized as an adjustment to income as interest payments are made on the Company’s variable-rate debt. Realized gains or losses on settled derivative instruments included in AOCI are recognized as an adjustment to income over the term of the hedged debt transaction. Amounts reported in AOCI related to the cross-currency interest rate swap are recognized as an adjustment to income as transaction gains or losses arising from the remeasurement of foreign currency denominated loans are recognized and as actual interest and principal obligations are repaid.

The Company expects that approximately $2.4 million of the AOCI of Taubman Centers, Inc. and the noncontrolling interests will be reclassified from AOCI and recognized as an increase to income in the following 12 months.

The following tables present the effect of derivative instruments on the Consolidated Statement of Operations and Comprehensive Income for the three months ended March 31, 2018 and 2017 . The tables include the amount of gains or losses on outstanding derivative instruments recognized in OCI in cash flow hedging relationships and the location and amount of gains or losses reclassified from AOCI into income resulting from outstanding derivative instruments.

	Amount of Gain or (Loss) Recognized in OCI on Derivative (Effective Portion)		Location of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	Amount of Gain or (Loss) Reclassified from AOCI into Income (Effective Portion)	
	Three Months Ended March 31			Three Months Ended March 31	
	2018	2017		2018	2017
Derivatives in cash flow hedging relationships:					
Interest rate contracts – consolidated subsidiaries	$ 5,872	$ 764	Interest Expense	$ (463)	$ (1,074)
Interest rate contracts – UJVs	1,372	1,042	Equity in Income of UJVs	(306)	(759)
Cross-currency interest rate contract – UJV	(51)	36	Equity in Income of UJVs	(5)	(1,402)
Total derivatives in cash flow hedging relationships	$ 7,193	$ 1,842		$ (774)	$ (3,235)

The Company records all derivative instruments at fair value on the Consolidated Balance Sheet. The following table presents the location and fair value of the Company's derivative financial instruments as reported on the Consolidated Balance Sheet as of March 31, 2018 and December 31, 2017 .

		Fair Value	
	Consolidated Balance Sheet Location	March 31, 2018	December 31, 2017
Derivatives designated as hedging instruments:			
Asset derivative:			
Interest rate contracts – consolidated subsidiaries	Deferred Charges and Other Assets	$ 6,327	$ 939
Interest rate contract - UJV	Investment in UJVs	1,830	760
Total assets designated as hedging instruments		$ 8,157	$ 1,699
Liability derivatives:			
Interest rate contracts – consolidated subsidiary	Accounts Payable and Accrued Liabilities		$ (484)
Interest rate contracts – UJV	Investment in UJVs	$ (55)	(357)
Cross-currency interest rate contract – UJV	Investment in UJVs	(1,700)	(1,630)
Total liabilities designated as hedging instruments		$ (1,755)	$ (2,471)

Contingent Features

All of the Company's outstanding derivatives contain provisions that state if the hedged entity defaults on its indebtedness above a certain threshold, then the derivative obligation could also be declared in default. The cross default thresholds vary for each agreement, ranging from $0.1 million of any indebtedness to $50 million of indebtedness on the Operating Partnership's indebtedness. As of March 31, 2018 , the Company is not in default on any indebtedness that would trigger a credit-risk-related default on its current outstanding derivatives.

As of March 31, 2018 and December 31, 2017 , the fair value of derivative instruments with credit-risk-related contingent features that were in a liability position was $1.8 million and $2.5 million , respectively. As of March 31, 2018 and December 31, 2017 , the Company was not required to post any collateral related to these agreements. If the Company breached any of these provisions it would be required to settle its obligations under the agreements at their fair value. See Note 5 regarding guarantees and Note 11 for fair value information on derivatives.

Note 8 - Share-Based Compensation

General

The Taubman Company LLC 2008 Omnibus Long-Term Incentive Plan (2008 Omnibus Plan), as amended, which is shareowner approved, provides for the award to directors, officers, employees, and other service providers of the Company of restricted shares, restricted TRG Units, options to purchase common shares or TRG Units, share appreciation rights, performance share units, unrestricted shares or TRG Units, and other awards to acquire up to an aggregate of 8.5 million common shares or TRG Units. TRG Units to be awarded also include "TRG Profits Units", which are intended to constitute "profits interests" within the meaning of Treasury authority under the Internal Revenue Code of 1986, as amended. In addition, non-employee directors have the option to defer their compensation under a deferred compensation plan.

Non-option awards granted after an amendment of the 2008 Omnibus Plan in 2010 are deducted at a ratio of 1.85 common shares or TRG Units. Options are deducted on a one-for-one basis. The amount available for future grants is adjusted when the number of contingently issuable common shares or units are settled, for grants that are forfeited, and for options that expire without being exercised.

2018 Awards - TRG Profits Units

During 2018, the following types of TRG Profits Units awards were granted to certain senior management employees: (1) a time-based award with a three-year cliff vesting period (Restricted TRG Profits Units); (2) a performance-based award that is based on the achievement of relative total shareholder return (TSR) over a three-year period (Relative TSR Performance-based TRG Profits Units); and (3) a performance-based award that is based on the achievement of net operating income (NOI) over a three-year period (NOI Performance-based TRG Profits Units). The maximum number of Relative TSR and NOI Performance-based TRG Profits Units are issued at grant, eventually subject to a recovery and cancellation of previously granted amounts depending on actual performance against TSR and NOI measures over the three-year performance measurement period. NOI Performance-based TRG Profits Units provide for a cap on the maximum number of units vested if a specified absolute TSR level is not achieved. Relative TSR and NOI Performance-based TRG Profits Units are generally subject to the same performance measures as the TSR-Based and NOI-Based Performance Share Units (see 2018 Awards - Other Management Employee Grants below). Despite the difference in scaling of the grant programs, the final outcome of the TSR and NOI performance measures will result in similar numbers of either TRG Units or common shares being issued at vesting under the TRG Profits Units program and the Performance Share Unit program, respectively.

Each such award represents a contingent right to receive a TRG Unit upon vesting and the satisfaction of certain tax-driven requirements and, as to the TSR and NOI Performance-based TRG Profits Units, the satisfaction of certain performance-based requirements. Until vested, a TRG Profits Unit entitles the holder to only one-tenth of the distributions otherwise payable by TRG on a TRG Unit. Therefore, the Company accounts for these TRG Profits Units as participating securities in the Operating Partnership. A portion of the TRG Profits Units award represents estimated cash distributions that otherwise would have been payable during the vesting period and, upon vesting, there will be an adjustment in actual number of TRG Profits Units realized under each award to reflect the Operating Partnership's actual cash distributions during the vesting period .

All TRG Profits Units issued in 2018 vest in March 2021, if continuous service has been provided, or upon retirement or certain other events (such as death or disability) if earlier. Each holder of a TRG Profits Unit will be treated as a limited partner in TRG from the date of grant. To the extent the vested TRG Profits Units have not achieved the applicable criteria for conversion to TRG Units, vesting and economic equivalence to a TRG Unit prior to the tenth anniversary of the date of grant, the awards will be forfeited pursuant to the terms of the award agreement.

2018 Awards - Other Management Employee Grants

During 2018, other types of awards granted to management employees include those described below. These vest in March 2021, if continuous service has been provided, or upon retirement or certain other events (such as death or disability) if earlier.

TSR - Based Performance Share Units (TSR PSU) - Each TSR PSU represents the right to receive, upon vesting, shares of common stock ranging from 0-300% of the TSR PSU based on the Company's market performance relative to that of a peer group. The TSR PSU grants include a cash payment upon vesting equal to the aggregate cash dividends that would have been paid on such shares of common stock during the vesting period.

NOI - Based Performance Share Units (NOI PSU) - Each NOI PSU represents the right to receive, upon vesting, shares of common stock ranging from 0-300% of the NOI PSU based on the Company's NOI performance, as well as a cash payment upon vesting equal to the aggregate cash dividends that would have been paid on such shares of common stock during the vesting period. These awards also provide for a cap on the maximum number of units vested if a specified absolute TSR level is not achieved.

Restricted Share Units (RSU) - Each RSU represents the right to receive upon vesting one share of common stock, as well as a cash payment upon vesting equal to the aggregate cash dividends that would have been paid on such shares of common stock during the vesting period .

Expensed and Capitalized Costs

The compensation cost charged to income for the Company’s share-based compensation plans was $2.4 million and $3.1 million for the three months ended March 31, 2018 and 2017 , respectively. Compensation cost capitalized as part of properties and deferred leasing costs was $0.2 million and $0.3 million for the three months ended March 31, 2018 and 2017 , respectively.

Valuation Methodologies

The Company estimated the grant-date fair values of share-based grants using the methods as follows. Expected volatility and dividend yields are based on historical volatility and yields of the Company’s common stock, respectively, as well as other factors. The risk-free interest rates used are based on the U.S. Treasury yield curves in effect at the grant date. The Company assumes no forfeitures for failure to meet the service requirement of Performance Share Units (PSU) or TRG Profits Units, due to the small number of participants and low turnover rate.

The valuations of all grants utilized the Company's common stock price at the grant date. Common stock prices when used in valuing TRG Profits Units are further adjusted by the present value of expected differences in dividends payable on the common stock versus the distributions payable on the TRG Profits Units over the vesting period. The Company estimated the value of grants dependent on TSR performance using a Monte Carlo simulation and considering historical returns of the Company and the peer group.

For awards dependent on NOI performance, the Company considers the NOI measure a performance condition under applicable accounting standards, and as such, has estimated a grant-date fair value for each of its possible outcomes. The compensation cost ultimately will be recognized equal to the grant-date fair value of the award that coincides with the actual outcome of the NOI performance. The weighted average grant-date fair value shown for NOI-dependent awards corresponds with management's current expectation of the probable outcome of the NOI performance measure. The product of the NOI-dependent awards outstanding and the grant-date fair value represents the compensation cost being recognized over the service periods.

The valuations of TRG Profits Units consider the possibility that sufficient share price appreciation will not be realized, such that the conversion to TRG Units will not occur and the awards will be forfeited.

Summaries of Activity for the Three Months Ended March 31, 2018

Restricted TRG Profits Units

	Number of Restricted TRG Profits Units	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2018	61,131	$ 59.08
Granted	8,154	49.29
Outstanding at March 31, 2018	69,285	$ 57.93
Fully vested at March 31, 2018	3,826	$ 59.03

As of March 31, 2018 , there was $1.8 million of total unrecognized compensation cost related to nonvested Restricted TRG Profits Units outstanding. This cost is expected to be recognized over an average period of 1.6 years .

Relative TSR Performance-based TRG Profits Units

	Number of relative TSR Performance-based TRG Profits Units	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2018	129,733	$ 25.59
Granted	18,345	22.22
Outstanding at March 31, 2018	148,078	$ 25.17
Fully vested at March 31, 2018	797	$ 23.14

As of March 31, 2018 , there was $1.7 million of total unrecognized compensation cost related to nonvested Relative TSR Performance-based TRG Profits Units outstanding. This cost is expected to be recognized over an average period of 1.7 years .

NOI Performance-based TRG Profits Units

	Number of NOI Performance-based TRG Profits Units	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2018	131,604	$ 19.69
Granted	18,345	16.43
Outstanding at March 31, 2018	149,949	$ 19.28
Fully vested at March 31, 2018	2,668	$ 33.56

As of March 31, 2018 , there was $1.3 million of total unrecognized compensation cost related to nonvested NOI Performance-based TRG Profits Units outstanding. This cost is expected to be recognized over an average period of 1.7 years .

TSR - Based Performance Share Units

	Number of TSR PSU	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2018	40,850	$ 107.38
Vested	(37,046) (1)	110.19
Granted	10,393	78.82
Outstanding at March 31, 2018	14,197	$ 79.13

(1) Based on the Company's market performance relative to that of a peer group, the actual number of shares of common stock issued upon vesting during the three months ended March 31, 2018 was 45,941 shares (1.24 x) for the TSR PSU. That is, despite the completion of the applicable employee service requirements, the number of shares ultimately considered earned is determined by the extent to which the TSR market performance measure was achieved during the performance period.

As of March 31, 2018 , there was $1.0 million of total unrecognized compensation cost related to nonvested TSR PSU outstanding. This cost is expected to be recognized over an average period of 2.5 years .

NOI - Based Performance Share Units

	Number of NOI PSU	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 2018	3,804	$ 67.00
Granted	10,393	58.28
Outstanding at March 31, 2018	14,197	$ 60.59

As of March 31, 2018 , there was $0.8 million of total unrecognized compensation cost related to nonvested NOI PSU outstanding. This cost is expected to be recognized over an average period of 2.5 years .

Restricted Share Units

	Number of RSU	Weighted Average Grant-Date Fair Value
Outstanding at January 1, 20 18 (1)	195,021	$ 69.22
Vested	(72,528)	74.00
Granted	69,931	58.28
Forfeited	(1,940)	57.68
Outstanding at March 31, 2018	190,484	$ 63.50

(1) The beginning balance outstanding and associated grant-date fair value were adjusted immaterially from previously reported amounts to reflect the actual number of RSU outstanding as of January 1, 2018.

As of March 31, 2018 , there was $8.1 million of total unrecognized compensation cost related to nonvested RSU outstanding. This cost is expected to be recognized over an average period of 2.1 years .

Unit Option Deferral Election

Under both a prior option plan and the 2008 Omnibus Plan, vested unit options can be exercised by tendering mature units with a market value equal to the exercise price of the unit options. In 2002, Robert S. Taubman, the Company's chief executive officer, exercised options for 3.0 million units by tendering 2.1 million mature units and deferring receipt of 0.9 million units under the unit option deferral election. As the Operating Partnership pays distributions, the deferred option units receive their proportionate share of the distributions in the form of cash payments. Under an amendment executed in January 2011 and subsequent deferral elections (the latest being made in September 2016), beginning in December 2022 (unless Mr. Taubman retires earlier), the deferred options units will be issued as TRG Units in five annual installments. The deferred option units are accounted for as participating securities of the Operating Partnership.

2008 Omnibus Plan

The following table sets forth certain information regarding the Company's current equity compensation plans as of March 31, 2018 :

	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants, and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants, and Rights	Number of Securities Remaining Available for Future Issuances Under Equity Compensation Plans (Excluding Securities Reflected in Column (a))
	(a)	(b)	(c)
Equity compensation plans approved by security holders:			
2008 Omnibus Plan:			2,352,680
Profits Units (1)	367,313		
Performance Share Units (2)	85,182	(3)	
Restricted Share Units	190,484	(3)	
Non-Employee Directors' Deferred Compensation Plan (4)	74,712	(3)	
	717,691		2,352,680

(1) The maximum number of Relative TSR and NOI Performance-Based TRG Profits Units was issued at grant, eventually subject to a recovery and cancellation of previously granted amounts depending on actual performance against targeted measures of total shareholder return relative to that of a peer group and net operating income thresholds over a three-year period.
(2) Amount represents 28,394 performance share units at their maximum payout ratio of 300% . This amount may overstate dilution to the extent actual performance is different than such assumption. The actual number of performance share units that may ultimately vest will range from 0 - 300% based on actual performance against targeted measures of total shareholder return relative to that of a peer group and net operating income thresholds over a three-year period.
(3) Excludes restricted share units and performance share units issued under the Omnibus Plan because they are converted into common stock on a one-for-one basis at no additional cost.
(4) The Deferred Compensation Plan, which was approved by the Board of Directors in May 2005, gives each non-employee director of the Company the right to defer the receipt of all or a portion of his or her annual director retainer fee until the termination of such director's service on the Board of Directors and for such deferred amount to be denominated in restricted share units. The number of restricted share units received equals the amount of the deferred retainer fee divided by the fair market value of the common stock on the business day immediately before the date the director would otherwise have been entitled to receive the retainer fee. The restricted share units represent the right to receive equivalent shares of common stock at the end of the deferral period. During the deferral period, when the Company pays cash dividends on the common stock, the directors' notional deferral accounts are credited with dividend equivalents on their deferred restricted share units, payable in additional restricted share units based on the fair market value of the common stock on the business day immediately before the record date of the applicable dividend payment. Each director's notional account is 100% vested at all times.

Note 9 - Commitments and Contingencies

Cash Tender

At the time of the Company's initial public offering and acquisition of its partnership interest in TRG in 1992, the Company entered into an agreement (the Cash Tender Agreement) with the A. Alfred Taubman Restated Revocable Trust (the Revocable Trust) and TRA Partners (now Taubman Ventures Group LLC or TVG), each of whom owned an interest in TRG, whereby each of the Revocable Trust and TVG (and/or any assignee of the Revocable Trust or TVG) has the right to tender to the Company TRG Units (provided that if the tendering party is tendering less than all of its TRG Units, the aggregate value is at least $50 million) and cause the Company to purchase the tendered interests at a purchase price based on a market valuation of the Company on the trading date immediately preceding the date of the tender (except as otherwise provided below). TVG is controlled by a majority-in-interest among the Revocable Trust and entities affiliated with the children of A. Alfred Taubman (Robert S. Taubman, William S. Taubman, and Gayle Taubman Kalisman). At the election of the tendering party, TRG Units held by members of A. Alfred Taubman’s family and TRG Units held by entities in which his family members hold interests may be included in such a tender.

The Company will have the option to pay for these interests from available cash, borrowed funds, or from the proceeds of an offering of common stock. Generally, the Company expects to finance these purchases through the sale of new shares of its common stock. The tendering partner will bear all market risk if the market price at closing is less than the purchase price and will bear the costs of sale. Any proceeds of the offering in excess of the purchase price will be for the sole benefit of the Company. The Company accounts for the Cash Tender Agreement as a freestanding written put option. As the option put price is defined by the current market price of the Company's stock at the time of tender, the fair value of the written option defined by the Cash Tender Agreement is considered to be zero .

Based on a market value at March 31, 2018 of $56.91 per share for the Company's common stock, the aggregate value of TRG Units that may be tendered under the Cash Tender Agreement was $1.4 billion . The purchase of these interests at March 31, 2018 would have resulted in the Company owning an additional 28% interest in TRG.

Continuing Offer

The Company has made a continuing, irrevocable offer (the Continuing Offer) to all present holders of TRG Units (other than a certain excluded holder, currently TVG), permitted assignees of all present holders of TRG Units, those future holders of TRG Units as the Company may, in its sole discretion, agree to include in the Continuing Offer, all existing optionees under the previous option plan, and all existing and future optionees under the 2008 Omnibus Plan to exchange shares of common stock for TRG Units. Under the Continuing Offer agreement, one TRG Unit is exchangeable for one share of common stock . Upon a tender of TRG Units, the corresponding shares of Series B Preferred Stock, if any, will automatically be converted into common stock at a ratio of 14,000 shares of Series B Preferred Stock for one share of common stock .

Insurance

The Company carries liability insurance to mitigate its exposure to certain losses, including those relating to personal injury claims. We believe the Company's insurance policy terms and conditions and limits are appropriate and adequate given the relative risk of loss and industry practice. However, there are certain types of losses, such as punitive damage awards, which may not be covered by insurance, and not all potential losses are insured against.

Hurricane Maria and The Mall of San Juan

In the third quarter of 2017, The Mall of San Juan experienced certain interior water damage, impacts to exterior landscaping and signage, and significant damage to both Nordstrom and Saks Fifth Avenue as a result of Hurricane Maria. The Company has substantial insurance to cover hurricane and flood damage, as well as business and service interruption. The business interruption coverage commences at time of loss and continues for one year after the damage is fully repaired. The Company's hurricane coverage includes a single deductible of $2 million and policy limits of $900 million , all subject to various terms and conditions.

During the three months ended March 31, 2018 , the Company recorded $0.7 million of insurance recoveries related to reimbursement of expensed costs within Nonoperating Income (Expense) on the Consolidated Statement of Operations and Comprehensive Income. Additionally, during the three months ended March 31, 2018 , the Company recognized a reduction of $3.9 million of depreciation expense relating to insurance proceeds received in the period for property damage for which the Company took write-offs in 2017. The Company continues to assess physical loss and will update its estimates if necessary.

On October 17, 2017, Plaza Internacional Puerto Rico LLC (Plaza Internacional), the owner of The Mall of San Juan (the Mall), filed a civil action in the Commonwealth of Puerto Rico Court of First Instance, San Juan Judicial Center, Superior Court, Civil No. SJ2017CV02094 (503), against Saks Fifth Avenue Puerto Rico, Inc. (Saks PR), and Saks Incorporated (Saks Inc.). The lawsuit asks the court to compel Saks PR and Saks Inc. to immediately repair and remediate the Saks Fifth Avenue store (the Store) that was damaged by Hurricane Maria on September 20, 2017, to reopen the Store on the completion of the reconstruction, and to operate the Store in accordance with the Operating Covenant contained in the Construction, Operation and Reciprocal Easement Agreement among Plaza Internacional, Saks PR, and Nordstrom Puerto Rico LLC (Nordstrom PR) made as of April 23, 2013 (the REA). In response, Saks PR and Saks Inc. filed a Counterclaim, alleging that they have no obligation to repair, remediate, reconstruct, or reopen the Store, asserting various alleged breaches of the REA and other operating agreements. Should Saks PR prevail, Nordstrom PR and other Mall tenants may then have the right to terminate their own operating covenants or leases. Plaza Internacional is vigorously prosecuting its claims and defending the Counterclaim. The outcome of the action cannot be predicted, and, at this time, the Company is unable to estimate the amount of loss that could result from an unfavorable outcome. An unfavorable outcome may have a material and adverse effect on the Company's business and its results of operations.

Other

See Note 5 for the Operating Partnership's guarantees of certain notes payable, including guarantees relating to Unconsolidated Joint Ventures, Note 6 for contingent features relating to certain joint venture agreements, Note 7 for contingent features relating to derivative instruments, and Note 8 for obligations under existing share-based compensation plans.

Note 10 - Earnings Per Common Share

Basic earnings per common share amounts are based on the weighted average of common shares outstanding for the respective periods. Diluted earnings per common share amounts are based on the weighted average of common shares outstanding plus the dilutive effect of potential common stock. Potential common stock includes outstanding TRG Units exchangeable for common shares under the Continuing Offer (Note 9), outstanding options for TRG Units, TSR PSU, NOI PSU, Restricted and Performance-based TRG Profits Units, RSU, deferred shares under the Non-Employee Directors' Deferred Compensation Plan, and unissued TRG Units under a unit option deferral election (Note 8). In computing the potentially dilutive effect of potential common stock, TRG Units are assumed to be exchanged for common shares under the Continuing Offer, increasing the weighted average number of shares outstanding. The potentially dilutive effects of TRG Units outstanding and/or issuable under the unit option deferral elections are calculated using the if-converted method, while the effects of other potential common stock are calculated using the treasury method. Contingently issuable shares are included in diluted earnings per common share based on the number of shares, if any, which would be issuable if the end of the reporting period were the end of the contingency period.

	Three Months Ended March 31	
	2018	2017
Net income attributable to Taubman Centers, Inc. common shareowners (Numerator):		
Basic	$ 18,590	$ 17,170
Impact of additional ownership of TRG	28	45
Diluted	$ 18,618	$ 17,215
Shares (Denominator) – basic	60,917,235	60,555,466
Effect of dilutive securities	289,142	498,290
Shares (Denominator) – diluted	61,206,377	61,053,756
Earnings per common share – basic	$ 0.31	$ 0.28
Earnings per common share – diluted	$ 0.30	$ 0.28

The calculation of diluted earnings per common share in certain periods excluded certain potential common stock including outstanding TRG Units and unissued TRG Units under a unit option deferral election, both of which may be exchanged for common shares of the Company under the Continuing Offer. The table below presents the potential common stock excluded from the calculation of diluted earnings per common share as they were anti-dilutive in the period presented.

	Three Months Ended March 31	
	2018	2017
Weighted average noncontrolling TRG Units outstanding	4,145,247	4,018,981
Unissued TRG Units under unit option deferral elections	871,262	871,262

Note 11 - Fair Value Disclosures

This note contains required fair value disclosures for assets and liabilities remeasured at fair value on a recurring basis and financial instruments carried at other than fair value, as well as assumptions employed in deriving these fair values.

Recurring Valuations

Derivative Instruments

The fair value of interest rate hedging instruments is the amount that the Company would receive to sell an asset or pay to transfer a liability in an orderly transaction between market participants at the reporting date. The Company's valuations of its derivative instruments are determined using widely accepted valuation techniques, including discounted cash flow analysis on the expected cash flows of each derivative, and therefore fall into Level 2 of the fair value hierarchy. The valuations reflect the contractual terms of the derivatives, including the period to maturity, and use observable market-based inputs, including forward curves. The fair values of interest rate hedging instruments also incorporate credit valuation adjustments to appropriately reflect both the Company's own nonperformance risk and the respective counterparty's nonperformance risk.

Other

The Company's valuations of both its investments in an insurance deposit and in 590,124 SPG common shares utilize unadjusted quoted prices determined by active markets for the specific securities the Company has invested in, and therefore fall into Level 1 of the fair value hierarchy. In connection with the adoption of ASU No. 2016-01 on January 1, 2018 (Note 1), the Company now measures its investment in SPG common shares at fair value with changes in value recorded through net income. During the three months ended March 31, 2018 , the Company recorded $10.3 million of expense in Nonoperating Income (Expense) on the Consolidated Statement of Operations and Comprehensive Income related to the change in fair value of its SPG common shares investment during the period.

For assets and liabilities measured at fair value on a recurring basis, quantitative disclosure of the fair value for each major category of assets and liabilities is presented below:

	Fair Value Measurements as of March 31, 2018 Using		Fair Value Measurements as of December 31, 2017 Using	
Description	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
SPG common shares	$ 91,086		$ 101,348	
Insurance deposit	8,903		16,703	
Derivative interest rate contracts (Note 7)		$ 6,327		$ 939
Total assets	$ 99,989	$ 6,327	$ 118,051	$ 939
Derivative interest rate contracts (Note 7)				$ (484)
Total liabilities		$ —		$ (484)

The insurance deposit shown above represents an escrow account maintained in connection with a property and casualty insurance arrangement for the Company's shopping centers, and is classified within Deferred Charges and Other Assets on the Consolidated Balance Sheet. Corresponding deferred revenue relating to amounts billed to tenants for this arrangement has been classified within Accounts Payable and Accrued Liabilities on the Consolidated Balance Sheet.

Financial Instruments Carried at Other Than Fair Values

Notes Payable

The fair value of notes payable is estimated using cash flows discounted at current market rates and therefore falls into Level 2 of the fair value hierarchy. When selecting discount rates for purposes of estimating the fair value of notes payable at March 31, 2018 and December 31, 2017 , the Company employed the credit spreads at which the debt was originally issued. The Company does not believe that the use of different interest rate assumptions would have resulted in a materially different fair value of notes payable as of March 31, 2018 or December 31, 2017 .

The estimated fair values of notes payable at March 31, 2018 and December 31, 2017 were as follows:

	2018		2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Notes payable, net	$ 3,640,128	$ 3,550,968	$ 3,555,228	$ 3,503,071

The fair values of the notes payable are dependent on the interest rates used in estimating the values. An overall 1% increase in interest rates employed in making these estimates would have decreased the fair values of the debt shown above at March 31, 2018 by $145.9 million or 4.1% .

Cash Equivalents and Notes Receivable

The fair value of cash equivalents and notes receivable approximates their carrying value due to their short maturity. The fair value of cash equivalents is derived from quoted market prices and therefore falls into Level 1 of the fair value hierarchy. The fair value of notes receivable is estimated using cash flows discounted at current market rates and therefore falls into Level 2 of the fair value hierarchy.

See Note 7 regarding additional information on derivatives.

Note 12 - Accumulated Other Comprehensive Income

Changes in the balance of each component of AOCI for the three months ended March 31, 2018 were as follows:

	Taubman Centers, Inc. AOCI			Noncontrolling Interests AOCI		
	Cumulative translation adjustment	Unrealized gains (losses) on interest rate instruments and other	Total	Cumulative translation adjustment	Unrealized gains (losses) on interest rate instruments and other	Total
January 1, 2018	$ 384	$ (7,303)	$ (6,919)	$ 159	$ 9,220	$ 9,379
Other comprehensive income (loss) before reclassifications	2,641	4,553	7,194	1,080	1,866	2,946
Amounts reclassified from AOCI		550	550		224	224
Net current period other comprehensive income (loss)	$ 2,641	$ 5,103	$ 7,744	$ 1,080	$ 2,090	$ 3,170
Adjustment related to SPG common shares investment for adoption of ASU No. 2016-01 (Note 1)		(677)	(677)		(278)	(278)
Adjustments due to changes in ownership		9	9		(9)	(9)
March 31, 2018	$ 3,025	$ (2,868)	$ 157	$ 1,239	$ 11,023	$ 12,262

Changes in the balance of each component of AOCI for the three months ended March 31, 2017 were as follows:

	Taubman Centers, Inc. AOCI			Noncontrolling Interests AOCI		
	Cumulative translation adjustment	Unrealized gains (losses) on interest rate instruments and other	Total	Cumulative translation adjustment	Unrealized gains (losses) on interest rate instruments and other	Total
January 1, 2017	$ (23,147)	$ (12,769)	$ (35,916)	$ (9,613)	$ 7,065	$ (2,548)
Other comprehensive income (loss) before reclassifications	6,694	(1,985)	4,709	2,755	(818)	1,937
Amounts reclassified from AOCI		2,291	2,291		944	944
Net current period other comprehensive income (loss)	$ 6,694	$ 306	$ 7,000	$ 2,755	$ 126	$ 2,881
Adjustments due to changes in ownership	(61)	47	(14)	61	(47)	14
March 31, 2017	$ (16,514)	$ (12,416)	$ (28,930)	$ (6,797)	$ 7,144	$ 347

The following table presents reclassifications out of AOCI for the three months ended March 31, 2018 :

Details about AOCI Components	Amounts reclassified from AOCI	Affected line item on the Consolidated Statement of Operations and Comprehensive Income
Losses on interest rate instruments and other:		
Realized loss on interest rate contracts - consolidated subsidiaries	$ 463	Interest Expense
Realized loss on interest rate contracts - UJVs	306	Equity in Income of UJVs
Realized loss on cross-currency interest rate contract - UJV	5	Equity in Income of UJVs
Total reclassifications for the period	$ 774	

The following table presents reclassifications out of AOCI for the three months ended March 31, 2017 :

Details about AOCI Components	Amounts reclassified from AOCI	Affected line item on the Consolidated Statement of Operations and Comprehensive Income
Losses on interest rate instruments and other:		
Realized loss on interest rate contracts - consolidated subsidiaries	$ 1,074	Interest Expense
Realized loss on interest rate contracts - UJVs	759	Equity in Income of UJVs
Realized loss on cross-currency interest rate contract - UJV	1,402	Equity in Income of UJVs
Total reclassifications for the period	$ 3,235	

Note 13 - Cash Flow Disclosures and Non-Cash Investing and Financing Activities

Interest paid for the three months ended March 31, 2018 and 2017 , net of amounts capitalized of $3.3 million and $4.1 million , respectively, was $29.0 million and $23.4 million , respectively. Income taxes paid for the three months ended March 31, 2018 and 2017 were $0.2 million and $1.1 million , respectively. Other non-cash additions to properties during the three months ended March 31, 2018 and 2017 were $85.9 million and $95.4 million , respectively, and primarily represent accrued construction and tenant allowance costs.

Reconciliation of Cash, Cash Equivalents, and Restricted Cash

On January 1, 2018, the Company adopted ASU No. 2016-18, "Statement of Cash Flows - Restricted Cash", which changed the presentation of restricted cash and changes in restricted cash on the Consolidated Statement of Cash Flows (Note 1). The following table provides a reconciliation of cash, cash equivalents, and restricted cash reported within the Consolidated Balance Sheet that sum to the total of the same such amounts shown on the Consolidated Statement of Cash Flows.

	March 31, 2018	December 31, 2017
Cash and cash equivalents	$ 53,920	$ 42,499
Restricted cash	126,954	121,905
Total Cash, Cash Equivalents, and Restricted Cash shown on the Consolidated Statement of Cash Flows	$ 180,874	$ 164,404

Restricted Cash

The Company is required to escrow cash balances for specific uses stipulated by certain of its lenders and other various agreements. As of March 31, 2018 and December 31, 2017 , the Company's cash balances restricted for these uses were $5.3 million and $2.7 million , respectively. Also, as of March 31, 2018 and December 31, 2017 , the Company had $121.6 million and $119.2 million , respectively, of restricted cash held as collateral for long-term financing arrangements related to its Asia investments.

Note 14 - New Accounting Pronouncement

In February 2016, the FASB issued ASU No. 2016-02, "Leases", which provides for significant changes to the current lease accounting standard. The primary objectives of this ASU is to address off-balance-sheet financing related to operating leases and to introduce a new lessee model that brings substantially all leases onto the balance sheet. ASU No. 2016-02 is effective for financial statements issued for fiscal years and interim periods beginning after December 15, 2018. The Company expects to adopt the new standard on its effective date. The Company is currently evaluating the application of this ASU and its effect on the Company's financial position and results of operations. From initial implementation efforts, the Company preliminarily expects the most significant impacts of adoption to include the potential need to expense certain internal leasing costs currently being capitalized, including costs associated with the Company's leasing department, and the recognition of lease obligations and right-of-use assets for ground and office leases under which the Company or its ventures are the lessee. In March 2018, the FASB approved an amendment to ASU No. 2016-02 which includes a practical expedient that allows lessors to not separate non-lease components from a lease, which provides the Company with the option of not bifurcating certain common area maintenance recoveries as a non-lease component, if certain requirements are met.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains various "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. These forward-looking statements represent our expectations or beliefs concerning future events and performance. Actual results may differ materially from those expected because of various risks and uncertainties. The forward-looking statements included in this report are made as of the date hereof or the date specified herein. Except as required by law, we assume no obligation to update these forward looking statements, even if new information becomes available in the future. Other risks and uncertainties are detailed from time to time in reports filed with the Securities and Exchange Commission (SEC), and in particular those set forth under "Risk Factors" in our most recent Annual Report on Form 10-K. The following discussion should be read in conjunction with the accompanying consolidated financial statements of Taubman Centers, Inc. and the notes thereto.

General Background and Performance Measurement

Taubman Centers, Inc. (TCO) is a Michigan corporation that operates as a self-administered and self-managed real estate investment trust (REIT). The Taubman Realty Group Limited Partnership (the Operating Partnership or TRG) is a majority-owned partnership subsidiary of TCO that owns direct or indirect interests in all of our real estate properties. In this report, the terms "we", "us", and "our" refer to TCO, the Operating Partnership, and/or the Operating Partnership's subsidiaries as the context may require. We own, manage, lease, acquire, dispose of, develop, and expand retail shopping centers and interests therein. The Consolidated Businesses consist of shopping centers and entities that are controlled by ownership or contractual agreements, The Taubman Company LLC (Manager), and Taubman Properties Asia LLC and its subsidiaries (Taubman Asia). Shopping centers owned through joint ventures that are not controlled by us but over which we have significant influence (Unconsolidated Joint Ventures) are accounted for under the equity method.

References in this discussion to "beneficial interest" refer to our ownership or pro rata share of the item being discussed. Investors are cautioned that deriving our beneficial interest as our ownership interest in individual financial statement items may not accurately depict the legal and economic implications of holding a noncontrolling interest in an investee.

The comparability of information used in measuring performance is affected by the opening of CityOn.Zhengzhou in March 2017 (see "Results of Operations - Taubman Asia"), and the renovation of Beverly Center beginning in 2016 (see "Liquidity and Capital Resources - Capital Spending - Redevelopments"). Additional "comparable center" statistics that exclude the centers noted above are provided to present the performance of comparable centers. Comparable centers are generally defined as centers that were owned and open for the entire current and preceding period presented, excluding centers impacted by significant redevelopment activity. Comparable center statistics for 2017 have been restated to include comparable centers to 2018 . This affects the comparability of our operating results period over period. Additionally, The Mall of San Juan has been excluded from "comparable center" statistics as a result of Hurricane Maria, which occurred in 2017, and the expectation that the center's performance will be impacted for the foreseeable future. See "Hurricane Maria and The Mall of San Juan" within this report. Finally, Taubman Prestige Outlets Chesterfield has also been excluded from "comparable center" statistics as a result of the redevelopment agreement relating to the center. See ("Results of Operations - Redevelopment Agreement for Taubman Prestige Outlets Chesterfield").

Current Operating Trends

The U.S. shopping center industry is currently facing a number of challenges. Across the industry, department store sales have weakened and store closures have increased, with mature mall tenants and anchors rationalizing square footage. While there has been some stabilization of the retail landscape recently, including comparatively strong sales performance in the first quarter of 2018, the retail headwinds still have the potential to be prolonged and ultimately may still result in lost rent and increased unscheduled terminations. However, over time we believe high-quality mall portfolios such as ours will continue to gain market share of tenant sales and rents. Where appropriate, we are making decisions as we re-tenant space to use some shorter leases in order to maintain occupancy, merchandising, and preserve cash flow when possible.

During the three months ended March 31, 2018 , 1.1% of our tenants sought the protection of the bankruptcy laws, as compared to 3.1% of our tenants for the year ended December 31, 2017 and although our occupancy and lease space statistics remain solid, lease cancellation revenue is increasing and expected to be at historically high levels.

Our comparable mall tenants reported a 12.4% increase in mall tenant sales per square foot in the first quarter of 2018 from the same period in 2017 . For the trailing 12-month period ended March 31, 2018 , comparable mall tenant sales per square foot were $837 , a 5.0% increase from $797 for the trailing 12-month period ended March 31, 2017 .

Over the long term, the level of mall tenant sales remains the single most important determinant of revenues of the shopping centers because mall tenants provide approximately 90% of these revenues and mall tenant sales determine the amount of rent, overage rent, and recoverable expenses, excluding utilities (together, total occupancy costs) that mall tenants can afford to pay. However, levels of mall tenant sales can be considerably more volatile in the short run than total occupancy costs, and may be impacted significantly, either positively or negatively, by the success or lack of success of a small number of tenants or even a single tenant.

We believe that the ability of mall tenants to pay occupancy costs and earn profits over long periods of time increases as mall tenant sales per square foot increase, whether through inflation or real growth in customer spending. Because most mall tenants have certain fixed expenses, the occupancy costs that they can afford to pay and still be profitable are a higher percentage of mall tenant sales at higher sales per square foot.

Mall tenant sales directly impact the amount of overage rents certain tenants and certain anchors pay. The effects of increases or declines in mall tenant sales on our operations are moderated by the relatively minor share of total rents that overage rents represent. Overage rent is very difficult to predict as it is highly dependent upon the sales performance of specific mall tenants in specific centers, and is typically paid by a small number of our tenants in any given period.

In negotiating lease renewals, we generally intend to maximize the minimum rents we achieve. As a result, a tenant will generally pay a higher amount of minimum rent and an initially lower amount of overage rent upon renewal.

While mall tenant sales are critical over the long term, the high quality regional mall business has been a very stable business model with its diversity of income from thousands of tenants, its staggered lease maturities, and high proportion of fixed rent. However, a sustained trend in mall tenant sales does impact, either negatively or positively, our ability to lease vacancies and sign lease renewals, negotiate rents at advantageous rates, and collect amounts contractually due.

Mall tenant occupancy costs (the sum of minimum rents, percentage rents, and expense recoveries, excluding utilities) as a percentage of sales in our Consolidated Businesses and Unconsolidated Joint Ventures are as follows:

	Trailing 12-Months Ended March 31 [1]	
	2018	2017
Consolidated Businesses:		
Minimum rents	9.7%	9.4%
Overage rents	0.4	0.5
Expense recoveries	4.9	4.8
Mall tenant occupancy costs	15.1%	14.7%
Unconsolidated Joint Ventures:		
Minimum rents	8.7%	9.3%
Overage rents	0.7	0.6
Expense recoveries	4.0	4.5
Mall tenant occupancy costs	13.3%	14.4%
Combined:		
Minimum rents	9.2%	9.4%
Overage rents	0.6	0.5
Expense recoveries	4.4	4.6
Mall tenant occupancy costs	14.2%	14.5%

(1) Based on reports of sales furnished by mall tenants of all centers reported during that period.
(2) Amounts in this table may not add due to rounding.

Mall tenant ending occupancy and leased space statistics as of March 31, 2018 and 2017 are as follows:

	2018 [1]	2017 [1]
Ending occupancy - all centers	92.2%	92.1%
Ending occupancy - comparable centers	92.8	92.8
Leased space - all centers	94.5	94.5
Leased space - comparable centers	95.0	94.8

(1) Occupancy and leased space statistics include temporary in-line tenants (TILs) and anchor spaces at value and outlet centers (Dolphin Mall, Great Lakes Crossing Outlets, and Taubman Prestige Outlets Chesterfield). Taubman Prestige Outlets Chesterfield has been excluded from "comparable centers" statistics.

The difference between leased space and occupancy is that leased space includes spaces where leases have been signed but the tenants are not yet open. The occupancy statistic represents those spaces upon which we are currently collecting rent from mall tenants. The spread between comparable center leased space and occupied space, at 2.2% this quarter, is consistent with our history of 1% to 3% in the first quarter.

As leases have expired in the centers, we have generally been able to rent the available space, either to the existing tenant or a new tenant, at rental rates that are higher than those of the expired leases. Generally, center revenues have increased as older leases rolled over or were terminated early and replaced with new leases negotiated at current rental rates that were usually higher than the average rates for existing leases. In periods of increasing sales, rents on new leases will generally tend to rise. In periods of slower growth or declining sales, rents on new leases will generally grow more slowly or will decline for the opposite reason, as tenants' expectations of future growth become less optimistic.

Average and base rent per square foot statistics are computed using contractual rentals per the tenant lease agreements, which reflect any lease modifications, including those for rental concessions. Rent information for comparable centers in our Consolidated Businesses and Unconsolidated Joint Ventures are as follows:

	Three Months Ended March 31	
	2018	2017
Average rent per square foot: (1)		
Consolidated Businesses	$ 71.65	$ 68.75
Unconsolidated Joint Ventures	49.30	47.70
Combined	57.73	55.54

(1) Statistics exclude non-comparable centers.

	Trailing 12-Months Ended March 31 (1) (2)	
	2018	2017
Opening base rent per square foot:		
Consolidated Businesses	$ 71.59	$ 77.52
Unconsolidated Joint Ventures	44.46	54.67
Combined	57.28	66.37
Square feet of GLA opened:		
Consolidated Businesses	398,857	431,279
Unconsolidated Joint Ventures	445,158	410,904
Combined	844,015	842,183
Closing base rent per square foot:		
Consolidated Businesses	$ 66.45	$ 69.54
Unconsolidated Joint Ventures	44.05	44.50
Combined	54.84	57.38
Square feet of GLA closed:		
Consolidated Businesses	432,899	431,028
Unconsolidated Joint Ventures	465,379	407,397
Combined	898,278	838,425
Releasing spread per square foot:		
Consolidated Businesses	$ 5.14	$ 7.98
Unconsolidated Joint Ventures	0.41	10.17
Combined	2.44	8.99
Releasing spread per square foot growth:		
Consolidated Businesses	7.7%	11.5%
Unconsolidated Joint Ventures	0.9%	22.9%
Combined	4.4%	15.7%

(1) Statistics exclude non-comparable centers.
(2) Opening and closing statistics exclude spaces greater than or equal to 10,000 square feet.
(2) Opening and closing statistics exclude spaces gr

The spread between opening and closing rents may not be indicative of future periods, as this statistic is not computed on comparable tenant spaces, and can vary significantly from period to period depending on the total amount, location, and average size of tenant space opening and closing in the period. Broadly, the lower releasing spread reflects the recently decelerating environment for retail.

Seasonality

The U.S. shopping center industry is seasonal in nature, with mall tenant sales highest in the fourth quarter due to the Christmas season, and with lesser, though still significant, sales fluctuations associated with the Easter holiday and back-to-school period. While minimum rents and recoveries are generally not subject to seasonal factors, most leases are scheduled to expire in the first quarter, and the majority of new stores open in the second half of the year in anticipation of the Christmas selling season. Additionally, most overage rents are recorded in the fourth quarter. Accordingly, revenues and occupancy levels are generally highest in the fourth quarter. Further, gains on sales of peripheral land and lease cancellation income may vary significantly from quarter to quarter.

	2018	2017				
	1 st Quarter	Total	4 th Quarter	3 rd Quarter	2 nd Quarter	1 st Quarter
	(in thousands, except occupancy and leased space data)					
Mall tenant sales: (1)						
Comparable	$ 1,454,999	$ 5,867,393	$ 1,860,514	$ 1,343,084	$ 1,358,577	$ 1,305,218
All Centers	1,582,682	6,327,787	1,978,554	1,475,440	1,485,116	1,388,677
Revenues and nonoperating income (expense)						
Consolidated Businesses	$ 154,349	$ 652,993	$ 187,665	$ 155,716	$ 157,750	$ 151,862
Ending occupancy:						
Comparable	92.8%		95.7%	94.3%	93.3%	92.8%
All Centers	92.2		94.8	93.5	92.7	92.1
Leased space:						
Comparable	95.0%		96.6%	96.6%	95.6%	94.8%
All Centers	94.5		95.9	95.9	94.9	94.5

(1) Based on reports of sales furnished by mall tenants.

Results of Operations

In addition to the results and trends in our operations discussed in the preceding sections, the following sections discuss certain recent transactions or events that affected operations during the three months ended March 31, 2018 and 2017 , or are expected to affect operations in the future.

Hurricane Maria and The Mall of San Juan

The Mall of San Juan incurred significant damage from Hurricane Maria in 2017. We have substantial insurance to cover hurricane and flood damage, as well as business and service interruption. The business interruption coverage commences at time of loss and continues for one year after the damage is fully repaired. Our hurricane coverage includes a single deductible of $2 million and policy limits of $900 million, all subject to various terms and conditions. However, we expect insurance proceeds will lag and likely not be received in the same period the losses are incurred. During the three months ended March 31, 2018, we recorded $0.7 million of insurance recoveries related to reimbursement of expensed costs within Nonoperating Income (Expense) on the Consolidated Statement of Operations and Comprehensive Income. Additionally, during the three months ended March 31, 2018, we recognized a reduction of $3.9 million of depreciation expense relating to insurance proceeds received in the period for property damage for which we took write-offs in 2017. We continue to assess physical loss and will update these estimates if necessary. See "Part II - Item 1 - Legal Proceedings" for more information regarding our ongoing litigation with Saks Fifth Avenue Puerto Rico, Inc. and Saks Incorporated to compel them to immediately repair and remediate the Saks Fifth Avenue store.

Taubman Asia

We have a joint venture with Wangfujing that owns an interest in a shopping center, CityOn.Zhengzhou, in Zhengzhou, China, which opened in March 2017. We own an effective 49% interest in CityOn.Zhengzhou, which is accounted for as an Unconsolidated Joint Venture.

Disposition

Valencia Place Office Tower at Country Club Plaza

In March 2017, our joint venture with The Macerich Company sold the Valencia Place office tower at Country Club Plaza for $75.2 million ($37.6 million at TRG’s beneficial share). The joint venture recognized a gain on the sale of the Valencia Place office tower, of which TRG's beneficial share, net of tax, was $2.1 million.

Debt Transactions

In March 2018, we completed a $250 million unsecured term loan that matures in March 2023 (see "Liquidity and Capital Resources - Term Loans").

Also in March 2018, proceeds from both the $250 million unsecured term loan and the Twelve Oaks Mall loan (see below) were used to pay off our existing $475 million unsecured term loan.

In February 2018, we completed a 10-year, $300 million non-recourse financing for Twelve Oaks Mall. The payments on the loan, which bears interest at a fixed rate of 4.85%, began in April 2018 and are amortizing principal based on 30 years. As a result of this financing, Twelve Oaks Mall has been removed as a guarantor under the primary unsecured revolving line of credit and the unsecured term loans.

In July 2017, we obtained an additional one-year extension option for The Mall at Green Hills loan, providing the option to extend the maturity date to December 2020.

In April 2017, we extended our $65 million secured secondary revolving line of credit for one year upon maturity. All significant terms remain unchanged as a result of the extension.

In March 2017, we repaid the outstanding balance of $302.4 million on the construction facility for The Mall of San Juan, which was scheduled to mature in April 2017. We funded the repayment using our revolving lines of credit.

In February 2017, we completed a $300 million unsecured term loan that matures in February 2022 (see "Liquidity and Capital Resources - Term Loans").

In February 2017, we amended our primary unsecured revolving line of credit extending the maturity to February 2021, with two six-month extension options (see "Liquidity and Capital Resources - Cash and Revolving Lines of Credit").

Interest Expense

Interest expense is impacted by the capitalization of interest on the costs of our U.S. and Asia development and redevelopment projects. We capitalize interest on our consolidated project costs and our equity contributions to Unconsolidated Joint Ventures under development using our average consolidated borrowing rate, which does not reflect the specific source of funds for the costs and is generally greater than our incremental borrowing rate. Any excess of the capitalization rate over our incremental borrowing rate positively impacts our results of operations during the construction phase of our development projects. This positive impact will affect our results until the overall level of construction spending decreases. As these projects are completed, interest capitalization generally ends and we begin recognizing interest expense. We have experienced an increase in interest expense in recent years primarily due to the opening of four ground-up development projects and we expect interest expense to increase further as our redevelopment projects are placed in service.

Redevelopment Agreement for Taubman Prestige Outlets Chesterfield

In March 2018, we entered into a redevelopment agreement for Taubman Prestige Outlets Chesterfield. The building and improvements will be transferred to The Staenberg Group (“TSG”), and TSG will lease the land subject to a long-term, participating ground lease. We will receive ground lease payments and a share of the property’s revenues above a specified level. TSG is planning a significant redevelopment of the property, which will transform it into a unique entertainment, shopping and dining destination. During the transition, the center will be temporarily renamed Chesterfield Outlets. We have no future capital obligation related to the redevelopment of the property. Both we and TSG have the ability to terminate the ground lease in the event that the redevelopment has not begun within five years, with the buildings and improvements reverting to us upon termination. The transaction, which has been approved by our Board of Directors, is subject to normal closing conditions. Closing is expected to occur in May 2018. Taubman Prestige Outlet Chesterfield's historic contribution to our results of operations has been immaterial. For our accounting purposes, an allocation of the transaction's consideration between the sales price for the building and improvements and the land lease is to be determined after the transaction closes. We will defer recognition of a sale of the building and improvements and maintain the property on our Consolidated Balance Sheet until the foregoing termination right is no longer available to the parties, with this right ceasing upon TSG commencing the redevelopment.

Comparison of the Three Months Ended March 31, 2018 to the Three Months Ended March 31, 2017

The following is a comparison of our results for the three months ended March 31, 2018 and 2017 , as disclosed in our Consolidated Statement of Operations and Comprehensive Income.

Total revenues for the three months ended March 31, 2018 were $161.5 million , a $ 12.4 million or 8.3% increase from the comparable period in 2017 . The following impacted total revenues:

- the increase in minimum rents was primarily attributable to an increase in average rent per square foot;
- the decrease in expense recoveries was primarily attributable to a decrease in recoveries at The Mall of San Juan due to property damage, business interruption, and other impacts of Hurricane Maria; and
- the increase in other income was primarily attributable to increases in lease cancellation income and in food and beverage revenues of our restaurant joint venture.

Total expenses for the three months ended March 31, 2018 were $ 139.3 million , a $ 0.3 million or 0.2% increase from the comparable period in 2017 . The following impacted total expenses:

- the decrease in maintenance, taxes, utilities, and promotion expense was primarily attributable to decreases in property tax and common area maintenance expenses;
- the increase in other operating expense was primarily due to food and beverage expenses of our restaurant joint venture and increased bad debt expenses, partially offset by cost saving initiatives enacted in response to the completion of another major development cycle and current near-term challenges facing the U.S. mall industry;
- the decrease in general and administrative expense was also primarily due to the aforementioned cost saving initiatives. A restructuring charge was incurred in the prior year related to reductions in our workforce and the reorganization of various areas of the organization, which were also undertaken for a similar reason;
- the increase in interest expense was attributable to overall increased levels of debt, an increase in LIBOR, reduced capitalization of interest on developments and redevelopments, and our recently completed financing for Twelve Oaks Mall; and
- the decrease in depreciation and amortization expense was primarily due to a reduction of expenses related to insurance proceeds received for previously capitalized expenditures at The Mall of San Juan.

Nonoperating income (expense) decreased primarily due to a decrease in the fair value of our Simon Property Group (SPG) common shares investment.

Net Income

Net income was $ 34.6 million for the three months ended March 31, 2018 compared to $32.8 million for the three months ended March 31, 2017 . After allocation of income to noncontrolling, preferred, and participating interests, the net income attributable to Taubman Centers, Inc. common shareowners for the three months ended March 31, 2018 was $ 18.6 million compared to $17.2 million in the comparable period in 2017 . Diluted earnings per common share was $0.30 for the three months ended March 31, 2018 compared to $0.28 for the three months ended March 31, 2017 .

Funds from Operations (FFO) and FFO per Common Share

Our FFO attributable to partnership unitholders and participating securities of TRG was $76.6 million for the three months ended March 31, 2018 compared to $74.4 million for the three months ended March 31, 2017 . FFO per diluted common share was $0.88 for the three months ended March 31, 2018 and $0.85 per diluted common share for the three months ended March 31, 2017 . Adjusted FFO attributable to partnership unitholders and participating securities of TRG for the three months ended March 31, 2018 was $90.4 million, and excluded a reduction of a previously expensed restructuring charge, costs incurred associated with shareowner activism, the fluctuation in the fair value of our SPG common shares investment, and a charge recognized in connection to the write-off of deferred financing costs related to the early payoff of our $475 million unsecured term loan. Adjusted FFO attributable to partnership unitholders and participating securities of TRG for the three months ended March 31, 2017 was $80.2 million, and excluded a restructuring charge, costs incurred associated with shareowner activism, and a charge recognized in connection with the partial write-off of deferred financing costs related to an amendment of our primary unsecured revolving line of credit in February 2017. Adjusted FFO per diluted common share was $1.04 for the three months ended March 31, 2018 and $0.92 per diluted common share for the three months ended March 31, 2017 . See "Non-GAAP Measures - Use of Non-GAAP Measures" for the definition of FFO and "Non-GAAP Measures - Reconciliation of Non-GAAP Measures" for the reconciliation of Net Income Attributable to Taubman Centers, Inc. Common Shareowners to Funds from Operations and Adjusted Funds from Operations.

Comparable and Non-Comparable Center Operations

During the three months ended March 31, 2018 , the consolidated non-comparable centers contributed total operating revenues of $21.9 million, and incurred operating expenses, excluding interest expense and depreciation and amortization, of $12.6 million. During the three months ended March 31, 2017 , the consolidated non-comparable centers contributed total operating revenues of $21.9 million, and incurred operating expenses, excluding interest expense and depreciation and amortization, of $10.5 million.

See "Non-GAAP Measures - Use of Non-GAAP Measures" for the definition and discussion of Net Operating Income (NOI) and for the reconciliation of Net Income to NOI. For the three months ended March 31, 2018 , comparable center NOI excluding lease cancellation income was up 4.7% over the comparable period in 2017 . Also, for the three months ended March 31, 2018 , comparable center NOI including lease cancellation income was up 9.2% over the comparable period in 2017 .

For the three months ended March 31, 2018 , we recognized our $11.2 million share of lease cancellation income, as compared to $2.2 million for the three months ended March 31, 2017 .

Liquidity and Capital Resources

General

Our internally generated funds and distributions from operating centers and other investing activities, augmented by use of our existing revolving lines of credit, provide resources to maintain our current operations and assets, pay dividends, and fund a portion of our major capital investments. We pursue an overall strategy of creating value and recycling capital using long-term fixed rate financing on the centers upon stabilization, using any excess proceeds to reinvest in our business. Generally, our need to access the capital markets is limited to refinancing debt obligations at or near maturity and funding major capital investments. From time to time, we also may access the equity markets or sell interests in operating properties to raise additional funds or refinance existing obligations on a strategic basis, including using any excess proceeds therefrom.

Property Encumbrances

We are primarily financed with property-specific secured debt and currently have six unencumbered center properties. The entities that own Beverly Center, Dolphin Mall, and The Gardens on El Paseo are guarantors under our primary unsecured revolving credit facility, $250 million unsecured term loan, and $300 million unsecured term loan, and are unencumbered assets under such facility and term loans. Under the related debt agreements, we are required to have a minimum of three eligible unencumbered assets with a minimum unencumbered asset value. Therefore, while any of the assets may be removed from the unencumbered asset pool and encumbered upon notice to lender, provided that there is no default and the required covenant calculations are met on a pro forma basis, a replacement eligible unencumbered asset would need to be added to the unencumbered asset pool. Besides the three centers previously noted, Taubman Prestige Outlets Chesterfield, The Mall of San Juan, and Stamford Town Center, a 50% owned Unconsolidated Joint Venture property, are unencumbered (see "Results of Operations - Redevelopment Agreement for Taubman Prestige Outlets Chesterfield" for more information).

Cash and Revolving Lines of Credit

As of March 31, 2018 , we had a consolidated cash balance of $ 53.9 million. We also have an unsecured revolving line of credit of $1.1 billion and a secured revolving line of credit of $65 million. The availability under these facilities as of March 31, 2018 , after considering the outstanding balances, the outstanding letters of credit, and the current values of the unencumbered asset pool, was $416.5 million. Fourteen banks participate in our $1.1 billion primary unsecured revolving line of credit and the failure of one bank to fund a draw on our line does not negate the obligation of the other banks to fund their pro rata shares. The $1.1 billion unsecured facility matures in February 2021 with two six-month extension options, and bears interest at a range based on our total leverage ratio. As of March 31, 2018 , the total leverage ratio resulted in a rate of LIBOR plus 1.45% with a 0.225% facility fee. As of March 31, 2018, the LIBOR rate is swapped to 1.65% through February 2019 on $225 million of the $1.1 billion unsecured facility. The primary unsecured revolving line of credit includes an accordion feature, which in combination with our $300 million unsecured term loan, would increase our borrowing capacity to as much as $2.0 billion in aggregate between the two facilities if fully exercised, subject to obtaining additional lender commitments, customary closing conditions, covenant compliance, and minimum asset values for the unencumbered asset pool. As of March 31, 2018 , we could not utilize the accordion feature unless additional assets were added to our unencumbered asset pool.

Construction Financings

In addition to the revolving lines of credit described above, we often use construction financing where available and place non-recourse permanent financing on new assets upon their stabilization. We have construction facilities outstanding for several recently opened centers, as described in the following paragraphs.

We have a $330.9 million construction facility for International Market Place, a consolidated joint venture. As of March 31, 2018 , $37.1 million was available under the construction facility. The facility, which matures in August 2018, has two, one-year extension options, and bears interest at LIBOR plus 1.75%, which may be reduced to LIBOR plus 1.60% upon the achievement of certain performance measures. The loan is interest-only during the initial three-year term and no draws on the loan are permitted after the original maturity date. During the extension period, debt service payments also include principal payments based on an assumed interest rate of 6.0% and a 30-year amortization.

Our joint venture that owns CityOn.Zhengzhou has a construction facility on which we can borrow up to 834 million Chinese Yuan Renminbi (RMB) ($132.6 million U.S. dollars using the March 31, 2018 exchange rate). We have an effective 49% interest in the Unconsolidated Joint Venture. The 11-year financing bears interest at 130% of the RMB People's Bank of China base lending rate for a loan term greater than five years, which resets in January of each year. The interest rate on the debt outstanding at March 31, 2018 was 6.37%. As of March 31, 2018 , $39.3 million U.S. dollars were available under the construction facility using the March 31, 2018 exchange rate.

As a foreign investor, we are subject to various government approval processes and other hurdles in funding the construction of our Chinese projects. These hurdles have required our Xi'an and Zhengzhou ventures to obtain short-term financing, in the form of loans from partners or fully cash collateralized bank loans, to meet certain construction funding commitments in local currency. As of March 31, 2018 , our share of such loans was approximately $131 million. These loans have fixed interest rates that range from 2.5% to 5.7%. These loans are collateralized with restricted cash on our Consolidated Balance Sheet.

Refer to "Note 5 - Beneficial Interest in Debt and Interest Expense" to our consolidated financial statements for further details of our construction financings and related guarantees.

Upcoming Maturities and Financings

The loan for Fair Oaks Mall, a 50% owned Unconsolidated Joint Venture, matures in July 2018. We expect to refinance this loan with a new $260 million, five-year, non-recourse financing for on the center. We expect the loan to bear interest at a fixed rate of approximately 5.35%.

The construction facility for International Market Place matures in August 2018, and we are currently evaluating options related to refinancing or exercising the initial one-year extension option.

The loan for The Mall at Green Hills matures in December 2018. We plan to exercise the initial one-year extension option upon maturity.

Term Loans

In March 2018, we completed a $250 million unsecured term loan that matures in March 2023. The unsecured term loan bears interest at a range of LIBOR plus 1.25% to 1.90% based on our total leverage ratio. As of March 31, 2018 , the total leverage ratio resulted in an interest rate of LIBOR plus 1.60%. The proceeds from this financing, in conjunction with the proceeds from the financing for Twelve Oaks Mall and borrowings on our revolving line of credits, were used to pay off our existing $475 million unsecured term loan. Our existing swaps on the $475 million unsecured term loan were applied to other unsecured debt, including the new $250 million unsecured term loan, resulting in an effective interest rate on the new term loan in the range of 2.89% to 3.54% through the remaining swap period ending in February 2019. The loan includes an accordion feature which would increase our borrowing capacity to as much as $400 million if fully exercised, subject to obtaining additional lender commitments, customary closing conditions, covenant compliance, and minimum asset values for the unencumbered asset pool. As of March 31, 2018 , we could not utilize the accordion feature unless additional assets were added to our unencumbered asset pool.

We have a $300 million unsecured term loan that matures in February 2022. The unsecured term loan bears interest at a range of LIBOR plus 1.25% to 1.90% based on our total leverage ratio. As of March 31, 2018 , the total leverage ratio resulted in an interest rate of LIBOR plus 1.60%. The LIBOR rate is swapped to a fixed rate of 2.14%, which results in an effective interest rate in the range of 3.39% to 4.04%. The loan includes an accordion feature which in combination with our $1.1 billion unsecured revolving line of credit would increase our borrowing capacity to as much as $2.0 billion in aggregate between the two facilities if fully exercised, subject to obtaining additional lender commitments, customary closing conditions, covenant compliance, and minimum asset values for the unencumbered asset pool. As of March 31, 2018 , we could not utilize the accordion feature unless additional assets were added to our unencumbered asset pool.

SPG Common Shares Investment

As of March 31, 2018, we have an investment in 590,124 SPG common shares. We have never intended to hold the investment long-term and may elect to sell them at any time.

Summaries of Capital Activities and Transactions for the Three Months Ended March 31, 2018 and 2017

Operating Activities

Our net cash provided by operating activities was $ 50.6 million in 2018 , compared to $ 108.2 million in 2017 . See also "Results of Operations" for descriptions of 2018 and 2017 transactions affecting operating cash flows.

Investing Activities

Net cash used in investing activities was $ 52.1 million in 2018 , compared to $52.8 million in 2017 . Additions to properties in 2018 and 2017 related primarily to capital and tenant improvements at existing centers, including centers under redevelopment. A tabular presentation of 2018 and 2017 capital spending is shown in "Capital Spending." Insurance proceeds received for capital items at The Mall of San Juan were $4.8 million in 2018, and related to property damage for which we took write-offs in 2017. In 2017, we made a refundable deposit of $11.0 million relating to a potential development opportunity with Shinsegae in South Korea. After performing due diligence, we decided not to proceed with the project.

Contributions to Unconsolidated Joint Ventures were zero in 2018 and $1.6 million in 2017 , primarily related to the funding of Taubman Asia project costs. Distributions from Unconsolidated Joint Ventures in excess of income were $1.7 million in 2018. Distributions from Unconsolidated Joint Ventures in excess of income were $39.3 million in 2017 , which is primarily attributable to the proceeds from the sale of the Valencia Place office tower at Country Club Plaza and the additional proceeds from the incremental financing for The Mall at Millenia.

Financing Activities

Net cash provided by financing activities was $ 18.0 million in 2018 , compared to $ 33.4 million used in financing activities in 2017 . In 2018, proceeds from the issuance of debt, net of payments and issuance costs were $83.7 million, provided by the proceeds from our $250 million unsecured term loan, and our $300 million financing on Twelve Oaks Mall, partially offset by the payoff of our $475 million unsecured term loan. In 2017 , proceeds from the issuance of debt, net of payments and issuance costs were $26.3 million, generally provided by the proceeds from our $300 million unsecured term loan and borrowings on the revolving lines of credit, partially offset by the payoff of the construction facility for The Mall of San Juan.

In 2018 , $2.3 million was paid in connection with incentive plans, compared to $ 2.0 million received in 2017 . Total dividends and distributions paid were $ 63.4 million and $ 61.7 million in 2018 and 2017 , respectively.

Beneficial Interest in Debt

At March 31, 2018 , the Operating Partnership's debt and its beneficial interest in the debt of its Consolidated Businesses and Unconsolidated Joint Ventures totaled $4,803.2 million, with an average interest rate of 3.73% excluding amortization of debt issuance costs and interest rate hedging costs, if any. These costs are reported as interest expense in the results of operations. Interest expense includes non-cash amortization of premiums relating to acquisitions, if any. As of March 31, 2018 , there were no unamortized premiums and no interest rate hedging costs being amortized. Beneficial interest in debt includes debt used to fund development and expansion costs. Beneficial interest in construction work in progress totaled $436.0 million as of March 31, 2018 , which includes $405.2 million of assets on which interest is being capitalized. The following table presents information about our beneficial interest in debt as of March 31, 2018 :

	Amount	Interest Rate Including Spread
	(in millions)	
Fixed rate debt	$ 3,040.9	3.88% (1)
Floating rate debt swapped to fixed rate:		
Swap maturing in April 2018	129.6	4.10%
Swap maturing in February 2019	250.0	3.24%
Swap maturing in February 2019	225.0	3.10%
Swap maturing in September 2020	17.9	3.12%
Swap maturing in December 2021	82.6	3.58%
Swap maturing in February 2022	300.0	3.74%
Swap maturing in March 2024	12.0	3.49%
	$ 1,017.0	3.49% (1)
Floating month to month	763.4	3.46% (1)
Total floating rate debt	$ 1,780.4	3.48% (1)
Total beneficial interest in debt	$ 4,821.4	3.73% (1)
Total deferred financing costs, net	$ (18.0)	
Net beneficial interest in debt	$ 4,803.2	
Amortization of deferred financing costs (2)		0.20%
Average all-in rate		3.94%

(1) Represents weighted average interest rate before amortization of deferred financing costs.
(2) Deferred financing costs include debt issuance costs including amortization of deferred financing costs from revolving lines of credit and other fees not listed above.
(3) Amounts in table may not add due to rounding.

Sensitivity Analysis

We have exposure to interest rate risk on our debt obligations and interest rate instruments. We use derivative instruments primarily to manage exposure to interest rate risks inherent in variable rate debt and refinancings. We routinely use cap, swap, and treasury lock agreements to meet these objectives. Based on the Operating Partnership's beneficial interest in floating rate debt in effect at March 31, 2018 , a one percent increase in interest rates on this floating rate debt would decrease cash flows by $7.6 million, and due to the effect of capitalized interest, decrease annual earnings by $6.8 million. A one percent decrease in interest rates would increase cash flows by $7.6 million and due to the effect of capitalized interest, increase annual earnings by $6.8 million. Based on our consolidated debt and interest rates in effect at March 31, 2018 , a one percent increase in interest rates would decrease the fair value of debt by $145.9 million, while a one percent decrease in interest rates would increase the fair value of debt by $159.4 million.

Loan Commitments and Guarantees

Certain loan agreements contain various restrictive covenants, including the following corporate covenants on our primary unsecured revolving line of credit, $250 million and $300 million unsecured term loans, and the construction facility on International Market Place: a minimum net worth requirement, a maximum total leverage ratio, a maximum secured leverage ratio, a minimum fixed charge coverage ratio, a maximum recourse secured debt ratio, and a maximum payout ratio. In addition, our primary unsecured revolving line of credit and unsecured term loans have unencumbered pool covenants, which currently apply to Beverly Center, Dolphin Mall, and The Gardens on El Paseo on a combined basis. These covenants include a minimum number and minimum value of eligible unencumbered assets, a maximum unencumbered leverage ratio, a minimum unencumbered interest coverage ratio, and a minimum unencumbered asset occupancy ratio. As of March 31, 2018 , the corporate total leverage ratio was the most restrictive covenant. We were in compliance with all of our loan covenants and obligations as of March 31, 2018 . The maximum payout ratio covenant limits the payment of distributions generally to 95% of FFO, as defined in the loan agreements, except as required to maintain our tax status, pay preferred distributions, and for distributions related to the sale of certain assets. See "Note 5 - Beneficial Interest in Debt and Interest Expense" to our consolidated financial statements for more details on loan guarantees.

Cash Tender Agreement

The A. Alfred Taubman Restated Revocable Trust, Taubman Ventures Group LLC, and other specified entities have the right to tender TRG Units and cause us to purchase the tendered interests at a purchase price based on a market valuation of TCO on the trading date immediately preceding the date of the tender. See “Note 9 – Commitments and Contingencies – Cash Tender” to our consolidated financial statements for more details.

Capital Spending

Internally generated funds and excess proceeds from refinancings of maturing debt obligations, as well as borrowings under our revolving lines of credit would be sufficient to finance the anticipated remaining costs of our developments and redevelopments, but we also expect additional proceeds from our construction loan financings (see "Liquidity and Capital Resources - Construction Financings" above) and have the option to sell SPG common shares (see "Liquidity and Capital Resources - Simon Property Group Common Shares Investment" above).

Redevelopments

We are working on a comprehensive renovation of Beverly Center scheduled to be completed by the 2018 holiday season. The project will cost approximately $500 million and we expect a return of 3% to 4% at stabilization in 2020. The projected return was calculated using the estimated cash flow differential between two scenarios; a full renovation and a non-renovation scenario. As of March 31, 2018 , we had capitalized costs of $315.5 million related to this renovation.

We have an ongoing redevelopment project at The Mall at Green Hills that will add approximately 170,000 square feet of incremental GLA that we expect to be completed in 2019. The project will cost approximately $200 million, and we expect a return of 6.5% to 7.5% at stabilization. As of March 31, 2018 , we had capitalized costs of $110.7 million related to this redevelopment project.

2018 Capital Spending

Capital spending for routine maintenance of the shopping centers is generally recovered from tenants. Capital spending through March 31, 2018 , is summarized in the following table:

	2018 [1]			
	Consolidated Businesses	Beneficial Interest in Consolidated Businesses	Unconsolidated Joint Ventures	Beneficial Interest in Unconsolidated Joint Ventures
	(in millions)			
New development projects - Asia [2]			$ (6.5)	$ (3.2)
Existing centers:				
Projects with incremental GLA or anchor replacement [3]	$ 8.6	$ 8.6	—	—
Projects with no incremental GLA and other [4]	54.0	52.7	2.7	1.2
Mall tenant allowances	5.8	5.0	3.6	1.6
Asset replacement costs recoverable from tenants	0.3	0.3	1.0	0.7
Corporate office improvements, technology, equipment, and other	0.1	0.1	—	—
Total	$ 68.8	$ 66.6	$ 0.8	$ 0.4

(1) Costs are net of intercompany profits and are computed on an accrual basis.
(2) Reflects true-up of accruals for previously estimated capital spending at CityOn.Xi'an and CityOn.Zhengzhou.
(3) Includes costs related to The Mall at Green Hills redevelopment.
(4) Includes costs related to the Beverly Center renovation.
(5) Amounts in this table may not add due to rounding.

For the three months ended March 31, 2018 , in addition to the costs above, we incurred our $1.9 million share of Consolidated Businesses’ and $0.8 million share of Unconsolidated Joint Ventures’ capitalized leasing costs.

The following table presents a reconciliation of the Consolidated Businesses’ capital spending shown above (on an accrual basis) to additions to properties (on a cash basis) as presented in our Consolidated Statement of Cash Flows for the three months ended March 31, 2018 :

	(in millions)
Consolidated Businesses’ capital spending	$ 68.8
Other differences between cash and accrual basis	(10.1)
Additions to properties	$ 58.7

Planned 2018 Capital Spending

The following table summarizes planned capital spending for 2018 , including actual spending through March 31, 2018 and anticipated spending for the remainder of the year:

	2018 (1)			
	Consolidated Businesses	Beneficial Interest in Consolidated Businesses	Unconsolidated Joint Ventures	Beneficial Interest in Unconsolidated Joint Ventures
	(in millions)			
New development projects - Asia (2)			$ (6.5)	$ (3.2)
Existing centers:				
Projects with incremental GLA or anchor replacement (3)	$ 79.7	$ 79.7	—	—
Projects with no incremental GLA and other (4)	238.2	232.7	9.2	5.2
Mall tenant allowances	9.7	8.9	13.4	7.0
Asset replacement costs recoverable from tenants	22.8	22.2	12.8	7.1
Corporate office improvements, technology, equipment, and other	4.7	4.7	—	—
Total	$ 355.1	$ 348.2	$ 35.4	$ 19.3

(1) Costs are net of intercompany profits and are computed on an accrual basis.
(2) Reflects true-up of accruals for previously estimated capital spending at CityOn.Xi'an and CityOn.Zhengzhou.
(3) Includes costs related to The Mall at Green Hills redevelopment.
(4) Includes costs related to the Beverly Center renovation.
(5) Amounts in this table may not add due to rounding.

Disclosures regarding planned capital spending, including estimates regarding timing of openings, capital expenditures, occupancy, and returns on new developments and redevelopments are forward-looking statements and certain significant factors could cause the actual results to differ materially, including but not limited to (1) actual results of negotiations with anchors, tenants, and contractors, (2) timing and outcome of litigation and entitlement processes, (3) changes in the scope, number, and valuation of projects, (4) cost overruns, (5) timing of expenditures, (6) availability of and cost of financing and other financing considerations, (7) actual time to start construction and complete projects, (8) changes in economic climate, (9) competition from others attracting tenants and customers, (10) increases in operating costs, (11) timing of tenant openings, (12) early lease terminations and bankruptcies, (13) fluctuations in foreign currency exchange rates, and (14) other risks included in "Risk Factors" in our most recent Annual Report on Form 10-K. In addition, estimates of capital spending will change as new projects are approved by our Board of Directors.

Dividends

We pay regular quarterly dividends to our common and preferred shareowners and expect to continue to pay dividends for the foreseeable future. However, dividends to our common shareowners are at the discretion of the Board of Directors and depend on the cash available to us, our financial condition, capital and other requirements, and such other factors as the Board of Directors deems relevant. To qualify as a REIT, we must distribute at least 90% of our REIT taxable income prior to net capital gains to our shareowners, as well as meet certain other requirements. We must pay these distributions in the taxable year the income is recognized, or in the following taxable year if they are declared during the last three months of the taxable year, payable to shareowners of record on a specified date during such period and paid during January of the following year. Such distributions are treated as paid by us and received by our shareowners on December 31 of the year in which they are declared. In addition, at our election, a distribution for a taxable year may be declared in the following taxable year if it is declared before we timely file our tax return for such year and if paid on or before the first regular dividend payment after such declaration. These distributions qualify as dividends paid for the 90% REIT distribution test for the previous year and are taxable to holders of our capital stock in the year in which paid. Preferred dividends accrue regardless of whether earnings, cash availability, or contractual obligations were to prohibit the current payment of dividends.

The annual determination of our common dividends is based on anticipated FFO available after preferred dividends and our REIT taxable income, as well as assessments of annual capital spending, financing considerations, and other appropriate factors.

Any inability of the Operating Partnership or its joint ventures to secure financing as required to fund maturing debts, capital expenditures and changes in working capital, including development activities and expansions, may require the utilization of cash to satisfy such obligations, thereby possibly reducing distributions to partners of the Operating Partnership and funds available to us for the payment of dividends.

On March 2, 2018, we declared a quarterly dividend of $0.655 per common share, $0.40625 per share on our 6.5% Series J Preferred Stock, and $0.390625 per share on our 6.25% Series K Preferred Stock, all of which were paid on March 30, 2018 to shareowners of record on March 15, 2018.

New Accounting Pronouncement

Refer to "Note 14 - New Accounting Pronouncement" in the consolidated financial statements, regarding our ongoing evaluation of Accounting Standards Update No. 2016-02, addressing leases.

Non-GAAP Measures

Use of Non-GAAP Measures

We use NOI as an alternative measure to evaluate the operating performance of centers, both on individual and stabilized portfolio bases. We define NOI as property-level operating revenues (includes rental income excluding straight-line adjustments of minimum rent) less maintenance, taxes, utilities, promotion, ground rent (including straight-line adjustments), and other property operating expenses. Since NOI excludes general and administrative expenses, pre-development charges, interest income and expense, depreciation and amortization, impairment charges, restructuring charges, and gains from land and property dispositions, it provides a performance measure that, when compared period over period, reflects the revenues and expenses most directly associated with owning and operating rental properties, as well as the impact on their operations from trends in mall tenant sales, occupancy and rental rates, and operating costs. We also use NOI excluding lease cancellation income as an alternative measure because this income may vary significantly from period to period, which can affect comparability and trend analysis. We generally provide separate projections for expected NOI growth and our lease cancellation income.

The following reconciliations include the supplemental earnings measures of EBITDA and FFO. EBITDA represents earnings before interest, income taxes, and depreciation and amortization of our consolidated and unconsolidated businesses. We believe EBITDA generally provides a useful indicator of operating performance, as it is customary in the real estate and shopping center business to evaluate the performance of properties on a basis unaffected by capital structure.

The National Association of Real Estate Investment Trusts (NAREIT) defines FFO as net income (computed in accordance with Generally Accepted Accounting Principles (GAAP)), excluding gains (or losses) from extraordinary items, sales of properties, and impairment write-downs of depreciable real estate, plus real estate related depreciation and after adjustments for unconsolidated partnerships and joint ventures. We believe that FFO is a useful supplemental measure of operating performance for REITs. Historical cost accounting for real estate assets implicitly assumes that the value of real estate assets diminishes predictably over time. Since real estate values instead have historically risen or fallen with market conditions, we and most industry investors and analysts have considered presentations of operating results that exclude historical cost depreciation to be useful in evaluating the operating performance of REITs. We primarily use FFO in measuring performance and in formulating corporate goals and compensation.

We may also present adjusted versions of NOI and FFO when used by management to evaluate our operating performance when certain significant items have impacted our results that affect comparability with prior or future periods due to the nature or amounts of these items. In addition to the reasons noted above for each measure, we believe the disclosure of the adjusted items is similarly useful to investors and others to understand management's view on comparability of such measures between periods. For the three months ended March 31, 2018 , we adjusted FFO to exclude a reduction of a previously expensed restructuring charge, costs incurred associated with shareowner activism, the fluctuation in the fair value of the SPG common shares investment, and a charge recognized in connection with the write-off of deferred financing costs related to the early payoff of our $475 million unsecured term loan. For the three months ended March 31, 2017, we adjusted FFO to exclude a restructuring charge, costs incurred associated with shareowner activism, and a charge recognized in connection with the partial write-off of deferred financing costs related to an amendment of our primary unsecured revolving line of credit in February 2017.

Our presentations of NOI, EBITDA, FFO, and adjusted versions of these measures, if any, are not necessarily comparable to the similarly titled measures of other REITs due to the fact that not all REITs use the same definitions. These measures should not be considered alternatives to net income or as an indicator of our operating performance. Additionally, these measures do not represent cash flows from operating, investing, or financing activities as defined by GAAP. Reconciliations of Net Income Attributable to Taubman Centers, Inc. Common Shareowners to Funds from Operations and Adjusted Funds from Operations and Net Income to Net Operating Income are presented in the following section.

Reconciliation of Non-GAAP Measures

The following includes reconciliations of our non-GAAP financial measures: Net Income Attributable to Taubman Centers, Inc. Common Shareowners to Funds from Operations and Adjusted Funds from Operations and Net Income to Net Operating Income.

Reconciliation of Net Income Attributable to Taubman Centers, Inc. Common Shareowners to Funds from Operations and Adjusted Funds from Operations

	Three Months Ended March 31					
	2018			2017		
	Dollars in millions	Diluted Shares/ Units	Per Share/ Unit	Dollars in millions	Diluted Shares/ Units	Per Share/ Unit
Net income attributable to TCO common shareowners - basic	$ 18.6	60,917,235	$ 0.31	$ 17.2	60,555,466	$ 0.28
Add impact of share-based compensation	—	289,142		—	498,290	
Net income attributable to TCO common shareowners - diluted	$ 18.6	61,206,377	$ 0.30	$ 17.2	61,053,756	$ 0.28
Add depreciation of TCO's additional basis	1.6		0.03	1.6		0.03
Add TCO's additional income tax expense	—		—	0.1		—
Net income attributable to TCO common shareowners, excluding step-up depreciation and additional income tax expense	$ 20.2	61,206,377	$ 0.33	$ 18.9	61,053,756	$ 0.31
Add:						
Noncontrolling share of income of TRG	8.3	24,954,658		7.8	24,977,946	
Distributions to participating securities of TRG	0.6	871,262		0.6	871,262	
Net income attributable to partnership unitholders and participating securities of TRG	$ 29.1	87,032,297	$ 0.33	$ 27.3	86,902,964	$ 0.31
Add (less) depreciation and amortization (1) :						
Consolidated businesses at 100%	35.0		0.40	37.7		0.43
Depreciation of TCO's additional basis	(1.6)		(0.02)	(1.6)		(0.02)
Noncontrolling partners in consolidated joint ventures	(1.9)		(0.02)	(1.8)		(0.02)
Share of Unconsolidated Joint Ventures	17.1		0.20	15.7		0.18
Non-real estate depreciation	(1.1)		(0.01)	(0.7)		(0.01)
Less beneficial share of gain on disposition, net of tax	—		—	(2.1)		(0.02)
Less impact of share-based compensation	—		—	—		—
Funds from Operations attributable to partnership unitholders and participating securities of TRG	$ 76.6	87,032,297	$ 0.88	$ 74.4	86,902,964	$ 0.86
TCO's average ownership percentage of TRG - basic	70.9%			70.8%		
Funds from Operations attributable to TCO's common shareowners, excluding additional income tax expense	$ 54.3		$ 0.88	$ 52.7		$ 0.86
Less TCO's additional income tax expense	—		—	(0.1)		—
Funds from Operations attributable to TCO's common shareowners	$ 54.3		$ 0.88	$ 52.6		$ 0.85
Funds from Operations attributable to partnership unitholders and participating securities of TRG	$ 76.6	87,032,297	$ 0.88	$ 74.4	86,902,964	$ 0.86
Restructuring charge	(0.3)		—	1.9		0.02
Costs associated with shareowner activism	3.5		0.04	3.5		0.04
Fluctuation in fair value of SPG common shares investment	10.3		0.12			
Write-off of deferred financing costs	0.4		—	0.4		—
Adjusted Funds from Operations attributable to partnership unitholders and participating securities of TRG	$ 90.4	87,032,297	$ 1.04	$ 80.2	86,902,964	$ 0.92
TCO's average ownership percentage of TRG - basic	70.9%			70.8%		
Adjusted Funds from Operations attributable to TCO's common shareowners	$ 64.1		$ 1.04	$ 56.8		$ 0.92

(1) Depreciation includes $3.7 million $3.5 million of mall tenant allowance amortization for the three months ended March, 31 2018 and 2017, respectively.
(2) Amounts in this table may not recalculate due to rounding.

Reconciliation of Net Income to Net Operating Income

	Three Months Ended March 31 (in millions) 2018	2017
Net income	$ 34.6	$ 32.8
Add (less) depreciation and amortization:		
Consolidated businesses at 100%	35.0	37.7
Noncontrolling partners in consolidated joint ventures	(1.9)	(1.8)
Share of Unconsolidated Joint Ventures	17.1	15.7
Add (less) interest expense and income tax expense:		
Interest expense:		
Consolidated businesses at 100%	30.8	25.5
Noncontrolling partners in consolidated joint ventures	(3.0)	(3.0)
Share of Unconsolidated Joint Ventures	16.8	15.8
Income tax expense:		
Consolidated businesses at 100%	0.2	0.2
Noncontrolling partners in consolidated joint ventures	(0.1)	—
Share of Unconsolidated Joint Ventures	0.7	1.6
Share of income tax expense on disposition		0.7
Less noncontrolling share of income of consolidated joint ventures	(1.3)	(1.4)
Add EBITDA attributable to outside partners:		
EBITDA attributable to noncontrolling partners in consolidated joint ventures	6.3	6.2
EBITDA attributable to outside partners in Unconsolidated Joint Ventures	51.0	47.9
EBITDA at 100%	$ 186.2	$ 177.9
Add (less) items excluded from shopping center Net Operating Income:		
General and administrative expenses	8.5	10.8
Management, leasing, and development services, net	(0.5)	(0.3)
Restructuring charge	(0.3)	1.9
Costs associated with shareowner activism	3.5	3.5
Straight-line of rents	(5.5)	(1.9)
Fluctuation in fair value of SPG common shares investment	10.3	
Insurance recoveries - The Mall of San Juan	(0.7)	
Gain on disposition		(4.4)
Gain on sale of peripheral land		(1.7)
Dividend income	(1.2)	(1.0)
Interest income	(1.6)	(2.0)
Other nonoperating expense (income)	—	0.1
Unallocated operating expenses and other	8.1	7.3
Net Operating Income at 100% - total portfolio	$ 206.8	$ 190.1
Less Net Operating Income of non-comparable centers (1)	(12.8)	(12.4)
Net Operating Income at 100% - comparable centers	$ 194.0	$ 177.7
Lease cancellation income	(11.7)	(3.6)
Net Operating Income at 100% excluding lease cancellation income (2)	$ 182.3	$ 174.1

(1) Includes Beverly Center, CityOn.Zhengzhou, The Mall of San Juan, and Taubman Prestige Outlets Chesterfield.
(2) See "Non-GAAP Measures - Use of Non-GAAP Measures" above for a discussion of the use and utility of Net Operating Income excluding lease cancellation income as a performance measure.
(3) Amounts in this table may not add due to rounding.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The information required by this item is included in this report at Item 2 under the caption "Management’s Discussion and Analysis of Financial Condition and Results of Operations – Liquidity and Capital Resources – Sensitivity Analysis."

Item 4. Controls and Procedures

As of the end of the period covered by this quarterly report, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures. Based upon that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that, as of March 31, 2018 , our disclosure controls and procedures were effective to ensure the information required to be disclosed by us in reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized, and reported within the time periods prescribed by the SEC, and that such information is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

There were no changes in our internal control over financial reporting that occurred during the quarter ended March 31, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II
OTHER INFORMATION

Item 1. Legal Proceedings

There were no material changes in our legal proceedings previously disclosed in Part I, Item 3, of our Form 10-K for the year ended December 31, 2017.

Item 1 A. Risk Factors

There were no material changes in our risk factors previously disclosed in Part I, Item 1A. of our Form 10-K for the year ended December 31, 2017 .

Item 6. Exhibits

Exhibit Number	Exhibit Description	Incorporated by Reference: Form	Period Ending	Exhibit	Filing Date	Filed Herewith
4.1	Release of Guaranty, dated February 28, 2018, by and among The Taubman Realty Group Limited Partnership, Twelve Oaks Mall, LLC, and JPMorgan Chase Bank, N.A., in its capacity as Administrative Agent for the Lenders under the Term Loan Agreement.					X
4.2	Release of Guaranty, dated February 28, 2018, by and among The Taubman Realty Group Limited Partnership, Twelve Oaks Mall, LLC, and JPMorgan Chase Bank, N.A., in its capacity as Administrative Agent for the Lenders under the Amended and Restated Revolving Credit and Term Loan Agreement.					X
10.1	Termination of Limited Liability Company Agreement of Taubman Properties Asia II LLC dated February 22, 2018 between Taubman Asia Management II LLC, René Tremblay, and Peter John Sharp.	10-K	December 31, 2017	10.15.1		
12	Statement Re: Computation of Taubman Centers, Inc. Ratio of Earnings to Combined Fixed Charges and Preferred Dividends.					X
31.1	Certification of Chief Executive Officer pursuant to 15 U.S.C. Section 10A, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
31.2	Certification of Chief Financial Officer pursuant to 15 U.S.C. Section 10A, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					**
32.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					**
101.INS	XBRL Instance Document.					X
101.SCH	XBRL Taxonomy Extension Schema Document.					X
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.					X
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.					X
*	A management contract or compensatory plan or arrangement required to be filed.					
**	Documents are furnished, not filed.					

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

	TAUBMAN CENTERS, INC.
Date: April 27, 2018	By: /s/ Simon J. Leopold
	Simon J. Leopold
	Executive Vice President, Chief Financial Officer, and Treasurer (Principal Financial Officer)

Exhibit 4.1

RELEASE OF GUARANTY

Reference is hereby made to (a) the Term Loan Agreement , dated as of November 12, 2013, as amended to date (as so amended, the " ***Credit Agreement*** "), by and among THE TAUBMAN REALTY GROUP LIMITED PARTNERSHIP, a Delaware limited partnership (the "Borrower"), JPMORGAN CHASE BANK, N.A. and the other lending institutions from time to time party thereto (individually, a " ***Lender*** " and collectively, the " ***Lenders*** ") and JPMORGAN CHASE BANK, N.A., as administrative agent (in such capacity, the " ***Administrative Agent*** ") for itself and each other Lender, and (b) the Guaranty, dated as of November 12, 2013, as supplemented to date (as so supplemented, the " ***Guaranty*** "), among Dolphin Mall Associates LLC, Twelve Oaks Mall, LLC, (" ***Twelve Oaks*** "), The Gardens on El Paseo LLC, and La Cienega Partners Limited Partnership and the Administrative Agent. Capitalized terms which are used herein without definition and which are defined in the Credit Agreement shall have the respective meanings assigned to such terms in the Credit Agreement.

On January 19, 2018, the Borrower delivered written notice to the Administrative Agent of its plan to encumber Twelve Oaks Mall with a mortgage lien in a mortgage loan transaction. By such written notice, the Borrower also delivered a compliance certificate. The Borrower hereby confirms that such encumbrance is permitted by Section 6.04 of the Credit Agreement and that no Default or Event of Default had occurred or was continuing as of the date of such notice, or would occur on a pro forma basis after giving effect to such encumbrance. The Borrower has further delivered written notice to the Administrative Agent that such disposition was consummated on the date hereof, and that Twelve Oaks Mall has ceased to be an Eligible Unencumbered Asset as of the date hereof. Section 5.10 of the Credit Agreement provides that the guarantee obligations under the Guaranty of any Subsidiary Guarantor that owns a Property that ceases to be an Eligible Unencumbered Asset shall be released by the Administrative Agent without the need for any consent or approval of the Lenders. The Borrower has requested that the Administrative Agent execute and deliver an instrument of release to so evidence the release of Twelve Oaks from its guarantee obligations under the Guaranty.

Based upon the foregoing, as of the date hereof, the Administrative Agent, on behalf of the Lenders, hereby releases and forever discharges Twelve Oaks from any obligations it may have to the Administrative Agent and Lenders as a Subsidiary Guarantor under the Guaranty. Such release shall not release, discharge, impair or otherwise affect the guarantee obligations of the other Subsidiary Guarantors under the Guaranty, and such guarantee obligations of the other Subsidiary Guarantors shall remain in full force and effect.

IN WITNESS WHEREOF, the undersigned has executed this Release of Guaranty as of February 28, 2018.

ADMINISTRATIVE AGENT:

JPMORGAN CHASE BANK, N.A. ,
as Administrative Agent

By: /s/ Elizabeth Johnson

Name: Elizabeth Johnson
Title: Executive Director

ACKNOWLEDGED AND AGREED :

THE TAUBMAN REALTY GROUP LIMITED PARTNERSHIP

By: /s/ Simon J. Leopold

Name: Simon J. Leopold
Title: Authorized Signatory

TWELVE OAKS MALL, LLC

By: /s/ Simon J. Leopold

Name: Simon J. Leopold
Title: Authorized Signatory

Exhibit 4.2

RELEASE OF GUARANTY

Reference is hereby made to (a) the Amended and Restated Revolving Credit and Term Loan Agreement , dated as of February 1, 2017 (as amended to date, the " ***Credit Agreement*** "), by and among THE TAUBMAN REALTY GROUP LIMITED PARTNERSHIP, a Delaware limited partnership (the "Borrower"), JPMORGAN CHASE BANK, N.A. and the other lending institutions from time to time party thereto (individually, a " ***Lender*** " and collectively, the " ***Lenders*** ") and JPMORGAN CHASE BANK, N.A., as administrative agent (in such capacity, the " ***Administrative Agent*** ") for itself and each other Lender, and (b) the Guaranty, dated as of February 1, 2017 (the " ***Guaranty*** "), among Dolphin Mall Associates LLC, Twelve Oaks Mall, LLC, (" ***Twelve Oaks*** "), The Gardens on El Paseo LLC, and La Cienega Partners Limited Partnership and the Administrative Agent. Capitalized terms which are used herein without definition and which are defined in the Credit Agreement shall have the respective meanings assigned to such terms in the Credit Agreement.

On January 19, 2018, the Borrower delivered written notice to the Administrative Agent of its plan to encumber Twelve Oaks Mall with a mortgage lien in a mortgage loan transaction. By such written notice, the Borrower also delivered a compliance certificate. The Borrower hereby confirms that such encumbrance is permitted by Section 6.04 of the Credit Agreement and that no Default or Event of Default had occurred or was continuing as of the date of such notice, or would occur on a pro forma basis after giving effect to such encumbrance. The Borrower has further delivered written notice to the Administrative Agent that such disposition was consummated on the date hereof, and that Twelve Oaks Mall has ceased to be an Eligible Unencumbered Asset as of the date hereof. Section 5.10 of the Credit Agreement provides that the guarantee obligations under the Guaranty of any Subsidiary Guarantor that owns a Property that ceases to be an Eligible Unencumbered Asset shall be released by the Administrative Agent without the need for any consent or approval of the Lenders. The Borrower has requested that the Administrative Agent execute and deliver an instrument of release to so evidence the release of Twelve Oaks from its guarantee obligations under the Guaranty.

Based upon the foregoing, as of the date hereof, the Administrative Agent, on behalf of the Lenders, hereby releases and forever discharges Twelve Oaks from any obligations it may have to the Administrative Agent and Lenders as a Subsidiary Guarantor under the Guaranty. Such release shall not release, discharge, impair or otherwise affect the guarantee obligations of the other Subsidiary Guarantors under the Guaranty, and such guarantee obligations of the other Subsidiary Guarantors shall remain in full force and effect.

IN WITNESS WHEREOF, the undersigned has executed this Release of Guaranty as of February 28, 2018.

ADMINISTRATIVE AGENT:

JPMORGAN CHASE BANK, N.A. ,
as Administrative Agent

By: /s/ Elizabeth Johnson

Name: Elizabeth Johnson
Title: Executive Director

ACKNOWLEDGED AND AGREED :

THE TAUBMAN REALTY GROUP LIMITED PARTNERSHIP

By: /s/ Simon J. Leopold

Name: Simon J. Leopold
Title: Authorized Signatory

TWELVE OAKS MALL, LLC

By: /s/ Simon J. Leopold

Name: Simon J. Leopold
Title: Authorized Signatory

Exhibit 12

TAUBMAN CENTERS, INC.

Computation of Ratios of Earnings to Combined Fixed Charges and Preferred Dividends

(in thousands, except ratios)

	Three Months Ended March 31	
	2018	2017
Income before income tax expense, equity in income of Unconsolidated Joint Ventures, and gain on disposition, net of tax	$ 15,052	$ 12,849
Add back:		
Fixed charges	36,733	31,764
Amortization of previously capitalized interest	797	746
Distributed income of Unconsolidated Joint Ventures (1)	1,401	2,575
Deduct:		
Capitalized interest	(3,293)	(4,081)
Earnings available for fixed charges and preferred dividends	$ 50,690	$ 43,853
Fixed charges:		
Interest expense	$ 30,823	$ 25,546
Capitalized interest	3,293	4,081
Interest portion of rent expense	2,617	2,137
Total fixed charges	$ 36,733	$ 31,764
Preferred dividends	5,784	5,784
Total fixed charges and preferred dividends	$ 42,517	$ 37,548
Ratio of earnings to fixed charges and preferred dividends	1.2	1.2

(1) In 2018, the Company adopted ASU No. 2016-15, "Statement of Cash Flows - Classification of Certain Cash Receipts and Cash Payments", which changed the presentation of certain cash receipts and payments, including the classification of distributions received from equity method investees, on the Consolidated Statement of Cash Flows. In connection with the adoption of this ASU, the Company re-evaluated its current methodology and retrospectively changed the classification of Distributed Income of Unconsolidated Joint Ventures for the three months ended March 31, 2017 to re-classify prior year balances to correspond with current year classifications.

Exhibit 31.1

Certification of Chief Executive Officer
Pursuant to 15 U.S.C. Section 10A, as Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Robert S. Taubman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Taubman Centers, Inc.;

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 27, 2018

/s/ Robert S. Taubman

Robert S. Taubman

Chairman of the Board of Directors, President, and Chief Executive Officer

Exhibit 31.2

Certification of Chief Financial Officer
Pursuant to 15 U.S.C. Section 10A, as Adopted Pursuant to
Section 302 of the Sarbanes-Oxley Act of 2002

I, Simon J. Leopold, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Taubman Centers, Inc.;

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting, which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 27, 2018

/s/ Simon J. Leopold

Simon J. Leopold

Executive Vice President, Chief Financial Officer, and Treasurer (Principal Financial Officer)

Exhibit 32.1

Certification of Chief Executive Officer
Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

I, Robert S. Taubman, Chief Executive Officer of Taubman Centers, Inc. (the "Registrant"), certify that based upon a review of the Quarterly Report on Form 10-Q for the period ended March 31, 2018 (the "Report"):

(i) The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ Robert S. Taubman Date: April 27, 2018

Robert S. Taubman

Chairman of the Board of Directors, President, and Chief Executive Officer

Exhibit 32.2

Certification of Chief Financial Officer
Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to
Section 906 of the Sarbanes-Oxley Act of 2002

I, Simon J. Leopold Chief Financial Officer of Taubman Centers, Inc. (the "Registrant"), certify that based upon a review of the Quarterly Report on Form 10-Q for the period ended March 31, 2018 (the "Report"):

(i) The Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and

(ii) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Registrant.

/s/ Simon J. Leopold Date: April 27, 2018

Simon J. Leopold

Executive Vice President, Chief Financial Officer, and Treasurer (Principal Financial Officer)