UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form S-8

(POST-EFFECTIVE AMENDMENT NO. 1)

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

Two Harbors Investment Corp.

(Exact Name of Registrant as Specified in Its Charter)

Maryland

(State or Other Jurisdiction of Incorporation or Organization) 27-0312904 (I.R.S. Employer Identification No.)

590 Madison Avenue, 36th Floor New York, New York 10022 (Address of Principal Executive Offices)

Two Harbors Investment Corp. Restated 2009 Equity Incentive Plan (Full Title of the Plans)

Rebecca B. Sandberg General Counsel and Secretary c/o Two Harbors Investment Corp. 590 Madison Avenue, 36th Floor New York, New York 10022 (612) 629-2500

(Name, Address and Telephone Number, including Area Code, of Agent for Service)

Copy to:

Stephen M. Quinlivan, Esq. Bryan J. Pitko, Esq. Stinson Leonard Street LLP 50 South Sixth Street, Suite 2600 Minneapolis, MN 55402 (612) 335-7076

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ⊠ Non-accelerated filer □ (Do not check if a smaller reporting company) Accelerated filer □ Smaller reporting company □ Emerging growth company □

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

EXPLANATORY STATEMENT

This Post-Effective Amendment No. 1 to the Registration Statement on Form S-8 (the "Post-Effective Amendment No. 1") relates to the Registration Statement on Form S-8 (File No. 333-188875) filed with the Securities and Exchange Commission (the "SEC") by Two Harbors Investment Corp. (the "Registrant") on May 28, 2013 (the "2013 Registration Statement") and is being filed to adjust the number of securities covered by the 2013 Registration Statement pursuant to Rule 416(b) of the Securities Act of 1933, as amended (the "Securities Act"), and related interpretations of the staff of the SEC.

The 2013 Registration Statement registered 2,853,272 shares of common stock, par value \$0.01 per share (the "Common Stock"), of the Registrant to be issued pursuant to the Registrant's Restated 2009 Equity Incentive Plan (the "Restated 2009 Plan")(which was further restated in 2015 as the Second Restated 2009 Equity Incentive Plan). On November 1, 2017, the Registrant completed a one-for-two reverse stock split of the Common Stock (the "Reverse Stock Split"). Accordingly, the purpose of this Post-Effective Amendment No. 1 is to proportionately reduce the number of shares of Common Stock covered by the 2013 Registration Statement. As a result, as of November 1, 2017, on a post-Reverse Stock Split basis, the 2013 Registration Statement now covers a maximum of 1,426,636 shares of Common Stock.

Except to the extent specified above, the 2013 Registration Statement, as originally filed, is not amended or otherwise affected by this Post-Effective Amendment No. 1.

PART II

Item 3. Incorporation of Certain Documents by Reference

The Registrant hereby incorporates by reference into this Registration Statement the following documents previously filed with the Securities and Exchange Commission:

(a) The Registrant's Annual Report on Form 10-K for the fiscal year ended December 31, 2016;

(b) The Registrant's Quarterly Report on Form 10-Q for the fiscal quarters ended March 31, 2017, June 30, 2017, and September 30, 2017;

(c) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act of 1934, as amended (the "Exchange Act") since December 31, 2016; and

(d) The description of the Registrant's Common Stock contained in the Company's Registration Statement on Form 8-A filed with the Commission on February 10, 2011, as amended by Amendment No. 1 to Form 8-A filed with the Commission on November 2, 2017.

All documents filed by the Registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act on or after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement that indicates that all securities offered have been sold or that deregisters all securities then remaining unsold shall be deemed to be incorporated by reference in this Registration Statement and to be part hereof from the date of filing of such documents.

Any statement contained in a document incorporated by reference herein shall be deemed to be modified or superseded for purposes of this Registration Statement to the extent that a statement contained in a subsequently filed document which is also incorporated by reference herein modifies or supersedes such statement.

Item 4. Description of Securities

Not applicable.

Item 5. Interests of Named Experts and Counsel

Not applicable.

Item 6. Indemnification of Directors and Officers

Maryland law permits a Maryland corporation to include in its charter a provision eliminating the liability of its directors and officers to the corporation and its stockholders for money damages, except for liability resulting from (1) actual receipt of an improper benefit or profit in money, property or services or (2) active and deliberate dishonesty established by a final judgment as being material to the cause of action. Our charter contains such a provision that eliminates such liability to the maximum extent permitted by Maryland law.

The Maryland General Corporation law, or MGCL, requires us (unless our charter provides otherwise, which our charter does not) to indemnify a director or officer who has been successful, on the merits or otherwise, in the defense of any proceeding to which he or she is made or threatened to be made a party by reason of his or her service in that capacity. The MGCL permits a corporation to indemnify its present and former directors and officers,

3

among others, against judgments, penalties, fines, settlements and reasonable expenses actually incurred by them in connection with any proceeding to which they may be made or threatened to be made a party by reason of their service in those or other capacities unless it is established that:

- the act or omission of the director or officer was material to the matter giving rise to the proceeding and (1) was committed in bad faith or (2) was the result of active and deliberate dishonesty;
- the director or officer actually received an improper personal benefit in money, property or services; or
- in the case of any criminal proceeding, the director or officer had reasonable cause to believe that the act or omission was unlawful.

However, under the MGCL, a Maryland corporation may not indemnify a director or officer in a suit by or in the right of the corporation in which the director or officer was adjudged liable to the corporation or in a proceeding in which the director or officer was adjudged liable on the basis that personal benefit was improperly received. A court may order indemnification if it determines that the director or officer is fairly and reasonably entitled to indemnification, even though the director or officer did not

meet the prescribed standard of conduct or was adjudged liable on the basis that personal benefit was improperly received. However, indemnification for an adverse judgment in a suit by us or in our right, or for a judgment of liability on the basis that personal benefit was improperly received, is limited to expenses.

In addition, the MGCL permits a corporation to advance reasonable expenses to a director or officer upon the corporation's receipt of:

- a written affirmation by the director or officer of his or her good faith belief that he or she has met the standard of conduct necessary for indemnification by the corporation; and
- a written undertaking by the director or officer or on the director's or officer's behalf to repay the amount paid or reimbursed by the corporation if it is ultimately determined that the director or officer did not meet the standard of conduct.

Our charter authorizes us to obligate ourselves and our bylaws obligate us, to the maximum extent permitted by Maryland law in effect from time to time, to indemnify and, without requiring a preliminary determination of the ultimate entitlement to indemnification, pay or reimburse reasonable expenses in advance of final disposition of a proceeding to:

- any present or former director or officer who is made or threatened to be made a party to the proceeding by reason of his or her service in that capacity; or
- any individual who, while a director or officer of our company and at our request, serves or has served another corporation, real estate investment trust, partnership, joint venture, trust, employee benefit plan or other enterprise as a director, officer, partner or trustee of such corporation, real estate investment trust, partnership, joint venture, trust, employee benefit plan or other enterprise and who is made or threatened to be made a party to the proceeding by reason of his or her service in that capacity.

Our charter and bylaws also permit us to indemnify and advance expenses to any person who served a predecessor of ours in any of the capacities described above and to any employee or agent of ours or a predecessor of ours.

We have entered into indemnification agreements with each of our directors and executive officers that provide for indemnification to the maximum extent permitted by Maryland law. In addition, the operating agreements of our subsidiaries provide that we, as managing member, and our officers and directors are indemnified to the fullest extent permitted by law.

4

Insofar as the foregoing provisions permit indemnification of directors, officers or persons controlling us for liability arising under the Securities Act, we have been informed that, in the opinion of the SEC, this indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

Item 7. Exemption from Registration Claimed

Not applicable.

5

Item 8. Exhibits

Exhibit Number	Name
5.1	Opinion of Stinson Leonard Street LLP
23.1	Consent of Ernst & Young LLP.
23.2	Consent of Stinson Leonard Street LLP (included in Exhibit 5.1 to this Registration Statement).
24.1	Powers of Attorney (included on signature page of this Registration Statement).
99.1*	Restated 2009 Equity Incentive Plan (incorporated here by reference to Appendix A to the Registrant's Definitive Proxy Statement filed on April 8, 2013).
99.2*	Form of Restricted Stock Agreement under the Restated 2009 Equity Incentive Plan (incorporated here by reference to Exhibit 99.2 to the Registrant's Registration Statement on Form S-8 on May 28, 2013).

*Previously filed.

Item 9. Undertakings

(a) The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

⁽i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Exchange Act) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

7

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in New York, New York, as of November 13, 2017.

TWO HARBORS INVESTMENT CORP. (Registrant)

By: /s/Thomas E. Siering

Thomas E. Siering Chief Executive Officer, President and Director

POWER OF ATTORNEY

KNOW BY ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints, jointly and severally, Thomas E. Siering and Brad Farrell, his or her attorneys-in-fact and agents, each with the power of substitution and resubstitution, for him or her and in his or her name, place or stead, in any and all capacities, to sign any amendments to this Registration Statement on Form S-8, and to file such amendments, together with exhibits and other documents in connection therewith, with the Securities and Exchange Commission, granting to each attorney-in-fact and agent full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully as he or she might or could do in person, and ratifying and confirming all that the attorneys-infact and agents, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

	Signatures	Title	Date
By:	/s/ Thomas E. Siering Thomas E. Siering	Chief Executive Officer, President and Director (principal executive officer)	November 13, 2017
By:	/s/ Brad Farrell Brad Farrell	Chief Financial Officer and Treasurer (principal financial officer)	November 13, 2017
By:	/s/ Mary K. Riskey Mary K. Riskey	Chief Accounting Officer (principal accounting officer)	November 13, 2017
By:	/s/ Brian C. Taylor Brian C. Taylor	Chairman of the Board of Directors	November 13, 2017
By:	/s/ E. Spencer Abraham E. Spencer Abraham	Director	November 13, 2017
By:	/s/ James J. Bender	Director	November 13, 2017

By:	/s/ Stephen G. Kasnet Stephen G. Kasnet	Director	November 13, 2017
By:	/s/ Lisa A. Pollina Lisa A. Pollina	Director	November 13, 2017
By:	/s/ William Roth William Roth	Director	November 13, 2017
By:	/s/ W. Reid Sanders W. Reid Sanders	Director	November 13, 2017
By:	/s/ Hope B. Woodhouse Hope B. Woodhouse	Director	November 13, 2017
		9	

STINSON LEONARD STREET LLP 50 South Sixth Street, Suite 2600 Minneapolis, MN 55402

November 13, 2017

Two Harbors Investment Corp. 590 Madison Avenue, 36th Floor New York, NY 10022

Ladies and Gentlemen:

We have acted as your counsel in connection with Post-Effective Amendment No. 1 (the "Amendment") to the Registration Statement on Form S-8 (the "Registration Statement") filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "1933 Act") for the registration of 2,853,272 shares (the "Current Shares") of common stock, par value \$0.01 per share ("Common Stock"), of Two Harbors Investment Corp., a Maryland corporation (the "Company"), that are issuable under the Company's Restated 2009 Equity Incentive Plan (the "Plan"). On November 1, 2017 the Company completed a two-for-one reverse stock split of its Common Stock (the "Reverse Stock Split"). Accordingly, the Amendment is being filed to proportionately reduce the number of shares of Common Stock covered by the Registration Statement. As a result, as of November 1, 2017, on a post-reverse split basis, the Registration Statement will cover a maximum of 1,426,636 shares (the "New Shares") of Common Stock.

You have requested our opinion as to the matters set forth below in connection with the Amendment. For purposes of rendering that opinion, we have examined the Registration Statement, the Amendment, the Company's Articles of Amendment and Restatement and Bylaws, the Plan and the corporate action of the Company approving and adopting the Amendment, and we have made such other investigation as we have deemed appropriate. We also have made the assumptions that are customary in opinion letters of this kind. We have not verified any of those assumptions.

Our opinion set forth below is limited to the law of the State of Maryland.

Based upon and subject to the foregoing, it is our opinion that the New Shares, when and if issued and delivered against payment therefor in accordance with the Plan, will be validly issued, fully paid and nonassessable.

We hereby consent to the filing of this opinion as an exhibit to the Registration Statement. In giving our consent we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the 1933 Act or the rules and regulations thereunder.

Yours truly,

/s/ Stinson Leonard Street LLP

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-188875) pertaining to the Restated 2009 Equity Incentive Plan of Two Harbors Investment Corp. of our reports dated February 28, 2017, with respect to the consolidated financial statements and schedule of Two Harbors Investment Corp. and the effectiveness of internal control over financial reporting of Two Harbors Investment Corp. included in its Annual Report (Form 10-K) for the year ended December 31, 2016, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Minneapolis, MN November 13, 2017