

PROSPECTUS SUPPLEMENT NO. 1
(To Prospectus dated September 16, 2013)

656,998 Shares



Common Stock

This Prospectus Supplement No. 1 (the "Prospectus Supplement") supplementing the prospectus dated September 16, 2013 (the "Prospectus"), relating to the possible resale of up to 656,998 shares of common stock of Wheeler Real Estate Investment Trust, Inc., that may be offered and sold from time to time by the selling stockholders named in the Prospectus. For information on the selling stockholders, please see the section entitled "Selling Stockholders" beginning on page 22 of the Prospectus. This Prospectus Supplement is part of, and should be read in conjunction, with the Prospectus.

On November 14, 2013, the Company filed with the Securities in Exchange Commission ("SEC") its Quarterly Report on Form 10-Q for the period ended September 30, 2013 (the "Quarterly Report"). In addition, the Company filed with the SEC Current Reports on Form 8-K filed on September 18, 2013, September 19, 2013, September 27, 2013, October 21, 2013, October 25, 2013, November 13, 2013 and November 18, 2013 (collectively the "Current Reports"). This Prospectus Supplement is being filed to update and supplement the information included or incorporated by reference in the Prospectus with the information contained and incorporated by reference in the Quarterly Report and Current Reports. Accordingly, we have included the update to the documents we are incorporating by reference to in this Prospectus Supplement.

Our common stock trades on the Nasdaq Capital Market under the symbol "WHLR." On November 20, 2013, the last reported sale price of our common stock on the Nasdaq Capital Market was \$4.37 per share.

Wheeler Real Estate Investment Trust, Inc.
Riversedge North
2529 Virginia Beach Blvd., Suite 200
Virginia Beach, Virginia 23452
(757) 627-9088

Investing in our common stock involves significant risks. See "Risk Factors" on page 3 of the Prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of our securities or passed upon the adequacy or accuracy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this Prospectus Supplement is November 21, 2013

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

We are incorporating certain information about us that we have filed with the SEC by reference in this Prospectus Supplement, which means that we are disclosing important information to you by referring you to those documents. We are also incorporating by reference in this Prospectus Supplement information that we file with the SEC after this date. The information we incorporate by reference is an important part of the Prospectus, and later information that we file with the SEC automatically will update and supersede the information we have included in or incorporated into the Prospectus.

We incorporate by reference the following documents we have filed, or may file, with the SEC:

- Annual Report on Form 10-K for the fiscal year ended December 31, 2012, filed on April 1, 2013;
- Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2013, June 30, 2013 and September 30, 2013, filed on May 15, 2013, August 12, 2013 and November 14, 2013, respectively;
- Current Reports on Form 8-K filed on January 17, 2013, February 11, 2013, February 19, 2013 (amended version), February 21, 2013, March 5, 2013 (amended version), March 6, 2013 (amended version), April 2, 2013, April 10, 2013, April 18, 2013, April 22, 2013 (amended version), April 25, 2013, April 30, 2013, May 2, 2013, May 15, 2013, May 21, 2013, May 23, 2013, May 28, 2013, June 6, 2013, June 13, 2013, June 13, 2013 (amended version), June 18, 2013, June 19, 2013 (amended version), July 19, 2013, July 26, 2013, August 14, 2013, August 19, 2013, August 23, 2013, August 30, 2013, September 18, 2013, September 19, 2013, September 27, 2013, October 21, 2013, October 25, 2013, November 13, 2013 and November 18, 2013; and
- All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act or proxy or information statements filed pursuant to Section 14 of the Exchange Act since December 31, 2012.

This Prospectus Supplement is part of a registration statement we have filed with the SEC on Form S-11 relating to our common stock. As permitted by SEC rules, this Prospectus Supplement does not contain all of the information included in the registration statement and the accompanying exhibits and schedules we file with the SEC. We have incorporated by reference certain legal documents that control the terms of our common stock offered by the Prospectus as exhibits to the registration statement. You may refer to the registration statement and the exhibits for more information about us and our common stock. The registration statement and exhibits are also available at the SEC's Public Reference Room or through its web site.

The section entitled "Where You Can Find More Information About Preferred Apartment Communities" above describes how you can obtain or access any documents or information that we have incorporated by reference herein. The information relating to us contained in this Prospectus Supplement does not purport to be comprehensive and should be read together with the information contained in the documents incorporated or deemed to be incorporated by reference in this Prospectus Supplement.

Upon written or oral request, we will provide, free of charge, to each person, including any beneficial owner, to whom a Prospectus Supplement is delivered, a copy of any or all of the reports or documents that are incorporated by reference into this Prospectus Supplement. Such written or oral requests should be made to:

Riversedge North
2529 Virginia Beach Blvd., Suite 200
Virginia Beach, Virginia 23452
(757) 627-9088

In addition, such reports and documents may be found on our website at www.WHLR.us.