Michigan Public School Employees' Retirement System

A Pension and Other Postemployment Benefit Trust Fund of the State of Michigan

Schedules of Employer Pension and Other Postemployment Benefit Allocations and Schedules of Collective Pension and Other Postemployment Benefit Amounts for Fiscal Year Ended September 30, 2019



Prepared by

The Office of Retirement Services
P.O. Box 30171
Lansing, MI 48909-7671
517-322-5103
800-381-5111

Table of Contents

Independent Auditor's Report	3
Schedule of Employer Allocations – Non-University Employers	5
Schedule of Employer Allocations – University Employers	25
Schedule of Collective Pension Amounts	26
Schedule of Collective Other Postemployment Benefit (OPEB) Amounts	27
Notes to the Schedules of Employer Allocations and Schedules of Collective Pension and OPEB Amounts	28



Doug A. Ringler, CPA, CIAAuditor General

201 N. Washington Square, Sixth Floor • Lansing, Michigan 48913 • Phone: (517) 334-8050 • audgen.michigan.gov

Independent Auditor's Report

Mr. Scott Koenigsknecht, Chair
Michigan Public School Employees' Retirement System Board
Stevens T. Mason Building
and
Mr. Brom Stibitz, Acting Director
Department of Technology, Management, and Budget
Lewis Cass Building
and
Mr. Anthony J. Estell, Director
Office of Retirement Services
Stevens T. Mason Building
Lansing, Michigan

Dear Mr. Koenigsknecht, Mr. Stibitz, and Mr. Estell:

Report on the Schedules

We have audited the accompanying schedules of employer allocations for non-university employers and university employers and the related notes of the Michigan Public School Employees' Retirement System as of and for the fiscal year ended September 30, 2019. We have also audited the respective totals for non-universities and universities for the following columns, hereafter referred to as the specified column totals:

- September 30, 2019 net pension liability, total deferred outflows of resources excluding employer-specific amounts, total deferred inflows of resources excluding employer-specific amounts, and pension expense excluding that attributable to employer-paid member contributions included in the accompanying schedule of collective pension amounts as of and for the fiscal year ended September 30, 2019.
- September 30, 2019 net OPEB liability, total deferred outflows of resources excluding employer-specific amounts, total deferred inflows of resources excluding employer-specific amounts, and OPEB expense excluding that attributable to employer-paid member contributions included in the accompanying schedule of collective other postemployment benefit (OPEB) amounts as of and for the fiscal year ended September 30, 2019.

Management's Responsibility for the Schedules

Management is responsible for the preparation and fair presentation of these schedules in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of schedules that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on the schedules of employer allocations for non-university employers and university employers and the specified column totals included in the schedule of collective pension amounts and the schedule of collective OPEB amounts based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedules of employer allocations for non-university employers and university employers and the specified column totals included in the schedule of collective pension amounts and the schedule of collective OPEB amounts are free from material misstatement.



Mr. Scott Koenigsknecht, Chair Mr. Brom Stibitz, Acting Director Mr. Anthony J. Estell, Director Page 2

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedules of employer allocations for non-university employers and university employers and the specified column totals included in the schedule of collective pension amounts and the schedule of collective OPEB amounts. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the schedules of employer allocations for non-university employers and university employers and the specified column totals included in the schedule of collective pension amounts and the schedule of collective OPEB amounts, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the schedules of employer allocations for non-university employers and university employers and the specified column totals included in the schedule of collective pension amounts and the schedule of collective OPEB amounts in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedules of employer allocations for non-university employers and university employers and the specified column totals included in the schedule of collective pension amounts and the schedule of collective OPEB amounts.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the schedules referred to in the first paragraph present fairly, in all material respects, the non-university employers' and university employers' pension and OPEB allocations and the respective non-universities' and universities' specified column totals included in the schedule of collective pension amounts and the schedule of collective OPEB amounts for the Michigan Public School Employees' Retirement System as of and for the fiscal year ended September 30, 2019 in accordance with accounting principles generally accepted in the United States of America.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the System as of and for the fiscal year ended September 30, 2019, and our report thereon, dated February 26, 2020, expressed an unmodified opinion on those financial statements.

Restriction on Use

Our report is intended solely for the information and use of the Michigan Public School Employees' Retirement System Board, the Department of Technology, Management, and Budget, the Office of Retirement Services, and the System's participating employers and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Sincerely,

Doug Ringler Auditor General June 29, 2020

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
*5880	Detroit Public Schools	\$ -		\$ -	
5890	Detroit Public Schools Community District	94,661,212	0.0356332872	25,639,133	0.0373417497
5900	-	1,087,196	0.0004092529	279,467	0.0004070261
5930	-	139,697	0.0000525862	35,744	0.0000520592
5950	Burt Township School District	132,731	0.0000499638	33,007	0.0000480718
5980	Munising Public Schools	1,076,364	0.0004051752	278,384	0.0004054481
5990	Superior Central School District	529,734	0.0001994076	138,895	0.0002022913
6000	Allegan Area Educational Service Agency	3,013,943	0.0011345376	796,888	0.0011606167
6370	Glenn-Ganges School District #4	74,048	0.0000278739	19,195	0.0000279564
7000	Allegan Public Schools	3,930,098	0.0014794055	1,012,756	0.0014750135
7020	Plainwell Community School	3,960,830	0.0014909737	1,029,736	0.0014997446
7030	Hopkins Public School	2,363,309	0.0008896194	611,860	0.0008911347
7040	Fennville Public School	1,992,938	0.0007502009	519,503	0.0007566228
7050	Martin Public Schools	933,084	0.0003512405	245,050	0.0003569000
7060	Otsego Public Schools	3,665,087	0.0013796475	964,745	0.0014050896
7070	Saugatuck Public Schools	1,401,693	0.0005276389	367,217	0.0005348284
7080	Wayland Union Schools	4,597,684	0.0017307048	1,212,682	0.0017661933
7090	Alpena-Montmorency-Alcona ESD	1,153,199	0.0004340984	291,017	0.0004238478
7120	Alpena Public Schools	5,713,260	0.0021506406	1,498,219	0.0021820603
7210	Ellsworth Community School	400,724	0.0001508445	107,662	0.0001568025
7220	Central Lake-Antrim County Public Schools	433,427	0.0001631546	113,385	0.0001651382
7230	Alba Public Schools	189,902	0.0000714846	50,148	0.0000730381
7240	Elk Rapids Schools	1,938,869	0.0007298479	506,018	0.0007369822
7250	Bellaire Public Schools	505,296	0.0001902082	134,618	0.0001960628
7270	Mancelona Public Schools	1,380,515	0.0005196669	357,164	0.0005201864
7470	Arenac-Eastern High School	8,370	0.0000031508	3,637	0.0000052973
7480	Au Gres-Sims School District	582,130	0.0002191310	149,371	0.0002175486
7520	Arvon Township Schools	41,129	0.0000154822	10,478	0.0000152608
7540	Baraga Township Schools	722,241	0.0002718728	188,480	0.0002745090
7560	L'Anse Public Schools	992,920	0.0003737645	260,098	0.0003788167
7570	Barry ISD	914,386	0.0003442022	241,729	0.0003520624
7980	Delton-Kellogg Schools	1,841,002	0.0006930076	470,411	0.0006851228
8000	Hastings Area School District	3,639,934	0.0013701792	947,791	0.0013803965
8020	Thornapple-Kellogg School	4,939,780	0.0018594798	1,293,786	0.0018843161
8040	Bay-Arenac ISD	5,163,634	0.0019437448	1,336,358	0.0019463197
8630	Bangor Township Schools	3,706,616	0.0013952800	971,668	0.0014151713
8640	Bay City Public Schools	11,727,606	0.0044146187	3,011,762	0.0043864382

^{*}Employer had no statutorily required contributions. See Note 2. The accompanying notes are an integral part of this schedule.

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
8650	Essexville-Hampton Public Schools	2,284,242	0.0008598566	586,602	0.0008543474
8680	Pinconning Area Schools	1,943,674	0.0007316566	496,209	0.0007226967
8830	Berrien RESA	4,953,599	0.0018646815	1,293,806	0.0018843448
9250	Riverside-Hager School District #6	103,413	0.0000389276	27,211	0.0000396308
9600	River School	103,981	0.0000391415	26,779	0.0000390020
9720	Buchanan Community Schools	2,153,210	0.0008105320	556,185	0.0008100482
9760	Bridgman Public Schools	1,612,698	0.0006070674	424,565	0.0006183524
9780	New Buffalo Area Schools	2,005,573	0.0007549570	525,459	0.0007652974
9790	Niles Public Schools	5,206,264	0.0019597922	1,368,280	0.0019928121
9800	Brandywine Public Schools	1,967,738	0.0007407149	499,026	0.0007267993
9810	Berrien Springs Public Schools	4,847,945	0.0018249104	1,306,200	0.0019023969
9820	Eau Claire Public Schools	1,386,834	0.0005220454	338,085	0.0004923988
9830	St Joseph Public Schools	4,227,136	0.0015912194	1,109,812	0.0016163694
9850	Watervliet Public Schools	2,198,337	0.0008275191	562,267	0.0008189052
9870	Branch County ISD	3,198,847	0.0012041408	837,196	0.0012193228
10150	Bronson Community School	1,440,474	0.0005422371	372,251	0.0005421590
10160	Coldwater Community Schools	4,030,238	0.0015171009	1,033,934	0.0015058587
10180	Quincy Community Schools	1,753,224	0.0006599656	442,963	0.0006451478
10190	Union City Community Schools	1,629,091	0.0006132380	411,613	0.0005994883
10200	Calhoun County ISD	8,141,772	0.0030648043	2,109,169	0.0030718687
*10790	Albion Public Schools	-	-	-	-
10800	Athens Area School	741,365	0.0002790718	193,860	0.0002823441
10810	Battle Creek Public Schools	7,067,228	0.0026603142	1,816,389	0.0026454544
10820	Lakeview School District	6,351,785	0.0023910001	1,621,699	0.0023618999
10860	Harper Creek Community Schools	4,390,144	0.0016525805	1,141,795	0.0016629511
10880	Homer Community Schools	1,612,245	0.0006068969	419,836	0.0006114646
10890	Marshall Public Schools	4,397,618	0.0016553938	1,149,967	0.0016748538
10900	Pennfield Schools	3,363,857	0.0012662556	883,960	0.0012874303
10910	Tekonsha Community School	355,942	0.0001339873	92,360	0.0001345167
11410	Dowagiac-Union School District	3,313,291	0.0012472210	852,783	0.0012420244
11430	•	1,282,513	0.0004827759	332,223	0.0004838609
11440	Marcellus Community Schools	995,319	0.0003746674	260,135	0.0003788695
11450	Edwardsburg Public Schools	3,614,130	0.0013604657	937,347	0.0013651862
11470	Lewis Cass ISD	1,579,055	0.0005944031	414,288	0.0006033846
11560	Beaver Island Community School	244,542		63,326	0.0000922305
11570	Boyne Falls Public School	402,238	0.0001514142	105,991	0.0001543685
11580	Charlevoix Public Schools	1,615,835	0.0006082484	410,544	0.0005979313

^{*}Employer had no statutorily required contributions. See Note 2. The accompanying notes are an integral part of this schedule.

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
11620	Cheboygan-Otsego-Presque Isle ESD	1,611,919	0.0006067741	414,675	0.0006039471
11810	Inland Lakes Schools	1,044,116	0.0003930361	269,817	0.0003929710
11820	Mackinaw City Public Schools	358,464	0.0001349366	94,882	0.0001381899
11830	Wolverine Community Schools	428,939	0.0001614655	111,812	0.0001628471
11840	Eastern Upper Peninsula ISD	1,674,756	0.0006304277	445,733	0.0006491822
11930	DeTour Area Schools	456,570	0.0001718666	117,897	0.0001717091
11950	Pickford Public Schools	526,417	0.0001981589	140,696	0.0002049141
11970	Rudyard Public Schools	951,358	0.0003581194	242,290	0.0003528791
11980	Sault Ste Marie Public Schools	3,061,212	0.0011523309	796,276	0.0011597250
12000	Brimley Public Schools	938,343	0.0003532202	241,272	0.0003513970
12010	Whitefish Township School	171,364	0.0000645066	45,151	0.0000657590
12020	Clare-Gladwin ISD	2,145,635	0.0008076807	569,042	0.0008287726
12230	Clare Public Schools	2,147,804	0.0008084970	565,088	0.0008230143
12240	Harrison Community Schools	1,946,427	0.0007326928	502,816	0.0007323191
12250	Farwell Area Schools	1,760,195	0.0006625897	448,422	0.0006530973
12260	Clinton County ISD	2,349,955	0.0008845928	621,082	0.0009045662
12930	Bath Community Schools	1,795,222	0.0006757748	455,335	0.0006631656
12940	St Johns Public Schools	4,372,680	0.0016460066	1,127,631	0.0016423226
12950	Fowler Public Schools	721,672	0.0002716589	186,224	0.0002712230
12980	Dewitt Public Schools	4,810,405	0.0018107790	1,239,033	0.0018045716
13070	Delta-Schoolcraft ISD	1,537,707	0.0005788385	395,045	0.0005753571
13120	Bark River - Harris Schools	1,094,485	0.0004119967	286,300	0.0004169777
13130	Escanaba Area Public Schools	3,560,969	0.0013404543	907,147	0.0013212017
13170	Gladstone Area Schools	2,138,677	0.0008050616	550,494	0.0008017588
13190	Rapid River Public Schools	499,372	0.0001879783	126,608	0.0001843971
13220	Dickinson-Iron ISD	1,453,288	0.0005470606	376,912	0.0005489484
13250	Breitung Township Schools	2,745,416	0.0010334560	708,215	0.0010314698
13270	Iron Mountain Public Schools	1,250,241	0.0004706279	325,511	0.0004740860
13310	Eaton County ISD	2,953,735	0.0011118734	772,840	0.0011255911
13720	Strange-Oneida School #3	21,742	0.0000081845	6,623	0.0000096459
13890	Bellevue Community Schools	823,163	0.0003098628	211,644	0.0003082463
13900	Potterville Public Schools	1,292,641	0.0004865882	329,695	0.0004801789
13910	Charlotte Public Schools	3,504,485	0.0013191920	912,101	0.0013284169
13940	Eaton Rapids Public Schools	3,768,089	0.0014184203	977,831	0.0014241479
13950	Grand Ledge Public Schools	8,085,480	0.0030436144	2,078,582	0.0030273214
13980	Olivet Community Schools	2,152,593	0.0008102998	557,794	0.0008123910
14140	Alanson Public Schools	303,118	0.0001141026	80,971	0.0001179290

		Total Required		Total Required	
		Pension	Pension	OPEB	OPEB
Employer	- ,	Employer	Proportionate	Employer	Proportionate
Number	Employer Name	Contributions	Share	Contributions	Share
14150	Harbor Springs Public Schools	1,948,377	0.0007334270	503,836	0.0007338050
14160	Pellston Public Schools	755,049	0.0002842227	200,886	0.0002925780
14170	Petoskey Public Schools	4,075,329	0.0015340747	1,075,729	0.0015667302
14180	Genesee County ISD	12,459,134	0.0046899874	3,183,777	0.0046369666
14300	Goodrich Area Schools	2,809,451	0.0010575606	729,845	0.0010629722
14310	Bendle Public Schools	1,871,632	0.0007045376	499,369	0.0007272992
14320	Bentley Community Schools	1,125,985	0.0004238543	285,594	0.0004159495
14330	Atherton Community Schools	1,226,091	0.0004615371	320,886	0.0004673492
14340	Davison Community Schools	8,593,191	0.0032347318	2,197,757	0.0032008921
14350	Lake Fenton Community School District	3,100,585	0.0011671520	803,386	0.0011700807
14360	Fenton Area Public Schools	5,215,519	0.0019632758	1,330,439	0.0019376996
14370	Linden Community School	4,110,310	0.0015472426	1,044,878	0.0015217973
14380	Flint Community Schools	6,803,926	0.0025611995	1,727,003	0.0025152683
14400	Carman-Ainsworth Community School District	7,070,807	0.0026616616	1,810,644	0.0026370862
14430	Flushing Community Schools	6,792,964	0.0025570732	1,757,293	0.0025593837
14450	Swartz Creek Community Schools	5,559,354	0.0020927058	1,429,276	0.0020816483
14460	Mt Morris Consolidated Schools	3,295,592	0.0012405585	821,514	0.0011964817
14470	Genesee School District	946,646	0.0003563456	242,206	0.0003527580
14480	Kearsley Community Schools	4,869,323	0.0018329577	1,240,594	0.0018068449
14490	Grand Blanc Community Schools	11,740,641	0.0044195253	3,050,871	0.0044433971
14500	Montrose Community Schools	2,117,353	0.0007970344	544,853	0.0007935431
14510	Beecher Community School District	1,041,301	0.0003919764	252,795	0.0003681795
14520	Westwood Heights Schools	2,003,188	0.0007540594	533,201	0.0007765730
14530	Clio Area School District	4,156,081	0.0015644722	1,051,768	0.0015318329
14790	Beaverton Rural School District	1,560,767	0.0005875191	397,830	0.0005794143
14800		2,296,309	0.0008643987	587,101	0.0008550747
14830	Bessemer Area School District	612,143	0.0002304287	163,100	0.0002375445
14890	Wakefield Township Schools	491,892	0.0001851629	126,082	0.0001836310
14900	•	496,613	0.0001869399	125,327	0.0001825300
14910	Traverse Bay Area ISD	8,854,771	0.0033331985	2,308,153	0.0033616767
15130	Kingsley Area School	1,977,379	0.0007443440	513,093	0.0007472869
15150	Traverse City Public Schools	15,451,228	0.0058163003	3,964,461	0.0057739825
15170	Gratiot-Isabella ISD	3,289,245	0.0012381694	860,726	0.0012535921
16060	Alma Public Schools	3,413,134	0.0012848048	890,515	0.0012969784
16070	Ashley Community School	369,440	0.00012040040	97,152	0.00012303764
16080	Fulton Schools	1,227,843	0.0001530001	313,701	0.0001414351
16090	Ithaca Public Schools	1,659,922	0.0004021300	423,167	0.0004300051
10030	TUTAGA T ADITO DOTTOOTS	1,000,322	0.0000240437	423, 107	0.0000103130

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
16100		1,497,019	0.0005635224	384,621	0.0005601759
16120	Breckenridge Community Schools	979,415	0.0003686809	248,031	0.0003612418
16130	Hillsdale County ISD	1,530,853	0.0005762583	399,632	0.0005820384
16270	North Adams-Jerome Public Schools	415,484	0.0001564007	106,496	0.0001551052
16280	Camden-Frontier School	794,466	0.0002990605	202,231	0.0002945369
16290	Jonesville Community Schools	2,245,141	0.0008451376	573,291	0.0008349618
16300	Hillsdale Community Schools	2,101,968	0.0007912432	545,520	0.0007945145
16310	Litchfield Community Schools	453,365	0.0001706599	113,838	0.0001657974
16320	Pittsford Area Schools	736,524	0.0002772495	184,422	0.0002685989
16330	Reading Community School	1,169,484	0.0004402283	300,946	0.0004383092
16340	Waldron Area Schools	258,835	0.0000974333	65,426	0.0000952887
16350	Copper Country ISD	1,503,844	0.0005660916	406,506	0.0005920495
16390	Adams Township School District	604,740	0.0002276422	159,720	0.0002326219
16400	Calumet Public Schools	1,963,239	0.0007390214	499,849	0.0007279980
16420	Chassell Township Schools	281,703	0.0001060412	71,952	0.0001047933
16440	Elm River Township Schools	41,871	0.0000157613	10,722	0.0000156161
16450	Hancock Public Schools	946,762	0.0003563893	239,314	0.0003485457
16470	Dollar Bay-Tamarack City Area Schools	468,215	0.0001762501	118,373	0.0001724034
16480	Houghton-Portage Township School District	1,878,907	0.0007072764	487,910	0.0007106089
16490	Lake Linden-Hubbell Public School	623,711	0.0002347832	161,164	0.0002347243
16500	Stanton Township Public Schools	224,536	0.0000845219	58,332	0.0000849571
16510	Huron ISD	2,010,071	0.0007566503	529,147	0.0007706685
16600	Caseville Public School	414,662	0.0001560909	105,405	0.0001535163
16610	Big Burning-Colfax #1F School	29,239	0.0000110062	7,474	0.0000108848
16780	Church School	28,220	0.0000106227	8,051	0.0000117260
17020	Adams-Sigel #3 School	51,317	0.0000193172	14,083	0.0000205113
17030	Eccles-Sigel #4 School	38,871	0.0000146321	10,909	0.0000158878
*17040	Kipper School	-	-	-	-
17060	Verona Mills School	31,593	0.0000118927	8,031	0.0000116967
17110	Ubly Community Schools	1,151,857	0.0004335930	298,300	0.0004344547
17130		617,396	0.0002324062	155,418	0.0002263558
*17170	Port Hope Community Schools	-	-	-	-
17180	Harbor Beach Community School District	799,029	0.0003007783	213,994	0.0003116689
17200	Bad Axe Public Schools	1,594,169	0.0006000924	408,169	0.0005944723
17220	Ingham ISD	7,251,630	0.0027297286	1,901,108	0.0027688416
17710	Holt Public Schools	9,410,116	0.0035422466	2,415,021	0.0035173232
17740	East Lansing Public Schools	5,623,048	0.0021166820	1,465,027	0.0021337182

^{*}Employer had no statutorily required contributions. See Note 2. The accompanying notes are an integral part of this schedule.

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
17750	Dansville Schools	950,414	0.0003577642	245,811	0.0003580073
17760	Lansing Public Schools	20,520,019	0.0077243436	5,324,991	0.0077555073
17830	Webberville Community Schools	697,788	0.0002626681	177,488	0.0002584993
17840	Leslie Public Schools	2,099,295	0.0007902370	546,026	0.0007952520
17850	Haslett Public Schools	4,595,625	0.0017299297	1,192,584	0.0017369227
17860	Okemos Public Schools	8,023,721	0.0030203665	2,097,071	0.0030542493
17890	Stockbridge Community Schools	1,937,802	0.0007294460	497,835	0.0007250652
17900	Mason Public Schools	5,389,022	0.0020285878	1,405,287	0.0020467097
17910	Williamston Community Schools	2,810,896	0.0010581045	727,794	0.0010599848
17920	Ionia County ISD	3,800,455	0.0014306039	972,291	0.0014160788
17940	Coon-Berlin Township School District #3	21,103	0.0000079437	5,627	0.0000081956
18140	Haynor-Easton Township School District #6	33,394	0.0000125706	8,275	0.0000120526
18160	North LeValley School #2	18,869	0.0000071029	5,012	0.0000072994
18640	Saranac Community Schools	1,176,542	0.0004428852	292,491	0.0004259947
18660	Ionia Public Schools	3,966,115	0.0014929633	1,040,125	0.0015148749
18680	Pewamo-Westphalia Community School District	944,741	0.0003556286	244,764	0.0003564826
18700	Belding Area Schools	2,437,631	0.0009175964	624,777	0.0009099471
18710	Portland Public Schools	2,631,501	0.0009905749	670,648	0.0009767553
18720	losco RESA	959,592	0.0003612188	256,472	0.0003735354
18760	Oscoda Area Schools	1,888,504	0.0007108887	494,626	0.0007203908
18770	Hale Area Schools	523,325	0.0001969950	133,622	0.0001946121
18780	Tawas Area Schools	1,761,219	0.0006629750	460,277	0.0006703637
19220	Shepherd Public Schools	2,688,471	0.0010120202	691,687	0.0010073976
19230	Mt Pleasant Public Schools	6,338,895	0.0023861482	1,642,444	0.0023921146
19240	Beal City Schools	907,750	0.0003417039	232,624	0.0003388025
19290	Bois Blanc Pines School District	18,417	0.0000069326	5,405	0.0000078725
19310	Moran Township School District	213,635	0.0000804187	53,967	0.0000785993
19340	Les Cheneaux Community Schools	413,483	0.0001556473	109,752	0.0001598473
19370	Mackinac Island Public School	254,858	0.0000959362	68,076	0.0000991486
19390	St Ignace Public Schools	767,532	0.0002889218	191,069	0.0002782796
19400	Jackson ISD	9,628,632	0.0036245028	2,524,648	0.0036769871
19730	East Jackson Community Schools	1,481,872	0.0005578207	383,805	0.0005589874
19750	Columbia School District	2,121,839	0.0007987233	557,913	0.0008125644
19760	Concord Community Schools	1,067,644	0.0004018927	270,007	0.0003932480
19770	Grass Lake Community Schools	1,941,030	0.0007306612	498,764	0.0007264178
19780	Hanover Horton School District	1,701,762	0.0006405939	438,210	0.0006382252
19800	Jackson Public Schools	7,529,330	0.0028342631	1,916,495	0.0027912518

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
19810	Michigan Center School District	2,284,206	0.0008598430	590,741	0.0008603765
19830	Napoleon Community School District	2,024,704	0.0007621588	522,728	0.0007613194
19840	Northwest School District	5,067,481	0.0019075503	1,328,711	0.0019351821
19860	Springport Public School	1,490,681	0.0005611365	396,645	0.0005776881
19880	Vandercook Lake Public Schools	1,676,266	0.0006309963	399,698	0.0005821351
19890	Kalamazoo RESA	8,768,749	0.0033008170	2,292,397	0.0033387289
20080	Climax-Scotts Community School	811,113	0.0003053270	212,301	0.0003092025
20090	Comstock Public Schools	2,995,585	0.0011276271	806,118	0.0011740592
20100	Galesburg-Augusta Community School District	1,499,873	0.0005645966	406,759	0.0005924184
20110	Kalamazoo Public Schools	23,349,243	0.0087893474	6,050,921	0.0088127777
20140	Parchment School District	2,577,921	0.0009704059	668,747	0.0009739872
20170	Portage Public Schools	14,578,822	0.0054879009	3,782,582	0.0055090882
20200	Vicksburg Community Schools	4,185,488	0.0015755417	1,078,572	0.0015708706
20210	Schoolcraft Community Schools	1,505,296	0.0005666382	389,808	0.0005677304
20260	Crawford-Excelsior School District #1	53,375	0.0000200919	14,590	0.0000212498
20390	Kalkaska Public Schools	2,232,490	0.0008403754	583,038	0.0008491573
20400	Kent County ISD	17,562,555	0.0066110664	4,666,203	0.0067960251
21660	Rockford Public Schools	13,034,413	0.0049065397	3,333,156	0.0048545280
21670	Byron Center Public Schools	6,540,884	0.0024621827	1,712,410	0.0024940151
21680	Caledonia Community Schools	8,376,373	0.0031531151	2,236,957	0.0032579847
21700	Grand Rapids Public Schools	32,059,936	0.0120683108	8,219,000	0.0119704449
21710	East Grand Rapids Public Schools	4,835,586	0.0018202581	1,231,389	0.0017934388
21740	Lowell Area Schools	5,677,397	0.0021371407	1,486,291	0.0021646874
21750	Cedar Springs Public Schools	4,882,077	0.0018377585	1,280,619	0.0018651395
21780	Godwin Heights Public Schools	3,716,259	0.0013989101	951,722	0.0013861215
21800	Comstock Park Public Schools	2,939,268	0.0011064276	751,094	0.0010939208
21820	Sparta Area Schools	3,790,545	0.0014268735	985,477	0.0014352835
21830	Kent City Community Schools	2,011,174	0.0007570654	527,692	0.0007685489
21870	Grandville Public Schools	8,882,460	0.0033436212	2,291,067	0.0033367922
21900	Godfrey-Lee Public Schools	2,996,748	0.0011280647	760,871	0.0011081593
21910	Kelloggsville Public Schools	4,038,800	0.0015203240	1,066,243	0.0015529148
21940	Grant Township School	24,424	0.0000091938	6,220	0.0000090596
22110	Baldwin Community Schools	976,789	0.0003676924	245,207	0.0003571282
22120	Lapeer County ISD	2,142,102	0.0008063509	547,293	0.0007970969
22690	Almont Community Schools	1,949,632	0.0007338993	494,635	0.0007204044
22700	Dryden Community Schools	636,531	0.0002396092	157,218	0.0002289777
22710	Imlay City Community Schools	3,184,859	0.0011988755	834,965	0.0012160728

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
22720	Lapeer Public Schools	7,762,899	0.0029221854	1,996,043	0.0029071082
22730	North Branch Area Schools	3,082,606	0.0011603844	790,846	0.0011518170
22740	Lakeville Community Schools	1,449,033	0.0005454589	371,440	0.0005409780
22770	Glen Lake Community Schools	1,830,978	0.0006892346	472,719	0.0006884852
22790	Northport Public School	527,927	0.0001987273	138,817	0.0002021773
22800	Leland Public School	1,067,171	0.0004017147	279,755	0.0004074450
22810	Suttons Bay Public Schools	986,182	0.0003712281	257,788	0.0003754518
22830	Lenawee ISD	5,067,134	0.0019074194	1,320,762	0.0019236049
23250	Adrian Public Schools	4,815,645	0.0018127516	1,248,316	0.0018180918
23260	Blissfield Community School District	1,415,883	0.0005329804	368,706	0.0005369971
23270	Onsted Community School	1,984,389	0.0007469830	498,386	0.0007258676
23280	Clinton Community School	1,605,951	0.0006045276	427,169	0.0006221440
23300	Hudson Area Schools	1,707,415	0.0006427215	444,872	0.0006479275
23310	Sand Creek Community Schools	1,288,844	0.0004851591	333,677	0.0004859787
23320	Madison School District #2	2,842,607	0.0010700415	730,257	0.0010635728
23330	Britton Deerfield Schools	725,828	0.0002732234	177,948	0.0002591705
23340	Morenci Area Schools	971,923	0.0003658607	244,540	0.0003561573
23350	Tecumseh Public Schools	3,807,507	0.0014332587	975,868	0.0014212888
23360	Addison Community School	1,266,193	0.0004766327	330,276	0.0004810259
23370	Livingston ISD	7,379,137	0.0027777260	1,928,519	0.0028087634
23680	Brighton Area Schools	11,669,073	0.0043925853	3,072,814	0.0044753565
23690	Fowlerville Community Schools	4,467,614	0.0016817425	1,144,133	0.0016663561
23700	Hartland Consolidated Schools	8,339,066	0.0031390717	2,169,765	0.0031601234
23710	Howell Public Schools	10,022,433	0.0037727411	2,610,367	0.0038018322
23720	Pinckney Community Schools	4,195,380	0.0015792656	1,056,919	0.0015393341
23770	Tahquamenon Area School District	843,608	0.0003175589	215,599	0.0003140061
23780	Macomb ISD	17,976,662	0.0067669485	4,627,872	0.0067401981
23850	Armada Area Schools	2,790,369	0.0010503776	723,544	0.0010537959
23860	Romeo Community Schools	8,223,391	0.0030955283	2,151,255	0.0031331654
23870	Anchor Bay School District	9,949,466	0.0037452741	2,594,751	0.0037790875
23890	Mt Clemens Community Schools	1,602,535	0.0006032417	412,608	0.0006009368
23910	Clintondale Community Schools	3,448,759	0.0012982153	887,565	0.0012926817
23920	Fraser Public Schools	9,209,228	0.0034666266	2,369,408	0.0034508901
23930	East Detroit School District	4,082,860	0.0015369096	1,015,053	0.0014783594
23950	Roseville Community Schools	8,804,293	0.0033141968	2,243,246	0.0032671441
23970	L'Anse Creuse Public Schools	18,279,723	0.0068810297	4,698,032	0.0068423820
23980	Lake Shore Public Schools	6,919,060	0.0026045395	1,767,116	0.0025736907

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
23990	Lakeview Public Schools	6,775,640	0.0025505519	1,763,738	0.0025687704
24000	South Lake Public Schools	3,051,517	0.0011486816	774,088	0.0011274096
24010	New Haven Community Schools	1,710,696	0.0006439565	442,271	0.0006441393
24020	Memphis Community Schools	1,289,680	0.0004854737	324,451	0.0004725416
24030	Richmond Community Schools	2,179,199	0.0008203150	562,692	0.0008195251
24040	Utica Community Schools	45,977,683	0.0173073634	11,696,509	0.0170352136
24060	Warren Consolidated Schools	27,906,798	0.0105049463	7,086,161	0.0103205383
24070	Center Line Public Schools	5,342,011	0.0020108914	1,371,377	0.0019973225
24080	Warren Woods Public Schools	6,312,151	0.0023760809	1,642,184	0.0023917352
24090	Vandyke Public Schools	4,384,642	0.0016505094	1,114,959	0.0016238662
24100	Fitzgerald Public Schools	4,555,655	0.0017148835	1,146,914	0.0016704068
24110	Manistee ISD	882,899	0.0003323492	225,784	0.0003288398
24250	Bear Lake School	420,398	0.0001582502	109,118	0.0001589231
24270	Manistee Public Schools	2,174,798	0.0008186583	560,560	0.0008164189
24300	Onekama Consolidated Schools	548,981	0.0002066528	140,172	0.0002041509
24350	Wells Township School #18	53,145	0.0000200053	14,658	0.0000213479
24390	Gwinn Area Community Schools	1,683,414	0.0006336870	436,554	0.0006358130
24400	Ishpeming Public Schools	1,157,773	0.0004358202	295,314	0.0004301062
24420	Marquette Area Public Schools	5,102,968	0.0019209084	1,340,522	0.0019523840
24450	Negaunee Public School	2,471,502	0.0009303467	644,545	0.0009387390
24460	Powell Township School District	154,948	0.0000583272	39,817	0.0000579914
24470	Republic-Michigamme Schools	329,660	0.0001240938	84,357	0.0001228603
24500	West Shore ESD	2,998,774	0.0011288276	772,722	0.0011254203
24680	Mason County Central School District	1,650,788	0.0006214057	424,600	0.0006184020
24690	Mason County-Eastern-Custer #5 School District	607,163	0.0002285540	155,679	0.0002267367
24710	Ludington Area Schools	3,402,282	0.0012807199	884,479	0.0012881875
24720	Mecosta-Osceola ISD	3,212,035	0.0012091051	834,967	0.0012160751
24880	Big Rapids Public Schools	3,020,091	0.0011368517	789,347	0.0011496330
24930	Menominee County ISD	715,296	0.0002692584	175,521	0.0002556355
25050	Menominee Area Public Schools	1,864,923	0.0007020125	486,287	0.0007082460
25070	Carney-Nadeau Public School	449,519	0.0001692124	121,593	0.0001770923
25100	Midland County Ed Service Agency	2,240,771	0.0008434926	581,753	0.0008472856
25600	Midland Public Schools	12,538,355	0.0047198088	3,234,945	0.0047114901
25610	Bullock Creek School District	3,017,261	0.0011357865	785,979	0.0011447286
25620	Coleman Community Schools	1,076,130	0.0004050874	274,604	0.0003999424
25740	Lake City Area Schools	1,648,346	0.0006204863	426,005	0.0006204484
25750	McBain Rural Agricultural Schools	1,598,501	0.0006017230	406,979	0.0005927383

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
25760	Monroe County ISD	7,023,233	0.0026437533	1,817,901	0.0026476565
25920	Airport Community Schools	3,771,903	0.0014198560	963,327	0.0014030242
25930	Bedford Public Schools	6,740,838	0.0025374514	1,758,425	0.0025610337
25940	Dundee Community Schools	2,227,347	0.0008384393	586,888	0.0008547642
25950	Jefferson Schools	2,846,087	0.0010713515	718,040	0.0010457790
25960	Ida Public Schools	2,173,499	0.0008181696	555,921	0.0008096638
25970	Monroe Public Schools	7,195,283	0.0027085177	1,835,550	0.0026733606
25990	Mason Consolidated Schools	1,635,143	0.0006155163	414,975	0.0006043845
26000	Summerfield Schools	969,990	0.0003651332	253,111	0.0003686404
26010	Whiteford Agricultural Schools	1,026,010	0.0003862205	269,200	0.0003920720
26020	Montcalm Area ISD	3,158,035	0.0011887780	822,450	0.0011978454
26540	Lakeview Community Schools	1,675,082	0.0006305506	429,637	0.0006257393
26560	Greenville Public Schools	5,805,997	0.0021855496	1,510,167	0.0021994616
26600	Vestaburg Community School	944,261	0.0003554478	255,383	0.0003719492
26660	Atlanta Community Schools	352,296	0.0001326147	89,169	0.0001298687
26670	Hillman Community School	688,851	0.0002593041	183,042	0.0002665888
26680	Muskegon Area ISD	5,335,868	0.0020085788	1,396,081	0.0020333018
27080	Fruitport Community Schools	4,542,044	0.0017097601	1,167,036	0.0016997130
27100	Holton Public Schools	1,182,185	0.0004450094	304,992	0.0004442011
27120	Montague Area Public Schools	2,390,047	0.0008996845	622,063	0.0009059944
27130	Muskegon City Public Schools	6,262,999	0.0023575786	1,604,309	0.0023365726
27160	Orchard View Schools	3,847,045	0.0014481417	983,264	0.0014320612
27170	Reeths-Puffer Schools	5,845,351	0.0022003635	1,498,581	0.0021825867
27200	Muskegon Heights City Public Schools	10,950	0.0000041219	4,758	0.0000069297
27210	North Muskegon Public Schools	1,524,344	0.0005738083	394,763	0.0005749467
27270	Ravenna Public Schools #24	1,589,338	0.0005982740	409,023	0.0005957156
27280	Whitehall District Schools	4,010,674	0.0015097366	1,035,164	0.0015076498
27300	Newaygo County RESA	2,685,685	0.0010109714	692,164	0.0010080930
27690	Big Jackson School District	29,373	0.0000110570	7,896	0.0000115006
27830	Grant Public Schools	2,485,898	0.0009357658	647,425	0.0009429323
27840	Newaygo Public Schools	2,521,664	0.0009492292	642,457	0.0009356974
27860	Hesperia Community Schools	1,471,620	0.0005539613	380,012	0.0005534625
27880	Fremont Public Schools	3,439,030	0.0012945530	890,092	0.0012963619
27890	White Cloud Public Schools	1,414,561	0.0005324829	367,952	0.0005358980
27900	Oakland County ISD	13,667,352	0.0051447965	3,517,765	0.0051233991
27970	Rochester Community Schools	25,506,338	0.0096013420	6,527,656	0.0095071118
27980	Avondale School District	6,076,121	0.0022872322	1,609,688	0.0023444072

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
27990	Birmingham Public Schools	20,317,016	0.0076479272	5,238,276	0.0076292123
28000	Bloomfield Hills School District	16,000,149	0.0060229307	4,089,269	0.0059557570
28020	Brandon School District	3,430,731	0.0012914288	851,831	0.0012406365
28030	Walled Lake Consolidated School	25,127,812	0.0094588535	6,365,899	0.0092715237
28040	Farmington Public Schools	21,912,595	0.0082485504	5,629,153	0.0081984995
28050	Clarenceville School District	3,157,240	0.0011884789	808,538	0.0011775835
28060	Holly Area Schools	5,211,442	0.0019617412	1,335,496	0.0019450641
28070	Clarkston Community Schools #3F	14,513,366	0.0054632612	3,757,256	0.0054722017
28080	South Lyon Community Schools	13,526,160	0.0050916477	3,540,823	0.0051569810
28090	Huron Valley School District #4F	15,674,764	0.0059004461	4,063,187	0.0059177708
28100	Novi Community School District	12,304,986	0.0046319618	3,190,958	0.0046474252
28110	Lake Orion Community School #3	13,395,314	0.0050423936	3,483,462	0.0050734383
28120	Oxford Area Community School	9,269,217	0.0034892083	2,417,515	0.0035209559
28130	Pontiac City School District	6,889,210	0.0025933028	1,751,812	0.0025514013
28150	Oak Park School District	6,388,549	0.0024048395	1,659,583	0.0024170757
28160	Lamphere Public Schools	5,401,756	0.0020333810	1,359,599	0.0019801686
28170	Royal Oak City School District	9,002,822	0.0033889292	2,341,307	0.0034099627
28180	Berkley School District	10,262,691	0.0038631813	2,704,541	0.0039389901
28190	Hazel Park Public Schools	5,539,192	0.0020851160	1,379,244	0.0020087802
28200	Ferndale City School District	4,985,712	0.0018767700	1,277,965	0.0018612743
28210	Madison District Public Schools	2,578,712	0.0009707038	667,558	0.0009722559
28220	Southfield Public Schools	13,041,428	0.0049091804	3,382,045	0.0049257313
28230	Troy City School District	23,401,048	0.0088088484	6,144,584	0.0089491914
28240	Clawson City School District	2,782,570	0.0010474417	703,108	0.0010240317
28250	Waterford School District	16,176,859	0.0060894495	4,119,757	0.0060001609
28260	West Bloomfield Schools	9,800,438	0.0036891756	2,526,716	0.0036800002
28820	Hart Public Schools	1,962,397	0.0007387045	499,935	0.0007281238
28830	Walkerville Public Schools	447,680	0.0001685201	113,667	0.0001655493
28840	Pentwater Public Schools	488,439	0.0001838627	124,938	0.0001819639
28850	Shelby Public Schools	2,287,676	0.0008611490	598,110	0.0008711082
29180	Ontonagon Area School District	455,495	0.0001714617	116,524	0.0001697100
29540	Marion Public School	700,558	0.0002637108	179,333	0.0002611875
29550	Evart Public Schools	1,355,546	0.0005102676	350,453	0.0005104120
29560	Reed City Public School District	2,018,976	0.0007600025	509,509	0.0007420669
29600	Mio-AuSable Schools	823,331	0.0003099262	214,622	0.0003125825
29610	Fairview Area Schools	476,467	0.0001793561	124,447	0.0001812490
29650	Gaylord Community Schools	4,723,184	0.0017779467	1,208,572	0.0017602072

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
29660	Johannesburg-Lewiston Area Schools	1,042,018	0.0003922466	269,668	0.0003927535
29670	Vanderbilt Area School	145,227	0.0000546676	35,989	0.0000524163
29690	Ottawa Area ISD	8,408,249	0.0031651143	2,225,134	0.0032407650
30620	Hudsonville Public Schools	11,892,606	0.0044767296	3,100,592	0.0045158136
30630	Grand Haven Public Schools	11,588,455	0.0043622380	2,999,568	0.0043686783
30640	Holland Public Schools	6,493,454	0.0024443287	1,653,641	0.0024084220
30700	Coopersville Public Schools	3,978,994	0.0014978114	1,027,943	0.0014971335
30720	Spring Lake Public Schools	4,108,637	0.0015466129	1,065,561	0.0015519213
30740	Zeeland Public Schools	10,775,230	0.0040561161	2,837,942	0.0041332802
30950	Onaway Area Community Schools	912,452	0.0003434738	229,814	0.0003347100
30970	Posen Consolidated School	340,124	0.0001280326	88,016	0.0001281904
30980	Rogers City Area Schools	836,738	0.0003149730	214,329	0.0003121557
31020	Roscommon Area Public Schools	1,589,994	0.0005985207	405,590	0.0005907162
31030	Houghton Lake Community Schools	2,224,434	0.0008373430	560,052	0.0008156793
31040	Saginaw County ISD	7,868,560	0.0029619593	2,054,953	0.0029929066
31650	Birch Run Area Schools	2,407,992	0.0009064395	620,704	0.0009040155
31670	Bridgeport-Spaulding Community School District	1,895,708	0.0007136007	469,457	0.0006837334
*31680	Buena Vista School District	-	-	-	-
31700	Carrollton School District	3,328,959	0.0012531190	868,378	0.0012647373
31710	Chesaning-Union Schools	2,029,274	0.0007638787	521,287	0.0007592212
31720	Frankenmuth School District	1,961,280	0.0007382840	511,679	0.0007452278
31730	Merrill Community Schools	822,054	0.0003094455	201,855	0.0002939887
31740	Hemlock Public Schools	1,671,416	0.0006291707	425,404	0.0006195743
31750	Saginaw City Schools	8,762,957	0.0032986370	2,238,828	0.0032607092
31780	St Charles Community Schools	1,426,490	0.0005369732	362,568	0.0005280568
31800	Freeland Community Schools	2,503,940	0.0009425574	646,378	0.0009414079
31820	St Clair County RESA	4,248,011	0.0015990772	1,099,611	0.0016015133
32110	East China School District #3	6,863,196	0.0025835105	1,757,030	0.0025590009
32410	Yale Public School District	2,908,822	0.0010949668	740,176	0.0010780182
32420	Algonac Community Schools	1,994,679	0.0007508563	514,019	0.0007486357
32470	Capac Community Schools	1,248,002	0.0004697849	316,750	0.0004613259
32480	Marysville Public Schools	3,912,566	0.0014728060	999,821	0.0014561754
32490	Port Huron Area Schools	13,168,218	0.0049569077	3,360,704	0.0048946491
32520	St Joseph County ISD	2,438,510	0.0009179273	645,062	0.0009394906
32830	Burr Oak Community Schools	388,117	0.0001460988	100,350	0.0001461528
32840	Colon Community School	659,338	0.0002481943	171,022	0.0002490831
32850	Constantine Public Schools	1,733,546	0.0006525582	455,586	0.0006635314

^{*}Employer had no statutorily required contributions. See Note 2. The accompanying notes are an integral part of this schedule.

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate
32860	Employer Name Mendon Community School	724,159	0.0002725951	184,962	Share 0.0002693854
32870	Centreville Public Schools	1,140,186	0.0002723331	294,155	0.0002033034
32880	Sturgis Public School	4,788,581	0.0004231330	1,226,867	0.0004264173
32890	Three Rivers Public Schools	3,864,135	0.0014545751	1,032,282	0.0017000007
32900	White Pigeon Community Schools	1,052,716	0.0003962736	268,156	0.0003905524
32910	Sanilac County ISD	1,264,399	0.0004759574	320,178	0.0004663181
33390	Carsonville-Port Sanilac School	473,122	0.0001780973	121,656	0.0001771839
33400	Peck Community Schools	451,252	0.0001698647	114,591	0.0001668939
33420	Croswell-Lexington Schools	2,817,063	0.0010604262	716,497	0.0010435313
33430	Brown City Community Schools	1,220,144	0.0004592985	316,230	0.0004605680
33440	Deckerville Community School District	984,160	0.0003704672	256,033	0.0003728959
33450	Marlette Community School	1,198,539	0.0004511657	305,462	0.0004448864
33460	Sandusky Community Schools	1,516,906	0.0005710083	395,077	0.0005754047
33870	Manistique Area Schools	1,078,288	0.0004058998	273,748	0.0003986964
33880	Shiawassee Regional ESD	3,311,403	0.0012465103	855,788	0.0012464006
34650	Byron Area School	1,284,228	0.0004834213	323,049	0.0004704998
34660	•	2,807,278	0.0010567427	724,296	0.0010548909
34670	New Lothrop Area Public Schools	1,273,889	0.0004795295	327,532	0.0004770288
34680	Owosso Public Schools	4,968,410	0.0018702567	1,264,298	0.0018413691
34690	Perry Public Schools	1,520,400	0.0005723237	389,606	0.0005674366
34700	Morrice Area School	813,085	0.0003060691	207,305	0.0003019265
34710	Laingsburg Community Schools	1,612,326	0.0006069273	413,074	0.0006016158
34730	Tuscola County ISD	3,865,078	0.0014549299	991,195	0.0014436122
35410	Reese Public Schools	1,123,566	0.0004229435	285,445	0.0004157323
35420	Cass City Public Schools	1,413,953	0.0005322540	359,924	0.0005242056
35450	Mayville Community School	748,362	0.0002817056	189,564	0.0002760874
35460	Caro Community Schools	2,668,259	0.0010044120	696,362	0.0010142063
35470	Kingston Community School	900,811	0.0003390920	234,048	0.0003408762
35480	Millington Community School District	1,739,538	0.0006548137	449,800	0.0006551053
35490	Vassar Public Schools	1,761,154	0.0006629508	451,425	0.0006574714
35500	Van Buren County ISD	6,819,174	0.0025669392	1,763,408	0.0025682899
35660	Wood School District #8	31,855	0.0000119911	7,858	0.0000114445
36080	Mattawan Consolidated School	5,040,475	0.0018973841	1,286,333	0.0018734609
36090	Lawton Community Schools	1,515,377	0.0005704329	388,130	0.0005652867
36100	Bangor Public Schools	1,842,286	0.0006934909	470,633	0.0006854470
36110	Gobles Public Schools	1,099,139	0.0004137484	280,414	0.0004084052
36120	Bloomingdale Public Schools	1,645,696	0.0006194889	424,223	0.0006178540

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
36130	Covert Public Schools	907,192	0.0003414940	233,165	0.0003395897
36140	Decatur Public Schools	1,042,093	0.0003922748	265,038	0.0003860105
36150	Hartford Public Schools	1,908,302	0.0007183413	486,812	0.0007090110
36160	Lawrence Public Schools	802,685	0.0003021546	204,604	0.0002979919
36170	Paw Paw Public Schools	3,097,902	0.0011661422	800,845	0.0011663793
36180	South Haven Public Schools	2,995,743	0.0011276866	757,780	0.0011036581
36190	Washtenaw ISD	7,507,663	0.0028261070	2,059,518	0.0029995557
36590	Ann Arbor Public Schools	39,516,994	0.0148753684	10,140,591	0.0147691190
36600	Lincoln Consolidated School	6,364,159	0.0023956581	1,629,164	0.0023727723
36610	Manchester Community Schools	1,481,102	0.0005575306	379,698	0.0005530053
36620	Whitmore Lake Public Schools	1,611,783	0.0006067229	406,108	0.0005914703
36650	Saline Area Schools	10,477,358	0.0039439884	2,692,520	0.0039214820
36660	Dexter Community Schools	6,960,663	0.0026202000	1,817,977	0.0026477673
36670	Chelsea School District	4,880,044	0.0018369932	1,272,429	0.0018532116
36680	Milan Area Schools	4,005,588	0.0015078221	1,031,000	0.0015015855
36690	Ypsilanti Community Schools	7,310,096	0.0027517370	1,927,210	0.0028068579
36710	Wayne County RESA	5,565,645	0.0020950738	1,499,479	0.0021838951
36740	Flat Rock Community Schools	2,767,827	0.0010418921	702,461	0.0010230892
36790	Gibraltar School District	5,073,872	0.0019099558	1,325,350	0.0019302870
36810	Dearborn Public Schools	39,595,466	0.0149049076	10,266,416	0.0149523753
36811	Henry Ford College	12,157,589	0.0045764771	3,095,252	0.0045080358
36840	Crestwood School District	6,907,779	0.0026002927	1,795,599	0.0026151743
36850	Dearborn Heights School District #7	3,727,277	0.0014030578	947,293	0.0013796707
36860	Westwood Community Schools	2,610,974	0.0009828479	657,717	0.0009579220
36870	Ecorse Public Schools	1,402,460	0.0005279274	360,544	0.0005251091
36880	River Rouge Public School	2,926,392	0.0011015807	754,727	0.0010992118
36890	Lincoln Park Public Schools	9,581,653	0.0036068183	2,511,773	0.0036582355
36910	Southgate Community School District	7,184,151	0.0027043275	1,804,736	0.0026284828
36920	Allen Park Public Schools	6,330,232	0.0023828872	1,626,639	0.0023690951
36930	Melvindale-Northern Allen Park School District	5,108,877	0.0019231329	1,356,582	0.0019757752
36940	Grosse Ile Township Schools	3,197,925	0.0012037940	826,359	0.0012035387
36950	Grosse Pointe Public Schools	16,451,142	0.0061926979	4,220,823	0.0061473575
36960	Hamtramck Public Schools	5,623,458	0.0021168364	1,485,707	0.0021638362
36970	Harper Woods Public Schools	2,981,393	0.0011222847	820,938	0.0011956436
*36980	Highland Park School District	-	-	-	-
36990	-	4,562,217	0.0017173538	1,185,676	0.0017268613
37000	Livonia Public Schools	29,323,332	0.0110381717	7,533,182	0.0109715958

^{*}Employer had no statutorily required contributions. See Note 2. The accompanying notes are an integral part of this schedule.

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
37010	Trenton Public Schools	5,094,753	0.0019178160	1,317,285	0.0019185406
37020	Riverview Public Schools	4,107,105	0.0015460363	1,047,526	0.0015256540
37040	Garden City Public Schools	7,479,525	0.0028155150	2,000,018	0.0029128976
*37070	Inkster Public Schools	-	-	-	-
37080	Wayne-Westland Community Schools	19,987,632	0.0075239375	5,075,040	0.0073914697
37090	Northville Public Schools	13,981,073	0.0052628905	3,608,509	0.0052555615
37100	Plymouth-Canton Community School District	28,201,321	0.0106158136	7,321,669	0.0106635406
37110	Redford-Union School District #1	6,608,986	0.0024878182	1,679,391	0.0024459247
37120	South Redford School District	5,510,078	0.0020741567	1,430,058	0.0020827883
37130	Romulus Community Schools	3,795,237	0.0014286396	969,368	0.0014118217
37150	Taylor School District	12,848,924	0.0048367159	3,270,581	0.0047633906
37160	Van Buren Public Schools	8,060,660	0.0030342714	2,075,998	0.0030235572
37170	Wyandotte Public Schools	10,644,867	0.0040070437	2,746,245	0.0039997293
37180	Wexford-Missaukee ISD	2,942,636	0.0011076955	748,670	0.0010903905
37390	Cadillac Area Public Schools	4,387,187	0.0016514674	1,133,707	0.0016511710
37400	Manton Consolidated School District	1,365,064	0.0005138507	356,258	0.0005188669
37410	Buckley Community School	546,211	0.0002056100	147,929	0.0002154491
37430	Mesick Consolidated Schools	923,432	0.0003476072	243,448	0.0003545657
39100	Allendale Public Schools	4,174,153	0.0015712749	1,113,347	0.0016215178
39350	Standish-Sterling Community School District	2,351,302	0.0008850997	601,700	0.0008763372
39370	Lakeshore Public Schools	4,180,256	0.0015735724	1,087,877	0.0015844230
39410	Whittemore-Prescott Area Schools	1,115,895	0.0004200559	292,606	0.0004261617
39420	Forest Hills Public Schools	16,901,090	0.0063620714	4,348,361	0.0063331079
39450	Northwestern Michigan College	4,643,961	0.0017481248	1,175,394	0.0017118862
39810	Coloma Community Schools	2,105,530	0.0007925838	530,230	0.0007722465
39830	Morley-Stanwood Community School	1,769,271	0.0006660059	459,214	0.0006688164
39880	Laker Schools	1,497,750	0.0005637975	392,881	0.0005722061
39890	Western School District	4,420,481	0.0016640001	1,142,326	0.0016637244
39900	Meridian Public Schools	2,049,178	0.0007713715	520,094	0.0007574840
39910	Hamilton Community Schools	4,657,058	0.0017530546	1,212,656	0.0017661556
39920	Owendale-Gagetown Area Schools	251,021	0.0000944917	64,389	0.0000937787
39980	Kentwood Public Schools	15,958,057	0.0060070858	4,216,885	0.0061416228
39990	Saginaw Township Community Schools	7,554,576	0.0028437663	1,959,911	0.0028544852
40010	West Ottawa Public Schools	11,914,397	0.0044849323	3,053,859	0.0044477496
40080	Delta College	9,482,003	0.0035693071	2,398,067	0.0034926312
40090	North Central Michigan College	1,104,197	0.0004156524	271,278	0.0003950994
	· · ·	464,299	0.0001747759	121,911	0.0001775561

^{*}Employer had no statutorily required contributions. See Note 2. The accompanying notes are an integral part of this schedule.

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
40330	Nottawa Community School	172,771	0.0000650363	44,670	0.0000650587
40360	Stephenson Area Public Schools	693,435	0.0002610295	176,488	0.0002570428
40370	Chippewa Valley Schools	26,634,605	0.0100260551	6,961,644	0.0101391870
40410	Mona Shores School District #29	5,804,413	0.0021849532	1,527,358	0.0022244992
40650	Waverly Community Schools	5,590,466	0.0021044173	1,456,614	0.0021214646
40660	Northview Public Schools	5,995,140	0.0022567484	1,533,781	0.0022338530
41030	Lakewood School District	2,498,636	0.0009405606	646,245	0.0009412138
41040	Kenowa Hills Public Schools	4,983,492	0.0018759343	1,291,163	0.0018804955
41330	Wyoming Public Schools	6,959,797	0.0026198741	1,793,433	0.0026120198
41440	Durand Area Schools	1,914,477	0.0007206658	497,171	0.0007240973
41450	Benzie County Central Schools	2,017,952	0.0007596172	516,516	0.0007522719
41460	Frankfort-Elberta Area Schools	1,004,096	0.0003779715	265,029	0.0003859984
41470	Tri-County Area Schools	2,661,423	0.0010018386	680,186	0.0009906467
41490	Gull Lake Community Schools	5,223,254	0.0019661876	1,368,753	0.0019935008
41500	Schoolcraft Community College	11,240,080	0.0042310996	2,821,106	0.0041087604
41540	Mar Lee School District	440,549	0.0001658357	116,283	0.0001693588
41690	Maple Valley Schools	1,395,227	0.0005252049	342,538	0.0004988852
41700	Carson City-Crystal Area School	1,322,798	0.0004979403	340,451	0.0004958451
41710	Bay De Noc Community College	1,492,256	0.0005617294	371,636	0.0005412646
41720	Kaleva Norman Dickson School District	751,797	0.0002829986	194,877	0.0002838263
41740	Oakridge Public Schools	2,908,451	0.0010948273	757,522	0.0011032821
41750	Central Montcalm Public Schools	2,482,755	0.0009345824	631,325	0.0009194839
41790	Macomb Community College	18,347,339	0.0069064826	4,668,414	0.0067992455
41810	Charlevoix-Emmet ISD	3,022,793	0.0011378688	789,073	0.0011492338
41820	Marquette-Alger ISD	1,696,763	0.0006387119	435,314	0.0006340068
41860	Muskegon County Community College	3,882,133	0.0014613499	971,857	0.0014154471
41910	River Valley School District	1,307,303	0.0004921075	344,305	0.0005014584
42070	Norway-Vulcan Area Schools	974,402	0.0003667938	246,621	0.0003591876
42080	Lake Michigan College	1,585,878	0.0005969716	389,433	0.0005671838
42120	Ovid-Elsie Area Schools	2,240,470	0.0008433794	577,879	0.0008416440
42300	Monroe County Community College	3,332,395	0.0012544121	843,630	0.0012286922
42310	Southwestern Michigan College	1,040,408	0.0003916404	273,980	0.0003990337
42370	Pine River Area Schools	1,561,663	0.0005878562	405,790	0.0005910073
42380	Oakland Community College	16,567,192	0.0062363823	4,204,040	0.0061229143
42450	Lansing Community College	14,261,891	0.0053685988	3,602,273	0.0052464798
42490	Benton Harbor Area Schools	2,281,884	0.0008589687	583,621	0.0008500064
42500	Montcalm Community College	1,919,557	0.0007225783	494,248	0.0007198401

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
42510	Jackson College	2,311,555	0.0008701378	584,100	0.0008507039
42520	Gogebic-Ontonagon ISD	780,966	0.0002939789	202,582	0.0002950473
42560	Coor ISD	1,062,031	0.0003997798	278,243	0.0004052437
42580	Cheboygan Area School District	2,523,999	0.0009501080	646,485	0.0009415645
42600	West Branch-Rose City Area Schools	2,855,166	0.0010747690	738,337	0.0010753409
42640	Washtenaw Community College	12,710,847	0.0047847399	3,252,548	0.0047371275
42650	North Dickinson School	380,698	0.0001433060	96,510	0.0001405607
42680	Glen Oaks Community College	723,001	0.0002721592	188,930	0.0002751645
42730	Mid-Michigan Community College	3,195,711	0.0012029603	800,928	0.0011665006
42740	Engadine Consolidated School District #4	654,258	0.0002462821	164,131	0.0002390463
42810	Montabella Community Schools	1,153,961	0.0004343851	300,897	0.0004382371
42820	Swan Valley School District	2,500,176	0.0009411404	633,209	0.0009222282
42850	Crawford-AuSable School District	2,561,508	0.0009642277	653,453	0.0009517125
42870	Big Bay De Noc School District	277,726	0.0001045444	73,176	0.0001065759
42900	Gogebic Community College	888,749	0.0003345516	214,456	0.0003123408
42980	Kalamazoo Valley Community College	5,922,997	0.0022295917	1,513,511	0.0022043317
43020	Chippewa Hills School District	3,209,110	0.0012080040	829,889	0.0012086804
43030	West Iron County Public Schools	1,293,573	0.0004869391	332,786	0.0004846809
43040	Forest Park School District	712,685	0.0002682758	188,434	0.0002744423
43060	Ironwood-Gogebic City Area Schools	1,218,643	0.0004587335	315,780	0.0004599134
43080	Ewen-Trout Creek Consolidated School District	331,132	0.0001246477	84,696	0.0001233549
43100	Kirtland Community College	1,790,836	0.0006741237	447,431	0.0006516544
43170	West Shore Community College	1,217,342	0.0004582437	302,177	0.0004401018
43240	St Clair County Community College	3,178,201	0.0011963692	796,817	0.0011605134
43310	Unionville-Sebewaing Area Schools	1,034,573	0.0003894441	270,435	0.0003938707
43440	Jenison Public Schools	9,054,762	0.0034084810	2,343,233	0.0034127686
43450	Woodhaven-Brownstown School District	8,758,578	0.0032969883	2,280,988	0.0033221118
44010	Wayne County Community College	13,011,536	0.0048979281	3,309,544	0.0048201385
44920	Charles S Mott Community College	7,409,109	0.0027890083	1,877,056	0.0027338116
44960	North Central Area Schools	526,825	0.0001983125	133,150	0.0001939245
45000	Kellogg Community College	3,935,749	0.0014815327	1,006,419	0.0014657850
45780	Nice Community Schools	2,110,123	0.0007943129	546,139	0.0007954158
46510	Forest Area Schools	695,922	0.0002619658	183,613	0.0002674205
47180	East Jordan Public Schools	1,454,602	0.0005475552	380,600	0.0005543192
47190	Boyne City Public Schools	2,109,930	0.0007942402	542,579	0.0007902312
47200	Mid Peninsula Schools	220,877	0.0000831446	59,232	0.0000862681
47930	Alpena Community College	2,103,241	0.0007917224	521,944	0.0007601774

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share
49130		281,137	0.0001058282	55,295	0.0000805331
49230	Grand Rapids Community College	14,378,940	0.0054126595	3,612,096	0.0052607858
60000	Macomb Academy	168,257	0.0000633371	30,597	0.0000445623
*60010	New Branches School	-	-	-	-
60020	Walden Green Day School Inc	31,666	0.0000119201	7,662	0.0000111597
60050	Nah Tah Wahsh Public School Academy	411,874	0.0001550418	106,523	0.0001551438
*60070	Windover High School	-	-	-	_
60100	Honey Creek Community School	483,098	0.0001818524	125,048	0.0001821248
60110	Bay-Arenac Community High School	189,526	0.0000713432	49,623	0.0000722725
60120	Da Vinci Institute	513,172	0.0001931732	133,903	0.0001950218
60130	El-Hajj Malik El-Shabazz Academy	279,552	0.0001052316	72,576	0.0001057017
60280	A G B U Alex & Marie Manoogian School	514,231	0.0001935719	133,617	0.0001946048
*60300	Michigan Technical Academy	-	-	-	_
60380	Joseph K. Lumsden Public School Academy	1,526,645	0.0005746745	412,329	0.0006005301
60390	Martin Luther King Jr Public School Academy	482,370	0.0001815784	122,324	0.0001781572
60410	-	439,405	0.0001654051	115,371	0.0001680299
*60420	St Clair County Learning Academy	-	-	-	-
60440		36,734	0.0000138278	9,366	0.0000136405
*60500	Woodward Academy	-	-	-	-
60510	Summit Academy	9,056	0.0000034089	2,300	0.0000033493
*60560	Commonwealth Community Development Academy	-	-	-	-
*60580	Midland Academy of Advanced and Creative Studies	-	-	-	-
*60600	Academy for Business and Technology	-	-	-	-
60720	Flat River Academy	368	0.0000001386	208	0.0000003032
*60760	•	-	-	-	-
60830	-	782,998	0.0002947436	210,095	0.0003059900
60890	Henry Ford Academy	661,814	0.0002491263	172,231	0.0002508433
60930	Dearborn Academy	20,706	0.0000077944	5,326	0.0000077574
60980	North Star Academy	313,889	0.0001181572	82,685	0.0001204249
		504,074	0.0001897482	135,310	0.0001970707
61220		38,171	0.0000143688	9,694	0.0000141181
61240	Creative Technologies Academy	415,488	0.0001564020	113,891	0.0001658744
*61330	Hope Academy	-	-	-	_
61400	Detroit Edison Public School Academy	81,089	0.0000305242	20,442	0.0000297721
*61630	·	-	-	- -	-
61670	, , , ,	952,205	0.0003584383	245,682	0.0003578204
*61680		•		•	

^{*}Employer had no statutorily required contributions. See Note 2. The accompanying notes are an integral part of this schedule.

Employer Number	Employer Name	Total Required Pension Employer Contributions	Pension Proportionate Share	Total Required OPEB Employer Contributions	OPEB Proportionate Share	
61700	West Village Academy	30,551	0.0000115002	7,812	0.0000113774	
61810	Grand Rapids Child Discovery Center	362,851	0.0001365877	95,390	0.0001389289	
61840	George Washington Carver Academy	38,184	0.0000143736	9,825	0.0000143100	
*61930	Blue Water Learning Academy	-	-	-	-	
61960	Arts Academy in the Woods	396,398	0.0001492160	104,703	0.0001524930	
61970	Battle Creek Area Learning Center	13,174	0.0000049590	5,724	0.0000083370	
62040	Presque Isle Academy II	32,732	0.0000123212	8,430	0.0000122781	
62060	Outlook Academy	144,376	0.0000543475	38,602	0.0000562218	
*62120	St Clair County Academy of Style	-	-	-	-	
62180	Richfield Public School Academy	31,894	0.0000120057	9,119	0.0000132820	
62360	Crescent Academy	1,256	0.0000004727	710	0.0000010340	
*62490	Wavecrest Career Academy	-	-	-	-	
62590	Three Lakes Academy	189,027	0.0000711554	50,852	0.0000740629	
62610	Virtual Learning Academy of St Clair	146,705	0.0000552243	37,113	0.0000540521	
*62620	Michigan Math and Science Academy	-	-	-	-	
*62660	Washington-Parks Academy	-	-	-	-	
*62810	St Clair County Career Prep Academy	-	-	-	-	
62940	West Michigan Aviation Academy	5,558	0.0000020921	1,400	0.0000020383	
62950	Blue Water Middle College Academy	107,263	0.0000403768	27,556	0.0000401330	
63050	Relevant Academy of Eaton County	42,902	0.0000161494	10,952	0.0000159511	
*63230	Cornerstone Health School	-	-	-	-	
*63310	Madison-Carver Elementary	-	-	-	-	
63430	Muskegon Heights Public School Academy	113,318	0.0000426564	23,644	0.0000344361	
63440	Greater Heights Academy	97,148	0.0000365694	24,258	0.0000353305	
63520	Rising Stars Academy	18,721	0.0000070473	7,911	0.0000115214	
*63530	Detroit Public Safety Academy	-	-	-	-	
63580	Covenant House Academy Grand Rapids	5,565	0.0000020948	3,146	0.0000045822	
63780	Waterford Montessori Academy	3,620	0.0000013626	919	0.0000013388	
63960	New School High	6,670	0.0000025109	1,984	0.0000028900	
*64160	Cornerstone Jefferson-Douglass Academy	-	-	-	-	
64310	Flint Cultural Center Academy	25,893	0.0000097467	11,462	0.0000166939	
70000	•	8,317	0.0000031308	221	0.0000003215	
	Bacon Memorial District Library	15,217	0.0000057279	3,407	0.0000049617	
70020	•	72,638	0.0000273432	13,911	0.0000202606	
70030	•	49,421	0.0000186035	10,905	0.0000158829	
	Public Libraries of Saginaw	156,276	0.0000588268	31,467	0.0000458295	
	Houghton Lake Public Library	-	-	-	-	

^{*}Employer had no statutorily required contributions. See Note 2. The accompanying notes are an integral part of this schedule.

		Total Required		Total Required		
Employer		Pension Employer	Pension Proportionate	OPEB Employer	OPEB Proportionate	
Number	Employer Name	Contributions	Share	Contributions	Share	
70070	Ann Arbor District Library	213,282	0.0000802859	44,400	0.0000646653	
70090	Flint Public Library	171,601	0.0000645959	36,903	0.0000537467	
70100	Hackley Public Library	146,390	0.0000551055	26,628	0.0000387826	
70120	Mount Clemens Public Library	168,644	0.0000634824	30,355	0.0000442103	
Total		\$2,656,538,846	1.0000000000	\$686,607,696	1.0000000000	

Employer Number	Employer Name	i	al Required Pension Employer ntributions	Pension Proportionate Share	E	al Required OPEB Employer ntributions	OPEB Proportionate Share
44730	Central Michigan University	\$	12,286,555	0.2458310732	\$	3,215,545	0.2477567029
44740	Eastern Michigan University		6,263,469	0.1253203440		1,610,733	0.1241064458
44750	Michigan Technological University		5,635,665	0.1127591611		1,466,062	0.1129596204
44760	Northern Michigan University		4,712,064	0.0942796087		1,216,972	0.0937673107
44770	Western Michigan University		11,425,463	0.2286022293		2,959,515	0.2280296538
44780	Ferris State University		8,161,050	0.1632873996		2,114,611	0.1629301112
44790	Lake Superior State University		1,495,401	0.0299201840		395,202	0.0304501552
Total	•	\$	49,979,667	0.999999999	\$	12,978,640	1.0000000000

Michigan Public School Employees' Retirement System Schedule Of Collective Pension Amounts As Of And For The Fiscal Year Ended September 30, 2019

			Deferre	ed Outflows of Re	esources	Deferred Inflows of Resources				_	
	Sep	otember 30, 2019 Net Pension Liability	Differences Between Expected and Actual Experience	Changes of Assumptions	Total Deferred Outflows of Resources Excluding Employer- Specific Amounts*	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on Pension Plan Investments	Changes of Assumptions	Total Deferred Inflows of Resources Excluding Employer- Specific Amounts*	Pension Expense Excluding That Attributable to Employer-Paid Member Contributions*	
Non-Universities**	\$	33,116,637,824	\$ 148,439,282	\$6,484,260,993	\$ 6,632,700,275	\$ 138,093,212	\$ 1,061,331,966	-	\$ 1,199,425,178	\$ 5,106,142,146	
Universities**		669,590,910					12,118,318		12,118,318	76,155,685	
System Total	\$	33,786,228,734	\$ 148,439,282	\$6,484,260,993	\$ 6,632,700,275	\$ 138,093,212	\$ 1,073,450,284		\$ 1,211,543,496	\$ 5,182,297,831	

^{*} Employer-specific amounts that are excluded from this schedule are the changes in proportion and differences between employer contributions and proportionate share of contributions as well as the related amortization as defined in paragraphs 54-55 of GASB Statement No. 68, Accounting and Financial Reporting for Pensions.

^{**}Employer-level results may not add to the System-wide results due to rounding.

Michigan Public School Employees' Retirement System Schedule Of Collective Other Postemployment Benefit (OPEB) Amounts As Of And For The Fiscal Year Ended September 30, 2019

			Deferre	ed Outflows of Re	sources					
	•	tember 30, 2019 OPEB Liability	Differences Between Expected and Actual Experience	Changes of Assumptions	Total Deferred Outflows of Resources Excluding Employer- Specific Amounts*	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Investment Earnings on OPEB Plan Investments	Changes of Assumptions	Total Deferred Inflows of Resources Excluding Employer- Specific Amounts*	OPEB Expense Excluding That Attributable to Employer-Paid Member Contributions*
Non-Universities**	\$	7,177,748,020	-	\$1,555,272,696	\$ 1,555,272,696	\$2,633,718,726	\$ 124,824,481	-	\$ 2,758,543,207	\$ 183,595,106
Universities**		91,780,094		2,278,490	2,278,490	5,668,125	2,827,861		8,495,986	(18,686,252)
System Total	\$	7,269,528,114		\$1,557,551,186	\$ 1,557,551,186	\$2,639,386,851	\$ 127,652,342		\$ 2,767,039,193	\$ 164,908,854

^{*} Employer-specific amounts that are excluded from this schedule are the changes in proportion and differences between employer contributions and proportionate share of contributions as well as the related amortization as defined in paragraphs 64-65 of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefit Plans Other Than Pensions.

^{**}Employer-level results may not add to the System-wide results due to rounding.

Michigan Public School Employees' Retirement System Notes to the Schedules of Employer Allocations and Collective Pension and OPEB Amounts As of and for the Fiscal Year Ended September 30, 2019

Note 1: Plan Description

Organization

The Michigan Public School Employees' Retirement System (System or MPSERS) is a cost-sharing, multiple employer, state-wide, defined benefit (DB) public employee retirement plan governed by the State of Michigan (State) originally created under Public Act (PA) 136 of 1945, re-codified and currently operating under the provisions of PA 300 of 1980, as amended. Section 25 of this act establishes the board's authority to promulgate or amend the provisions of the System. The board consists of twelve members – eleven appointed by the Governor and the State Superintendent of Instruction, who serves as an ex-officio member.

The System is administered by the Office of Retirement Services within the Michigan Department of Technology, Management & Budget. The Department Director appoints the Office Director, with whom the general oversight of the System resides. The State Treasurer serves as the investment officer and custodian for the System. Executive Order 2018-10 created the new State of Michigan Investment Board to be the investment fiduciary with respect to the investment and functions for which the State Treasurer had responsibilities and investment authority. The order became effective November 26th, 2018.

Plan Membership

The System's pension plan was established by the State to provide retirement, survivor and disability benefits to public school employees. In addition, the System's health plan provides eligible retirees with the option of receiving health, dental and vision coverage under the Michigan Public School Employees Retirement Act. There are more than 680 participating employers, adjusted for changes to employer status that occurred during the measurement period. The System is a qualified pension trust fund under section 401(a) of the Internal Revenue Code.

By statute, employees of K-12 public school districts, public school academies, district libraries, tax-supported community colleges and seven universities may be members. In 1995, PA 272 amended the Retirement Act to exclude new university employees from MPSERS, effective January 1, 1996. These employees became members of an alternative plan. As a result of PA 272, the seven participating university employers (Eastern Michigan University, Central Michigan University, Northern Michigan University, Western Michigan University, Ferris State University, Michigan Technological University, and Lake Superior State University) would be responsible for their own unfunded actuarial accrued liability (UAAL).

Additionally, due to PA 272, separate actuarial valuations are performed for the university employers and the non-university employers (K12 districts, intermediate school districts (ISDs), charter schools/public school academies, district libraries, and community colleges), and separate employer contribution rates are calculated for the two employer types based on those actuarial valuations. Therefore, the net pension liability and pension expense are presented separately for the two employer types.

Since the OPEB plan began to be prefunded, separate OPEB actuarial valuations have been performed for the university and non-university employers, and separate employer OPEB contribution rates are calculated using the two actuarial valuations. Therefore, the net OPEB liability and OPEB expense are presented separately for the two employer types.

The System's financial statements are available on the ORS website at www.michigan.gov/orsschools.

Note 2: Summary of Significant Accounting Policies

Governmental Accounting Standards Board (GASB) Statements 68 and 75

Employers participating in the System are required to report pension information in their financial statements for fiscal periods beginning on or after June 15, 2014, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 68, Accounting and Financial Reporting for Pensions.

Employers participating in the System are required to report information about OPEB in their financial statements for fiscal periods beginning on or after June 15, 2017, in accordance with Governmental Accounting Standards Board (GASB) Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions.

The requirements of GASB 68 and 75 incorporate provisions intended to reflect the effects of transactions and events related to pensions and OPEB in the measurement of employer liabilities and recognition of expense and deferred outflows of resources and deferred inflows of resources related to pensions and OPEB.

The Schedules of Employer Allocations recognize the employers' proportionate share of the collective net pension and OPEB liabilities determined in conformity with GASB 68 and 75. The Schedule of Collective Pension Amounts recognizes the collective pension expense, including ending net pension liability, deferred inflows of resources and deferred outflows of resources related to the System's pension plan. The Schedule of Collective OPEB Amounts recognizes the collective OPEB expense, including ending net OPEB liability, deferred inflows of resources and deferred outflows of resources related to the System's OPEB plan. These schedules were prepared by ORS with assistance from its third-party actuaries and provide employers with the required information for financial reporting related to the System's pension and OPEB plans as of and for the fiscal year ended September 30, 2019 (the measurement period).

Basis of Accounting and Presentation

The System's financial statements are prepared using the accrual basis of accounting, in accordance with accounting principles generally accepted in the United States (GAAP). Employer contributions are recognized as revenue when due and payable. Benefits and refunds are recognized when due and payable in accordance with the terms of the System.

The Schedules of Employer Allocations, Schedule of Collective Pension Amounts, and Schedule of Collective OPEB Amounts were prepared in conformity with GAAP. The preparation of these schedules required management to make estimates and assumptions that affect certain amounts and disclosures. Actual results could differ from those estimates.

The schedules present elements of the financial statements of the System and its participating employers and are not a complete financial presentation of the System or its participating employers.

Proportionate Share Allocation Methodology

In determining the proportionate share allocation, GASB Statements 68 and 75 require the basis for each employer's proportion be consistent with the determination of the System's contributions. The System has determined that utilizing the statutorily required employer pension and OPEB contributions based on reportable compensation during the System's fiscal year is an appropriate allocation methodology. Each employer's proportionate share allocation is determined by dividing each employer's statutorily required

contributions to the system during the measurement period by the percent of contributions required from all applicable employers during the measurement period.

In fiscal year ended September 30, 1995, the System's actuaries allocated the System's net position between non-university employers and university employers based on the employer groups' share of the unfunded actuarial accrued liability. Starting in fiscal year ended September 30, 1996, the actuaries accounted for the member activity and applied the applicable actuarial assumptions for university employers to determine the university employers' net position. With the implementation of GASB 68, the actuaries prepared separate valuations for non-university employers and university employers that calculate the total pension liability, net position and net pension liability.

Prior to the fiscal year ended September 30, 2013, non-university OPEB was funded on a pay-as-you-go basis. Prior to the fiscal year ended September 30, 2015, university OPEB was funded on a pay-as-you-go basis. For the purposes of the proportionate share allocation methodology the Office of Retirement Services allocated the System's net OPEB position between non-university employers and university employers based on the employer group's proportionate share of the System's total membership as of the fiscal year beginning October 1, 2009. Starting in the fiscal year beginning October 1, 2014, the actuaries accounted for the member activity and applied the applicable actuarial assumptions for university employers to determine the university employers' net OPEB position. With the implementation of GASB 75, the actuaries prepared separate valuations for non-university employers and university employers that calculate the total OPEB liability, net position and net OPEB liability.

The Schedules of Employer Allocations display the proportionate allocation to contributing employers within the System. Required employer pension contributions for non-university employers are comprised of pension normal cost, pension unfunded actuarial accrued liability (UAAL), and pension early retirement incentive contributions. Required employer pension contributions for university employers are comprised of pension normal cost and pension UAAL charged on active member payroll, UAAL charged on university non-member payroll and the minimum required payroll established by PA 136 of 2016. Required employer pension contributions for both non-university and university employers also include the UAAL rate stabilization contributions. Required employer OPEB contributions for both non-university and university employers are comprised of OPEB normal cost and OPEB UAAL. Required employer OPEB contributions for university employers also include UAAL charged on university non-member payroll and the minimum required payroll established by PA 136 of 2016.

Employers that had no statutorily required pension or OPEB contributions for the fiscal year are identified with an asterisk (*) in the employer allocation schedules. These employers have residual deferred inflows and/or deferred outflows which are being amortized over the current and future year's pension and/or OPEB expense.

The Schedules of Employer Allocations have been rounded and present the first ten decimal places.

Note 3: Net Pension and OPEB Liability

The System's net pension liability is measured as the total pension liability, less the amount of the pension plan's fiduciary net position. In actuarial terms, this is the accrued liability less the market value of assets.

Net Pension Liability As of October 1, 2018		Non-University Employers		University Employers		System Total
Total Pension Liability	\$	79,863,694,444	\$	1,180,646,584	\$	81,044,341,028
Fiduciary Net Position		(49,801,889,205)	_	(541,609,200)	_	(50,343,498,405)
Net Pension Liability*	\$_	30,061,805,239	\$	639,037,384	\$	30,700,842,623
Fiduciary Net Position as a Percentage of Total Pension Liability		62.36%	-	45.87%	_	62.12%
Net Pension Liability as a Percentage of Covered Payroll		352.81%		306.17%		351.70%

^{*}Employer-level results may not add to the System-wide results due to rounding.

Net Pension Liability As of September 30, 2019		Non-University Employers		University Employers		System Total
Total Pension Liability	\$	83,442,507,212	\$	1,200,891,617	\$	84,643,398,829
Fiduciary Net Position		(50,325,869,388)		(531,300,707)		(50,857,170,095)
Net Pension Liability*	\$	33,116,637,824	\$	669,590,910	\$	33,786,228,734
Fiduciary Net Position as a Percentage of Total Pension Liability	•	60.31%	•	44.24%	-	60.08%
Net Pension Liability as a Percentage of Covered Payroll		378.65%		314.52%		377.13%

^{*}Employer-level results may not add to the System-wide results due to rounding.

The System's net OPEB liability is measured as the total OPEB liability, less the amount of the OPEB plan's fiduciary net position. In actuarial terms, this is the accrued liability less the market value of assets.

Net OPEB Liability As of October 1, 2018		Non-University Employers		University Employers		System Total
Total OPEB Liability	\$	13,932,170,264	\$	246,663,333	\$	14,178,833,597
Fiduciary Net Position		(5,983,218,473)		(128,022,779)		(6,111,241,252)
Net OPEB Liability*	\$	7,948,951,791	\$	118,640,554	\$	8,067,592,345
Fiduciary Net Position as a Percentage of Total OPEB Liability	_	42.95%	•	51.90%	•	43.10%
Net OPEB Liability as a Percentage of Covered Payroll		93.29%		56.84%		92.42%

^{*}Employer-level results may not add to the System-wide results due to rounding.

Net OPEB Liability As of September 30, 2019		Non-University Employers		University Employers		System Total
Total OPEB Liability	\$	13,925,860,688	\$	235,765,954	\$	14,161,626,642
Fiduciary Net Position		(6,748,112,668)		(143,985,860)	_	(6,892,098,528)
Net OPEB Liability*	\$	7,177,748,020	\$	91,780,094	\$	7,269,528,114
Fiduciary Net Position as a Percentage of Total OPEB Liability	_	48.46%	_	61.07%	_	48.67%
Net OPEB Liability as a Percentage of Covered Payroll		82.07%		43.11%		81.14%

^{*}Employer-level results may not add to the System-wide results due to rounding.

Discount Rate

A discount rate of 6.80% was used to measure the total pension liability (6.80% for the Pension Plus plan, 6.0% for the Pension Plus 2 plan, hybrid plans provided through non-university employers only). This discount rate was based on the long-term expected rate of return on pension plan investments of 6.80% (6.80% for the Pension Plus plan, 6.0% for the Pension Plus 2 plan). A discount rate of 6.95% was used to measure the total OPEB liability. This discount rate was based on the long-term expected rate of return on OPEB plan investments of 6.95%. The projection of cash flows used to determine these discount rates assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the fiduciary net positions of both the pension and OPEB plans were projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension and OPEB plan investments was applied to all periods of projected benefit payments to determine the total pension and OPEB liabilities.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

As required by GASB Statement No. 68, the following presents the System's net pension liability for university employers and non-university employers, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher:

	5	1% Decrease* 5.80% / 5.80% / 5.00%	Current Single Discount Rate* 6.80% / 6.80% / 6.00%	1% Increase* 7.80% / 7.80% / 7.00%
Non-University Employers	\$	43,053,747,756 \$	33,116,637,824	\$ 24,878,431,320
University Employers		788,403,136	669,590,910	568,369,185
System Total	\$	43,842,150,893 \$	33,786,228,734	\$ 25,446,800,505

^{*} Discount rates listed in the following order: Basic and Member Investment Plan (MIP), Pension Plus, and Pension Plus 2. Non-university employers provide Basic, MIP, Pension Plus and Pension Plus 2 plans. University employers provide only the Basic and MIP plans.

Sensitivity of the Net OPEB Liability to Changes in the Discount Rate

As required by GASB Statement No. 75, the following table presents the System's net OPEB liability, calculated using a discount rate of 6.95%, as well as what the System's net OPEB liability would be if it were calculated using a discount rate that is one percent lower or one percent higher:

		1% Decrease 5.95%	Current Single Discount Rate 6.95%	 1% Increase 7.95%
Non-University Employers	\$	8,804,586,528 \$	7,177,748,020	\$ 5,811,655,517
University Employers	_	115,333,487	91,780,094	 71,730,066
System Total	\$	8,919,920,015 \$	7,269,528,114	\$ 5,883,385,583

Sensitivity of the Net OPEB Liability to Changes in the Healthcare Cost Trend Rate

As required by GASB Statement No. 75, the following presents the System's net OPEB liability calculated using assumed trend rates, as well as what the System's net OPEB liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher:

		1% Decrease		Current Healthcare Cost Trend Rate	1% Increase
	_	1 /6 Decrease	_	Cost Helia Nate	 1 /0 IIICI ease
Non-University Employers	\$	5,753,739,131	\$	7,177,748,020	\$ 8,804,393,509
University Employers		70,378,149		91,780,094	 116,303,870
System Total	\$	5,824,117,280	\$	7,269,528,114	\$ 8,920,697,379

Timing of the Pension and OPEB Plan Valuations

An actuarial valuation to determine the total pension liability is required to be performed every year. An actuarial valuation to determine the total OPEB liability is required to be performed at least every two years. The MPSERS pension and OPEB valuations are performed every year. If the actuarial valuation is not calculated as of the plan's fiscal year end, the total pension liability or total OPEB liability is required to be rolled forward from the actuarial valuation date to the pension or OPEB plan's fiscal year end.

The total pension and OPEB liabilities as of September 30, 2019, are based on the results of an actuarial valuation date of September 30, 2018, and rolled forward using generally accepted actuarial procedures.

Actuarial Valuations and Assumptions

Actuarial valuations for the pension and OPEB plans involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment and mortality.

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the fall of 2017, the Department of Technology, Management, and Budget Director and the MPSERS Retirement Board adopted a dedicated gains policy to lower the discount rate below 7.50% in years where investment returns exceed the current assumption based on a schedule determined by the plan actuary. Excess investment gains in the 2018 fiscal year were sufficient to reduce the discount rate for the MPSERS non-hybrid and the Pension Plus plans from 7.05% and 7.00%, respectively, to 6.80%; and to reduce the MPSERS OPEB plan discount rate to 6.95% from 7.15% beginning with the September 30, 2018 actuarial valuations.

Additional information as of the latest actuarial valuation follows:

Summary of Actuarial Assumptions

Valuation Date: September 30, 2018
Actuarial Cost Method: Entry Age, Normal

Wage Inflation Rate: 2.75%

Investment Rate of Return:

Basic and MIP plans:
Pension Plus plan:
Pension Plus 2 plan:
OPEB Plan (Retiree Healthcare Fund):
6.80% net of investment expenses
6.00% net of investment expenses
6.95% net of investment expenses

Projected Salary Increases: 2.75 - 11.55%, including wage inflation at 2.75% Cost-of-Living Pension Adjustments: 3% Annual Non-Compounded for MIP Members

Healthcare Cost Trend Rate: 7.50% year 1 graded to 3.50% Year 12

Mortality:

Retirees: RP-2014 Male and Female Healthy Annuitant Mortality Tables, scaled by 82% for

males and 78% for females and adjusted for mortality improvements using

projection scale MP-2017 from 2006.

Active: RP-2014 Male and Female Employee Mortality Tables, scaled 100% and

adjusted for mortality improvements using projection scale MP-2017 from 2006.

Other OPEB Assumptions:1

Opt-Out Assumption 21% of eligible participants hired before July 1, 2008

and 30% of those hired after June 30, 2008 are assumed to opt out of the retiree health plan

Survivor Coverage 80% of male retirees and 67% of female retirees are

assumed to have coverage continuing after the retiree's

death

Coverage Election at Retirement 75% of male and 60% of female future retirees are

assumed to elect coverage for 1 or more dependents

Notes:

- Assumption changes as a result of an experience study for the periods 2012 through 2017 have been adopted by the System for use in the determination of the total pension and OPEB liabilities beginning with the September 30, 2017 valuation.
- Recognition period for pension liabilities is the average of the expected remaining service lives of all employees in years is as follows:
 - o University employers: 1.0000
 - Non-university employers: 4.4977
- Recognition period for pension assets in years is 5.0000
- Recognition period for OPEB liabilities is the average of the expected remaining service lives of all employees in years is as follows:
 - University employers: 1.1641
 - o Non-university employers: 5.7101
- Recognition period for OPEB assets in years is 5.0000
- Full actuarial assumptions are available in the 2019 MPSERS CAFR found on the ORS website at www.michigan.gov/orsschools.

¹Applies to individuals hired before September 4, 2012.

Note 4: Pension and OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions and OPEB

Pension Plan

The following table provides details of the System's pension expense for the fiscal year ended September 30, 2019.

Expense	Non-University Employers	University Employers	System Total
Service Cost	\$ 774,953,690	\$ 4,591,455	\$ 779,545,145
Interest on the Total Pension Liability	5,481,212,088	80,257,284	5,561,469,372
Current-Period Benefit Changes	-	-	-
Employee Contributions (shown as negative for addition here)	(401,458,149)	(1,688,416)	(403,146,565)
Projected Earnings on Plan Investments (shown as negative for addition here)	(3,441,280,229)	(36,850,785)	(3,478,131,014)
Pension Plan Administrative Expense ¹	27,336,415	404,578	27,740,993
Other Changes in Plan Fiduciary Net Position ²	606,033	(808,338)	(202,305)
Recognition of Outflow (Inflow) of Resources due to Liabilities	2,710,254,207	29,108,632	2,739,362,839
Recognition of Outflow (Inflow) of Resources due to Assets ¹	(45,481,909)	1,141,275	(44,340,634)
Total Pension Expense ³	\$ 5,106,142,146	\$ 76,155,685	\$ 5,182,297,831

¹The Net Investment Income and the Administrative Expenses attributable to University and Non-University employers are derived by allocating the total MPSERS values in proportion to the average market values of assets.

²Other includes \$808,338 attributable to a transfer of assets to the University MPSERS group associated with demographic movement between groups.

³Employer-level results may not add to the System-wide results due to rounding.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in future years' pension expense as follows:

Net Deferred Outflows (Inflows) of Resources

Fiscal Year Ending September 30		Non-University Employers	_	University Employers	_	System Total
2020	\$	2,160,671,965	\$	(6,017,729)	\$	2,154,654,236
2021		1,713,128,144		(6,514,254)		1,706,613,890
2022		1,112,852,196		(1,618,648)		1,111,233,548
2023		446,622,792		2,032,313		448,655,105
2024		-		-		-
Thereafter	_		_		_	
Total	\$	5,433,275,097	\$_	(12,118,318)	\$	5,421,156,779

Other Postemployment Benefit Plan

The following table provides details of the OPEB plan expense for the fiscal year ended September 30, 2019.

Expense		Non-University Employers	University Employers	System Total
Service Cost	\$	177,641,216 \$	1,375,017	\$ 179,016,233
Interest on the Total OPEB Liability		986,006,286	17,481,511	1,003,487,797
Current-Period Benefit Changes		-	-	-
Employee Contributions (shown as negative for addition here)		(206,620,161)	(1,576,976)	(208,197,137)
Projected Earnings on Plan Investments (shown as negative for addition here)		(443,387,598)	(9,467,541)	(452,855,139)
OPEB Plan Administrative Expense ²		4,027,009	70,548	4,097,557
Other Changes in Plan Fiduciary Net Position ³		81,841	(156,464)	(74,623)
Recognition of Outflow (Inflow) of Resources due to Liabilities		(267,830,762)	(24,922,243)	(292,753,005)
Recognition of Outflow (Inflow) of Resources due to Assets		(66,322,725)	(1,490,104)	(67,812,829)
Total OPEB Expense ¹	\$	183,595,106 \$	(18,686,252)	\$ 164,908,854

¹Employer-level results may not add to the System-wide results due to rounding.

²The Net Investment Income and the Administrative Expenses attributable to University and Non-University members are derived from the total MPSERS values by allocating in proportion to the average market value of assets.

³Other includes \$156,464 attributable to a transfer of assets to the University MPSERS group associated with demographic movement between the groups.

Other amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in future years' OPEB expense as follows:

Net Deferred Outflows (Inflows) of Resources

Fiscal Year Ending September 30		Non-University Employers		University Employers		System Total		
2020	\$	(334,153,487)	\$	(4,879,739)	\$	(339,033,226)		
2021		(334,153,487)		(1,490,102)		487) (1,490,102)		(335,643,589)
2022		(271,804,336)		(335,993)		(272,140,329)		
2023		(175,042,342)		488,338		(174,554,004)		
2024		(88,116,859)		-		(88,116,859)		
Thereafter	_	<u>-</u>	_		_			
Total	\$_	(1,203,270,511)	\$_	(6,217,496)	\$_	(1,209,488,007)		