

Pioneer Municipal High Income Fund, Inc.

Ticker Symbol: MHI

Schedule of Investments | 1/31/24

(unaudited)

Principal Amount USD (\$)		Value
	UNAFFILIATED ISSUERS — 142.1%	
	MUNICIPAL BONDS — 137.3% of Net Assets(a)	
	Arizona — 0.9%	
2,220,000	Industrial Development Authority of the City of Phoenix, 3rd & Indian School Assisted Living Project, 5.40%, 10/1/36	\$ 2,026,039
	Total Arizona	\$ 2,026,039
	Arkansas — 6.0%	
13,700,000	Arkansas Development Finance Authority, Green Bond, 5.45%, 9/1/52	\$ 13,814,669
	Total Arkansas	\$ 13,814,669
	California — 11.1%	
2,500,000	Bay Area Toll Authority, Series F-2, 2.60%, 4/1/56	\$ 1,709,400
530,000	California County Tobacco Securitization Agency, Series B-1, 5.00%, 6/1/49	531,590
10,000,000(b)	California County Tobacco Securitization Agency, Capital Appreciation, Stanislaus County, Subordinated, Series A, 6/1/46	2,663,200
1,400,000	California Statewide Communities Development Authority, Lancer Plaza Project, 5.625%, 11/1/33	1,401,750
2,000,000	California Statewide Communities Development Authority, Loma Linda University Medical Center, 5.50%, 12/1/58 (144A)	2,029,040
10,235,000	City of Oroville, Oroville Hospital, 5.25%, 4/1/49	6,813,030
8,690,000	City of Oroville, Oroville Hospital, 5.25%, 4/1/54	5,939,181
4,000,000	San Diego County Regional Airport Authority, Series B, 5.25%, 7/1/58	4,278,360
	Total California	\$ 25,365,551
	Colorado — 4.5%	
1,000,000	Aerotropolis Regional Transportation Authority, 4.375%, 12/1/52	\$ 821,950
2,000,000	City & County of Denver, Airport System Revenue, Series B, 5.25%, 11/15/53	2,203,240
7,250,000	Dominion Water & Sanitation District, 5.875%, 12/1/52	7,262,470
	Total Colorado	\$ 10,287,660
	Connecticut — 1.5%	
3,380,000	Mohegan Tribal Finance Authority, 7.00%, 2/1/45 (144A)	\$ 3,388,011
	Total Connecticut	\$ 3,388,011

Principal Amount USD (\$)		Value
	District of Columbia — 3.7%	
5,825,000	District of Columbia Tobacco Settlement Financing Corp., Asset-Backed, 6.75%, 5/15/40	\$ 6,043,263
10,000,000(b)	District of Columbia Tobacco Settlement Financing Corp., Capital Appreciation, Asset-Backed, Series A, 6/15/46	2,433,300
	Total District of Columbia	\$ 8,476,563
	Florida — 3.6%	
3,220,000	City of Tampa, Hospital Revenue Bonds (H. Lee Moffitt Cancer Center Project), Series B, 4.00%, 7/1/45	\$ 3,110,617
5,000,000	County of Miami-Dade, Water & Sewer System Revenue, Series A, 4.00%, 10/1/44	5,009,700
	Total Florida	\$ 8,120,317
	Georgia — 6.4%	
3,010,000	Brookhaven Development Authority, Children's Healthcare of Atlanta, Inc., Series A, 4.00%, 7/1/49	\$ 2,906,305
10,000,000	Brookhaven Development Authority, Children's Healthcare Of Atlanta, Inc., Series A, 4.00%, 7/1/44	9,931,200
2,500,000	County of Fulton Water & Sewerage Revenue, Series A, 2.25%, 1/1/42	1,827,050
	Total Georgia	\$ 14,664,555
	Idaho — 2.2%	
5,000,000	Power County Industrial Development Corp., FMC Corp. Project, 6.45%, 8/1/32	\$ 5,017,150
	Total Idaho	\$ 5,017,150
	Illinois — 6.5%	
2,000,000(c)	Chicago Board of Education, Series A, 5.00%, 12/1/47	\$ 2,053,500
2,000,000(c)	Chicago Board of Education, Series H, 5.00%, 12/1/46	2,002,180
704,519(b)	Illinois Finance Authority, Cabs Clare Oaks Project, Series B-1, 11/15/52	42,271
1,116,010(d)(e)	Illinois Finance Authority, Clare Oaks Project, Series A-3, 4.00%, 11/15/52	725,407
3,500,000	Illinois Finance Authority, The Admiral at the Lake Project, 5.25%, 5/15/42	2,819,985
4,000,000	Illinois Finance Authority, The Admiral at the Lake Project, 5.50%, 5/15/54	3,019,880
915,000	Illinois Housing Development Authority, Series B, 2.15%, 10/1/41 (GNMA FNMA FHLMC COLL Insured)	668,938
2,000,000	Metropolitan Pier & Exposition Authority, McCormick Place Expansion, 4.00%, 6/15/50	1,855,220

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(unaudited) (continued)

Principal Amount USD (\$)		Value
	Illinois — (continued)	
1,205,000	Metropolitan Pier & Exposition Authority, McCormick Place Expansion, 5.00%, 6/15/57	\$ 1,213,543
695,000(d)	Southwestern Illinois Development Authority, Village of Sauget Project, 5.625%, 11/1/26	521,250
	Total Illinois	\$ 14,922,174
	Indiana — 1.8%	
2,000,000	City of Evansville, Silver Birch Evansville Project, 5.45%, 1/1/38	\$ 1,767,420
1,500,000	City of Mishawaka, Silver Birch Mishawaka Project, 5.375%, 1/1/38 (144A)	1,307,835
1,000,000	Indiana Finance Authority, Multipurpose Educational Facilities, Avondale Meadows Academy Project, 5.375%, 7/1/47	981,000
	Total Indiana	\$ 4,056,255
	Iowa — 4.1%	
9,675,000	Iowa Finance Authority, Alcoa Inc. Projects, 4.75%, 8/1/42	\$ 9,410,485
	Total Iowa	\$ 9,410,485
	Maine — 1.2%	
3,000,000	Maine Health & Higher Educational Facilities Authority, Series A, 4.00%, 7/1/50	\$ 2,809,350
	Total Maine	\$ 2,809,350
	Maryland — 1.5%	
3,000,000	Maryland State Transportation Authority, Series A, 3.00%, 7/1/47	\$ 2,372,730
1,250,000	Washington Suburban Sanitary Commission, 3.00%, 6/1/47 (CNTY GTD Insured)	1,032,025
	Total Maryland	\$ 3,404,755
	Massachusetts — 10.3%	
4,000,000(c)	Commonwealth of Massachusetts, Series C, 3.00%, 3/1/49	\$ 3,159,600
2,500,000	Massachusetts Development Finance Agency, Series A, 5.00%, 7/1/44	2,460,525
3,000,000	Massachusetts Development Finance Agency, Lowell General Hospital, Series G, 5.00%, 7/1/44	2,965,920
1,000,000	Massachusetts Development Finance Agency, Partner's Healthcare System, 4.00%, 7/1/41	991,810
7,100,000	Massachusetts Development Finance Agency, WGBH Educational Foundation, Series A, 5.75%, 1/1/42 (AMBAC Insured)	9,178,525

Principal Amount USD (\$)		Value
Massachusetts — (continued)		
1,000,000	Massachusetts Housing Finance Agency, Sustainability Bond, Series B-1, 2.875%, 12/1/51	\$ 717,500
2,800,000(c)	Town of Arlington, 2.00%, 9/15/41	1,974,476
2,270,000(c)	Town of Millbury, 4.00%, 8/15/51	2,192,025
	Total Massachusetts	\$ 23,640,381
Michigan — 0.4%		
990,000	David Ellis Academy-West, 5.25%, 6/1/45	\$ 928,531
	Total Michigan	\$ 928,531
Minnesota — 0.9%		
1,000,000	City of Ham Lake, DaVinci Academy, Series A, 5.00%, 7/1/47	\$ 941,980
1,000,000	City of Rochester, Health Care Facilities, Mayo Clinic, 4.00%, 11/15/48	992,400
	Total Minnesota	\$ 1,934,380
Montana — 0.0%†		
1,600,000(d)	Two Rivers Authority, 7.375%, 11/1/27	\$ 80,000
	Total Montana	\$ 80,000
New Hampshire — 2.9%		
6,000,000	New Hampshire Health and Education Facilities Authority Act, Series A, 5.00%, 8/1/59	\$ 6,435,480
375,000	New Hampshire Health and Education Facilities Authority Act, Catholic Medical Centre, 3.75%, 7/1/40	292,567
	Total New Hampshire	\$ 6,728,047
New Jersey — 1.7%		
2,200,000	New Jersey Economic Development Authority, Continental Airlines, 5.75%, 9/15/27	\$ 2,205,148
1,000,000	New Jersey Economic Development Authority, Marion P. Thomas Charter School, Inc., Project, Series A, 5.375%, 10/1/50 (144A)	930,200
1,000,000	New Jersey Infrastructure Bank, Green Bond, 2.00%, 9/1/41	719,780
	Total New Jersey	\$ 3,855,128
New Mexico — 1.2%		
2,960,000(e)	County of Otero, Otero County Jail Project, Certificate Participation, 9.00%, 4/1/28	\$ 2,812,000
	Total New Mexico	\$ 2,812,000

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(unaudited) (continued)

Principal Amount USD (\$)		Value
New York — 19.1%		
2,000,000	Erie Tobacco Asset Securitization Corp., Asset-Backed, Series A, 5.00%, 6/1/45	\$ 1,836,520
6,175,000	Metropolitan Transportation Authority, Green Bond, Series C-1, 4.75%, 11/15/45	6,335,982
2,000,000	Metropolitan Transportation Authority, Green Bond, Series C-1, 5.25%, 11/15/55	2,091,440
2,000,000	Metropolitan Transportation Authority, Green Bond, Series D-2, 4.00%, 11/15/48	1,884,680
3,000,000	Metropolitan Transportation Authority, Green Bond, Series E, 4.00%, 11/15/45	2,866,680
2,500,000	New York Counties Tobacco Trust IV, Settlement pass through, Series A, 5.00%, 6/1/45	2,325,150
2,500,000	New York State Dormitory Authority, Group 3, Series A, 3.00%, 3/15/41	2,224,450
2,000,000	New York State Housing Finance Agency, Sustainability Bonds, Series D-1, 4.20%, 11/1/52 (SONYMA FHA 542c Insured)	1,937,600
3,000,000	New York State Urban Development Corp., Group 3, Series A, 3.00%, 3/15/49	2,416,350
2,500,000	New York Transportation Development Corp., Series A, 5.25%, 1/1/50	2,503,775
11,330,000	New York Transportation Development Corp., Delta Airlines Inc-LaGuardia, 5.00%, 10/1/40	11,614,836
1,750,000	New York Transportation Development Corp., Green Bond, 5.375%, 6/30/60	1,829,993
1,000,000	Troy Capital Resource Corp., 4.00%, 9/1/40	974,280
2,148,177	Westchester County Healthcare Corp., Series A, 5.00%, 11/1/44	2,152,280
1,000,000	Westchester County Local Development Corp., Purchase Senior Learning Community, 4.50%, 7/1/56 (144A)	765,680
	Total New York	\$ 43,759,696
Ohio — 8.2%		
17,275,000	Buckeye Tobacco Settlement Financing Authority, Senior Class 2, Series B-2, 5.00%, 6/1/55	\$ 16,265,622
1,000,000	Ohio Housing Finance Agency, Sanctuary Springboro Project, 5.45%, 1/1/38 (144A)	841,580
1,540,000	State of Ohio, 5.00%, 12/31/39	1,552,366
	Total Ohio	\$ 18,659,568

Principal Amount USD (\$)		Value
	Oregon — 1.7%	
5,000,000	Oregon Health & Science University, Green Bond, Series A, 3.00%, 7/1/51	\$ 3,819,950
	Total Oregon	\$ 3,819,950
	Pennsylvania — 6.8%	
5,000,000	Montgomery County Higher Education and Health Authority, Thomas Jefferson University, Series B, 4.00%, 5/1/52	\$ 4,531,450
3,500,000	Montgomery County Higher Education and Health Authority, Thomas Jefferson University, Series B, 5.00%, 5/1/57	3,651,095
4,335,000	Pennsylvania Higher Educational Facilities Authority, University of Pennsylvania, 4.00%, 8/15/49	4,199,922
2,000,000	Pennsylvania Housing Finance Agency, Series 134A, 2.05%, 4/1/41	1,386,120
500,000	Philadelphia Authority for Industrial Development, 5.50%, 6/1/49 (144A)	473,120
1,000,000	Philadelphia Authority for Industrial Development, Global Leadership Academy Charter School Project, Series A, 5.00%, 11/15/50	910,120
460,000	Philadelphia Authority for Industrial Development, Greater Philadelphia Health Action, Inc., Project, Series A, 6.625%, 6/1/50	453,348
	Total Pennsylvania	\$ 15,605,175
	Puerto Rico — 13.9%	
5,267,777(c)	Commonwealth of Puerto Rico, Restructured Series A1, 4.00%, 7/1/41	\$ 4,767,338
3,000,000(c)	Commonwealth of Puerto Rico, Restructured Series A1, 4.00%, 7/1/46	2,661,240
2,000,000	Puerto Rico Commonwealth Aqueduct & Sewer Authority, Series A, 5.00%, 7/1/37 (144A)	2,038,500
11,500,000	Puerto Rico Commonwealth Aqueduct & Sewer Authority, Series A, 5.00%, 7/1/47 (144A)	11,385,000
5,740,000	Puerto Rico Commonwealth Aqueduct & Sewer Authority, Series B, 5.00%, 7/1/37 (144A)	5,846,592
1,000,000	Puerto Rico Electric Power Authority, Series AAA, 5.25%, 7/1/21	245,000
2,500,000	Puerto Rico Sales Tax Financing Corp. Sales Tax Revenue, Restructured Series A-1, 5.00%, 7/1/58	2,496,875
2,500,000	Puerto Rico Sales Tax Financing Corp. Sales Tax Revenue, Restructured Series A-2, 4.784%, 7/1/58	2,443,750
	Total Puerto Rico	\$ 31,884,295

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(unaudited) (continued)

Principal Amount USD (\$)		Value
	Rhode Island — 1.0%	
5,900,000(d)	Central Falls Detention Facility Corp., 7.25%, 7/15/35	\$ 2,360,000
	Total Rhode Island	\$ 2,360,000
	South Carolina — 1.3%	
2,850,000	City of Charleston Waterworks & Sewer System Revenue, 4.00%, 1/1/49	\$ 2,872,971
	Total South Carolina	\$ 2,872,971
	Texas — 4.7%	
500,000	Arlington Higher Education Finance Corp., 5.45%, 3/1/49 (144A)	\$ 527,380
1,000,000	Arlington Higher Education Finance Corp., Universal Academy, Series A, 7.00%, 3/1/34	1,001,820
8,000,000	City of Houston Airport System Revenue, 4.00%, 7/15/41	7,224,800
945,656	Multifamily Tax-Exempt Mortgage-Backed Bonds, Series 2020-HOLL, 2.30%, 7/1/37 (FNMA HUD SECT 8 Insured)	753,385
3,960,000(d)	Sanger Industrial Development Corp., Texas Pellets Project, Series B, 8.00%, 7/1/38	975,150
350,000	Texas Municipal Gas Acquisition & Supply Corp. III, 5.00%, 12/15/31	373,709
	Total Texas	\$ 10,856,244
	Virginia — 7.2%	
2,500,000(c)	City of Alexandria, Series A, 3.00%, 7/15/46 (ST AID WITHHLDG Insured)	\$ 2,015,800
1,000,000	City of Richmond Public Utility Revenue, Series A, 3.00%, 1/15/45	824,870
2,000,000	Virginia Small Business Financing Authority, Senior Lien, 5.00%, 12/31/42	2,103,740
1,000,000	Virginia Small Business Financing Authority, Senior Lien, 5.00%, 12/31/47	1,005,690
1,000,000	Virginia Small Business Financing Authority, Senior Lien 95 Express Lanes LLC Project, 4.00%, 1/1/48	912,130
3,500,000	Virginia Small Business Financing Authority, Transform 66-P3 Project, 5.00%, 12/31/49	3,513,580
6,100,000	Virginia Small Business Financing Authority, Transform 66-P3 Project, 5.00%, 12/31/56	6,111,346
	Total Virginia	\$ 16,487,156

Principal Amount USD (\$)		Value
	Wisconsin — 1.0%	
1,500,000	Public Finance Authority, Gardner Webb University, 5.00%, 7/1/31 (144A)	\$ 1,580,430
750,000	Public Finance Authority, Roseman University Health Sciences Project, 5.875%, 4/1/45	752,040
	Total Wisconsin	\$ 2,332,470
	TOTAL MUNICIPAL BONDS (Cost \$329,426,575)	\$314,379,526
	U.S. GOVERNMENT AND AGENCY OBLIGATIONS — 4.8% of Net Assets	
9,000,000(b)	U.S. Treasury Bills, 2/20/24	\$ 8,975,005
2,000,000(b)	U.S. Treasury Bills, 2/27/24	1,992,399
	TOTAL U.S. GOVERNMENT AND AGENCY OBLIGATIONS (Cost \$10,967,349)	\$ 10,967,404
	TOTAL INVESTMENTS IN UNAFFILIATED ISSUERS — 142.1% (Cost \$340,393,924)	\$325,346,930
	OTHER ASSETS AND LIABILITIES — (42.1)%	\$(96,391,841)
	NET ASSETS APPLICABLE TO COMMON STOCKHOLDERS — 100.0%	\$228,955,089

AMBAC	Ambac Assurance Corporation.
CNTY GTD	County Guaranteed.
COLL	Collateral.
FHLMC	Federal Home Loan Mortgage Corporation.
FNMA	Federal National Mortgage Association.
FNMA HUD SECT 8	Federal National Mortgage Association U.S. Department of Housing and Urban Development Section 8.
GNMA	Government National Mortgage Association.
SONYMA FHA 542c	State of New York Mortgage Agency Federal Housing Administration Section 542c.
ST AID WITHHLDG	State Aid Withholding.

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(unaudited) (continued)

- (144A) The resale of such security is exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may be resold normally to qualified institutional buyers. At January 31, 2024, the value of these securities amounted to \$31,113,368, or 13.6% of net assets applicable to common stockholders.
- (a) Consists of Revenue Bonds unless otherwise indicated.
- (b) Security issued with a zero coupon. Income is recognized through accretion of discount.
- (c) Represents a General Obligation Bond.
- (d) Security is in default.
- (e) The interest rate is subject to change periodically. The interest rate and/or reference index and spread shown at January 31, 2024.
- † Amount rounds to less than 0.1%.

The concentration of investments as a percentage of total investments by type of obligation/market sector is as follows:

Revenue Bonds:

Health Revenue	24.5%
Development Revenue	22.3
Transportation Revenue	13.5
Water Revenue	11.5
Tobacco Revenue	9.9
Other Revenue	5.7
Education Revenue	4.2
Facilities Revenue	1.6
Utilities Revenue	0.2
Power Revenue	0.2
	<hr/>
	93.6%
General Obligation Bonds:	<hr/>
	6.4%
	<hr/>
	100.0%

Various inputs are used in determining the value of the Fund's investments. These inputs are summarized in the three broad levels below.

Level 1 – unadjusted quoted prices in active markets for identical securities.

Level 2 – other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risks, etc.).

Level 3 – significant unobservable inputs (including the Adviser's own assumptions in determining fair value of investments).

The following is a summary of the inputs used as of January 31, 2024 in valuing the Fund's investments:

	Level 1	Level 2	Level 3	Total
Municipal Bonds	\$—	\$314,379,526	\$—	\$314,379,526
U.S. Government and Agency Obligations	—	10,967,404	—	10,967,404
Total Investments in Securities	\$—	\$325,346,930	\$—	\$325,346,930

During the period ended January 31, 2024, there were no transfers in or out of Level 3.