Issuer Free Writing Prospectus dated April 22, 2015 File pursuant to Rule 433 Relating to the Preliminary Prospectus dated April 21, 2015 Registration Statement No. 333-202113

National Storage Affiliates Trust

20,000,000 Common Shares of Beneficial Interest

This free writing prospectus relates to the initial public offering of common shares of beneficial interest, \$0.01 par value per share of National Storage Affiliates Trust and should be read together with the preliminary prospectus dated April 21, 2015, or the preliminary prospectus, included in Amendment No. 4 to the Registration Statement on Form S-11 relating to this offering of common shares of beneficial interest, which may be accessed through the following link:

http://www.sec.gov/Archives/edgar/data/1618563/000104746915003743/a2224303zs-11a.htm

National Storage Affiliates Trust has filed a registration statement (including a preliminary prospectus) with the Securities and Exchange Commission, or the SEC, for the offering to which this communication relates. Before you invest, you should read the preliminary prospectus in that registration statement and other documents National Storage Affiliates Trust has filed with the SEC for more complete information about National Storage Affiliates Trust and this offering. You may get these documents for free by visiting EDGAR on the SEC web site at www.sec.gov.

We estimate we will issue an aggregate of approximately 270,000 more OP units and approximately 72,000 more subordinated performance units than previously estimated based on the mid-point of the price range shown on the front cover of the preliminary prospectus in connection with our acquisition of the 21 properties that we expect to acquire from SecurCare, Move It and Storage Solutions in connection with the formation transactions.

On April 21, 2015, we filed Amendment No. 4 to our Registration Statement on Form S-11 in order to add the following disclosure as the first paragraph of the section of the preliminary prospectus entitled "Underwriting—Other Activities and Relationships":

Affiliates of Jefferies LLC, Morgan Stanley & Co. LLC and KeyBanc Capital Markets Inc. are lenders under our unsecured term loan. KeyBank National Association, an affiliate of KeyBanc Capital Markets Inc., is the administrative agent and a lender, Keybanc Capital Markets Inc. is sole bookrunner and lead arranger, Wells Fargo Bank, National Association, an affiliate of Wells Fargo Securities, LLC, is a co-syndication agent and lender, and affiliates of Morgan Stanley & Co. LLC and Capital One Securities, Inc. are lenders, under our credit facility. In addition, Wells Fargo Bank, National Association is a lender to us under various property-level mortgages. Because affiliates of Jefferies LLC, Morgan Stanley & Co. LLC and KeyBanc Capital Markets Inc. are lenders under our unsecured term loan and affiliates of KeyBanc Capital Markets Inc., Wells Fargo Securities, LLC, Morgan Stanley & Co. LLC and Capital One Securities, Inc. are lenders under our credit facility, to the extent that net proceeds from this offering are applied to repay borrowings under such facilities, such affiliates will receive proceeds of this offering through the repayment of those borrowings.