## SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

December 31, 2016



### TABLE OF CONTENTS

	Page
INDEPENDENT AUDITORS' REPORT	1
Schedule of Employer Allocations	3
Schedule of Pension Amounts by Employer	4
Notes to Schedule of Employer Allocations and Schedule of Pension Amounts by Employer	5



#### **INDEPENDENT AUDITORS' REPORT**

The Board of Trustees
Public School Retirement System of the School District of Kansas City, Missouri

#### Report on Schedules

We have audited the accompanying schedule of employer allocations of the Public School Retirement System of the School District of Kansas City, Missouri (the "Retirement System") as of and for the year ended December 31, 2016, and the related notes. We have also audited the total for all entities of the columns titled net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense (specified column totals) as of and for the year ended December 31, 2016 included in the accompanying schedule of pension amounts by employer of the Retirement System, and the related notes.

### 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 the schedules that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express opinions on the schedule of employer allocations and the specified column totals included in the schedule of pension amounts by employer 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 schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer, 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 schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer 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 schedule of employer allocations and specified column totals included in the schedule of pension amounts by employer.

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



#### **Opinion**

In our opinion, the schedules referred to above present fairly, in all material respects, the employer allocations and net pension liability, total deferred outflows of resources, total deferred inflows of resources, and total pension expense for the total of all participating entities for the Retirement System as of and for the year ended December 31, 2016, 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, the financial statements of the Retirement System as of and for the year ended December 31, 2016, and our report thereon, dated June 7, 2017, expressed an unmodified opinion on those financial statements.

#### Restriction of Use

Our report is intended solely for the information and use of the Retirement System management, the Board of Trustees of the Retirement System, the Retirement System employers and their auditors and is not intended to be and should not be used by anyone other than these specified parties.

Kansas City, Missouri September 22, 2017

Mayer Hoffman McCam P.C.

### **SCHEDULE OF EMPLOYER ALLOCATIONS**

For the year ended December 31, 2016

### Schedule of Employer Allocations For the Year Ended December 31, 2016

Employer	2016 Adjusted Employer Contributions				
Academy For Intergrated Arts	\$ 69,570	0.428511%			
Allen Village Charter School	305,943	1.884430%			
Alta Vista Charter School	461,624	2.843334%			
Benjamin Banneker Charter Academy	190,003	1.170307%			
Citizens of the World Charter School	39,714	0.244615%			
Crossroads Academy of Kansas City	262,103	1.614401%			
DeLaSalle Charter School	191,225	1.177834%			
Della Lamb Elementary	352,884	2.173559%			
Genesis School, Inc.	178,259	1.097971%			
Gordon Parks Elementary	147,459	0.908261%			
Hogan Preparatory Academy	518,124	3.191341%			
Hope Leadership Academy	65,667	0.404470%			
Kansas City Neighborhood Academy	50,896	0.313490%			
Ewing Marion Kauffman School	375,395	2.312214%			
KIPP Endeavor Academy	221,809	1.366214%			
Academie Lafayette	431,794	2.659599%			
Lee A. Tolbert Community Academy	248,008	1.527584%			
Scuola Vita Nuova	132,713	0.817435%			
University Academy	594,644	3.662660%			
Brookside Charter School	323,851	1.994733%			
Pathway Academy	175,379	1.080232%			
Frontier School of Innovation	675,519	4.160802%			
KC Library - KCPL	636,430	3.920037%			
School District - KCSD	 9,586,293	59.045964%			
Total	\$ 16,235,306	100.000000%			

NOTE: The Retirement System had contributions of \$45,020 for 2016; however, this amount was not used in determining the Schedule of Employer Allocations.

### SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

For the year ended December 31, 2016

			Defer	red Outflows of Resou	irces			Deferre	Deferred Inflows of Resources Pension Expense							
Employer	12/31/2016 Net Pension Liability	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes in Assumptions	Changes in Proportion	Total Deferred Outflows of Resources	Differences Between Expected and Actual Experience	Net Difference Between Projected and Actual Earnings on Pension Plan Investments	Changes in Assumptions	Changes in Proportion	Total Deferred Inflows of Resources	Proportionate Share of Plan Pension Expense	Net Recognition of Deferred Amounts from Changes in Proportionate Share	Employer Pension Expense Allocated	Military Service Purchase Payments	Total Employer Pension Expense
		\$ 12.699	\$ 230,292				\$ 7.756	•			\$ 7.756	\$ 196,778	\$ 97.413		٠.	
Academy For Intergrated Arts	\$ 1,148,448			\$ 4,689	\$ 144,576	\$ 392,256		\$ -	\$ -	\$ -				\$ -	•	\$ 294,191
Allen Village Charter School	5,050,451	55,844	1,012,739	20,622	42,695	1,131,900	34,109	-	-	69,811	103,920	865,358	200,818		-	1,066,176
Alta Vista Charter School Benjamin Banneker Charter Academy	7,620,406	84,260 34.681	1,528,077	31,116	206,150	1,849,603	51,465		-		51,465	1,305,701	351,997	-	-	1,657,698
Citizens of the World Charter School	3,136,535 1,311,184	34,681 14,498	628,952 262,924	12,807 5.354	26,275 560,281	702,715 843.057	21,183 8.855	-			21,183	537,422 224.662	(70,497) 331,527		-	466,925 556.189
Crossroads Academy of Kansas City	1,311,184 4.326.749	14,498 47.842	262,924 867.619	5,354 17,667	560,281 557,774	1,490,902	8,855 29,221				8,855 29,221	741.357	331,527 458.578		-	1,199,935
DeLaSalle Charter School	3.156.708	34,904	632,997	12,889	,	680,790	29,221	1	-	422,299	443.618	741,357 540.879	(216,259)	-	:	324,620
Dela Lamb Elementary	5.825.347	34,904 64,412	1.168.124	23.786			39.342			100.273	139.615	998.130	(52.144)		-	324,620 945,986
Genesis School. Inc.	2.942.667	32,538	1,168,124 590.077	12.016	28.540	1,256,322 663,171	39,342 19.873			48,003	67.876	504.204	(52,144) 48,776	-		552,980
Geresis School, Inc. Gordon Parks Elementary	2,434,226	32,538 26.916	488.122	9,939	28,540 94,974	619.951	16,440			37,600	54.040	417.087	72.141			489,228
Hogan Preparatory Academy	8.553.099	94.573	1.715.105	34.924	61,816	1,906,418	57.764			87.825	145.589	1.465.511	201.820	•	•	1.667.331
Hope Academy  Hope Academy	8,553,099	94,573	1,715,105	34,924	61,816	1,906,418	57,764			166,634	166.634	1,400,511	(551,002)		-	(551,002)
Hope Leadership Academy	1.084.020	11.986	217.373	4.426	42.579	276.364	7.321			100,034	7.321	185.739	64.001		-	249.740
Kansas City Neighborhood Academy	1,680,363	18,580	336.954	6,861	718,034	1,080,429	11.348	-	-		11,348	287.918	424.872			712,790
Ewing Marion Kauffman School	6.196.954	68.521	1.242.641	25.303	581.727	1,918,192	41.852				41.852	1.061.803	682.286		-	1.744.089
KIPP Endeavor Academy	3.661.583	40.487	734.237	14.951	348.171	1,137,846	24,729				24,729	627.385	265.875			893,260
Academie Lafavette	7.127.979	78.815	1.429.334	29.105	62,526	1,599,780	48.139			37.078	85,217	1,221,327	78.153	_		1,299,480
Lee A. Tolbert Community Academy	4.094.071	45.269	820.961	16.717	02,320	882.947	27.650			180,728	208.378	701.489	(129,072)			572,417
Scuola Vita Nuova	2,190,803	24,224	439,310	8,946	70.827	543.307	14.796			-	14.796	375,378	48.437		_	423,815
University Academy	9.816.278	108,540	1.968.404	40.082	19.405	2.136.431	66.295			205.797	272.092	1,681,947	(80.546)		_	1.601.401
Brookside Charter School	5.346.075	59.112	1,072,019	21,829	389,686	1,542,646	36.105				36.105	916.011	461,702		_	1,377,713
Derrick Thomas	-		.,		-	.,,					-		(252,045)		-	(252,045)
Pathway Academy	2.895.126	32.012	580.543	11.821		624.376	19.552			100.886	120,438	496.059	(108,457)		_	387.602
Frontier School of Innovation	11,151,348	123,302	2.236.118	45,533	904.595	3.309.548	75,311			,	75,311	1,910,702	895.082		-	2.805.784
KC Library - KCPL	10.506.074	116,167	2.106.725	42.898		2,265,790	70.953			224.883	295.836	1,800,139	(188,764)	-	-	1.611.375
School District - KCSD	158,248,820	1,749,782	31,732,751	646,165		34,128,698	1,068,743			3,178,814	4,247,557	27,114,773	(3,034,692)			24,080,081
Total	\$ 269,505,314		\$ 54,042,398	\$ 1,100,446	\$ 4,860,631	\$ 62,983,439	\$ 1,820,121	s -	\$ -	\$ 4,860,631	\$ 6,680,752	\$ 46,177,759	\$ -	\$ -	ş .	\$ 46,177,759

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

#### (1) <u>Description of plan</u>

The following description of the Public School Retirement System of the School District of Kansas City, Missouri (the "Retirement System") provides only general information. Participants should refer to the Missouri Revised Statutes regarding the Retirement System or the Summary Plan Description for a more complete description of the Retirement System's provisions, which are available from the Retirement System's administrator.

General - The Retirement System is a cost-sharing multiple-employer defined benefit pension plan (the "Plan"), which was established by the General Assembly of the State of Missouri and is exempt from the provisions of the Employee Retirement Income Security Act of 1974. The Board of Trustees of the Retirement System ("Board of Trustees") administers and operates the Plan in accordance with the statutes of the State of Missouri. At December 31, 2016, participating employers consisted of the School District of Kansas City, Missouri; the Kansas City, Missouri Public Library District; the Retirement System; and the following charter schools: Academie LaFayette, Academy for Integrated Arts, Allen Village Charter School, Citizens of the World Charter School, Alta Vista Charter School, Benjamin Banneker Charter Academy, Brookside Charter School, Crossroads Academy of Kansas City, DeLaSalle Charter School, Della Lamb Elementary, Ewing Marion Kauffman School, Frontier School of Innovation, Genesis School, Inc., Gordon Parks Elementary, Hogan Preparatory Academy, Hope Leadership Academy, Kansas City Neighborhood Academy, KIPP Endeavor Academy, Lee A. Tolbert Community Academy, Pathway Academy, Scuola Vita Nuova, and University Academy.

Administration of the Retirement System - The Board of Trustees (the "Board") is responsible for the general administration and proper operation of the Retirement System. The Board consists of twelve members: four members appointed by the Board of Education, one member appointed by the Board of Trustees of the Library District, four members elected by and from the members of the Retirement System, two members elected by and from the retirees of the Retirement System, and the Superintendent of Schools of the School District of Kansas City, Missouri. The Board hires an Executive Director to manage the day-to-day operations and implement strategic plans as set by the Board.

**Eligibility** - All regular, full-time employees of the participating employers become members of the Plan as a condition of employment if they are in a position requiring at least 25 hours of work per week and nine calendar months per year. Employees who retire after June 30, 1999 and were hired after 1961, but before January 1, 2014 are members of Plan B. Employees hired after January 1, 2014 are members of Plan C. At January 1, 2016 and 2015, respectively, the Plan's membership consisted of:

	2016	2015
A ativa mlan manahara	2 574	2.402
Active plan members	3,574	3,493
Retirees and beneficiaries receiving benefits	4,049	4,011
Terminated plan members, vested entitled to but not yet		
receiving benefits	461	476
Terminated plan members, nonvested entitled to a refund of		
contributions plus accrued interest	2,279	2,124
Total plan membership	10,363	10,104

Terminated plan members entitled to but not yet receiving benefits include former members who are entitled to a refund of their contributions plus accrued interest.

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

#### (1) <u>Description of plan</u> (continued)

**Contributions** - Effective January 1, 2015, members of Plan B and C contributed at 8.5% of annual compensation, as defined. Effective January 1, 2016, members of Plan B and C contributed at 9% of annual compensation.

Effective January 1, 2015, employers contributed 8.5% of annual compensation, as defined. Effective January 1, 2016, employers contributed at 9% of annual compensation.

**Service** - Creditable service is membership service. This is service for which required contributions have been made. Members of Plan B are effectively limited to 30 years of creditable service, regardless of the number of years actually worked, unless the member earned more than 30 years prior to August 28, 1993. Members of Plan C are effectively limited to 34.25 years of creditable service, regardless of the number of years actually worked.

#### Compensation

Annual compensation - Compensation in excess of the limitations set forth in Section 401(a)(17) of the Internal Revenue Code will be disregarded for purposes of determining contributions and benefits for members of Plan B and C. A member's annual compensation is the member's regular compensation.

Average final compensation - For members of Plan B and C, the average final compensation is the highest average compensation paid during any four consecutive years of creditable service.

#### Normal retirement

Eligibility - A member of Plan B may retire (a) after the completion of five years of creditable service, provided such member has attained at least the age of 60 or (b) after the member has accumulated a minimum of 75 credits (effective August 28, 1998), where each year of creditable service plus a member's age equals 75 credits. A member of Plan C may retire (a) after the completion of five years of creditable service, provided such member has attained at least the age of 62 or (b) after the member has accumulated a minimum of 80 credits, where each year of creditable service plus a member's age equals 80 credits.

Benefit - For a member of Plan B, the normal monthly retirement benefit equals the product of one-twelfth of 2.00% (1.75% for members who retired prior to June 30, 1999) of the member's average final compensation and years of creditable service, subject to a maximum of 60% of their average final compensation. The normal monthly retirement benefit for a member of Plan B whose years of creditable service exceeded 34.25 years on August 28, 1993, shall equal the product of 1.75% and the member's years of creditable service on August 28, 1993. For a member of Plan C, the normal monthly retirement benefit equals the product of one-twelfth of 1.75% of the member's average final compensation and years of creditable service, subject to a maximum of 60% of their average final compensation.

Minimum benefit - Effective January 1, 1996, any member with at least ten years of service, but less than twenty years, is entitled to a minimum monthly retirement benefit equal to the sum of \$150 and \$15 for each full year of creditable service in excess of ten years or the actuarial equivalent if an option is elected. Any member with at least twenty years of creditable service at retirement is entitled to a minimum monthly retirement benefit of \$300 or the actuarial equivalent of \$300 if an option is elected. Beneficiaries of deceased members who retired with at least ten years of creditable service and elected one of the optional plans for payment of benefits may receive the actuarial equivalent of the minimum monthly retirement benefit available for the option chosen.

Under either Plan, if a member's accumulated contributions provide more than one-half of the member's monthly retirement benefit (under the actuarial assumptions adopted by the Board of Trustees), the member's benefit will be increased by this excess.

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

### (1) <u>Description of plan</u> (continued)

#### Early retirement

*Eligibility* - A member with at least five years of creditable service and a minimum age of fifty-five is eligible for early retirement. A Plan B member with at least 30 years of creditable service may retire at any time regardless of age. A Plan C member with at least 34.25 years of service may retire at any time regardless of age.

Benefit - A member eligible for early retirement will receive a reduced benefit, calculated as for normal retirement, which recognizes service and compensation to the actual retirement date. The reduction in benefit will provide a benefit which is actuarially equivalent to the normal retirement benefit that would be payable at the member's normal retirement date.

#### Disability retirement

*Eligibility* - A member with at least five years of creditable service who is certified to be totally incapacitated for performance of duty by the Medical Board (as designated by the Board of Trustees) is eligible for disability retirement.

Benefit - A disabled member will receive an unreduced benefit, calculated as for normal retirement, based on service and average final compensation at the actual retirement date. The minimum disability retirement allowance shall be the lesser of:

- 1. 25% of the person's average compensation; or
- 2. The member's service retirement allowance calculated based on the member's final average compensation and the maximum number of years of creditable service the member would have earned had the member remained an employee until attaining the age of 60.

#### **Termination benefits - vested**

*Eligibility* - A member who has at least five years of creditable service earns a vested interest in their accrued benefit, provided the member leaves their contributions in the Plan.

Benefit - The vested benefit is calculated as a normal retirement benefit based on a member's creditable service and average final compensation on the termination date. The benefit is payable, at minimum, on the member's normal retirement date.

#### Termination benefits - non-vested

If the member's termination is for reasons other than death or retirement, and if the member has not met the vesting or retirement requirements, only the member's contributions with interest will be refunded.

### Death benefit

*Prior to retirement* - For a member who passes away while actively employed, the member's accumulated contributions with interest will be paid to the member's beneficiary. Certain beneficiaries of a member of Plan B or C have the option to receive a monthly retirement benefit or a refund of the member's contributions with interest. All beneficiaries are guaranteed to receive at least the member's accumulated contributions at retirement, if a member passes away before electing an option.

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

### (1) <u>Description of plan</u> (continued)

Post retirement - The optional form of benefit payment selected under either Plan B or Plan C will determine what, if any, benefits are payable upon death after retirement.

Option 1 - The retiree's beneficiary will receive, for life, the same level of monthly retirement benefit. In the event that the retiree's beneficiary predeceases the retiree, the retiree's monthly retirement benefit will be adjusted to the amount it would have been, had the retiree not elected Option 1.

Option 2 - The retiree's beneficiary will receive, for life, a monthly retirement benefit equal to one-half the retiree's benefit. In the event the retiree's beneficiary predeceases the retiree, the retiree's monthly benefit will be adjusted to the amount it would have been, had the retiree not elected Option 2.

Option 3 - No benefits are payable to the retiree's estate or any beneficiary. Retirement benefits payable under this option will be actuarially increased from the normal formula.

If the death of any retiree who has not elected an option occurs before they have received total benefits at least as large as their accumulated contributions, the difference shall be paid to the deceased's beneficiary, if living, or to their estate.

**Benefit increase adjustments** - The Board of Trustees shall determine annually whether or not the Retirement System can provide an increase in benefits for those retirees who, as of January 1 preceding the date of such increase, have been retired at least one year (three years prior to January 1, 2002). Any increase also applies to optional retirement allowances paid to a retiree's beneficiary. Before any increases are made, the following requirements must be satisfied:

- 1. The Retirement System funded ratio as of January 1<sup>st</sup> of the preceding year of the proposed increase must be at least 100% after adjusting for the effect of the proposed increase. The funded ratio is the ratio of assets to the pension benefit obligation.
- 2. The actuarially required contribution rate, after adjusting for the effect of the proposed increase, may not exceed the statutory contribution rate.
- 3. The actuary must certify that the proposed increase will not impair the actuarial soundness of the Retirement System.

In accordance with the Benefit Increase Adjustments Policy, if an increase is permissible, the amount of the increase will be equal to the lesser of 3% or the percentage increase in the CPI for the preceding year, subject to a cumulative increase of 100% subsequent to December 31, 2000.

The Board of Trustees reserves the right, at its sole discretion, not to award any Benefit Increase Adjustment or other supplements for any year, even if the statutory requirements for an increase are satisfied, or to provide increases in greater or lesser amounts than prescribed by this policy. For the years ended December 31, 2016 and 2015 there was no Benefit Increase Adjustment or an extra check issued to eligible retirees.

#### (2) Summary of significant accounting policies

**Basis of accounting** - The schedule of employer allocations and the schedule of pension amounts by employer present amounts that are considered elements of the financial statements of the Retirement System or its participating employers. Accordingly, they do not purport to be a complete presentation of the financial position or changes in financial position of the Retirement System or the participating employers.

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

### (2) Summary of significant accounting policies (continued)

**Use of estimates** - The accompanying schedule of employer allocations and the schedule of pension amounts by employer were prepared in accordance with U.S. generally accepted accounting principles. Such preparation requires management of the Retirement System to make a number of estimates and assumptions relating to the reported amounts. Due to the inherent nature of these estimates, actual results could differ from those estimates.

### (3) Net pension liability

The components of the net pension liability of the participating employers as of December 31, 2016 were as follows:

	 2016
Total pension liability Less: Fiduciary net position Net pension liability	\$ 900,947,927 631,442,613 269,505,314
Plan fiduciary net position as a percentage of total pension liability	70.09%
percentage of total pension liability	70.099

### (4) Actuarial assumptions

The actuarial assumptions used for the most recent valuation are as follows:

Valuation Date	January 1, 2016
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Dollar, Open Period
Remaining Amortization Period	30 years
Asset Valuation Method	5-year Smoothed Market Value
Actuarial Assumptions:	
Investment Rate of Return	8.00%, including inflation
Projected Salary Increases	5.00%, including inflation
Inflation	3.00%

Pre-retirement mortality rates were based on RP-2000 Healthy Non-Annuitant projected 15 years from the valuation date using Scale AA. Post-retirement mortality rates were based on RP-2000 Healthy Annuitant Table Annuitant projected 7 years from the valuation date using Scale AA. Disability mortality rates were based on RP-2000 Disabled Table for Males and Females.

The long-term expected rate of return on pension plan investments is reviewed as part of the regular experience study prepared by the Retirement System. Several factors are considered in evaluating the long-term rate of return assumption, including long-term historical data, estimates inherent in current market data, and an analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of investment expense and inflation), along with estimates of variability and correlations for each asset class, were developed by the Retirement System's investment consultant. These ranges are combined to produce the 10-year long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Retirement System's target asset allocation as of December 31, 2016 (see the discussion of the pension plan's investment policy) are summarized in the following table:

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

### (4) <u>Actuarial assumptions</u> (continued)

Target Allocation	10-Year Long-term Expected Real Rate of Return
22.50 %	6 5.3 %
15.00 %	6 5.7 %
10.00 %	7.1 %
10.00 %	6 2.0 %
2.50 %	4.0 %
5.00 %	6 1.1 %
7.50 %	4.7 %
5.00 %	8.7 %
4.50 %	4.8 %
3.00 %	3.7 %
5.00 %	6 2.8 %
10.00 %	4.6 %
	22.50 % 15.00 % 10.00 % 2.50 % 5.00 % 4.50 % 5.00 %

**Discount Rate** - The discount rate used to measure the total pension liability was 8%. The projection of cash flows used to determine the discount rate assumed that contributions from the Plan members will be made at the current contribution rate and that contributions from employers will be made at contractually required rates, actuarially determined. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current Plan members. Therefore, the long-term expected rate of return on Plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the Net Pension Liability to Changes in the Discount Rate - The following presents the net pension liability of participating entities calculated using the discount rate of 8%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7%) or 1-percentage-point higher (9%) than the current rate:

	Discount Rate	Participating entities' net pension liabilty
1% decrease	7.0%	\$351,329,071
Current discount rate	8.0%	269,505,314
1% increase	9.0%	199,173,702

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

### (5) Collective deferred outflows of resources and deferred inflows of resources

A summary of the collective deferred outflows of resources and deferred inflows of resources as of December 31, 2016, are included below. The actual experience and assumption change impacts are recognized over the average expected remaining service life of active and inactive Plan members at the beginning of the measurement period, while investment gains/losses are recognized equally over five years.

	Deferred Outflows of Resources							
	ı	December 31, 2015		Additions		Recognition		December 31, 2016
Differences between expected			_		_		_	
and actual experience								
2014 Base	\$	-	\$	-	\$	-	\$	-
2015 Base		7,495,060		-		4,515,096		2,979,964
2016 Base		-						
Total		7,495,060		-		4,515,096		2,979,964
Changes of assumptions								
2014 Base	\$	-	\$	-	\$	-	\$	-
2015 Base		764,096		-		460,298		303,798
2016 Base		<u>-</u>		1,268,037		471,389		796,648
Total		764,096		1,268,037		931,687		1,100,446
Differences between projected								
and actual earnings								
2014 Base	\$	18,042,433	\$	-	\$	6,014,145	\$	12,028,288
2015 Base		51,081,737		-		12,770,434		38,311,303
2016 Base		-		4,628,509		925,702		3,702,807
Total		69,124,170		4,628,509		19,710,281		54,042,398
Changes in proportion								
2014 Base	\$	1,192,241	\$	-	\$	1,192,241	\$	-
2015 Base		2,645,171		-		1,593,477		1,051,694
2016 Base		-		6,062,746		2,253,809		3,808,937
Total		3,837,412		6,062,746		5,039,527		4,860,631
Total	\$	81,220,738	\$	11,959,292	\$	30,196,591	\$	62,983,439

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

### (5) <u>Collective deferred outflows of resources and deferred inflows of resources</u> (continued)

	Deferred Inflows of Resources						
		December 31, 2015		Additions	ļ	Recognition	December 31, 2016
Differences between expected					_		
and actual experience							
2014 Base	\$		\$		\$		\$ -
2015 Base		-		-		-	-
2016 Base		-		2,897,115		1,076,994	 1,820,121
Total		-		2,897,115		1,076,994	1,820,121
Changes of assumptions							
2014 Base	\$		\$		\$		\$ -
2015 Base		-		-		-	-
2016 Base		-		-		-	 -
Total		-		-		-	-
Differences between projected							
and actual earnings							
2014 Base	\$		\$		\$		\$ -
2015 Base		-		-		-	-
2016 Base		<u>-</u> _		-		-	 -
Total		-		-		-	-
Changes in proportion							
2014 Base	\$	1,192,241	\$	-	\$	1,192,241	\$ -
2015 Base		2,645,171		-		1,593,477	1,051,694
2016 Base		-		6,062,746		2,253,809	3,808,937
Total		3,837,412		6,062,746		5,039,527	4,860,631
Total	\$	3,837,412	\$	8,959,861	\$	6,116,521	\$ 6,680,752

The following provides the net deferred outflows/(inflows) of resources as of December 31, 2016, that will be recognized in pension expense in future years:

Year Ending December 31:		Deferred Outflows of Resources	Deferred Inflows of Resources	Net Deferred Outflows (Inflows of Resources			
2017	\$	23,465,432	\$ 1,076,994	\$ 22,388,438			
2018		20,035,538	743,127	19,292,411			
2019		13,696,137	-	13,696,137			
2020		925,701	-	925,701			
2021		-	-	-			
Thereafter		-	-	-			

## NOTES TO SCHEDULE OF EMPLOYER ALLOCATIONS AND SCHEDULE OF PENSION AMOUNTS BY EMPLOYER

### (6) Collective pension expense

Collective pension expense for the year ended December 31, 2016 is as follows:

Service cost	\$ 17,413,255
Interest on the total pension liability	68,598,774
Benefit term changes	(64,073)
Expensed portion of current-period difference between expected and actual experience in the total pension	
liability	(1,076,994)
Expensed portion of current-period assumption changes	471,389
Member contributions	(16,528,188)
Projected earnings of plan investments	(48,966,283)
Expenses portion of current-period difference between projected and actual earnings on plan investments	925,702
	,
Administrative expenses	1,552,025
Other	92,179
Recognition of beginning deferred outflows resources	23,759,973
Total pension expense	\$ 46,177,759