

OMB APPROVAL	
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>WELLS LEO F III</u> (Last) (First) (Middle) <u>6200 THE CORNERS PARKWAY</u> (Street) <u>NORCROSS GA 30092</u> (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>WELLS REAL ESTATE INVESTMENT TRUST INC [N/A]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director 10% Owner Officer (give title below) Other (specify below)
	3. Date of Earliest Transaction (Month/Day/Year) <u>04/16/2007</u>	
4. If Amendment, Date of Original Filed (Month/Day/Year)		

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	04/16/2007		J ⁽¹⁾		19,546,302	A	\$8.9531	19,573,180.61	I	By Wells Advisory Services I, LLC ⁽²⁾
Common Stock	04/16/2007		J ⁽³⁾		22,339	A	\$8.9531	19,573,180.61	I	By Wells Capital, Inc. ⁽⁴⁾

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)	6. Date Exercisable and Expiration Date (Month/Day/Year)		7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)	8. Price of Derivative Security (Instr. 5)	9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	V		Date Exercisable	Expiration Date					

Explanation of Responses:

- Shares issued to Wells Advisory Services I, LLC as consideration for the internalization of advisor companies into Wells Real Estate Investment Trust, Inc. For more details on this transaction, see the proxy statement filed with the Securities and Exchange Commission pursuant to Section 14A of the Securities Exchange Act of 1934 on February 26, 2007.
- Leo F. Wells, III is the sole shareholder of Wells Real Estate Funds, Inc., which is the sole shareholder of Wells Management Company, Inc. and Wells Capital, Inc. Wells Management Company, Inc. and Wells Capital, Inc. own a 92% controlling interest in Wells Advisory Services I, LLC.
- Shares issued to Wells Capital, Inc. as consideration for the internalization of advisor companies into Wells Real Estate Investment Trust, Inc. For more details on this transaction, see the proxy statement filed with the Securities and Exchange Commission pursuant to Section 14A of the Securities Exchange Act of 1934 on February 26, 2007.
- Leo F. Wells, III is the sole shareholder of Wells Real Estate Funds, Inc., which is the sole shareholder of Wells Capital, Inc.

Leo F. Wells, III 04/18/2007
 ** Signature of Reporting Person Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 4 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.