

**Functional Requirements
for the
2009
No Child Left Behind
Annual Measurable Achievement Outcomes
Calculations**



*2009 NCLB – AMAO Calculations
Functional Requirements*

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1 Introduction

1.1 Overview

The purpose of this document is to describe the No Child Left Behind (NCLB) calculation as it relates to measuring Title III districts for Annual Measurable Achievement Outcomes (AMAO). This document is designed to be used by those who wish to understand the details of the Minnesota's accountability system. This includes developers, district accountability coordinators, Title I and Title III coordinators, and many others. Items highlighted in yellow are new for 2009.

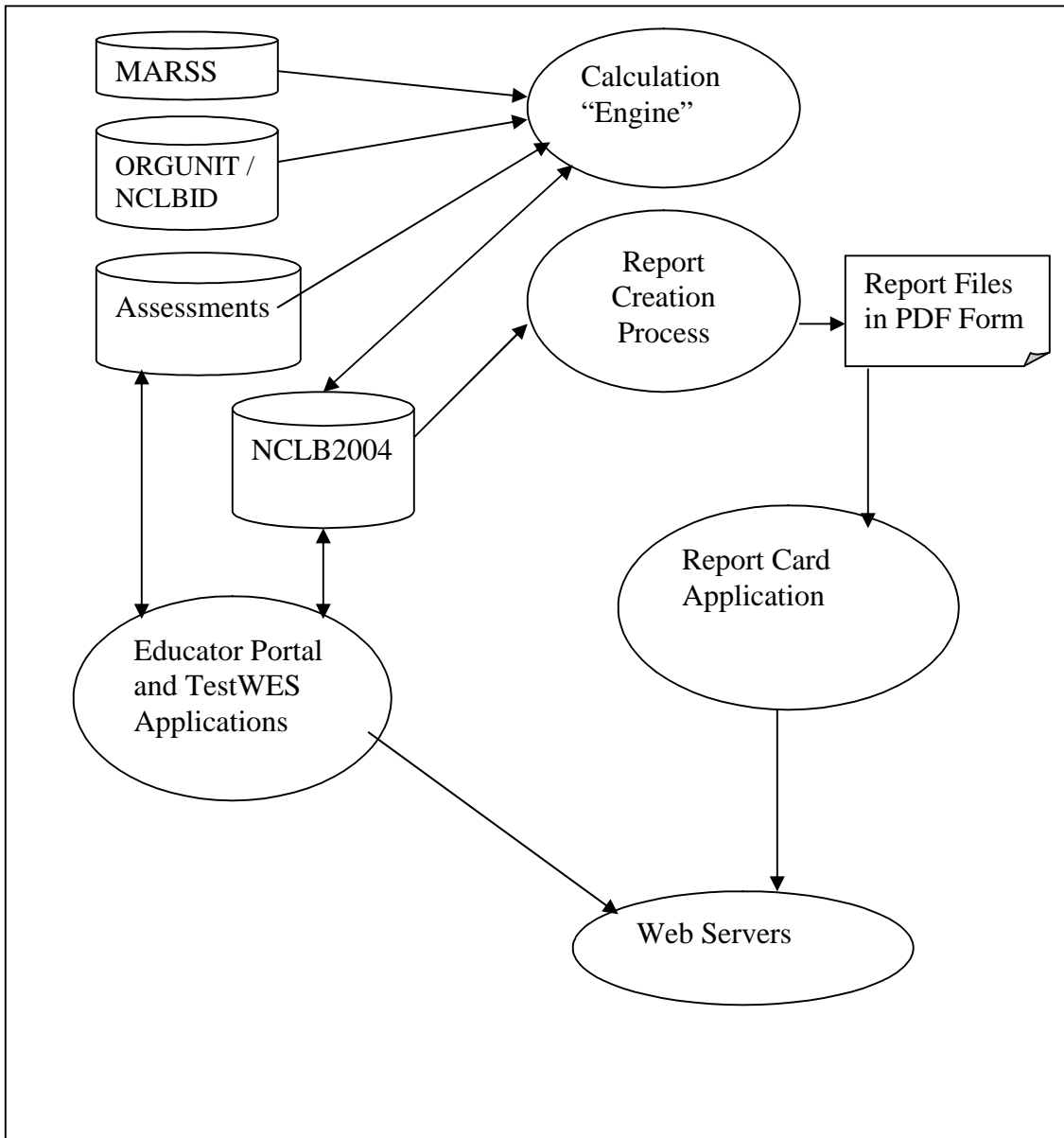
1.2 Context (place in the system)

The AMAO computational software (the calculation “engine”) interacts with the existing ASSESSMENT database to acquire assessment results, with the ORGUNIT database and NCLBID system to identify district entities, with the NCLB2004 database to acquire AYP data, and with the MARSS database for student demographics and enrollment information.

Final calculation results are placed in the NCLB2004 database. Working tables and reference tables also reside in the NCLB2004 database. Information about Title III entities, including consortia, is an example of such reference data since this data is not available elsewhere.

The results are made available using Accountability Gateway and Report Card web applications.

All of this is schematically illustrated in the sketch that follows.



1.3 Target Users

The target audience includes software developers as well as program area personnel who are expert in the requirements of the NCLB act.

1.4 Glossary of Terms

ADM attribute	Average Daily Membership. An attribute of a student in the MARSS database that indicates the cumulative amount of time in academic years that the student has spent in schools in Minnesota.
AMAO	Annual Measurable Achievement Objectives. These are the objectives set in Minnesota as a part of the effort to comply with the Title III section of the No Child Left Behind (NCLB) Act.
AMAO Level	A numeric value (capped at 4) indicating consecutive years the district has Not Made AMAO.
AMAO Status	The annual result of the AMAO measurement applied to a district. A district is identified as either ‘Making AMAO’ or ‘Not Making AMAO’ based on the eight AMAO components.
AMAO Consortium	For the purposes of this document, consortium refers to a group of school districts that are acting together from the point of view of NCLB Title III funds. For each consortium, there is one district that acts as the “fiscal host” for the consortium. AMAO results are reported for member districts, but the progress and proficiency measures are based on all students in the consortium.
INOI Status	In Need Of Improvement Status: One of four designations assigned to a district based on current year data if Not Making AMAO.
INOI Implementation	In Need Of Improvement Implementation: One of several actions to be implemented in the coming year for districts applying for Title I funds if Not Making AMAO.
LEP	Limited English Proficiency. This is a designation given to students with a home primary language other than English who have been identified by district staff as having Limited English Proficiency (LEP) within the testing district during the testing window.
MARSS	Minnesota Automated Reporting Student System. A database maintained by MDE for the purpose of recording attendance and demographic information about all students. MARSS is mainly used for allocating funds to schools, but it is used for multiple reporting purposes. It uses a 13-character identifier to track a student over time.

MCA-II	Minnesota Comprehensive Assessment – Series II. Beginning in 2006, a census test given annually to grades 3-8 and 10 for Reading and grades 3-8 and 11 for Math.
MDE	Minnesota Department of Education
MN SOLOM	Minnesota Student Oral Language Observation Matrix. A test given in Minnesota to assess a student’s listening and speaking language skills.
NCLB	No Child Left Behind. A federal act ensuring accountability (among other things) for schools designated as Title I and Title III.
NCLBID	No Child Left Behind Identification Number. A unique number identifying a school or district over multiple years, regardless of the current or previous MDE district or school number found in ORGUNIT.
NCLBID system	An application and set of tables identifying certain schools and districts to be included in the AYP calculations.
ORGUNIT	A database maintained by MDE for the purpose of identifying various educational delivery organizations and their attributes. For example, this database holds information about schools and school districts. It does not currently hold information about consortia of school districts.
TEAE	Test of Emerging Academic English. Tests given in Minnesota to LEP students to assess their reading and writing English language skills.
TestWES	The Assessment Web Edit System where districts have the ability to update and verify assessment data as well as view the MARSS demographics assigned to each record

1.5 References

No Child Left Behind Act of 2001 - (<http://www.ed.gov/policy/elsec/leg/esea02/107-110.pdf>)

Minnesota Consolidated State Application September 1, 2003 Submission (an AMAO reference)

TestWES Functional Specification

MARSSWES Functional Specification

2009 NCLB – AYP Calculations - Functional Requirements

AMAO 2009 Calculations Illustrated

This Excel file includes the basic computations including formulas designed to aid in both visualizing the computations and checking individual results.

2 Functional Description

2.1 AMAO (NCLB Title III Calculations)

The purpose of the AMAO calculations software is to provide a report of English language acquisition as required by Title III of the NCLB Act for students who have limited English language proficiency. Once per year, temporal progress and current year proficiency measures of students English language skills are measured and reported as per NCLB requirements.

Language acquisition assessments used for the 2009 AMAO calculation are

- TEAE Reading (Grades 3-12)
- TEAE Writing (Grades 3-12)
- MN SOLOM Listening/Speaking (Grades K-12)
- Reading Evaluation (Grades K-2 collected on the SOLOM assessment document)
- Writing Evaluation (Grades K-2 collected on the SOLOM assessment document))

Content Ability (as measured through the AYP Proficiency measure) is based on MCA-II reading and math test results for the LEP subgroup.

The results are summarized and published for the state and each school district. Publication includes status values indicating whether the entity has met AMAO target values for progress and proficiency. If a district is part of a consortium, the results in the district report are based on the consortium as a whole, not the individual district.

An example of an AMAO report published by MDE is available in the appendix entitled “Appendix – Example AMAO Report”.

2.1.1 AMAO Entities - Student record selection for District and State aggregations

When selecting student records for the AMAO calculation, only those students from certain districts are evaluated. Unlike the AYP Calculation, there is no school measurement or school selection criteria, but student results are still aggregated at the district, consortia and state level.

AMAO entities are defined as districts or consortia serving Limited English Proficient students and receiving Title III funding in the current year. A special reference table identifies AMAO entities on an annual basis and includes information on district membership in a consortia and the initial measurement year. Districts that are part of a consortium earn the results of the consortium for AMAO Progress and AMAO Proficiency measurements. **Beginning in 2009, the AMAO Content Ability measurements are also derived from the consortia’s own AYP measurement for the LEP subgroup.**

Individual Student Record Selection

Student record selection within each district is based on several criteria further described in the following measurements. TEAE and MN SOLOM assessment results are used over a two year period to measure Progress. TEAE and MN SOLOM assessment results from the current year are used to measure Proficiency.

Beginning in 2009, records do not need to be reported from the same district in both years to be included in the measurements.

2.1.2 AMAO Calculation: Students disaggregated

Student results are disaggregated into three groups called Cohorts. These Cohorts are established by using a demographic characteristic assigned to each TEAE and MN SOLOM assessment record. The field is called ADM97 and contains a value which represents the Average Daily Membership (ADM) generated by the student since the 1996/1997 school year. This value is approximately equal to the years enrolled in Minnesota public schools.

Cohort A: ADM97 is less than 3 years.

Cohort B: ADM97 is 3 or more years but less than 6 years.

Cohort C: ADM97 is 6 or more years.

No other disaggregations are required for the AMAO calculation.

2.1.3 AMAO Calculation: Computational comparisons

Like the AYP Calculation, measurements often compare a computed value to a target value. When computing and storing these values, the computation uses FLOAT values (floating decimal points). However, when comparing to the target values, the numbers are converted to a decimal figure rounded to 4 points.

2.1.4 AMAO Calculation: AMAO Measurements

There are three broad categories for AMAO measurements: Progress, Proficiency and Content Ability. Progress and Proficiency both have marks assigned for three cohort groups. Cohorts are determined by the length of time a student has been in the country. Content ability is evaluated for reading and mathematics. An AMAO Status Mark is assigned to each of the eight measurement groups based on whether their results met the respective target values.

1. PROGRESS Cohort A
2. PROGRESS Cohort B
3. PROGRESS Cohort C
4. PROFICIENCY Cohort A
5. PROFICIENCY Cohort B

6. PROFICIENCY Cohort C
7. CONTENT ABILITY Math
8. CONTENT ABILITY Reading

For districts that are not members of a consortium, the CONTENT ABILITY measurements are taken directly from the previously computed AYP results for the LEP subgroup for the district. For districts that are members of a consortium, CONTENT ABILITY measurements are calculated for all current and prior LEP students in the consortium – similar to how AYP would be measured for all current and prior LEP students in an individual district.

These eight AMAO Status Marks are later evaluated to provide the district’s AMAO Annual Status Mark.

2.1.5 AMAO Calculation: AMAO Status Marks

The calculation assigns an AMAO Status Mark to the eight measurements. These AMAO Status Marks are defined as follows:

- A: Measured result is at/above target
- B: Measured result is below target
- Z: Result was calculated, but the group cell size falls under minimum required for measurement
- X. Group does not exist within entity

For districts that are not part of a consortia, the CONTENT ABILITY Status Marks are derived from the AYP results and may contain one additional Status Mark not shown above.

- S: Measured result is below target, but results are still at/above the Safe Harbor target

The chart below illustrates how the AMAO Status Marks might be assigned for any particular district.

	Cohort	Measure	AMAO Status Mark
1	A. Less than 3 years	Progress	X
2	B. Between 3 and 6 years	Progress	A
3	C. 6 or more years	Progress	Z
4	A. Less than 3 years	Proficiency	X
5	B. Between 3 and 6 years	Proficiency	B
6	C. 6 or more years	Proficiency	Z
7	AYP LEP subgroup	Content Ability Math	S
8	AYP LEP Subgroup	Content Ability Reading	A

2.1.6 AMAO Calculation: Determining AMAO Annual Status Mark

To determine the district’s Annual AMAO Status, the eight AMAO Status Marks are evaluated. The calculation assigns the AMAO Annual Status Mark as follows:

- A: No AMAO Status Mark within the district is below the target (no marks = B)
- B: At least one AMAO Status Mark is below target (at least 1 mark = B)
- Z: All measures fell below cell size (all AMAO Status Marks = Z).
- X: No measures exist within the district (all AMAO Status Marks = X)

	Cohort	Measure	AMAO Status Mark
1	A. Less than 3 years	Progress	X
2	B. Between 3 and 6 years	Progress	A
3	C. 6 or more years	Progress	Z
4	A. Less than 3 years	Proficiency	X
5	B. Between 3 and 6 years	Proficiency	B
6	C. 6 or more years	Proficiency	Z
7	AYP LEP subgroup	Content Ability Math	S
8	AYP LEP Subgroup	Content Ability Reading	A
	AMAO Annual Status	Not Making AMAO	B

2.1.7 AMAO Calculation: Progress and Proficiency Designations on Student Records

The AMAO Calculation designates student records for appropriate subjects as ‘Making Progress’ when:

- The current year record has an achievement level defined as ‘Proficient’ OR
- The current year score is greater than the prior year score
- For K-2 Reading and Writing:
 - The order for scores (from lowest to highest) is: Beginning, Intermediate, Advanced, Transitional, Fluent
 - Students who score ‘Intermediate’ for two consecutive years are considered ‘Making Progress’
 - Students who score ‘Advanced’ for two consecutive years are considered ‘Making Progress’

The AMAO Calculation designates student records for appropriate subjects as ‘Proficient’ when the Achievement Level reaches a certain threshold. These thresholds differ by subject are defined as follows:

- TEAE Reading: Achievement Level = 4
- TEAE Writing: Achievement Level = 5
- MN SOLOM Listening/Speaking: Achievement Level = 4 or 5
- K-2 Reading and Writing: Transitional or Fluent

2.1.8 AMAO Calculation: Statewide Targets for Progress and Proficiency

The AMAO statewide targets were recreated based on results from 2007 using the revised 2009 logic. The revised logic includes the K-2 students and does not limit documents if they are not from the same district. The results are detailed in the following charts. When measuring PROGRESS and PROFICIENCY, the results for each district or consortia are compared to the statewide targets to determine the AMAO Status Mark. The methodology for computing the targets is shown in Appendix – *Computation of Starting and Ending Points for AMAO*.

AMAO PROGRESS								
Statewide Targets expressed as Proportion Making Progress								
Cohort	2007	2008	2009	2010	2011	2012	2013	2014
A	0.6935	0.7150	0.7365	0.7580	0.7795	0.8010	0.8225	0.8441
B	0.6707	0.6828	0.6949	0.7071	0.7192	0.7314	0.7435	0.7556
C	0.6547	0.6673	0.6799	0.6925	0.7051	0.7177	0.7303	0.7429

AMAO PROFICIENCY								
Statewide Targets expressed as Proportion Proficient								
Cohort	2007	2008	2009	2010	2011	2012	2013	2014
A	0.0300	0.0374	0.0447	0.0521	0.0594	0.0668	0.0741	0.0815
B	0.0571	0.0727	0.0883	0.1039	0.1194	0.1350	0.1506	0.1661
C	0.0964	0.1092	0.1221	0.1349	0.1478	0.1606	0.1735	0.1863

2.1.9 AMAO Calculation: Progress Measurement

Districts are required to show their LEP students making progress as measured on the TEAE and MN SOLOM assessments. Progress is measured by comparing scores for individual student records from one year to the next. Progress is only measured on LEP students enrolled over the first two weeks of the three week TEAE/SOLOM testing window. These students must have a matching assessment record in both years with a valid score in both years. The Proportion Making Progress is determined by counting records where progress was made and dividing by the total number of records. This proportion is then compared to the statewide target to determine the Progress Status Mark.

2009 Target (from chart)

- Cohort A: 73.65% (0.7365)
- Cohort B: 69.49% (0.6949)
- Cohort C: 67.99% (0.6799)

Minimum Cell Size for Measurement

20

Student Record Selection

All LEP students enrolled (as reported on MARSS) in an AMAO entity during the first two weeks of the three week testing window are evaluated. The most current MARSS End of Year data submitted to MDE will be used up until the close of the TestWES editing window. The selection criteria are as follows:

- The MARSS grade reported must be one of the tested grades for the assessment:
K, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11,12
- MARSS Status Begin Date must be *on or before* the end of the second week of the TEAE/MN SOLOM testing window (3/20/2009).
- MARSS Status End Date must be *on or after* the first day of the TEAE/MN SOLOM testing window (3/09/2009).
- MARSS State Aid Category must *not* be one of the following:
14, 16, 17, 18, 24, 25, 28, 98, 46
- The MARSS record must *not* have a local error (MARSS Status 1 = local error)
- The District Type must *not* equal 2 (students attending school out of state)
- The School Classification must *not* equal 45 (extended-day programs where the student is also enrolled during the day in another full-time program). These students will be included in AYP in their other full-time program.

Student Record Matching

Once the student records are selected, the appropriate test documents must be matched to each student record. To do so, the Student Linking System (SLS) is accessed with additional checks against MARSS Number and Grade. In most cases, the Last Name, First Name, Birth Date and Gender will match in addition to the MARSS Number and Grade. However, the SLS allows for slight deviations in name (such as Mike compared to Michael) to allow additional matches.

In cases where an assessment record cannot be matched to an enrollment record, the student is considered as ‘not participating’ for the appropriate subject. Students who do not have a valid scores not considered in the AMAO calculation and these records are ignored.

If an assessment record is linked, it is allocated to the district and school as reported on the MARSS record, regardless of what school or district is indicated on the assessment record.

For students who have multiple enrollment records in different AMAO entities districts during the testing window, the single test record will be allocated to both AMAO entities. When summarizing these students at the state level, the counts will be unduplicated. In other words, a single student in a specific grade will be counted once within each AMAO entity and once within the state, each with the associated results of the assessment record. When summarizing results, the enrollment record with the later status end date (within the AMAO enrollment window described above) should be used. However, for students in different districts, the status end date may be the same. If so, when summarizing state results, the record with the lower district number and district type is used when the status end dates are the same. In all cases, a record with a linked assessment having a valid score will be used over records for the same student without valid scores.

Student demographics are derived from the MARSS enrollment records. Additionally, elements from the assessment record will be verified using the MARSS enrollment records through the TestWES application.

A. Multiple enrollment records found for a single assessment record.

For multiple enrollment records where an assessment record is not found, all districts reporting the student will show the student as ‘not participating’. For multiple enrollment records where an assessment record is found, all schools reporting the student in that tested grade will be allocated the assessment record with its corresponding codes and indicators for use on the AMAO measures.

B. Multiple test documents found for a single enrollment record.

Internal checks and validations will ensure there will be only one Writing, Reading and Listening/Speaking document for each student by grade. This de-duplication process occurs within the TestWES application.

C. Use of test record with associated enrollment record.

Once a corresponding assessment record is associated with a MARSS record, only those linked documents with the following characteristics are used:

1. The current year record must have a valid score (Score Code = ‘VS’).
For K-2 Reading and Writing a valid score is the presence of one of the 5 evaluations (Beginning, Intermediate, Advanced, Transitional, Fluent), regardless of the Score Code for the Listening/Speaking portion of the assessment.
2. For the ‘Progress’ measurement, the current year record must have a prior year record with a prior year valid score.

General Formula

Proportion Making Progress is equal to the number of TEAE Reading, TEAE Writing, MN SOLOM Listening/Speaking, and K-2 Reading Writing records marked as Making Progress divided by the total number of records included in the measurement. Subjects are combined in this measurement. For example, a student may contribute three assessment records to the measurement, one for Reading, one for Writing, and one for Listening/Speaking.

Numerator

Total number of records designated as Making Progress. Making Progress is defined as:

- The current year record has an achievement level defined as ‘Proficient’ OR
- The current year score is greater than the prior year score

Denominator

Count of all records applicable to the measurement.

Adjustments to measurement

None

2.1.10 AMAO Calculation: Proficiency Measurement

Districts are required to show a portion of their LEP students as proficient in all three subjects (Reading, Writing and Listening/Speaking) as measured on the TEAE and MN SOLOM assessments. Proficiency is measured by evaluating the achievement levels on the assessments. Proficiency is only measured on students who took all three subjects. Counting those records where the student is considered proficient on all three subjects and then dividing by the total number of records provides the proportion proficient. This proportion is then compared to the statewide target to determine the Proficiency Status Mark.

2009 Target (from chart)

Cohort A: 4.47% (0.0447)

Cohort B: 8.83% (0.0883)

Cohort C: 12.21% (0.1221)

Minimum Cell Size for Measurement

20

Student record selection

The same students used in the Progress measurement are used in the Proficiency measurement, except students must have a valid score in all three subjects to be included.

General Formula

Proportion proficient is equal to the number of students marked as ‘Proficient’ in all three subjects (Reading, Writing, and Listening/Speaking) divided by the number of students who took all three subjects.

Numerator

Total number of students designated as ‘Proficient’ who took all three subjects.

Denominator

Count of all students who took all three subjects with valid scores.

Adjustments to measurement

None

2.1.11 AYP Calculation: AMAO ‘In Need of Improvement’ Status

The AMAO Status is used over multiple years to determine the AMAO Level and the resulting ‘In Need of Improvement’ (INOI) Status for Title III entities. The INOI Status is *designated* based on results from the current year for an individual district. The *implementation* of the INOI Status is dependent on the district’s Title III conditions in the following year and whether the district is joining or leaving a consortium.

Assignment of the AMAO Level

The AMAO Level (0-4) is roughly equivalent to the number of years (capped at 4) the district has not been designated as Making AMAO. The historical string of AMAO Annual Status Marks is evaluated. The AMAO Level is determined by counting from the right the number of Bs until an A is encountered. For example, the six year history (beginning in 2005) for a district represented by the string of marks ‘BAB**B**X**B**’ evaluates to AMAO Level =3. The A in year 2005 cleared the B in year 2004, but since no other As are found in the string, the **B**s in years 2006, 2007, and 2009 are counted.

Assignment of the AMAO ‘In Need of Improvement’ Status

Districts receiving Title III funding in the current year are assigned an INOI Status when they are identified as Not Making AMAO (AMAO Annual Status Mark= B). Districts retain an INOI Status until they are identified as Making AMAO in a following year (AMAO Annual Status Mark = A). If districts choose not to apply for Title III funding in following years, an INOI Status remains in place until they are once again a Title III district and are identified as Making AMAO.

Advancement of the AMAO ‘In Need of Improvement’ Status

Once a district is assigned an INOI status, the following year’s INOI status is dependent on:

1. The AMAO Annual Status Mark earned in the following year
2. The Title III Status of the district in the following year
3. Whether the district is joining or leaving a consortium in the following year

Districts that are designated as Making AMAO clear their INOI status.

The INOI status advances and accumulates over time for Title III entities if the district is Not Making AMAO the following year. The INOI status is applied in the following order:

AMAO Level	AMAO Status	INOI Status
0	Making AMAO	
1	Not Making AMAO	Parent Notification
2	Not Making AMAO	Supplemental Educational Service
3	Not Making AMAO	Corrective Action
4	Not Making AMAO	Prepare For Restructuring

2.1.12 AYP Calculation: AMAO 'In Need of Improvement' Implementation

AMAO measurements and designations of INOI Status are made in the summer of each year after assessment results are made available. If designated with an INOI Status, districts begin implementation when school year begins in September.

However, districts only need to implement if they plan on receiving Title III funding for the new school year. Districts that do not receive Title III funding the following year retain their INOI Status, even though they are not implementing it.

Additionally, districts that are part of a consortium implement the INOI Status of the fiscal host of the consortia, regardless of what the individual district's INOI Status is.

When districts leave or join consortia, each district retains their previous AMAO Annual Status Marks, their designated AMAO Level and the resulting INOI Status. Districts that join a consortium implement whatever the fiscal host's INOI Status is, but they retain their own AMAO Level and INOI Status. Districts that leave a consortium implement whatever their individual INOI Status is.

3 Limitations

3.1 Dependencies

Test Results Data must be available in order for the calculations to take place.

Consistent ORGUNIT, NPPI, and NCLBID data must also be available.

MARSS data on which the related AYP results are dependent has a vintage of End of Test WES window for the academic year for which the AMAO reporting and calculations are done.

AMAO calculations must be done after the AYP calculations because the content ability component comes from the current year AYP.

3.2 Critical Assumptions

The TEAE and MN SOLOM assessments were validated against the MARSS LEP indicator. If the LEP indicator on MARSS was set to N (no) the assessment was invalidated.

3.3 Constraints

None identified.

3.4 Dimensional Limitations

3.4.1 AMAO-related limits

For any of the dimensional values listed below it shall be possible without reprogramming to change the values used if they represent actual limits to the functioning of the software.

There are fewer than 500 districts not in Title III consortia.

There are fewer than 200 districts, not in Title III consortia, but who accept Title III funds.

There are fewer than 20 Title III consortia, each consisting of fewer than 20 districts.

There are fewer than 200 districts that are members of Title III consortia.

There are fewer than 900,000 students.

There are fewer than 100,000 students who have taken a single language evaluation test in both of the last two years.

TEAE/MN SOLOM Records

There are about 50,000 LEP students taking the TEAE/MN SOLOM tests contributing about 150,000 records per year.

Grades 3 - 12 take the TEAE Reading and Writing test (45,000 x 2 subjects = 90,000 records)

Grades K-12 take the MN SOLOM Listening/Speaking assessment (50,000 records)

4 Appendix – Computation of Statewide Starting and Ending Points for AMAO

AMAO Starting Points:

AMAO Starting Points are based on districts that are not part of a consortium. Each AMAO measure (report section) and cohort has a unique starting point derived from the district at the 20th percentile for that AMAO measure and cohort.

The following method was used to determine the statewide starting points for each cohort and AMAO measure.

1. AMAO Progress and Proficiency results (the AMAO measures) were computed for all districts in the state using MARSS enrollment data and TEAE / MN SOLOM assessment data. The logic used is described above in the Progress and Proficiency sections of the functional requirements. These results are based on students enrolled over the first two weeks of the 2007 TEAE / MN SOLOM assessment window – 4/16/2007 through 4/27/2007.
2. Only those districts that were not part of a consortium and were designated as Title III were selected to be rank ordered.
3. The total number of students for each cohort by AMAO measure was totaled providing a ‘statewide enrollment total’ for these Title III districts.
4. For each cohort by AMAO measure, the schools are ranked based on the respective rate from low (0% making progress or proficient) to high (100 % making progress or proficient).
5. Based on this ranking, a ‘cumulative enrollment total’ is written to each district record in order from 0% to 100%. For example, the first school (at 0% proficient) has an ‘enrollment total’ of 40. The ‘cumulative enrollment total’ is set to 40. The second school (at 1% proficient) has an ‘enrollment total’ of 55. The ‘cumulative enrollment total’ is set to 40 + 55 = 95. The third school (at 2% proficient) has ‘enrollment total’ at 73. The ‘cumulative enrollment total’ is set to 40 + 55 + 73 = 168.
6. The first district that has their ‘cumulative enrollment total’ equal or exceed 20% of the ‘state enrollment total’ has their ‘rate’ set as the statewide starting point for that cohort and measure.

AMAO Ending Points:

Ending points are established using the five largest Title III districts and the state. For the state measurement, all LEP students were included regardless of the Title III status of the districts where they were served. Each AMAO measure and cohort has a unique ending point derived from one of these six large entities. The highest ‘rate’ for each AMAO measure and cohort from these six entities is selected as the ending point.

5 Appendix – Example AMAO Report

The original form for the AMAO reports is shown below. This form is used to present data for each participating district as well as for the State of Minnesota. Each report is divided into sections: a header, a progress section (dependent on two years of test data), a proficiency section, a content ability section, and an annual status section. The final form of the report may differ somewhat from this form shown according to peculiarities arising from the implementation tool(s) used and final program area review.

Districts can participate individually, and it is also possible for a group of districts to form a consortium and participate through the consortium. No matter how a district participates, a report is provided for it. In district reports, only students in districts receiving Title III funds are considered, so these reports can be for a subset of districts in the state.

Reports are also created for the entire State of Minnesota. One type of state report is based just on students in districts receiving Title III funds, the other is for all students independent of attendance in a district that receives Title III funds.

In both the progress and proficiency sections, student test results are grouped according to the number of years a student has been in a Minnesota school. Cumulative MARSS Average Daily Membership (ADM) is used to determine this value, beginning with the 1996/1997 school year and continuing through the year prior to the test administration. There are three of these attendance groupings (less than 3 years, at least 3 years but less than 6 years, and 6 years or more). The groups are referred to as “cohorts”.

The academic content section reports on average MCA index scores for reading and math. The group for which these two averages are calculated is the “expanded LEP subgroup from AYP” for the district or state. This subgroup includes those students who at any time in the last two years were designated as “LEP” in the MARSS database or who are currently identified as “LEP” using the current MCA test record. This group will probably differ in size and membership from the groups reported on in the progress and proficiency sections above. These values are drawn directly from AYP calculated results for the same academic year.

Reports will be available one at a time, presented on a web display with the option of downloading a copy in PDF format. The date of report creation will be shown on each report. The report also shows the date/time of the last execution of the calculation engine so that the vintage of the data is apparent. (This date is not affected by a status override if it exists.) The “report creation” process mentioned earlier is responsible for generating the report files used by the web server facilities.

The report form is shown here with key aspects (fields) identified graphically and then explained. The AMAO Calculations facilities provide the report data.

0 District Annual Measurable Achievement Objectives for the ESL Program

DISTRICT No.	DISTRICT NAME	CONSORTIUM FISCAL HOST NAME	2003-2004				
Language ability Test of Emerging Academic English (TEAE) and Minnesota Student Oral Language Observation Matrix (MSLOM)							
PROGRESS							
cohort	Number of ELL contributing 1 or more matched test scores	Number of matched test scores 02-03 – 03-04	Rate of progress (%)	State target (%)	Status		
0-2.9 years							
3-5.9 years							
6 + years							
PROFICIENCY							
cohort	Number of ELL contributing all 3 test scores	Number of test scores 03-04	Rate of proficiency (%)	State target (%)	Status		
0-2.9 years							
3-5.9 years							
6 + years							
Content ability Minnesota Comprehensive Assessment (MCA)			<p>Title III districts or consortia must meet state goals (shown by an "A" in the status column) for each cohort that meets the minimum cell size requirement (n greater than or equal to 20).</p> <p>The English ability AMAO (progress and proficiency) are based on the district's or consortium's LEP population.</p> <p>The content ability AMAO (reading and math) are based on the district's AYP Expanded LEP population (which includes LEP and former LEP who were reclassified within the last 2 years).</p>				
READING							
Index	Target Index	Status					
MATHEMATICS							
Index	Target Index	Status					
Annual							
2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011

Status Key: A = Above the state target; B = Below the state target; Z = Not meeting minimum cell size of at least 20 students; X = Lack of data on which to base a status; "S" = AYP safe harbor conditions met. Two consecutive years of "B" status requires a district plan to improve its ESL services. Four consecutive years of "B" status requires a district to restructure its ESL services in cooperation with the Minnesota Department of Education. An asterisk next to any status value indicates that the value is based on a successful appeal of a calculated value.

Report date: mm/dd/yyyy

Data last updated on: mm/dd/yyyy

<u>Field Number</u>	<u>Report Section</u>	<u>Description</u>
0	Header	<p><u>District Reports:</u></p> <p>The header shows these items: (1) a district number, (2) the corresponding district name, (3) the name of the consortium (i.e., Fiscal Host District name) if the district is a consortium member (“NA” otherwise), and (4) the school year of the most recent test data being used for the report. (Two years of test data are used to create the report.)</p> <p><u>State Reports:</u></p> <p>State report including data for all Title III districts: District number = blank District name = “State of Minnesota – All Title III Districts” Consortium Name = blank or “NA” Year = the school year of the most recent data in the report in the form yyyy-yyyy.</p> <p>State report including data for all districts: District number = blank or “NA” District name = “State of Minnesota – All Districts” Consortium Name = blank Year = the school year of the most recent data in the report in the form yyyy-yyyy.</p>
1	Progress	This column identifies the attendance “cohort”.
2	Progress	<p>For a given cohort, an entry in one of these fields shows how many students have a valid score on at least one of the three language proficiency tests (TEAE reading, TEAE writing, or MN SOLOM) in both current year and prior year.</p> <p>When the report is invoked for a Title III district that is a consortium member, this field shows data for the whole consortium. For a Title III district that is not a consortium member, the report shows just district data.</p> <p>The state reports show counts for either all Title III districts or for all districts according to the type of state report requested.</p>
3	Progress	Fields in this column show the total number of tests taken by the students in the previous column. This will never be more than 3 times the count in the field immediately to its left since there are only three possible tests. These are test-taking instances.

<u>Field Number</u>	<u>Report Section</u>	<u>Description</u>
4	Progress	This column reports the fraction of the test taking instances in which progress was made between the two years. Presented as a % to the nearest 0.01%. If a progress status value = “Z” (see item 6), then this field is left blank.
5	Progress	Target % improvement values are provided in this column.
6	Progress	Status values are assigned based on whether the target is met for a given cohort. “A” means at or above the target value, “B” means below the target, “Z” means that the cohort filter limit was not met, and “X” status indicates a lack of data on which to base a status value. If an asterisk appears after a status value, this means that the status calculated automatically according to the rule above has been replaced manually with another value based on an AMAO appeal. An abbreviation of the reason for the override will also be shown. See the section named “Override of Status Values”.
7	Proficiency	This column identifies the attendance “cohort”.
8	Proficiency	This shows the number of LEP students taking all three language tests in the current year. When the report is invoked for a Title III district that is a consortium member, this field shows data for the whole consortium. For a Title III district that is not a consortium member, the report shows just district data. The state reports show counts for either all Title III districts or for all districts according to the type of state report requested.
9	Proficiency	The total number of test scores (must be 3 times the value in the field to its left).
10	Proficiency	The ratio of students identified in 8 above who scored proficient in <u>all</u> three test scores in the current year. This is represented as a percent to the nearest 0.01%. (See the previous definition of proficiency in field 4 above.) Note: If two (or more) scores are encountered for a student for a single test instance, the higher (highest) value is used. If a progress status value = “Z” (see item 12), then this field is left blank.
11	Proficiency	Target % values are provided in this column.

<u>Field Number</u>	<u>Report Section</u>	<u>Description</u>
12	Proficiency	<p>Status values are assigned based on whether the target is met for a given cohort. “A” means at or above the target value, “B” means below the target, “Z” means that the cohort filter limit was not met, and “X” status indicates a lack of data on which to base a status value.</p> <p>If an asterisk appears after a status value, this means that the status calculated automatically according to the rule above has been replaced manually with another value based on an AMAO appeal. An abbreviation of the reason for the override will also be shown. See the section named “Override of Status Values”.</p>
13	Content ability	<p>This field holds the AYP index score on the MCA reading test for the students identified as members of the expanded LEP subgroup for the district or consortia or state as described above. The average is presented to the nearest 0.01.</p> <p>If a progress status value = “Z” (see item 15), then this field is left blank.</p>
14	Content ability	<p>The MCA reading AYP target index value for the district or state. These values are drawn from AYP target calculations.</p>
15	Content ability	<p>Status values are assigned based on whether the target is met. “A” means at or above the target value, “B” means below the target, “Z” means that the cohort limit was not met, and “X” status indicates a lack of data on which to base a status value. “S” means “safe harbor” conditions were met. A value of “S” is equivalent to “A” for determining the annual status value mentioned later.</p> <p>If an asterisk appears after a status value, this means that the status calculated automatically according to the rule above has been replaced manually with another value based on an AMAO appeal. An abbreviation of the reason for the override will also be shown. See the section named “Override of Status Values”.</p>
16	Content ability	<p>This field holds the AYP index score on the MCA math test for the students identified as members of the expanded LEP subgroup for the district or consortia or state as described above. The average is presented to the nearest 0.01.</p> <p>If a progress status value = “Z” (see item 18), then this field is left blank.</p>
17	Content ability	<p>The MCA reading AYP target index value for the district or state. These values are drawn from AYP target calculations.</p>

<u>Field Number</u>	<u>Report Section</u>	<u>Description</u>
18	Content ability	<p>Status values are assigned based on whether the target is met. “A” means at or above the target value, “B” means below the target, “Z” means that the cohort filter limit was not met, and “X” status indicates a lack of data on which to base a status value.</p> <p>If an asterisk appears after a status value, this means that the status calculated automatically according to the rule above has been replaced manually with another value based on an AMAO appeal. An abbreviation of the reason for the override will also be shown. See the section named “Override of Status Values”.</p>
19	Annual status	<p>Annual status values for the current year are based on the 8 component detailed status values previously defined. Annual status values are determined as follows: any current year detailed status value of B yields a summary value of B. Detailed values of A, S, Z, and X in any combination where there is at least one A or S value result in a summary value of A. If all detailed values are Z, then the summary value is Z. An X status indicates a lack of data on which to base a status value.</p> <p>If an asterisk appears after one the 8 component status values, this is not reflected in the annual status value.</p>