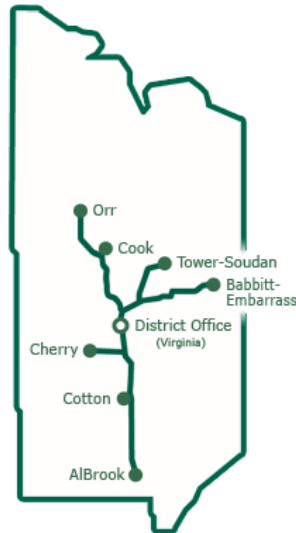


**Student Enrollment Projection  
for  
St. Louis County Schools (ISD 2142):  
AlBrook ~ Babbitt-Embarrass ~ Cherry  
~ Cook ~ Cotton ~ Orr ~  
Tower-Soudan**



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Prepared for Johnson Controls, Inc.

by

Applied Insights<sup>north</sup>

August 2008

**Student Enrollment Projection**  
**for**  
**St. Louis County Schools ( ISD 2142):**  
**AlBrook / Babbitt-Embarrass / Cherry / Cook / Cotton / Orr /**  
**Tower-Soudan**

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August 2008

Prepared for Johnson Controls, Inc.

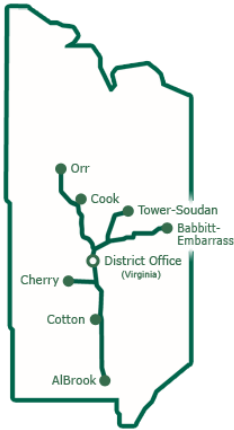
by

Applied Insights<sup>north</sup>

John Powers, Principal

181 Farley Lane /Duluth, Minnesota 55803

218-724-2332 / djpowers@cpinternet.com



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## Purpose

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The St. Louis County School District (ISD 2142) is undertaking an assessment of its physical plant as part of a strategic planning process to determine how the district proceeds to deliver quality educational opportunities across its sprawling jurisdiction. One part of that assessment is gaining an understanding of the likely near future enrollment levels.

Every school district in Minnesota is unique, but the qualities that make the St. Louis County School District unique greatly complicate delivery of education and planning for the future district:

- The district is one of three in Minnesota containing seven separate high schools.
- The seven high school enrollment areas are individually distinctive in terms of economic underpinnings, social interaction, relationship to regional communities, geographic size, and physical plant age and condition.
- The district adjoins 20 other public and tribal school districts. With open enrollment, the range of possible student flow in and out of the district is exceptionally multi-faceted.
- In terms of geography it is the largest district in Minnesota and requires 1.3 million transportation miles to bring its students to and from school each year.

Further complicating the situation is the unfolding of several major economic development projects that will have significant impact upon the region and the school district. This report attempts to quantify the magnitude of the impact of these projects on District enrollments even as the timing of all the projects undergoes constant revision.

This report presents projections for each of the District's seven high school enrollment areas. Background information and analyses are provided to support the projections and the assumptions upon which they are founded.

The enrollment figures presented in this report can be seen as the *potential* students likely to attend ISD 2142 schools under the assumptions provided. During the subsequent strategic planning phase of the process a number of "what if" scenarios will be devised and evaluated. Many of these scenarios will be founded on different assumptions that will impact future enrollment.



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## Projection Summary

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St. Louis County School District (ISD 2142) is evaluating its physical plant to determine what changes, if any, are needed to maintain an educationally functional, financially responsible, and attractive school system. One part of that assessment is gaining an understanding of the likely future enrollment levels.

One component of the context for this projection is the current regional trends in population and school enrollment. Six of the schools abutting ISD 2142 lost over 25% of their enrollment in the past ten years; only two increased and one was due to the addition of a new school (Mountain Iron-Buhl). Population declines have driven much of the enrollment losses – only two of 12 districts in St. Louis County are expected to gain population between 2000 and 2010. A slight rebound is expected over the next ten years with five districts projected to have minor gains in population. Part of that increase, though, will be fueled by an upsurge in births due to the presence of more women of child-bearing ages; this increase in births, which should continue through about 2015 and then stabilize, will impact incoming kindergarten classes.

In addition to the complicating factors of a sprawling district with seven distinctive high school enrollment areas and 20 adjoining districts, this enrollment projection is being done as several major economic development projects are unfolding at different rates of progress across the Iron Range.

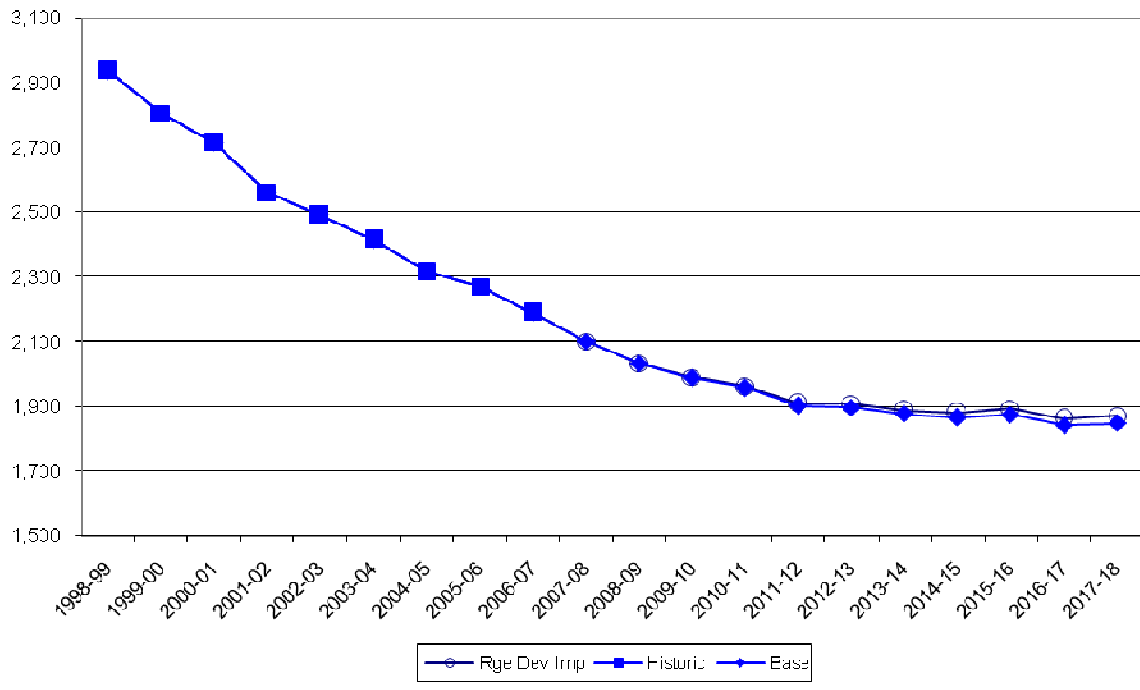
Fortunately, although many aspects of the developments remain unclear, most especially their timing, coordinated work by Range communities and organizations has provided excellent information regarding the likely impact of the developments in term of employment and housing. This information is used in this enrollment projection.

Given the potential magnitude of the regional development projects, this report presents two projections so as to more clearly show both existing enrollment dynamics and the likely impact of the new projects. The “Base Projection” is founded on current demographic conditions without factoring in the impact of the development projects. The purpose of this projection is to illustrate the district’s underlying enrollment dynamics.

The “Range Development Impact Projection” incorporates the impact of the most likely scenario for new regional development. This forecast impacts four of the district’s seven high school enrollment areas – Babbitt-Embarrass, Cherry, Cotton, and Tower-Soudan.

Figure 1 and Tables 1 and 2 summarize the Base and Range Development Impact enrollment projections for ISD 2142 through the 2017-18 school year.

**Fig. 1. Base & Range Development Projections of Kindergarten-Grade 12 Enrollment for ISD 2142, 1999-2018**



**Table 1. Projected St. Louis County School District (ISD 2142) Kg – Grade 12 Enrollment, Base and Range Development Impact Options to 2017-18 School Year**

(2007-08 is current year)

Year	Base Projection	Range Development Impact Projection
2007-08	2,101	2,101
2008-09	2,024	2,034
2009-10	1,988	1,990
2010-11	1,957	1,962
2011-12	1,902	1,909
2012-13	1,897	1,907
2013-14	1,876	1,888
2014-15	1,866	1,881
2015-16	1,880	1,893
2016-17	1,842	1,863
2017-18	1,848	1,872

It should be noted that Pre-Kindergarten enrollment is not included in these figures. First, Pre-Kindergarten was not provided in all past years, and, because attendance in Pre-Kindergarten is not required, participation can vary widely.

The Range Development Impact Projection includes these regional projects – Minnesota Power upgrade, Essar/Minnesota Steel, KeeTac/US Steel expansions, Mesabi Nugget, and PolyMet. All are assumed to be online with full employment by 2012, although the exact timing of PolyMet, which has large impact on ISD 2142, is still unclear and may be pushed back one to two years.

<b>Table 2. Projected St. Louis County School District (ISD 2142) Kindergarten – Grade 12 Enrollment by High School Enrollment Area</b>			
<b>High School Area</b>	<b>Current Year: 2007-08</b>	<b>Projected Enrollment in 2017-18</b>	
		<b>Base Projection</b>	<b>Range Development Impact Projection</b>
AlBrook	385	297	297
Babbitt-Embarrass	345	246	246
Cherry	330	270	279
Cook	402	361	367
Cotton	167	192	201
Orr	227	202	202
Tower-Soudan	245	280	280
<b>Total</b>	<b>2,101</b>	<b>1,848</b>	<b>1,872</b>

The impact of including the remaining two regional development projects – Franconia Minerals and Duluth Metals, both of which are on the eastern end of the Range – was calculated for the purposes of gaining perspective on potential future enrollments. The timing of these projects is particularly speculative at this time, but *if* they were to develop 5-10 years in the future their impact on ISD 2142 would likely be:

- Approximately 275 more students arriving with the new workers. Most (153) would be within Babbitt-Embarrass enrollment area and Tower-Soudan would gain 110. Cherry and Cotton likely would see six additional students each.
- Another 20 new kindergarten students each year for a period of 10-15 years. Babbitt-Embarrass will get 13 and Tower-Soudan should see seven.
- Given the likely timing of these two projects, assuming they come to fruition, this influx of new students would arrive just as enrollment in ISD 2142 begins to flatten out after the initial round of development impacts.

## Projection Assumptions

The following summarizes the assumptions used to create these enrollment projections:

- No change in school district or individual high school enrollment area boundaries.
- The most recent St. Louis County population forecast prepared by the State Demographers Office showing essentially no change between 2000 and 2020.
- Incoming kindergarten classes are based on projected births and each high school area's recent "capture rate" of corresponding births.
- Class retention rates based on historic trends for each high school area.

- Open enrollment, private, and home schooling dynamics remain unchanged.
- Base economic conditions remain unchanged; relative to Ainsworth plant in Cook, the plant is assumed to reopen with no loss of employment.
- No adjustment made for short-term impact of students arriving with construction workers for major regional economic development projects.
- Range Development Impact Projection based on the “Medium Growth Scenario” described in recent regional housing needs assessment.
- No changes in adjacent school districts (e.g., consolidation, high school closures, aggressive open enrollment marketing efforts, etc.) that would significantly alter inter-district dynamics.

## Conclusions

Among the conclusions that can be drawn from these projections are:

- Over the past decade ISD 2142’s enrollment has declined by 28% from 2,914 to 2,101 students (K-12).
  - Much of the decline has been driven by graduating classes being consistently replaced by much smaller incoming kindergarten classes.
  - ISD 2142 loses a net of more than 400 students each year through open enrollment.
- Under both the Base and Range Development Impact projections, district enrollment will decline 9-10% over the next ten years.
- Although the Range economic development projects will create new jobs, the impact on school enrollment is reduced due to the high number of unemployed or underemployed local workers who will absorb most of the new jobs. The number of new incoming households, especially in the Babbitt-Embarrass and Tower-Soudan areas is low.
- Critical changes will occur *within* the district – currently the district has three schools under 300 students; by 2017-18 there will be six with two of them having just 200 students.
  - Cook will remain the largest school but will lose over 30 students;
  - Tower-Soudan will gain nearly 35 students but will have critically small upper grade sizes in the near term time period.
  - Cotton will gain just over 30 students, but for three consecutive years (2010/11 to 2012/13) will have just 36-41 students in grades 9-12 combined.
  - Orr will lose roughly 20 students and will join as Cotton as the district’s two smallest schools;
  - Babbitt-Embarrass will lose nearly 100 students.
  - Cherry will lose 50 students;
  - AlBrook experiences the second largest reduction losing almost 90 students.

For the purposes of this facility assessment and planning effort, the Range Development Impact Projection will be used.

## Two Key Issues

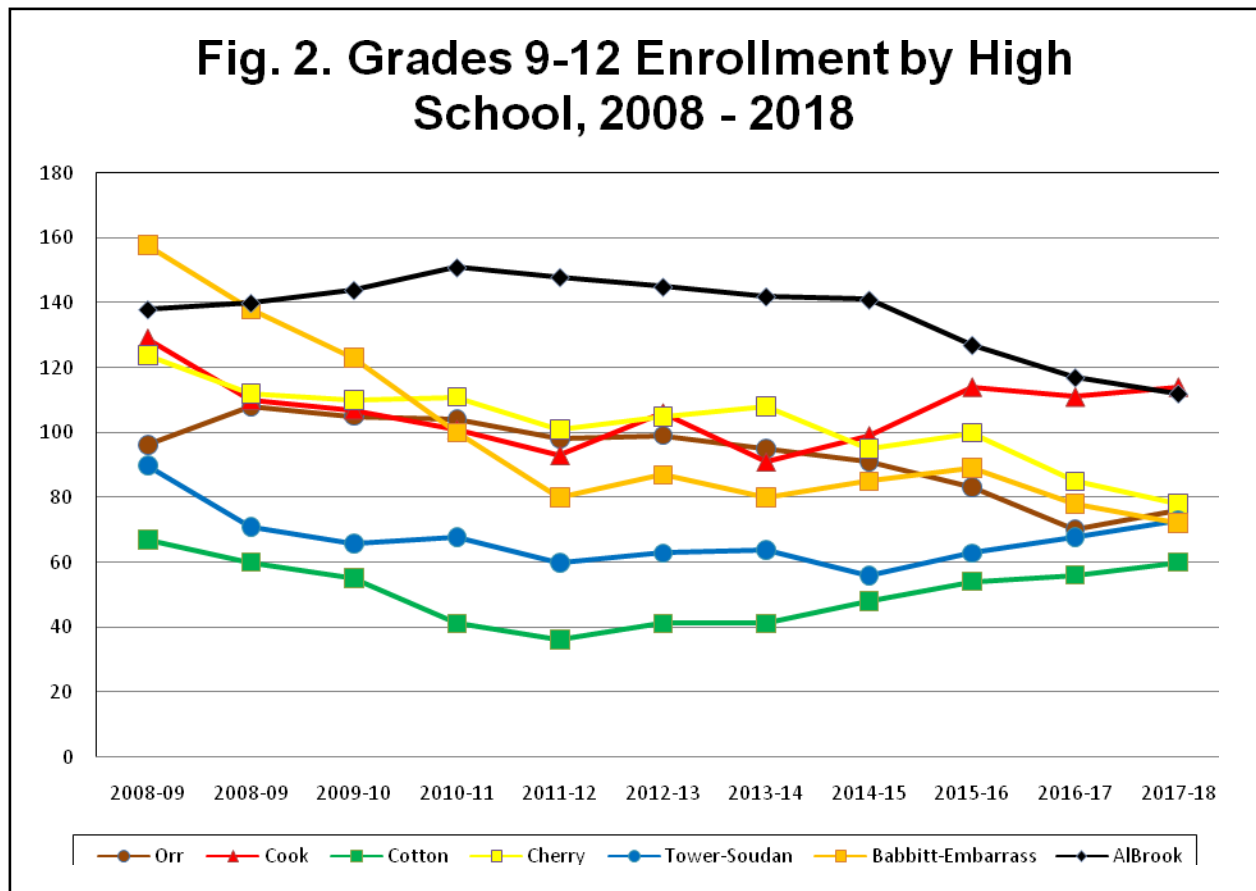
Two issues are central to the District’s current and projected future enrollment. The first concerns the high net loss of students through open enrollment to adjacent districts. As summarized in Table 3 the District in general, and two high school areas in particular, are losing large numbers of potential students. And, as is explained later in the report, these losses accelerate in the upper grades.

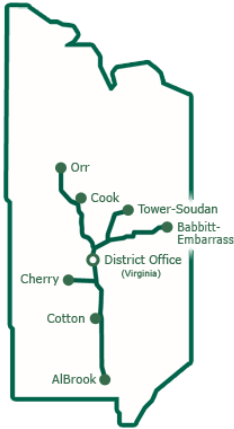
That trend leads to the second critical issue. As highlighted in Figure 2, within three years Cotton for sure and quite possibly Tower-Soudan will face seriously small class sizes in the upper grades. In Cotton’s situation the total grade 9-12 enrollment will be roughly 40

students, which levels will exist for several years. Tower-Soudan's situation is less severe, but there the total grade 9-12 enrollment only will be in the 60-70 student range. However, couple the existing pattern of upper grade open enrollment out of the district to ever smaller classes (and, hence, less of an opportunity to provide choices in electives and extra-curricular activities), the question of the near-term viability of these high schools must be posed.

	AIBrook	Babbitt-Embarass	Cherry	Cook	Cotton	Orr	Tower - Soudan	District Total
Students OE Out	134	52	60	17	137	19	58	477
% of Area's Total Enrollment Pool	25%	12%	15%	4%	41%	7%	19%	18%

Source: ISD 2142; analysis by Applied Insights<sup>north</sup>





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## Projection Details

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### Two Projections Made / One Chosen

ISD 2142 is situated in an area that is undergoing significant economic development that will greatly impact community development, population change, and student enrollment across much of Northeastern Minnesota. Consequently, the consultant undertook two projections to understand and analyze the likely future enrollment for the District.

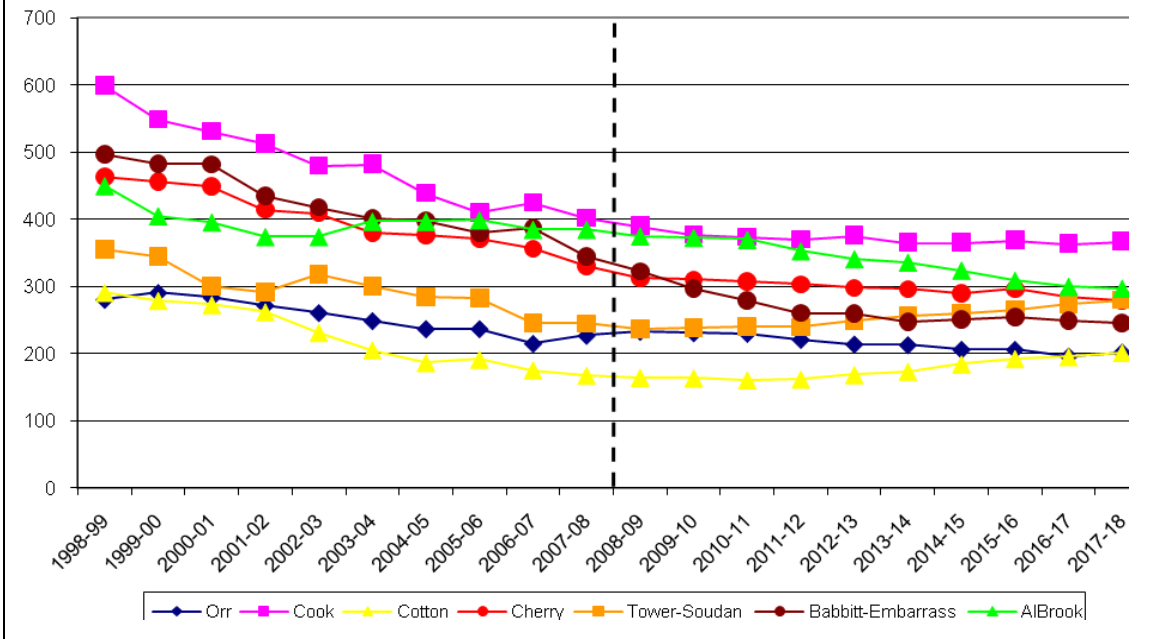
A “Base Projection” was done using current demographic conditions without factoring in the impact of the development projects. This projection illustrated the district’s underlying enrollment dynamics.

The “Range Development Impact Projection” incorporates the impact of one scenario for new regional development. This forecast impacts four of the district’s seven high school enrollment areas – Babbitt-Embarrass, Cherry, Cotton, and Tower-Soudan. The development scenario used is the “medium” growth model, which many regional development personnel believe is the one likely to occur through the near future.

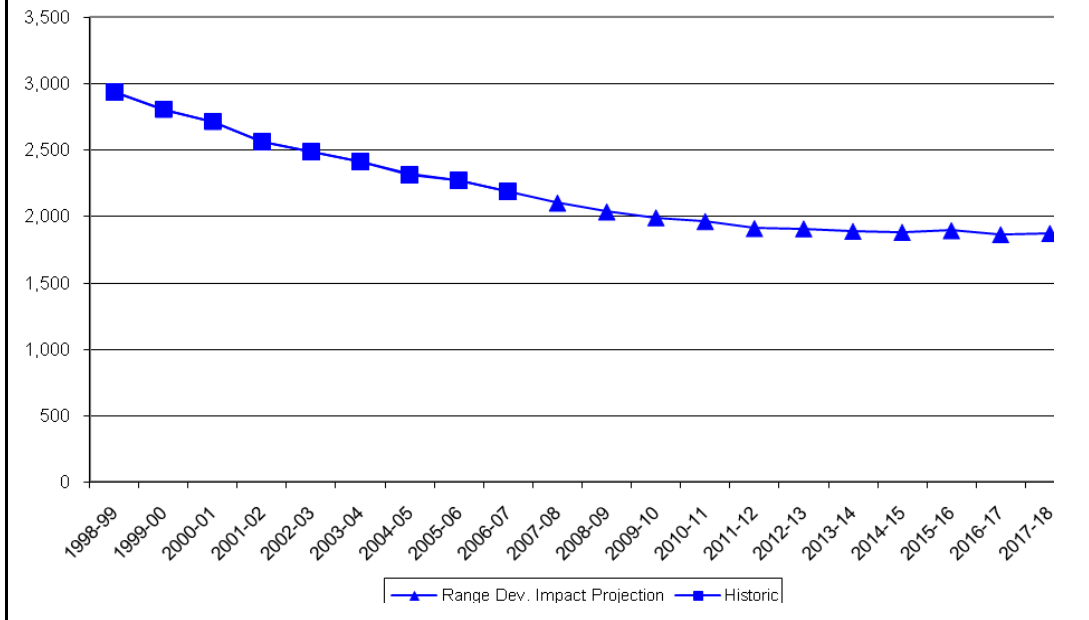
**Because the difference between the two projections proved to be minimal, this report only presents the Range Development Impact Project.**

Figures 3a-b present the Range Development Impact Projection, which shows historic and projected enrollments for each high school area and the district as a whole. The appendices provide details on methodology and the inputs for both projections.

**Fig. 3a. Past & Range Development Impact  
Projection of ISD 2142 Kg - 12 Enrollment by HS  
Area, 1999-2018**



**Fig. 3b. Past & Range Development Projection  
of ISD 2142 Total Kindergarten-Grade 12  
Enrollment, 1999-2018**



## Range Development Impact Projection

The Range Development Impact Projection integrates likely changes in population due to new developments across the Range. The basic assumptions for this projection are (see Appendix B for detailed discussion):

- No change in school district or high school enrollment boundaries.
- The most recent St. Louis County population forecast prepared by the State Demographers Office showing essentially no change from 2000-2020.
- Incoming kindergarten classes are based on projected births and each high school area's recent "capture rate" of corresponding births in their respective enrollment areas.
- Class retention rates based on historic trends for each high school area.
- The current year's pre-kindergarten enrollment relative to subsequent kindergarten classes is used to guide future enrollment.
- Open enrollment, private, and home schooling dynamics remain unchanged.
- No adjustment is made for short- or long-term impact of students arriving with construction workers for major regional economic development projects.
- No changes in adjacent school districts (e.g., consolidation, high school closures, aggressive open enrollment marketing efforts, etc.) that would significantly alter inter-district dynamics.
- The "medium" growth scenario of a recent Iron Range housing impact analysis is used to estimate number of incoming households.
- Estimates are made on the number of new students arriving with incoming full-time workers, and, ongoing increases to future kindergarten classes due to higher birth levels.
- Allocation of new households and students are based upon current distribution of households within project area. It is determined that AlBrook and Orr will not see any measurable impact of the development.

Tables 4a-h present details for the Range Development Impact Projection. Included with the projections are estimates of the number of students living within each area that open enroll out of the district or are being home schooled, and, the total "pool" of students within each area (sum of enrolled in ISD 2142, open enrolled out of the district, and home schooled).

<b>Table 4a. ALBROOK HIGH SCHOOL AREA: Range Development Impact Projection to 2017-18 School Year</b>											
<b>Grade Level</b>	<b>22007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
PK	5	5	5	6	6	6	6	6	6	6	6
K	17	16	16	16	17	17	17	17	18	18	18
1	22	20	19	19	19	20	20	20	20	21	21
2	29	22	20	19	19	19	20	20	20	20	21
3	23	29	22	20	19	19	19	20	20	20	20
4	28	23	29	22	20	19	19	19	20	20	20
5	33	28	23	29	22	20	19	19	19	20	20
6	30	34	29	24	30	23	21	20	20	20	21
7	29	33	37	32	26	33	25	23	22	22	22
8	36	30	34	38	33	26	34	25	23	22	22
9	41	37	31	35	39	34	27	35	26	24	23
10	30	42	38	32	36	40	35	28	36	26	24
11	30	31	44	40	33	38	42	36	29	38	27
12	37	30	31	44	40	33	38	42	36	29	38
Kg	17	16	16	16	17	17	17	17	18	18	18
Gr 1 - 5	135	122	113	109	99	97	97	98	99	101	102
Gr 6 - 8	95	97	100	94	89	82	80	68	65	64	65
Gr 9 - 12	138	140	144	151	148	145	142	141	127	117	112
PK – 12	390	380	378	376	359	347	342	330	315	306	303
Kg - 12	385	375	373	370	353	341	336	324	309	300	297

<b>Estimated Number of K-12 Open Enrolled Out (OEO) + Home Schooled (HS) Students Living Within Enrollment Area, and, Estimated Total Student Pool in Area</b>											
<b>K-12</b>	<b>22007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
OEO/HS	158	154	153	152	145	140	138	133	127	123	122
Pool	543	529	526	522	498	481	474	457	436	423	419

<b>Table 4b. BABBITT-EMBARRASS HIGH SCHOOL AREA: Range Development Impact Projection to 2017-18 School Year</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
PK	5	3	3	3	3	3	3	3	3	3	3
K	15	20	20	20	20	20	21	20	21	21	21
1	21	15	20	20	20	20	20	21	20	21	21
2	18	19	14	18	18	18	18	18	19	18	19
3	23	17	18	13	17	17	17	17	17	18	17
4	27	26	19	21	15	19	19	19	19	19	21
5	17	27	26	19	21	15	19	19	19	19	19
6	14	16	26	25	18	20	14	18	18	18	18
7	32	14	17	27	26	19	21	14	19	19	19
8	20	31	14	17	26	25	19	21	14	19	19
9	36	19	30	14	17	25	24	19	20	14	19
10	37	36	19	30	14	17	25	24	19	20	14
11	45	37	36	19	30	14	17	25	24	19	20
12	40	46	38	37	19	31	14	17	26	25	19
Kg	15	20	20	20	20	20	21	20	21	21	21
Gr 1 - 5	106	104	97	91	91	89	93	94	94	95	97
Gr 6 - 8	66	61	57	69	70	64	54	53	51	56	56
Gr 9 - 12	158	138	123	100	80	87	80	85	89	78	72
PK – 12	350	326	300	283	264	263	251	255	258	253	249
Kg - 12	345	323	297	280	261	260	248	252	255	250	246

<b>Estimated Number of Open Enrolled Out (OEO) + Home Schooled (HS) Students Living Within Enrollment Area, and, Estimated Total Student Pool in Area</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
OEO/HS	83	78	71	67	63	63	60	61	61	60	59
Pool	428	401	368	347	324	323	308	313	316	313	305

<b>Table 4c. CHERRY HIGH SCHOOL AREA: Range Development Impact Projection to 2017-18 School Year</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
PK	8	7	7	7	7	7	7	7	7	7	7
K	18	24	25	25	25	25	25	25	25	25	25
1	21	16	22	23	23	23	23	23	23	23	23
2	14	21	16	22	23	23	23	23	23	23	23
3	27	14	20	16	21	22	22	22	22	22	22
4	31	26	14	20	16	20	21	21	21	21	21
5	17	32	27	15	21	17	21	22	22	22	22
6	28	18	33	28	16	22	18	22	23	23	23
7	23	26	17	31	26	15	20	17	20	21	21
8	27	23	26	17	31	26	15	20	17	20	21
9	29	31	26	30	19	35	30	17	23	19	23
10	27	27	29	24	28	17	32	28	16	21	17
11	27	28	28	30	25	29	18	33	29	17	22
12	41	26	27	27	29	24	28	17	32	28	16
Kg	18	24	25	25	25	25	25	25	25	25	25
Gr 1 - 5	110	109	99	96	104	105	110	111	111	111	111
Gr 6 - 8	78	67	76	76	73	63	53	59	60	64	65
Gr 9 - 12	124	112	110	111	101	105	108	95	100	85	78
PK - 12	338	319	317	315	310	305	303	297	303	292	286
Kg - 12	330	312	310	308	303	298	296	290	296	285	279

<b>Estimated Number of Open Enrolled Out (OEO) + Home Schooled (HS) Students Living Within Enrollment Area, and, Estimated Total Student Pool in Area</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
OEO/HS	71	67	67	66	65	64	64	62	64	61	60
Pool	401	379	377	374	368	362	360	352	356	346	339

<b>Table 4d. COOK HIGH SCHOOL AREA: Range Development Impact Projection to 2017-18 School Year</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
PK	4	4	4	4	4	4	4	4	4	4	4
K	33	28	28	29	28	29	29	29	29	29	29
1	38	30	26	26	27	26	27	27	27	27	27
2	34	39	31	27	27	28	27	28	28	28	28
3	24	37	42	34	29	29	30	29	30	30	30
4	35	23	35	40	32	27	27	28	27	28	28
5	24	36	24	36	42	33	28	28	29	28	29
6	27	24	36	24	36	42	33	28	28	29	28
7	38	26	23	34	23	34	40	31	27	27	28
8	20	37	25	22	33	22	33	38	30	26	26
9	30	19	36	24	21	32	21	32	37	29	25
10	27	27	17	33	22	19	29	19	29	34	26
11	37	27	27	17	33	22	19	29	19	29	34
12	35	37	27	27	17	33	22	19	29	19	29
Kg	33	28	28	29	28	29	29	29	29	29	29
Gr 1 - 5	155	165	158	163	157	143	139	140	141	141	142
Gr 6 - 8	85	87	84	80	92	98	106	97	85	82	82
Gr 9 - 12	129	110	107	101	93	106	91	99	114	111	114
PK - 12	406	394	381	377	374	380	369	369	373	367	371
Kg - 12	402	390	377	373	370	376	365	365	369	363	367

<b>Estimated Number of Open Enrolled Out (OEO) + Home Schooled (HS) Students Living Within Enrollment Area, and, Estimated Total Student Pool in Area</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
OEO/HS	37	36	35	34	34	35	34	34	34	33	34
Pool	439	426	412	407	404	411	399	399	403	396	401

<b>Table 4e. COTTON HIGH SCHOOL AREA: Range Development Impact Projection to 2017-18 School Year</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
PK	2	2	2	2	2	2	2	2	2	2	2
K	14	13	14	14	14	14	14	15	15	15	15
1	13	14	13	14	14	14	14	14	15	15	15
2	12	14	15	14	15	15	15	15	15	16	16
3	10	12	14	15	14	15	15	15	15	15	16
4	14	11	13	15	16	15	16	16	16	16	16
5	9	13	10	12	14	15	14	15	15	15	15
6	6	9	13	10	12	14	15	14	15	15	15
7	11	6	10	14	11	13	15	16	15	16	16
8	11	12	6	11	15	12	14	16	17	16	17
9	14	10	11	6	10	14	11	13	15	16	15
10	21	15	10	12	6	10	15	12	14	16	17
11	15	20	14	9	11	6	9	14	11	13	15
12	17	15	20	14	9	11	6	9	14	11	13
Kg	14	13	14	14	14	14	14	15	15	15	15
Gr 1 - 5	58	64	65	70	73	74	74	75	76	77	78
Gr 6 - 8	28	27	29	35	38	39	44	46	47	47	48
Gr 9 - 12	67	60	55	41	36	41	41	48	54	56	60
PK – 12	169	166	165	162	163	170	175	186	194	197	203
Kg - 12	167	164	163	160	161	168	173	184	192	195	201

<b>Estimated Number of Open Enrolled Out (OEO) + Home Schooled (HS) Students Living Within Enrollment Area, and, Estimated Total Student Pool in Area</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
OEO/HS	164	161	160	157	158	165	170	181	189	191	197
Pool	331	325	323	317	319	333	343	365	381	386	398

<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
PK	0	2	2	2	2	2	2	2	2	2	2
K	10	12	12	12	12	12	12	12	12	12	12
1	7	11	13	13	13	13	13	13	13	13	13
2	14	7	11	13	13	13	13	13	13	13	13
3	8	13	7	10	12	12	12	12	12	12	12
4	18	8	13	7	10	12	12	12	12	12	12
5	13	19	8	14	7	11	13	13	13	13	13
6	15	12	18	8	13	7	10	12	12	12	12
7	18	24	19	29	13	21	11	16	19	19	19
8	28	19	25	20	30	14	22	12	17	20	20
9	28	29	20	26	21	31	15	23	13	18	21
10	28	31	32	22	29	23	34	17	25	14	20
11	23	26	28	29	20	26	21	31	16	23	13
12	17	22	25	27	28	19	25	20	29	15	22
Kg	10	12	12	12	12	12	12	12	12	12	12
Gr 1 - 5	60	58	52	57	55	61	63	63	63	63	63
Gr 6 - 8	61	55	62	57	56	42	43	40	48	51	51
Gr 9 - 12	96	108	105	104	98	99	95	91	83	70	76
PK - 12	227	235	233	232	223	216	215	208	208	198	204
Kg - 12	227	233	231	230	221	214	213	206	206	196	202

<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
OEO/HS	33	34	34	33	32	31	31	30	30	28	29
Pool	260	267	265	263	253	245	244	236	236	224	231

<b>Table 4g. TOWER-SOUDAN HIGH SCHOOL AREA: Range Development Impact Projection to 2017-18 School Year</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
PK	3	3	3	3	3	3	3	3	3	3	3
K	20	22	21	21	22	22	22	23	23	23	23
1	24	20	22	21	21	22	22	22	23	23	23
2	12	25	21	23	22	22	23	23	23	24	24
3	17	12	25	21	23	22	22	23	23	23	24
4	15	17	12	25	21	23	22	22	23	23	23
5	18	15	18	12	26	22	24	23	23	24	24
6	22	18	15	18	12	25	21	23	22	22	23
7	16	22	18	15	18	12	25	21	23	22	22
8	11	15	21	17	15	17	12	24	20	22	21
9	27	11	15	21	17	15	17	12	24	20	22
10	19	25	10	14	20	16	14	16	11	23	19
11	18	18	24	10	13	19	15	13	15	10	22
12	26	17	17	23	10	13	18	15	13	15	10
Kg	20	22	21	21	22	22	22	23	23	23	23
Gr 1 - 5	86	89	98	102	113	111	113	113	115	117	118
Gr 6 - 8	49	55	54	50	45	54	58	68	65	66	66
Gr 9 - 12	90	71	66	68	60	63	64	56	63	68	73
PK - 12	248	240	242	244	243	253	260	263	269	277	283
Kg - 12	245	237	239	241	240	250	257	260	266	274	280

<b>Estimated Number of Open Enrolled Out (OEO) + Home Schooled (HS) Students Living Within Enrollment Area, and, Estimated Total Student Pool in Area</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
OEO/HS	68	66	66	67	67	69	71	72	74	76	78
Pool	313	303	305	308	307	319	328	335	340	350	358

<b>Table 4h. ST. LOUIS COUNTY SCHOOL DISTRICT TOTAL: Range Development Impact Projection to 2017-18 School Year</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
PK	27	28	26	27	27	27	28	28	27	27	27
K	127	135	136	137	138	139	140	141	143	143	143
1	146	126	135	136	137	138	139	140	141	143	143
2	133	147	128	136	137	138	139	140	141	142	144
3	132	134	148	129	135	136	137	138	139	140	141
4	168	134	135	150	130	135	136	137	138	139	141
5	131	170	136	137	153	133	138	139	140	141	142
6	142	131	170	137	137	153	132	137	138	139	140
7	167	151	141	182	143	147	157	138	145	146	147
8	153	167	151	142	183	142	149	156	138	145	146
9	205	156	169	156	144	186	145	151	158	140	148
10	189	203	155	167	155	142	184	144	150	154	137
11	195	187	201	154	165	154	141	181	143	149	153
12	213	193	185	199	152	164	151	139	179	142	147
Kg	127	141	136	137	138	139	140	141	143	143	143
Gr 1 - 5	710	711	682	688	692	680	689	694	699	705	711
Gr 6 - 8	462	449	462	461	463	442	438	431	421	430	433
Gr 9 - 12	802	739	710	676	616	646	621	615	630	585	585
PK - 12	2,128	2,062	2,016	1,989	1,936	1,934	1,916	1,909	1,920	1,890	1,899
Kg - 12	2,101	2,034	1,990	1,962	1,909	1,907	1,888	1,881	1,893	1,863	1,872

<b>Estimated Number of Open Enrolled Out (OEO) + Home Schooled (HS) Students Living Within District and, Estimated Total Student Pool in District</b>											
<b>Grade Level</b>	<b>2007-08</b>	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
OEO/HS	614	596	586	576	564	567	568	573	579	572	579
Pool	2,715	2,630	2,576	2,538	2,473	2,474	2,456	2,454	2,472	2,435	2,451

## Points to Ponder

This enrollment projection is made within the context of a bewildering array of forces that could easily send the district into wildly divergent directions. The projection depends upon assumptions that seem appropriate at this time. Yet, there are a number of factors that cannot be ignored in the subsequent planning process; District decisions and plans may affect these factors and consequently alter the enrollment projection.

- Open enrollment is a wild card that can be played both ways. Right now ISD 2142 loses a net of over 400 students a year to neighboring districts. As more of the District's schools become smaller and the ability to offer a wide choice of classes, especially in the upper grades, is diminished, the outflow might increase. On the other hand, the adjoining districts are also losing students; it is possible that one or more of them loses viability and the flow shifts to ISD 2142's favor. Aggressive programming by ISD 2142 could also cause a shift of students to the district.
- Although Cotton is projected to increase its total enrollment over the ten-year period, there is a critical three-year span where the combined enrollment of grades 9-12 will range from 36 to 41 students. At Tower-Soudan the comparable enrollment will be in the 60-70 range. These low levels of high school enrollment will make it exceptionally difficult to provide competitive educational opportunities for these students. As suggested in the previous bullet, parents may opt to open enroll their students to larger schools in order for their children to have greater choices for electives and sports. It is not inconceivable that Cotton's upper grade programming could cease altogether as could Tower-Soudan's.
- The dramatically increased cost of transportation eventually will impact where people will live. For the foreseeable future, say the next 10 years, the impact will be negligible as inertia of place will tend to keep populations distributed as they are today. However, if high transportation costs persist, it is likely trends will favor centralization into communities versus low density rural living.
- The projections are made for the existing schools and enrollment boundaries. If these were to change, the number of potential students would remain the same but how parents/students would decide to attend schools is unknown.
- The first round of regional mining projects will impact the overall Iron Range region but as noted in this report they'll have minor impacts on ISD 2142's enrollment levels. However, the second round of projects involving Franconia and Duluth Minerals would impact Babbitt-Embarrass and Tower-Soudan – Babbitt-Embarrass could see a net gain of 50 students over its current enrollment and Tower-Soudan roughly another 100 students. Both schools would be at or over 400 students. As of this moment, neither project has a firm schedule for coming online.
- Open enrollment plays a role in the impact of the regional mining projects on schools. The assumption used in this report is that in selecting where they live households have considered school districts and will attend the district in which they live. Clearly, this may not be the case. For instance, the northern townships of the Cotton enrollment area, where some of the new mining households will likely locate, already has a large open enrollment loss to Eveleth-Gilbert; the new households could follow the lead of their neighbors – opt for a rural lifestyle but send their children to the larger, urban school. This situation also applies to Cook, Cherry, Tower-Soudan, and Babbitt-Embarrass.



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## Appendix A. Methodology

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This chapter describes the information and process used to develop the enrollment projections.

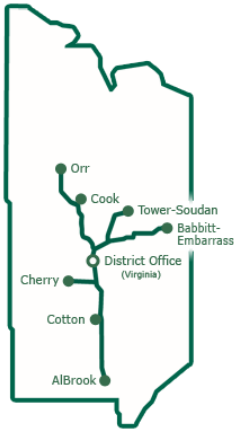
### Population Dynamics

A review of population dynamics is used to: identify probable direction and magnitude of population change within the District, and, estimate the sizes of incoming kindergarten classes. This review is based upon published population projections produced by the Minnesota State Demographic Center, U.S. Census Bureau 2000 census and subsequent annual estimates, and Minnesota Department of Health birth statistics.

A massive complicating factor in this particular projection is the extent of unknown impacts from the impending range development. Fortunately, there is solid information just emerging on the probable scope of these projects. What is difficult is allocating the impacts to specific geographic areas and fixing their timing. The projection offered in this report makes a number of assumptions in this regard, which assumptions have been reviewed with individuals knowledgeable of regional dynamics and who concur that the assumptions are reasonable.

### Historic Enrollment Patterns

The single most important predictor of future enrollments is the dynamics of the existing enrollment viewed in terms of recent trends in classes shifting from one grade into the next. Assuming no major changes in key factors, recent trends in school enrollment effectively summarize the net relationship of such factors as economic activity, population change, birth rates, and open enrollment.



## Appendix B. Population Factors

This chapter reviews population trends and projections for St. Louis County and the ISD 2142 enrollment areas with particular attention on incoming kindergarten classes, and, the impact of Iron Range development projects.

### Trends & Projections

The Minnesota State Demographic Center periodically publishes projections of population for Minnesota and counties.<sup>1</sup> The most recent projection was published in June 2007.

Among the highlights of the projection for the state and region are:

- Minnesota's population is expected to grow from 5,192,122 in 2005 to 5,943,240 by the year 2020.
- The Twin Cities suburbs and the Rochester and St. Cloud regions are expected to show the most growth during this period. The lakes areas of central Minnesota are also expected to show substantial growth. Twenty-eight counties, mostly in western and southwestern Minnesota will decline, as will the core counties of the Twin Cities.
- Across the state births are expected to steadily rise until 2015 and remain relatively level. Birth rates are expected to remain steady, so the increase in births will be due to an increase in the number of women of childbearing age.
- The seven-county region of northeastern Minnesota is expected to increase from 325,357 in 2005 to 340,200 by 2020.

Table B-1 shows the expected change in population for St. Louis County and ISD 2142 in whole and by high school enrollment area.

<sup>1</sup> Minnesota Planning State Demographic Center, "Minnesota Population Projections 2005-2035", June 2007.

Area	Population			Percent Change	
	2000	2010	2020	2000 - 2010	2010 - 2020
St. Louis County	200,584	197,998	200,545	-1.3%	1.3%
ISD 2142 Total	17,964	17,122	17,414	-4.7%	1.7%
AlBrook Area	2,396	2,378	2,456	-0.7%	3.3%
Babbitt-Embarrass Area	2,981	2,732	2,701	-8.4%	-1.1%
Cook Area	2,730	2,451	2,374	-10.2%	-3.2%
Cotton Area	2,727	2,584	2,657	-5.2%	2.8%
Cherry	2,518	2,320	2,262	-7.8%	-2.5%
Orr Area	1,803	1,798	1,867	-0.3%	3.8%
Tower-Soudan Area	2,809	2,859	3,098	1.8%	8.4%

Source: Minnesota State Demographic Center; Applied Insights<sup>north</sup>

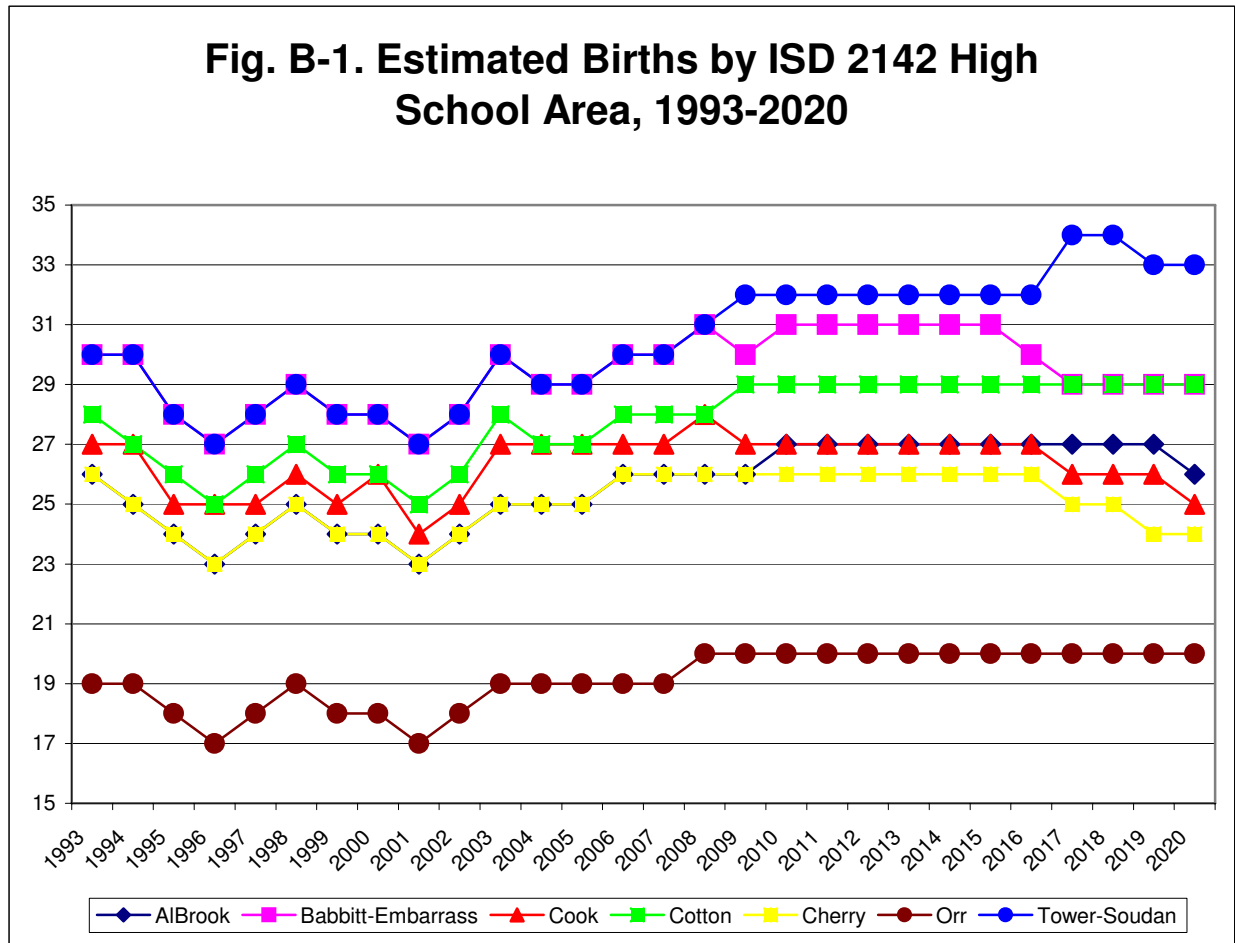
Area	Population			Percent Change	
	2000	2010	2020	2000-10	2010-20
Chisholm	5,771	5,377	5,203	-6.8%	-3.2%
Ely	5,592	5,344	5,314	-4.4%	-0.6%
Eveleth-Gilbert	9,023	8,466	8,244	-6.2%	-2.6%
Floodwood	1,774	1,786	1,841	0.7%	3.1%
Hibbing	18,004	17,020	16,582	-5.5%	-2.6%
Hermantown	9,923	12,553	14,206	26.5%	13.2%
Mesabi East	7,803	6,957	6,718	-10.8%	-3.4%
Mtn Iron-Buhl	4,723	4,466	4,370	-5.4%	-2.1%
Proctor	9,473	9,309	9,455	-1.7%	1.6%
Virginia	11,617	10,904	10,703	-6.1%	-1.8%
Duluth	95,446	94,999	96,504	-0.5%	1.6%
Nett Lake	272	248	249	-8.8%	0.4%

## Incoming Kindergarten Classes

A critical enrollment factor is estimating the size of incoming kindergarten classes. The number of births basically drives incoming kindergarten classes five years prior to the class year.

According to the State Demographic Center, “Births [in Minnesota] are projected to rise steadily between now and 2015” after which time there will be a decline. This short-term growth is attributed to anticipated greater numbers of women of childbearing age. However, this trend, while loosely reflected across the state, will vary with most of the growth expected in the Twin Cities suburban area; rural areas will see steady birth rates or declines in them. Northeastern Minnesota is expected to have a slight increase but not at the pace of the suburban communities.

Figure B-1 shows the estimated number of births by high school area within ISD 2142 for recent years and projected to 2020 (not including any increase due to Range Development projects). The rural decline in births noted in the state report is seen beginning in 2019.



Note: Births were distributed according to each area’s percentage of the county’s population.

Births within an enrollment area represent the pool of potential pre-kindergarten and kindergarten students. However, due to home schooling, private schools, and open enrollment not all students in a pool attend the associated school. Open enrollment also means that children outside of a given school area may opt to attend that school. Table B-3 shows the “capture rate” of area births in the corresponding kindergarten classes (five years after the births) by ISD 2142 high school area.

Table B-3. Kindergarten Capture Rates in ISD 2142, 2001 - 2007								
Births <sup>1</sup>	2001	2002	2003	2004	2005	2006	2007	
AlBrook	23	24	25	24	24	23	24	
Babbitt-Embarrass	27	28	29	28	28	27	28	
Cook	25	25	26	25	26	24	25	
Cotton	25	26	27	26	26	25	26	
Cherry	23	24	25	24	24	23	24	
Orr	17	18	19	18	18	17	18	
Tower-Soudan	27	28	29	28	28	27	28	
District	167	173	180	173	174	166	173	
<b>Kg Class</b>								
AlBrook	20	34	26	29	27	14	17	
Babbitt-Embarrass	20	23	27	27	19	22	15	
Cook	27	27	30	21	39	38	33	
Cotton	9	9	12	6	12	10	14	
Cherry	27	17	27	27	21	26	18	
Orr	14	12	16	9	15	6	10	
Tower-Soudan	24	22	18	17	13	24	20	
District	141	144	156	136	146	140	127	
<b>Capture Rate</b>								<b>Forecast<sup>2</sup></b>
AlBrook	87%	142%	104%	121%	113%	61%	71%	66%
Babbitt-Embarrass	74%	82%	93%	96%	68%	81%	54%	68%
Cook	108%	108%	115%	84%	150%	158%	132%	102%
Cotton	36%	35%	44%	23%	46%	40%	54%	47%
Cherry	117%	71%	108%	113%	88%	113%	75%	94%
Orr	82%	67%	84%	50%	83%	35%	56%	62%
Tower-Soudan	89%	79%	62%	61%	46%	89%	71%	80%
District	84%	83%	87%	79%	84%	84%	73%	

<sup>1</sup>Births have been lagged five years to correspond with appropriate kindergarten class year; that is births shown in 2001 occurred in 1996.

<sup>2</sup>Rates used for projections are averages of past three years except for Cook and Orr, which use ten and five year averages, respectively.

## Impact of Range Development Projects

The Iron Range is at the beginning phase of a major economic development rejuvenation fueled by upwards of eight large projects several of which are located within the boundaries of the St. Louis County School District. These projects will impact communities, population levels, and school enrollments. However, the scope and timing of these impacts is the subject of intense investigation and speculation.

This enrollment projection uses the most recent analyses for estimating the impact on ISD 2142 near future enrollments. A number of assumptions on data and timing are critical to the projections. The following narrative highlights the information and assumptions used in the projections.

### **Ainsworth Plant Closure**

The Ainsworth OSB plant near Cook is currently shutdown with just over 140 workers laid off. According to plant personnel, the current understanding is that the plant will be reopened but not until the US housing market rebounds most likely in late 2009 to early 2010. It seems that most of the laid off workers have remained in the area for the time being. The assumption used in the projection is that the plant reopens.

However, if the plant closes and is not replaced by another operation, then it can be assumed that most workers would leave the area seeking employment. Some may find jobs in the expanding mining industry, which would accordingly diminish the impact of the incoming facilities. The scale of the out migration can be estimated from the general location of workers (based on information provided by plant personnel): 39 in the Britt, Virginia, Mountain Iron area; 28 from Cook (probably includes Orr, too); 17 from Tower-Soudan; 4 from Zim; rest unknown.

In addition, the complete closure of the plant could mean the loss of logging jobs as well.

### **Iron Range Projects**

The Range Readiness Initiative effort, which is a joint effort by twelve regional governments and development agencies, retained the firm of Bonestroo to evaluate future housing needs generated by the development projects. Bonestroo presented its findings at a June 24 conference in Grand Rapids. The company's report, "Iron Range Housing: Planning for Growth" (June 24, 2008) presents a wealth of information on population and housing across the Iron Range and offers the findings of a detailed model attempting to estimate the number and general location of new housing. Among the information sources used by Bonestroo were several economic impact reports prepared by the University of Minnesota – Duluth for the various projects.

Bonestroo's housing needs model analyzed five geographic sub-regions across the range, four of which directly impact St. Louis County Schools. The model was developed for three growth scenarios – Low, Medium, and High – based on the number of the plants coming online. For the purpose of this projection the Medium Growth Scenario was used which includes these projects – Minnesota Power upgrade, Essar / Minnesota Steel, Kee Tac / US Steel expansion, Mesabi Nugget, and PolyMet. This scenario seems the most realistic version having impact on the enrollment projection period.

### **Range Development Impact Enrollment Inputs and Assumptions**

- Bonestroo housing impact model's Medium Growth Scenario was selected as being most realistic and with likely impact during enrollment projection period.
- The State Demographic Center's 2005 population estimate for St. Louis County was used to determine base population; this estimate provides figures by age group.
- The number of new incoming workers by sub-region is from Bonestroo's Medium Growth Scenario. The internal assumptions within the Bonestroo model are important as they determine new households and students. The model assumes that existing residents will fill 1,790 (58%) of the anticipated 3,080 new permanent jobs. Existing residents will fill an even greater percentage in the Northeast Sub-Region (Babbitt-Embarrass, Ely, Tower-Soudan) and only 16 new households are expected.
- Estimate the number of new people by sub-region by multiplying the estimated average household size by the number of incoming households. The average household size is estimated by: eliminating all households over age 60 (incoming workers are assumed to be under age 60; use average household size of 1.5 for these older households; calculate number of households in this age group;

subtract these older households from county total). Dividing the remaining number of people by remaining households produces an average household size of 2.65 for households under age 60 vs overall county average of 2.29.

- Estimated number of new people: 3,095.
- Distribute new people by age according to age distribution in St. Louis County in 2005. Distribution is also by the four sub-regions within St. Louis County.
- Estimate number of new students in each age group: PK from 0-4 age group, all of age groups 5-14, 60% of the 15-19 age group.
- Estimated new births per year: assume 51% of incoming people are female; multiply age 15-44 age group by three-year average birth rate for St. Louis County.
- Determine incoming year of new students: use Bonestroo analysis for arrival year.
- Assign incoming students by grade: divide estimated number of students in each age group evenly by the number of grades represented by age group.
- Distribute incoming students within each sub-region to respective ISD 2142 enrollment area: use existing household percentages as basis for distribution. Arguments can be made that larger cities are in better position to attract incoming workers or that rural, lakeshore areas will be more attractive. Absent any compelling reason to favor one over the other, the assumption is being made that distribution will approximate current distribution of households.

Table B-4 shows the estimated percent of each of ISD 2142's high school areas within the Iron Range housing assessment sub-regions.

<b>Table B-4. Estimated Percent of ISD 2142 Enrollment Areas within Iron Range Housing Assessment Sub-Regions</b>				
<b>School</b>	<b>Central</b>	<b>Quad Cities</b>	<b>East Range</b>	<b>Northeast</b>
Cherry	2%	5%		
Cook		2%		
Tower-Soudan			3%	16%
Babbitt-Embarrass				27%
Cotton		7%	4%	

Tables B-5 shows the results of the calculations for the Medium Growth Scenario in terms of one-time arrival of new households, total people, and student aged people. It also shows the estimated ongoing number of new births generated by the development projects by sub-region. Table B-6 shows the results for the High Growth Scenario.

<b>Table B-5. Anticipated <u>One-Time Increase</u> in New Households, Total People, and Student Age People, and, Ongoing Increase in Births/Year Due to <u>Medium</u> Growth Scenario for the Iron Range</b>					
<b>Item</b>	<b>Central</b>	<b>Quad Cities</b>	<b>East Range</b>	<b>Northeast</b>	<b>Total</b>
Households	675	108	369	16	1,168
People	1,789	286	978	42	3,095
PreK-Grade 12	316	50	172	8	546
Births / Year	30	5	16	1	52

\*Source: Bonestroo; Applied Insights<sup>north</sup>

<b>Table B-6. Anticipated <u>One-Time Increase</u> in New Households, Total People, and Student Age People, and, Ongoing Increase in Births/Year Due to <u>High</u> Growth Scenario for the Iron Range</b>					
<b>Item</b>	<b>Central</b>	<b>Quad Cities</b>	<b>East Range</b>	<b>Northeast</b>	<b>Total</b>
Households	811	194	398	1,113	2,516
People	2,149	514	1,055	2,949	6,667
PreK-Grade 12	380	91	187	522	1,180
Births / Year	36	9	17	49	111

\*Source: Bonestroo; Applied Insights<sup>north</sup>

Table B-7 shows the estimated impact of these new households on various high school enrollment areas within ISD 2142.

<b>Table B-7. Estimated Number of New Students Generated by Iron Range Development Projects During 2009-2012, Medium and High Growth Scenarios</b>		
<b>High School Area</b>	<b>Medium Scenario</b>	<b>High Scenario</b>
Cherry	0	6
Tower-Soudan	0	110
Babbitt-Embarrass	0	153
Cotton	0	6
Total District	0	275

Under the medium growth scenario the district is not expected to see any new births (contributing to future Pre-Kindergarten and Kindergarten enrollment). However, under the high growth scenario the district would see additional births each year as follows:

- Babbitt-Embarrass – 13.
- Tower-Soudan – 8.
- Cherry and Cotton – 1 each.

## Assessment

Key findings from this review include:

- Births
  - Births within each of the high school enrollment areas is expected to increase for a period at levels equal to or greater than those for recent years. These elevated levels will impact the 10-year projection.
  - Births will begin to decline after 2015, which is outside the projection period. The timing of the decline varies by high school area; Babbitt-Embarrass and Cherry begin earlier, probably due to older populations with smaller numbers of women in childbearing ages. Tower-Soudan actually increases slightly before declining, while Cotton and Orr hold steady, probably due to larger number of women of childbearing ages.
- Capture Rates of Potential Kindergarten Students
  - Overall, the District captures just over 80% of the potential kindergarten students. That is, one-fifth of the incoming student pool is annually lost through open enrollment and home schooling.
  - Cook seemingly attracts more kindergarten students than corresponding births five years earlier, but this is probably due to a fault in the assumption that births are distributed throughout the county by population. The forecast has been adjusted to account for this.
  - Cherry captures nearly every potential student in its pool.
  - Cotton, due to massive open enrollment losses to Floodwood and Eveleth, captures less than half of the potential kindergarten students.
- Range Development Impacts
  - The most comprehensive examination of the likely impacts of the proposed Iron Range development projects is the Bonestroo Housing Assessment.
  - Under Bonestroo's Medium Growth Scenario, which is the most likely scenario for the period under consideration in this projection, the level of impact in terms of new students is minimal for ISD 2142 schools.
  - Bonestroo's High Growth Scenario greatly increases the number of students for ISD 2142 schools, especially for Babbitt-Embarrass and Tower-Soudan. However, the two projects added for this scenario likely will not start before 2012 and more likely later than that.



## Appendix C. Enrollment Trend Analysis

This chapter reviews historic enrollment patterns within ISD 2142 and other public school districts in St. Louis County.

### Enrollment Trends in Adjacent Districts

The St. Louis County School District abuts 20 other public and tribal school districts. Understanding patterns in their enrollments helps place ISD 2142’s situation into perspective. In addition, the interrelationship between districts has been greatly enhanced because of open enrollment. For example, a school district that is losing enrollment may either more aggressively use open enrollment to secure new students or fall prey to other districts as the school falls below a viability threshold.

**Table C-1. Total Kg-Grade 12 Enrollment of ISD 2142 and Adjoining School Districts, 1999 - 2008**

District	98-99	99-00	00-01	01-02	02-03	03-04	04-05	05-06	06-07	07-08	10-yr Change
Mesabi East	1,305	1,272	1,082	1,034	999	936	916	900	885	860	-34.1%
Lake Superior	2,124	2,079	2,028	1,916	1,679	1,607	1,618	1,575	1,516	1,448	-31.8%
Ely	828	812	788	756	707	683	645	637	611	585	-29.3%
St. Louis Co.	2,914	2,768	2,686	2,523	2,453	2,380	2,283	2,250	2,163	2,101	-27.9%
International Falls	1,766	1,690	1,604	1,492	1,455	1,423	1,363	1,322	1,314	1,295	-26.7%
Chisholm	979	960	912	873	816	762	761	749	727	734	-25.0%
Hibbing	3,226	3,102	2,897	2,775	2,746	2,700	2,563	2,510	2,481	2,426	-24.8%
Virginia	2,041	1,912	1,806	1,787	1,729	1,661	1,632	1,567	1,571	1,565	-23.3%
Duluth	12,889	12,612	12,284	11,994	11,473	11,151	10,772	10,431	10,210	9,976	-22.6%
Proctor	2,099	2,038	2,026	1,925	1,867	1,853	1,790	1,754	1,727	1,698	-19.1%
Eveleth-Gilbert	1,545	1,471	1,449	1,388	1,425	1,369	1,363	1,327	1,328	1,265	-18.1%
Grand Rapids	4,644	4,535	4,338	4,235	4,105	3,979	3,912	3,872	3,859	3,827	-17.6%

<b>Table C-1. Total Kg-Grade 12 Enrollment of ISD 2142 and Adjoining School Districts, 1999 - 2008</b>											
<b>District</b>	<b>98-99</b>	<b>99-00</b>	<b>00-01</b>	<b>01-02</b>	<b>02-03</b>	<b>03-04</b>	<b>04-05</b>	<b>05-06</b>	<b>06-07</b>	<b>07-08</b>	<b>10-yr Change</b>
Floodwood	401	388	436	440	434	428	395	395	383	372	-7.2%
Cloquet	2,477	2,441	2,416	2,352	2,351	2,316	2,289	2,271	2,266	2,303	-7.0%
Cromwell-Wright	327	339	334	309	311	298	316	313	303	323	-1.2%
Hermantown	1,937	1,915	1,930	1,938	1,943	1,966	1,971	1,994	2,006	2,004	3.5%
Mountain Iron-Buhl	597	585	572	545	557	659	634	624	646	634	6.2%

Note: Mountain Iron-Buhl's increase in 2003-04 was due to the establishment of the Mesabi Academy School within the district.

### **The Open Enrollment Factor**

Open enrollment is arguably the most significant issue facing the District. As shown in Tables C-2 and C-3, the District experiences a net loss of over 400 students to adjacent districts. This is roughly 18% of the District's potential enrollment. The biggest losses are to Floodwood, Virginia, Eveleth-Gilbert, Cloquet, and Fond du Lac.

Table C-2. Open Enrollment Out of/ Into ISD 2142 by District						
District	2005-06		2006-97		2007-08	
	In	Out	In	Out	In	Out
Cloquet	4	41	2	42	4	50
Esko	0	9	0	8	0	8
International Falls	0	10	0	10	0	8
Littlefork-Big Falls	0	4	0	4	0	5
Lake Superior	0		0	2	0	2
Chisholm	0	2	1	2	0	4
Ely	3	13	1	13	1	13
Floodwood	0	98	0	92	0	97
Hermantown	1	21	1	23	1	25
Hibbing	10	21	6	19	11	17
Proctor	8	22	9	32	13	29
Nett Lake	36	10	41	12	47	12
Virginia	10	55	13	72	14	83
Duluth	1	6	2	5	2	7
Mountain Iron-Buhl	11	14	9	12	9	10
Eveleth-Gilbert	16	61	18	68	19	65
Mesabi East	5	15	5	14	6	10
Fond du Lac	N.R.	59	N.R.	57	N.R.	58
All Others	N. D.	64	17	35	N. D.	47
Totals	105	525	125	522	127	550
Net		-420		-397		-423

Based on Average Daily Membership reports to State.

<b>Table C-3. Net Open Enrollment Gain/Loss for ISD 2142 by District, 2006 – 08 School Years</b>			
<b>District</b>	<b>05-06</b>	<b>06-07</b>	<b>07-08</b>
Cloquet	-37	-40	-46
Esko	-9	-8	-8
International Falls	-10	-10	-8
Littlefork-Big Falls	-4	-4	-5
Lake Superior	0	-2	-2
Chisholm	-2	-1	-4
Ely	-10	-12	-12
Floodwood	-98	-92	-97
Hermantown	-20	-22	-24
Hibbing	-11	-13	-6
Proctor	-14	-23	-16
Nett Lake	26	29	35
Virginia	-45	-59	-69
Duluth	-5	-3	-5
Mountain Iron-Buhl	-3	-3	-1
Eveleth-Gilbert	-45	-50	-46
Fond du Lac	-59	-57	-58
Mesabi East	-10	-9	-4

Based on Average Daily Membership reports to State.

Notes: Students gained from Nett Lake are in upper grades as Nett Lake only has a K-6 school. There is no inbound data for students open enrolling from Fond du Lac; as a consequence the net loss is probably overstated.

As part of this assessment, student data for ISD 2142 was mapped. This permitted analysis of where open enrolled students lived within the District and which high school areas were experiencing the greatest losses. Table C-4 shows the number of students open enrolling out of the district by high school area and by the destination district.

As noted in Table C-4, while the average loss due to open enrollment is around 18% of the District's potential student pool, it is 41% for Cotton and 25% for AlBrook. Cook and Orr, which have limited open enrollment opportunities, have the lowest rate of losses.

Losses to Virginia have occurred as that district sends buses into the Four Corners area of Embarrass and to the 'Y' area just west of Tower.

<b>District</b>	<b>AIBrook</b>	<b>Babbitt-Embarrass</b>	<b>Cherry</b>	<b>Cook</b>	<b>Cotton</b>	<b>Orr</b>	<b>Tower - Soudan</b>	<b>Total</b>
Floodwood	19				68			87
Virginia	1	19	11	10	3		41	85
Eveleth – Gilbert		2	19		24		2	47
Cloquet	34				1			35
Proctor	22			1	2			25
Hermantown	13	1			6			20
Duluth	9	1	1	1	3			15
Ely		7			1		6	14
Hibbing			10	1	2		1	14
Mesabi East		8	1		1			10
Esko	7				1			8
Fond du Lac	8							8
Mountain Iron-Buhl			6	1				7
Nett Lake				1		5		6
Chisholm			3	1				4
Grand Rapids		2	1		1			4
Littlefork – Big Falls						5		5
International Falls						2		2
Nashwauk – Keewatin					1			1
Other, Charter	3	5	2	1	10	2	2	25
Unknown	18	7	6		13	5	6	55
<b>Total</b>	<b>134</b>	<b>52</b>	<b>60</b>	<b>17</b>	<b>137</b>	<b>19</b>	<b>58</b>	<b>477</b>
<b>% of Area's Total Enrollment Pool</b>	<b>25%</b>	<b>12%</b>	<b>15%</b>	<b>4%</b>	<b>41%</b>	<b>7%</b>	<b>19%</b>	<b>18%</b>

Source: ISD 2142; analysis by Applied Insights<sup>north</sup>

There are many reasons why students opt to attend another school district including location of parent's job, divorced parents living in and out of the district, disgruntlement with specific teachers or administrators, location of daycare, range of electives, and sports. All of these are at play in ISD 2142 but as Table C-5 suggests, opportunities for curriculum electives and sports may well be the major ones. As the table shows, grades 9-12 have a greater proportion of the open enrolled out students.

Table C-5. ISD 2142 Students Open Enrolling Out by Grade and High School Area, 2007-08									
Grade	AIBrook	Babbitt - Embarras	Cherry	Cook	Cotton	Orr	Tower - Soudan	Total	% of Total
K	5	3	4	1	9	0	2	24	5.9%
1	1	2	1	0	0	0	1	5	1.2%
2	8	2	4	1	8	0	4	27	6.6%
3	9	3	7	0	9	3	3	34	8.4%
4	2	0	1	0	1	0	0	4	1.0%
5	11	4	6	1	11	2	2	37	9.1%
6	3	1	2	2	11	5	1	25	6.1%
7	13	1	4	3	9	1	3	34	8.4%
8	9	9	4	1	4	0	5	32	7.9%
9	9	3	6	1	17	1	5	42	10.3%
10	20	8	5	1	14	1	5	54	13.3%
11	11	2	5	2	19	2	4	45	11.1%
12	13	8	6	0	13	2	2	44	10.8%
Unk.	20	6	5	4	12	2	21	70	

Source: ISD 2142; analysis by Applied Insights<sup>north</sup>

## Home Schooling

As shown in Table C-6 the number of students taught at home is about 6% of the district's enrollment (not including students who have open enrolled out of the district). While Babbitt-Embarras has the greatest number of home school students, the percentage of total enrollment is substantially more at Cotton.

<b>Table C-6. Number of Home School Students, 2007-08</b>					
<b>School</b>	<b>K - 5</b>	<b>6 - 8</b>	<b>9 - 12</b>	<b>Total</b>	<b>% of School*</b>
AlBrook	8	6	10	24	5.9%
Babbitt-Embarrass	18	8	5	31	8.2%
Cherry	0	2	9	11	3.2%
Cook	7	5	8	20	4.7%
Cotton	10	5	12	27	13.9%
Orr	5	4	5	14	5.8%
Tower-Soudan	3	2	5	10	3.9%
<b>Total</b>	<b>51</b>	<b>32</b>	<b>54</b>	<b>137</b>	<b>6.1%</b>

\*Number of home school students divided by sum of school and home school students.

## **ISD 2142 Enrollment**

Obviously, the base foundation for a projection is the current enrollment and the patterns of change within the district over recent years. Tables C-7a-i presents ISD 2142's recent enrollment figures by grade.

Table C-7a. ALBROOK Enrollment by Grade, 1998-99 to 2007-08										
Grade Level	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
PK	4	11	9	12	8	5	7	6	6	5
K	34	23	27	20	34	26	29	27	14	17
1	29	28	29	30	25	35	25	25	31	22
2	28	27	27	29	28	25	34	28	23	29
3	35	26	25	27	31	32	27	34	29	23
4	23	34	26	29	30	30	29	29	32	28
5	32	27	31	26	25	29	32	28	28	33
6	27	33	24	28	27	27	31	34	28	30
7	35	26	33	25	30	30	25	37	36	29
8	28	34	30	31	27	36	31	27	36	36
9	41	24	35	26	32	30	35	26	30	41
10	42	37	26	30	28	29	31	37	26	30
11	41	37	36	27	29	33	30	31	36	30
12	51	38	38	34	20	30	31	30	30	37
Total	450	405	396	374	374	397	397	399	385	390
Kg	34	23	27	20	34	26	29	27	14	17
Grades 1-5	147	142	138	141	139	151	147	144	143	135
Grades 6-8	90	93	87	84	84	93	87	98	100	95
Grades 9 - 12	175	136	135	117	109	122	127	124	122	138

Source: Minnesota Department of Education; ISD 2142.

<b>Grade Level</b>	<b>1998-99</b>	<b>1999-00</b>	<b>2000-01</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>
PK	5	12	4	6	7	7	4	2	5	5
K	34	23	30	20	23	27	27	19	22	15
1	34	35	26	26	17	19	27	23	22	21
2	36	34	37	23	28	17	16	24	23	18
3	35	38	36	37	22	24	17	15	22	23
4	35	38	39	33	34	23	29	17	18	27
5	27	37	40	36	34	33	23	31	17	17
6	36	30	39	40	37	35	34	25	30	14
7	40	37	28	39	41	39	37	34	26	32
8	49	40	39	28	41	41	42	40	37	20
9	43	49	41	37	27	39	45	41	39	36
10	35	41	45	38	37	26	40	45	42	37
11	45	35	40	36	39	37	22	39	44	45
12	43	34	38	36	31	35	35	25	40	40
<b>Total</b>	<b>497</b>	<b>483</b>	<b>482</b>	<b>435</b>	<b>418</b>	<b>402</b>	<b>398</b>	<b>380</b>	<b>387</b>	<b>350</b>
Kg	34	23	30	20	23	27	27	19	22	15
Grades 1-5	167	182	178	155	135	116	112	110	102	106
Grades 6-8	125	107	106	107	119	115	113	99	93	66
Grades 9 – 12	166	159	164	147	134	137	142	150	165	158

Source: Minnesota Department of Education; ISD 2142.

Table C-7c. CHERRY Enrollment by Grade, 1998-99 to 2007-08										
Grade Level	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
PK	4	6	3	4	5	6	6	6	5	8
K	27	26	30	27	17	27	27	21	26	18
1	26	25	19	24	28	16	29	30	15	21
2	30	25	30	16	22	28	18	31	28	14
3	39	33	26	25	18	21	27	16	33	27
4	24	40	34	27	25	19	24	25	17	31
5	27	26	38	32	32	26	23	24	28	17
6	33	29	31	38	34	27	28	26	24	28
7	33	34	36	33	39	35	30	25	24	23
8	37	34	36	32	34	41	31	27	24	27
9	35	38	36	39	37	33	38	35	29	29
10	51	35	41	40	37	31	33	38	29	27
11	46	57	34	42	42	37	31	37	40	27
12	51	48	55	35	39	33	31	30	34	41
Total	463	456	449	414	409	380	376	371	356	338
Kg	27	26	30	27	17	27	27	21	26	18
Grades 1-5	146	149	147	124	125	110	121	126	121	110
Grades 6-8	103	97	103	103	107	103	89	78	72	78
Grades 9 – 12	183	178	166	156	155	134	133	140	132	124

Source: Minnesota Department of Education; ISD 2142.

Table C-7d. COOK Enrollment by Grade, 1998-99 to 2007-08										
Grade Level	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
PK	6	6	9	11	11	10	11	3	6	4
K	37	21	34	27	27	30	21	39	38	33
1	33	32	21	41	28	23	31	17	37	38
2	36	35	30	20	42	27	20	35	24	34
3	39	36	36	31	19	42	27	23	39	24
4	37	33	34	35	34	22	40	25	23	35
5	37	41	35	36	35	34	20	40	27	24
6	49	39	43	38	38	35	34	21	38	27
7	49	49	38	42	36	39	37	29	21	38
8	50	49	52	38	41	38	40	32	31	20
9	61	47	47	52	39	43	37	37	33	30
10	61	57	46	46	44	39	41	36	35	27
11	45	59	56	44	44	49	33	38	36	37
12	60	45	50	52	42	51	47	35	37	35
Total	600	549	531	513	480	482	439	410	425	406
Kg	37	21	34	27	27	30	21	39	38	33
Grades 1-5	182	177	156	163	158	148	138	140	150	155
Grades 6-8	148	137	133	118	115	112	111	82	90	85
Grades 9-12	227	208	199	194	169	182	158	146	141	129

Source: Minnesota Department of Education; ISD 2142.

<b>Grade Level</b>	<b>1998-99</b>	<b>1999-00</b>	<b>2000-01</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>
PK	2	2	3	2	1	0	1	0	0	2
K	14	15	13	9	9	12	6	12	10	14
1	17	13	15	11	7	7	12	8	12	13
2	23	13	14	16	14	5	9	14	9	12
3	17	19	13	12	15	12	7	9	13	10
4	19	19	16	16	13	12	14	8	9	14
5	19	17	19	18	16	15	12	15	6	9
6	23	21	19	21	17	18	16	10	12	6
7	30	22	23	19	19	14	20	19	11	11
8	32	27	20	20	21	18	13	23	19	11
9	18	31	31	26	18	23	16	14	24	14
10	32	23	33	32	20	22	19	18	16	21
11	27	28	26	33	29	20	23	21	14	15
12	18	29	28	27	32	27	18	20	20	17
<b>Total</b>	<b>291</b>	<b>279</b>	<b>273</b>	<b>262</b>	<b>231</b>	<b>205</b>	<b>186</b>	<b>191</b>	<b>175</b>	<b>169</b>
Kg	14	15	13	9	9	12	6	12	10	14
Grades 1-5	95	81	77	73	65	51	54	54	49	58
Grades 6-8	85	70	62	60	57	50	49	52	42	28
Grades 9-12	95	111	118	118	99	92	76	73	74	67

Source: Minnesota Department of Education; ISD 2142.

<b>Grade Level</b>	<b>1998-99</b>	<b>1999-00</b>	<b>2000-01</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>
PK	7	2	1	1	2	2	3	1	1	0
K	15	19	12	14	12	16	9	15	6	10
1	16	16	22	13	17	13	15	11	13	7
2	20	18	11	18	12	15	12	16	10	14
3	12	21	21	11	16	14	18	12	17	8
4	20	14	21	20	10	14	12	15	12	18
5	20	20	11	21	19	7	16	13	15	13
6	18	19	18	13	19	21	8	16	11	15
7	27	23	35	20	19	24	31	21	25	18
8	23	28	22	38	20	21	23	29	23	28
9	23	24	29	22	37	18	15	22	28	28
10	29	27	27	29	23	37	19	19	23	28
11	25	28	25	24	30	21	35	18	15	23
12	26	32	29	28	25	26	21	29	16	17
<b>Total</b>	<b>281</b>	<b>291</b>	<b>284</b>	<b>272</b>	<b>261</b>	<b>249</b>	<b>237</b>	<b>237</b>	<b>215</b>	<b>227</b>
Kg	15	19	12	14	12	16	9	15	6	10
Grades 1-5	88	89	86	83	74	63	73	67	67	60
Grades 6-8	68	70	75	71	58	66	62	66	59	61
Grades 9-12	103	111	110	103	115	102	90	88	82	96

Source: Minnesota Department of Education; ISD 2142.

Table C-7g. TOWER-SOUDAN Enrollment by Grade, 1998-99 to 2007-08										
Grade Level	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
PK	0	0	0	3	4	6	2	3	3	3
K	25	15	13	24	22	18	17	13	24	20
1	20	24	14	11	23	21	19	20	13	24
2	29	21	22	14	15	25	24	20	14	12
3	25	30	19	24	13	17	24	23	14	17
4	27	27	25	21	27	14	14	24	19	15
5	27	26	25	23	25	28	13	20	23	18
6	30	27	24	22	25	21	28	11	17	22
7	27	33	24	30	24	23	23	32	10	16
8	28	25	26	28	34	24	22	22	27	11
9	25	31	21	26	34	28	22	24	20	27
10	36	22	28	20	25	30	23	23	20	19
11	29	35	24	28	21	24	28	21	24	18
12	27	28	35	18	26	22	25	27	18	26
Total	355	344	300	292	318	301	284	283	246	248
Kg	25	15	13	24	22	18	17	13	24	20
Grades 1-5	128	128	105	93	103	105	94	107	83	86
Grades 6-8	85	85	74	80	83	68	73	65	54	49
Grades 9-12	117	116	108	92	106	104	98	95	82	90

Source: Minnesota Department of Education; ISD 2142.

<b>Table C-7h. ISD 2142 TOTAL Enrollment by Grade, 1998-99 to 2007-08</b>										
<b>Grade Level</b>	<b>1998-99</b>	<b>1999-00</b>	<b>2000-01</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>	<b>2005-06</b>	<b>2006-07</b>	<b>2007-08</b>
PK	28	39	29	39	38	36	34	21	26	27
K	186	142	159	141	144	156	136	146	140	127
1	175	173	146	156	145	134	158	134	143	146
2	202	173	171	136	161	142	133	168	131	133
3	202	203	176	167	134	162	147	132	167	132
4	190	205	195	181	173	134	162	143	130	168
5	189	194	199	192	186	172	139	171	144	131
6	216	198	198	200	197	184	179	143	160	142
7	241	224	217	208	208	204	203	197	153	167
8	247	237	225	215	218	219	202	200	197	153
9	246	244	240	228	224	214	208	199	203	205
10	286	242	246	235	214	214	206	216	191	189
11	258	279	241	234	234	221	202	205	209	195
12	276	254	273	230	215	224	208	196	195	213
<b>Total</b>	<b>2,942</b>	<b>2,807</b>	<b>2,715</b>	<b>2,562</b>	<b>2,491</b>	<b>2,416</b>	<b>2,317</b>	<b>2,271</b>	<b>2,189</b>	<b>2,128</b>
Kg	186	142	159	141	144	156	136	146	140	127
Grades 1-5	958	948	887	832	799	744	739	748	715	710
Grades 6-8	704	659	640	623	623	607	584	540	510	462
Grades 9-12	1,066	1,019	1,000	927	887	873	824	816	798	802

Source: Minnesota Department of Education; ISD 2142.

Grade Level	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
AlBrook	450	405	396	374	374	397	397	399	385	390
Babbitt-Embarrass	497	483	482	435	418	402	398	380	387	350
Cherry	463	456	449	414	409	380	376	371	356	338
Cook	600	549	531	513	480	482	439	410	425	406
Cotton	291	279	273	262	231	205	186	191	175	169
Orr	281	291	284	272	261	249	237	237	215	227
Tower-Soudan	355	344	300	292	318	301	284	283	246	248
Total	2,942	2,807	2,715	2,562	2,491	2,416	2,317	2,271	2,189	2,128

Source: Minnesota Department of Education; ISD 2142.

Tables C-8a-g show the “class retention rates” for each high school area within the St. Louis County School district over the past decade. A class retention rate is the ratio of students in a current grade to the number of students in the previous grade in the prior year. For example, if there are 50 students in second grade in 2002 and 55 students in third grade in 2003, the class retention rate is 1.10. Although rates can fluctuate from year to year, over a period of time the rates provide an excellent accounting of typical and localized change factors including: net change due to open enrollment, slow influx of students in grade school as families move into or out of a community, and losses during high school due to drop outs.

Since Pre-Kindergarten is not mandatory, it is not possible to calculate a retention rate from it to the succeeding Kindergarten class. Instead, the ratio is calculated backwards to establish the relationship.

Year to Year	PK>K	K>1	1>2	2>3	3>4	4>5	5>6	6>7	7>8	8>9	9>10	10>11	11>12
High	5.80	1.57	1.12	1.14	1.16	1.17	1.08	1.19	1.20	1.14	1.08	1.18	1.03
Low	2.22	0.82	0.92	0.93	0.91	0.86	0.89	0.93	0.94	0.84	0.86	0.88	0.74
Average													
All Years	3.48	1.11	0.98	1.02	1.01	0.99	1.02	1.04	1.05	1.00	0.99	1.02	0.96
Last 3	3.01	1.19	0.99	1.01	0.99	0.99	1.04	1.10	1.02	1.03	1.02	1.04	1.00
Middle 3	3.96	1.08	0.97	1.10	1.00	0.97	1.06	1.04	1.10	1.04	1.01	1.06	0.90
First 3	3.48	1.07	0.97	0.95	1.04	1.03	0.94	1.00	1.02	0.92	0.95	0.96	0.97
Forecast Rate	3.01	1.19	0.99	1.01	0.99	0.99	1.04	1.10	1.02	1.03	1.02	1.04	1.00

<b>Table C-8b. BABBITT-EMBARRASS Class Retention Rate (Ratio of Students in Current Grade to Students in Previous Grade in Prior Year), 1999-2008 School Years</b>													
<b>Year to Year</b>	<b>PK&gt;K</b>	<b>K&gt;1</b>	<b>1&gt;2</b>	<b>2&gt;3</b>	<b>3&gt;4</b>	<b>4&gt;5</b>	<b>5&gt;6</b>	<b>6&gt;7</b>	<b>7&gt;8</b>	<b>8&gt;9</b>	<b>9&gt;10</b>	<b>10&gt;11</b>	<b>11&gt;12</b>
High	11.00	1.16	1.08	1.06	1.23	1.07	1.11	1.07	1.09	1.10	1.03	1.07	1.14
Low	2.50	0.83	0.82	0.86	0.92	0.92	0.82	0.93	0.77	0.95	0.92	0.80	0.76
Average													
All Years	4.71	0.96	0.95	0.98	1.07	1.01	1.01	1.02	1.01	0.99	0.97	0.96	0.95
Last 3	6.25	0.99	0.90	0.95	1.14	1.00	0.96	1.04	0.98	0.97	0.99	1.01	1.02
Middle 3	3.85	0.89	0.97	0.94	1.06	1.00	1.03	1.05	1.04	1.00	1.00	0.96	0.90
First 3	4.03	1.01	0.98	1.04	1.01	1.01	1.06	0.99	1.02	0.99	0.93	0.93	0.91
Forecast Rate	6.25	0.99	0.90	0.95	1.14	1.00	0.96	1.04	0.98	0.97	0.99	1.01	1.02

<b>Table C-8c. CHERRY Class Retention Rate (Ratio of Students in Current Grade to Students in Previous Grade in Prior Year), 1999-2008 School Years</b>													
<b>Year to Year</b>	<b>PK&gt;K</b>	<b>K&gt;1</b>	<b>1&gt;2</b>	<b>2&gt;3</b>	<b>3&gt;4</b>	<b>4&gt;5</b>	<b>5&gt;6</b>	<b>6&gt;7</b>	<b>7&gt;8</b>	<b>8&gt;9</b>	<b>9&gt;10</b>	<b>10&gt;11</b>	<b>11&gt;12</b>
High	9.00	1.11	1.20	1.13	1.14	1.21	1.19	1.24	1.13	1.21	1.11	1.12	1.04
Low	3.50	0.71	0.84	0.83	0.93	0.94	0.84	0.89	0.89	0.93	0.83	0.93	0.79
Average													
All Years	5.12	0.90	1.00	0.99	1.02	1.06	1.04	1.03	0.99	1.07	0.97	1.03	0.94
Last 3	3.81	0.88	0.98	0.97	0.98	1.04	1.04	0.92	1.00	1.14	0.92	1.03	0.97
Middle 3	4.72	1.02	1.01	1.01	1.07	1.15	0.99	1.06	0.99	1.02	0.93	1.02	0.85
First 3	6.83	0.82	1.00	0.99	1.03	0.99	1.09	1.11	0.99	1.06	1.06	1.04	1.01
Forecast Rate	3.81	0.90	0.98	0.97	0.98	1.04	1.04	0.92	1.00	1.14	0.92	1.03	0.97

**Table C-8d. COOK Class Retention Rate (Ratio of Students in Current Grade to Students in Previous Grade in Prior Year), 1999-2008 School Years**

Year to Year	PK>K	K>1	1>2	2>3	3>4	4>5	5>6	6>7	7>8	8>9	9>10	10>11	11>12
High	12.67	1.21	1.41	1.15	1.16	1.11	1.09	1.06	1.07	1.05	1.00	1.11	1.16
Low	2.10	0.81	0.87	0.95	0.85	0.91	0.95	0.85	0.86	0.93	0.82	0.85	0.85
Average													
All Years	4.57	0.97	1.03	1.03	0.98	1.03	1.03	0.98	1.00	0.99	0.94	0.98	0.98
Last 3	7.24	0.92	1.15	1.09	0.94	1.04	1.00	0.95	0.96	0.97	0.91	0.99	1.00
Middle 3	2.43	0.97	0.95	0.98	1.07	0.97	1.02	1.01	1.02	1.02	0.93	0.97	1.02
First 3	4.06	1.02	0.98	1.02	0.92	1.08	1.06	0.98	1.02	0.97	0.96	0.97	0.93
Forecast Rate	7.00	0.92	1.03	1.09	0.94	1.04	1.00	0.95	0.96	0.97	0.91	0.99	1.00

**Table C-8e. COTTON Class Retention Rate (Ratio of Students in Current Grade to Students in Previous Grade in Prior Year), 1999-2008 School Years**

Year to Year	PK>K	K>1	1>2	2>3	3>4	4>5	5>6	6>7	7>8	8>9	9>10	10>11	11>12
High	12.00	1.33	1.29	1.40	1.23	1.15	1.13	1.19	1.15	1.30	1.28	1.13	1.21
Low	3.00	0.78	0.71	0.83	0.80	0.75	0.80	0.82	0.87	0.74	0.77	0.78	0.87
Average													
All Years	N.A.	1.00	1.05	0.99	1.05	1.00	1.01	1.01	0.98	1.02	1.04	0.98	0.99
Last 3	N.A.	1.21	1.10	1.01	1.07	0.94	0.88	1.07	1.05	0.95	1.05	0.94	1.01
Middle 3	N.A.	0.85	1.09	1.06	1.02	1.05	1.05	0.95	0.99	0.96	0.94	0.98	0.93
First 3	5.67	0.92	0.97	0.89	1.06	1.01	1.11	1.02	0.89	1.14	1.12	1.00	1.04
Forecast Rate	7.00	1.03	1.10	1.01	1.07	0.94	1.01	1.07	1.05	0.95	1.05	0.94	1.01

<b>Year to Year</b>	<b>PK&gt;K</b>	<b>K&gt;1</b>	<b>1&gt;2</b>	<b>2&gt;3</b>	<b>3&gt;4</b>	<b>4&gt;5</b>	<b>5&gt;6</b>	<b>6&gt;7</b>	<b>7&gt;8</b>	<b>8&gt;9</b>	<b>9&gt;10</b>	<b>10&gt;11</b>	<b>11&gt;12</b>
High	14.00	1.22	1.13	1.20	1.17	1.14	1.18	2.63	1.12	1.22	1.27	0.03	1.28
Low	2.71	0.87	0.69	0.80	0.83	0.70	0.85	1.11	0.94	0.71	1.00	0.79	0.83
Average													
All Years	7.58	1.09	0.93	1.04	0.96	0.97	1.00	1.58	1.03	0.98	1.08	0.93	1.02
Last 3	7.00	1.09	1.02	0.95	0.96	1.06	0.95	1.94	1.05	1.05	1.10	0.91	0.95
Middle 3	8.17	1.08	0.91	1.09	0.88	0.93	1.05	1.40	1.02	0.86	1.03	0.96	0.97
First 3	7.57	1.10	0.88	1.07	1.04	0.93	1.01	1.41	1.03	1.03	1.10	0.93	1.15
Forecast Rate	7.00	1.09	1.02	0.95	0.96	1.06	0.95	1.94	1.05	1.05	1.10	0.91	0.95

<b>Year to Year</b>	<b>PK&gt;K</b>	<b>K&gt;1</b>	<b>1&gt;2</b>	<b>2&gt;3</b>	<b>3&gt;4</b>	<b>4&gt;5</b>	<b>5&gt;6</b>	<b>6&gt;7</b>	<b>7&gt;8</b>	<b>8&gt;9</b>	<b>9&gt;10</b>	<b>10&gt;11</b>	<b>11&gt;12</b>
High	8.00	1.18	1.36	1.21	1.13	1.43	1.09	1.25	1.17	1.21	1.05	1.09	1.08
Low	2.83	0.85	0.70	0.70	0.82	0.92	0.84	0.89	0.79	0.82	0.82	0.90	0.75
Average													
All Years	N.A.	0.99	1.03	0.99	0.99	1.03	0.93	1.04	0.99	0.99	0.91	0.98	0.96
Last 3	N.A.	1.06	0.89	0.96	0.97	1.11	0.88	1.00	0.97	1.00	0.94	0.95	0.97
Middle 3	7.06	0.99	1.20	1.01	1.01	1.05	0.98	1.04	1.03	0.98	0.89	0.98	1.01
First 3	4.89	0.91	0.99	1.01	1.01	0.94	0.93	1.08	0.96	0.98	0.91	1.02	0.91
Forecast Rate	7.06	0.99	1.03	0.99	0.99	1.03	0.98	1.00	0.97	1.00	0.94	0.95	0.97

Another important perspective of enrollment patterns concerns the relative sizes of incoming kindergarten classes compared to that of the previous year's graduating senior class. Kindergarten classes that are larger than the senior classes they replace means a school should grow while smaller ones, especially if consistently smaller over a number of years, means that a district will decline in size.

Area	99 > 00	00 > 01	01 > 02	02 > 03	03 > 04	04 > 05	05 > 06	06 > 07	07 > 08
AlBrook	-28	-11	-18	0	6	-1	-4	-16	-13
Babbitt-Embarrass	-20	-4	-18	-13	-4	-8	-16	-3	-25
Cherry	-25	-18	-28	-18	-12	-6	-10	-4	-16
Cook	-39	-11	-23	-25	-12	-30	-8	3	-4
Cotton	-3	-16	-19	-18	-20	-21	-6	-10	-6
Orr	-7	-20	-15	-16	-9	-17	-6	-23	-6
Tower-Soudan	-12	-15	-11	4	-8	-5	-12	-3	2
District Total	-134	-95	-132	-86	-59	-88	-62	-56	-68

The trends depicted in Table 9 are ones of constant and significant declines albeit at a reduced rate in recent years. Table 10 shows the class differences through the projection period.

Area	08 > 09	09 > 10	10 > 11	11 > 12	12 > 13	13 > 14	14 > 15	15 > 16	16 > 17	17 > 18
AlBrook	-21	-14	-15	-27	-23	-16	-21	-24	-18	-11
Babbitt-Embarrass	-20	-26	-18	-17	1	-10	6	4	-5	-4
Cherry	-17	-1	-2	-2	-4	1	-3	8	-7	-3
Cook	-7	-9	2	1	12	-4	7	10	0	10
Cotton	-4	-1	-6	0	5	3	9	6	1	4
Orr	-5	-10	-13	-15	-16	-7	-13	-8	-17	-3
Tower-Soudan	-4	4	4	-1	12	9	5	8	10	8
District Total	-78	-57	-48	-61	-13	-24	-10	4	-36	1

Among the findings from Tables 9 and 10 are:

- All seven schools have experienced enrollment decline in good part due to much smaller kindergarten classes replacing larger graduating classes with the heaviest losses occurring nine to ten years ago.
- The projection indicates that AlBrook and Orr will consistently experience negative replacement rates.
- Babbitt-Embarrass will continue its recent trend of having significantly smaller incoming kindergarten classes but that trend will moderate in about five years.
- Cherry, Cook, Cotton, and Tower-Soudan slow their losses and for all but Cherry the trends become positive.

## Assessment

Among the pertinent findings from these tables and charts are:

- Other districts' enrollments
  - Mountain Iron – Buhl's gain is an anomaly as in 2003 the district included the new Mesabi Academy, which has roughly 60 students in grades 5-12; without those students MIB would have lost about 4% during the period, still a good showing considering trends at other districts.
  - Hermantown is the only district to gain in enrollment (once MI-B's unique factor is discounted).
  - Enrollment in seven of the districts has declined by 25% over the past ten years, including ISD 2142.
- ISD 2142 enrollment
  - In the past ten years the district's total enrollment has declined by over 800 students, a drop of 28%.
  - Every high school area lost enrollment with the greatest numeric loss at Cook (194 students, -32%) and smallest at Babbitt-Embarrass (47, -9%). Cotton experienced the largest percentage decline at 42%.
  - Ten years ago the district had 4 schools with over 400 students and just 2 under 300 students. This year there is just 1 school over 400 students and 3 under 300.
  - All seven schools had significantly smaller incoming kindergarten classes replacing larger graduating classes; this has been a major factor in overall enrollment decline. Over the projection period this trend will continue for AlBrook and Orr, continue and moderate for Babbitt-Embarrass, and shift into a positive relationship for the other four schools.
- Open enrollment
  - About 18% of potential student enrollment is lost through net open enrollment with other districts.
  - Single largest net loss is to Floodwood (90-100 students per year) followed by Virginia, Eveleth-Gilbert and Cloquet. The losses to Virginia have primarily come in the past two years in response to aggressive bussing and marketing efforts by that school.
  - The only net gain for ISD 2142 is with Nett Lake, whose school only has Pre-K through grade 6, at the middle school level.
  - The two high school enrollment areas suffering the greatest losses are Cotton and AlBrook. Between open enrollment and home schooling, Cotton loses 54% of its potential enrollment. AlBrook loses 30% of its potential enrollment.
- Home school
  - Home-schooled students represent just over 6% of the district's enrollment (not including students that have open enrolled out), but in the Cotton area the figures is over 13%.
- The district loses about 24% of its potential students to open enrollment and home schooling. However, even if the district captured all those students, there still would have been a loss of about 300 students over the past ten years.