

PIONEER MUNICIPAL HIGH INCOME TRUST  
Form SC 13G/A  
January 12, 2010

United States\*  
Securities and Exchange Commission  
Washington, D.C. 20549

Schedule 13G

Under the Securities Exchange Act of 1934

(Amendment No. 4)\*

Pioneer Municipal High Income Trust  
-----  
(Name of Issuer)

Common Stock  
-----  
(Title of Class of Securities)

723763108  
-----  
(CUSIP Number)

December 31, 2009  
-----  
(Date of Event Which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

- Rule 13d-1(b)  
 Rule 13d-1(c)  
 Rule 13d-1(d)

\*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

CUSIP No. 723763108

1. Names of Reporting Persons. First Trust Portfolios L.P.

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I.R.S. Identification Nos. of above persons (entities only).

36-3768815

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization Illinois, U.S.A.

Number of Shares Bene- ficially Owned by Each Reporting Person With:	5. Sole Voting Power	0
	6. Shared Voting Power	2,555,489
	7. Sole Dispositive Power	0
	8. Shared Dispositive Power	2,555,489

9. Aggregate Amount Beneficially Owned by Each Reporting Person  
2,555,489

10. Check if the Aggregate Amount in Row (9) Excludes  
Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9) 11.6%

12. Type of Reporting Person (See Instructions) BD

CUSIP No. 723763108

1. Names of Reporting Persons. First Trust Advisors L.P.

I.R.S. Identification Nos. of above persons (entities only).

36-3788904

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

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3. SEC Use Only

4. Citizenship or Place of Organization Illinois, U.S.A.

Number of Shares Bene- ficially Owned by Each Reporting Person With:	5. Sole Voting Power	0
	6. Shared Voting Power	2,555,489
	7. Sole Dispositive Power	0
	8. Shared Dispositive Power	2,555,489

9. Aggregate Amount Beneficially Owned by Each Reporting Person  
2,555,489

10. Check if the Aggregate Amount in Row (9) Excludes  
Certain Shares (See Instructions)

11. Percent of Class Represented by Amount in Row (9) 11.6%

12. Type of Reporting Person (See Instructions) IA

CUSIP No. 723763108

1. Names of Reporting Persons. The Charger Corporation  
I.R.S. Identification Nos. of above persons (entities only).  
36-3772451

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a)

(b)

3. SEC Use Only

4. Citizenship or Place of Organization Illinois, U.S.A.

Number of Shares Bene- ficially Owned by Each Reporting Person With:	5. Sole Voting Power	0
	6. Shared Voting Power	2,555,489
	7. Sole Dispositive Power	0

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- |     |   |           |
|-----|---|-----------|
| 8.  | Shared Dispositive Power  | 2,555,489 |
| 9.  | Aggregate Amount Beneficially Owned by Each Reporting Person                        |           |
|     |   | 2,555,489 |
| 10. | Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) |           |
| 11. | Percent of Class Represented by Amount in Row (9)                                   | 11.6%     |
| 12. | Type of Reporting Person (See Instructions)   | HC        |

Item 1.

- (a) Name of Issuer - Pioneer Municipal High Income Trust
- (b) Address of Issuer's Principal Executive Offices
- 60 State Street  
Boston, MA 02109

Item 2.

- (a) Name of Person Filing
- First Trust Portfolios L.P.  
First Trust Advisors L.P.  
The Charger Corporation
- (b) Address of Principal Business Office or, if none, Residence
- 120 East Liberty Drive, Suite 400  
Wheaton, Illinois 60187
- (c) Citizenship
- Illinois, U.S.A.
- (d) Title of Class of Securities
- Common Stock
- (e) CUSIP Number
- 723763108

Item 3. If this statement is filed pursuant to Sec. 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

- (a)  Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b)  Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c)  Insurance company as defined in section 3(a)(19) of the

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Act (15 U.S.C. 78c).

- (d) Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C. 80a-8).
- (e) X An investment adviser in accordance with Sec. 240.13d-1(b)(1)(ii)(E).
- (f) An employee benefit plan or endowment fund in accordance with Sec. 140.13d-1(b)(1)(ii)(F).
- (g) X A parent holding company or control person in accordance with Sec. 240.13d-1(b)(1)(ii)(G).
- (h) A savings association as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813).
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3).
- (j) Group, in accordance with Sec. 240.13d-1(b)(1)(ii)(J).

Item 4. Ownership

Provide the following information regarding the aggregate number and percentage of the class of securities of the issuer identified in Item 1.

- (a) Amount beneficially owned: 2,555,489
- (b) Percent of class: 11.6%
- (c) Number of shares as to which the person has:
  - (i) Sole power to vote or to direct the vote  
0.
  - (ii) Shared power to vote or to direct the vote  
2,555,489.
  - (iii) Sole power to dispose or to direct the disposition of  
0.
  - (iv) Shared power to dispose or to direct the disposition of  
2,555,489.

Instruction. For computations regarding securities which represent a right to acquire an underlying security see Sec. 204.13d-3(d)(1).

Item 5. Ownership of Five Percent or Less of a Class

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following. [ ]

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Instruction: Dissolution of a group requires a response to this item.

Item 6. Ownership of More than Five Percent on Behalf of Another Person

First Trust Portfolios L.P. is sponsor of several unit investment trusts which hold shares of common stock of the issuer. No unit investment trust sponsored by First Trust Portfolios L.P. holds 5% or more of the issuer's common stock. First Trust Advisors L.P. is an affiliate of First Trust Portfolios L.P. and acts as portfolio supervisor of the unit investment trusts which hold shares of common stock of the issuer. The Charger Corporation is the general partner of both First Trust Portfolios L.P. and First Trust Advisors L.P.

Item 7. Identification and Classification of the Subsidiary Which Acquired the Security Being Reported on By the Parent Holding Company

See Item 6.

Item 8. Identification and Classification of Members of the Group

Not Applicable.

Item 9. Notice of Dissolution of Group

Not Applicable.

Item 10. Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of or with the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having that purpose or effect.

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

FIRST TRUST PORTFOLIOS L.P.

Date: January 12, 2010

By: /s/ James A. Bowen

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James A. Bowen, President

FIRST TRUST ADVISORS L.P.

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Date: January 12, 2010

By: /s/ James A. Bowen

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James A. Bowen, President

THE CHARGER CORPORATION

Date: January 12, 2010

By: /s/ James A. Bowen

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James A. Bowen, Senior Vice President