*Michigan Alliance for Student Opportunity (formerly Middle Cities Education Association) is a group of member school districts that serve students with the greatest educational needs. We advocate on their behalf to build an equitable foundation for education so all students have the opportunities they need to succeed in school and beyond.*

# ENROLLMENT PROJECTION INTERPRETATION GUIDE

The Alliance has attempted to make our enrollment projection report as easy to understand as possible. However, being primarily a statistical report, it does require a certain amount of analysis. This guide is designed to assist you in interpreting your report. The enrollment projection report is explained page by page to help you understand the meaning and significance of each table.

The program uses three variations of the Cohort Survival Method to project enrollments. This method analyzes the survival ratios for your students and then projects those ratios into the future. The survival ratio compares the number of students in a particular grade during the current year with the number of students in the next lower grade the previous year. For example, if there are 100 first graders in 2021-22 and 113 second graders in 2022-23 then the survival ratio for that 2nd grade class is 113%. The way each of the projection methods uses the survival ratios is described below.

Your projections are based upon enrollment numbers for mainstreamed K-12 students only. Special education students are normally not included in the projections because of the unpredictable nature of their progress through each grade.

## County Births

The county births table reflects the number of resident births for the county in which your district is located. These numbers are used to project what proportion of children born in your county become students at your schools. Because the Department of Health cannot compile birth statistics for a particular year until at least the middle of the next year, the current year's birth rate is an estimate. The survival rate for the enrollment in the subsequent tables is based upon the percentage of students entering in the county with births five preceding years.

## Current & Historic Enrollments – Table 1

Table 1 indicates your district's enrollment for the past six years listed by grade. The percent figure under the enrollment number is the survival ratio for that grade in that year. Please check these numbers. Be alert to extremely large variations in the ratios because they serve as indicators for trends in your district's enrollment. Survival ratios across a particular grade that are consistently well above 100% indicate that additional students enter grades at that level. For example, this frequently happens in 6$^{th}$ or 7$^{th}$ grades in districts with parochial elementaries. Survival rates well below 100% across a grade indicate a particular

grade that loses students. Dropouts at 10th – 12th grades frequently drive the survival rates for these grades down.

The table below Table 1 sums the table above into groups corresponding with your district's grade/building configuration.

***In the event you will be using this report in preparation for a meeting with the Michigan Department of Treasury (School Bond Qualification and Loan Program), please be aware that Treasury will typically expect you to use Method I in your application.***

## PROJECTION METHOD 1

Projection Method 1 uses the survival ratios for the past five years to arrive at a mean value to use in projecting how many students each year will become students in the next grade the subsequent year. **This method is the most accurate for school districts that have not experienced major enrollment impacts on their district in recent years.**

### Projected Enrollment by Method 1 – Table 2

Table 2 predicts your enrollment. The percentage figures under the enrollment numbers are the predicted survival ratios that grade will show. Percentages below or above 100 indicate that either loss or gain has occurred and care should be taken to determine the cause of any significant fluctuation.

### Comparison Between Past and Future Enrollment – Method 1 – Table 3

Table 3 summarizes past, present, and projected future enrollment. The percent figures indicate the difference between that year and the current year enrollment. The key numbers on this table are the percent changes for the grade configuration summaries for the future. These indicate the extent to which your district will either lose (negative number) or gain (positive number) enrollment.

### Enrollment Graphs for Method 1

These graphs summarize the information from Tables 2 and 3, showing district enrollment from 5 years ago to five years into the future. Each grade grouping is shown separately, and all are stacked to show total enrollment.

The bottom graph shows your past 5 years enrollment, and how it is projected to look over the next 5 years. The degree to which these lines vary from the baseline (0%) shows how enrollment has changed and is expected to change into the future.

### 10 Year Projections by Method 1 – Table 4

Table 4 shows predicted enrollment 10 years into the future. You will notice that starting six years into the future, some grades are omitted from the report. This is because birth rates, which are the base from

which the projections work, are very difficult to project with any accuracy. Without actual birth data, Kindergarten enrollment becomes impossible to project six years out. Although this gives only a partial glimpse of your ten-year enrollment, we feel it is better to exclude some information than to possibly be misleading with inaccurate data.

## PROJECTION METHOD 2

Projection Method 2 uses the survival ratio for the current year only. This method may be most accurate for your school if it has recently experienced a significant change in its enrollment trends. For example, the closing or opening of a private or charter school in the previous year will affect your enrollment the current year, and in years to come. Under these and similar circumstances, Method 2 may have the best predictive power.

### Projected Enrollment by Method 2 – Table 5

Table 5 shows predicted enrollment up to five years into the future, grade by grade. The percentage figures under the enrollment numbers are the survival rates that grade may show. Percentages below or above 100 indicate that either loss or gain will occur and attention should be given to the cause of any significant fluctuation.

### Comparison Between Past and Future Enrollment – Method 2 – Table 6

Table 6 summarizes the past, present, and projected enrollment. The percentage figures indicate the difference between that year's enrollment and the current year's enrollment. The key numbers in this table are the percent changes for the grade configuration summaries for the future. These indicate the extent to which your district will either lose (negative number) or gain (positive number) enrollment.

### Enrollment Graphs for Method 2

These graphs summarize the information from Tables 5 and 6, showing district enrollment from 5 years ago to five years into the future. Each grade grouping is shown separately, and all are stacked to show total enrollment.

The bottom chart shows your past 5 years' enrollment, and how it is projected to look over the next 5 years. The degree to which these lines vary from the baseline (0%) shows how enrollment has changed, and is expected to change into the future.

### 10 Year Projections by Method 2 – Table 7

Table 7 shows predicted enrollment 10 years into the future. You will notice that, starting six years into the future, some grades are omitted from the report. This is because birth rates, which are the base from which the projections work, are very difficult to project with any accuracy. Without actual birth data, Kindergarten enrollment becomes impossible to project six years out. Although this gives only a partial

glimpse of your ten-year enrollment, we feel it is better to exclude some information than to possibly be misleading with inaccurate data.

## PROJECTION METHOD 3

The third method to project enrollments takes the average ratio calculated by Method 1 and combines it with the one-year ratio calculated by Method 2. The resulting ratio emphasizes current trends in your enrollment while tempering it with the trends of the past. Method 3 may best suit districts that have had fluctuations in their enrollment due to temporary occurrences, but do not expect those occurrences to overwhelmingly impact future enrollment. As with the other methods, the accuracy table (Table 11) may indicate which method works best for your district.

### Projected Enrollment by Method 3 – Table 8

Table 8 predicts your district's enrollment up to five years into the future, grade by grade. The percentage figures under the enrollment numbers are the survival rates each grade will show. Percentages below or above 100 indicate that either loss or gain has occurred and attention should be given to the cause of any significant fluctuation.

### Comparison Between Past and Future Enrollment – Method 3 – Table 9

Table 9 summarizes past, present, and projected enrollment. The percentage figures indicate the difference between that year and the current year enrollment. The key numbers in this table are the percentage changes for the grade configuration summaries for the future. These indicate the extent to which your district will either lose (negative number) or gain (positive number) enrollment.

### Enrollment Graphs for Method 3

These graphs summarize the information from Tables 8 and 9, showing district enrollment from 5 years ago to five years into the future. Each grade grouping is shown separately, and all are stacked to show total enrollment.

The bottom graph shows your past 5 years enrollment and how it is projected to look over the next 5 years. The degree to which these lines vary from the baseline (0%) shows how enrollment has changed, and is expected to change into the future.

### 10 Year Projections by Method 3 – Table 10

Table 10 shows predicted enrollment 10 years into the future. It should be noted that in these times of schools of choice, charter schools, and fluid, changing demographics, it is increasingly difficult to project out more than five years. This table is for your information but we do not suggest using it for long-term planning purposes. You will notice that, starting six years into the future, some grades are omitted from the report. This is because birth rates, the base from which the projections work, are very difficult to project with any accuracy. Without actual birth data, Kindergarten enrollment becomes impossible to

project six years out. Although this gives only a partial glimpse of your ten-year enrollment, we feel it is better to exclude some information than to possibly be misleading with inaccurate data.

**Method Accuracy – Table 11**

Table 11 shows which of the three projection methods has the greatest predictive power for your district. This is done by creating a projection of CURRENT YEAR enrollment using past data and then comparing it to the current year's actual enrollment. The method showing the smallest total (K-12) error may have the best ability to predict your future enrollment.

In comparing the percentages across the three methods, if all three numbers are well above zero and positive, your current year actual enrollment for a particular grade (or group of grades) was LOWER than the projection methods predicted. Conversely, large negative numbers indicate the enrollment for the grade or grade grouping is HIGHER than projected. These variations can provide clues to where your enrollment is changing.

**Teacher Projections**

These tables use Method 1 to forecast teacher needs. The tables are arranged according to selected pupil:teacher ratios (22:1 through 32:1). As with the ten-year enrollment projections, lower grades fall out of the system in later years due to projection limitations.

**Method Accuracy Group Graphs**

These graphs look at your projected enrollment for each grade grouping and compare that enrollment between each of the three projection methods. The usual situation is that Method 1 will give the most conservative projection (with a line that is closest to horizontal). Method 2 will usually show the greatest variation from current enrollment, and Method 3 will normally fall somewhere in between.

As you evaluate these graphs, pay particular attention to the degree to which the enrollment lines separate over time. If all three lines remain very close together, it's an indicator that your recent enrollment patterns are very similar to your historic enrollment trends. In other words, your district's enrollment trends are very stable. If the lines separate greatly, however, it is an indicator that your enrollment trends are fluctuating. Clearly, the greater these lines separate, the more consideration you must use in deciding which projection method most accurately reflects your district's enrollment trends.