

Nursing Education

**Supply & Demand Analysis
Curriculum Redesign &
System-wide Offerings**

Topics

- ❖ MUS Nursing Graduate Production
- ❖ State-level Analysis – Supply & Demand
- ❖ National Perspective
- ❖ Nursing Curriculum Redesign
- ❖ BSN & Graduate Programs

MUS Nursing Graduates - History

Nursing Degrees & Certificates Awarded, 2005 to 2015

MAJOR	DEGREE	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	10 yr Growth	
													#	%
Registered Nurses (RN)	Associates	96	93	121	83	112	112	143	218	236	232	208	112	117%
	Bachelors	186	214	187	195	205	205	191	195	229	260	264	78	42%
	Masters	11	15	7	11	13	15	20	27	26	31	9	-2	-18%
RN Total		293	322	322	298	330	332	354	440	491	523	481	188	64%
Licensed Practical	Certificate	6	27	88	63	23	22	9	0	0	0	0	-6	-100%
	Associates	131	115	75	75	84	108	130	163	127	157	147	16	12%
LPN Total		137	142	163	138	107	130	139	163	127	157	147	10	7%
Grand Total		430	464	485	436	437	462	493	603	618	680	628	198	46%

MUS Nursing Graduates by Campus

Nursing Degrees & Certificates Awarded, 2014-15

CAMPUS	LPNs	Registered Nurses		Master of Nursing	Total
	Associate of Applied Science	Associate of Science (ASN)	Bachelor of Science (BSN)		
Miles CC		31			31
City College at MSUB	31	41			72
MSU Northern		43	33		76
MSU Bozeman			215	9	224
Helena College UM	32	16			48
MT Tech		27	16		43
Missoula College UM	35	35			70
Flathead Valley CC	20	15			35
Great Falls College MSU	29				29
Total	147	208	264	9	628

Geographical Distribution of Nurses

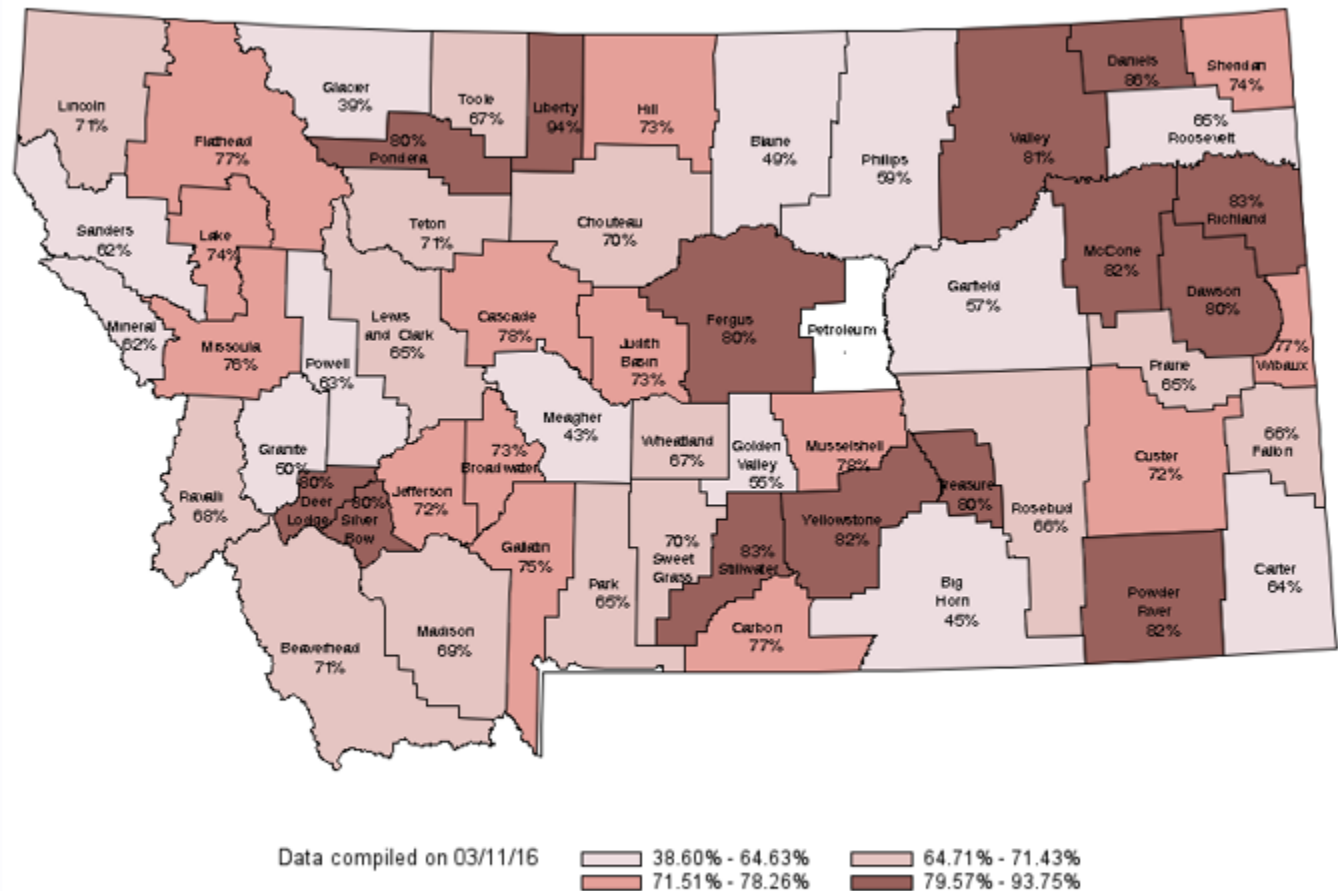
Over 1,000 APRNs,
 2,800 LPNs and
 15,000 RNs actively
 licensed

Most live in western
 and more populated
 counties

9 counties where all
 LPNs working

12 counties where all
 APRNs working

Percent of Actively Licensed Registered Nurses (RN) Working

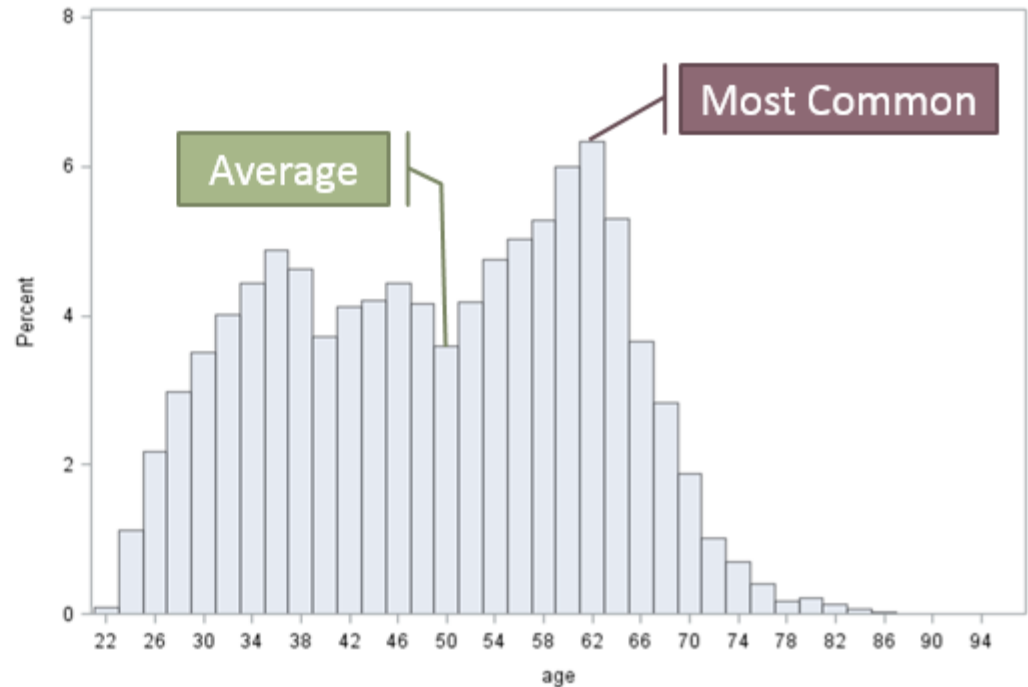


Source: MT DLI Licensure Data as of 03/11/16

Age of Current Nursing Workforce

	LPN	RN	APRN
Mean	49.8	48.4	50.2
Median	52	49	52
Mode	61	62	62
25 th Percentile	39	37	41
75 th Percentile	60	60	61

Age Distribution of Actively Licensed Nurses



Source: MT DLI Licensure Data as of 03/11/16

Notes: Includes all actively licensed RNs, APRNs, and LPNs. 97.7% of APRNs reported their birthdate, and 99.98% of LPNs and RNs reported their birthdate.

Nursing Employment Projections

Occupation	Minimum Requirements Before Entering Profession		Employment Levels		Annual Openings			2014 MT Average Annual Wage
	Education	Work Experience	Base Employment 2014	Projected Employment 2024	Openings Due to New Jobs	Openings Due to Workers Leaving	Total Annual Openings	
Nurse Practitioners	Master's	None	385	484	10	8	18	\$92,797
Registered Nurses*	Associate's	None	9,126	11,118	199	177	376	\$61,814
Licensed Practical and Vocational Nurses	PS Award	None	2,825	3,325	50	69	119	\$38,762
Nursing Assistants	PS Award	None	5,821	6,888	107	111	218	\$24,890

Abbreviations: PS Award=Postsecondary Award; Master's= Masters Degree; Associate's=Associates Degree

Source: Montana Department of Labor and Industry Employment Projections, 2014 wages from Occupational Employment Statistics

**includes BSN and ASN prepared registered nurses*

National Perspective on the Supply and Demand for Registered Nurses

➤ Supply

- Retirement of over 1 million RNs over the next 10 years
- Will the nation be able to replace these RNs?

➤ Demand

- Driven by the large number of aging baby boomers (78 million), increasing number of people with co-morbid diseases, an expanding size of the population, physician shortages, and implementation of health reforms
 - Delivery systems --- Increasing emphasis on prevention and education --- Insurance expansions --- Shifting payment from fee-for-service to value-based
- What will happen to the demand for RNs?
- What will happen to the educational composition of the RN workforce?
 - Advanced practice nurses to associate degree nurses

Projections

NATIONAL

- In 2014 the federal Health Resources & Services Administration projected **Supply** will grow 33% and **Demand** 21% by 2025, resulting in a *surplus* of 340,000 RNs nationally*
- Most analysts do not agree ... project shortages
- Auerbach, Buerhaus, Staiger (2015)
 - We will be able to replace the retiring baby boom RNs!
 - Total supply will increase by 15% (half as much as HRSA's projection), consequently ...
 - Supply will not match demand in 2025 and shortages of up to 130,000 nationwide still a possibility

*Health Resources and Services Administration. Future of the Nursing Workforce: National- and State-level Projections, 2012-2025. December 12, 2014. <http://bhpr.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/nursingprojections.pdf>

Projections

MONTANA

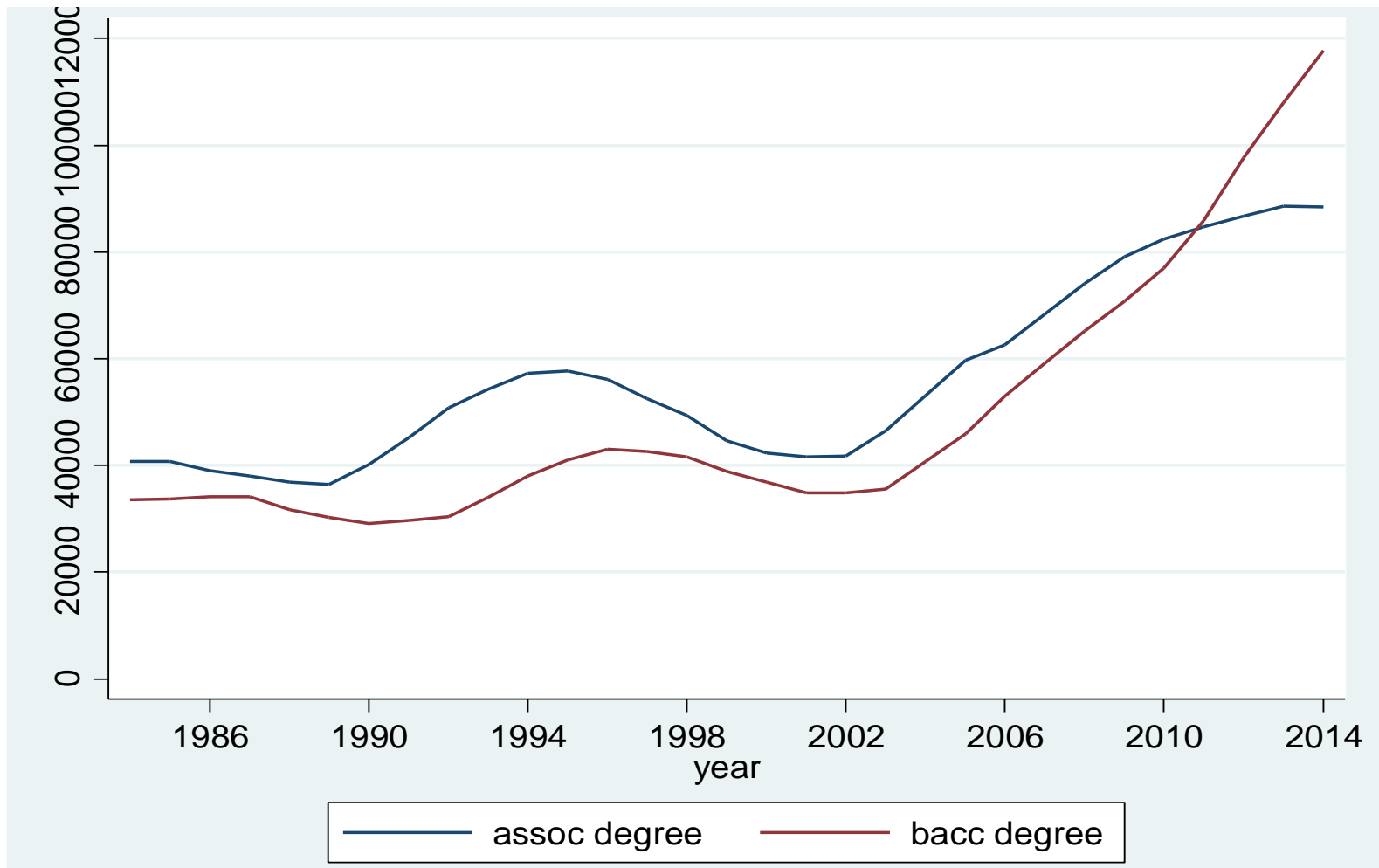
- According to the Health Resources & Services Administration, in 2025:
 - RN Demand estimated at 12,100
 - RN Supply estimated at 11,300
 - Deficit = -800 RNs

*Health Resources and Services Administration. Future of the Nursing Workforce: National- and State-level Projections, 2012-2025. December 12, 2014. <http://bhpr.hrsa.gov/healthworkforce/supplydemand/nursing/workforceprojections/nursingprojections.pdf>

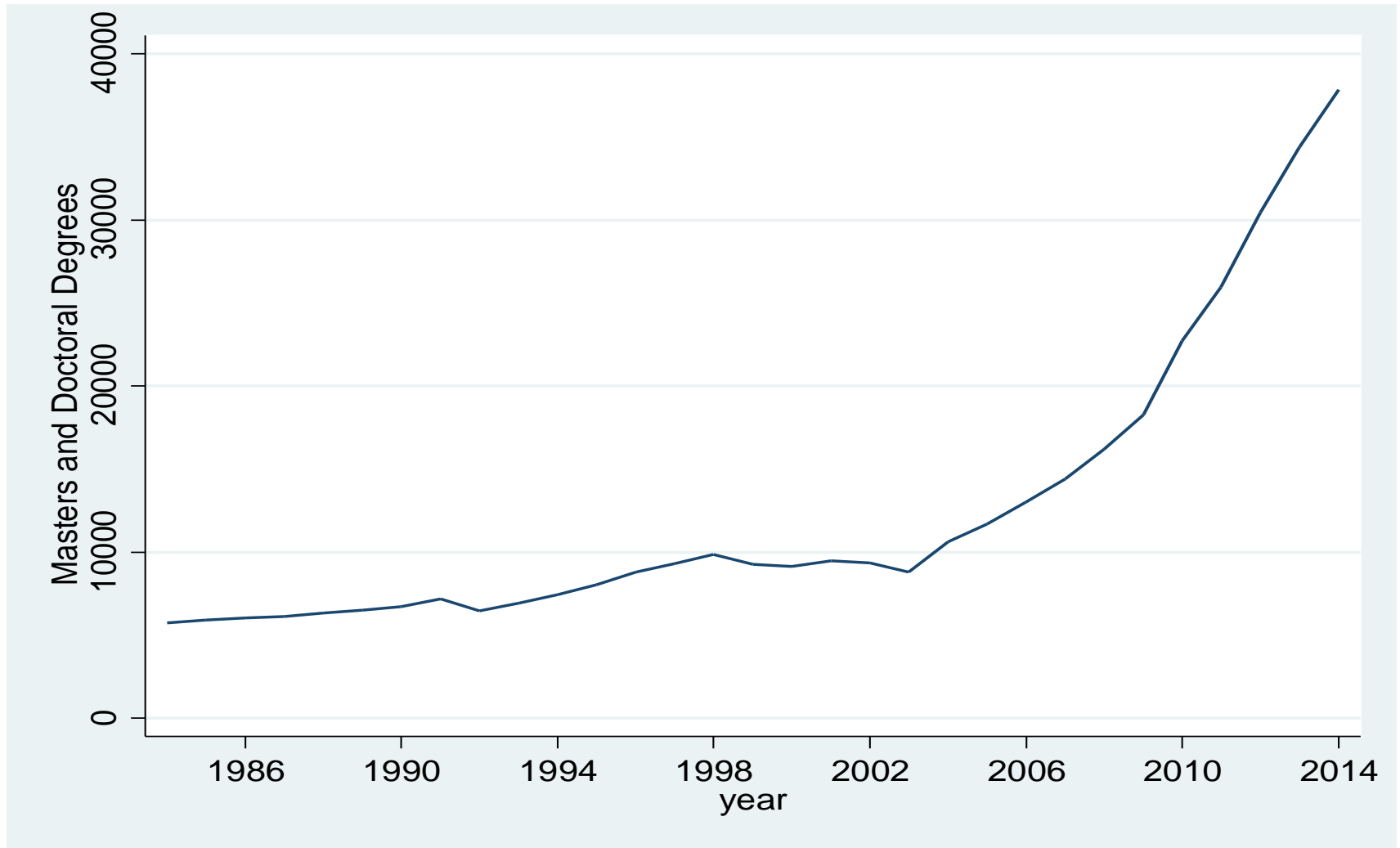
What is being done?

- May 10, the Robert Wood Johnson Foundation and Association of American Retired People held 1.5 day meeting to organize a national data collection effort
- Roughly 35 states have created a state “nursing workforce commission”
- In mid July, the nation’s S/D modeling experts are coming to Montana to address forecasting issues and arrive at consensus
- 2017 national meeting on the nursing workforce

ASN and BSN Graduates, 1984-2014



Masters and PhD Graduates, 1984-2014



Nursing Curriculum Redesign in Montana

➤ Curriculum Review Committee

- PN, ASN and BSN Completion faculty from 11 colleges
- 90 employers representing healthcare across Montana

➤ Purpose of Redesign

- Address workforce needs and shortages in nursing
- Prepare nurses to respond adequately to the health needs of their clients and the community
- Meet rapidly changing healthcare needs
- Ensure pathway of academic progression from PN to ASN
- Seamless academic progression from ASN to BSN

Three Revised Nursing Programs

- 1) 3 semester, 42 credit Certificate of Applied Science (CAS) Practical Nursing Program**
 - Decrease of one semester and 10 credits
 - Increase in geriatric and community nursing
 - Distance delivery to rural and frontier Montana

- 2) 5 semester, 72-74 credit Associate of Science (ASN) Registered Nursing Program**
 - Decrease of one semester and 7 credits
 - Increase in nursing content aligning with the RN scope of practice

- 3) 3 semester, 48-49 credit Bachelor of Science (BSN) Completion Program**
 - Decrease of one semester and 3-4 credits
 - Online with 3 credits (90 hours) clinical that can be completed in community
 - Part-time program completion available

Curriculum Revision Outcomes

- 20-25% reduction in time and up to \$16,599 reduction in cost for PN, ASN and BSN Completion education
- Entry into workforce **six months earlier** resulting in potential to increase earnings ~\$15,500 for LPN and \$22,500 for Registered Nurse (RN)
- 20% increase in number of ASN graduates over time
- Increase in nursing curriculum content preparing graduates with knowledge, skills and abilities current to the scope of practice and National standards
- Improve the quality and safety of Montana healthcare needs
- Increased access to nursing education for rural residents, veterans, Native Americans, and unemployed Montanans expands the population base that can become nurses

BSN Programs Statewide

➤ **MSU BSN Program**

- Statewide (5 campus) program, 215 graduates in 2014-15
 - Students may take pre-requisites where they live or in Bozeman
 - Montana students may attend the Upper Division programs in Billings, Missoula, Kalispell, Great Falls, Bozeman

➤ **MSU Northern**

- Bachelors of Science Nursing -- Completion Program, 33 graduates in 2014-15

➤ **MT Tech**

- Bachelors of Science in Nursing -- Completion Program, 16 graduates in 2014-15
- NEW, Bachelors of Science in Nursing (4-year Degree Program) approved March 2015

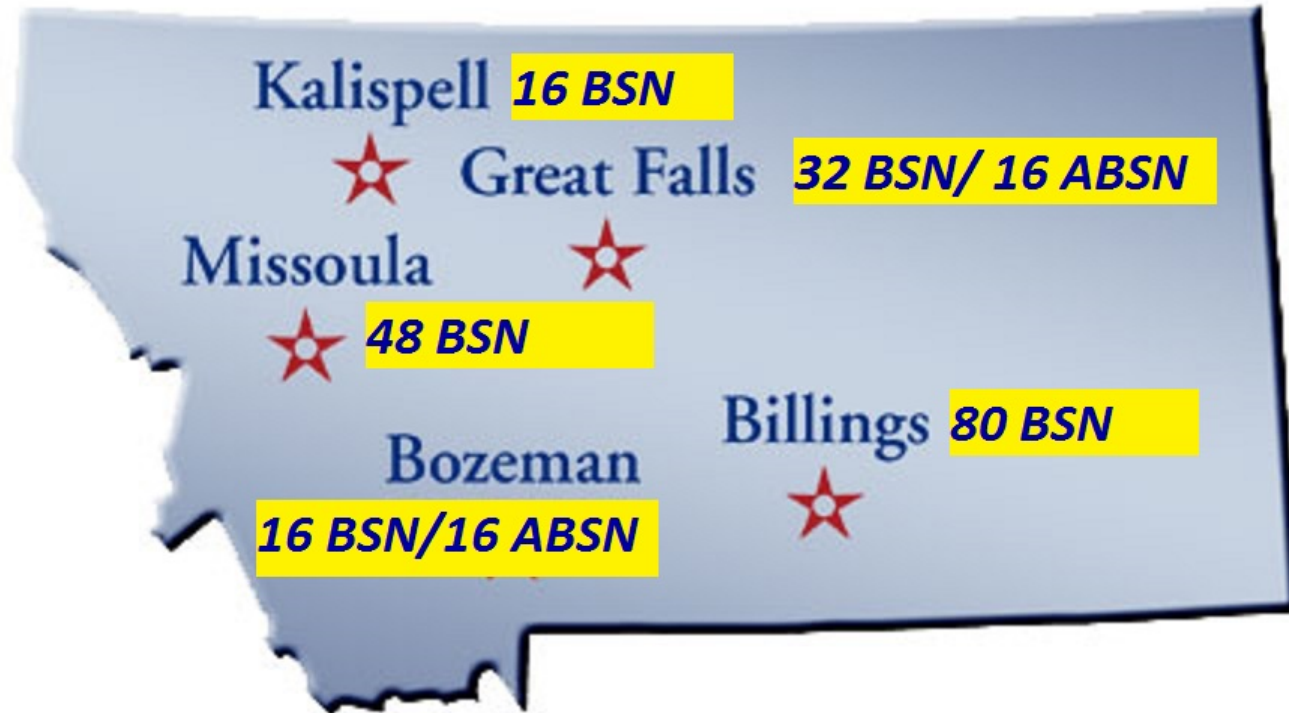
MSU College of Nursing – Bozeman Programs of Study

- Traditional BSN:
 - May be adding additional 16 seats to Bozeman site
- Accelerated BSN (ABSBN):
 - Great Falls & Bozeman
 - Hoping to add 16 seats split between Missoula and Kalispell
- ADRN-MN (CNL)
- CNL MN
- DNP
 - Psyche/Mental Health DNP
 - Family Nurse Practitioner DNP
- Certificate in Nursing Education

224 annual
admissions/graduations

DNP = Doctorate of Nursing Practice
ADRN-MN = Associate Degree RN to Master in Nursing Degree
CNL = Clinical Nurse Leader

Annual Upper Division Undergraduate Admissions



Graduate Programs of Study

- ADRN-MN
 - New program of study
 - 5 students in current cohort
 - Will matriculate in F16 to CNL/MN
- CNL-MN: 5-10/year
 - Clinical Nurse Leaders for MT
- DNP
 - Family Nurse Practitioner (FNP)
 - 20-25/year
 - Psyche Mental Health
 - 10-15/year
- Distance Delivery
 - Clinical in home community
 - Didactic by distance
 - Develop and Implement Evidence Based Practice Projects
- Montana vs Out of State Applicants
 - Varies: out of state < 25%
- Certification Exam
 - Consistently 100% pass rate

Summary

- MUS Nursing graduate production has increased by 46% (198 grads) over the past ten years.
- Montana's nursing workforce is aging and concentrated in more urban areas.
- Employment projections in MT indicate the need for 376 RN's and 119 LPN's annually for the next ten years.
- Nationally, over 1 million registered nurses are expected to retire in the next ten years.
- While experts struggle to agree on the number, both national and state-level shortages are projected.
- The MUS is undertaking nursing curriculum revisions designed to increase efficiency and overall nursing graduate production.
- Access to associate and bachelor's level nursing opportunities is available at multiple sites throughout the statewide.