



Minnesota

Board of Teaching

2015 Legislative Priorities

The Board of Teaching has provided leadership in initial and ongoing teacher education over the course of the last 40 years, by establishing and maintaining licensure standards and requirements, approving institutions, alternative providers and licensure programs to prepare highly effective educators, and by establishing and enforcing the Code of Ethics for Minnesota teachers.

Investing in Teacher Effectiveness

- Increase Board of Teaching funding to provide maintenance of existing statutory responsibilities and continued leadership for the profession
- Create student loan forgiveness programs to encourage teaching in geographically remote areas of the state and to diversify the teacher workforce
- Address shortages through increased access to training opportunities while maintaining high standards for granting a full time standard Minnesota teaching license
- Maintain ongoing collaboration with border states and enter into licensure agreements that promote the mobility of licensed teachers.

Policy Making that Supports Professional Growth

- Support the use of college entrance exams as a measure of basic skills to reduce the financial burden of standardized testing (ACT, SAT, GRE) on teacher candidates.
- Improve teacher retention and effectiveness through the creation of state funded induction and mentoring programs
- Implement policies for teacher licensure renewal that recognize educators for pursuing targeted professional development that enhances their instructional skills and content knowledge, including National Board Certification.

Ensuring Access to Educational Opportunities

- Recruit and retain more teachers of color to reflect the demographics of our changing student population.
- Support the development of mentoring programs to retain teachers of color in MN schools.
- Encourage the creation of new pathways for education support professionals to become licensed teachers.
- Reduce caseloads and paperwork for educators who work with students with special needs so they can give those students the extra attention they need.

Maintaining Safe Learning Environments for Students

Addition of language to MN §122A.20, subdivision 1 (b) allowing the Board of Teaching to revoke a teacher's license to teach without the right to a hearing upon receiving a certified copy of a conviction showing that the teacher has been convicted of:

- Sex trafficking in the first degree
- Engaging in hiring, or agreeing to hire minor to engage in prostitution
- Solicitation of children to engage in sexual conduct; communication of sexually explicit materials to children
- Interference with privacy (minor victim)
- Stalking (minor victim)
- Any violation which requires registration as an offender under section 243.166, subdivision 1b, paragraph (a) or (b)”

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*The current authority and responsibilities of the Board of Teaching are delineated primarily in Minnesota Statutes §122A.05 – §122A.09, §122A.18, §122A.20, §122A.23, §214, and Minnesota Rules, Chapters 8700, 8705 and 8710.

Board of Teaching Operations by the 2015 Numbers

- ✓ Oversight of MN Teacher Licensure Exams on cycling 5 year contract
- ✓ Licensure Appeals and Contested Case Hearings
- ✓ Coordination of Licensure Policy Implementation with MDE
- ✓ Oversight and daily support for **33 teacher preparation program providers**
Written reports with an onsite reviews every 5-7 years
- ✓ Requests for Initial Program Approval – Approximately **15-20 annually**
- ✓ Ongoing Program Review (biannual requests for continuing approval):
 - **750+** specific **content** licensure programs
 - Additional **125 SEP (pedagogy)** program sequences
- ✓ One Alternative program approved under MN §122A.245
Annual end of year report with PERCA reports for all programs
U of M: TFA
- ✓ Seven Nonconventional (Higher Education Based Alternative Programs)
Annual reporting with PERCA report as well
 - St. Cloud State: Mandarin Chinese
 - Winona: Elementary at Rochester Schools
 - Twin Cities Collaborative (TC2 - 6 colleges): Secondary fields
 - Bemidji: Secondary & Elementary SEP programs
 - U of M & District #916: Special Education Licensure for Paraprofessionals
 - Winona: Secondary Fields in Rochester Schools – Internship Program

States ranked by staff to provider ratio

State	Devoted Staff	# Units / Providers	# Programs undergraduate/post-baccalaureate	Institution : Staff Ratio
Wyoming	1	1	7 / 3	1 : 1
Washington	5	21	1367 total	4 : 1
Kentucky	6	33	706 / 514	6 : 1
Vermont	2	14	89 / 89	7 : 1
Oklahoma	2	23	252	12 : 1
Hawaii	1	14	38 / 138	14 : 1
California	6	256 (89 institutions, 167 districts)	990 institution-based, 319 district based	15 : 1
Oregon	1	19	120	19 : 1
Minnesota	.85	32	549 / 223	32 : 1

Board of Teaching Operations by the Numbers 2015

Disciplinary Actions by Minnesota Board of Teaching

The Board's Disciplinary Committee meets on a monthly basis and is supported by 1 full time Teacher Ethics Specialist.

Summary Data: FY13 & FY14						
Board Response / Disposition	Complaint Category					
	Immoral character or conduct	Code of Ethics violation	Failure to fulfill contract	Gross inefficiency / Willful neglect of duty	Fraud or Misrepresentation in obtaining a license new applicants and renewals	Investigation of prior conviction of a crime new applicants and renewals
No jurisdiction/Dismissed	1	29	1		1	
License suspended	13	4	2	6		0
License revoked	2	0	0	1		6
License denied	11	0	0	0	18	9
License surrendered	3	1	0	0		0
Application withdrawn	1	1	0	0		3
Allegation unsubstantiated/No action	19	76	2	30	11	192
Total per category	50	111	5	37	30	210
Total Caseload						443

As of January 2015 (FY15), there are **90 investigations pending**, **4 new matters set for hearing at OAH** and approximately **50 licenses suspended per Department of Revenue and Department of Human Services notification**. When looking at sheer number of teachers compared to staff responsible for investigating their ethics, Minnesota ranks lowest in the nation.

States ranked by teacher to ethics staff ratio

State	# Teachers under purview*	Staff	Teachers : Staff
Wyoming	7,127	2	3,564
Oregon	28,109	7	4,016
Kentucky	42,042	7	6,006
California	260,806	31	8,413
Georgia	112,460	13	8,650
Delaware	8,933	1	8,933
Hawaii	11,396	1	11,396
Iowa	34,642	3	11,547
Minnesota	52,672	1	52,672

Board of Teaching Operations by the Numbers

2015

Permissions						
School Year	08-09	09-10	10-11	11-12	12-13	13-14
Variance	1,915	1,661	1,565	1,515	1,645	1,582
Appeal Variance	45	56	52	34	32	42
Discretionary Variance	9	8	9	26	46	55
Community Expert	364	326	344	367	399	466
Waiver	2,128	2,194	2,335	2,510	2,745	2,416
Limited	4,755	5,298	5,122	4,702	4,747	4,819
Non Renewable	257	239	209	221	232	249

Paraprofessional Credential

- ✓ first portfolio submission in Nov. 2011
- ✓ 139 Portfolios reviewed with 130 Credentials Issued



Minnesota Board of Teaching

Facilitating Teacher Mobility in MN

January 2015

More candidates coming to MN from other states are being licensed than ever before.

2009/2010 Data:

Total Licenses Issued: **8,368**

Total Licenses Issued to Out of State Applicants: **1,697 (20% of total)**

97% issued Full time licenses

3% issued as limited licenses

2013/2014 Data:

Total Licenses Issued: **9,403**

Total Licenses Issued to Applicants trained in other states: **3,658 (39% of total)**

99% issued Full time licenses

1% issued as limited licenses

MN Statute mandates that candidates coming to MN complete the following items to be issued a full time standard 5 year license (if not already present at the time of application).

Many are issued a 1 year full time license to facilitate employment, while meeting these requirements.

- Training in the teaching of reading
- Training in multicultural education (Human Relations) and specifically training that addresses history, culture and language of Minnesota's American Indian population
- MN Basic Skills testing
- MN Pedagogy Testing
- MN Content (Subject area) Testing

It is common that candidates who receive a 1 year license with the above renewal conditions or anything less than a full 5 year license inaccurately report being "denied" licensure in Minnesota. As long as the statutory requirements are evidenced at the end of 1 year, a full 5 year license is issued.

Changes have taken place since 2013 regarding the licensing of teachers trained in other states and promotion of teacher mobility broadly.

Changes to Testing:

- Immersion & World Language Teachers that are non-native English Speakers are not required to take the Basic Skills Exam
- The Board has adopted ACT and SAT scores to be used to meet the Basic Skills requirement
- Recommendations from the Board will be incorporated into FY15 RFP for FY 16 testing changes. The RFP is set to be released in February 2015.
- Testing recommendations going forward are being discussed with Legislators and MDE prior to and during the 2015 Session.

- edTPA is now required for all candidates in MN teacher preparation programs. Minnesota candidates may present composite scores to be recognized for licensure in select states.

Changes to licensing process:

- Candidates that can provide recommendation for the same licensure field from a state approved program for 7-12 licensure in another state, passing MTLE exam scores, training in adolescent psychology/development, content specific pedagogy training and student teaching or equivalent experience can be granted the full MN 5-12 license.
- Middle level course options across MN teacher training programs are being provided for those needing to address deficiencies in their training in the areas of adolescent psychology or middle level pedagogy.
- The requirement for student teaching can be met through a supervised equivalent experience (e.g. residency program, district supported mentorship and induction program during teaching)
- Bi-weekly meetings are held with MDE/BOT staff to provide in-depth review of any applications that do not appear to meet qualifications prior to a denial being issued.

Changes for Institutions:

- Out of state candidates needing course work but requiring less than 50% of a program's total requirements need not receive a recommendation for licensure from that institution to apply for licensure.
- Candidates can submit a transcript demonstrating that they have address any noted deficiencies to reapply for full MN licensure.
- Training regarding advising out of state candidates is being provided to all MN institutions and their licensure certification officers to provide clarification and consistency.

Changes for the BOT:

- A licensure committee of the Board has been established to review licensure appeals for those who have been denied licensure.
Candidates are asked to submit a written statement and any additional information that may not have been initially considered within the licensure process to meet identified deficiencies.
- Licensure Rules that are presenting barriers have been identified for specific fields. In December 2014, the Board began rulemaking to change the licensure rules for Developmental and Adaptive PE due to identified barriers to candidates from other states and to MN programs

Next Steps in 2015:

- Streamlining Recommendations to be made by BOT/MDE Working group specific to Special Education licensure
- Interstate Agreements to be put in place
Wisconsin – First meeting August 27, 2014 – Follow up November 2014 - next meeting February 2015
Illinois - TBD – Waiting for efficiencies/model identified within WI contract. WI and IL already aligned.
Iowa
North Dakota
South Dakota

Reciprocal Agreements and Teacher Mobility in Minnesota

The purpose of this document is to provide information about current policies and procedures, and describe the steps taken to provide a streamlined licensure application process for all candidates.

AGREEMENTS IN PLACE

Minnesota has signed the *Interstate Agreement* created by the National Association of State Directors of Teacher Education (NASDTEC), a collection of 50 individual agreements by states. It outlines which types of licenses are required, which types of licenses will be accepted by an individual state, and accommodations for temporary licenses while candidates meet state specific requirements for full licensure they are missing.

There are 2 components to the NASDTEC agreement which Minnesota has signed:

- First is participation in the information clearinghouse for licensure requirements for each state. It is not a collection of reciprocity agreements.
- Second is participation in the Educator Information Clearinghouse to provide names of educators whose licenses have been suspended, revoked, etc.

In other words, Minnesota has a NASDTEC agreement in place which is used to facilitate licensure decisions by agreeing to review out of state candidates according to a set of agreed upon standards, and providing access to an information sharing resource. To help with educator mobility, the agreement does commit Minnesota to provide for initial licenses or temporary licensure authorizations to teach while candidates from out of state complete Minnesota specific requirements.

CONTRACT PROCESS

Apart from the NASDTEC agreement, as a state we have a Board authorized option to also facilitate mobility of licensed teachers from certain states. We are working on establishing contracts with states to recognize the licensure requirements approved by that state as equivalent to Minnesota's. The contract process is not connected to the NASDTEC agreement and is not authorized by NASDTEC. The contract option further streamlines licensure processing and provides advance reassurance to candidates. Moreover, contracts assure that we have reviewed the requirements for other states' teacher preparation programs to determine if they are essentially equivalent, or not, in order to meet the standards for licensure established by the Legislature and the Board of Teaching. The state intent is to improve licensure mobility without lowering professional licensure standards.

ADDITIONAL SUPPORTS

- Streamlining: the BOT has developed new policies and procedures to facilitate the review and processing of licensure applications. Both Teacher Preparation programs and MDE licensing staff are undergoing training to ensure consistency across multiple reviews.
- MDE/Licensing is contracting with the Teacher Evaluation System (TES) to provide access to a national data base on college and university courses for candidates who have completed out of state programs, including military personnel, in order to evaluate coursework: this should significantly cut down on processing time.



Minnesota Board of Teaching

Response to HF 2, 89th Legislative Session: January 16, 2015

Basic Skills Exam

Lines 1.18 – 2.5; 5.3-5.5; 5.12-5.14; 5.18-5.25; 5.33; 6.3-6.8; 9.31–9.36; 11.4-11.5

Associated Statute(s):

- §122A.09, subdivision 4(b)
- §122A.18, subdivision 2

The Basic Skills exam is currently taken prior to admission to Minnesota teacher preparation programs as a measure of readiness. Similar graduate and college readiness exams could be used exclusively to demonstrate skills in reading, writing and mathematics, thereby reducing the financial burden on candidates. The Board does not believe that a Minnesota specific exam for basic skills is needed and is willing to set passing scores on the GRE to add to the ACT and SAT options candidates have currently for program and licensure application. This type of change will allow greater mobility for teachers coming to Minnesota from other states and has been a key part of the negotiation surrounding interstate reciprocity agreements.

The Board of Teaching suggests consideration of the ACT/SAT/GRE in meeting a requirement for a skills exam, and that all language regarding a Board adopted skills exam be amended to align with this expectation. Content and pedagogy exams remain aligned to Minnesota standards.

Licensure by Exam

Lines 8.16 - 8.17; 9.26–9.30

Associated Statute(s):

- §122A.23, Section 1

As Minnesota's professional standards board, the Board of Teaching does not support issuing a license to teach based solely on experience and exam requirements. Pedagogical training is vital to meeting the needs of all learners in Minnesota and is crucial to the retention of teachers as supported by [Ingersoll, R., Merrill, L., & May, H. \(2014\)](#). Decreasing the standard requirements for all teachers based on shortages is not an acceptable solution. The 2015 Supply and Demand report demonstrates that special permissions to teach in Minnesota classrooms are declining and applicants from other states currently represent only 2% of new hires in Minnesota annually. Shortages continue to be linked to matters of geography, teacher pay, and specific licensure fields, requiring further study of the solutions that best address the concern. The BOT asks that you instead consider adjusting time limits on limited licenses (currently 3 years) to address these immediate shortage concerns.

Applicants Trained in Other States

Lines 7.3; 8.1-8.6; 8.12-8.15; 8.21-8.25; 9.19-9.30

Associated Statute(s):

- §122A.23

A Minnesota teaching license has long been held as the “gold standard” by various states across the country. This is due in large part to the comprehensive training requirements that are in place both in statute and in rule. Requiring that teachers coming to Minnesota be granted the same full time standard license without the benefit of *essentially equivalent* training promotes inequity and removes the understanding that all teachers have been provided with the deep training Minnesota values. Removing the “essentially equivalent” language from statute also leaves the phrase “a course” standing alone. Taking one course in teacher preparation will not provide candidates with the necessary training to provide effective teaching.

(Line 8.1-8.6) The past calendar year has seen numerous adjustments to the application review process for out of state candidates. While it is not an unrealistic expectation to meet the January 1, 2016 deadline for such activities, implementation of these processes has already occurred and communications materials (web/print) are in process.

(Lines 8.12-8.15) Programs that train teachers for licensure **must** include field specific methods, content preparation, and student teaching or equivalent experience. Just as other licensed professions view academic preparation as essential to the expectations of the profession, being hired to perform a job is not a substitute for rigorous training needed to support effective teaching.

(Lines 8.21-8.25) The use of the word “similar” does not lend itself to legal defensibility when licensure is denied.

(Lines 9.19-9.26) These considerations are already included in the current licensing evaluation process. A requirement to enter into rulemaking to include pieces of our current process appears to be unnecessary and requires a significant allocation of resources in an already limited budget allocation.

(9.26-9.30) A change in language to “may issue” does not provide a legally defensible means of denying licensure when the Board of Teaching feels that it is not appropriate. Licensure by exam only is not a sufficient replacement for pedagogy training. While content knowledge is very important, understanding the means of delivering instruction for all learners is essential for effective teaching.

(Lines 8.26; 8.33; 9.17) Standards that have been adopted to promote the training of highly effective teachers within Minnesota teacher training programs should be applied uniformly to all who apply for a full standard Minnesota license. To address shortage concerns, please consider lifting the three year cap on Limited Licensure when a district cannot find a licensed teacher to hold the position.

Unnecessary Rulemaking

Lines 4.21-4.28;

Associated Statute(s):

- §122A.09, subdivision 4(o)

The requirement for the Board to engage in rule making is one that also requires a great deal of staff engagement, and is not without significant fiscal impact. When it is done comprehensively, rulemaking requires the coordinated engagement of stakeholders, publication fees for the state register, and costs associated with the ongoing review provided by the judicial branch of our state government (OAH). As the items described in this section are pieces of the current processes in licensing, it would seem appropriate to conserve staff time and Board of Teaching budget dollars for moving other work forward.

Licensure via Portfolio:

Lines 6.32-7.21

Associated Statute(s):

- §122A.18, subdivision 3

A credential portfolio review has been a part of the streamlined application processes for candidates who are not able to be licensed through the traditional application process or those who are appealing a licensing decision since 2013.

The licensure via portfolio fund (\$200 & \$300 portfolio application fees paid by candidates) was transitioned to MDE in 2012 as fewer Board staff meant no longer being able to support this labor intensive review process. Staffing in Educator Licensing was also placed at a disadvantage when hiring to backfill for the portfolio coordinator position was not approved by MDE. Due to the inability to support this type of review, the licensure via portfolio pathway was discontinued.

Neither the BOT nor MDE's Educator Licensing division is staffed to support this work as the past process has required 1 FTE to support the review of 25-40 successful applicants per year. Time limits proposed for the in depth review and processing of these portfolios further contribute to the lack of sustainability of this process.

Teacher Licensure Agreements with Adjoining States

Lines 10.3 – 10.18

Associated Statute(s):

- § 122A.23 subdivision 3

The Board of Teaching has already begun working on agreements with states bordering Minnesota and will continue with those states that represent the highest number of incoming teachers. As the majority of incoming teachers are licensed in Wisconsin, the Board is developing a model agreement with the Wisconsin Department of Public Instruction with support from MACTE institutions and the University of Wisconsin system. Lines 10.15-10.17 aren't necessary for this work to continue.

Currently, the Commissioner of MDE is responsible for signing the NASDTEC agreement and the Board supports the proposed change, as the entity responsible for teacher training in Minnesota. Dues for this national organization have typically been a shared responsibility for MDE and BOT and the proposed change would allow the BOT to gain voting rights within the organization, currently held only by MDE. The \$5,000 dues obligation would not be able to be met without the continued increase to BOT base funding that was granted last session.

The NASDTEC agreement does not grant blanket reciprocity without additional requirements for candidates in those states who sign the agreement – nor does the Board of Teaching believe that it should. The agreement allows for states to issue a license to begin teaching while jurisdictional requirements are met. This is current practice in Minnesota. Nearly every state signing the agreement has jurisdictional requirements present.

The Board of Teaching suggests that consideration be given instead to the use of nationally recognized assessments for teacher licensure, to decrease the number of demands placed on incoming teachers.

Consistency in Expectations for all Teachers in Minnesota Schools

Lines 10.8; 11.16-11.23

Associated Statute(s):

- § 122A.23 subdivision 3
- §122A.245

The Board of Teaching believes that all candidates, regardless of their geographical location or pathway to teacher preparation must meet the same high standards for licensure prior to entering the classroom as fully licensed teachers of record. It is important that any applicant for Minnesota licensure be required to meet these expectations and that state policy does not foster inequity among members of the profession.

Minnesota preparation programs must demonstrate that they have introduced candidates to the knowledge within the standards set by the Board of Teaching. Candidates must also be assessed to demonstrate their competency in pedagogy and content standards throughout the duration of their program. While the Board considers nontraditional means of demonstrating mastery in all programs currently, licensure by exam only is not supported.

In 2014, the Board of Teaching adopted new rules regarding the approval of teacher preparation programs, requirements for student teaching and field experiences, as well as faculty qualifications for those who instruct teachers in Minnesota. Those who provide instruction as well as supervision of candidates in field based settings must have advanced degrees and K-12 experience in their fields. Allowing those with Baccalaureate degrees to serve as instructors within alternative programs does not provide a consistent requirement across Minnesota teacher preparation, nor does it provide the depth of training expected for those educating others to enter the profession. Other professions that require licensure (e.g. doctors, nurses, lawyers, the trades) would not lower their standards or choose to operate in anything other than the best interest of the public to address workforce shortages. Instead, technological solutions, funding incentives and the like might be considered. Certainly, Minnesota's teaching profession, parents and students should expect nothing less.

Community Experts

Lines 12.5-12.33

Associated Statute(s):

- §122A.25

The “Community Expert” permission was created to allow someone with a particular expertise in a given area to offer coursework in PK-12 schools; for instance, a journalist teaching in a secondary English classroom or a legislator teaching a section of Civics. In recent years, this permission has been regularly used to place non-licensed individuals in full time teaching positions – seemingly far from its intended use.

The Board of Teaching inquires with those districts applying for special permissions to ensure that all efforts to fill teaching positions with trained, licensed individuals have been made. While some districts and charter

schools are truly experiencing shortages, others have used this special permission as a means of working around licensing requirements. Removing the Board's authority to approve the hiring of unlicensed personnel undermines the requirement for licensed teachers in our schools. Changes proposed in HF 02 do not allow the professional standards boards for teachers or school administrators to work with districts to ensure the hiring of qualified individuals prior to the start of a school year, but ask that the Board of Teaching and Board of School administrators REACT to information from districts, after the education of children in Minnesota schools has already seen the impact of an untrained individual.

The Board's approval of requests for community expert permissions continues to be granted to those who truly bring expertise to a school or classroom, and ensures that all students are given equal access to well trained teachers. In June, Minnesota is expected to deliver its own plan to the U.S. Department of Education for ensuring equal access to great teaching across the state. Allowing the decisions to hire unlicensed individuals to be made at the school level without prior approval from any policy making authority, will undermine the work of MDE in the months ahead.

Respectfully submitted by Erin Doan, Executive Director

2015 REPORT OF TEACHER SUPPLY AND DEMAND IN MINNESOTA'S PUBLIC SCHOOLS

Purpose and Executive Summary

Every two years, the Educator Licensing Division of the Minnesota Department of Education (MDE) is tasked with producing a report on the supply and demand of teachers. By statute, that report must contain data collected by surveying Minnesota public school districts, charter schools, and teacher preparation institutions.

This report presents findings addressing five research questions. The data for addressing these questions were obtained from data files maintained by the Minnesota Board of Teaching (BOT), the Minnesota Center for Health Statistics (MCHS), MDE, and the U.S. Census Bureau. The data from the surveys of districts, charter schools, and teacher preparation institutions also informed findings related to the research questions.

The research questions motivating this study are:

1. What are the five-year trends in teacher staffing? Do these trends vary by teacher race/ethnicity? What are the license areas of shortage and surplus? Do these trends vary by region of the state?
2. Are there differences in the teacher shortage areas in charter schools, rural schools, and urban schools?
3. What barriers do district staff perceive as impairing their ability to hire effective teachers?
4. What factors do teacher preparation institutions cite as influencing their ability to prepare effective teachers now and during the next 10 years?
5. What K–12 public school enrollment trends are expected for particular student subgroups (e.g., racial and ethnic categories and English language learners [ELLs]) for the next three, five, and 10 years?

This report summarizes the findings and highlights the perceived teacher shortage areas and trends as measured by the data collected.

Data Sources and Limitations

The findings are based on analyses of data from the following data sources: BOT, MCHS, MDE, and the U.S. Census Bureau. These databases were:

- the database of special permissions maintained by MDE
- county-level birth data available from MCHS' data files and website
- Minnesota Automated Student System (MARSS), Minnesota Financial Reports (MFRs), licensure database, and Staff Automated Reporting system (STAR), all housed at MDE
- county-level intercensal population estimates and Longitudinal Employer-Household Dynamics data from the U.S. Census Bureau

Data also were collected through two surveys:

- (1) the survey of 83 percent of Minnesota's public school districts and charter schools, and
- (2) the survey of 94 percent of Minnesota's teacher preparation institutions.

The findings based on data from these surveys and agency-mandated data collection systems are considered accurate and reliable. The most uncertain findings are those involving longer-term forecasts (research question 5). Although the forecast model used was the most accurate of those tested, forecasts that extend beyond three years in the future are based on assumed birth rates and the number of women between 15 and 30 years old. Each estimate has some degree of imprecision; thereby affecting the overall forecast accuracy. Education administrators who rely on these forecasts are urged to consider whether migration and birth rates have changed since the 2012–13 period and adjust their personal projections accordingly.

Key Findings

Research Question #1

Overall Picture of Teachers in Minnesota. As of the beginning of the 2013–14 school year, there were 58,211 teachers employed in Minnesota's public schools, which is an increase of 2.5 percent from five years earlier. However, changes in numbers of teachers vary by economic development region, with changes to teacher numbers varying from -15 to +5 percent. There have been increases in numbers of Asian/Pacific Islander and Hispanic teachers, but 96.5 percent of Minnesota's teachers are Caucasian.

Teacher Shortage Areas. Special permissions data indicate that during 2013-14, districts had to hire 3,504 teachers who lacked the necessary licenses for the subjects and the grade levels taught. This corresponds to 6 percent of the entire teaching workforce. The number of teachers requiring special permissions has declined from 2008–09 by about 7 percent. Special permission data and experiences of district hiring officers converge on the following 11 shortage areas:

- Emotional behavior disorders (294 permissions)
- Learning disabilities (265 permissions)
- Developmental disabilities (145 permissions)
- Early childhood special education (91 permissions)
- English as a second language (86 permissions)
- Mathematics (78 permissions)
- School psychologist (66 permissions)
- Spanish (64 permissions)
- Physics (50 permissions)
- Developmental/adapted physical education (45 permissions)
- Chemistry (43 permissions)

Many district hiring officers also mentioned having difficulty finding qualified speech language pathologists (a licensed support position for which special permissions are not granted). The rank ordering of these hard-to-staff license areas varied slightly from year to year, but they remained within the top 11 or 12 for all five years investigated as part of this study.

Areas of Teacher Surplus. According to district hiring officers and the teacher preparation institutions, the teaching positions that are easiest to fill (or most difficult to place teaching program graduates) are as follows:

- K–6 elementary
- Physical education
- Social studies (high school and Grades 5–8)
- Communication arts and literature (high school and Grades 5–8)

Demand for Teachers. Several components go into estimating the demand for teachers, including teacher attrition, student enrollments, and student-teacher ratios.

- The teacher attrition rate between the 2008-09 and 2012-13 school years has been approximately 8 percent per year. The attrition rate between 2012-13 and 2013-14 is higher at 10.2 percent.
- Between the 2007-08 and 2013-14 school years, student enrollments in Minnesota public schools have increased by 1.4 percent, but no apparent increasing or decreasing enrollment patterns are apparent at the statewide level. Schools in 7 of 13 economic development regions saw decreasing enrollments, especially those in the Southwest Central region (decreased by 16.39 percent) and the Upper Minnesota Valley region (decreased by 9 percent). The regions that have experienced the largest enrollment increases were the Central region (7.83 percent increase) and the Metro region (3.20 percent increase).
- The population of students enrolled in Minnesota's public schools is becoming more diverse each year. The percentage of students who are of Caucasian descent has decreased by 1 percent per year. The five-year period also has seen a steady 23 percent increase in the number of students who are eligible for free or reduced-price lunch. The numbers of students who have limited English proficiency and/or who have special needs also increased by 5 percent.
- The most recent data available (2013) indicate that the average student-teacher ratios have remained steady at 14.7. When asked whether their district was forced to increase student-teacher ratios, 18 percent of the responding districts/charter schools indicated that they had increased their student-teacher ratios within the last two years.

In summary, attrition was relatively high between the 2012-13 and 2013-14 school years. Fewer districts are reducing their teacher workforce. Enrollments are holding at the same level as in 2012 and student-teacher ratios remain at the same levels statewide. The higher level of attrition and fewer districts reducing their workforce suggest greater demand.

Teacher Supply. Teachers who held the respective positions the previous year fill approximately 86 percent of the teaching positions available each year. Newly licensed teachers trained in Minnesota teacher preparation institutions filled 4.5 percent of the vacant positions, teachers transferring from another district filled 4.1 percent of the vacancies, and teachers

returning from service fill 3.5 percent of the vacancies. The remaining 2 percent of vacancies are filled by teachers who transfer from other states, private schools, or other countries or newly licensed teachers trained in out-of-state institutions.

- The numbers of new teacher licenses being awarded to completers of Minnesota teacher preparation institutions during the 5-year span of 2008 and 2013 (the last year for which complete data are available) have decreased by 7 percent. However, the larger pattern of licenses awarded to graduates of Minnesota institutions shows a larger decrease since 2004.
- The reserve pool of the total number of active license holders has increased for 8 of the 15 traditional teacher shortage areas, remained constant for 6 areas, and decreased for one shortage area (industrial arts).

Taken together, these data on teacher supply suggest an overall reduction in the supply of teachers, especially in teacher shortage areas.

Research Question #2

The numbers of special permissions granted for districts have decreased in all locale types. The decreases were greatest for districts in suburban areas (27.5 percent decrease), followed by districts in rural areas (16.4 percent decrease), towns (16.1 percent decrease) and cities (11.8 percent decrease).

The numbers of permissions needed have decreased in public school districts and charter schools. Regular public school districts and charter schools saw a 15.2 percent decrease and 24.5 percent decrease, respectively, for permissions needed. Other types of districts (i.e., cooperatives, education districts, and academies) saw a 3.3 percent decrease in permissions needed.

The licensure areas requiring special permissions differ between charter schools and regular school districts. The top six licensure areas needing special permissions in charter schools included the core subjects of mathematics, communication arts/literature, and science in grades 5-8. In contrast, core subjects were not among regular districts' top 5 licensure areas requiring special permissions. Regular public school districts also had English as a second language as a licensure area requiring special permissions.

Research Question #3

District hiring officers were asked whether certain standards or policies represented barriers to the hiring and retaining of teachers.

- Between 63 and 79 percent of the responding districts indicated that teacher-licensing standards, teacher testing requirements, and federal "highly qualified" requirements were either a large barrier or a small barrier for hiring effective teachers.
- Between 80 and 87 percent of the responding districts indicated that teacher-licensing standards, teacher testing requirements, and federal "highly qualified" requirements were either a large barrier or a small barrier for hiring effective teachers.
- When asked to list other types of barriers to hiring qualified teachers, districts and charter schools frequently mentioned districts locale and school size influenced the hiring of teachers. Being a charter school was also perceived to be a barrier to hiring effective

teachers. Other often-mentioned barriers include: lack of pay/resources, and lack of respect given to the teaching profession as a whole.

Research Question #4

Teacher-testing requirements were mentioned as a barrier by 73 percent of the institutions. The other major impediments mentioned by 48 percent of the institutions were the cost of higher education for students and the lack of scholarships. A minority of institutions also mentioned resources for complying with accountability provisions (16 percent), resources for faculty (16 percent), low teacher salaries (12 percent), and support for the teaching profession by the public (8 percent).

Research Question #5

Student enrollments in Minnesota's public schools are expected to increase by 2 percent during the next 10 years. This figure represents a growth rate that is much more modest than the most recent enrollment forecasts offered by the National Center for Education Statistics (NCES; 2013 forecast to 2022 with a growth rate of 13 percent).

Between 2014 and 2024, enrollments in elementary schools are expected to decrease by 5 percent while enrollments in high schools are expected to increase by 11 percent. Enrollments in middle schools will increase by 8 percent until about 2019 and then decrease by 4 percent through 2014.

The relatively small numbers of students in the racial and ethnic groups make separate forecasts for these specific groups too inaccurate to trust. However, it is possible to calculate the number of students of color as whole. It is expected that Minnesota's public school population will continue to become more racially/ethnically diverse, with the percentage of school populations representing students of color increasing by about 1 percent per year. By 2024, it is expected that 38 percent of the student population will be made up of non-Caucasian students.

The forecasts of English Language Learners (ELL) also were too inaccurate to trust. The future enrollments of these students are less related to the numbers of ELL students currently in the system and the existing population of immigrants, but rather future immigration rates.

Final Conclusions

The available data suggest a slight increase in the demand for teachers, as evidenced by the percentages of district hiring officers' indicating that they have increased student-teacher ratios and eliminated vacant positions in recent years. These percentages are less than they were in the 2012 survey. The supply of teachers appears to have decreased somewhat, based on the numbers of new licenses awarded to completers of Minnesota's teacher preparation institutions.

The single indicators of supply-demand balance provide conflicting data. On the one hand, districts and schools require fewer special permissions than in the past. However, the percentages of districts indicating that it is impossible or very difficult to hire qualified teachers to fill vacancies in hard-to-staff areas are nearly double those seen in the 2012 survey.

Four trends should be of concern to policymakers. The first involves the diversity of Minnesota's public school population. The past 5 years have witnessed increases in the numbers of of

students needing free or reduced price lunch, the numbers of students with special needs and students with limited English proficiency. Public schools are becoming more ethnically diverse as well, with the percentage of students representing non-Caucasian racial and ethnic groups increasing by 1 percent per year. Yet Minnesota's teacher workforce remains 96 percent Caucasian. This disparity in diversity of the teaching workforce and student population may affect student academic achievement of students of color and Caucasian students alike (Dee, 2001).

Second, while the specific teacher licensure areas experiencing shortage remain the same, the percentage of districts indicating that it is difficult or impossible to hire qualified teachers in these areas is about double that seen in the 2012 survey.

Third, a larger percentage of districts and charter schools are indicating difficulty securing short-term and long-term substitute teachers. Respondents to the district survey also expect to have more difficulty hiring substitute teachers over the next 5 years.

Finally, testing requirements for teachers top the list of factors that challenge teacher preparation institutions' efforts to recruit and prepare teachers, and 63% of districts indicate that testing requirements represent either a small (27%) or large barrier (36%) to hiring teachers. It may be useful to determine if the issue applies to all three teacher tests ("basic" skills, pedagogy, and content) and what features of the tests are of concern. This study did not ask respondents about the specific tests which they think challenge ability to recruit, prepare and hire teachers.