

WELLS REAL ESTATE INVESTMENT TRUST, INC.

SUPPLEMENT NO. 5 DATED DECEMBER 14, 1998 TO THE PROSPECTUS  
DATED JANUARY 30, 1998

This document supplements, and should be read in conjunction with, the Prospectus of Wells Real Estate Investment Trust, Inc. dated January 30, 1998, as supplemented and amended by Supplement No. 1 dated April 20, 1998, Supplement No. 2 dated June 30, 1998, Supplement No. 3 dated August 12, 1998, and Supplement No. 4 dated November 1, 1998 (the "Prospectus"). Unless otherwise defined herein, capitalized terms used in this Supplement shall have the same meanings as set forth in the Prospectus.

The purpose of this Supplement is to describe the following:

(i) The status of the offering of shares of common stock in Wells Real Estate Investment Trust, Inc. (the "Company"); and

(ii) Revisions to the "INVESTOR SUITABILITY STANDARDS" and "PLAN OF DISTRIBUTION" sections of the Prospectus.

STATUS OF THE OFFERING

Pursuant to the Prospectus, the offering of shares in the Company began on January 30, 1998. The Company began its operations on June 5, 1998, upon the acceptance of subscriptions for the minimum offering of \$1,250,000 (125,000 shares). As of November 30, 1998, the Company had raised a total of \$27,119,000 in offering proceeds (2,711,900 shares).

INVESTOR SUITABILITY STANDARDS

The information contained on page 15 in the "INVESTOR SUITABILITY STANDARDS" section of the Prospectus, as amended in Supplement No. 1 to the Prospectus, is revised and amended as of the date of this Supplement by the deletion of the fourth full paragraph of that section and the insertion of the following paragraph in lieu thereof:

The minimum purchase is 100 shares (\$1,000) (except in certain states and as otherwise described below). No transfers will be permitted of less than the minimum required purchase, nor (except in very limited circumstances) may an investor transfer, fractionalize or subdivide such shares so as to retain less than such minimum number thereof. For purposes of satisfying the minimum investment requirement for Retirement Plans, unless otherwise prohibited by state law, a husband and wife may jointly contribute funds from their separate Individual Retirement Accounts ("IRAs"), provided that each such contribution is made in increments of at least \$100. It should be noted, however, that an investment in the Company will not, in itself, create a Retirement Plan for any investor and that in order to create a Retirement Plan, an investor must comply with all applicable provisions of the Code. Except in Maine, Minnesota and Washington, investors who have satisfied the minimum purchase requirements and have purchased units in Prior Wells Public Programs or units or shares in other public real estate programs may purchase less than the minimum number of shares set forth above, but in no event less than 2.5 shares (\$25). The minimum purchase for New York investors is 250 shares (\$2,500); however, the minimum investment for New York IRAs is 100 shares (\$1,000). After an investor has purchased the minimum investment, any additional investments must be made in increments of at least 2.5 shares (\$25), except for (i) those made by investors in Maine, who must still meet the minimum investment requirement for Maine residents of \$1,000 for IRAs and \$2,500 for non-IRAs, (ii) purchases of shares pursuant to the Reinvestment Plan or

reinvestment plans of other public real estate programs, which may be in lesser amounts, and (iii) the minimum purchase requirement for Minnesota investors other than IRAs and Qualified Plans of 250 shares (\$2,500), and the minimum purchase requirement for Minnesota IRAs and Qualified Plans of 200 shares (\$2,000).

#### PLAN OF DISTRIBUTION

The information contained on page 74 in the "PLAN OF DISTRIBUTION" section of the Prospectus is revised as of the date of this Supplement by the deletion of the fourth full paragraph on that page and the insertion of the following paragraph in lieu thereof:

Payment for shares should be made by check payable to "NationsBank, N.A., as Escrow Agent." Subscriptions will be effective only upon acceptance by the Company, and the Company reserves the right to reject any subscription in whole or in part. In no event may a subscription for shares be accepted until at least five business days after the date the subscriber receives this Prospectus. Each subscriber will receive a confirmation of his purchase. Except for purchases pursuant to the Reinvestment Plan or reinvestment plans of other public real estate programs, all accepted subscriptions will be for not less than 100 shares (\$1,000). See "Investor Suitability Standards." Except in Maine, Minnesota and Washington, investors who have satisfied the minimum purchase requirement and have purchased units in Prior Wells Public Programs or units or shares in other public real estate programs may purchase less than the minimum number of shares discussed above, provided that such investors purchase a minimum of 2.5 shares (\$25). After investors have satisfied the minimum purchase requirement, minimum additional purchases must be in increments of at least 2.5 shares (\$25), except for purchases pursuant to the Reinvestment Plan or reinvestment plans of other public real estate programs.