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

Form 8-K

Current Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date Of Report (Date Of Earliest Event Reported): 9/21/2005

Wells Real Estate Investment Trust, Inc.

(Exact Name of Registrant as Specified in its Charter)

Commission File Number: 000-25739

MD

(State or Other Jurisdiction of Incorporation or Organization) 58-2328421 (I.R.S. Employer Identification No.)

6200 The Corners Parkway Norcross, GA 30092-3365 (Address of Principal Executive Offices, Including Zip Code)

770-449-7800 (Registrant's Telephone Number, Including Area Code)

(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

□ Soliciting material pursuant to Rule 14a-12 under the Exchange Act(17CFR240.14a-12)

Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act(17CFR240.14d-2(b))

Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act(17CFR240.13e-4(c))

Item 7.01. Regulation FD Disclosure

On September 21, 2005, Wells Real Estate Investment Trust, Inc. (the "Registrant") sent a letter to its shareholders providing an update of the Registrant's portfolio. This letter is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference. Pursuant to the rules and regulations of the Securities and Exchange Commission, such exhibit and the information set forth therein are deemed to have been furnished and shall not be deemed to be "filed" under the Securities Exchange Act of 1934.

Item 9.01. Financial Statements and Exhibits

EX-99.1 Letter to shareholders dated September 21, 2005.

Signature(s)

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 hereunto duly authorized.

Wells Real Estate Investment Trust, Inc.

Date: September 21, 2005.

By: _____/S/ DOUGLAS P. WILLIAMS

Douglas P. Williams Executive Vice President

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Exhibit	Index
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Exhibit No.	Description
EX-99.1	Letter to shareholders dated September 21, 2005.

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Wells Real Estate Funds

Message to Wells REIT Investors from Leo Wells



I am happy to introduce this newsletter as a means of staying in touch and keeping you informed of developments with your Wells REIT investment. But first, I want to take a moment to extend our deepest condolences to those affected by Hurricane Katrina and let you know that Wells is contributing time and money to relief efforts. While human needs are of utmost concern, we also want to reassure you that no Wells-owned buildings were harmed in any way by the storm.

In this issue, we'll talk about where the Wells REIT is in its life cycle, as well as provide an update on its vital statistics as of August 31, 2005. On the back page, we feature recent property news, including lease extensions and a build-to-suit we completed. These developments are important, as they demonstrate our commitment to strengthening the portfolio and our tenant relationships.

What's next for the Wells REIT?

If the Wells REIT is the first nontraded REIT you've invested in, it may be helpful to understand the life cycle of a nontraded REIT and where the Wells REIT currently falls in this life cycle. The Wells REIT is in the Portfolio Management phase, meaning that we are now actively monitoring and managing its assets and portfolio composition according to its stated objectives.

	Started Jan. 1998			Wells REIT is here		Jan. 2008 or before	
		Property		Portfolio		List	
	Fundraising	Acquisition		Management		Strategies Extend	
						Liquidate	
objectiv use of n offering • Commen	Statement of investment	• Funds used for property	•		Nears completion of its life cycle		
	objectives and intended use of net proceeds from offering	 purchases Portfolio achieves greater diversification 	•	monitored and managed Program matures and may experience:	•	List: May be listed on public exchange —	
	Commencement of receiving investor monies	• Portfolio begins to take shape	•	 Acquisitions 		shares would become tradable and may be sold for cash	
	receiving investor momes	in accordance with stated investment objectives		• Lease renewals/ New	•	Extend:	
		Property assets are actively monitored and managed		leasesDispositions		Could be extended by shareholder vote — current program would continue as is	
		montored and managed		• Reinvestments	•	Liquidate:	
				Payouts to investors		Assets may be sold or liquidated —	
				Additional acquisitions		proceeds would be distributed to investors after payment of fees and expenses	
			•	Portfolio valuation/appraisal for year ended Dec. 2006			

Our recent 27-property sale is a good example of active portfolio management and the type of fine-tuning the Wells REIT is undergoing right now. The next major step is to complete a valuation of the portfolio's assets, which we anticipate will be available in the first quarter of 2007. With the appraisal, you may get a better sense of the value of your shares.

More importantly, this valuation will enable us to prepare for the last phase of the Wells REIT — the exit-strategy phase. Per the prospectus, there are three possible exit options under consideration by the Wells REIT Board of Directors:

- List the Wells REIT on a public exchange
- Extend the Wells REIT past the 2008 liquidation deadline (requires shareholder vote)
- Liquidate the assets, pay fees and expenses, and distribute the proceeds back to investors

Although the Board has not yet made a decision on an exit strategy, it is tasked with managing the Wells REIT so that any of these three outcomes may be successful in delivering the greatest value to investors.

As we move forward and reach new milestones, we will keep you informed of what they mean to you as an investor. As always, we appreciate the confidence you've placed in us to manage the Wells REIT to its fullest potential.

Sincerely,

Leo F. Wells III President Wells Real Estate Funds



Wells Real Estate Funds

WELLS REIT PORTFOLIO UPDATE

Portfolio Details	(Data as of August 31, 2005)
Assets Under Management	\$ 4,398,676,136
Total Buildings	84
Total Square Footage	20,581,991
States Represented	24*
Major Industries Represented	49
Total Tenants	295
Total % Leased	95.6%
Average Lease Term Remaining	6.7 Years
% Office Properties	95.7%
% Industrial Properties	1.7%
% Mixed-Use Properties	2.6%
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* Includes District of Columbia.

Property News



One Independence Square

Washington, D.C.

Major tenant: United States Office of the Comptroller of the Currency (OCC)

- Signed five-year lease extension to June 2011.
- OCC occupies 100% of the property, its headquarters for the past 14 years.
- Class-A office property with 322,984 rentable square feet.
- OCC is the bureau of the U.S. Treasury Department that supervises national banks, federal branches, and foreign bank agencies.



26200 Enterprise Way Lake Forest (Orange County), California

Major tenant: Panasonic Avionics (formerly Matsushita Avionics)

- Signed five-year lease extension to February 2012.
- 145,000-square-foot office building.
- Tenant is world's leading supplier of in-flight entertainment and communication systems.
- Company occupies 100% of the property, constructed as a build-to-suit in 2000.



/50 South Kichfield

Aurora (Denver), Colorado

Major tenant: Northrop Grumman

- Signed new 10-year lease through June 2015 and completed building expansion.
- Expansion added 79,695 square feet to tenant's previous 108,240 square feet, an increase of 74%.
- Tenant is a global leader servicing the aerospace, systems, and automotive markets.
- Three-story building in strategic location next to Buckley Air Force Base.



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This document may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and 21E of the Securities Exchange Act of 1934. Such statements involve risks and uncertainties, which could cause actual results to vary materially from those expressed in or indicated by the forward-looking statements. Such forward-looking statements can generally be identified by our use of forward-looking terminology such as "may," "will," "expect," "intend," "anticipate," "estimate," "believe," "continue," or other similar words. Factors that may cause actual results to differ materially include changes in general economic conditions, changes in real estate conditions, construction delays, increases in interest rates, lease-up risks, lack of availability of financing, and lack of availability of capital proceeds. We make no representations or warranties (express or implied) about the accuracy of any such forward-looking statements contained in this document, and we do not intend to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise. This is neither an offer nor a solicitation to purchase securities.