

BLACKROCK MUNIYIELD INVESTMENT FUND  
Form N-PX  
August 25, 2010

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

**FORM N-PX**

**ANNUAL REPORT OF PROXY VOTING RECORD OF REGISTERED MANAGEMENT  
INVESTMENT COMPANY**

Investment Company Act file number 811-06502

Name of Fund: BlackRock MuniYield Investment Fund (MYF)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: Anne Ackerley, Chief Executive Officer, BlackRock MuniYield Investment Fund, 55 East 52<sup>nd</sup> Street, New York City, NY 10055.

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 07/31

Date of reporting period: 07/01/2009 - 06/30/2010

Item 1 Proxy Voting Record There were no matters relating to a portfolio security considered at any shareholder meeting held during the period ended June 30, 2010 with respect to which the registrant was entitled to vote.

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.

BlackRock MuniYield Investment Fund

By: /s/ Anne Ackerley  
Anne Ackerley  
Chief Executive Officer of  
BlackRock MuniYield Investment Fund

Date: August 23, 2010

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