

PIONEER MUNICIPAL HIGH INCOME ADVANTAGE TRUST  
Form N-PX  
August 21, 2015

UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
Washington, D.C. 20549

FORM N-PX  
ANNUAL REPORT OF PROXY VOTING RECORD OF REGISTERED  
MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-21409  
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Pioneer Municipal High Income Advantage Trust  
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(Exact name of registrant as specified in charter)

60 State Street Boston, MA 02109  
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(Address of principal executive offices)

Terrence J. Cullen  
60 State Street  
Boston, MA 02109  
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(Name and address of agent for service)

Registrant's telephone number, including area code: (617) 742-7825

Date of fiscal year end: March 31

Date of reporting period: July 1, 2014 to June 30, 2015

SIGNATURES

Pursuant to the requirements of the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) Pioneer Municipal High Income Advantage Trust

By (Signature and Title) /s/ Lisa Jones  
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Lisa Jones, Chief Executive Officer  
& President

Date August 20, 2015

===== Pioneer Muni High Income Advantage Trust =====

There is no proxy voting activity for the fund, as the fund did not hold any voting positions during the reporting period.

===== END NPX REPORT