



# Robbinsdale Area Schools School Board Meeting Agenda

Monday, November 5, 2012 at 6:00 PM

Work Session

Education Service Center Boardroom, 4148 Winnetka Avenue North,  
New Hope, Minnesota

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1. Legislative Action Coalition - 2013 Legislative Platform Draft 2  
Presenter: Al Ickler/Kami Aho/Jenny Holte/Heather Kehn/Kim Lewis/Jon Miners/John Vento  
Time: 6:00 - 6:45 p.m.
2. Area Learning Center (ALC) Graduation Requirements 5  
Presenter: Aldo Sicoli/Chris Rowe-Bartel/Linda Valentine/Gretchen Wurzer  
Time: 6:45 - 7:15 p.m.
3. Break  
Time: 7:15 - 7:25 p.m.
4. Middle School Science, Technology, Engineering and Math (STEM) Program 11  
Presenter: Gayle Walkowiak/Steve White  
Time: 7:25 - 7:55 p.m.
5. Financial Analysis - School of Science, Engineering and Arts (SEA) School 21  
Presenter: Jeff Priess  
Time: 7:55 - 8:15 p.m.
6. Forest Elementary Enrollment and Program Capacity 24  
Presenter: Dennis Beekman  
Time: 8:15 - 8:35 p.m.
7. Minneapolis Public Schools Resolution to Remain in West Metro Education Program 27  
Presenter: Helen Bassett  
Time: 8:55 - 9:15 p.m.
8. School Board Compensation  
Presenter: Barb Van Heel  
Time: 8:55 - 9:15 p.m.



MEMO

DATE: November 5, 2012

TO: Members of the School Board  
Superintendent Aldo Sicoli

FROM: Al Ickler  
Executive Director – Community Education

RE: Legislative Action Coalition – 2013 Legislative Platform Draft

The board will participate in a dialogue session on the 2013 platform drafted by the Legislative Action Coalition.

The 2013 legislative platform focuses on advocating for the resources needed to ensure all children are successful, and policies that will provide effective and efficient use of the resources.

Al Ickler, executive director of community education and Kim Lewis, program assistant, will join Legislative Action Coalition members Jon Miners, Kami Aho, Jenny Holte, Heather Kehn and John Vento in introducing the platform.

Members of the Legislative Action Coalition of Robbinsdale Area Schools advocate for our public school district and the learners, families, and communities it serves. Members are citizen volunteers who share an interest in legislative advocacy and a passion for public education.

## **Robbinsdale Area Schools Legislative Action Coalition 2013 Legislative Platform**

*We believe each Minnesota child deserves to attend a great public school and obtain an excellent education. To achieve this, Minnesota needs to amend its education funding and delivery system to meet the needs of today's students. All students must graduate with the knowledge and skills needed to be successful in the 21<sup>st</sup> century.*

Minnesota must reform education funding to provide adequate, predictable, and sustainable funding sufficient to meet the instructional needs of our current students and prepare all of our students to succeed in a post-secondary program. The Robbinsdale Area Schools Legislative Action Coalition (LAC) will advocate for the resources and reforms necessary for student success, including:

- **Improve access to high quality all-day kindergarten and pre-K programs.**
- **Ensure inflationary increases are addressed through the general education funding formula**
- **Fully fund special education programs ensuring students are well served and resources are not diverted from the general fund.**
- **Dedicate funding for school technology and library media resources, so that the district can enhance personalized learning.**

**Robbinsdale Area Schools  
Legislative Action Coalition  
2013 Legislative Draft Platform**

We believe that the state and local school districts must partner to improve education outcomes and school boards should work closely with the communities they serve and are best positioned to understand local issues and make decisions regarding district programs and finances. We will advocate for transparency, policy review, and local control, including:

- **State laws that support local control and decision making, and the elimination of broad mandates.**
- **Integrated and equitable learning opportunities for our students which follow the desegregation rule and the integration revenue program in a manner consistent with the framework developed by the Integration Revenue Replacement Task Force.**
- **Principal and teacher evaluation processes that are strong, fair, but not overly burdensome.**
- **Fair, consistent and relevant Graduation Required Assessments for Diploma (GRAD) standards.**
- **Level the playing field between local units of government by allowing school boards to renew an expiring operating referendum by a majority vote of the school board.**
- **Evaluate and support health indicators contributing to academic achievement.**

From a local perspective, we acknowledge sequestration is a national concern. Sequestration is the automatic, across-the-board cancellation of budgetary resources. It was put into place as a government wide effort to cut overall federal spending without concern for priority investments like education that are crucial to the long-term success of the nation. The LAC urges Congress to rescind sequestration to protect our nation's education priorities.



TO: Members of the School Board

FROM: Aldo Sicoli, Superintendent

DATE: November 2, 2012

RE: Graduation Requirements for Students in Alternative Learning Centers

**DISCUSSION:**

In 2009 Hennepin County Commissioners, Hennepin County Staff, and Superintendents of Hennepin County school districts began discussion of partnership efforts in a number of areas. In 2010 the discussions included ideas for dropout prevention efforts in the county. In 2011 school districts passed a resolution, expressing an interest in working together to prevent students from dropping out of school.

As discussions and research into existing models progressed, an identified barrier to graduation was differing graduation requirements among school districts. This barrier is particularly challenging for many students who attend Area Learning Centers. Area Learning Center (ALC) students are often highly mobile, changing schools more often than most students.

Consequently, they make progress towards graduation requirements in a given school district and then attend school in another district that has different graduation requirements; credits earned in a former district do not always apply towards graduation in the new school district. This slows student efforts towards graduation and can be discouraging to students.

An expert group was formed and made two recommendations. The first recommendation deals with accepting common graduation requirements and the second relates to identifying a common currency to convey student learning information at less than a course-equivalent level.

Superintendents were asked to respond to their level of comfort with the recommendations. It was understood that some district superintendents, such as those in the Robbinsdale Area Schools, Richfield Schools, and Intermediate District 287, would be ready to have conversations with their school boards about the possibility of issuing a diploma to ALC students based on the state requirements for graduation. The state requires completion of at least 21.5 year-long credits, with credit requirements in specified curricular areas. Robbinsdale Area Schools requires completion of 46 semester credits (equivalent to 23 year-long credits), with credit requirements in specified curricular areas.

This was discussed at the July 9, 2012 School Board Work Session. At that time School Board members were not ready to revise graduation requirements for Robbinsdale Area Schools ALC students but indicated that they would be willing to discuss it further at a later date. I met with Highview staff on September 11, 2012. Instead of adopting the state graduation requirements, Highview staff and district administration propose that we reduce total credits for Highview students from 46 to 44 (the state requires 43) by reducing electives from 14 to 12 semester credits. Electives are harder to get at Highview so this would prevent Armstrong and Cooper students from going to Highview when they need two more credits to graduate because they almost always need required credits upon entrance to Highview. Armstrong and Cooper administration support this proposal. Materials included for discussion of this topic are a description of the Minnesota state graduation requirements and a chart that compares graduation requirements in various school districts.

	Social Studies	English	Math credits	Science credits	PE	Health	Fine Arts	Electives	Total credits needed to graduate
<b>2012-13</b>									
<b>Minnesota High School Graduation Requirements;</b> 1 year = 1 credit	3.5	4	3	3	3		1	7	21.5
<b>Robbinsdale;</b> 1 semester = 1 credit	8	8	6	6	2	1	1	14	46
<b>2009-10</b>									
<b>* Wayzata;</b> 1 semester = 1 credit	8	8	8*	8*	2	1	2	27	60*
<b>* Hopkins;</b> 1 semester = 1 credit	8	8	6	6	2	1.5	2	20.5	54
<b>* St. Louis Park;</b> 1 semester = 1 credit	8	8	6	6	2	2	2	12	46
<b>Richfield;</b> 1 semester = 1 credit	8	8	6	6	2	1	0?	11	42
<b>Bloomington</b> 1 semester = .5 credit	4	4	3.5	3	1	0.5	1	12	29
<b>Minnetonka</b> 1 semester = .5 credit	3.5	4	3	3	1	0.5	1 (includes FA credit) 7.5		22.5
<b>Brooklyn Center</b> 1 semester = .5 credit	4	4	3	3	1	0.5	0?	15.5	25 (26 after 2009)
<b>Rochester</b> 1 semester = .5 credit	3 (+ .5 econ)	4	3	3	1	0.5	1	7.5	24
<b>Duluth</b> 1 semester = .5 credit	3.5	4	3	3	0.5	0.5	1	6	21.5
<b>* Osseo</b> 1 trimester = 1 credit	10	12	9	9	1	1	3	19	45
<b>Minneapolis</b> 1 trimester = 1 credit	10	11	9	7	3	1	2	22	66
<b>N. St. Paul/Oakdale</b> 1 trimester = 1 credit	10	10	9	7	3	1	2	23	66
<b>S. St. Paul</b> 1 trimester = 1 credit	(4 yrs)	(4 yrs)	(3 yrs)	(2 yrs)	(1 trimester)	(1 yr)	(1 yr)	varies	varies

<b>St. Paul</b>									
1 quarter = 1 credit	14 (3.5 yrs)	16 (4 yrs)	12 (3 yrs)	12 (3 yrs)	2 (.5 yr)	2 (.5 yr)	4 (1 yr)	21 (22 after 2011)	85 (86 after 2011)
* Gr. 10-12 high schools			* includes STEM courses	* includes STEM courses	* includes 1 health credit				

## Minnesota's High School Graduation Requirements

***Students must meet state and local high school graduation requirements***

To graduate from a Minnesota public high school, a student must meet the state's course credit and testing requirements and any additional local requirements established by the school district. State graduation requirements are outlined in [Minnesota Statutes, chapter 120B](#), and [Minnesota Rules, chapter 3501](#). Students also must pass three standards-based tests in reading, math, and writing.

***Minnesota requires students to complete 21.5 required and elective course credits***

State course credit requirements for graduating from high school require students to complete 21.5 course credits:

- four language arts credits
- three math credits in algebra, geometry and statistics, and probability; students in the class of 2015 and later also must complete an algebra II credit (or its equivalent) as part of this three-credit requirement
- three science credits that include one biology credit; students can use an agriculture science course to meet a general science credit, and students in the class of 2015 and later also must complete one physics or chemistry credit as part of this three-credit requirement
- three-and-a-half social studies credits in U.S. history, geography, world history, economics, and government and citizenship, or three social studies credits in U.S. history, geography, world history, government and citizenship, and half a credit in economics taught in the social studies, business, or agriculture education department of a high school
- one art credit
- seven elective credits

Beginning in the 2012-2013 school year, students must also have physical education, based on standards developed by the National Association for Sport and Physical Education.

A course credit signifies that a student successfully completed an academic year of study in a particular subject area or the district otherwise determined that the student mastered the subject area. Students may use a career and technical education course to meet a general science, math, or art credit.

***State graduation requirements apply to ELL students and children with disabilities***

Students with limited English proficiency, or English language learners (ELL), must meet the same graduation requirements as all other students. Children with disabilities must be given accommodations that are appropriate to their strengths and needs, and that permit equal access to and work toward grade-level content standards.

***Students also must complete local graduation requirements***

The state requires each district to establish standards in local graduation requirements for health, and also for physical education until the 2012-2013 school year when state physical education standards apply. Districts also must establish standards in career and technical education and world languages, and must offer

elective courses in these two subject areas. Districts may impose additional local graduation requirements.

***Students must pass the GRAD writing, reading, and math tests; limited exceptions apply to some students***

To graduate from high school, a Minnesota public school student who entered grade 8 in the 2005-2006 school year or later must pass three standards-based Graduation Required Assessment for Diploma (GRAD) tests: writing in grade 9; reading in grade 10; and math in grade 11. The few remaining who entered grade 8 in the 2004-2005 school year or earlier who have not yet graduated must pass three minimum-competency Basic Skills Tests (BSTs): reading and math in grade 8; and writing in grade 10. A student who does not pass may retake a test according to an established retest schedule. Students in the classes of 2010 through 2014 who do not pass the math GRAD test may still graduate if they meet all other specified requirements.

Students with limited English proficiency who first enroll in a Minnesota public school in grade 9 or above need not pass the GRAD tests to graduate. Other public school students in unique situations must pass the GRAD reading, math, and writing tests; those students include dual enrollment students, foreign exchange students, open enrollment students, postsecondary enrollment options students, district-placed students, students attending school under a tuition agreement, students without an individualized education program (IEP) placed for care and treatment, and students without an IEP program in a correctional facility.

***GRAD test items that students must pass to graduate are embedded in the reading and math MCA-IIs***

The GRAD reading and math test items that students must pass to graduate in Minnesota are embedded in the reading and math Minnesota Comprehensive Assessments-Series II (MCA-IIs). Students' GRAD test scores and MCA-II test scores are reported separately. The state and districts use students' GRAD test scores to determine whether students graduate. The state and districts use students' MCA-II test scores to comply with a federal requirement that districts demonstrate adequate yearly progress sufficient to have all students proficient in reading and math by the 2013-2014 school year. Also to comply with federal law, many 11th grade ELL students take the Mathematics Test for English Language Learners (MTELL), which assesses the same grade-level math standards as the math MCA-II.

***MTAS is an alternative assessment for students with significant cognitive disabilities***

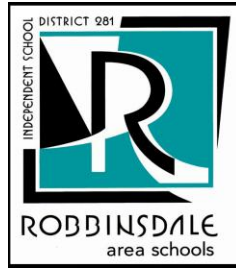
Students with IEPs and significant cognitive disabilities can take the Minnesota Test of Academic Skills (MTAS) instead of the GRAD reading and math tests. The MTAS is an alternative assessment in reading, math, and science that is based on alternative achievement standards and measures the extent to which students are making progress in the general curriculum. Students with IEPs and significant cognitive disabilities also can take the Alternative Assessment for Writing, which is an alternative assessment for the GRAD writing test.

***The MCA II high school science test is not a graduation requirement***

Although the federal No Child Left Behind Act requires states to administer a science test to high school students, students do not need to pass the high school science MCA II to graduate. State law prohibits the education commissioner from requiring students to receive a passing score on high school science assessments as a condition of receiving a diploma.

**For more information:** Contact legislative analyst Lisa Larson at 651-296-8036.

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MEMO

DATE: November 5, 2012

TO: Members of the School Board  
Superintendent Aldo Sicoli

FROM: Gayle Walkowiak, Executive Director, Teaching and Learning and Steve White,  
Teaching and Learning Specialist for math, science, health

RE: Further discussion about a potential MS STEM magnet program for students  
matriculating from the SEA School at Olson and for other interested students

During the October work session the School Board requested more information about a potential middle school STEM magnet program.

The attached report contains several documents including:

1. Proposal for a MS STEM magnet program
2. Sample schedule showing a typical instructional day for students enrolled in a MS STEM magnet program
3. List of the available units from Project Lead the Way's Gateway To Technology program for middle school students
4. Proposed budget
5. Floor plan of the lower level of RMS
6. Table showing where the state standards for science and math are already included in various GTT units



# PROPOSAL:

## MIDDLE SCHOOL STEM MAGNET PROGRAM

November 2012

### PROGRAM DESIGN

The middle school STEM magnet program will be comprised of two year-long courses including technology education (tech. ed.) and science.

#### TECHNOLOGY EDUCATION

Gateway to Technology (GTT) is a middle school STEM curriculum developed by Project Lead the Way (see [mnp1tw.org](http://mnp1tw.org)). It is currently used in the district's middle school technology education (tech. ed.) program. District middle school students may be enrolled in one or more of 3 quarter-long GTT/STEM units offered throughout grades 6, 7 and 8. The Gateway to Technology STEM curriculum focuses on engineering and technology and emphasizes related concepts from math and science.

*Students enrolled in the MS STEM magnet will be enrolled in a full year of technology education using up to 8 GTT units over grades 6-8 (see attached for a description of each unit). Enrichment opportunities may be added such as field trips to explore STEM-based careers, participation in opportunities such as the Metro ECSU Future City Competition and more.*

*Students in the MS STEM magnet program would not also be enrolled in Math Extensions. The technology education class would integrate the learning targets from the Math Extensions course into the GTT curriculum, thereby ensuring that students in the MS STEM magnet program get the math support they need to be proficient on the state math test.*

*Students enrolled in the MS STEM magnet program who are on-track for meeting math proficiency levels will deepen their understanding of engineering within the robust GTT curriculum and with other high-interest enrichment activities related to STEM education.*

#### SCIENCE

All district middle school students are enrolled in a full-year of science education including physical science in grade 6, biology in grade 7 and earth science in grade 8.

*Students enrolled in the MS STEM magnet program will also take 3 full years of science education. The science lessons will be integrated with the Gateway to Technology curriculum and will emphasize an inquiry-based approach to learning. All MS STEM magnet teachers will attend training on the GTT units during the summer and will work throughout the year to continuously sharpen the integrated approach to teaching science, technology, engineering and math. The nature of the teaching and learning in each course will be such that all students can be successful and that all students will be challenged academically.*

#### **Alternate Program Design**

*An alternate design for the science portion of the MS STEM magnet program would have every science teacher in the building trained to use an integrated, inquiry-based approach to science education, and all students would have access to the proposed high-tech science lab. In this model, the students in the STEM magnet program would have their science instruction along with other students in the grade level as usual.*

## **NUMBER OF SECTIONS**

Two or three sections of the MS STEM magnet program will be open for the incoming grade 6 students beginning with school year 2013-14. By school year 2014-15 the program will include students in grades 6 and 7, and by 2015-16 it will include students in grades 6-8. A third tech. ed. – GTT classroom may need to be considered by 2014-15 if the program includes more than 2 sections at each grade level.

## **ENROLLMENT PRIORITY**

It is proposed that students matriculating from the School for Engineering and the Arts at Olson (SEA) have first priority for enrollment in the Middle School STEM magnet. Additional seats will be filled through a lottery if the number of applications exceeds the number of available seats. A wait list will be created during the lottery process and students will be enrolled in order of the wait list as seats become available.

## **TRANSPORTATION**

Students will be transported to and from the MS STEM magnet program each day. Transportation will also be available for students enrolled in after-school activities.

## **FACILITIES FOR THE REGULAR GTT PROGRAM (NON-MS STEM MAGNET PROGRAM)**

For the past several years RMS has supported two tech. ed. - GTT classrooms including room 030 and room 004/006, although room 030 is somewhat less desirable as a GTT classroom due to a ramp located adjacent to the south wall and other structural irregularities.

The addition of the Math Extensions class beginning with school year 2012-13 for students not predicted to reach the proficient level on the MCA reduced the need for two tech. ed. – GTT classrooms and room 030 was subsequently converted into a general computer lab for test administration. No modifications were made to the classroom and all of the former GTT equipment/technology remains intact.

Room 004/006 will continue as a regular tech. ed. – GTT classroom and will be filled throughout the day with students in grades 6, 7, and 8 who are included in the regular tech. ed. GTT classes and not enrolled in the MS STEM magnet program.

## **FACILITIES FOR THE MS STEM MAGNET PROGRAM**

It is proposed that room 030 at RMS become the tech. ed. - GTT space for students enrolling in the MS STEM magnet program.

In order to improve the traffic pattern and the hands-on work space in room 030, and to make it more attractive as a learning space for the MS STEM magnet program, a list of capital improvements, in priority order, includes:

- Remove the ramp, doorway and half-wall on the south side of the room. These improvements will allow the computers to face the south wall and will increase the hands-on work space on the north wall by slightly more than 3 feet.
- Convert room 320, currently used as a general grade 6 classroom, into a high-tech, hands-on science lab. Room 320 is ideal for such a specialty science lab because it is located at the top of the staircase and thus avoids having grade 7 and 8 STEM magnet students walk through the grade 6 corridor. Another option would convert room 312, currently a computer lab, rather than 320.
- Increase the square footage of room 030 by building-out the jog that currently exists in the northeast section of the room. While improving the usefulness and traffic flow of the hands-on work space, the cost of this option causes it to be the lowest priority item.

## **STAFF TRAINING**

All teachers of the GTT curriculum must successfully complete training by the Project Lead the Way organization. It is proposed that math and science teachers also attend GTT training. Having the tech. ed., math and science teachers attend the training together will further support the goal of providing an integrated, inquiry-based teaching of science, technology, engineering and math in the MS STEM magnet program.

### ***Alternate Training Option***

*All science teachers at RMS will receive training in the IBMYP approach to technology instruction and would fully infuse technology-based learning into the science curriculum at each grade level. All RMS science teachers would also attend STEM training such as that offered by the Science Museum of Minnesota. Select math and science teachers would attend the summer GTT training with the tech. ed. teacher.*

<b>STEM MAGNET</b>	<b>Grade 6</b>	<b>Grade 7</b>	<b>Grade 8</b>
<b>PERIOD 1 Every Day</b>	Math	Math	Math
<b>PERIOD 2 Every Day</b>	English/Lang. Arts	English/Lang. Arts	English/Lang. Arts
<b>PERIOD 3 Every Day</b>	Science	Science	Science
<b>PERIOD 4 Every Day</b>	Social Studies	Social Studies	Social Studies
<b>PERIOD 5 Global Language or Reading Emphasis</b>	½ Developmental Reading ½ Global Language	At PMS: ½ Dev. Reading ½ Global Language At RMS: Global Language	Global Language
	<b>or</b> Workshop Reading	<b>or</b> Workshop Reading	<b>or</b> Workshop Reading
	<b>or</b> Intervention Reading	<b>or</b> Intervention Reading	<b>or</b> Intervention Reading
<b>PERIOD 6 Every Other Day</b>	Physical Education and Music <b>or</b> Physical Education and 2 Allied Arts	Physical Education and Music <b>or</b> Physical Education and 2 Allied Arts	Physical Education and Music <b>or</b> Physical Education and 2 Allied Arts
<b>PERIOD 7</b>	4 quarters of Allied Arts Art, Tech Ed - GTT, Health, FACS, AVID <b>or</b> Math Extensions full-year	4 quarters of Allied Arts Art, Tech Ed - GTT, Health, FACS, AVID <b>or</b> Math Extensions full-year	4 quarters of Allied Arts Art, Tech Ed - GTT, Health, FACS, AVID <b>or</b> Math Extensions full-year
<b>PERIOD 7 STEM Magnet Every Day</b>	<b>Additional STEM Gateway to Technology curriculum</b> Including inquiry-based science, technology, engineering and math	<b>Additional STEM Gateway to Technology curriculum</b> Including inquiry-based science, technology, engineering and math	<b>Additional STEM Gateway to Technology curriculum</b> Including inquiry-based science, technology, engineering and math

# PROJECT LEAD THE WAY - GATEWAY TO TECHNOLOGY

## CURRICULUM UNITS FOR THE MIDDLE SCHOOL

The PLTW Gateway To Technology (GTT) program features a project-based curriculum designed to challenge and engage the natural curiosity and imagination of middle school students. They envision, design and test their ideas with the same advanced modeling software used by companies like Lockheed Martin, Intel and Sprint. They study mechanical and computer control systems and explore the importance of energy, including innovative ways to reduce, conserve and produce it using solar, thermal and wind power.

Throughout GTT, students acquire knowledge and skills in problem solving, teamwork and innovation as well as explore STEM careers. Taught in conjunction with a rigorous academic curriculum, the program is divided into seven, nine-week independent units, assuming a 45-minute class period. Schools implement both foundation units and may add any combination of the specialization units.

GTT, intended for grades six through eight, is designed to spark an interest in STEM subjects and prepare students for further study in high school.

### FOUNDATION UNITS

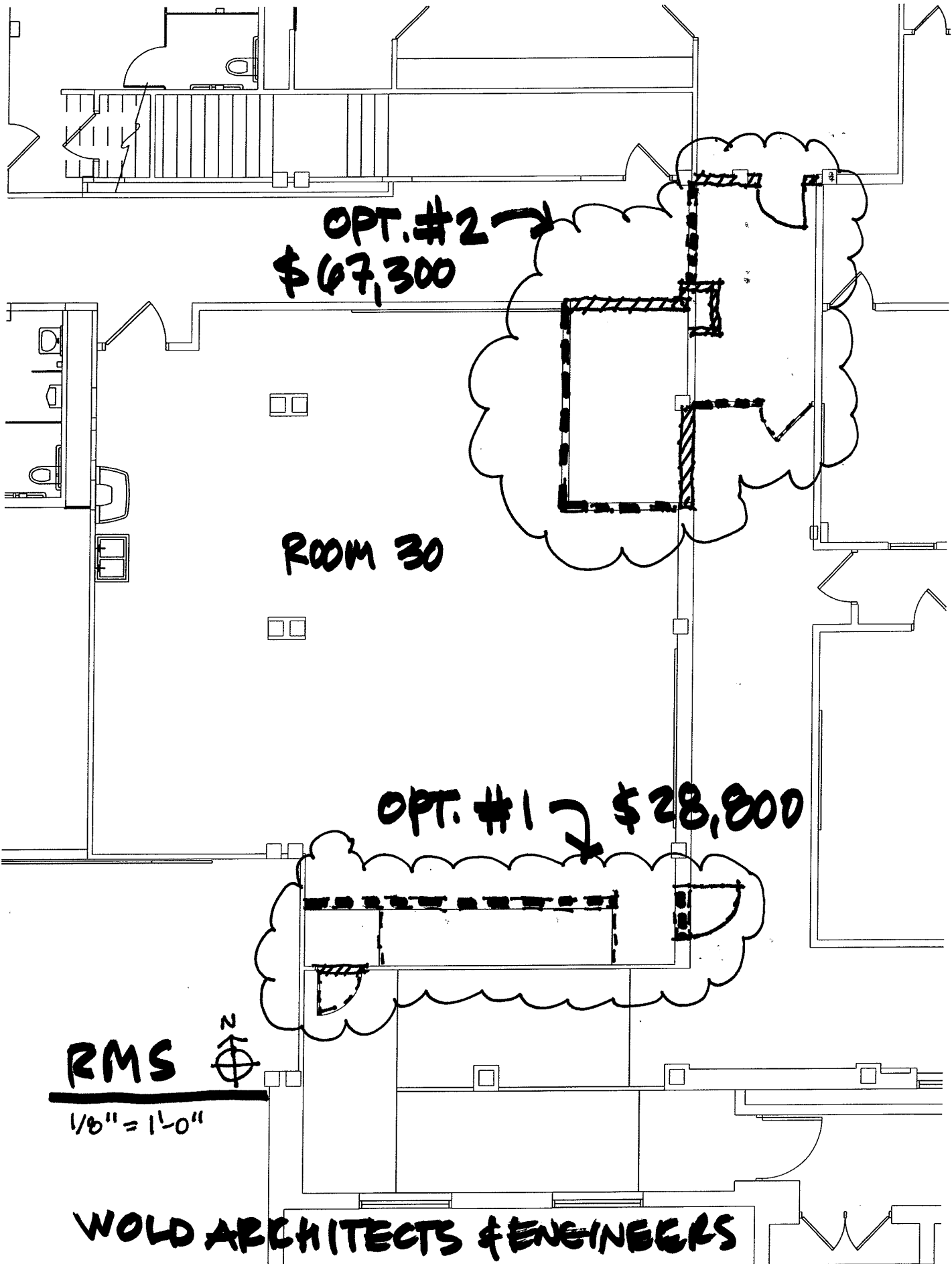
- **Automation and Robotics (AR)** Students trace the history, development, and influence of automation and robotics. They learn about mechanical systems, energy transfer, machine automation and computer control systems. Students use a robust robotics platform to design, build and program a solution to solve an existing problem.
- **Design and Modeling (DM)** In this unit, students begin to recognize the value of an engineering notebook to document and capture their ideas. They are introduced to and use the design process to solve problems and understand the influence that creative and innovative design has on our lives. Students use industry standard 3D modeling software to create a virtual image of their designs and produce a portfolio to showcase their creative solutions.

### SPECIALIZATION UNITS

- **Energy and the Environment (EE)** Students investigate the impact of energy on our lives and the environment. They design and model alternative energy sources and participate in an energy expo to demonstrate energy concepts and innovative ideas. Students evaluate ways to reduce energy consumption through energy efficiency and sustainability.
- **Flight and Space (FS)** The rich history of aerospace comes alive through hands-on activities, research, and a presentation in the form of a short informational video. Students explore the science behind aeronautics and use their knowledge to design, build and test an airfoil. Custom-built simulation software allows students to experience space travel.
- **Green Architecture (GA)** In a world of reduced resources and environmental challenges, it is important to present the concept of “being green” to the next generation of designers and builders. In this unit, students are introduced to architectural plans, construction styles, alternative materials and processes, dimensioning, measuring and architectural sustainability. Students use a 3D architectural software program to create an environmentally friendly home using shipping containers.
- **Magic of Electrons (ME)** Through hands-on projects, students explore the science of electricity, behavior and parts of atoms, and sensing devices. Students acquire knowledge and skills in basic circuitry design and examine the impact of electricity on our lives.
- **Science of Technology (ST)** How has science affected technology throughout history? To answer this question students apply the concepts in physics, chemistry and nanotechnology to STEM activities and projects.
- **Medical Detective (MD)** Available for school year 2013-14.

## PROPOSED BUDGET FOR MIDDLE SCHOOL STEM MAGNET PROGRAM

Proposed Expense Items	3 Year Budget Estimate			
	2013-2014	2014-2015	2015-2016	Total
<b>1 Capital Improvements to Room 030</b>				
1st Priority (remove ramp)	28,800	0	0	28,800
2nd Priority (remove concrete block wall) estimated at \$67,300	0	0	0	0
Capital Improvement Subtotal	\$ 28,800	\$ -	\$ -	\$ 28,800
<b>2 Science Classroom Enhancements</b>				
Science desks/chairs (30@\$200)	6,000	0	0	6,000
Misc Science/STEM related equip	15,000	0	0	15,000
SMART board/projector	3,000	0	0	3,000
Laptop Computers	32,000	0	0	32,000
Classroom Enhancement Subtotal	\$ 56,000	\$ -	\$ -	\$ 56,000
<b>3 Transportation</b>	35,000	70,000	105,000	210,000
Transportation Subtotal	\$ 35,000	\$ 70,000	\$ 105,000	\$ 210,000
<b>4 Curriculum</b>				
Gateway To Technology	30,000	30,000	30,000	90,000
Curriculum Subtotal	\$ 30,000	\$ 30,000	\$ 30,000	\$ 90,000
<b>5 Personal Mobile Device</b>				0
iPads (30@\$200) x 2 classes	12,000	0	0	12,000
Personal Mobile Device Subtotal	\$ 12,000	\$ -	\$ -	\$ 12,000
<b>6 Professional Development</b>				
Gateway To Technology at the U of M @ 3,500/participant over 3-year period	15,000	15,000	15,000	45,000
MYP Technology Travel @\$2000/person over 3-year period	6,000	6,000	6,000	18,000
STEM at Science Museum @\$1,000/teacher over 3-year period	3,000	3,000	3,000	9,000
Professional Development Subtotal	\$ 24,000	\$ 24,000	\$ 24,000	\$ 72,000
<b>Proposed Budget Total Per Year</b>	<b>\$ 185,800</b>	<b>\$ 124,000</b>	<b>\$ 159,000</b>	<b>\$ 468,800</b>



OPT. #2 →  
\$67,300

ROOM 30

OPT. #1 → \$28,800

**RMS** 

1/8" = 1'-0"

**WOLD ARCHITECTS & ENGINEERS**

# MINNESOTA PROJECT LEAD THE WAY

## Example of how a GTT lesson meets a grade 6 math benchmark

**Gateway to Technology course: Design and Modeling (see shaded area in table)**

**Minnesota Math Strand: 6.1.3** Numbers and Operations

**Benchmark: 6.1.3.4** Solve real-world and mathematical problems requiring arithmetic with decimals, fraction and mixed numbers

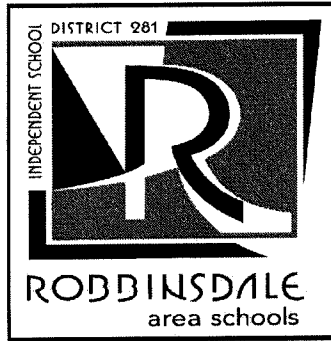
### Essential Understandings/Big Ideas:

Being able to multiply and divide fractions and mixed numbers accurately is important at school, at home, at work and when pursuing hobbies. Solving real-world and mathematical problems using arithmetic is practiced in PLTW classes when students use precision measuring tools. Correct use of these tools is taught to ensure accurate measurements are taken. The need for very accurate measurements during the design process goes back at least to the time of the great pyramids. The ancient Egyptians used the basics of math to solve real-world problems when they built the pyramids.

### What students should know and be able to do related to this Minnesota benchmark

- Understand numbers, ways of representing numbers, relationships among numbers, and number systems.
- Understand meanings of operations and how they relate to one another.
- Understand measurable attributes of objects and the units, systems, and processes of measurement.
- Apply appropriate techniques, tools, and formulas to determine measurements.

Gateway to Technology Unit	STEM	Minnesota Standard/ Benchmark
Automation and Robotics (AR)	Math	Standard 6.2.3.1
	Science	Benchmark 6.1.2.2.1
	Science	Standard 6.2.2.2
	Science	Standard 9.1.2.2
	Science	Benchmark 9.1.2.2.1
Design and Modeling (DM)	Math	Standard 6.1.3.4
	Science	Benchmark 6.1.2.2.1
Energy and the Environment (EE)	Math	Standard 6.1.2.4
	Science	Benchmark 9.1.2.1.2
Flight and Space (FS)	Math	Standard 6.1.2.4
	Math	Standard 7.2.2.2
	Science	Standard 8.1.3.3
	Science	Standard 9.1.2.2
Magic of Electrons (ME)	Math	Standard 7.2.1.1
	Science	Benchmark 9.1.2.2.1
Science of Technology	Math	Standard 7.2.2.2
	Science	Benchmark 6.2.2.1.1



TO: Members of the School Board

FROM: Jeff Priess, Executive Director of Business Services

DATE: November 5, 2012

RE: Financial Analysis -SEA

**DISCUSSION:**

Attached information provides an analysis of enrollment and fiscal operations at SEA. Report provides updated enrollment, revenue and expenditure information along with a comparison to the planning model for the 2012-13 school year. The analysis also provides revised estimates of operational costs for the 2013-14 school year.

**QUESTIONS:**

For questions please contact Jeff Priess at 763-504-8037 or [jeff\\_priess@rdale.org](mailto:jeff_priess@rdale.org)

**SEA Impact on Student Enrollment**

Increases:

- (1) Additional K-5 non-resident students who are attracted to enroll in SEA
- (2) Resident students in grades 1-5 who are attracted to enroll in SEA who did not attend ISD#281 before
- (3) Resident students in Kindergarten who are attracted to enroll in SEA who otherwise would not have attended an ISD#281 school
- (4) Opening SEA added additional capacity to serve more total elementary students throughout the district

	k					Total
	1	2	3	4	5	
(1)	5	2	2	1	5	15
(2)	6	5	7	3	4	27
(3)	3					3
(4)	24	12	18	5	5	63
<b>Addit Students</b>	<b>33</b>	<b>22</b>	<b>27</b>	<b>10</b>	<b>10</b>	<b>108</b>
<b>Planning Model</b>	<b>22</b>	<b>22</b>	<b>15</b>	<b>15</b>	<b>10</b>	<b>94</b>

**SEA Impact on Revenue**

	Actual 2012-13	Planning 2012-13	Planning 2013-14
General Education Basic Funding Formula	5,224		5,276
Other General Ed Formula amounts	274		274
Additional WADM's generated from enrollment increase	102.94		132.83
<b>Additional General Education Revenue</b>	<b>565,970</b>	<b>509,264</b>	<b>737,216</b>
Special Education Reimbursement	81,245	15,000	82,464
Compensatory	0	15,000	25,000
<b>Total Revenue</b>	<b>647,215</b>	<b>524,264</b>	<b>844,680</b>

SEA Impact on Expenditures	Actual 2012-13	Planning 2012-13	Planning 2013-14
Administration	171,949	169,852	174,528
Instructional Staff Increase (5.5) FTE	294,597	374,885	369,692
Instructional Support (EA) 6.1 FTE	159,149	100,583	161,536
Specialist (Art/Music/Nurse/Media/Coord)	321,378	219,933	299,015
Special Education Licensed	107,126	0	108,733
Special Education Non-Licensed	52,180	8,875	52,963
Maintenance Staff	134,033	122,412	136,043
<b>Total Staff Costs</b>	<b>1,240,412</b>	<b>996,540</b>	<b>1,302,511</b>
Other Costs:			
Capital Costs-(Materials/Equip/Tech/Media)	591,060	433,000	0
Operational Costs-Materials/Tech/Prof Dev/Transportation/Utilities	125,643	297,083	126,899
<b>Total Other Costs</b>	<b>716,703</b>	<b>730,083</b>	<b>126,899</b>
<b>Total Expenditures</b>	<b>1,957,115</b>	<b>1,726,623</b>	<b>1,429,410</b>
<b>Budget Impact</b>	<b>(1,309,900)</b>	<b>(1,202,359)</b>	<b>(584,730)</b>



To: School Board  
From: Dennis Beekman, executive director  
Date: November 5, 2012  
Re: Forest Elementary Enrollment and Program Capacity

A handwritten signature in black ink, appearing to read 'Dennis Beekman'.

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## DISCUSSION

For the last several years Forest Elementary School enrollment has been near or exceeded its program capacity of 600 students. As intended, opening the School of Engineering and Arts has drawn enrollment from all neighborhood elementary schools and all are currently below program capacity levels. Specifically, Forest Elementary enrollment has decreased by 96 students. However, Forest is still much nearer program capacity than other neighborhood schools. Ideally all schools would be comparable in terms of enrollment as a percent of capacity.

Looking ahead for the next few years it appears as if this enrollment imbalance will continue. If enrollment imbalance is a concern, possible options for consideration include:

- Modify attendance boundaries,
- Continue to use the magnet schools lottery to lessen enrollment at Forest, and
- Limit student transfers into Forest

The attached analysis is intended to simply give context and scope to what a potential boundary adjustment may look like. If the school board would like to pursue a boundary adjustment for 2013-2014, a decision would be needed by the end of March and a public hearing should be held prior to a decision. If the school board does not wish to pursue a boundary adjustment, administration will likely ask the board in January 2013 for another resolution to declare Forest Elementary School as a “School Nearing Capacity” for the 2013-2014 magnet school lottery. The intent of the resolution is to increase the number of incoming magnet school Kindergarten students from the Forest attendance area and reduce the Kindergarten enrollment at Forest.

## QUESTIONS

For questions please contact:

Dennis Beekman  
763-504-8055  
[dennis\\_beekman@rdale.org](mailto:dennis_beekman@rdale.org).

## Forest Elementary Boundary Analysis

**Purpose:** Analyze options to modify attendance boundaries for long-range enrollment balance among neighborhood elementary schools and to keep enrollment at Forest Elementary under program capacity

**Assumptions:**

1. Keep integrity of elementary feeder schools' relationship with the middle schools
2. Remove the designation of school nearing capacity from the magnet lottery
3. Disrupt the fewest number of families in achieving enrollment balance

Current Enrollment and Capacity of Neighborhood Elementary Schools			
Schools	October 1 Enrollment	Program Capacity	Percent of Capacity
Forest	590	600	98.3%
Lakeview	387	525	73.7%
Meadow Lake	603	700	86.1%
Northport	537	650	82.6%
Neill	516	600	86.0%
Noble	372	425	87.5%
Sonnesyn	575	650	88.5%
Zachary Lane	548	650	84.3%

**Analysis and Options:**

- In order to keep the integrity of our elementary feeder system, possible boundary changes will be limited to the schools sharing the RMS/CHS feeder area with Forest which are Lakeview, Meadow Lake and Northport.
- When analyzing the current Forest attendance area the neighborhoods most distant from Forest School share a boundary with Meadow Lake and Lakeview.
- If the proposed neighborhoods identified on the attached map were reassigned to Meadow Lake and Lakeview the enrollment and percent of capacity would adjust to the following levels:

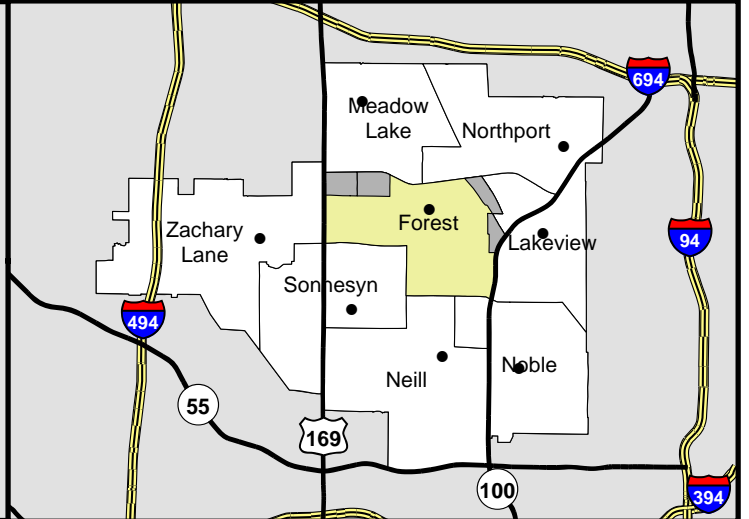
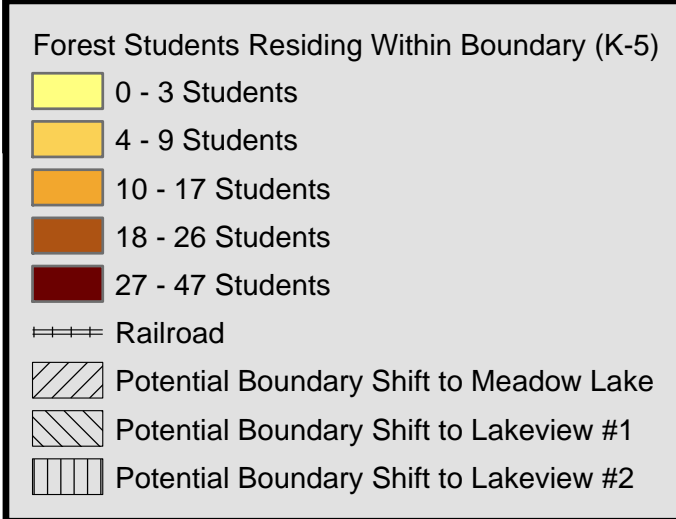
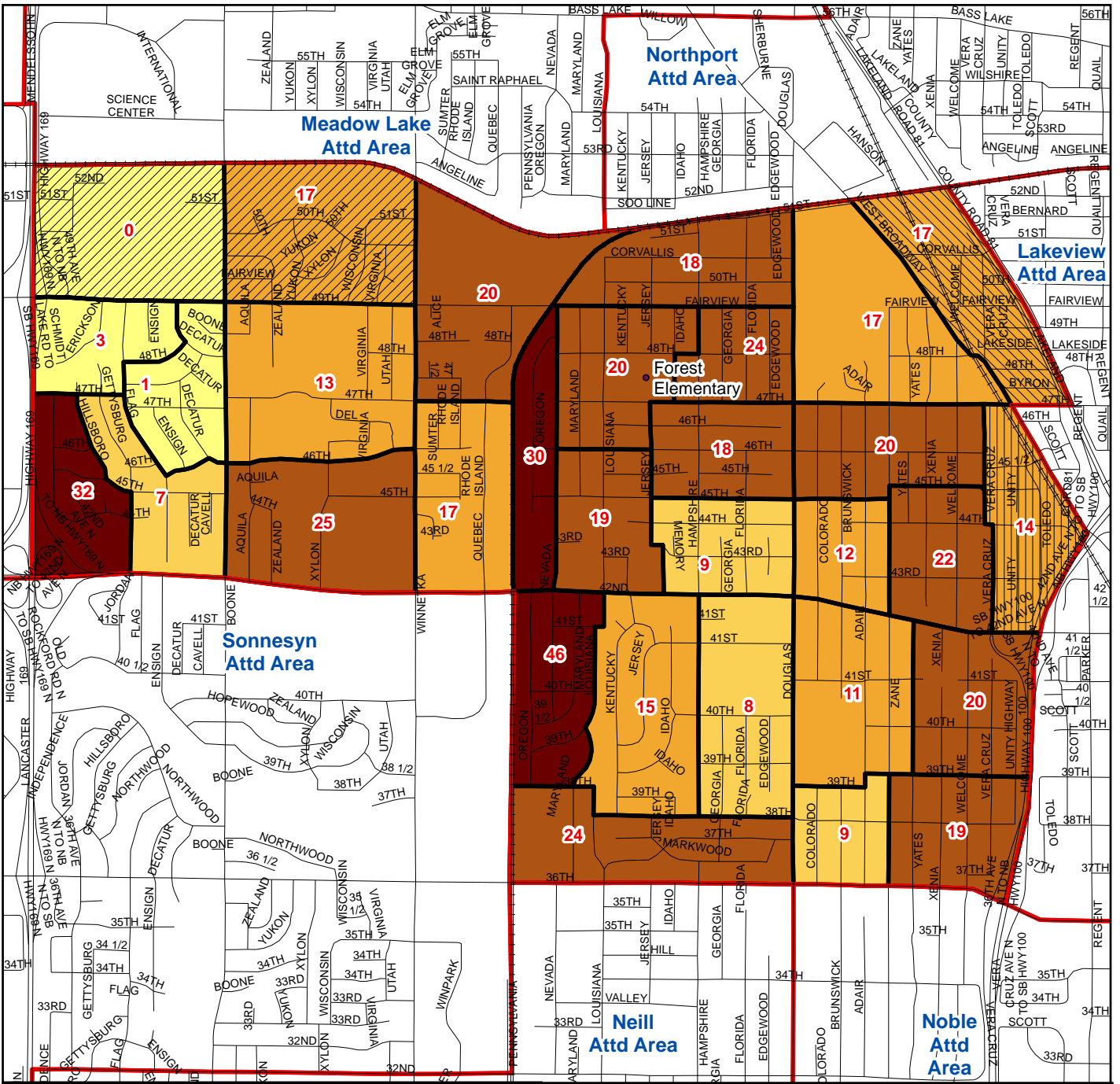
Impacted Schools	Current Enrollment	Program Capacity	Adjusted Boundary	Adjusted Enrollment	Adjusted Percent of Capacity
Forest	590	600	-48	542	90%
Lakeview	387	525	31	418	80%
Meadow Lake	603	700	17	620	89%

- The characteristics of the potentially affected neighborhoods are as follows:

Characteristics	Potential Neighborhood to:																							
	Meadow Lake							Lakeview #1							Lakeview #2									
Students	K	1	2	3	4	5	Total	K	1	2	3	4	5	Total	K	1	2	3	4	5	Total			
		3	4	6	1	1	2	<b>17</b>	3	4	6	1	1	2	<b>17</b>	-	1	3	4	4	2	<b>14</b>		
Families	12							11							12									
Minority %	41%							41%							29%									
Housing Type	Primarily Single-Family							Primarily Single-Family							Primarily Single-Family									
Distance to Forest	1.3 miles							1.2 miles							1.3 miles									
Distance to Reassigned School	1.7 miles							1.5 miles							1.4 miles									

- Implementation considerations may include grandfathered enrollment with or without phased out transportation.

# Forest Attendance Area - Boundary Analysis



October 23, 2012

**RESOLUTION REGARDING CONTINUED PARTNERSHIP WITH WEST METRO EDUCATION PROGRAM ("WMEP")**

**WHEREAS**, benefits of attending an integrated academic environment contributes to the holistic learning experience of students learning in an integrated, diverse environment teaches our students about cultures, provides opportunities for interracial and intercultural friendships, reduces prejudices and can assist in eliminating racial disparities in student outcomes such as graduation rates, suspension rates and overall academic achievement.

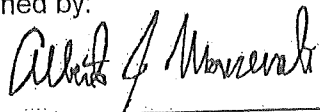
**WHEREAS**, in February 2012, the Minneapolis Public School Board served notice to the WMEP Joint Powers Board of its intent to withdraw from the WMEP Integration Collaborative district effective June 30, 2013. Subsequent to the submission of this notice, the Board directed staff to collect, review and analyze data to determine whether Minneapolis Public Schools would continue participation in the WMEP Integration Collaborative district.

**WHEREAS**, based upon the data collected and presented to the MPS Board and the Equity and Achievement committee, the Superintendent of MPS recommends the approval to rescind the resolution to withdraw from WMEP. The recommendation to rescind is contingent upon the WMEP Joint Powers Board adopting the Minneapolis Public Schools (MPS) and West Metro Education Partnership (WMEP) Agreement and Commitment to Equity and Excellence ("Agreement") with MPS on or before November 30, 2012. This Agreement is attached as Exhibit A. If the Agreement is not approved by the WMEP Joint Powers Board on or before November 30, 2012, the initial MPS resolution to withdraw from WMEP shall remain in place and become effective June 30, 2013.

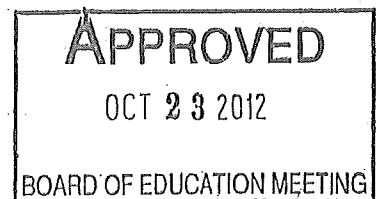
**NOW THEREFORE BE IT HEREBY RESOLVED** that the Board of Education, Special School District No. 1, approves the recommendation to rescind the resolution to withdraw from WMEP and instead remain a member of the West Metro Education Partnership. The recommendation to rescind is contingent upon the WMEP Joint Powers Board adopting the Minneapolis Public Schools (MPS) and West Metro Education Partnership (WMEP) Agreement and Commitment to Equity and Excellence ("Agreement") with MPS on or before November 30, 2012. If the Agreement is not adopted by that date, the original resolution to withdraw from WMEP effective June 30, 2013, shall remain in effect. MPS and WMEP together recommit to strengthening the relationship to fulfill the terms of WMEP inter-district integration collaboration.


**BE IT FURTHER RESOLVED THAT** in addition, the Agreement provides a six-month notice to withdraw from WMEP. To the extent that change requires amendment to the Joint Powers Agreement, that change must occur by March 30, 2013. If not, the original resolution to withdraw from WMEP effective June 30, 2013, shall remain in effect.

Signed by:

  
\_\_\_\_\_  
Alberto Monserrate  
Board of Education Chairperson

10-23-12  
Date



  
\_\_\_\_\_  
Richard Mammen  
Board of Education Clerk

10-23-12  
Date

October 9, 2012

## **Minneapolis Public Schools (MPS) and West Metro Education Program (WMEP) Agreement and Commitment to Equity and Excellence**

### **Background**

In February 2011, the Minneapolis Public School Board served notice to the WMEP Joint Powers Board of its intent to withdraw from the WMEP Integration Collaborative district effective June 30, 2013. Subsequent to the submission of this notice, the Board directed staff to collect, review and analyze data to determine whether Minneapolis Public Schools would continue participation in the WMEP Integration Collaborative district. The data collected was presented to MPS Board members and focused on: 1) Whether WMEP was still serving its original purpose; and 2) how MPS students enrolled in WMEP's schools are performing academically. The analysis also reviewed other WMEP services including professional development and school related programming. Based upon the data collected and presented to the MPS Board, staff provides the following recommendation to the MPS Board of Directors.

### **Recommendation**

MPS staff recommends that MPS remain a member of the West Metro Education Program and that MPS and WMEP recommit to strengthening the relationship to fulfill the terms of WMEP inter-district integration collaboration.

### **MPS and WMEP Mutual Accountability and Commitment**

MPS and WMEP are committed to the integration goals of producing interracial student contact within its respective school districts, creating regional integration strategies and also significantly closing, and eventually eliminating, the racial achievement gap. In order to achieve these goals, MPS believes there must be mutual accountability and commitment from MPS and WMEP.

MPS and WMEP agree to the following conditions of satisfaction as part of the renewed commitment to equity and excellence:

1. MPS and WMEP value equity and diversity. We believe that equity, diversity and integration includes more than racial diversity. Equity and diversity includes multilingual student diversity (ELL), free and reduced lunch student diversity, special education student diversity and homeless and highly mobile student diversity. In order to create an equitable and diverse learning environment for students, MPS and WMEP agree to review and modify student enrollment policies for WMEP schools in order to create a more inclusive lottery admissions process that will increase the diversity of multilingual, free and reduced lunch, special

education and homeless and highly mobile students. WMEP agrees to adequately staff WMEP schools to support both academically and emotionally the specific needs of these student populations. In addition, WMEP agrees to provide building-wide professional development focused on supporting the needs of these students. MPS and WMEP agree that this more inclusive lottery and admissions process will be implemented for the 2013-2014 school year;

2. MPS and WMEP value fiscal accountability and the equitable allocation of resources. We believe that all WMEP participating school districts should be treated equitably with respect to tuition payment for students attending WMEP schools. In order to create more fiscal accountability and the equitable allocation of resources, MPS and WMEP agree to enter into good faith negotiations in order to determine the allowable per student cost for MPS students attending WMEP schools. Good faith negotiations will include the discussion of integration and referendum aid currently distributed on a per student basis from MPS to WMEP and the phasing out of such aid over an agreed upon period of time. MPS and WMEP agree that all negotiations will be completed and the new allocation of resources implemented and effective for the 2013-2014 budget;
3. MPS and WMEP value equity professional development and equity programming for staff and students. We believe that professional development and student programming can create an equitable school environment that promotes interracial student contact and the elimination of the racial achievement gap. MPS and WMEP agree to work collaboratively to create a more diverse offering of staff professional development and student programming that will benefit staff and students. We agree to work collaboratively to establish measurable outcomes and metrics to evaluate the success of professional development and student programming and its respective impact on student achievement. MPS and WMEP agree that all suggested modifications to professional development and student programming will be implemented for the 2013-2014 school year; and
4. MPS and WMEP agree to collaboratively work with the State of Minnesota, Minnesota Minority Education Partnership, Integration Repurposing Task Force, Minnesota School Integration Council and other racial equity leaders in creating a transformative integration policy and rule that provide a more equitable and inclusive approach for the inclusion of all students, including but not limited to: multilingual, free and reduced lunch, special education and homeless and highly mobile students.

### **Terms and Conditions of Agreement**

MPS and WMEP agree that in order for WMEP to serve its purposes of creating interracial student contact and closing the racial achievement gap, MPS, WMEP and other member districts must hold each other mutually accountable to satisfy the terms of this agreement. MPS and WMEP agree that if MPS or WMEP does not satisfy the terms and conditions of this agreement, either party may provide 30-day notice and request a meeting to resolve any outstanding issues or concerns. Such issues or concerns must be clearly stated in the notice and the party stating the issue or concern must offer an equitable solution for such issues or concerns. If the meeting does not provide a mutually agreeable resolution, either party can provide 6-month notice of intent to withdraw from this agreement. Such notice shall also serve as official notice of intent to withdraw from WMEP and becomes effective for the next school year following the year in which the notice is given.

**Full and Final Agreement**

MPS and WMEP remain committed to increasing racial equity and closing the achievement gap. MPS and WMEP agree to recommit to the mission and purpose of WMEP and in good faith commit to productively engaging in an inter-district integration strategy that will benefit the achievement of all students.

_____	_____	_____	_____
Bernadeia H. Johnson, Ed.D.	Date	Daniel L. Jett, Ph.D.	Date
Superintendent		Superintendent	
Minneapolis Public Schools		West Metro Education Program	

_____	_____	_____	_____
Helen Bassett	Date	Alberto Monserrate	Date
Joint Powers Board, Chair		Board of Education, Chair	
West Metro Education Program		Minneapolis Public Schools	