River Forest Public Schools School District 90 Demographic Trends and Enrollment Projections



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Preface

This report is a continuation of a report created for the school district in 2017. We have updated the population and housing trends within River Forest School District 90 and used these new numbers to develop future projected enrollment for the individual schools and the district.

The objective of this report to paint a picture of the demographics of the school district as a whole and then to focus in on the student body changes over the past 5 years and project likely scenarios of future changes.

First, we will layout a sense of the community based upon findings from the latest Census data (American Community Survey 2016-2020). Then we will focus in on the individual schools and look at the underlying historical enrollment changes in each and in the District as a whole. Third we will analyze student migration patterns and other sources of these enrollment changes. And finally, we will create three tracks of projected enrollment, by grade and by year, for Lincoln and Willard elementary schools through school year 2027, and at Roosevelt Middle School and the District as a whole through school year 2032.

The enrollment projections have three separate scenarios. They are based upon different assumptions about future students moving into the district and kindergarten class size based upon population projections for children aged 0-4 and 5-9. These forecasts by grade and by year will be based upon (A) the minimum number of students that may be anticipated, (B) the most likely number of students to be expected, and (C) the maximum number of students that can be foreseen.

It would not have been possible to do this analysis without the data provided by administrators of District 90. We would like to acknowledge Dr. Edward J. Condon, Superintendent of River Forest Public Schools, and his staff, especially his Executive Assistant, Tracy Gutierrez, who assembled much of the information upon which this study is based. We are very appreciative of their help and expertise in compiling this report.

Overview of District 90

River Forest Public School District 90 is comprised of three schools that between them offer education for kindergarten through eighth grade. Two elementary schools, Lincoln and Willard, and one middle school, Roosevelt, together comprised 1,374 students in the Fall of 2022.

River Forest is a stable, relatively affluent, suburban community of 10,883 residents (according to the most recent US Census Bureau American Community Survey 2016-2020). The median income is \$125,288. Only ten percent of the households make less than \$35,000 and only twenty percent make less than \$65,000.

About 20 percent of the township are minority in race or ethnicity and almost all of whom are US citizens and speak English very well. The foreign-born population is only 10% of whom 6% have become naturalized citizens. And 86% of the population speaks English as their primary language. Of the remaining 14% three quarters speak English "very well" and there is only 4% remaining who speak English less than "very well".



Chart 1 - Population By Race and Ethnicity

White African American Native People Asian Multiracial Hispanic or Latino:

Source: U.S. Bureau of the Census. American Community Survey 5-Year Estimates 2016-20.

Housing Trends

District 90 is a mature suburb of Chicago. As Chart 2 shows, nearly half of the houses were built before 1940. Another third of the houses were built in the 1940's, 1950's and 1960's. Only 20% of all housing units were built in the past 50 years (since 1970). Because there isn't undeveloped land that can be built-up the housing stock has mostly stayed level. As the area has become more desirable the housing prices have gone up. This increase has been dramatic in the past 70 years (see Table 1).



Chart 2 - When Were Housing Units Build

Source: U.S. Bureau of the Census. American Community Survey 5-Year Estimates 2016-20.

Another factor feeding into the cost of housing is that almost 69% of houses are single family homes (some are detached and some are attached) but there are not many options for smaller, often less expensive housing units (see Chart 3). Relatedly the area is 87% owner occupied units and only has 13% renters.

Chart 3 - Type of Housing Unit



Source: U.S. Bureau of the Census. American Community Survey 5-Year Estimates 2016-20.

Table 1 shows that the median housing value doubled in the two decades from 1950 to 1970. Then in only one decade the values more than doubled (1970 to 1980). And then again in the next decade (1980 to 1990) they increased nearly 2.5 times. They have continued to increase but at a slower rate and have doubled again over two decades (1990 to 2010). Even in just the past 5 years they have gone up 10%. The US median home value is \$229,800, so River Forest's median value of \$602,405 is quite affluent. For comparison, the Illinois median housing value is \$202,100, and in Cook County it is \$255,500. There are only two townships in Cook County with more expensive median homes (Barrington and New Trier).

River Forest Median
Value
\$ 20,000+
\$ 34,700
\$ 45,100
\$ 109,700
\$ 256,600
\$ 386,600
\$ 556,400
\$ 574,600
\$ 575,900
\$ 581,900
\$ 596,900
\$ 602,405

Table 1 - Median Home Value of Owner-Occupied Housing Units: 1950 - 2020

Source: U.S. Bureau of the Census. Decennial Census of Population and Housing,

1950, 1960, 1970, 1980, 1900, and 2000. 2006–10, 2011–15, 2012-2016, 2013-2017, 2014-2018, 2015-2019, 2016-2020 American Community Survey 5 Year Estimates.

Townships in Cook County	Median Home Value
Thornton township	\$ 112,000
Calumet township	\$ 113,700
Bloom township	\$ 124,900
Rich township	\$ 157,100
Bremen township	\$ 166,700
Cicero township	\$ 174,400
Worth township	\$ 189,900
Stickney township	\$ 196,100
Proviso township	\$ 209,100
Hanover township	\$ 215,600
Berwyn township	\$ 227,100
Leyden township	\$ 227,300
Palos township	\$ 249,400
Schaumburg township	\$ 266,900
Chicago city	\$ 267,600
Orland township	\$ 276,200
Elk Grove township	\$ 282,800
Lyons township	\$ 285,800
Palatine township	\$ 302,400
Maine township	\$ 305,400
Wheeling township	\$ 311,800
Norwood Park township	\$ 325,800
Niles township	\$ 327,600
Riverside township	\$ 332,800
Lemont township	\$ 382,800
Oak Park township	\$ 403,200
Evanston city	\$ 409,900
Northfield township	\$ 531,300
River Forest township	\$ 604,900
Barrington township	\$ 653,100
New Trier township	\$ 812,600

Table 2 – Median Home Values for Owner-Occupied Units in Cook County, IL

Source: U.S. Bureau of the Census. 2016-2020 American Community Survey 5 Year Estimates.

There is a second, important housing number to look at - the number of new, young families that move into a neighborhood. From Chart 4 we can see that according to the latest American Community Survey (2016-2020) three percent of people moved into their house in the past year and when you look at the past 5 years (2015-2019) that increases to 26% of all residents. And 44% of the residents have moved into the town within the last 10 years. This is very good news for the school system. Many of these new households will have school-aged children and will replace some of the empty-nesters who were living in the existing house.

Chart 4 - When People Moved Into Their Housing



Source: U.S. Bureau of the Census. American Community Survey 5-Year Estimates 2016-20.

Population Trends

There has been a slight decrease in population from 2000 to present. The numbers for pre-school aged kids (under 5) are bouncing around without a clear pattern, though they did just take a sizeable uptick in 2020. The numbers for school aged children are not as good, those numbers have been decreasing substantially over the past 20 years. From 2000 where there were 919 children aged 5 to 9. There was a sizeable drop to 808 (a loss of over 100) in ten years to 2010 and then another even bigger drop by 2020 to only 619 children. This is a loss of a third of the kids in 20 years. The number of middle school students is similar to the preschoolers, there doesn't seem to be any set pattern. The number is almost the same as it was in 2010 and has been both higher and lower than it was in 2000 in the past few years.

Age	2000	2010	2011-15	2012-16	2013-17	2014-18	2015-19	2016-20
Group								
Total	11,635	11,172	11,233	11,217	11,215	11,064	10,970	10,883
Under 5	728	550	653	673	637	664	643	792
5 to 9	919	808	754	653	690	645	656	619
10 to 14	974	887	934	1043	951	939	1035	890
15 to 19	1,003	1,240	1,238	1264	1209	1154	1107	1,087
20 to 24	765	812	653	689	683	654	644	525
25 to 29	372	286	259	320	305	286	280	294
30 to 34	501	327	360	364	282	299	279	567
35 to 39	791	499	563	514	630	671	584	538
40 to 44	1,046	736	675	651	651	579	610	606
45 to 49	1,003	846	732	714	746	804	740	686
50 to 54	828	1,021	1,114	1076	1091	1029	1075	900
55 to 59	607	843	811	859	898	838	811	753
60 to 64	474	727	844	725	671	663	671	742
65+	1,624	1,590	1,643	1672	1771	1839	1835	1,884

Table 3 – Population by Age in River Forest IL 2000-2020

Source: U.S. Bureau of the Census. Decennial Census of Population and Housing, 2000, 2010, and American Community Survey 5 Year Estimates 2011–15, 2012-2016, 2013-2017, 2014-2018, 2015-2019, and 2016-2020.

It looks like the number of older adults is increasing. That is to say that 1,884 people over the age of 65 is more than 1,624 people over the age of 65 in 2000. But the other way to look at this is the number of people aged 45-64 in 2000 if they had stayed in their house would in 2020 all be aged 65+. So, in fact the people who are aged 45 or more in 2000 is 4,536 and these would all be 65+ in 2020. Thus, the fact that there are only 1,884 seniors means that 2,652 have either moved or died thus opening up a house for a younger family.

Causes of Enrollment Change

Total enrollment numbers change when a child either enters or leaves a school. If no one ever moved into or out of an area then the 8th grade graduating class would be the same size as the entering kindergarten class. Children enter the school because they either are old enough to join the kindergarten class, they join the public school system instead of their private/parochial school, or they moved into the area from outside. Children leave a school when they move out of the area, their parents decide on alternative schooling options (private or parochial school or home schooling), or in the unlikely event that they die.

In reality though, people move all of the time and thus school enrollments change from year to year due to the difference in class size between the entering kindergarten class and the previous year's graduating class and the number of children who move into or out of the area.

Enrollment Trends and Student Migration

Enrollment was increasing for 5 years from 2015/16 to 2019/20 when it peaked at 1,467 and has been decreasing for the past 3 years. As you can see from Table 4 that the 5 years of growth were in large part due to net migration into the system. So even when the entering Kindergarten class was much smaller than the exiting eighth grade there was still growth due to the net in-migration.

The net-migration in 2020-21 was only 1 child. This is probably due to Covid, either the quarantining which may have led some to home school their children or households not being able to relocate/sell their houses. In 2021/22 there is some in-migration, about half of the normal number and by 2022/23 it is almost back to normal.

School	Κ	1	2	3	4	5	6	7	8	K-8	EC	Sp	Total
Year												Ed	
2015-	121	143	144	139	149	173	142	186	165	1362	9	0	1371
2016													
2016-	103	152	151	151	145	155	173	148	186	1364	17	10	1391
2017													
2017-	138.	136	156	155	161	156	163	172	152	1389	26	10	1425
2018													
2018-	102	166	144	171	161	170	156	156	172	1398	27	8	1433
2019													
2019-	118	116	181	159	185	174	179	161	156	1429	28	10	1467
2020													
2020-	107	141	119	179	156	177	169	171	162	1381	27	8	1416
2021													
2021-	101	138	152	124	182	156	170	166	167	1356	31	10	1397
2022													
2022-	89	139	148	154	127	182	155	168	167	1329	35	10	1374
2023													

Table 4 - Enrollment History of River Forest Public Schools 2015/16 to 2022/23

Table 5 shows the cohort that begins kindergarten in a given September and shows how their class size changes over the years through to graduation in June, nine years later. You can see that there are only 102 kindergarteners in 2011 but by graduation the class size has swelled to 156 students, a net gain of 54. This change is all in-migration to the school. There is a gain of around 50 students over the course of their nine years in school together regardless of which cohort you look at (though the later years are incomplete). You can also see looking at the data this way that some grades have much higher influxes of new students. The largest is the jump from kindergarten to first grade. The large increase from kindergarten to first grade may well be parents sending their children to private/parochial schools for kindergarten and then transferring their children to public schools when they enter first grade.

For most years there is also a nice sized increase each year of the elementary school. Kids are still entering in second, third and fourth grade. There was an increase from fourth to fifth grade in the 2011 cohort through the 2014 cohort and then this fell off and we are now seeing a leveling off or even the loss

of students. This is something that will need to be monitored in the next few years as the data is not yet available to see if this is going to become a negative trend or if it is merely a data blip. The most likely cause is the complete disruption of regular life caused by the Covid pandemic. It could easily be that parents elected to 'home school' children or make some alternative arrangements. Additionally fewer houses were sold so fewer new families moved into the township. It is likely to be a combination of the two.

Cohort	K	1	2	3	4	5	6	7	8	Net
K Entry										Change
Year										
2011-	102	127	128	134	149	155	163	156	156	54
2012										
2012-	107	131	130	139	145	156	156	161	162	55
2013										
2013-	99	131	144	151	161	170	179	171	167	68
2014										
2014-	96	143	151	155	161	174	169	166	167	71
2015										
2015-	121	152	156	171	185	177	170	168		47
2016										
2016-	103	136	144	159	156	156	155			52
2017										
2017-	138	166	181	179	182	182				44
2018										
2018-	102	116	119	124	127					25
2019										
2019-	118	141	152	154						36
2020										
2020-	107	138	148							41
2021										
2021-	101	139								38
2022										
2022-	89									
2023										

Table 5 - Following a Cohort Through the Grades

Table 6 shows that the enrollment change from one year to another broken out into its component pieces: class size differences between incoming kindergarteners and graduating 8^{th} graders, the net migration into or out of the area and the modest changes to the EC and Special Education numbers.

Transition	Change	Entering K	Net Student	Change EC	Change
Year Sept to	Total	Vs Exiting	Migration/	_	Special
Sept	Enrollment	8	Transfer		Education
2016 to 2017	20	-62	64	8	10
2017 to 2018	34	-48	73	9	0
2018 to 2019	8	-50	59	1	-2
2019 to 2020	34	-54	85	1	2
2020 to 2021	-51	-49	1	-1	-2
2021 to 2022	-19	-61	36	4	2
2022 to 2023	-23	-78	51	4	0

Table 6 – Components of Annual Enrollment Change 2016/17 to 2022/23

As mentioned earlier, there is net growth for the 4 years from 2016/17 to 2019/20 and then the schools start having lower enrollment so by 2022/23 they are almost exactly where they were in 2015/16. Every year the incoming Kindergarten class is smaller than the graduating 8th grade. The addition of new children means that either new families with school-aged children have moved in or that families are having additional children. We can rule out the additional children per family though by looking at the data (see Table 7). There are fewer large families (3 or more children) than there were a decade or two decades ago. Instead, more families appear to be having only 1 or 2 children. So the increase in new children entering the school has to be from families moving into the area or pulling their kids from private/parochial school. In either case, they are new families to the school system.

Table 7	- Family	Household	Size 2000	through 2020
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	2000	ACS 2007-2011	ACS 2011-2015	ACS 2016-2020
Total Families	2948	2638	2886	2754
2-person households	40%	38%	42%	41%
3-person households	21%	21%	19%	23%
4-person households	22%	23%	30%	28%
5-person households	18%	18%	9%	8%

Source: U.S. Bureau of the Census. Decennial Census of Population and Housing, 2000 and American Community Survey 5-Year Estimates 2007-2011, 2011–15, and 2016-20.

Transition Sept to Sept	K-1	1-2	2-3	3-4	4-5	5-6	6-7	7-8	Total
2015 to 2016	31	9	9	7	8	0	4	-1	67
2016 to 2017	31	8	7	6	6	0	6	0	64
2017 to 2018	33	4	4	10	11	8	-1	4	73
2018 to 2019	28	8	15	6	9	0	-7	0	59
2019 to 2020	14	15	15	14	13	9	5	0	85
2020 to 2021	23	3	-2	-3	-8	-5	-8	1	1
2021 to 2022	31	11	5	3	0	-7	-3	-4	36
2022 to 2023	38	10	2	3	0	-1	-2	1	51
Average	28.63	8.5	6.9	5.8	4.9	0.5	-0.8	0.1	54.5

Table 8 – Annual Enrollment Change By Grade 2015/16 to 2022/23

The change from kindergarten to first grade is always a big growth year. There are lots of families who may make alternative decisions about kindergarten or who have just moved into the area to be there when first grade starts. The average for the eight years is an influx of 28.6 students in the transition from kindergarten to first grade. And the number steadily decreases as the kids get older. Thus, there are only 8.5 new students entering between first and second grade. Only 6.9 between second and third grade such that by the time you get to transitions from fifth grade on there is less than 1 additional child.

Covid appears to have had a profound effect on the enrollment numbers for mid to upper grades. The youngest don't seem to be affected. The enrollment changes from 2020 to 2022 for second grade through eighth grade are a net loss. In 2020 second through eighth grade is a loss of 25 students, 2021 is a loss of six students, and 2022 we begin to return to normal with a very modest gain of three students.

Enrollment Change in the Individual Schools

Annual grade-by-grade enrollments for Lincoln and Willard elementary schools and Roosevelt Middle School from 2015 to 2022 are provided in Tables 9, 11 and 13. Tables 10, 12, and 14 show the same date by cohort year instead of by school year. The advantage of the school year is this is the group that you actually have in your building. The advantage of looking at it by cohort is that you can more easily see where new students have been added or students have left.

Lincoln Elementary School was going through a growth phase for the first three to four years and then in 2019 the numbers started decreasing. By September 2022 the school was 58 students less than at its height of 403 students and had lost all of the gains from 2015.

The incoming class of 2018 was dramatically smaller than the other classes and that small class size has continued to bring down the numbers for the subsequent five years as the students go through the school. When you look at Table 10 you can see that the 2018 class of only 48 initial kindergarteners in fact grows by 14 students which is a little lower rate than the other classes. But it is really the fact that the initial class had only 48 students versus a class size of 62 or 72 like the classes above and below it that makes the school size smaller.

School	K	1	2	3	4	K-4	EC	Sp	Total
Year								Ed	
2015-	69	83	75	81	83	391	0	0	391
2016									
2016-	64	78	88	81	86	397	0	0	397
2017									
2017-	72	79	80	89	83	403	0	0	403
2018									
2018-	48	89	83	89	93	402	0	0	402
2019									
2019-	63	54	93	90	91	391	0	0	391
2020									
2020-	61	68	56	89	86	360	0	0	360
2021									
2021-	55	77	72	58	91	353	0	0	353
2022									
2022-	52	77	82	72	62	345	0	0	345
2023									

Table 9 – Enrollment History of Lincoln Elementary School 2015/16 to 2022/23

Cohort	K	1	2	3	4	Net Change
2015-	69	78	80	89	91	22
2016						
2016-	64	79	83	90	86	22
2017						
2017-	72	89	93	89	91	19
2018						
2018-	48	54	56	58	62	14
2019						
2019-	63	68	72	72		9
2020						
2020-	61	77	82			21
2021						
2021-	55	77				22
2022						
2022-	52					
2023						

 Table 10 - Cohort Enrollment Changes at Lincoln Elementary School

Willard Elementary School, like Lincoln, went through a growth phase for the first four years and then in 2020 the numbers started decreasing. By September 2022 the school was 49 students less than at its height of 396 students. Though it was still 33 students above where it had been in 2015.

Table 12 shows that the incoming classes of 2016 and 2022 are dramatically smaller than the other classes. But unlike at Lincoln the 2016 cohort has some larger additions making their class size 'average'. And in fact, by fourth grade the 2016 cohort is larger than the 2018 cohort that started out 15 children larger. The 2022 class we won't know about for several years.

School	K	1	2	3	4	K-4	EC	Sp	Total
Year								Ed	
2015-	52	60	69	58	66	305	9	0	314
2016									
2016-	39	74	63	70	59	305	17	0	322
2017									
2017-	66	57	76	66	78	343	26	0	369
2018									
2018-	54	77	61	82	68	342	27	0	369
2019									
2019-	55	62	88	69	94	368	28	0	396
2020									
2020-	46	73	63	90	70	342	27	0	369
2021									
2021-	46	61	80	66	91	344	31	0	375
2022									
2022-	37	62	66	82	65	312	35	0	347
2023									

 Table 11 – Enrollment History of Willard Elementary School 2015/16 to 2022/23

 Table 12 – Cohort Enrollment Changes at Willard Elementary School

Cohort	Κ	1	2	3	4	Net Change
2015-	52	74	76	82	94	42
2016						
2016-	39	57	61	69	70	31
2017						
2017-	66	77	88	90	91	25
2018						
2018-	54	62	63	66	65	11
2019						
2019-	55	73	80	82		27
2020						
2020-	46	61	66			20
2021						
2021-	46	62				16
2022						
2022-	37					347
2023						

Roosevelt Middle School, unlike the two elementary schools the total enrollment figures for the middle school are remarkably consistent across time. Over the eight years the total enrollment varied by only 36 students (from a low of 643 in 2017 to a high of 679 in 2020). When you look at the four grades in a given school year there is a lot of variation from the size of one to the size of the other (easily 30-40 students). But when you look at **Table 14** you can see that there is almost no change in class size once you get to fifth grade. The one exception is that there seems to be a small drop between sixth and seventh grade, we see this in all but one year (2017's cohort).

School	5	6	7	8	5-8	Sp	Total
Year						Ed	
2015-	173	142	186	165	666	0	666
2016							
2016-	155	173	148	186	662	0	662
2017							
2017-	156	163	172	152	643	0	643
2018							
2018-	170	156	156	172	654	0	654
2019							
2019-	174	179	161	156	670	0	670
2020							
2020-	177	169	171	162	679	0	679
2021							
2021-	156	170	166	167	659	0	659
2022							
2022-	182	155	168	167	672	0	672
2023							

Table 13 – Enrollment History of Roosevelt Middle School 2015/16 to 2022/23

School	5	6	7	8	Net Change
Year					
2015-	173	173	172	172	1
2016					
2016-	155	163	156	156	1
2017					
2017-	156	156	161	162	6
2018					
2018-	170	179	171	167	-3
2019					
2019-	174	169	166	167	-7
2020					
2020-	177	170	168		-9
2021					
2021-	156	155			-1
2022					
2022-	182				
2023					

 Table 14 – Cohort Enrollment Changes Roosevelt Middle School

Tables 15, 16, 17 show the change in total enrollment from one year to the next. This takes us back to the introduction where we discussed that school enrollment is comprised of the number of new students in/out of the school and the difference in size between the new incoming class and last year's graduating class. So, in these tables the first column of data tells the net difference in enrollment, which is really the bottom line. The second column tells the change from this year's entering class and last years graduating class. The third column is the number of students who entered the school in any of the grades to net out this difference. If you want to see which grades they entered you can consult one of the above tables where this is laid out in full detail. There was no material difference in EC or Special Education students, so I am not including them in this report.

Table 15 – as was noted earlier, there is an increase in enrollment for the first two years and then a steady decrease in enrollment with a large drop from 2019 to 2020. This is the beginning of the Covid pandemic and may well explain the size of the drop, though probably there would have been a decrease just a smaller one. The drop in the entering kindergarten versus the graduating fourth grade was comparable to the grades from 2017 to 2021. The difference is that instead of gaining twenty to thirty students, as was true in other years, in 2019-2020 there was the unprecedented net loss of one student. If the in-migration had been akin to other years, then the drop of 31 students would have been much lower and more similar to the years around it.

Table 15 – Components of Annual Enrollment Change Lincoln ElementarySchool: September 2015 to September 2022

Transition	Change	Entering K vs	Net Student
Sept to Sept	Total	Exiting 4	Migration/Transfer
	Enrollment	-	
2015 to	4	-19	23
2016			
2016 to	6	-14	20
2017			
2017 to	-1	-35	34
2018			
2018 to	-11	-30	19
2019			
2019 to	-31	-30	-1
2020			
2020 to	-7	-31	24
2021			
2021 to	-8	-39	31
2022			

Table 16 – Components of Annual Enrollment Change Willard ElementarySchool: September 2015 to September 2022

Transition	Change	Entering K vs	Net Student
Sept to Sept	Total	Exiting 4	Migration/Transfer
	Enrollment		
2015 to	0	-27	27
2016			
2016 to	38	7	31
2017			
2017 to	-1	-24	23
2018			
2018 to	26	-13	39
2019			
2019 to	-26	-48	22
2020			
2020 to	2	-24	26
2021			
2021 to	-32	-54	22
2022			

The thing most striking about Table 17 is how many years show a net out-migration of students. This is a very rare occurrence in the elementary schools whereas in the middle school it happens in four of the seven years. And it isn't just one or two students, there are twelve and fourteen students who leave in 2019-2021, this may be attributable to Covid however.

These numbers look much more 'lumpy'. It's hard to see why the changes in enrollment or the differences in entering vs graduating classes vary so widely. Table 14 helps smooth these out and explain that in fact different class cohorts are stable but they are different sizes one from another and thus create lumps as larger classes go through.

Transition	Change	Entering 5 vs	Net Student
Sept to Sept	Total	Exiting 8	Migration/Transfer
	Enrollment		
2015 to	-4	-10	6
2016			
2016 to	-19	-30	11
2017			
2017 to	11	18	-7
2018			
2018 to	16	2	14
2019			
2019 to	9	21	-12
2020			
2020 to	-20	-6	-14
2021			
2021 to	13	15	-2
2022			

Table 17 – Components of Annual Enrollment Change Roosevelt MiddleSchool September 2015 to September 2022

Another way of looking at Tables 10, 12, and 14 is to look at where it is that we see new students joining a grade. Tables 10, 12, and 14 are looking at the class size whereas tables 18, 19, and 20 are looking at the net differences from year to year.

The striking thing in Table 18 is the loss of students in 2019-2020, which we believe to be attributable to the Covid pandemic. The other interesting thing to note is that though children join the school in every grade the number of them decreases over time. The kindergarten to first grade is particularly high and is potentially caused by a different mechanism (parents choosing full-day kindergarten), but there are still students joining in second, third and even fourth grade.

Transition Sept to Sept	K to 1 st	1^{st} to 2^{nd}	2^{nd} to 3^{rd}	3^{rd} to 4^{th}	Total
2015 to 2016	9	5	6	5	25
2016 to 2017	15	2	1	2	20
2017 to 2018	17	4	9	4	34
2018 to 2019	6	4	7	2	19
2019 to 2020	5	2	-4	-4	-1
2020 to 2021	16	4	2	2	24
2021 to 2022	22	5	0	4	31
Average	12.9	3.7	3.0	2.1	21.7

Table 18 – Net Annual Student Migration/Transfer Lincoln 2015-2022

In comparing Table 18 to Table 19 you see how much more growth there was at Willard elementary as opposed to Lincoln elementary. On average there were 5.4 more children added to Willard every year (27.1 versus 21.7). You still see a decrease as the grades go up but the number of first graders added is higher as are the numbers for each of the other grades.

Transition Sept to Sept	K to 1 st	1^{st} to 2^{nd}	2^{nd} to 3^{rd}	3^{rd} to 4^{th}	Total
2015 to	22	3	1	1	27
2016					
2016 to	18	2	3	8	31
2017					
2017 to	11	4	6	2	23
2018					
2018 to	8	11	8	12	39
2019					
2019 to	18	1	2	1	22
2020					
2020 to	15	7	3	1	26
2021					
2021 to	16	5	2	-1	22
2022					
Average	15.4	4.7	3.6	3.4	27.1

When we turn our attention to the Middle School, things are less rosy. There are many instances of more children leaving school than those entering school. It is not contained to a specific year (for example 2020) nor is it a single grade. There are students who leave between fifth and sixth grade, between sixth and seventh grade and even a few who leave between seventh and eighth.

Transition Sept to Sept	5th to 6th	6th to 7th	7th to 8th	Total
2015 to	0	6	0	6
2016				
2016 to	8	-1	4	11
2017				
2017 to	0	-7	0	-7
2018				
2018 to	9	5	0	14
2019				
2019 to	-5	-8	1	-12
2020				
2020 to	-7	-3	-4	-14
2021				
2021 to	-1	-2	1	-2
2022				
Average	.6	-1.4	0.3	-0.6

 Table 20 – Net Annual Student Migration/Transfer Roosevelt 2015-2022

The Enrollment Future of District 90

When building projections for student enrollment the first piece of information you need is total population estimates. I turned first to the Chicago Metropolitan Agency for Planning. They have created township based (Minor Civil Divisions or MCD) forecasts for 5-year increments starting in 2015 and running until 2050 (see Table 21)

	Households	Population	Average Household Size
2015	4,013	10,293	2.56
2020	4.246	10,709	2.52
2025	4,509	11,127	2.46
2030	4,807	11,604	2.41
2035	5,103	12,137	2.37
2040	5,211	12,319	2.36
2045	5,225	12,319	2.36
2050	5,227	12,319	2.36

Table 21 – CMAP Household and Population Projections 2015 to 2050

Chicago Metropolitan Agency for Planning Forecasts for Minor Civil Divisions (MCDs), 2018.

There are some serious concerns with these numbers. First, they show an increase of over 1,200 households in the thirty-five years covered by their report. But as was mentioned earlier and in the previous report, there is very little land left to be built up to house 33% more families. The projected number for 2020 was 4,246 but in fact the actual number from the US Census Bureau's American Community Survey is only 4,040. A much more modest increase (27 households as opposed to 233).

It seems that the only way to accommodate this many new households would be some significant zoning changes. Either single family homes could be replaced with multiple units in the same location (either subdivide the property to create 2 or more stand-alone houses, build or convert the unit to a duplex, or build a multi-unit home instead of an existing home. The other option would be to convert office or industrial space to residential usage.

The other issue with this data is that the household numbers are increasing faster than the population numbers which means that the actual household size is going down. To have a drop of household size of 10% either more households are getting older so they are becoming empty nesters and the 'family' is smaller, the housing units are smaller so you can't have as many children and thus only smaller families are choosing to move in or people are choosing to be childless or have fewer children.

Instead of this option we used our own Projections which are based on the US Census Bureau's American Community Survey trends. We have already taken into account the changes in fertility, birth and death rates as well as migration. Those are all primary components of the projection model that we have built. Below in Table 22 are our proposed population changes.

	Total Population	Aged 0-4	Aged 5-9
2022	11,068	697	741
2027	10,980	617	707
2032	10,991	589	673
2035	10,981	593	677

Table 22 –	GeoLytics	Population	Projections	2022 to	2035
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GeoLytics Extended Premium Estimates 2022, 2027, 2032, 2035

Our numbers show a stable total population over the next 13 years with some fluctuations in the preschool aged cohort. There is a decrease over the next 13 years of preschoolers entering the township. The school aged children also show a drop but not as significantly. And then you look at them by cohort the you see that there is in fact growth from new families moving.

 Table 23 – GeoLytics Population Projections by cohort

	Total Population	Aged 0-4	Aged 5-9	Net Change
2022	11,068	697	707	10
2027	10,980	617	673	56
2032	10,991	589	677	88

GeoLytics Extended Premium Estimates 2022, 2027, 2032, 2035

To build out annual class numbers we then ran the annual projections for ages 0-4 and then 5-9 as shown in Table 24.

	Aged 0-4	Aged 5-9
2022	697	741
2023	663	740
2024	641	738
2025	637	721
2026	622	714
2027	617	707
2028	609	702
2029	591	697
2030	594	682
2031	593	677
2032	589	673
2033	580	661
2034	580	660
2035	593	677

Table 24 – GeoLytics Population Projections 2022 to 2035

GeoLytics Extended Premium Estimates 2022 through 2035

In building the school enrollment model we look at the children aged 0-4 who are five years out, these will be the incoming elementary school children and we compart them to the projections for those aged 5-9 five years later to see about the growth in the cohort over the course of the 5 years. The other important weight that we use is to go back to Tables 18, 19, and 20 to determine the average growth rate per grade for that particular school.

When creating Series A (low), Series B (anticipated) and Series C (high) projections we used the same initial input numbers for the total population. But there are a few numbers that were altered. First the number of students entering the average grade (Tables 18, 19, and 20). For the average (B) we used those numbers, for the low (A) we dropped the highest two of the seven years and re-averaged the number and then instead added that number and for the high (C) we dropped the lowest two of the seven years and re-averaged the number and tre-averaged the number and then instead added that number. Another change in the high number (C) was that we ignored what we believe to be the 'Covid' effect on the numbers and used some of the pre-Covid numbers. This was especially true in the Roosevelt numbers from Table 20. We felt that now that schools are operating mostly normally and the real estate market has recovered that the numbers should start to pick up. For the low number (A) we assumed that it isn't just Covid but that the economic issues that the pandemic created and the instabilities will stay with us and we continued this negative trend. Hopefully this will not happen, but it needs to be included in a 'low' version.

In the Low (A) version the total school enrollment for each school is about the same as the lowest average enrollment for the past eight years.

	Lincom	Licineir	uryrrv	Jecuons		
	К	1	2	3	4	Total
2022-2023	52	77	82	72	62	345
2023-2024	46	62	80	84	74	346
2024-2025	61	56	65	82	86	350
2025-2026	59	71	59	67	84	340
2026-2027	61	69	74	61	69	334
2027-2028	48	71	72	76	63	330

Table 25 – Lincoln Elementary Projections LOW (A) 2023/24 to 2027/28

Table 26 – Willard Elementary Projections LOW (A) 2023/24 to 2027/28

	К	1	2	3	4	Total
2022-2023	37	62	66	82	65	312
2023-2024	34	51	65	68	83	301
2024-2025	49	48	54	67	69	287
2025-2026	52	63	51	56	68	290
2026-2027	50	66	66	53	57	292
2027-2028	40	64	69	68	54	295

Table 27 – Roosevelt Middle School Projections LOW (A) 2023/24 - 2032/2033

	5	6	7	8	Total
2022-2023	182	155	168	167	672
2023-2024	127	181	153	168	629
2024-2025	157	126	179	153	615
2025-2026	155	156	124	179	614
2026-2027	152	154	154	124	584
2027-2028	126	151	152	154	583
2028-2029	117	125	149	152	543
2029-2030	147	116	123	149	535
2030-2031	148	146	114	123	531
2031-2032	148	147	144	114	553
2032-2033	125	147	145	144	561

In the Average (B) version the total school enrollment for each school is about the same as the average enrollment for the past eight years.

2027/28							
	К	1	2	3	4	Total	
2022-2023	52	77	82	72	62	345	
2023-2024	58	65	81	85	74	363	
2024-2025	62	71	69	84	87	373	
2025-2026	59	75	75	72	86	367	
2026-2027	61	72	79	78	74	364	
2027-2028	55	74	76	82	81	368	

Table 28 – Lincoln Elementary Projections EXPECTED (B) 2023/24 to 2027/28

Table 29 – Willard Elementary Projections EXPECTED (B) 2023/24 to 2027/28

	К	1	2	3	4	Total
2022-2023	37	62	66	82	65	312
2023-2024	44	52	67	70	85	318
2024-2025	50	59	57	71	73	310
2025-2026	52	65	64	61	74	316
2026-2027	46	67	70	68	64	315
2027-2028	48	61	72	74	71	326

Table 30 – Roosevelt Middle School Projections EXPECTED (B) 2023/24 to
2032/2033	

	5	6	7	8	Total
2022-2023	182	155	168	167	672
2023-2024	127	183	154	168	632
2024-2025	159	128	182	154	623
2025-2026	160	160	127	182	629
2026-2027	160	161	159	127	607
2027-2028	138	161	160	159	618
2028-2029	152	139	160	160	611
2029-2030	162	153	138	160	613
2030-2031	161	163	152	138	614
2031-2032	157	162	162	152	633
2032-2033	153	158	161	162	634

In the High (C) version the total school enrollment for each school is about the same as the highest average enrollment for the past eight years.

						<u> </u>
	К	1	2	3	4	Total
2022-2023	52	77	82	72	62	345
2023-2024	65	68	81	87	75	376
2024-2025	61	81	72	86	90	390
2025-2026	59	77	85	77	89	387
2026-2027	61	75	81	90	80	387
2027-2028	57	77	79	86	93	392

Table 31 – Lincoln Elementary Projections HIGH (C) 2023/24 to 2027/28

Table 32 – Willard Elementary Projections HIGH (C) 2023/24 to 2027/28

	К	1	2	3	4	Total
2022-2023	37	62	66	82	65	312
2023-2024	52	55	68	70	86	331
2024-2025	49	70	61	72	74	326
2025-2026	52	67	76	65	76	336
2026-2027	50	70	73	80	69	342
2027-2028	48	68	76	77	84	353

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	5	6	7	8	Total
2022-2023	182	155	168	167	672
2023-2024	133	190	161	171	655
2024-2025	167	141	196	164	668
2025-2026	170	175	147	199	691
2026-2027	171	178	181	150	680
2027-2028	155	179	184	184	702
2028-2029	183	163	185	187	718
2029-2030	176	191	169	188	724
2030-2031	177	184	197	172	730
2031-2032	177	185	190	200	752
2032-2033	171	185	191	193	740

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	К	1	2	3	4	5	6	7	8	Total
2022-2023	89	139	148	154	127	182	155	168	167	1329
2023-2024	80	113	145	152	157	127	181	153	168	1276
2024-2025	110	104	119	149	155	157	126	179	153	1252
2025-2026	111	134	110	123	152	155	156	124	179	1244
2026-2027	111	135	140	114	126	152	154	154	124	1210
2027-2028	88	135	141	144	117	126	151	152	154	1208
2028-2029	96	112	141	145	147	117	125	149	152	1184
2029-2030	98	122	118	145	148	147	116	123	149	1166
2030-2031	97	121	128	122	148	148	146	114	123	1147
2031-2032	99	123	127	132	125	148	147	144	114	1159
2032-2033	101	125	129	131	135	125	147	145	144	1182

Table 34 – District Projections by Grade LOW (A) 2023/24 to 2032/33

Table 35 – District Projections by Grade EXPECTED (B) 2023/24 to 2032/33

	К	1	2	3	4	5	6	7	8	Total
2022-2023	89	139	148	154	127	182	155	168	167	1329
2023-2024	102	117	148	155	159	131	183	154	168	1317
2024-2025	112	130	126	155	160	163	132	182	154	1314
2025-2026	111	140	139	133	160	164	164	131	182	1324
2026-2027	107	139	149	146	138	164	165	163	131	1302
2027-2028	103	135	148	156	152	142	165	164	163	1328
2028-2029	96	131	144	155	162	116	143	164	164	1275
2029-2030	103	124	140	151	161	164	117	142	164	1266
2030-2031	99	131	133	147	157	165	165	116	142	1255
2031-2032	101	127	140	140	153	165	166	164	116	1272
2032-2033	103	129	136	147	145	142	166	165	164	1297

Table 36 – District Projections by Grade HIGH (C) 2023/24 to 2032/33

	К	1	2	3	4	5	6	7	8	Total
2022-2023	89	139	148	154	127	182	155	168	167	1329
2023-2024	117	123	149	157	161	133	190	161	171	1362
2024-2025	114	151	133	158	164	167	141	196	164	1388
2025-2026	112	144	161	142	165	170	175	147	199	1415
2026-2027	111	145	154	170	149	171	178	181	150	1409
2027-2028	105	145	155	163	177	155	179	184	184	1447
2028-2029	98	139	155	164	170	183	163	185	187	1444
2029-2030	104	132	149	164	171	176	191	169	188	1444
2030-2031	100	138	142	158	171	177	184	197	172	1439
2031-2032	102	134	148	151	165	177	185	190	200	1452
2032-2033	104	136	144	157	158	171	185	191	193	1439

The actual annual projected number for each school by grade is in their respective tables and I've already described the basic manner for calculating them. But I would like to talk about the total enrollment at each school, focusing on the Average (B), which I believe is the most likely.

Projecting the enrollment numbers for the Middle School for the next five years can be done with some certainty because these students are already enrolled in one of the two elementary schools in the system. The unknown piece is how many new students will enter the school. This of course, is tricky and explains the low, average, high version of the estimates. Low is based on the past few years' negative enrollment; Average is continuing on with what has been normal and High is going back to the growth model that had been occurring seven or eight years ago.

Determining what the size of the incoming kindergarten class will be is the most complicated. The other numbers can be modeled based upon this number and the three variations of the low, average, and high class weights. For this we had to rely heavily on the population projections and their fluctuating numbers to determine likely entry class size.

In the Low (A) version we kept the ill effects on enrollment for another year, had some recovery from built up potential and then had it settle back to the low average.

In the Average (B) version we recovered from the built-up potential from Covid next year and for the next few years and then settled back to the average numbers. There are some fluctuations because of the fluctuations that we see in the population estimates for 0-4 and 5-9 year olds.

In the High (C) version we recover all of the lost potential from Covid in the next few years and then settle back down to the higher average numbers. There is still some fluctuations because of the population estimates fluctuations.

We expect the school district enrollment to be slightly less but very steady at about the 1,300 student level.

Concluding Remarks

With projections there are no guarantees and none of us can know the future. Who would have predicted the Covid pandemic or other disasters that have befallen us. We have tried to amass the best information available and use our best professional judgement and techniques to build the strongest model with the most reasonable scenarios included. There will always be unforeseeable events so these projections should be monitored and verified annually to make necessary alterations.

We hope that the projections and other demographic information in this report will be helpful to the District 90 Board of Education, administrators, teachers, and concerned citizens as you all plan for the future space and staff needs for your schools.

Katia Segre Cohen, MA GeoLytics, Inc., Branchburg, NJ October 2022