UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 11-K

(Mark one)

☑ ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2009

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☐ TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from

to

Commission file number 1-14023

A. Full title of the plan and address of the plan, if different from that of the issuer named below:

Corporate Office Properties, L.P. Employee Retirement Savings Plan

B. Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:

Corporate Office Properties Trust

6711 Columbia Gateway Drive, Suite 300 Columbia, Maryland 21046

TABLE OF CONTENTS

FORM 11-K

	PAGE
Report of Independent Registered Public Accounting Firm	3
Financial Statements	
Statements of Net Assets Available for Benefits	4
Statement of Changes in Net Assets Available for Benefits	5
Notes to Financial Statements	6
Supplemental Schedules * Schedule of Assets (Held at End of Year)	11
Schedule of Assets (field at End of Teal)	11
Signatures	12
Exhibit Index	13
Consent of Independent Registered Public Accounting Firm	Exhibit 23

2

Report of Independent Registered Public Accounting Firm

To the Participants and Administrator of the Corporate Office Properties, L.P. Employee Retirement Savings Plan

In our opinion, the accompanying statements of net assets available for benefits and the related statement of changes in net assets available for benefits present fairly, in all material respects, the net assets available for benefits of the Corporate Office Properties, L.P. Employee Retirement Savings Plan (the "Plan") at December 31, 2009 and 2008, and the changes in net assets available for benefits for the year ended December 31, 2009, in conformity with accounting principles generally accepted in the United States of America. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes

^{*} Other supplemental schedules required by 29 CFR 2520.103-10 of the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974, as amended, have been omitted because they are not applicable.

examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

Our audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental Schedule of Assets (Held at End of Year) as of December 31, 2009 is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

/s/ PricewaterhouseCoopers LLP Baltimore, MD June 24, 2010

3

Corporate Office Properties, L.P. Employee Retirement Savings Plan Statements of Net Assets Available for Benefits

		December 31,			
		2009		2008	
Assets				_	
Investments, at fair value					
Mutual funds	\$	14,197,694	\$	8,724,942	
Common/collective fund		1,002,549		778,566	
Corporate Office Properties Trust common shares		1,053,532		567,646	
Participant loans		274,272		224,198	
Cash and cash equivalents		_		5,092	
Total investments		16,528,047		10,300,444	
Receivables					
Employer contribution		27,664		_	
Net assets at fair value		16,555,711		10,300,444	
		<u> </u>			
Adjustment to contract value					
Adjustment from fair value to contract value for fully benefit-responsive investment contracts		(30,106)		7,298	
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Net assets available for benefits	\$	16,525,605	\$	10,307,742	
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See accompanying notes to financial statements.

4

Corporate Office Properties, L.P. Employee Retirement Savings Plan Statement of Changes in Net Assets Available for Benefits Year Ended December 31, 2009

Additions	
Investment income	
Interest and dividend income	\$ 295,796
Net appreciation in fair value of investments	3,562,796
Total investment income	3,858,592
Contributions	
Employee	2,136,230
Employer	961,624
Rollovers	172,840
Total contributions	3,270,694
Total additions	7,129,286
Deductions	
Benefits paid	910,123
Administrative expenses (Note 2)	1,300
Total deductions	911,423
Net increase	6,217,863
Net assets available for benefits	
Beginning of year	10,307,742
End of year	\$ 16,525,605
" · , "	

See accompanying notes to financial statements.

Corporate Office Properties, L.P. Employee Retirement Savings Plan Notes to Financial Statements

1. Description of Plan

The following description of the Corporate Office Properties, L.P. Employee Retirement Savings Plan (the "Plan") provides only general information. Participants should refer to the Plan document or summary plan description for a more complete description of the Plan's provisions.

General

Corporate Office Properties, L.P. (the "Company"), which conducts almost all of Corporate Office Properties Trust's operations and of which Corporate Office Properties Trust is the sole general partner, maintains the Plan for the benefit of the Company's employees, as well as of those of its qualifying subsidiaries, who have completed at least 60 days of employment and are at least 21 years of age. Employees automatically enter the Plan as participants on the first day of the month that coincides with or next follows the date when they become eligible to enter the Plan unless they make an affirmative election to not participate. The Plan is a defined contribution pension plan intended to be qualified under section 401(a) of the Internal Revenue Code of 1986, as amended (the "IRC"), and is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended ("ERISA"). The Company serves as the Plan administrator and T. Rowe Price Trust Company is the Trustee for the Plan.

Contributions

Participants may contribute up to 15% of their compensation, as defined in the Plan, per pay period on a before-tax basis, subject to limitations under the IRC. Participants may also contribute up to 15% of their compensation per pay period on an after-tax basis. Total before-tax contributions and after-tax contributions are limited to 15% of compensation. Participants who are 50 years of age or older by the end of a particular plan year and have contributed the maximum 401(k) deferral amount allowed under the Plan for that year are eligible to contribute an additional portion of their annual compensation on a before-tax basis as catch-up contributions, up to the annual IRC limit. Participants may rollover amounts from traditional individual retirement accounts ("IRAs"), 403(b) plans, 457 plans and other qualified retirement plans into the Plan. Participants direct the investment of their contributions into various investment options offered by the Plan. For contributions to the Plan occurring subsequent to December 31, 2008, the Company matches 100% of the first 1% of pre-tax and/or after-tax contributions that participants contribute to the Plan and 50% of the next 5% in participant contributions to the Plan occurring through December 31, 2008, the Company matched 50% of the first 6% of pre-tax and/or after-tax contributions that participants contributions to the Plan occurring through December 31, 2008, the Company matched 50% of the first 6% of pre-tax and/or after-tax contributions that participants cont

Participant Accounts

Each participant's account is credited with the participant's contributions, Company matching contributions and an allocation of Plan earnings (losses). Allocations are based on participant earnings or account balances, as defined in the Plan. The benefit to which a participant is entitled is the benefit that can be provided from the participant's vested account.

Vesting

Participants immediately vest in their contributions and related earnings thereon. Vesting in the Company matching contribution portion of Participant accounts is based on years of continuous service. For matching contributions made subsequent to December 31, 2008, a participant is 50% vested in Company matching contributions after one year of credited service and 100% vested after two years of credited service. For matching contributions made through December 31, 2008, a participant is 30% vested in Company matching contributions after one year of credited service, 60% vested after two years of credited service and 100% vested after three years of credited service.

Participant Loans

Participants are eligible to obtain loans from the Plan, not to exceed the lesser of \$50,000 or 50% of the vested balance of the participant's account. The loans are secured by the balance in the participant's account and bear interest at rates that are commensurate with local prevailing rates, as determined by the Plan administrator. At December 31, 2009, interest rates on participant loans ranged from 4.25% to 9.25% and the maturity dates on such loans ranged from May 2010 through November 2016. Repayment of participants' loan principal and interest is obtained through bi-weekly payroll deductions from such participants. If participants revoke elections applicable to such payroll deductions, the entire unpaid principal sum of the participants' loan plus accrued interest and any other amounts due under the loan will become due and payable.

6

Payment of Benefits

Upon termination of service, whether by death, disability, retirement or otherwise leaving the Company and its qualifying subsidiaries, a participant may elect to receive either a lump sum amount equal to the value of the participant's vested interest in his or her account, or annual installments over a specified period unless such vested interest is \$1,000 or less, in which case a distribution is made in a lump sum amount. Alternatively, a participant or applicable beneficiary may request that the Company make a direct transfer to another eligible retirement plan.

In the event of financial hardship (as defined by the Plan), participants may withdraw money from their Plan accounts while they are still employed. A participant cannot make elective deferral contributions to the Plan for six months after he or she takes a financial hardship distribution.

Forfeitures

Nonvested Company matching contributions are forfeited on the date a participant terminates employment with the Company or its qualifying subsidiaries. Forfeitures are available for the Company to apply against future Company contributions. Forfeited nonvested accounts totaled \$6,011 at December 31, 2009 and \$7,661 at December 31, 2008. The Plan used \$7,330 in forfeited nonvested accounts during 2009 to reduce the Company's funding requirements for additional employer contributions.

Investment Options

The Plan provides 23 T. Rowe Price mutual funds and one T. Rowe Price common/collective fund in which participants may choose to invest. Participants of the Plan may also choose to invest in additional mutual funds through a self-directed brokerage service provided by T. Rowe Price. In addition, the participants of the Plan may choose to invest in Corporate Office Properties Trust's common shares.

2. Summary of Accounting Policies

Basis of Accounting

The financial statements of the Plan are prepared under the accrual basis of accounting.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

Payment of Benefits

Benefits are recorded when paid.

Investment Valuation and Income Recognition

The Plan's investments are stated at fair value. Shares of mutual funds are valued at quoted market prices on the last business day of the Plan year. Shares in the T. Rowe Price Stable Asset Fund, which is a fully benefit-responsive common/collective fund, are valued at fair value with an adjustment to arrive at contract value based on information reported on the audited financial statements of the fund at year end; contract value is the relevant measurement attribute for that portion of the net assets available for benefits because that is the amount participants would receive if they were to initiate permitted transactions under the terms of the Plan. Corporate Office Properties Trust's common shares are valued at the closing market price of such shares at the end of the respective periods, as reported on the New York Stock Exchange. Participant loans are valued at amortized cost plus accrued interest, which approximates fair value.

Purchases and sales of securities are recorded on a trade-date basis. Dividends are recorded on the ex-dividend date. Interest income is recorded on the accrual basis.

The Plan presents in the Statement of Changes in Net Assets Available for Benefits the net appreciation in the fair value of its investments, which consists of the realized gains or losses and the unrealized appreciation and depreciation on those investments.

Administrative Expenses

Substantially all expenses incurred in connection with administration of the Plan are paid by the Company with the exception of loan fees, which are charged against the respective participants' accounts.

7

Recent Accounting Pronouncement

In June 2009, the Financial Accounting Standards Board ("FASB") issued guidance which establishes the FASB Accounting Standards Codification as the source of authoritative accounting principles recognized by the FASB to be applied in the preparation of financial statements in conformity with generally accepted accounting principles for nongovernmental entities. The guidance explicitly recognizes rules and interpretive releases of the Securities and Exchange Commission ("SEC") under federal securities laws as authoritative Generally Accepted Accounting Principles for SEC registrants. The guidance became effective for us on July 1, 2009 and did not have a material effect on the Plan's Financial Statements.

3. Investments, at fair value

The following presents the value and number of shares held of each investment that represents five percent or more of the Plan's net assets as of the end of the respective periods:

	Value of Investments at December 31,			ts at	Number of Shares Held at December 31,		
		2009		2008	2009	2008	
Mutual funds:							
T. Rowe Price Mid-Cap Growth Fund	\$	1,625,722	\$	1,105,839	34,233	33,849	
T. Rowe Price Retirement 2020 Fund		1,295,820		842,879	88,755	75,867	
T. Rowe Price Retirement 2030 Fund		1,191,429		*	78,798	*	
T. Rowe Price Equity Index 500 Fund		1,109,967		800,452	36,962	33,008	
T. Rowe Price Growth Stock Fund		1,011,004		712,056	36,750	37,009	
T. Rowe Price Stable Value Fund		1,002,549		778,566	972,443	785,864	
T. Rowe Price Retirement 2025 Fund		984,276		*	92,769	*	
T. Rowe Price Equity Income Fund		948,132		596,610	45,171	34,930	
T. Rowe Price Retirement 2035 Fund		925,600		*	86,911	*	
T. Rowe Price Small-Cap Value Fund		882,582		599,166	29,938	25,496	
Corporate Office Properties Trust common shares		1,053,532		567,646	28,761	18,490	

^{*}The balance of this investment does not represent more than 5% of the Plan's assets at December 31, 2008.

The Plan's investments appreciated in value by \$3,562,796 in the year ended December 31, 2009 (including realized gains and losses on investments bought and sold, and unrealized gains and losses on investments held during the year). This appreciation was attributable to the following: \$3,392,341 net appreciation to investments in mutual funds; and \$170,455 net appreciation to investments in Corporate Office Properties Trust common shares.

Accounting standards define fair value as the exit price, or the amount that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants as of the measurement date. The standards also establish a hierarchy for inputs used in measuring fair value that maximizes the use of observable inputs and minimizes the use of unobservable inputs by requiring that the most observable inputs be used when available. Observable inputs are inputs market participants would use in valuing the asset or liability developed based on market data obtained from sources independent of the Plan. Unobservable inputs are inputs that reflect assumptions about the factors market participants would use in valuing the asset or liability developed based upon the best information available given the circumstances. The hierarchy of these inputs is broken down into three levels: Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities; Level 2 inputs include (1) quoted prices for similar assets or liabilities in active markets, (2) quoted prices for identical or similar assets or liabilities in markets that are observable for the asset or liability, either directly or indirectly; and Level 3 inputs are unobservable inputs for the asset or liability. Categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Description		Quoted Prices in Active Markets for Identical Assets (Level 1)	nificant Other servable Inputs (Level 2)	Uı	Significant nobservable Inputs (Level 3)	Total
December 31. 2009						
Assets:						
Mutual funds:						
Stock funds	\$	7,373,424	\$ _	\$	_	\$ 7,373,424
Retirement funds		6,188,902	_		_	6,188,902
Bond funds		635,368	_		_	635,368
Common/collective fund		_	1,002,549		_	1,002,549
Corporate Office Properties Trust common shares		1,053,532	_		_	1,053,532
Participant loans		_	_		274,272	274,272
Total assets	\$	15,251,226	\$ 1,002,549	\$	274,272	\$ 16,528,047
December 31. 2008			 			
Assets:						
Mutual funds:						
Stock funds	\$	5,390,639	\$ _	\$	_	\$ 5,390,639
Retirement funds		2,850,425	_		_	2,850,425
Bond funds		483,878	_		_	483,878
Common/collective fund		_	778,566		_	778,566
Corporate Office Properties Trust common shares		567,646	_		_	567,646
Participant loans		_	_		224,198	224,198
Cash and cash equivalents	_	5,092				5,092
Total assets	\$	9,297,680	\$ 778,566	\$	224,198	\$ 10,300,444

The Plan's Level 1 assets are valued at quoted market prices. The Plan's Level 2 assets, representing investments in a common/collective fund, have underlying investments primarily in pools of investment contracts that are issued by insurance companies and commercial banks and contracts that are backed by high-quality bonds, bond and securities trusts and mutual funds; these investments are valued based on the aggregate market values of the applicable bonds, bond and securities trusts and other investments. The Plan's Level 3 assets, representing participant loans, are valued at amortized cost plus accrued interest, which approximates fair value. The Plan's Level 3 assets comprised approximately 1.7% of the Plan's total investment portfolio fair value. Below is a summary of changes in the fair value of the Plan's Level 3 assets for the year ended December 31, 2009:

Beginning balance	\$ 224,198
New loans issued	131,765
Loan repayments	(81,691)
Ending balance	\$ 274,272

4. Plan Termination

Although it has not expressed any intention to do so, the Company has the right under the Plan to terminate the Plan and discontinue its contributions at any time, subject to the provisions of ERISA. In the event of termination, participants become 100% vested in their accounts.

5. Related Parties

Certain Plan investments are shares of mutual funds managed by T. Rowe Price Associates. T. Rowe Price Associates and T. Rowe Price Trust Company are subsidiaries of T. Rowe Price Group, Inc. Transactions with the Trustee, T. Rowe Price Trust Company, therefore qualify as party-in-interest transactions, which are exempt from the prohibited transaction rules of ERISA.

During 2009, the Plan purchased 12,283 common shares of Corporate Office Properties Trust for \$370,889 and sold 2,012 common shares for \$55,458. The Plan held 28,761 common shares valued at \$1,053,532 at December 31, 2009 and 18,490 common shares valued at \$567,646 at December 31, 2008.

9

6. Income Tax Status

The Plan administrator received a favorable determination letter dated July 13, 2005. The Plan administrator believes that the Plan is designed and operated in compliance with the applicable requirements of the IRC. As such, no provision for income taxes has been included in the Plan's financial statements.

7. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market and credit risks. Due to the level of risk associated with certain investment securities, it is reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statement of net assets available for benefits.

8. Reconciliations of Financial Statements to Form 5500

The following is a reconciliation of net assets available for benefits per the financial statements to the Form 5500:

	December 31,			
		2009		2008
Net assets available for benefits per the financial statements	\$	16,525,605	\$	10,307,742
Adjustment from fair value to contract value for fully benefit-responsive investment contracts		30,106		(7,298)
Net assets available for benefits per the Form 5500	\$	16,555,711	\$	10,300,444

The following is a reconciliation of total investment income per the financial statements to the Form 5500 for the year ended December 31, 2009:

Total investment income per the financial statements	\$ 3,858,592
Adjustment from fair value to contract value for fully benefit-responsive investment contracts - current year	30,106
Adjustment from fair value to contract value for fully benefit-responsive investment contracts - prior year	 7,298

Corporate Office Properties, L.P. Employee Retirement Savings Plan Schedule H, Line 4i — Schedule of Assets (Held at End of Year) December 31, 2009

(c) Description of investment

	(b) Identity of issue, borrower, lessor	including maturity date, rate of interest, collateral, par or	(d)	(e) Current
(a)	or similar party	maturity value	Cost**	 Value
*	T. Rowe Price Mid-Cap Growth Fund	Mutual fund		\$ 1,625,722
*	T. Rowe Price Retirement 2020 Fund	Mutual fund		1,295,820
*	T. Rowe Price Retirement 2030 Fund	Mutual fund		1,191,429
*	T. Rowe Price Equity Index 500 Fund	Mutual fund		1,109,967
*	T. Rowe Price Growth Stock Fund	Mutual fund		1,011,004
*	T. Rowe Price Retirement 2025 Fund	Mutual fund		984,276
*	T. Rowe Price Equity Income Fund	Mutual fund		948,132
*	T. Rowe Price Retirement 2035 Fund	Mutual fund		925,600
*	T. Rowe Price Small-Cap Value Fund	Mutual fund		882,582
*	T. Rowe Price International Stock Fund	Mutual fund		740,485
*	T. Rowe Price Retirement 2040 Fund	Mutual fund		687,777
*	T. Rowe Price New Income Fund	Mutual fund		635,368
*	T. Rowe Price Balanced Fund	Mutual fund		513,498
*	T. Rowe Price Retirement 2045 Fund	Mutual fund		484,183
*	T. Rowe Price New Horizons Fund	Mutual fund		439,571
*	T. Rowe Price Retirement 2015 Fund	Mutual fund		245,017
*	T. Rowe Price Retirement Income Fund	Mutual fund		116,280
*	T. Rowe Price Extended Equity Market Index	Mutual fund		97,589
*	T. Rowe Price Retirement 2050 Fund	Mutual fund		94,473
*	T. Rowe Price Retirement 2010 Fund	Mutual fund		92,769
*	T. Rowe Price Retirement 2055 Fund	Mutual fund		35,868
*	T. Rowe Price Retirement 2005 Fund	Mutual fund		35,410
*	T. Rowe Price Mid-Cap Value Fund	Mutual fund		4,746
*	T. Rowe Price Media & Telecommunications	Mutual fund		65
*	T. Rowe Price Science & Technology Fund	Mutual fund		63
	Registered investment companies			 14,197,694
*	T. Rowe Price Stable Value Fund	Common/collective fund		1,002,549
*	Corporate Office Properties Trust common shares	Common shares		1,053,532
*	Participant loans	Interest rates ranging from 4.25% to 9.25%, maturity dates ranging from May 2010		
		through November 2016		 274,272
				\$ 16,528,047

* Denotes party-in-interest as defined by ERISA.

** Cost information not required for participant-directed accounts.

11

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plan) have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

CORPORATE OFFICE PROPERTIES, L.P. EMPLOYEE RETIREMENT SAVINGS PLAN

BY: CORPORATE OFFICE PROPERTIES, L.P.,

the Plan administrator

BY: CORPORATE OFFICE PROPERTIES TRUST,

the sole general partner

Date: June 24, 2010 BY: /s/ Randall M. Griffin

Randall M. Griffin

President and Chief Executive Officer

12

Exhibit Number Exhibit Title

23 Consent of Independent Registered Public Accounting Firm

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statement on Form S-8 (No.333-111736) of Corporate Office Properties Trust of our report dated June 24, 2010 relating to the financial statements and supplemental schedule of Corporate Office Properties, L.P. Employment Retirement Savings Plan, which appears in this Form 11-K.

/s/ PricewaterhouseCoopers LLP Baltimore, Maryland June 24, 2010