

Enrollment Projection Study

November 17, 2017

Executive Summary

Ross Haber and Associates has been engaged to provide an enrollment projection study to analyze issues regarding funding for the Lakewood Public Schools. The Lakewood Schools has had an enrollment averaging approximately 5,583 public school students between 2012-13 and 2017-18. However, Lakewood has a unique circumstance by having to provide services to a very large number of non-public school students.

Under the law public school districts are mandated to provide designated services to non-public schools in the community. Specifically these services include provision of textbooks, transportation to and from school and special education programs and services. In Lakewood this presents an overwhelming financial burden to the District based upon the disproportionate numbers of students who reside in Lakewood who attend non-public schools. Between 2012-13 and 2016-17 (the last year for which we have data) the average number of students residing in Lakewood who attend non-public schools has been 24,536 students ranging from a 19,777 in 2011-12 to 31,023 in 2016-17. This represents actual growth in the non-public schools of 11,246 students or approximately 36.25%. In that same time period (2011-12 to 2016-17) the public school growth was 625 students or approximately 10.7%. Table 1 compares the percentages of school aged children between 2011-12 and 2016-17 between the public and not public schools.

Table 1: Enrollment Comparison Between Public and Non-Public Schools (Actual)

Year	Total SAC	Public		Non-Public		
2011-12	25006	5229	20.91%	19777	79.09%	
2012-13	26616	5131	19.28%	21485	80.72%	
2013-14	28586	5650	19.76%	22936	80.24%	
2014-15	30765	5807	18.88%	24958	81.12%	
2015-16	32871	5831	17.74%	27040	82.26%	
2016-17	36877	5854	15.87%	31023	84.13%	
	SAC=School Aged Children in Lakewood					

Table 1 shows that the relative percentage between those students attending public and non-public schools in the District is extraordinary and makes Lakewood unique in the State. In the period indicated in Table 1 the disparity continued to grow. Table 2 shows the comparison based upon enrollment projections from 2017-18 through 2021-22.

Table 2: Enrollment Comparison Between Public and Non-Public Schools (Projected)

Year	Total SAC	Public		Non-Public		
2017-18	38383	5938	15.47%	32445	84.53%	
2018-19	44909	6068	13.51%	38841	86.49%	
2019-20	41353	6215	15.03%	35138	84.97%	
2020-21	42648	6395	14.99%	36253	85.01%	
2021-22	43806	6528	14.90%	37278	85.10%	
	SAC=School Aged Children in Lakewood					

Table 2 shows the projected numbers through 2021-22. The increase in both the public and non-public schools is continuing and substantial. During this period there is a widening gap between the percentage of the total number of school aged children between the public and non-public schools. This also implies a greater need for an increase in funding for the public schools as the percentage of the budget for services to the non-public schools increases.

Methodology

The study used the cohort survival projection method. The cohort survival method tracks students as they move from grade to grade and creates a growth or decline ratio between grades. For example, in 2011-12 if there were 100 children in grade 1 and the same group, in 2012-13 had an enrollment of 110 that would show a 10% growth rate (1.10). This migration ratio would be calculated for six years of enrollment history to get a five-year average which is then the multiplier for the projections based upon the average growth per grade. To project kindergarten the standard is using births five years prior to students entering kindergarten (for example children born in 2011 will become kindergarten students in 2016).

This method is required by the New Jersey State Department of Education in providing enrollment studies. The next section of the report shows the projection tables from 2011-12 through 2021-22. At the time of this report detailed information regarding non-public school enrollment was not available for 2017-18 therefore the enrollment history is from 2011-12 to 2016-17 for both public and non-public schools.

Table 3: Lakewood Public Schools Enrollment History and Projection 2011-12 through 2021-22

Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Tot K-12	Sp Ed	PK	Total	
2011-12	3129	0.19	592	561	466	444	380	370	349	301	297	255	265	229	215	4724	319	186	5229
			0.551	0.970	0.961	0.989	0.976	0.997	1.037	0.927	0.916	0.965	0.830	0.913					
2012-13	3461	0.18	627	326	544	448	439	371	369	362	279	272	246	220	209	4712	419		5131
			0.986	1.681	0.994	0.946	0.986	0.941	0.970	0.903	0.975	0.996	0.776	0.945					
2013-14	3448	0.17	602	618	548	541	424	433	349	358	327	272	271	191	208	5142	306	202	5650
			0.978	0.943	0.974	0.926	0.960	0.935	0.954	0.983	0.976	0.967	0.878	1.016					
2014-15	3746	0.15	551	589	583	534	501	407	405	333	352	319	263	238	194	5269	342	196	5807
			1.038	0.917	0.964	0.921	0.976	0.990	0.936	0.973	0.915	0.975	0.882	0.971					
2015-16	3849	0.13	508	572	540	562	492	489	403	379	324	322	311	232	231	5365	340	126	5831
			0.974	0.949	0.911	0.927	0.935	0.949	0.911	0.916	0.935	0.919	0.875	0.987					
2016-17	3966	0.12	484	495	543	492	521	460	464	367	347	303	296	272	229	5273	317	264	5854
Av		0.15	0.994	0.936	0.961	0.942	0.967	0.962	0.962	0.940	0.943	0.964	0.848	0.966					
Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12	Sp Ed	PK	Total	
2017-18	3971	601	481	464	522	463	504	443	446	345	327	292	251	263	5402	341	195	5938	
2018-19	4178	632	598	451	446	492	448	485	426	420	326	316	248	243	5528	344	197	6068	
2019-20	4337	657	629	560	433	420	475	431	466	400	396	314	268	240	5688	332	195	6215	
2020-21	4464	676	653	589	538	408	406	457	415	438	378	382	266	259	5863	336	195	6395	
2021-22	4326	655	672	611	566	507	394	390	440	390	413	364	324	257	5984	335	209	6528	

Table 4: Non-Public School Students Residing in Lakewood

Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Tot K-12	Sp Ed	PK	Total	
2011-12	3129	0.82	2577	2350	2212	1969	1847	1657	1500	1402	1236	906	755	678	531	19620	157		19777
			0.969	0.991	1.003	0.999	1.008	0.996	0.998	0.991	0.792	0.990	0.931	0.861					
2012-13	3461	0.81	2792	2496	2328	2218	1968	1861	1651	1497	1389	979	897	703	584	21363	122		21485
			1.074	0.985	0.997	1.003	0.995	1.001	1.003	0.943	0.670	0.894	0.889	0.789					
2013-14	3448	0.81	2799	2998	2458	2322	2224	1958	1863	1656	1412	930	875	797	555	22847	89		22936
			1.001	0.889	1.002	0.992	0.997	0.993	0.994	0.991	0.860	1.124	1.070	0.895					
2014-15	3746	0.82	3077	2802	2665	2464	2303	2218	1945	1852	1641	1214	1045	936	713	24875	83		24958
			1.003	1.001	1.011	1.003	1.013	0.998	1.004	0.985	0.781	0.974	0.971	0.810					
2015-16	3849	0.85	3257	3086	2804	2695	2472	2334	2214	1953	1825	1281	1182	1015	758	26876	164		27040
			0.979	1.011	1.014	1.010	1.001	1.002	1.005	0.997	0.838	1.034	0.947	0.934					
2016-17	3966	0.89	3518	3187	3119	2842	2723	2474	2338	2224	1948	1529	1324	1119	948	29293	151	1579	31023
Av		0.83	1.005	0.975	1.005	1.002	1.003	0.998	1.001	0.982	0.788	1.003	0.961	0.858					
Year	Births	K	1	2	3	4	5	6	7	8	9	10	11	12	Total K-12	Sp Ed	PK	Total	
2017-18	3971	3089	3535	3108	3136	2846	2731	2469	2340	2183	1535	1533	1273	960	30738	128	1579	32445	
2018-19	4178	3148	3104	3448	3125	3141	2854	2726	2471	2297	1720	1539	1474	1092	32139	123	1579	33841	
2019-20	4337	3218	3164	3027	3467	3130	3150	2849	2728	2426	1810	1725	1480	1265	33436	123	1579	35138	
2020-21	4464	3246	3234	3085	3043	3472	3138	3144	2851	2677	1911	1815	1659	1270	34545	129	1579	36253	
2021-22	4326	3244	3262	3153	3102	3048	3482	3133	3146	2799	2110	1917	1745	1423	35562	136	1579	37278	

Chart 1: Comparison between Public and Non Public History and Projections

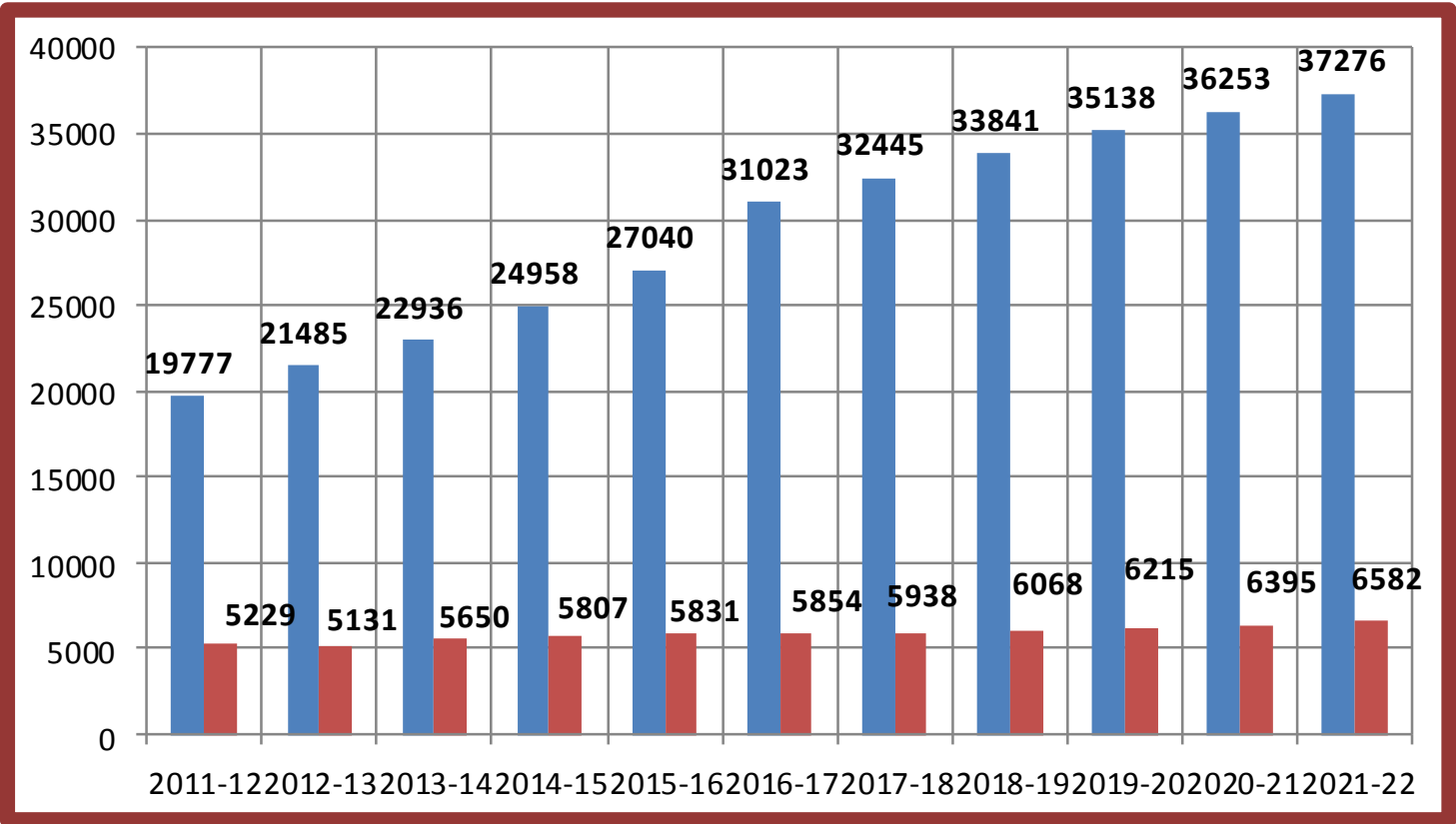


Table 5: History and Projection of Tuition and Transportation Costs

Year	Adequacy	Tuition	Transportation	Total
2015-16	\$115,998,679	\$25,449,467	\$18,459,083	\$43,908,550
2016-17	\$126,865,224	\$28,457,996	\$18,208,864	\$46,666,860
2017-18	\$119,394,029	\$31,780,583	\$24,477,814	\$56,258,397
2018-19	\$120,752,644	\$33,738,117	\$30,819,317	\$64,557,434
2019-20	\$122,337,299	\$35,610,979	\$34,354,293	\$69,965,272
2021-22	\$120,827,991	\$37,587,808	\$38,294,730	\$75,882,538

Table 5 shows the increase in both tuition and transportation costs to the District. The projections (2018-19 through 2021-22) are based upon the average increase of costs for the prior three years. The total expenditures in these categories are commensurate with the needs for these expenditures based upon the extraordinary growth of the total student population.

Chart 2: History and Projection of Tuition and Transportation Costs

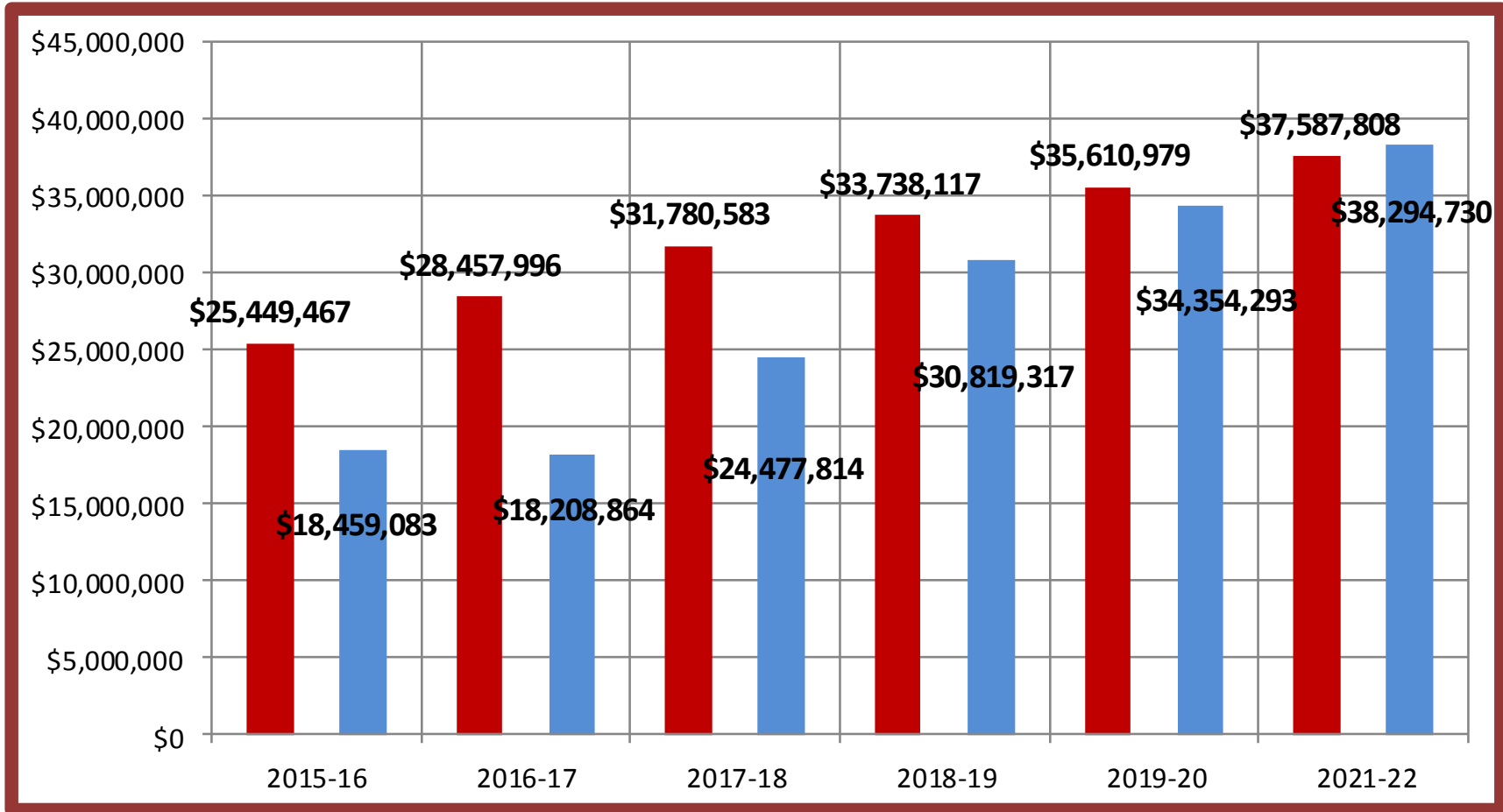


Table 6: Required Cost Above Adequacy for Lakewood Students

Year	Adequacy	Tuition	Transportation	Services*	Other Service**	Total Cost	Total Required
	1	2	3	4	5	6	
2015-16	\$115,998,679	\$25,449,467	\$18,459,083	\$3,772,780	\$2,366,430	\$50,047,760	\$166,046,439
2016-17	\$126,865,224	\$28,457,996	\$18,208,864	\$3,474,602	\$2,915,132	\$53,056,594	\$179,921,818
2017-18	\$119,394,029	\$31,780,583	\$24,477,814	\$3,723,890	\$2,967,150	\$62,949,437	\$182,343,466
2018-19	\$120,752,644	\$33,738,117	\$30,819,317	\$3,497,854	\$2,799,736	\$70,855,025	\$191,607,669
2019-20	\$122,337,299	\$35,610,979	\$34,354,293	\$3,505,605	\$2,761,271	\$76,232,148	\$198,569,447
2021-22	\$120,827,991	\$37,587,808	\$38,294,730	\$3,432,843	\$2,692,644	\$82,008,025	\$202,836,016

***services include such things as OT/PT; Speech **Other services include additional services provided to Lakewood children. These two categories were provided by the Lakewood Public Schools.**

Table 6 shows the history and projection of required expenses for Lakewood students. The historical data is from 2015-16 through 2017-18. The projected data is from 2018-19 through 2021-22. Column 1 is the adequacy budget (the amount of money the State considers the minimum expenditure for educating students in Lakewood. The projected years for Tuition (column 2) and Transportation (column 3) are based upon the average percentage of growth in these two categories. Columns 3 and 4 are based upon a moving average. This table does not include transportation or extraordinary aid provided to the District. The last column shows the historical and projected costs of what would actually be needed to provide these services for the growing number of students in Lakewood.

In 2012-13 there were 5,131 public and 19,777 non-public school students attending all schools in Lakewood for a total of 24,908 students. The projection for 2021-22 shows estimates that there will be 6,528 public and 37,278 non-public school students in Lakewood for a total of 43,806 students. That represents an estimate increase in the total school aged children in Lakewood between 2012-13 and 2021-22 of 43.14% over 10 years. To educate this number of students by the end of the projection will require \$ 202,836,016 in order to provide the services required for the non-public schools and to ensure an adequate education for students attending the Lakewood Schools.

Table 7: Required Cost Above Adequacy for Lakewood Students with Estimated Aid

Year	Adequacy	Tuition	Transportation	Services*	Other Service*	Total Cost	Trans Aid*	Extra Aid	Total Aid	Total Required
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>
2015-16	\$115,998,679	\$28,457,996	\$18,208,864	\$3,474,602	\$2,915,132	\$53,056,594	\$3,934,658	\$4,500,000	\$8,434,658	\$160,620,615
2016-17	\$126,865,224	\$31,780,583	\$24,477,814	\$3,723,890	\$2,967,150	\$62,949,437	\$4,199,793	\$5,200,000	\$9,399,793	\$180,414,868
2017-18	\$119,394,029	\$31,963,753	\$27,648,082	\$3,295,071	\$2,516,926	\$65,423,832	\$4,398,615	\$5,200,000	\$9,598,615	\$175,219,246
2018-19	\$120,752,644	\$33,738,117	\$30,819,317	\$3,497,854	\$2,799,736	\$70,855,025	\$4,398,615	\$5,200,000	\$9,598,615	\$182,009,054
2019-20	\$122,337,299	\$35,610,979	\$34,354,293	\$3,505,605	\$2,761,271	\$76,232,148	\$4,398,615	\$5,200,000	\$9,598,615	\$188,970,832
2021-22	\$120,827,991	\$37,587,808	\$38,294,730	\$3,432,843	\$2,692,644	\$82,008,025	\$4,398,615	\$5,200,000	\$9,598,615	\$193,237,401

Table 7 provides the same information as Table 6 with estimated aid. State aid changes year to year and is difficult to project therefore for the purposes of this study the current aid is carried forward to the end of the projection. It is important to note that the Transportation Aid column includes additional aid provided to the District under the Kean and Singer Pilot Program which is a three year program supplementing the District share in with additional aid from the State. For this study it is carried through to 2021-22.

Table 8: Estimated Projected Budget and Adequacy

Year	Budget	Adequacy	Needed	Difference
	1	2	3	4
2015-16	\$128,270,089	\$115,998,679	\$166,046,439	\$37,776,350
2016-17	\$137,836,194	\$126,865,224	\$179,921,818	\$42,085,624
2017-18	\$143,455,116	\$119,394,029	\$182,343,466	\$38,888,350
2018-19	\$151,230,383	\$120,752,644	\$191,607,669	\$40,377,285
2019-20	\$159,442,193	\$122,337,299	\$198,569,447	\$39,127,254
2021-22	\$168,099,904	\$120,827,991	\$202,836,016	\$34,736,112

Table 8 shows the differences between the Lakewood Budget (estimated budgets between 2018-19 and 2021-22 based upon the average increase in budgets between 2015-16 and 2017-18). Column 2 shows the estimated adequacy projection between 2018-19 and 2022-22. Column 3 indicates the amount required to educate and provide services to all Lakewood students. The last column indicates how, based upon budget estimates, the District will be underfunded in future years.

Conclusion

It is fully recognized that students attending non-public schools are entitled to receive transportation, textbooks and special education services via public school budgets should they opt for a Free and Appropriate Public Education (FAPE). This study does not contest that as a matter of law. The concern is that when these laws were adopted a situation such as Lakewood may not have been anticipated. Lakewood is unique in New Jersey in terms of the ratio of non-public to public school students. In 2011-12, which is the base year of this study, the percentage of school aged children attending non-public schools was just under 80% while the percentage of those attending public school was just over 20%. By 2016-17 (the last official enrollment used in this study) the percentage of public school students slipped to just fewer than 16% while the percentage of non-public school students increased to just over 85%. The differences in these percentages increased while the enrollment in both public and non-public schools also increased. Between 2011-12 and 2016-17 the enrollment in the public schools increased by 625 students while the enrollment in the non-public schools increased by 11,246 students. The projection indicates that by the 2021-22 school year the number of students enrolled in the public schools will increase from the 2016-17 enrollment of 5,854 to 6,528 in 2021-22, an increase of 674 students. The enrollment in the non-public schools will increase from the 2016-17 enrollment of 31,023 to 37,278, an increase of 6,255 students.

This increase in enrollment during the next five years will bring an increased need for programs and services for both the public and non-public schools. The district budget provides two major outlays to the non-public schools, these are, tuition for special needs students opting for FAPE to schools providing special education programs, and transportation for all eligible non-public school students. The increase in enrollment as per the projection will, by definition, increase the cost of tuition, transportation and other services over the next five years and beyond.

The district adequacy budget¹ in 2015-16 was \$ 115,998,679. The district operating budget in 2015-16 was \$ 128,270,089. The operating budget was \$12,271,410 more than the adequacy budget. However, in order to meet the needs of all students the total budgetary requirement was \$ 160,620,615. In order to meet the mandates for non-public school students, including those opting for FAPE (for the required services), the total cost to the district to provide a thorough and efficient education to its public school students (required services plus adequacy budget) was \$160,620,615, or \$ 32,000,000 more than its operating budget. This gap resulted in cuts to public school programs and curriculum.

The 2016-17 Lakewood school budget was \$137,836,194. This included a \$ 5,640,183 DOE loan against future State aide. The 2017-18 budget is \$ 143,455,116. This included an \$8,533,678 DOE loan against future State aid. This kind of financing, in which the District borrows against future State aid to cover annual increases in the budget, cannot be sustained.

In projecting adequacy budgets through 2021-22, based upon percentage increases from prior years, the public schools would require \$120,827,991. Even if the District were to remarkably cover each annual increase in its operating budget with loans against future State aid,

¹ Adequacy budget is what the state determines is the minimum funding level required to provide a "Thorough and Efficient" education for every student in the District.

the part of the operating budget for the public schools would be significantly below adequacy. The projected district operating budget out to 2021-22 based upon average historical increases (and continuation of the DOE loans) would be \$168,099,904. The differential between the projected budget for 2021-22 and the total cost to the District to provide a thorough and efficient education would be just over \$45,000,000 because the total required for providing T & E and mandated services would be \$202,836,016.² This would be a shortfall of just under \$35,000,000. If the State does not provide additional funding it is impossible to anticipate where the additional funding would come from given the limitation of the 2% cap on budget. Further, with the passage of the Tax Reform Act by Congress as of December 20, 2017 there is no way to anticipate how the loss of the State and local (property) tax deduction is going to impact on school budgets.

In the 2016-17 school year the enrollment in the Lakewood Public Schools was 5,854 students. The total number of students receiving Free or Reduced Lunch was 5,262 (5,131 free lunch). This means that just fewer than 90% of the students attending the Lakewood Public Schools are considered "children at risk" by the State of New Jersey. These percentages have not varied to any significant extent in the past five years and are not expected to change to any degree. Lakewood does receive, due to the high number of low-income nonpublic Title 1 students in the District, significant Federal Aid. However, the portion of this aid provided to the public schools has been significantly reduced and falls primarily into the purchase of supplies and equipment. What Lakewood has seen, and will continue to see, is a growth in class sizes and reduction of programs (curricular, co-curricular and extra-curricular). As there is more growth in the non-public school population, with its concurrent increase in needs for special education and transportation, along with the projected growth in the public schools, Lakewood will have to continue to find ways of cutting costs. Unfortunately most of the cutting will directly impact the public school students.

The numbers shown in this report are self-evident. The historical growth of the non-public school enrollment along with the continued growth in the public school enrollment has made it impossible to adequately fund the schools through local sources, especially given that Lakewood is one of the lowest income municipalities in New Jersey. While the State has provided an infusion of loans to increase the annual budget a substantial gap remains between revenues and what is needed for a thorough and efficient education in the public schools.

In my opinion, as an educator (having been a teacher and a school principal and as a consultant who has worked in well over 150 New Jersey School Districts), a change in the way in which a district with a overwhelming non-public school enrollment is funded must be considered. The manner in which the State supplements the Lakewood Budget must be reevaluated and set on a permanent basis so that the District can better plan for its future needs.

² This assumes that the Kean Singer Pilot Program would expire prior to 2021-22 thus lowering transportation aid.