

# Mapping the Landscape of Nursing in New Mexico



A Report Prepared For:  
The New Mexico Nursing Education Consortium  
Final Version, October 18, 2013

*Part I presented at the June 2013 statewide NMNEC Meeting*  
*Part II presented at the October 2013 statewide NMNEC Meeting*

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*Data... Insight... Impact*

# Overview

- The Goals Of The New Mexico Nursing Education Consortium
- What Are The Changing Health Care Needs Of New Mexico?
  - The New Mexico Context
  - What is the Current Status of the Health of New Mexicans?
  - What Factors are Changing the State's Health Care Needs?
- The Critical Role Of Registered Nurses In Health Care Provision
- The Landscape Of Nursing In New Mexico
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  - Who is Educating New Mexico's Future Nurses?
  - What is the Current Employment Picture for Nurses in New Mexico?
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- How Is The Nation Responding To The Need For Nurses?
- How Is New Mexico Responding To The Need For Nurses?
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# **The Goals Of The New Mexico Nursing Education Consortium**

# New Mexico Nursing Education Consortium

The New Mexico Nursing Education Consortium (NMNEC) is committed to improving the health care of all New Mexicans, now and in the future. In order to meet that commitment, NMNEC has focused on three critical goals:

1. Increase the number of nurses with BSN and graduate degrees in New Mexico.
2. Improve efficiency, quality, and educational outcomes of nursing education through cooperation among community colleges and universities.
3. Increase workforce diversity by improving nursing education for minorities, particularly in rural areas.



## This Report

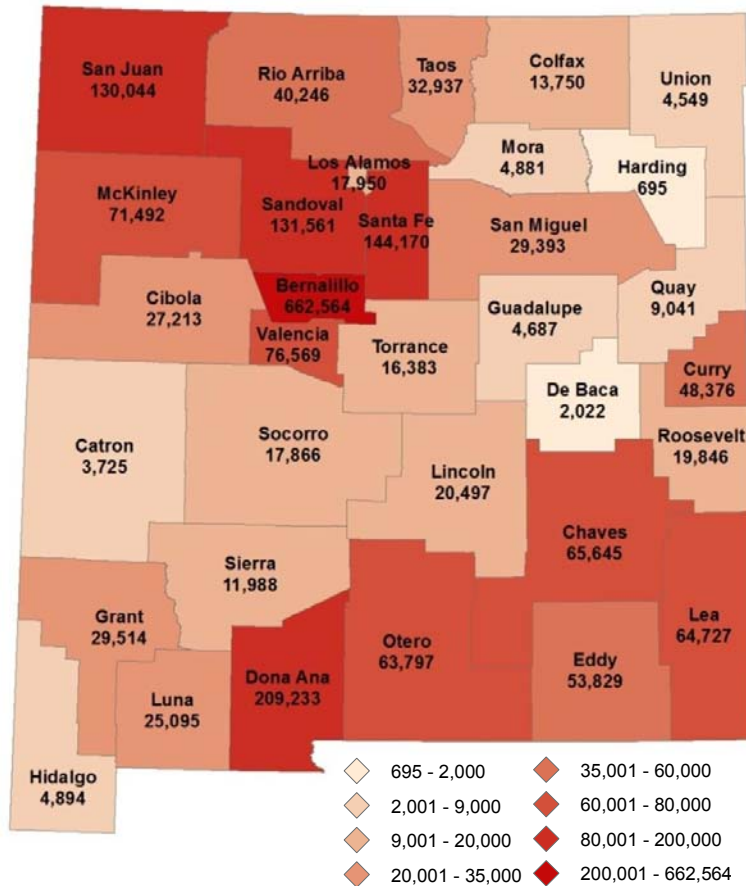
This purpose of this report is to inform and support NMNEC's efforts by examining the following questions:

- What are the potential benefits of the NMNEC initiative for the health and well-being of New Mexicans, and for New Mexico's nurses themselves?
- What is the state of the current pipeline for nursing preparation programs in the state?
- What are the current and projected landscapes for nursing careers in New Mexico?
- How can the initiative be strengthened to best meet the needs of all key stakeholders?
- As NMNEC partners monitor implementation of the initiative, what data should be gathered to ensure that the positive effects of the initiative are maximized?

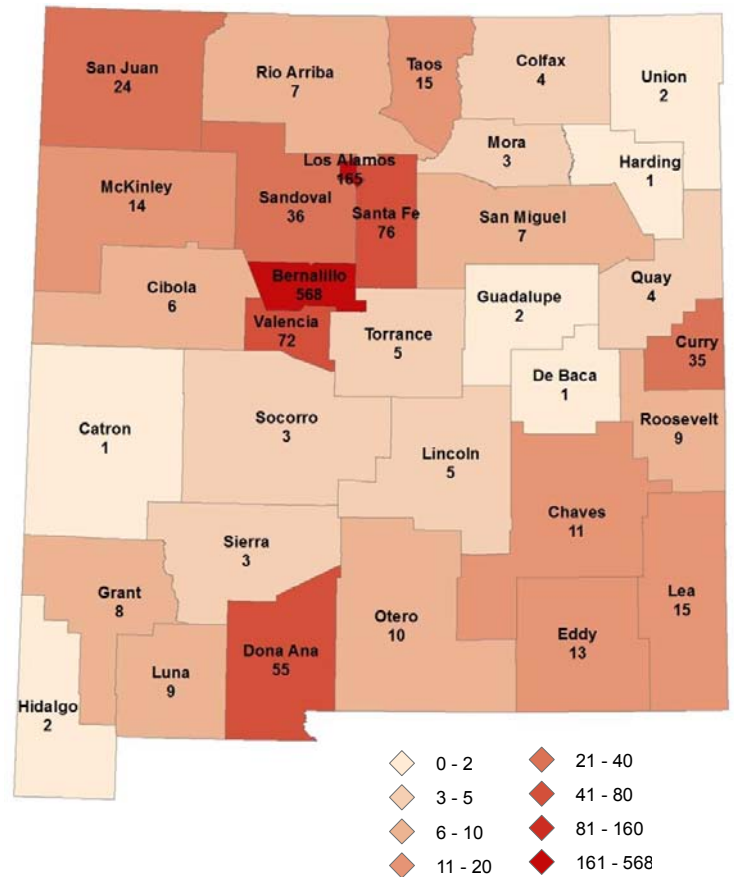
# **What Are The Changing Health Care Needs Of New Mexico?**

# The New Mexico Context

## New Mexico Counties: Total Population



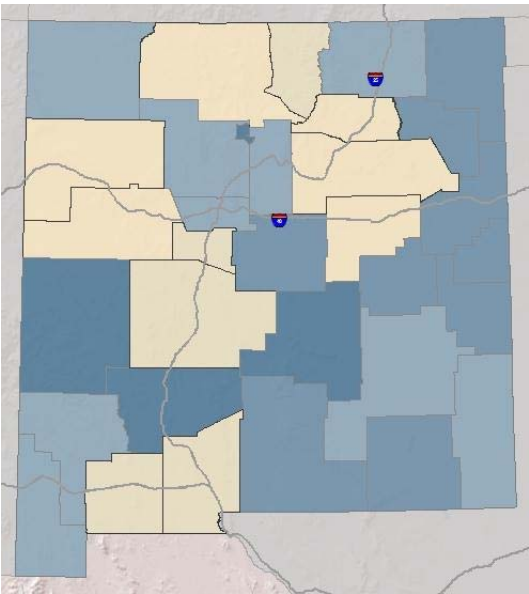
## New Mexico Counties: Population Density - Persons per Square Mile



The majority of New Mexico's population of 2,059,179 is located in a few counties. Even in those counties, however, New Mexico is often rural and spacious.

# Racial/Ethnic Distribution, By New Mexico Counties, 2007-2011

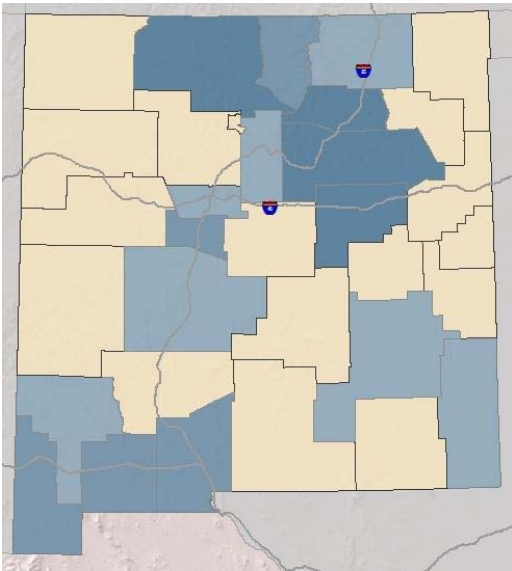
Counties where the White/Non-Hispanic population exceeds the statewide average of 40.5%



**White**

- 40.6% - 50%
- 50.1% - 59.3%
- 59.4% - 76.3%

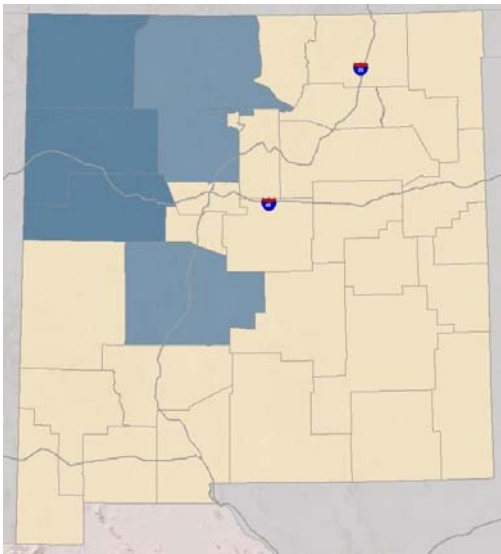
Counties where the Hispanic population exceeds the statewide average of 46.3%



**Hispanic**

- 46.3% - 52%
- 52% - 65.7%
- 65.7% - 81%

Counties where the Native American population exceeds the statewide average of 8.5%



**Native American**

- 8.6% - 14%
- 14.1% - 73.3%

# What Is The Current Status Of The Health Of New Mexicans?

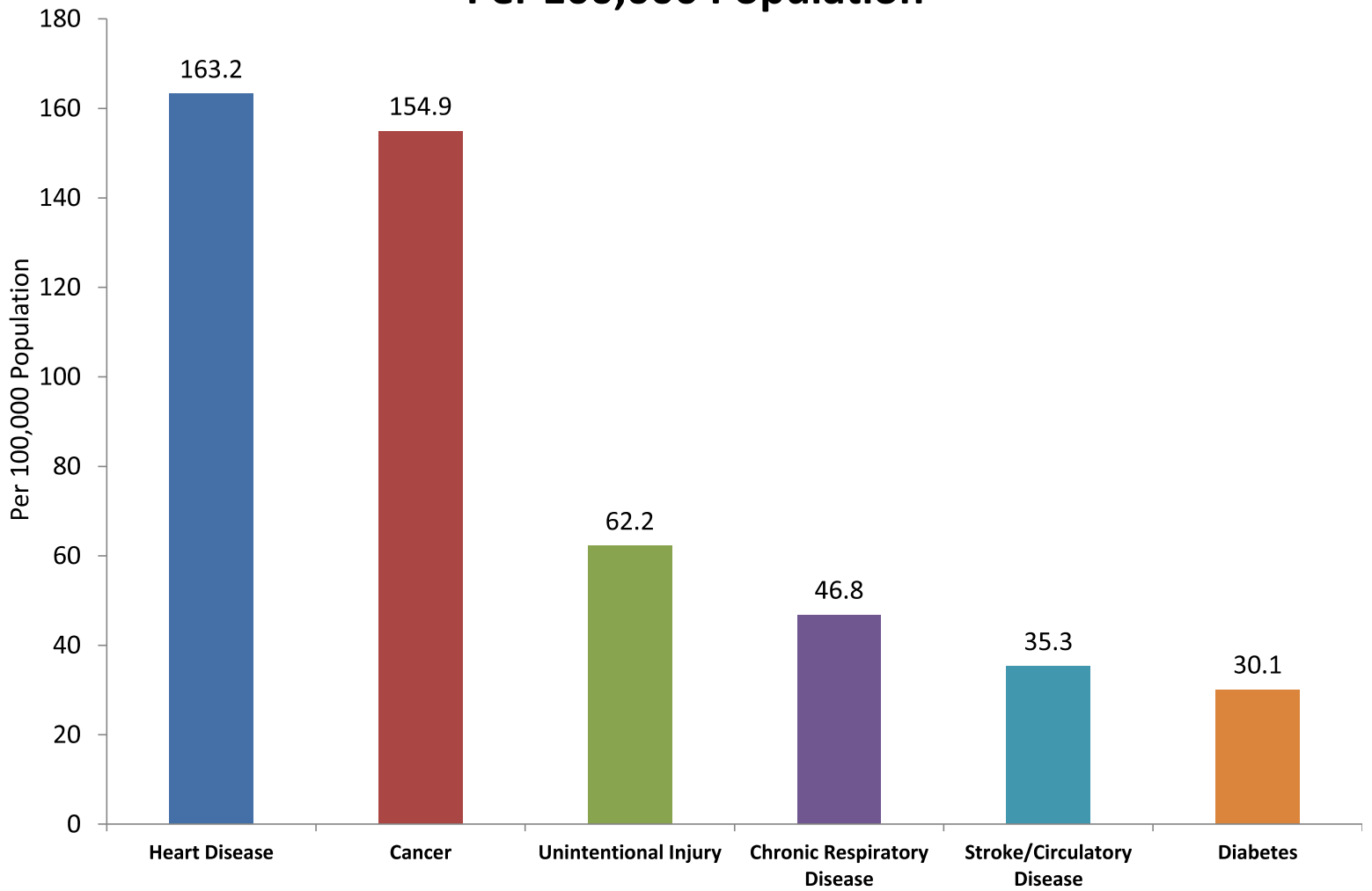
## Key Measures of General Health Status

The U.S. Department of Health and Human Services *Healthy People* 2020 initiative tracks specific measures to determine a population's general health status:

- Life Expectancy
- Years of Potential Life Lost
- Chronic Disease Prevalence

Source: [www.healthypeople.gov/2020/about](http://www.healthypeople.gov/2020/about)

# Leading Causes Of All New Mexico Deaths, 2002-2011, Per 100,000 Population





## Distribution of Health Challenges Across Counties

Just as population and racial/ethnic groups are unevenly distributed across New Mexico's diverse geographies, so are the health needs of the state. The disparate needs of the state are seen in the following county-by-county comparison across nine key indicators of health status:

- **Heart deaths** per 100,000 pop.
- **Cancer deaths** per 100,000 pop.
- **Unintentional injury deaths** per 100,000 pop.
- **Premature Deaths** (years of potential life lost per 100,000 pop.)
- **Life expectancy** from age 65
- **Adult diabetes** prevalence
- **% Adults obese**
- **% of population over age 65**
- **% of population uninsured**

Counties are colored on the following map according to how many bottom eight rankings they had across all nine indicators.

# Health Status Indicators, by County

\*yellow indicates a ranking in the bottom 8 of 33 NM counties

County	Heart Deaths per 100,000 Pop.	Years of Potential Life Lost per 100,000 Pop.	Life Expectancy After Age 65	Cancer Deaths per 100,000 Pop.	% of Adult Pop. With Diabetes	Unintentional Injury Deaths per 100,000 Pop.	% of Adults Obese	% Pop. over 65 (2010)	% of Pop. Uninsured
Bernalillo	191.5	12,496	19.1	151.9	6	60.7	19.9	0.122	17.1%
Catron	127.3	15,126	19.8	160.1	6.3	84	23.7	0.279	
Chaves	218.4	15,320	18.2	185.1	7.5	66.5	29.3	0.142	20.5%
Cibola	176.7	16,321	18.3	164.9	11.2	78.6	32	0.128	27.1%
Colfax	198.7	15,501	19	136.5	6.2	58.7	20.7	0.201	
Curry	292.6	11,823	18	146.2	8.6	46.9	27	0.114	17.1%
De Baca	192.5	16,920	19.7	149.6	6.7	118.7	22	0.229	
Doña Ana	174	10,761	18.9	154.6	6.9	45.2	25.6	0.124	21.3%
Eddy	252.2	15,163	18.1	181.4	9.9	63.9	30.8	0.14	14.2%
Grant	210.8	16,393	18.6	166	6	61.6	23.1	0.213	14.9%
Guadalupe	384.4	14,120	17.9	225.6	6.3	88.6	24.7	0.155	
Harding	101.1	12,024	22.1	95.7	6.2	86.9	27.2	0.292	
Hidalgo	192.9	15,554	18.3	123.6	6.1	38.6	23.7	0.167	
Lea	206.1	12,807	18.1	159.2	7.8	63.8	31.7	0.108	23.3%
Lincoln	141	14,200	20.1	137.6	5.5	62	20.3	0.22	17.6%
Los Alamos	123.6	8,316	21.2	114.4	5.3	30.4	18.7	0.15	
NM average	203.8	13,175	18.7	160.9		62.3		0.132	19.7
US average	190.9		17.7						15.2

Sources: New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health; Centers for Disease Control, Diagnosed Diabetes Percentage, 2009, New Mexico by County; New Mexico Department of Health, Indicator-Based Information System, [http://ibis.health.state.nm.us/indicator/view\\_numbers/NMPopDemoAge\\_65.Cnty.html](http://ibis.health.state.nm.us/indicator/view_numbers/NMPopDemoAge_65.Cnty.html); U.S. Census Bureau, Health Insurance Coverage Status, American Community Survey, 3-Year Estimates, 2009-2011.

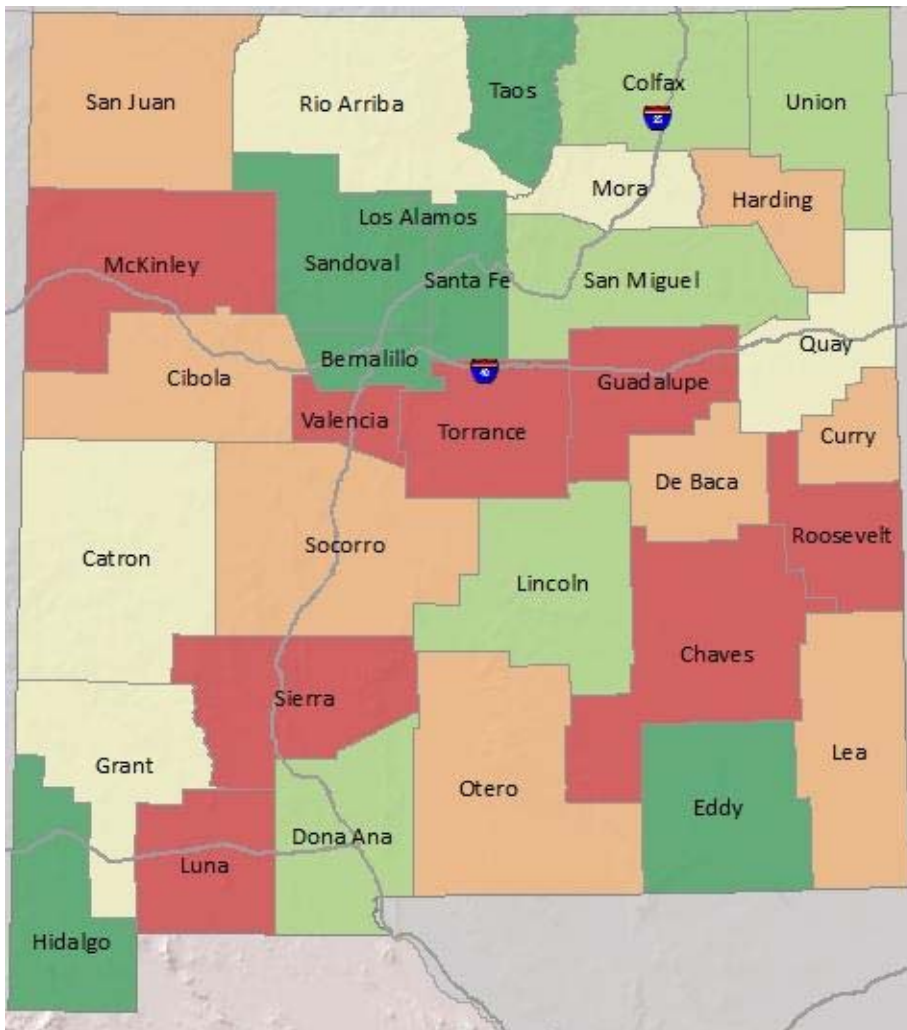
# Health Status Indicators, by County (cont'd)

\*yellow indicates a ranking in the bottom 8 of 33 NM counties

County	Heart Deaths per 100,000 Pop.	Years of Potential Life Lost per 100,000 Pop.	Life Expectancy After Age 65	Cancer Deaths per 100,000 Pop.	% of Adult Pop. With Diabetes	Unintentional Injury Deaths per 100,000 Pop.	% of Adults Obese	% Pop. over 65 (2010)	% of Pop. Uninsured
Luna	325.8	16,481	18	184.4	7.1	58.4	26.8	0.196	22.9%
McKinley	212.2	15,456	17.8	175.6	12.4	100.3	36.2	0.095	38.0%
Mora	310.6	16,041	19	136.2	6.7	84	21.4	0.187	
Otero	293.4	13,777	18	171.2	7.8	40.6	25.7	0.15	19.9%
Quay	192.7	20,221	18.8	159.1	6.1	54.8	24.1	0.206	
Rio Arriba	219.1	18,608	18.2	179.1	6.3	105.3	24.5	0.141	18.8%
Roosevelt	257.9	12,113	18	197.3	5.9	50.72	27.2	0.119	21.6%
Sandoval	211.6	11,086	18.7	169.2	6.4	48.7	24.3	0.121	15.5%
San Juan	168.4	13,817	18.5	146.4	8.5	78.43	29.8	0.108	30.1%
San Miguel	221.8	16,259	17.8	183.6	6.4	77.3	22.5	0.152	14.4%
Santa Fe	180.3	11,589	19.6	158	3.9	60.8	14	0.151	19.9%
Sierra	266.6	25,793	17.7	204.8	6.1	63	25.1	0.306	
Socorro	247.1	16,847	17.4	223.9	7.3	79.6	26.7	0.142	
Taos	180	13,656	19.3	164.6	5.9	76.4	18.7	0.171	20.4%
Torrance	312.4	15,331	16.5	248.4	6.5	87.8	25.3	0.142	
Union	123.8	12,690	18	123.5	5.9	64	23.8	0.179	
Valencia	277.5	14,236	17.1	211.5	7	70.1	27.6	0.127	15.8
NM	203.8	13,175	18.7	160.9		62.3		0.132	19.7
US	190.9		17.7						15.2

Sources: New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health; Centers for Disease Control, Diagnosed Diabetes Percentage, 2009, New Mexico by County; New Mexico Department of Health, Indicator-Based Information System, [http://ibis.health.state.nm.us/indicator/view\\_numbers/NMPopDemoAge\\_65.Cnty.html](http://ibis.health.state.nm.us/indicator/view_numbers/NMPopDemoAge_65.Cnty.html); U.S. Census Bureau, Health Insurance Coverage Status, American Community Survey, 3-Year Estimates, 2009-2011.

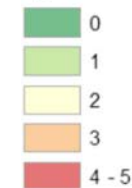
# Map of Multiple Health Challenges, By County



This map depicts the frequency with which counties ranked in the bottom 8 of 33 counties for the following health status indicators:

- **Heart deaths** per 100,000 pop.
- **Cancer deaths** per 100,000 pop.
- **Unintentional injury deaths** per 100,000 pop.
- **Premature Deaths** (years of potential life lost) per 100,000 pop.
- **Life expectancy** from age 65
- **Adult diabetes** prevalence
- **% Adults obese**
- **% of population over age 65**
- **% of population uninsured**

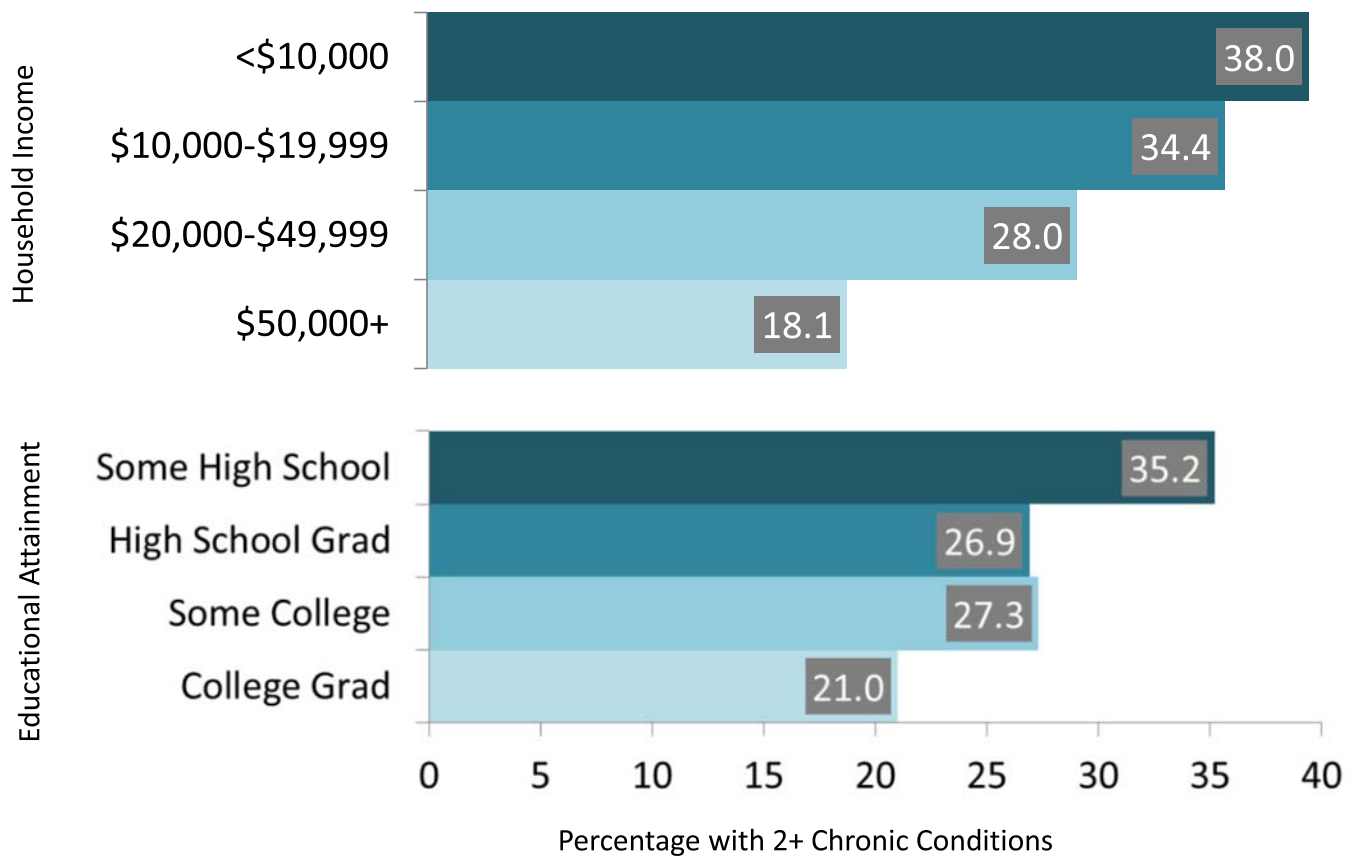
**Number of Times County Appears in Lowest Rankings By Health Status Indicator**



Sources: New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health; Centers for Disease Control, Diagnosed Diabetes Percentage, 2009, New Mexico by County; New Mexico Department of Health, Indicator-Based Information System, [http://ibis.health.state.nm.us/indicator/view\\_numbers/NMPopDemoAge\\_65.Cnty.html](http://ibis.health.state.nm.us/indicator/view_numbers/NMPopDemoAge_65.Cnty.html); U.S. Census Bureau, Health Insurance Coverage Status, American Community Survey, 3-Year Estimates, 2009-2011.

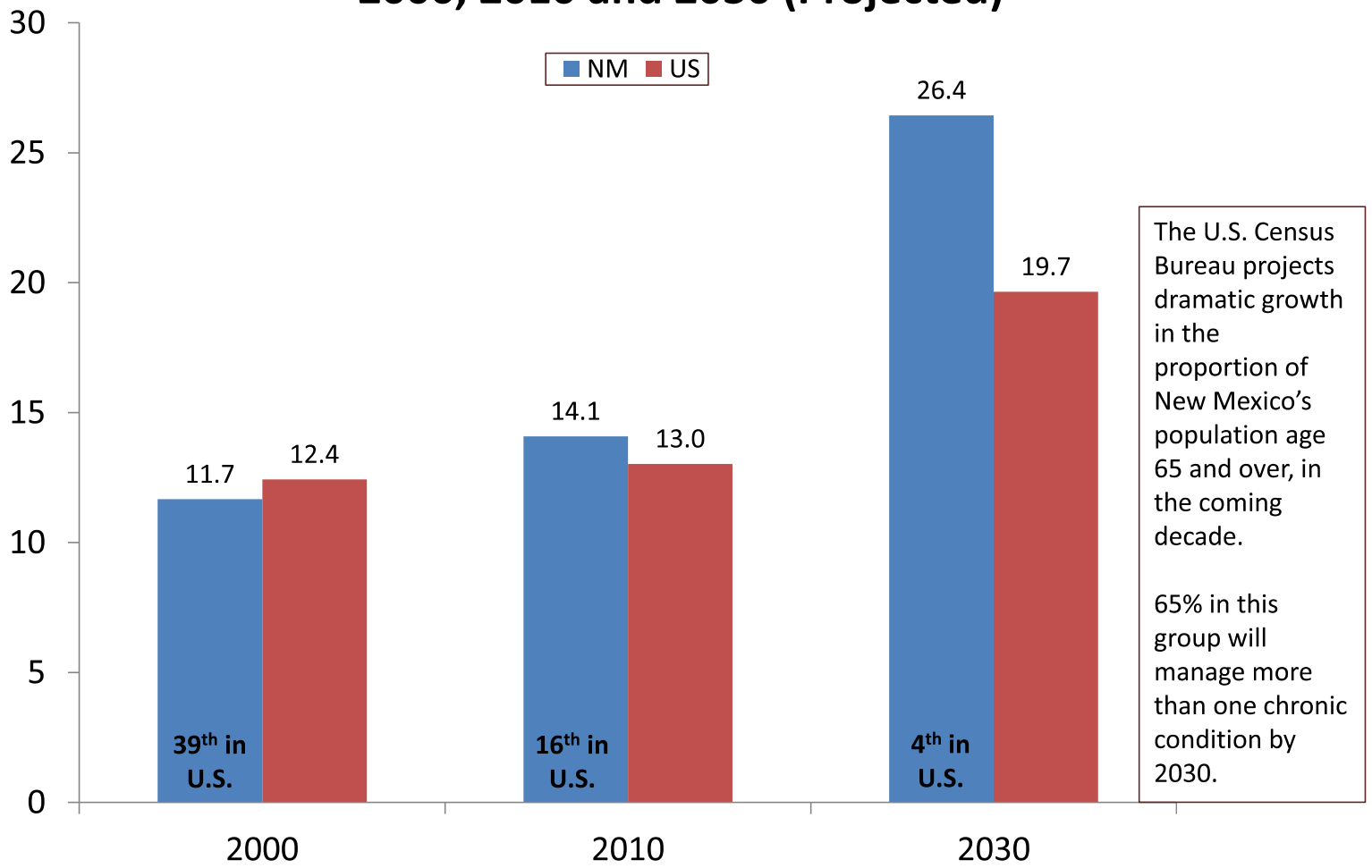
# What Factors Are Changing The State's Health Care Need?

# Prevalence Of Multiple Chronic Conditions By Annual Income And Educational Level, Age 45+, New Mexico, 2011



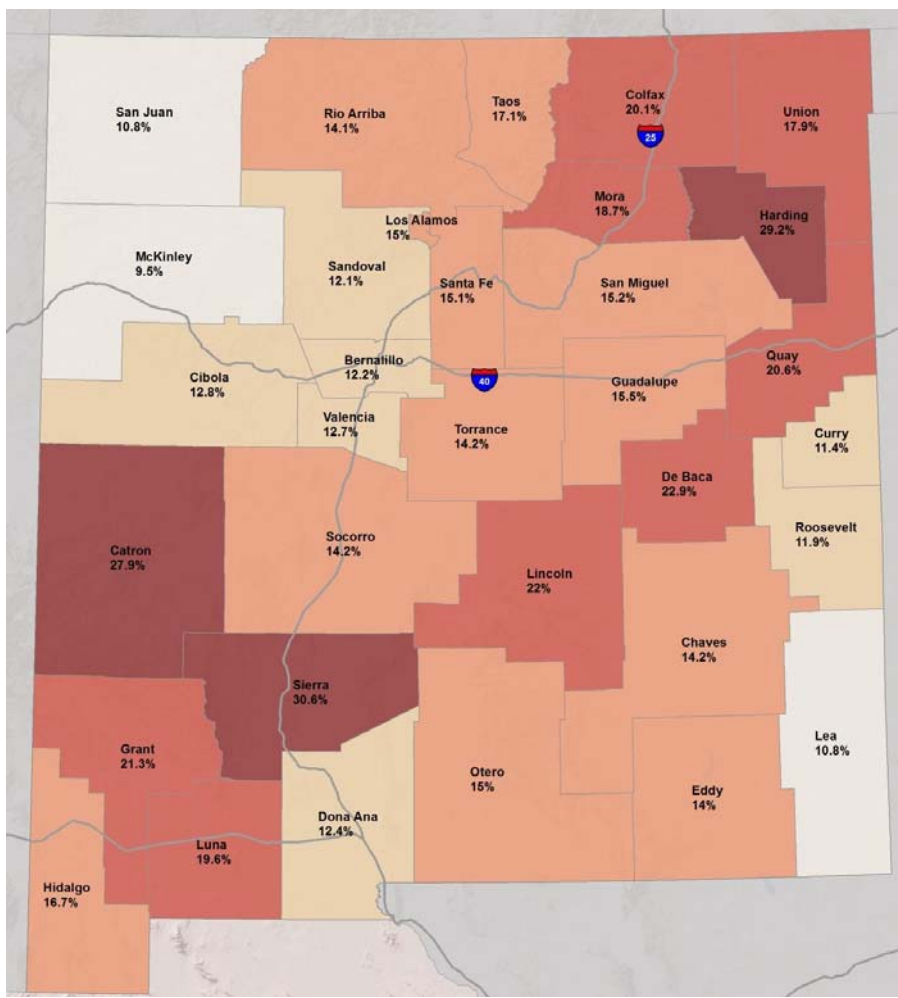
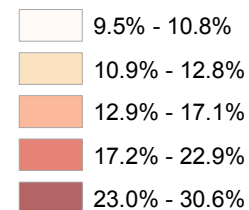
Source: NM Behavioral Risk Factor Surveillance System, NMDOH. Note: Multiple Chronic Conditions include two or more of the following: Cardiovascular disease (heart attack, coronary heart disease, and/or stroke), current asthma, cancer (excluding skin cancer), COPD, arthritis, kidney disease, or diabetes.

# Percentage of Population Age 65 And Older, New Mexico and U.S.: 2000, 2010 and 2030 (Projected)



## Percentage Of Adults Age 65 And Over, By County, 2010

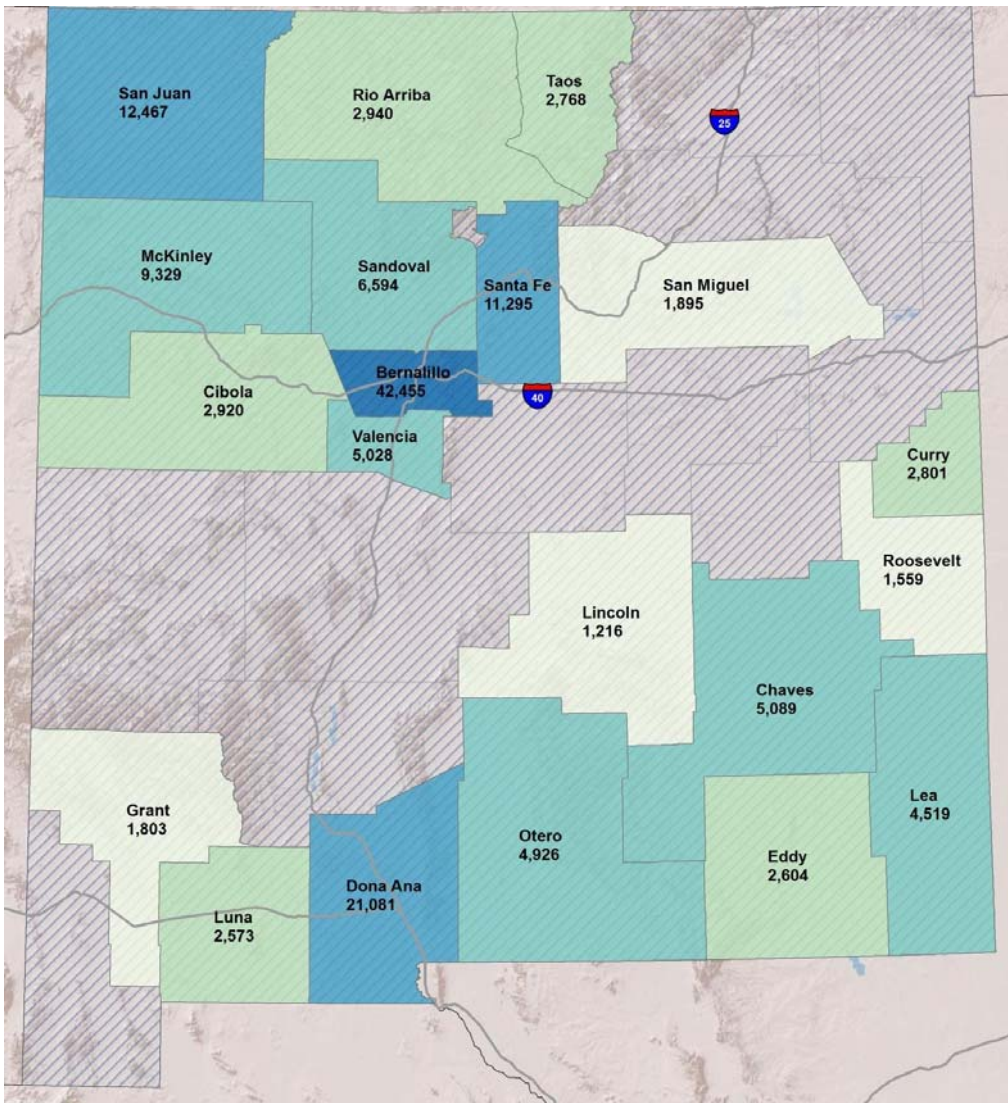
Statewide average in  
2010 was 13.2%.



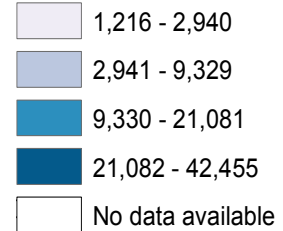
New Mexico Department of Health, Indicator-Based Information System, [http://ibis.health.state.nm.us/indicator/view\\_numbers/NMPopDemoAge\\_65.Cnty.html](http://ibis.health.state.nm.us/indicator/view_numbers/NMPopDemoAge_65.Cnty.html). U.S. Census Bureau, 2010 Census. 12% of all age 65+ lived below the federal poverty level. U.S. Census, Population Projections: Table 4. Change in Total population and population 65 and older by state: 2000 to 2030 <http://www.census.gov/population/projections/data/state/projectionsagesex.html>



# Estimated Number Of Adults Newly Eligible for Medicaid, By County



Uninsured Adults, Ages 18-64,  
Living Below 140% Federal Poverty Level,  
2011



Total for Counties  
Reported = 145,862

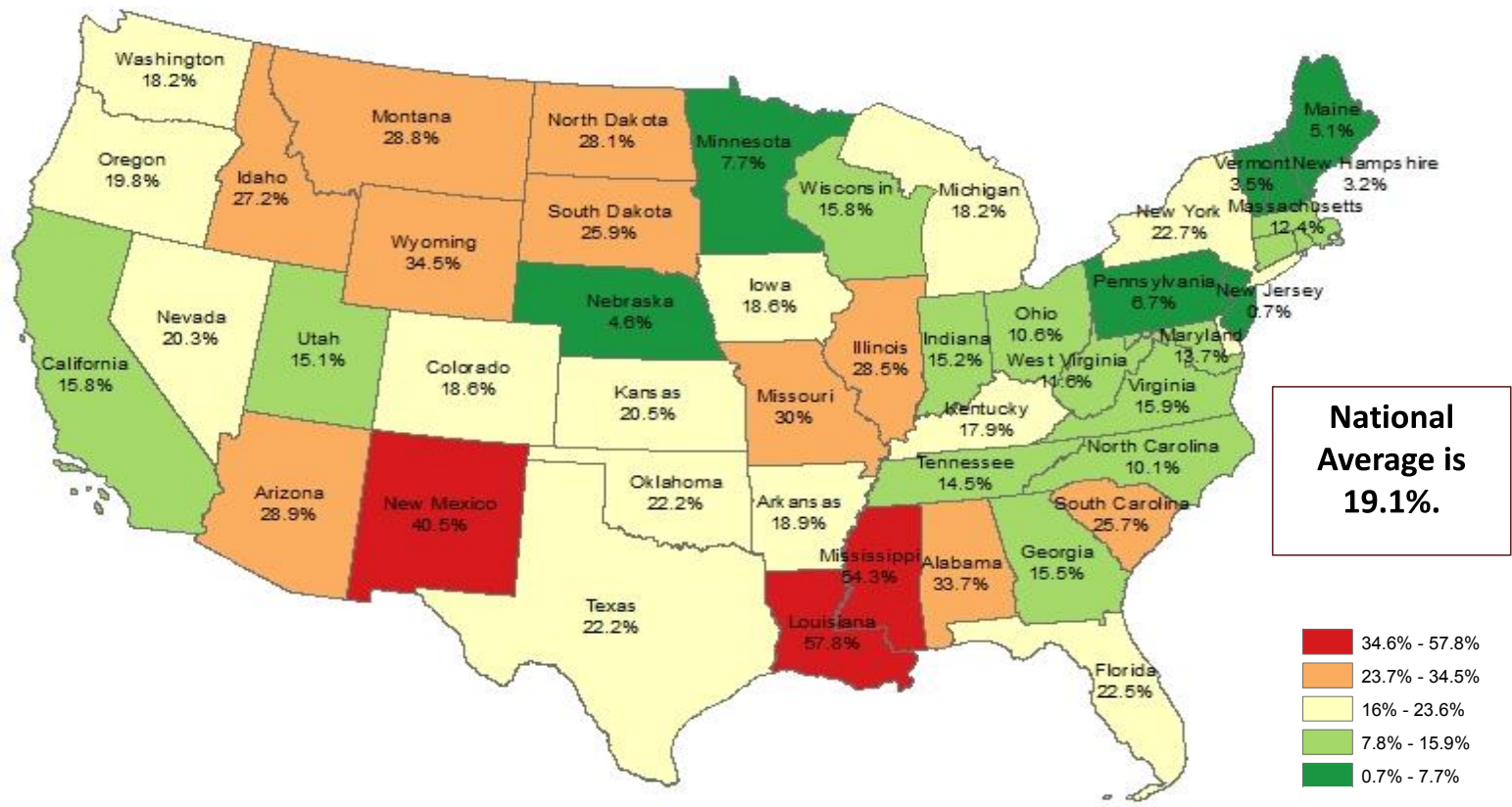
U.S. Census, American Community Survey, 3-Year Estimates, 2009-2011,  
B27016: Health Insurance Coverage Status and Type By Ratio of Income  
to Poverty Level in the Past 12 Months by Age.

## New Mexico's Growing Primary Care Provider Shortage

- The vast majority of the projected 170,000 adults in NM newly eligible for Medicaid in 2014 and beyond have not previously had primary care health homes.
- NM has already struggled to maintain an adequate primary care network (primary care physicians, nurse practitioners, and physician assistants.)
- Already, 32 of 33 NM counties are designated as Health Professional Shortage Areas, or medically underserved.
- 40.5% of NM's population lives in a Primary Care Health Professional Shortage Area. Nationally, the rate is 19.1%.

Sources: LFC Brief; HRSA (U.S. Dept. of Health and Human Services, Health Resources and Service Administration), <http://bhpr.hrsa.gov/shortage/updateddesignations/2012June29/primarycarehpsas-6292012.pdf>. Kaiser State Health Facts, New Mexico: HPSA 50 State Comparison. CLP, NM Health Policy Commission.

# Percentage Of Population Living In A Primary Care Health Professional Shortage Area, 2012, By State



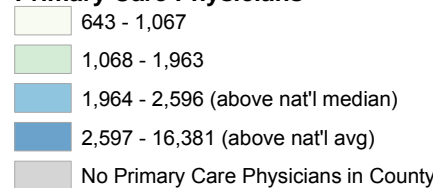
# Ratio Of Population To Primary Care Physician, By County, 2012

The number shown represents the number of county residents to each primary care physician working in the county. For example, a ratio of 1,914:1 means that there are 1,914 people for every 1 primary care physician working in the county.

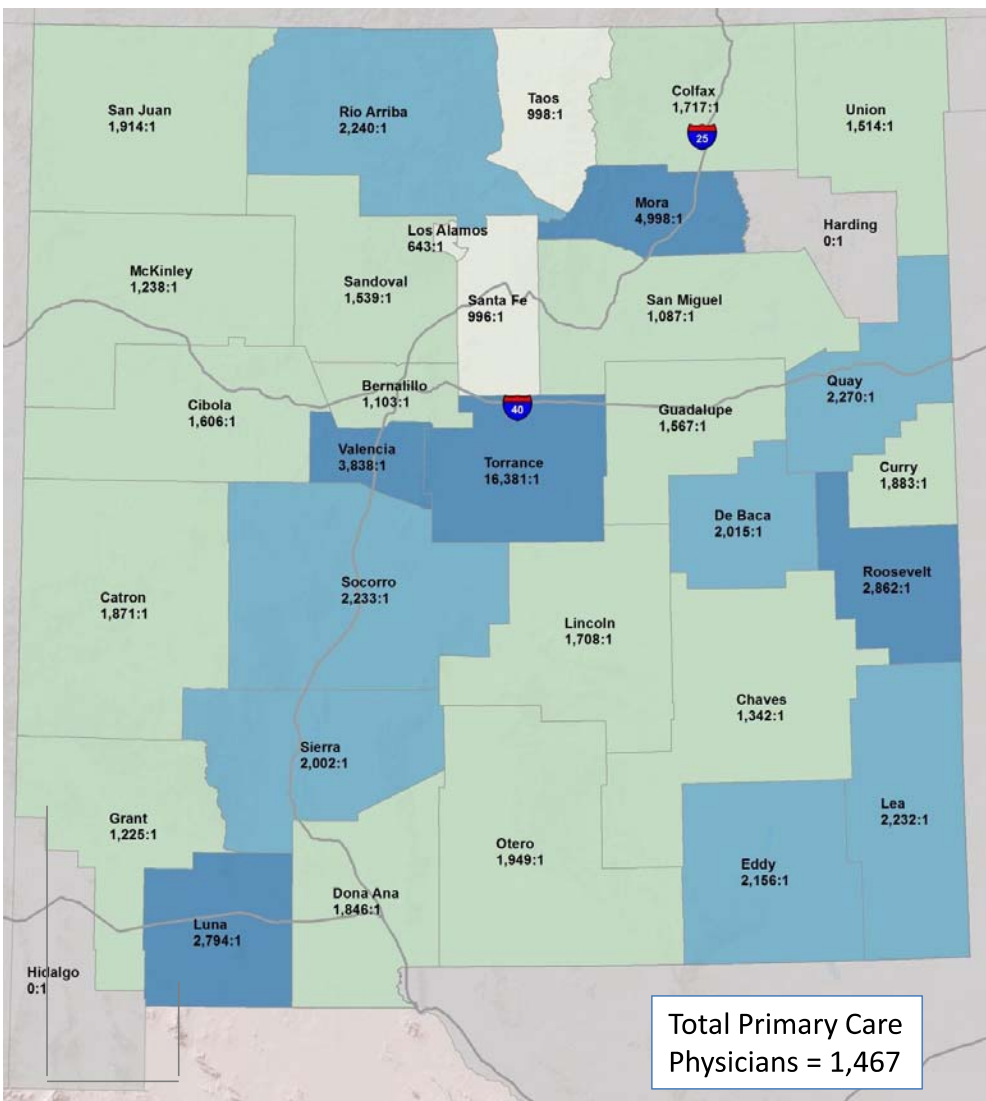
The *2013 County Health Rankings and Roadmaps* sets a national benchmark ratio at 1,067:1.

The statewide average ratio is 1,409:1.

## Ratio of Population to Primary Care Physicians



Source: Robert Wood Johnson Foundation, County Health Rankings, 2013. Note: Ratios do not account for usage rates.

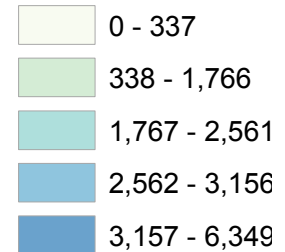
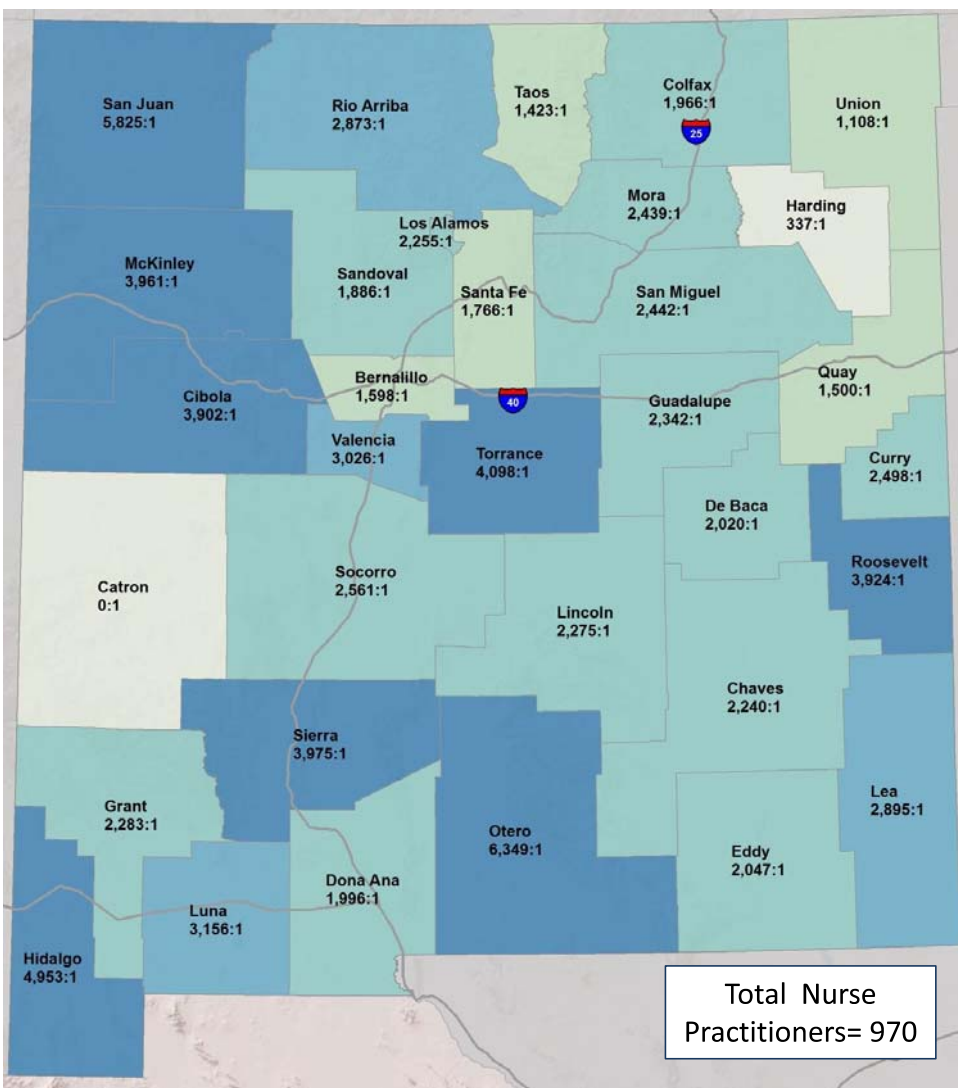




# Ratio Of Population To Nurse Practitioner, By County, 2012

The number shown represents the number of county residents to each Nurse Practitioner working in the county. For example, a ratio of 1,423:1 means that there are 1,423 people for every 1 Nurse Practitioner working in the county.

The statewide average ratio is 2,100:1.

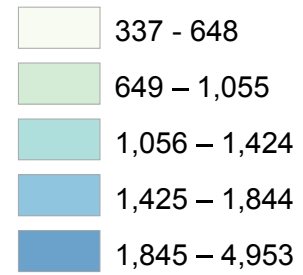
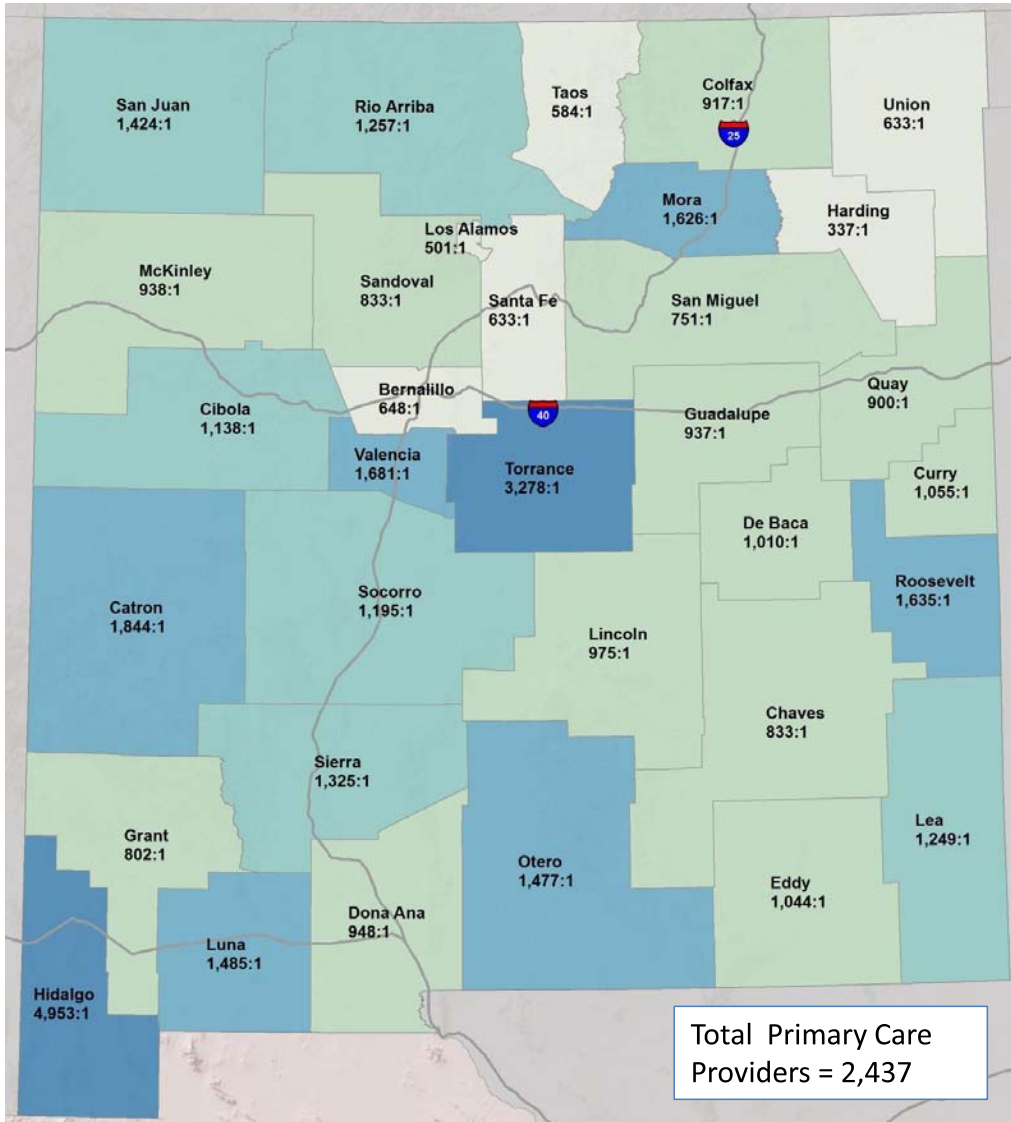


Source: New Mexico Board of Nursing Annual Report for FY 2012

# Ratio Of Population To Primary Care Providers (Physicians and NPs), By County, 2012

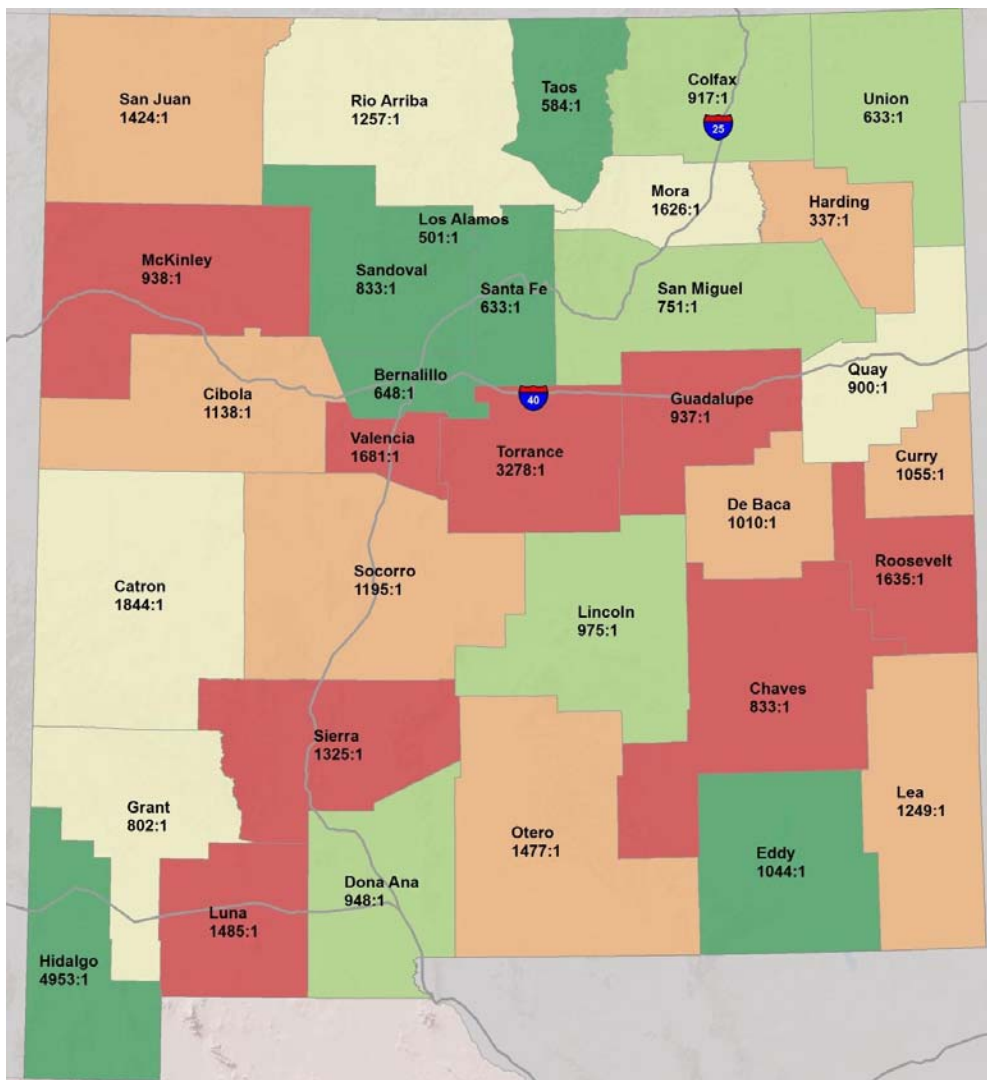
The number shown represents the number of county residents to primary care providers working in the county. For example, a ratio of 1,423:1 means that there are 1,423 people for every 1 Primary Care Physician or Nurse Practitioner working in the county.

The statewide average ratio is 836:1.



Source: New Mexico Board of Nursing Annual Report for FY 2012; Robert Wood Johnson Foundation, County Health Rankings, 2013; U.S. Census, ACS 5-year estimates. Note: Ratios do not account for usage rates.

# County Provider-to-Needs Gap: Primary Care (MDs and NPs)

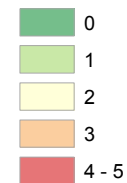


Map colors depict the frequency with which counties ranked in the bottom 8 of 33 counties for the seven major health status indicators.

The number shown represents the number of county residents to primary care providers working in the county. For example, a ratio of 1,423:1 means that there are 1,423 people for every 1 Primary Care Physician or Nurse Practitioner working in the county.

The statewide average ratio is 836:1.

## Number of Times County Appears in Lowest Rankings By Health Status Indicator



Sources: NM Board of Nursing 2012 Annual Report; Robert Wood Johnson Foundation, County Health Rankings, 2013; U.S. Census, ACS 5-year estimates. New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, NM Department of Health; Centers for Disease Control, Diagnosed Diabetes Percentage, 2009, New Mexico by County; U.S. Census Bureau, Health Insurance Coverage Status, American Community Survey, 3-Year Estimates, 2009-2011.

# **The Critical Role Of Registered Nurses In Health Care Provision**



## RNs as Frontline Service Providers

Though health needs and disparities in care provision vary for populations across the state, all rely heavily on health care services of the largest group of health care professionals— Registered Nurses.

RNs provide the bulk of health care services to the state's residents, whether relatively healthy, suffering from chronic disease, aging, or newly insured.

The health care needs of New Mexico's population in 2012 were met in part by the following:

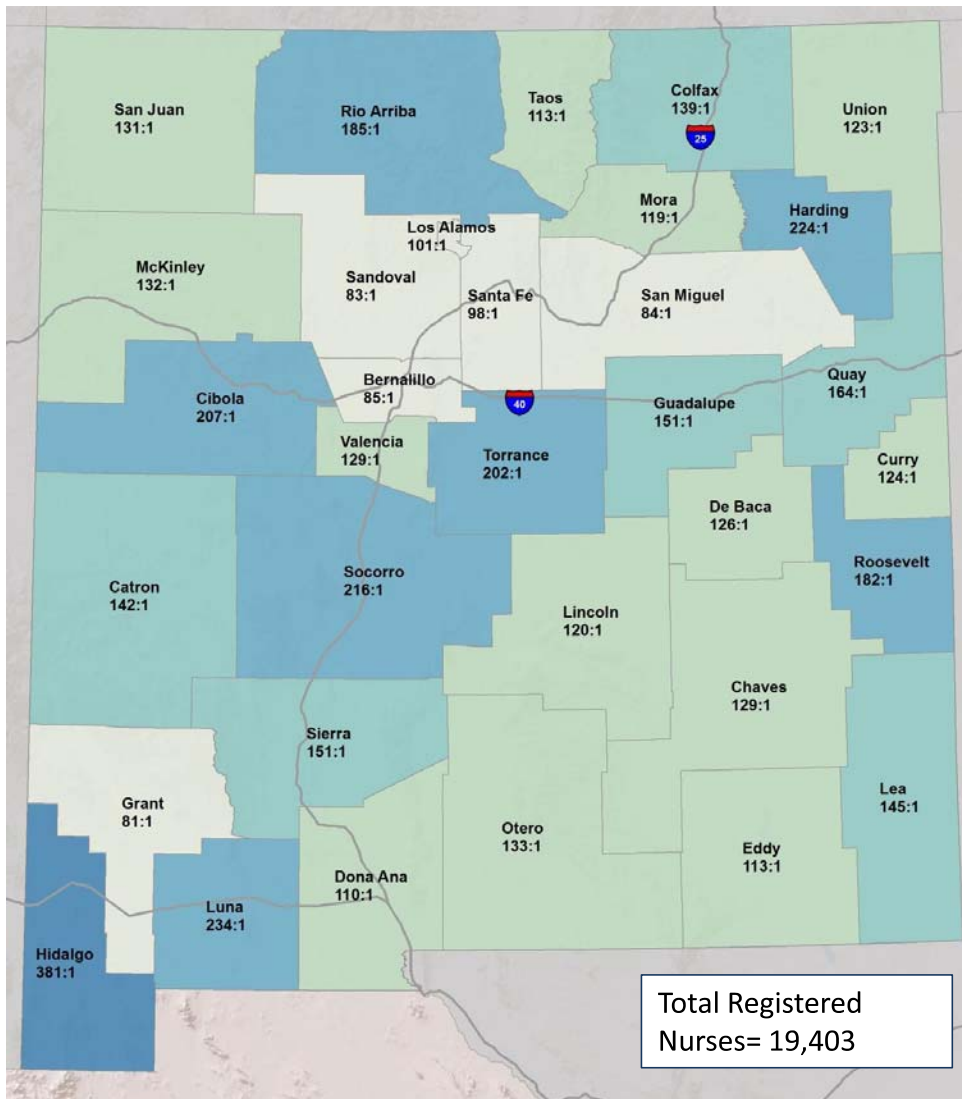
<u>Provider Type</u>	<u>Number</u>	<u>Ratio of Pop:Provider</u>
Primary Care Physicians:	1,467	1,409:1
Nurse Practitioners (primary care):	970	2,100:1
Registered Nurses:	19, 403	105:1

Source: Robert Wood Johnson Foundation, County Health Rankings, 2013. and New Mexico Board of Nursing FY2012 Annual Report. Note: Ratios do not account for usage rates.

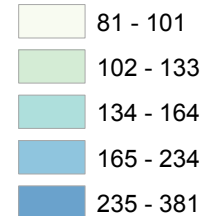
# Ratio Of Population To Registered Nurse, By County, 2012

The number shown represents the number of county residents to each Registered Nurse working in the county. For example, a ratio of 131:1 means that there are 131 people for every 1 Registered Nurse working in the county.

The statewide average ratio is 105:1.



## Ratio of Population to Registered Nurses



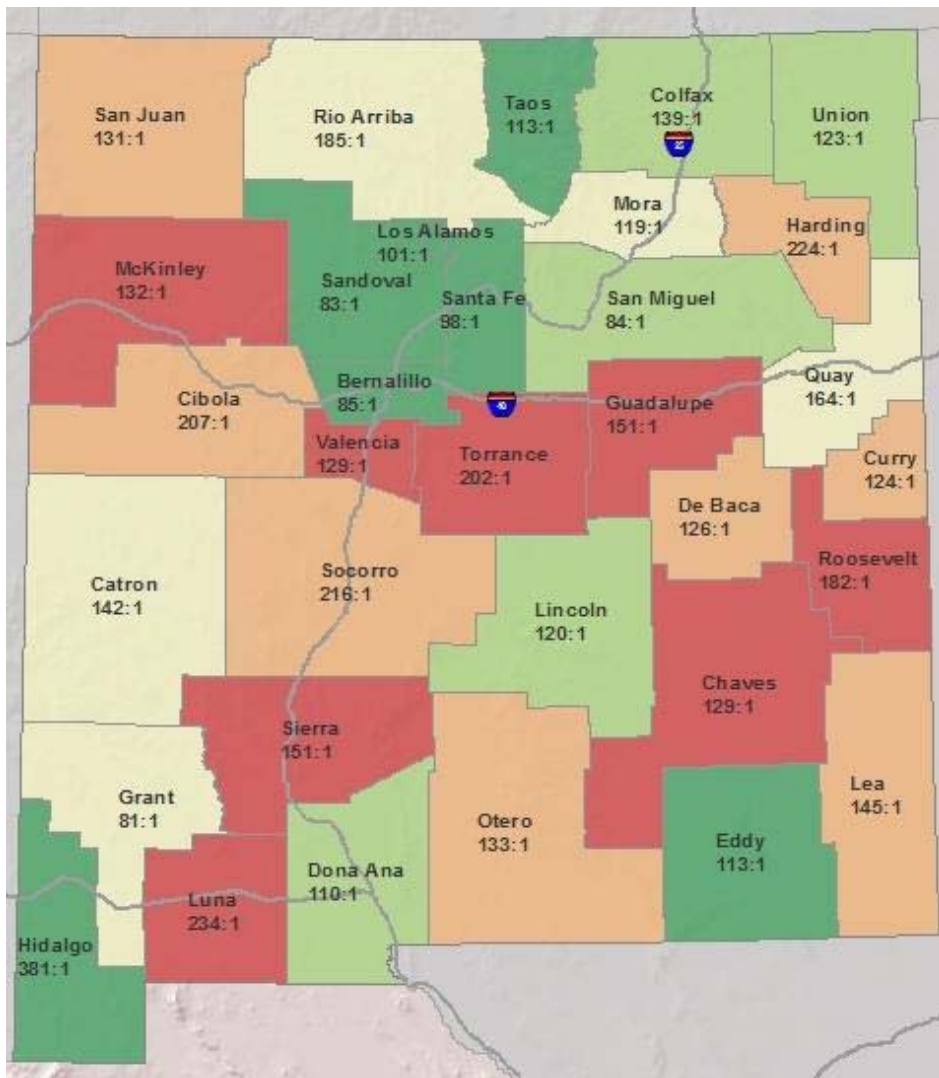
Source: New Mexico Board of Nursing Annual Report for FY 2012

## County Provider-To-Needs Gap: Registered Nurses

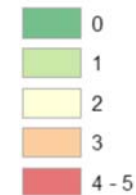
Map colors depict the frequency with which counties ranked in the bottom 8 of 33 counties for the seven major health status indicators.

The number shown represents the number of county residents to each Registered Nurse working in the county. For example, a ratio of 98:1 means that there are 98 residents in the county for each Registered Nurse.

The statewide average ratio is 105:1.



### Number of Times County Appears in Lowest Rankings By Health Status Indicator



Sources: NM Board of Nursing 2012 Annual Report; New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, NM Department of Health; Centers for Disease Control, Diagnosed Diabetes Percentage, 2009, New Mexico by County; U.S. Census Bureau, Health Insurance Coverage Status, American Community Survey, 3-Year Estimates, 2009-2011.

# **Will There Be Enough Nurses To Take Care Of New Mexicans?**

# Will We Have The Nurses We Need To Take Care Of New Mexicans?

## What Do Changing Health Demand Factors Tell Us?

- Existing shortages of health care providers – including RNs -- in New Mexico already leave many health demands inadequately addressed. In the several decades ahead, demand is expected to increase due to the growing mean age of the state's population and expanded access to care through health reform measures set to take place in 2014.
- Researchers forecast that RN shortages will grow across the country by 2030, with **New Mexico projected to face the largest shortage ratio in the nation.**
- Current data reported in the October 2013 Annual Report of the New Mexico Health Workforce Committee indicates a **current shortage of 2,306 RNs** in the state.
- Clearly, New Mexico will need more nurses to meet increased demand.

Source: "United States Registered Nurse Workforce Report Card and Shortage Forecast, Juraschek, Zhang, Ranganathan and Lin, *American Journal of Medical Quality* 2012 (27:241). Legislative Finance Committee Report 13-03, Adequacy of New Mexico's Healthcare Systems Workforce, May 15, 2013. 2013 Annual Report, New Mexico Health Workforce Committee, October 2013.

# Will We Have The Nurses We Need To Take Care Of New Mexicans?

## What Do Changing Health Demand Factors Tell Us?

- Advanced practice nurses may increasingly be looked to in order to provide primary care services, which are in short supply in New Mexico. Only RNs who hold a BSN degree meet entry requirements for advanced practice nurse education programs.

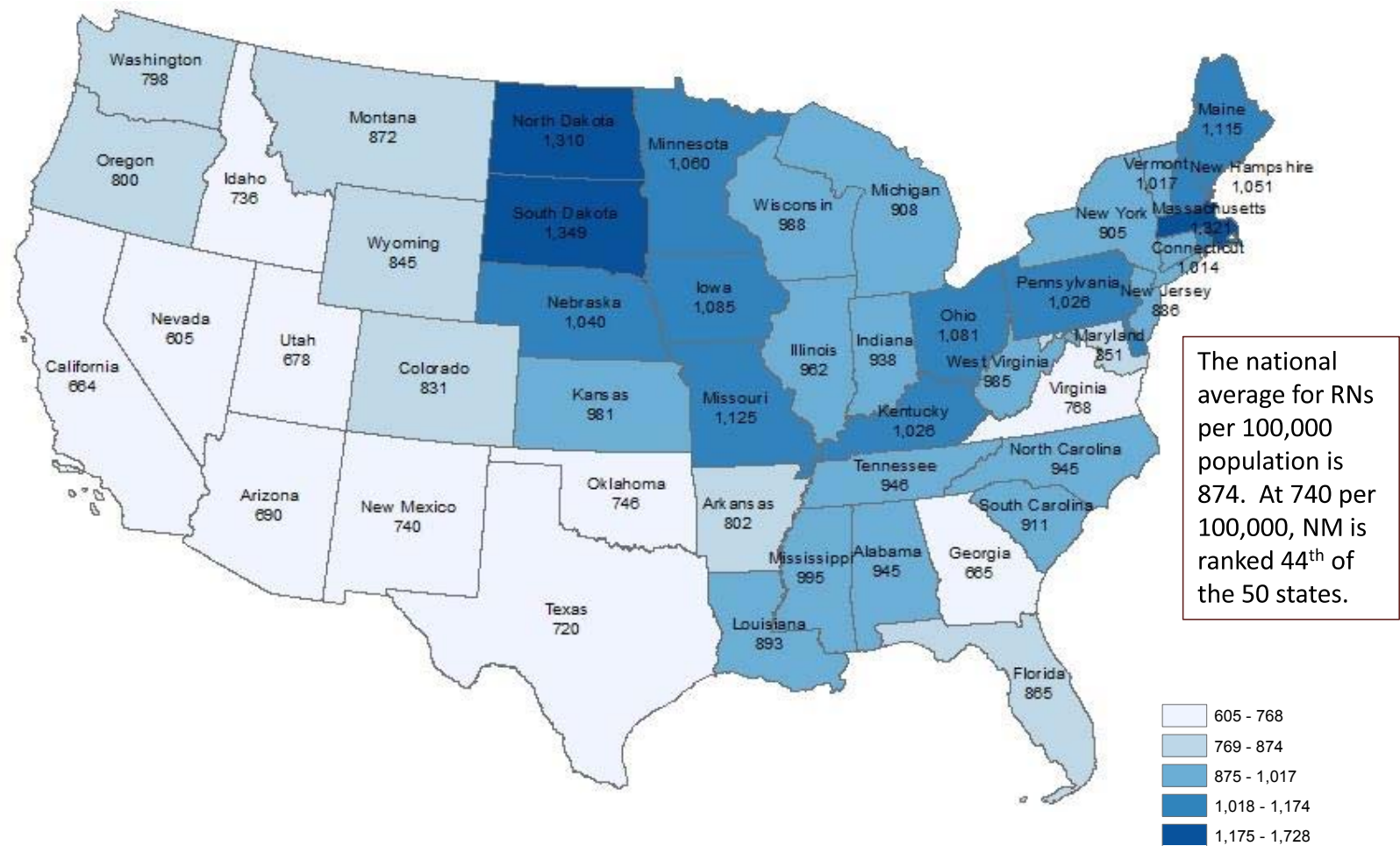
Source: "United States Registered Nurse Workforce Report Card and Shortage Forecast, Juraschek, Zhang, Ranganathan and Lin, *American Journal of Medical Quality* 2012 (27:241). Legislative Finance Committee Report 13-03, Adequacy of New Mexico's Healthcare Systems Workforce, May 15, 2013.

# The Landscape Of Nursing In New Mexico

# Who Are New Mexico's Exiting Nurses?



## Registered Nurses per 100,000 Population, All States



Source: Henry J. Kaiser Foundation, <http://www.statehealthfacts.org/profileind.jsp?ind=439&cat=8&rgn=33>. RNs here include advance practice nurses such as nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists; both full- and part-time nurses are counted.

# **The Workforce Data Set: NM Board of Nursing Annual Report 2012`**

Information on New Mexico's nursing workforce comes primarily through state licensure data, reported annually in the New Mexico Board of Nursing (BON)'s Governor's Reports. The 2012 BON report includes:

- Total number of active nursing license holders in the state
- Total number of active license holders by type of nurse.

These totals, however, do not differentiate between those license holders currently working as nurses and those not currently working as nurses.

More detailed information is collected when new licenses are issued or existing licenses are renewed (every 2 years). This data set provides a more complete snapshot of the makeup of the state's nursing workforce, based on roughly half of NM's license holders. This set provides data on nurses by:

- County of residence, license type, gender, age, degree held, employment status, work setting, and employment position.
- Race/ethnicity of nurses will be reported beginning in 2013.

The BON data on all active licenses show that:

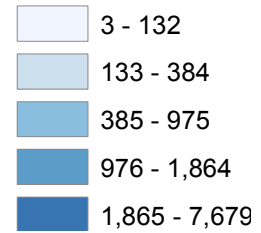
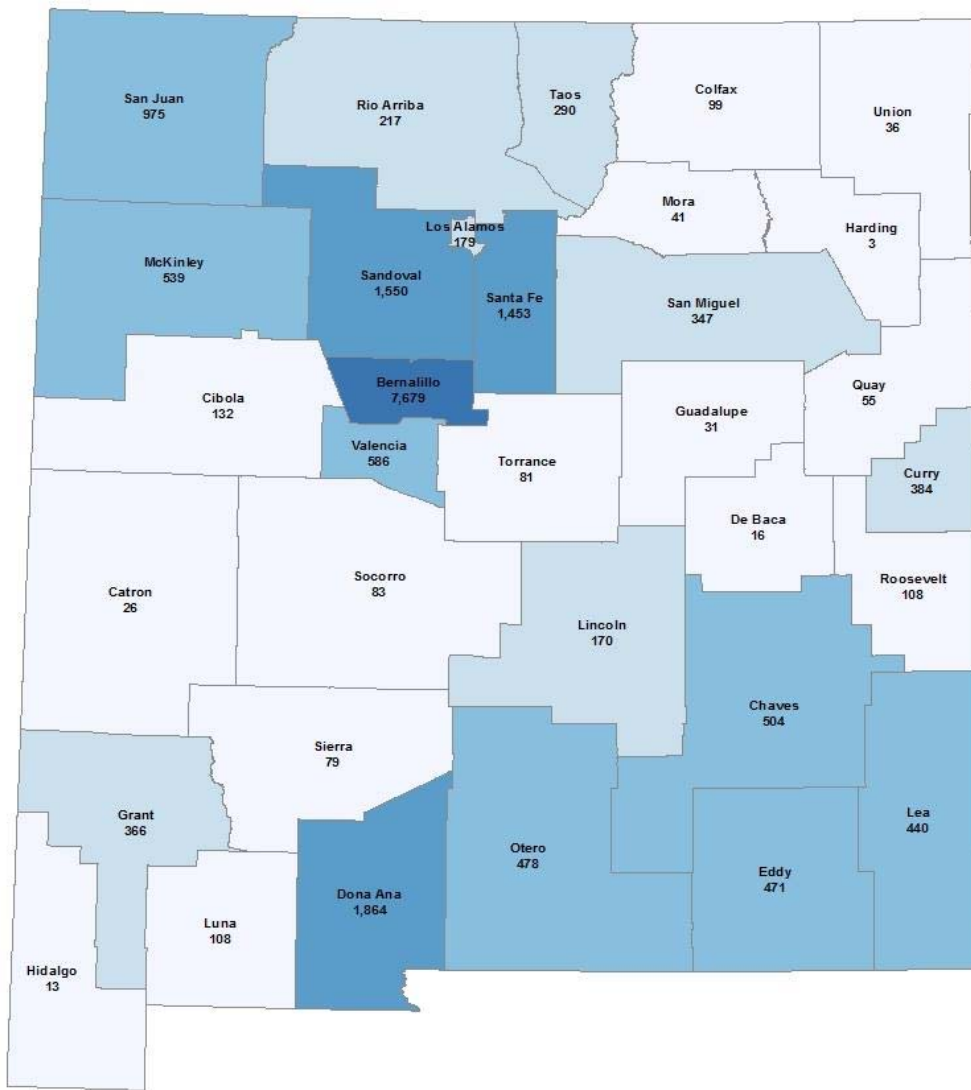
- 83% of all NM nurses are RNs.
- A total of 19,403 RNs lived in state.
- 89% of RNs are female.
- 48% of RNs are age 50 or older.

Licensure renewal information indicates that:

- 58% of the state's RNs are educated below a BSN level.
- 76% of those holding licenses were actively working.
- 44% of RNs worked in hospital settings.

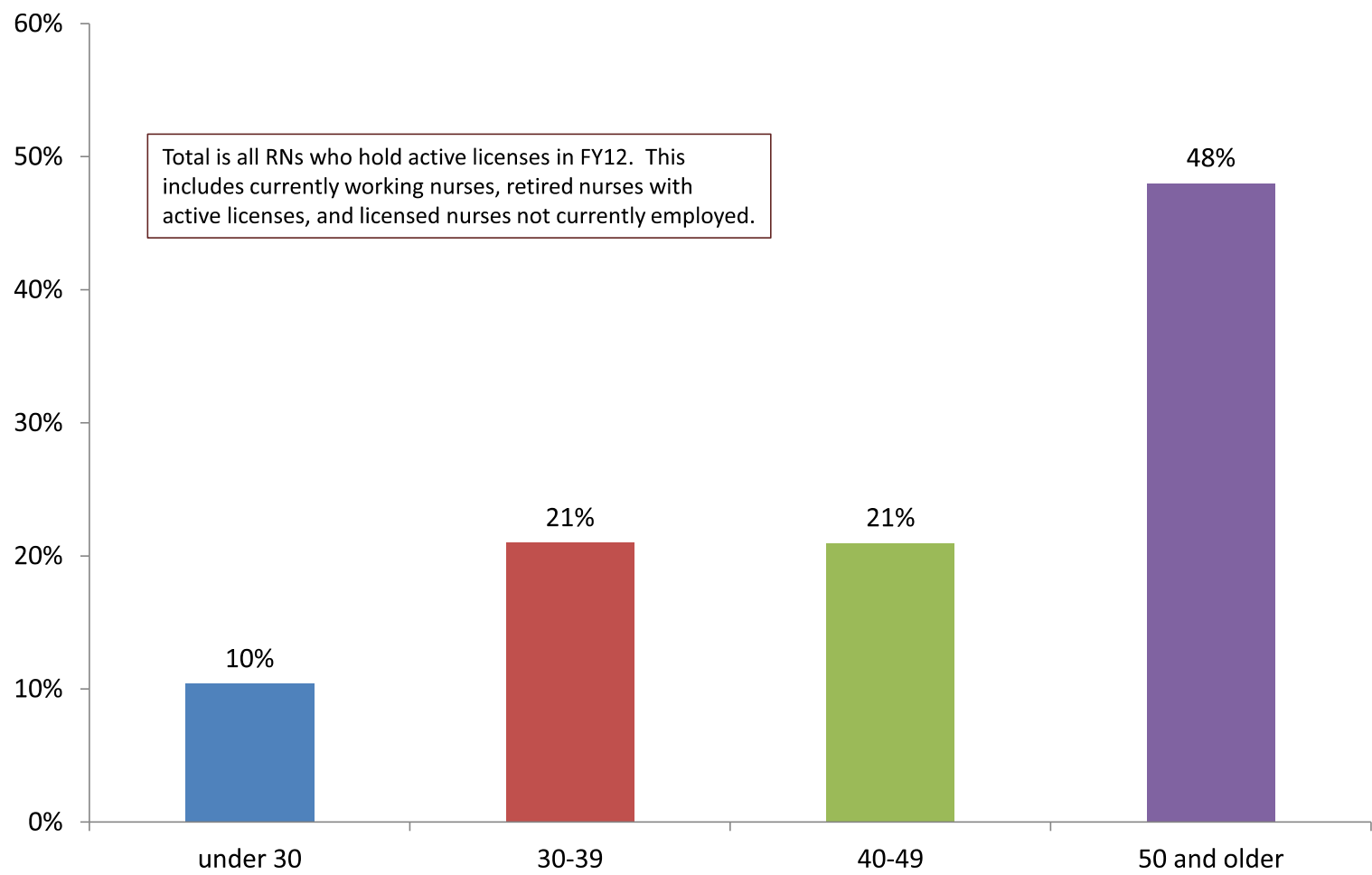
# Total Number of Active Registered Nurse Licenses, By County, 2012

Total for RNs residing in NM = 19,403.



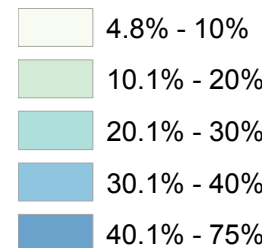
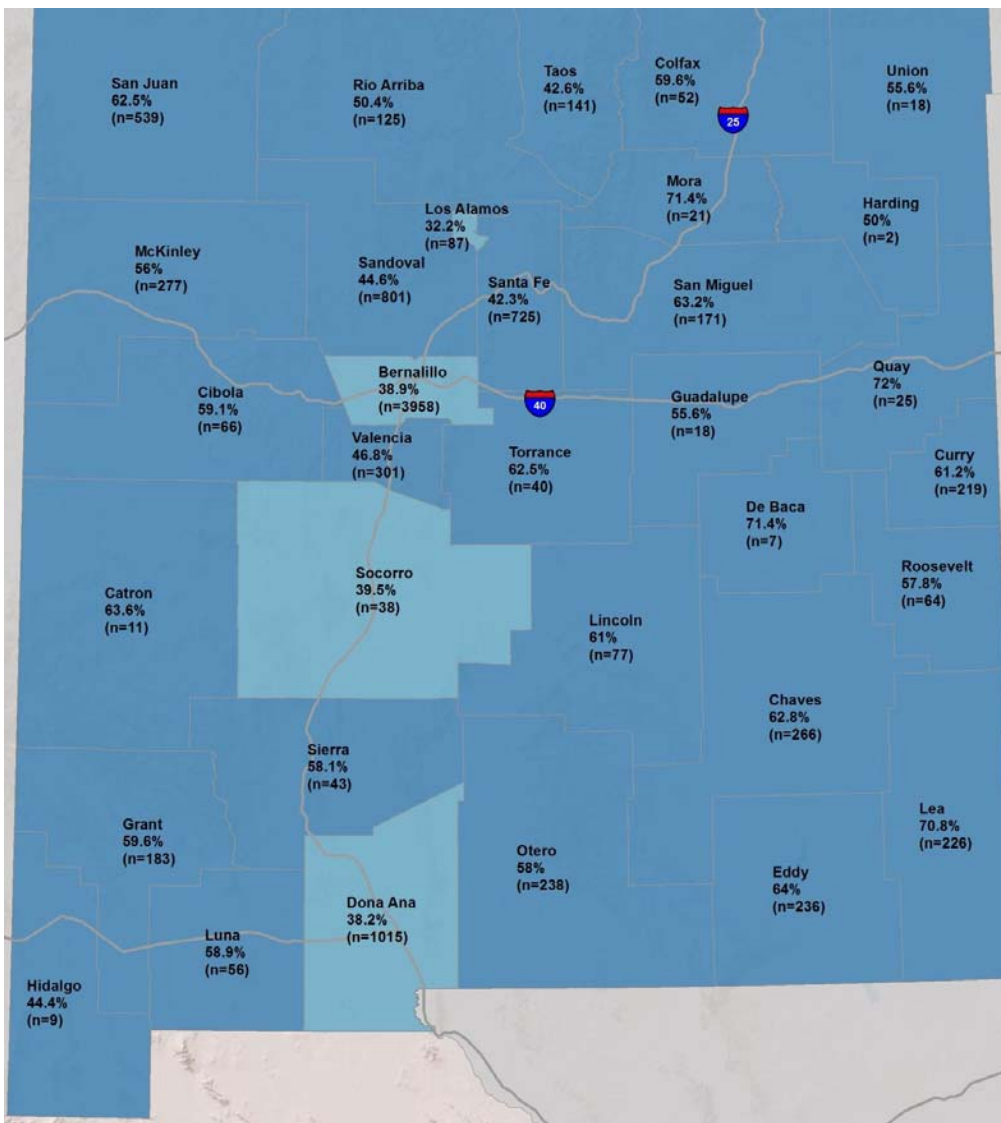
Source: New Mexico Board of Nursing 2012 Annual Report for Fiscal Year 2012.

# New Mexico Registered Nurse License Holders, By Age, 2012



# Percentage Of RNs Who Are ADN- Prepared, By County, 2012 New And Renewed Licenses Only

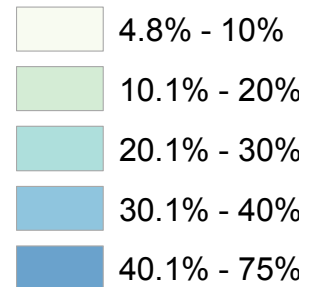
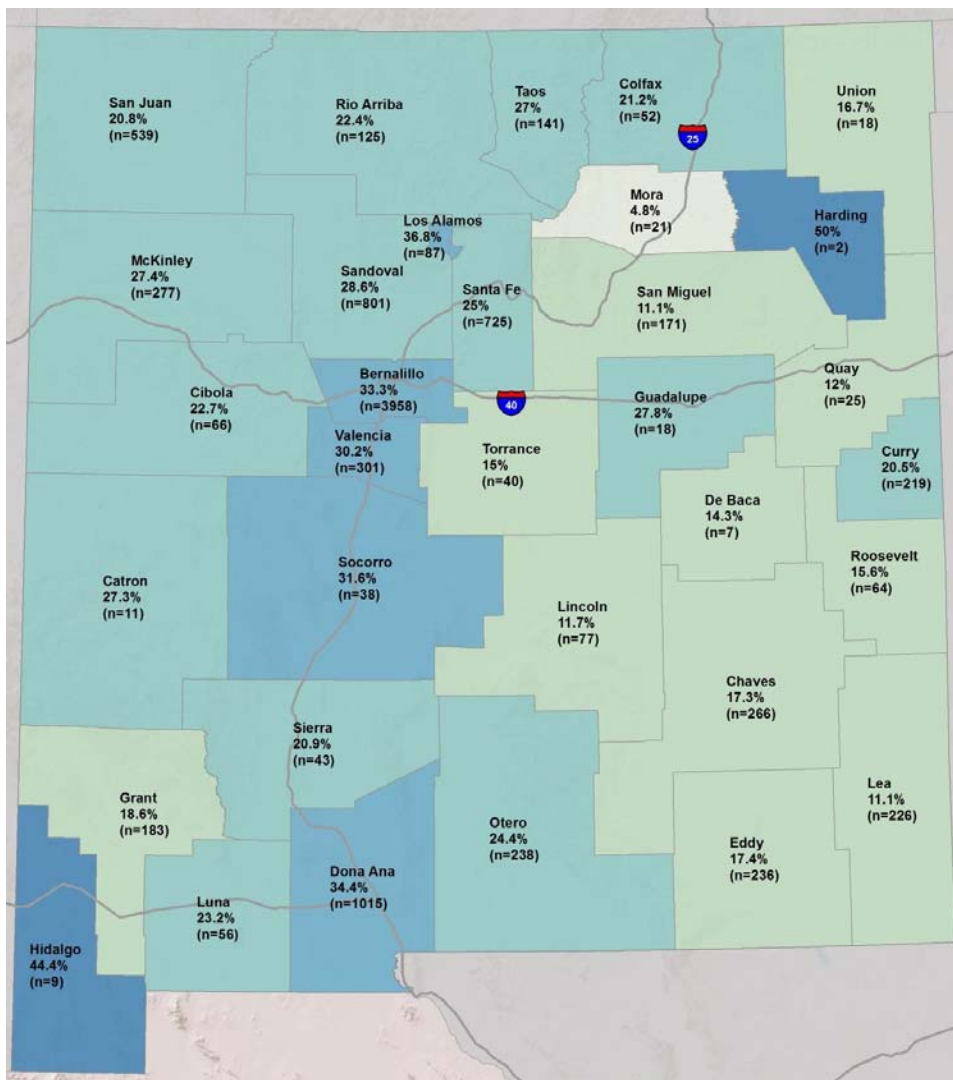
Associate of Nursing Degree-prepared RNs make up **46.4%** of the state's RN workforce, based on new licenses and license renewals issued FY11-12. Percentages are based on data collected from approximately half of the state's population of RNs.



Source: New Mexico Board of Nursing 2012 Annual Report for Fiscal Year 2012.

# Percentage Of RNs Who Are BSN-Prepared, By County, 2012 New And Renewed Licenses Only

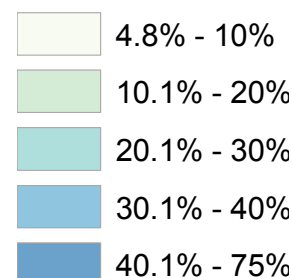
Bachelor of Nursing Degree-prepared RNs make up **28.1%** of the state's RN workforce, based on new licenses and license renewals issued FY11-12. Percentages are based on data collected from approximately half of the state's population of RNs.





# Percentage Of RNs Who Are Prepared With Nursing-Related MSN And PhD Degrees, By County, 2012 New And Renewed Licenses Only

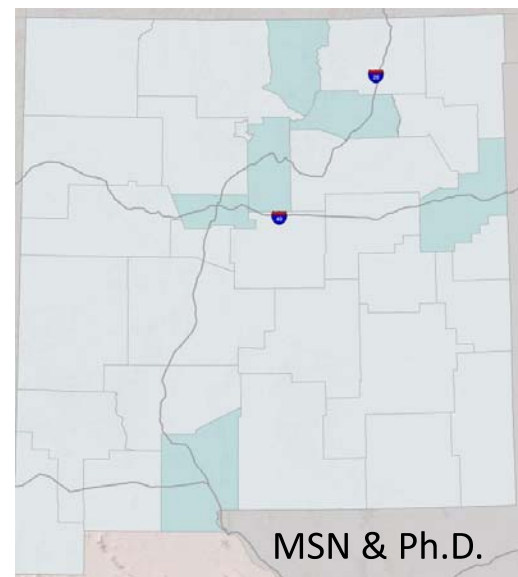
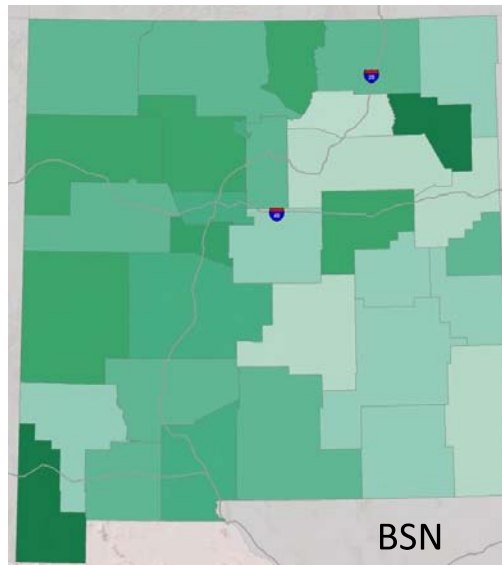
Masters in Nursing and PhD in Nursing Degree-prepared RNs make up **10.9%** of the state's RN workforce, based on new licenses and license renewals issued FY11-12. Percentages are based on data collected from approximately half of the state's population of RNs.



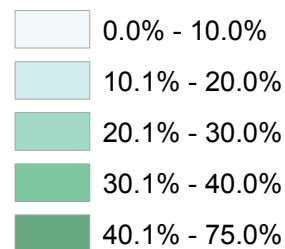
Source: New Mexico Board of Nursing 2012 Annual Report for Fiscal Year 2012.  
Note: Does not include RNs with non-nursing advanced degrees.



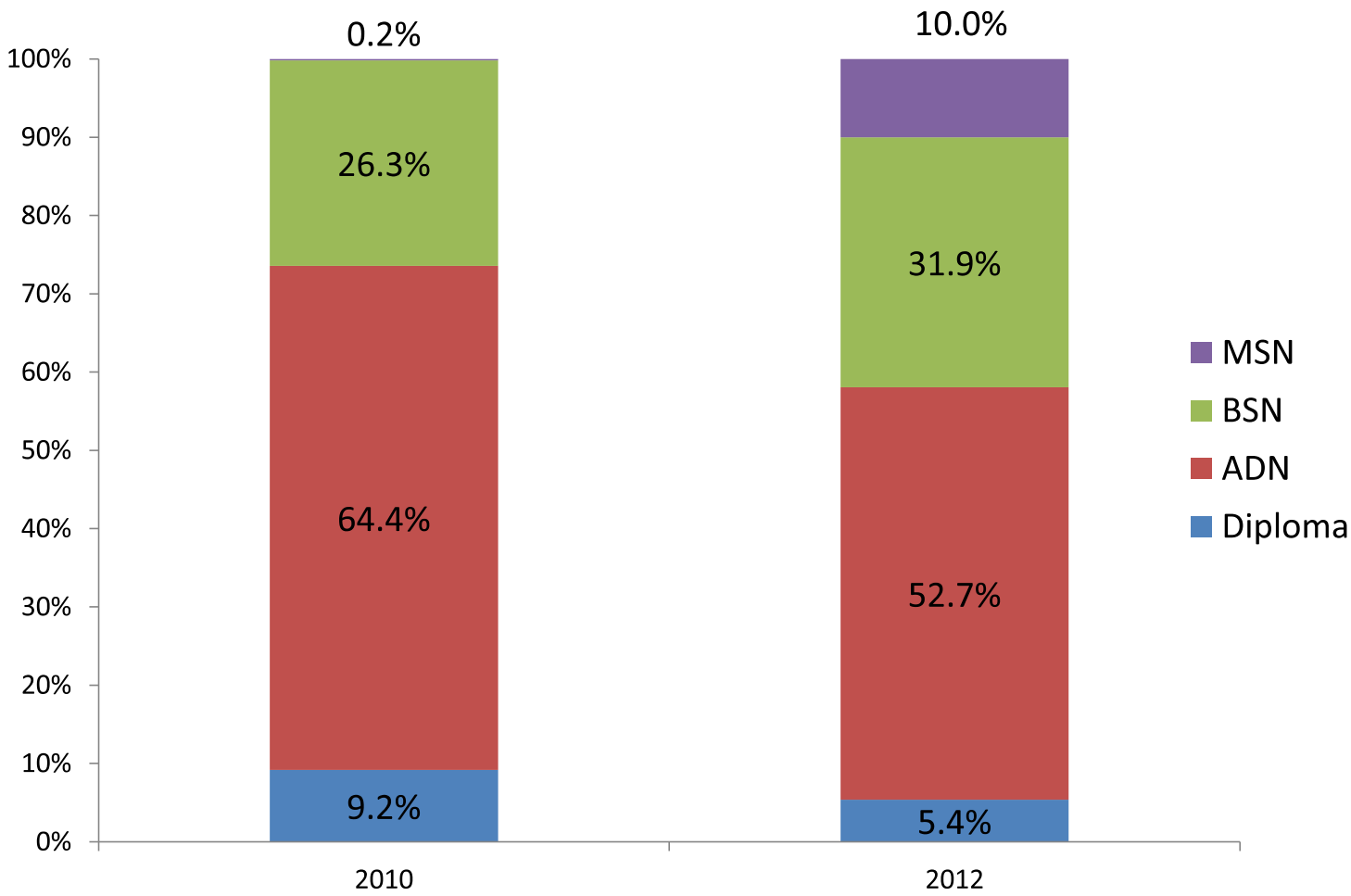
# Percentage of County Nurses by Highest Degree Held



Each polygon shows the percentage of all Registered Nurses in that county practicing by highest degree held.



# Change in Highest Degree Held by New Mexico RNs, 2010 to 2012, New and Renewed Licenses Only



Source: New Mexico Board of Nursing 2010 and 2012 Annual Reports. Totals include only nurses holding degrees listed.

# Will We Have The Nurses We Need To Take Care Of New Mexicans?

## What Do Data About Our Current Supply of Nurses Tell Us?

- 48% of current RNs are age 50 or older, meaning that almost half of New Mexico's nurses are within 20 years of retirement. With an aging RN workforce, we are likely to face a dwindling supply.
- New Mexico's Center for Nursing Excellence reports that 2012 new nurse licenses (1,936) were not enough to replace newly inactive licenses (2,685), indicating that the existing supply is indeed dwindling.
- With nearly 60% of RNs educated below the BSN level in 2012, the bulk of New Mexico's nursing workforce is not yet qualified to undertake training for advanced nursing practice.

Source: "United States Registered Nurse Workforce Report Card and Shortage Forecast, Juraschek, Zhang, Ranganathan and Lin, *American Journal of Medical Quality* 2012 (27:241). Center for Nursing Excellence, in House Joint Memorial 40, 2009.

# Who Are New Mexico's Future Nurses?

# The Data Set: NMNEC Academic Survey

- In 2012, NMNEC solicited survey responses from all public and several private institutions that offer academic nursing degrees.
- The survey asked for data about programs offered, the student pipeline through those programs, and faculty.
- Responses were returned from 15 of 28 nursing education programs in the state, including:
  - 11 of the state's 21 ADN-granting institutions
  - 4 of the state's 5 BSN-granting institutions
  - All of the state's 6 RN-BSN degree completion programs
  - All of the responding institutions were public.
- All NMNEC member and associate schools and all survey respondent schools are listed on the following slides.

# NMNEC Membership 2013

National Accreditation Status

● Accredited

● None

● In Process

Full Members	City	ADN	BSN	RN-BSN	MSN/ Ph.D.	National Nursing Accreditation
Central New Mexico Community College	Albuquerque	●				ACEN
Clovis Community College	Clovis	●				ACEN
Eastern New Mexico University	Portales			●	●	ACEN, MSN candidate
Eastern New Mexico University-Roswell	Roswell	●				ACEN
New Mexico Highlands University	Las Vegas		●	●		CCNE
New Mexico Junior College	Hobbs	●				ACEN
New Mexico State University	Las Cruces		●	●	●	CCNE
New Mexico State University - Alamogordo	Alamogordo	●				ACEN with warning
San Juan College	Farmington	●				ACEN
Santa Fe Community College	Santa Fe	●				ACEN
University of New Mexico	Albuquerque		●	●	●	CCNE
University of New Mexico - Taos	Rancho de Taos	●				ACEN
Western New Mexico University	Silver City	●	●	●		ACEN, CCNE
<b>Associate Members</b>						
Albuquerque Public Schools	Albuquerque					NLNAC (LPN)
Carrington College	Albuquerque	●				none
Dona Ana Community College	Las Cruces	●				none
Grand Canyon University	Albuquerque		●			CCNE
ITT Technical Institute	Albuquerque	●				none
Luna Community College	Las Vegas	●				ACEN
New Mexico Nurses Association	Santa Fe					N/A
New Mexico State University - Carlsbad	Carlsbad	●				ACEN
Northern New Mexico College	Espanola	●		●		none, CCNE
Pima Medical Institute	Albuquerque	●				none
UNM Center for Native American Health	Albuquerque					N/A
University of New Mexico - Gallup	Gallup	●				ACEN candidate
University of New Mexico - Valencia	Los Lunas	●				none
University of Phoenix	Albuquerque			●		CCNE

# NMNEC Survey Respondent Schools (in red)

## Non-respondent Schools in Black

NMNEC Survey Respondent Schools					
Full Members	City	ASN	BSN	RN-BSN	MSN/ Ph.D.
Central New Mexico Community College	Albuquerque	●			
Clovis Community College	Clovis	●			
Eastern New Mexico University	Portales			●	●
Eastern New Mexico University-Roswell	Roswell	●			
New Mexico Highlands University	Las Vegas		●	●	
New Mexico Junior College	Hobbs	●			
New Mexico State University	Las Cruces		●	●	●
New Mexico State University - Alamogordo	Alamogordo	●			
San Juan College	Farmington	●			
Santa Fe Community College	Santa Fe	●			
University of New Mexico	Albuquerque		●	●	●
University of New Mexico - Taos	Rancho de Taos	●			
Western New Mexico University	Silver City	●	●	●	
Associate Members					
Albuquerque Public Schools	Albuquerque				
Carrington College	Albuquerque	●			
Dona Ana Community College	Las Cruces	●			
Grand Canyon University	Albuquerque		●		
ITT Technical Institute	Albuquerque	●			
Luna Community College	Las Vegas	●			
New Mexico Nurses Association	Santa Fe				
New Mexico State University - Carlsbad	Carlsbad	●			
Northern New Mexico College	Espanola	●		●	
Pima Medical Institute	Albuquerque	●			
UNM Center for Native American Health	Albuquerque				
University of New Mexico - Gallup	Gallup	●			
University of New Mexico - Valencia	Los Lunas	●			
University of Phoenix	Albuquerque			●	

# Where Do Nurses Come From?

Nursing has multiple educational pathways. Most common are:

New Nurses (Pre-Licensure)	Experienced Nurses	Advanced Degree Nurses (Who Teach Other Nurses)
<ul style="list-style-type: none"><li>• 2-Year College to RN (ADN)</li><li>• 4-Year College to RN (BSN)</li></ul>	<ul style="list-style-type: none"><li>• RN to BSN (for those already licensed)</li></ul>	<ul style="list-style-type: none"><li>• BSN to Advanced Degree Nurse</li></ul>

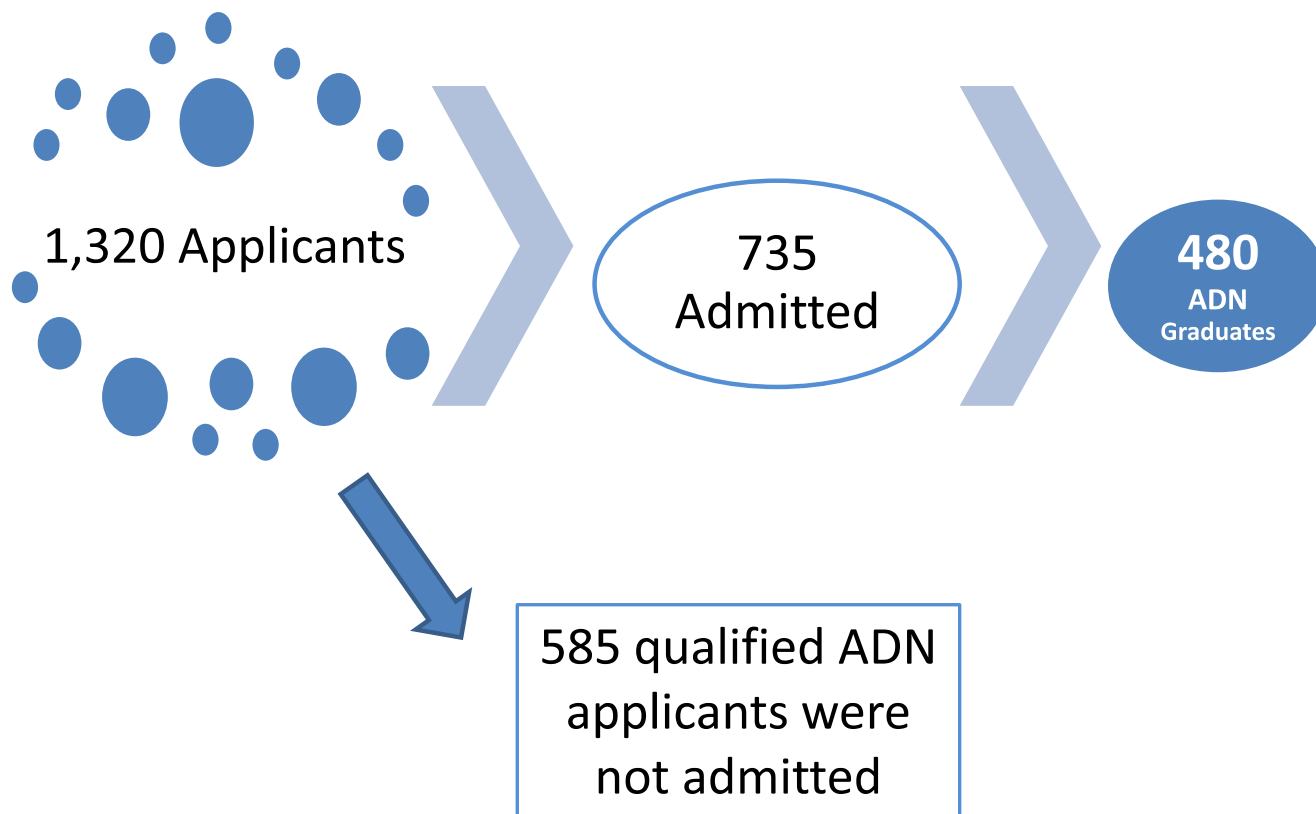
All of these have proven valuable pathways for students of diverse backgrounds, preparation, and means to enter into the field.



# **PRE-LICENSURE RN PROGRAMS (ADN & BSN)**

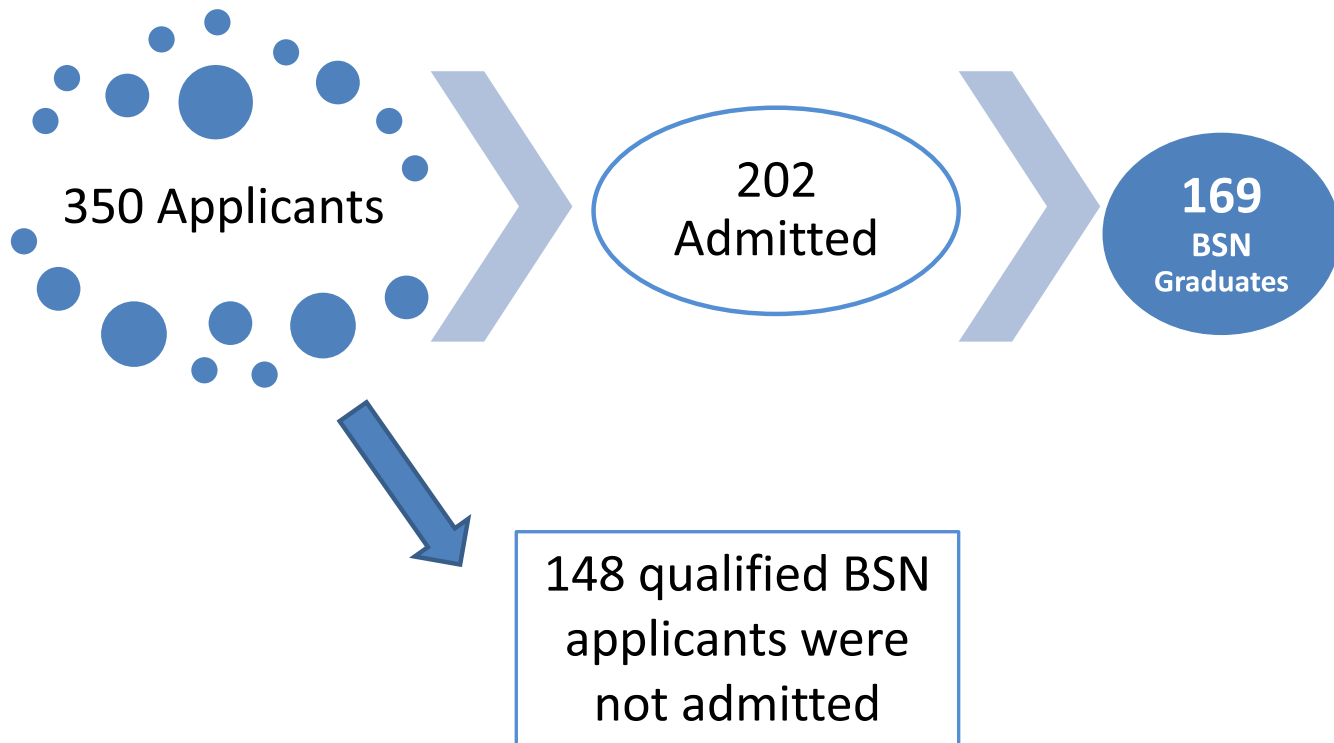
# The ADN Pipeline

## Snapshot AY11-12 (11 Surveyed NMNEC Schools)

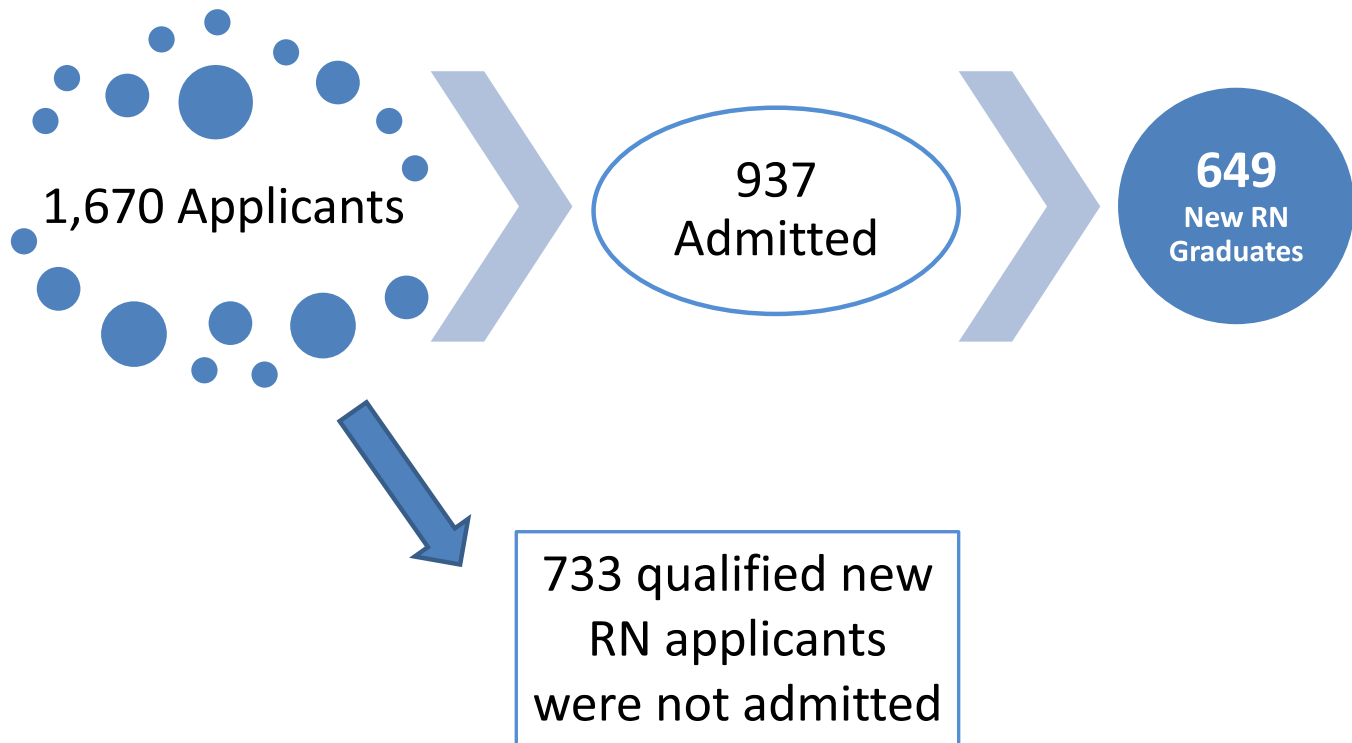


# The Pre-Licensure BSN Pipeline

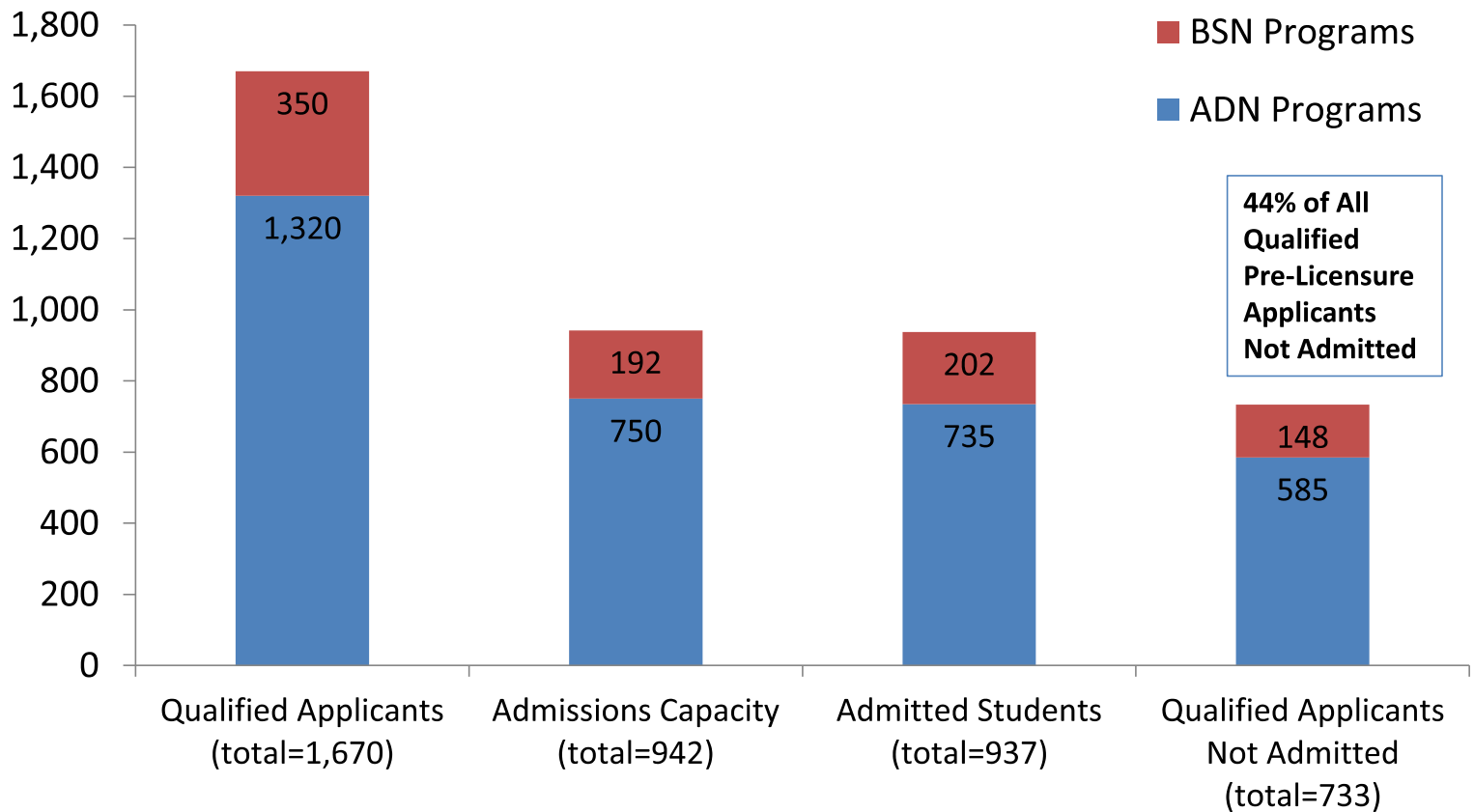
## Snapshot AY11-12 (4 Surveyed NMNEC Schools)



# Overall Pre-Licensure RN Pipeline Snapshot AY11-12 (15 Surveyed NMNEC ADN & BSN Programs)

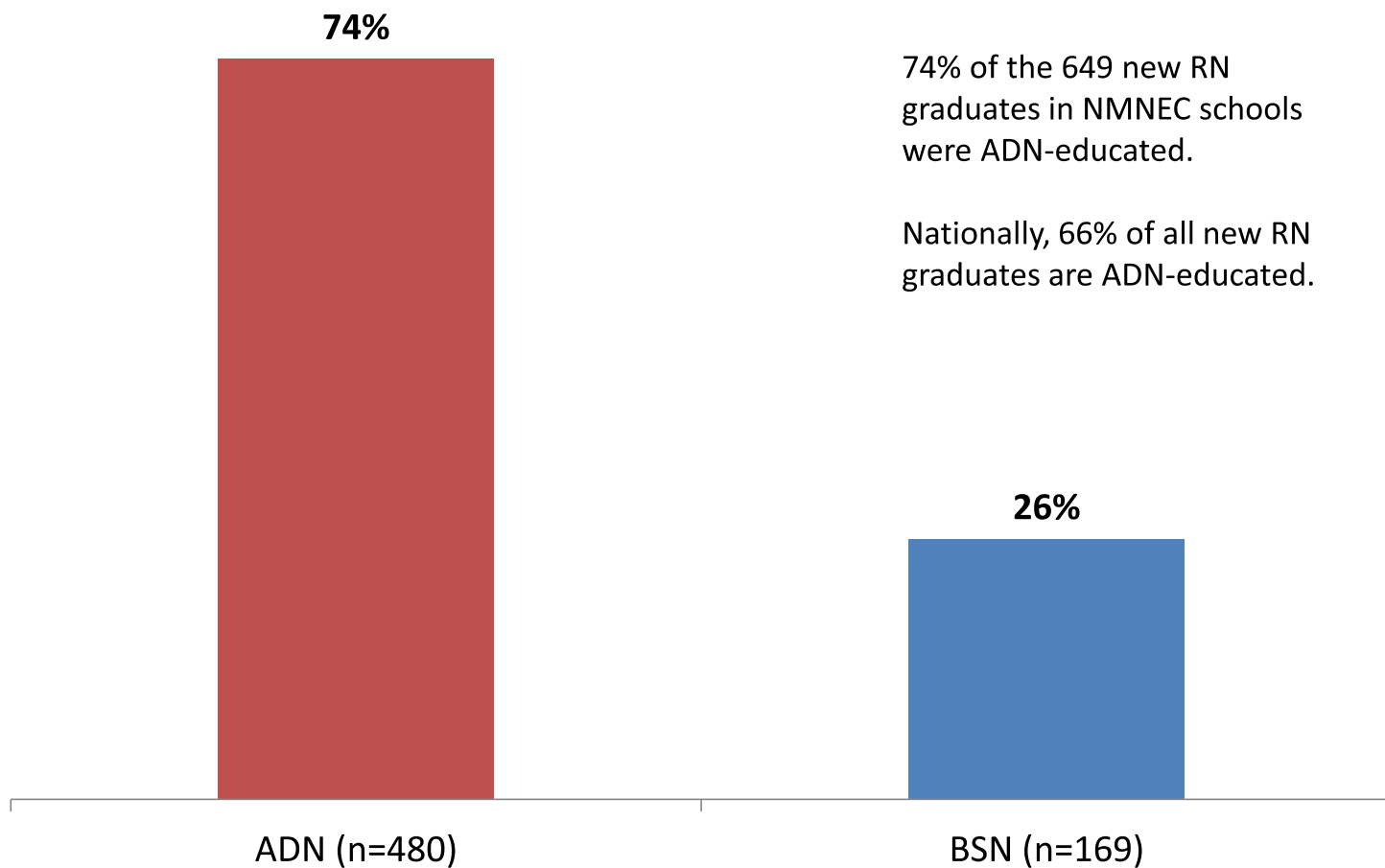


# Pre-Licensure RN Programs, Overall Capacity and Admissions, All Surveyed NMNEC Programs, 2011-12



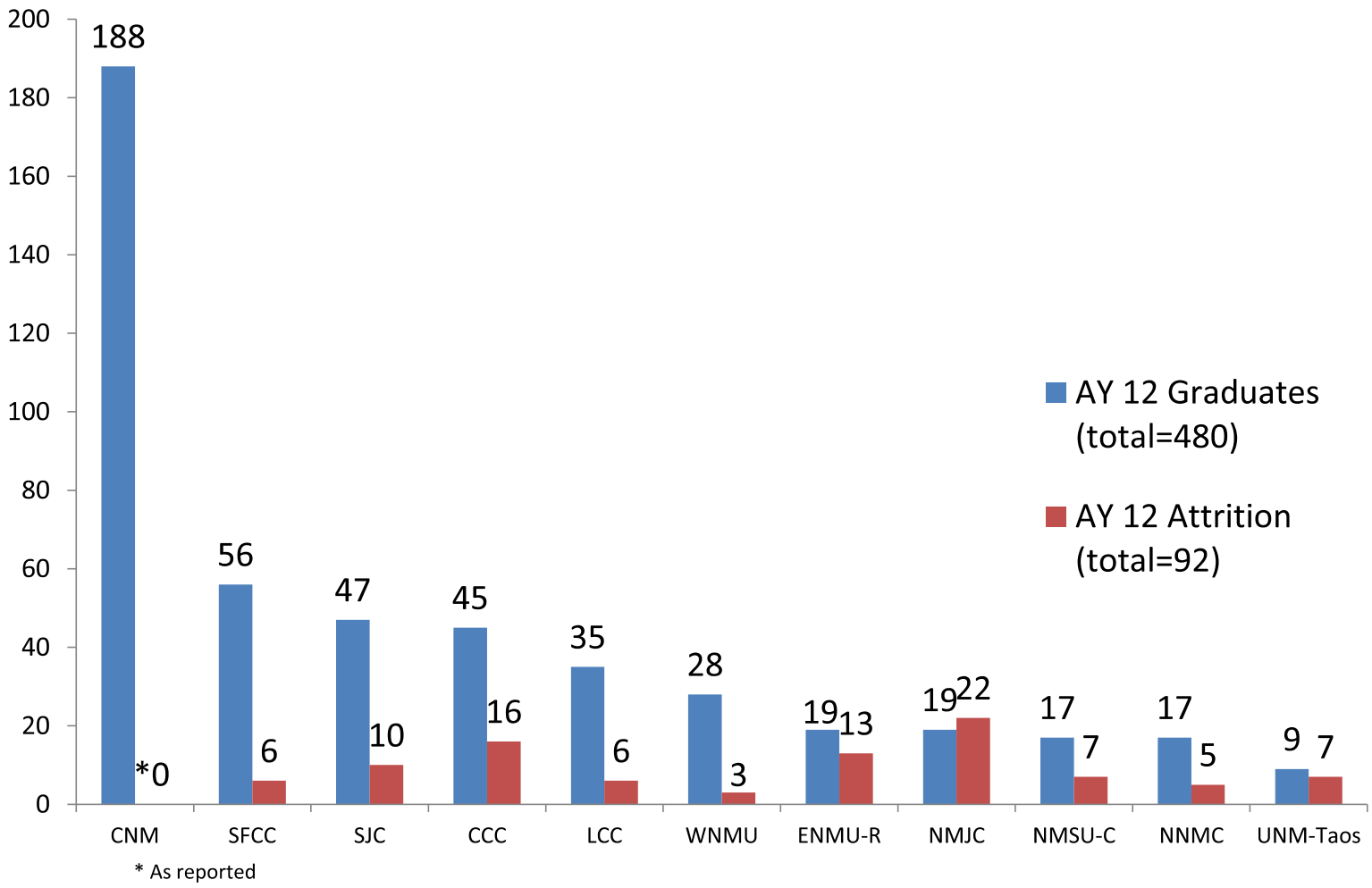
Source: Respondents to 2012 NMNEC Academic Survey, to questions that asked for: "Total Number of qualified applicants (qualified applicant means applicant meets all admissions criteria) who applied to your ADN or BSN program in AY 2011-12;" "Total admission capacity for AY 2011-12;" and "Total number of students admitted to your ADN or BSN program in AY 2011-12 by term/semester. (Summer 2011/ Fall 2011/ Spring 2012)."

## Pre-Licensure RN Graduates by Degree Program, All Surveyed NMNEC Schools, AY2011-12



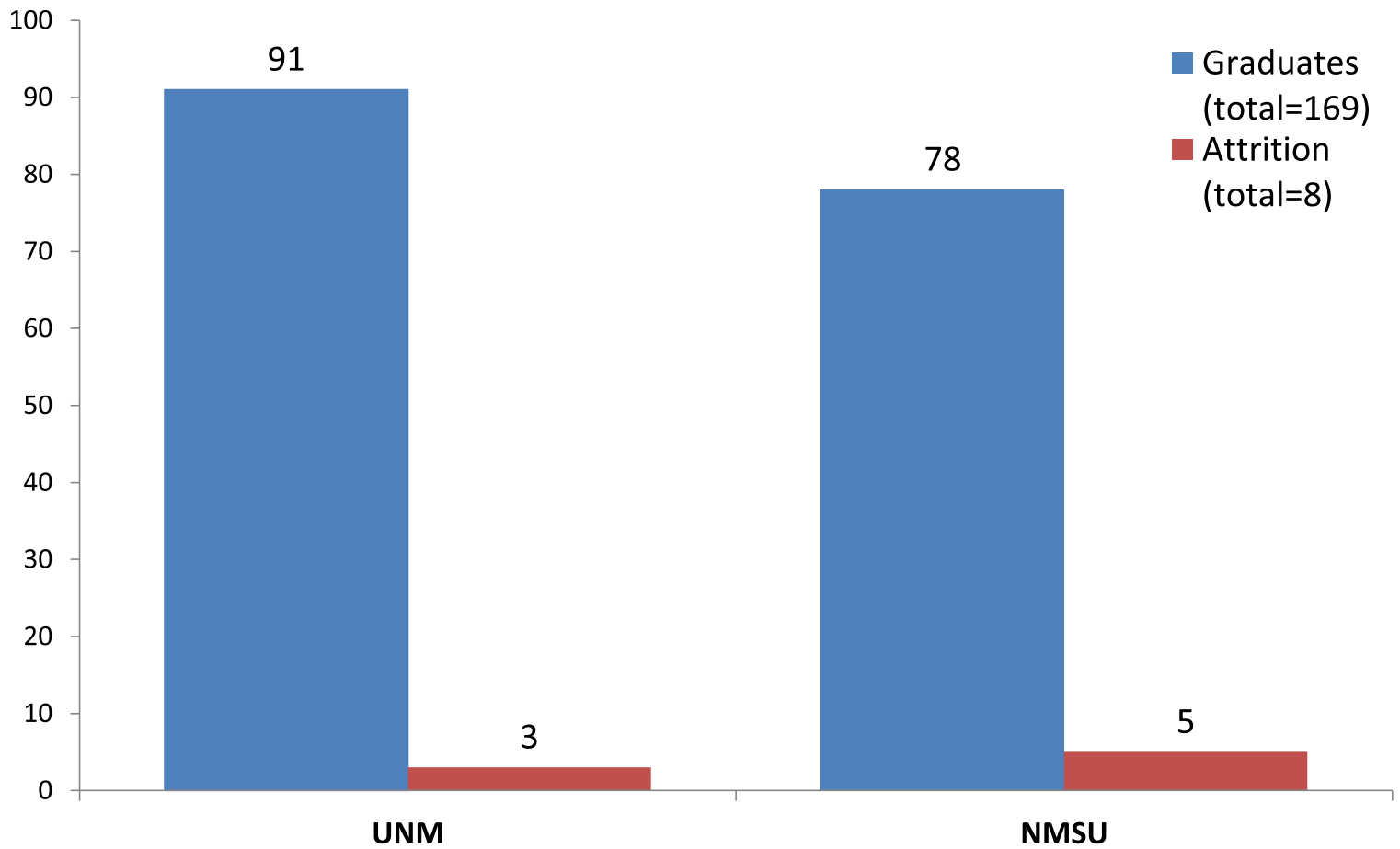
Source: All respondents to 2012 NMNEC Academic Survey question that asks for "Total number of graduates from your program in AY2011-12 by term" (Summer 2011, Fall 2011 and Spring 2012 combined). National figure for ADN graduates is from the Institute of Medicine's 2011 Future of Nursing report.

# 2011-2012 ADN Graduates and Attrition, AY12, By Surveyed College



Source: Respondents to 2012 NMNEC Academic Survey question that asked for “Total number of graduates from your associate degree nursing program in AY 2011-12 by term/semester. (Summer 2011, Fall 2011, Spring 2012).”

# 2011-2012 Pre-Licensure BSN Graduates & Attrition by Surveyed NMNEC College



Source: Respondents to 2012 NMNEC Academic Survey question that asked for “Total number of graduates from your bachelor degree nursing program in AY 2011-12 by term/semester. (Summer 2011, Fall 2011, Spring 2012).”



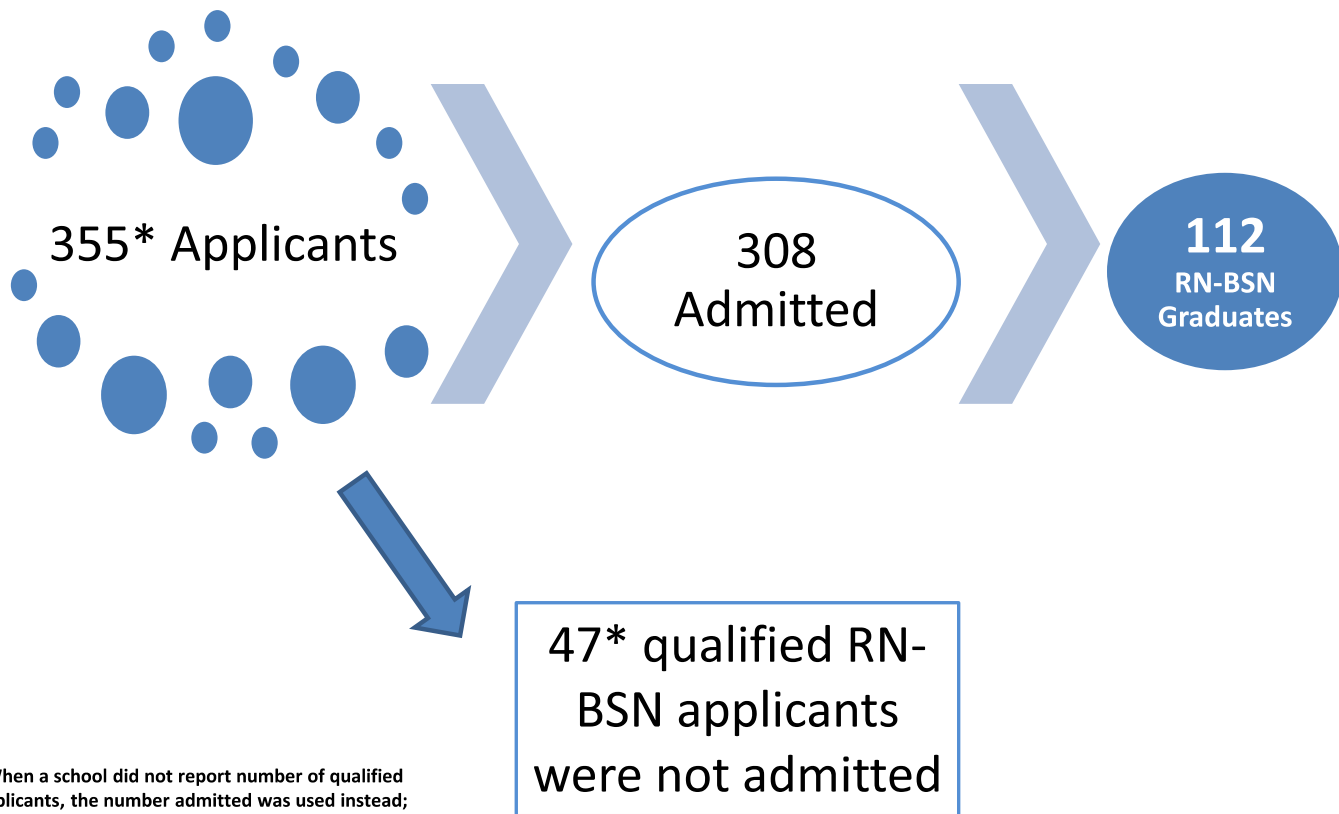
# RN TO BSN PROGRAMS

# Who Are Candidates for the RN to BSN Program?

- Candidates for the RN-BSN Programs are already licensed RNs who have yet to earn a BSN degree.
- 46.4% of actively licensed RNs in NM currently hold an ADN degree. (New Mexico Board of Nursing Governor's Report 2012)
- 85% of the 2012 RN nursing graduates in NM were ADN-prepared. (*2013 Annual Report, New Mexico Health Workforce Committee, October 2013*)

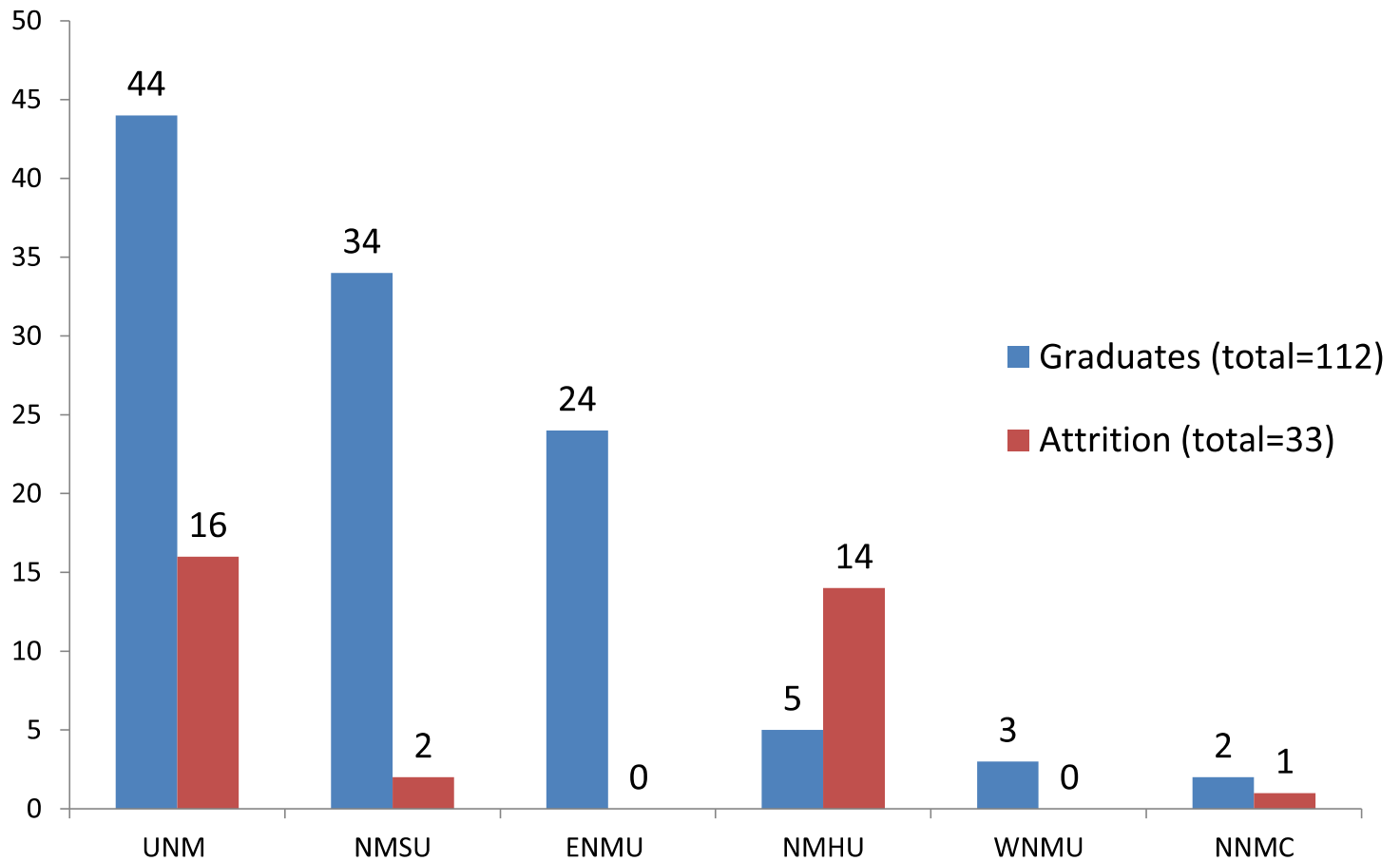
# The RN-BSN Pipeline

## Snapshot AY11-12 (6 Surveyed NMNEC Schools)



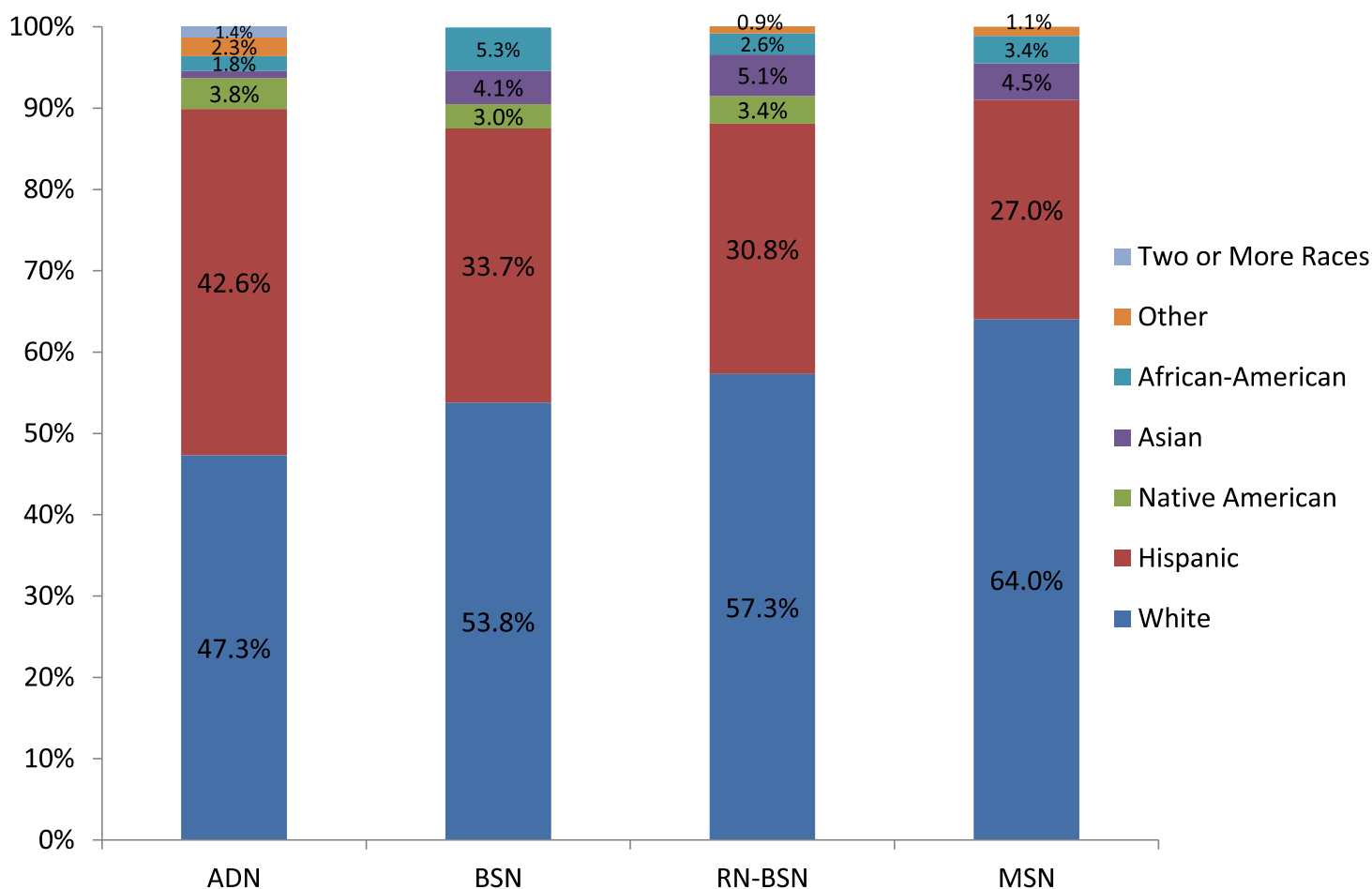
\*When a school did not report number of qualified applicants, the number admitted was used instead; actual number of applicants and applicants not admitted may be higher.

# 2011-2012 RN-BSN Graduates & Attrition by Surveyed NMNEC Program



Source: Respondents to 2012 NMNEC Academic Survey question that asked for "Total number of graduates from your RN-BSN degree nursing program in AY 2011-12 by term semester. (Summer 2011, Fall 2011, Spring 2012)."

# Graduates by Race/Ethnicity, All Surveyed Degree Programs, AY2011-2012



Source: All respondents to 2012 NMNEC Academic Survey question that asks for "Total number of graduates from your program in AY2011-12 by term/semester" (Summer 2011, Fall 2011 and Spring 2012 combined). Two ADN programs did not report race/ethnicity of their graduates.

# Will We Have The Nurses We Need To Take Care Of New Mexicans?

## What Does Statewide Data About Our Nursing Students Tell Us?

It looks unlikely that, at current rates, the numbers of graduates from our nursing programs will be adequate to replace our diminishing supply of RNs. Statewide data reports that:

- The number of new RNs produced by the state, according to a May 2013 Legislative Finance Committee report, decreased from 1,062 in 2007 to **932** in 2011.
- The Center for Nursing Excellence estimates that a total enrollment of **3,025** students needs to be maintained each year through 2020 to meet New Mexico's nursing needs. That would require an additional **469** students enrolled each year statewide to meet future demand for nurses in NM.

Source: "United States Registered Nurse Workforce Report Card and Shortage Forecast, Juraschek, Zhang, Ranganathan and Lin, *American Journal of Medical Quality* 2012 (27:241). Center for Nursing Excellence, in House Joint Memorial 40, 2009.

# Will We Have The Nurses We Need To Take Care Of New Mexicans?

## What Does the NMNEC Program Survey Data Tell Us?

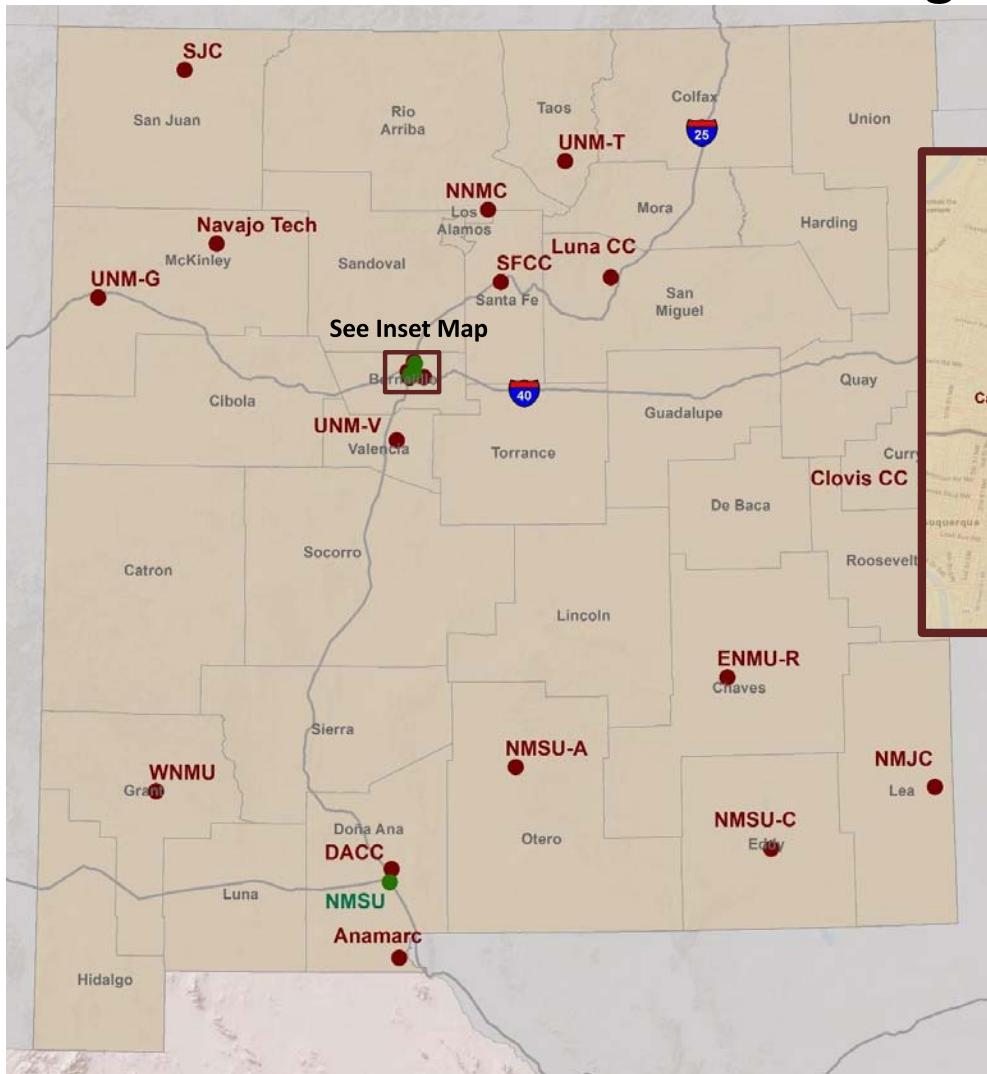
- Only 56% of qualified ADN applicants and 58% of qualified BSN applicants were admitted to the NMNEC programs surveyed.
- All programs reported admitting students at or above their current capacity levels.
- A total of 733 potential RN students (585 qualified ADN student applicants and 148 pre-licensure BSN qualified applicants) were not admitted by the 13 respondent programs, due to capacity limitations.
- Survey respondents do not represent all schools of nursing in the state (public and private), but the data they report suggests that program capacity is a serious limiting factor for aspiring students of nursing in the state.
- While survey responses provide only one snapshot of attrition, the data suggest that closer attention should be paid to variations in attrition rates between pre-licensure BSN students and ADN and RN-BSN students.

Source: 2012 NMNEC Academic Survey.

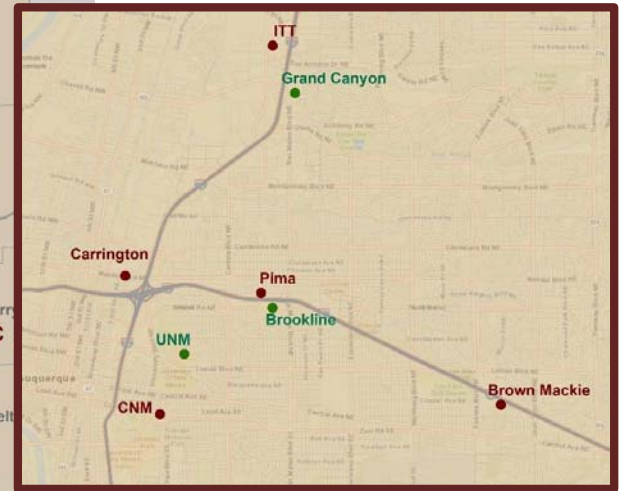
# Who Is Educating New Mexico's Future Nurses?



# New Mexico RN Pre-Licensure Degree Programs 2013



Inset Map (Bernalillo County)

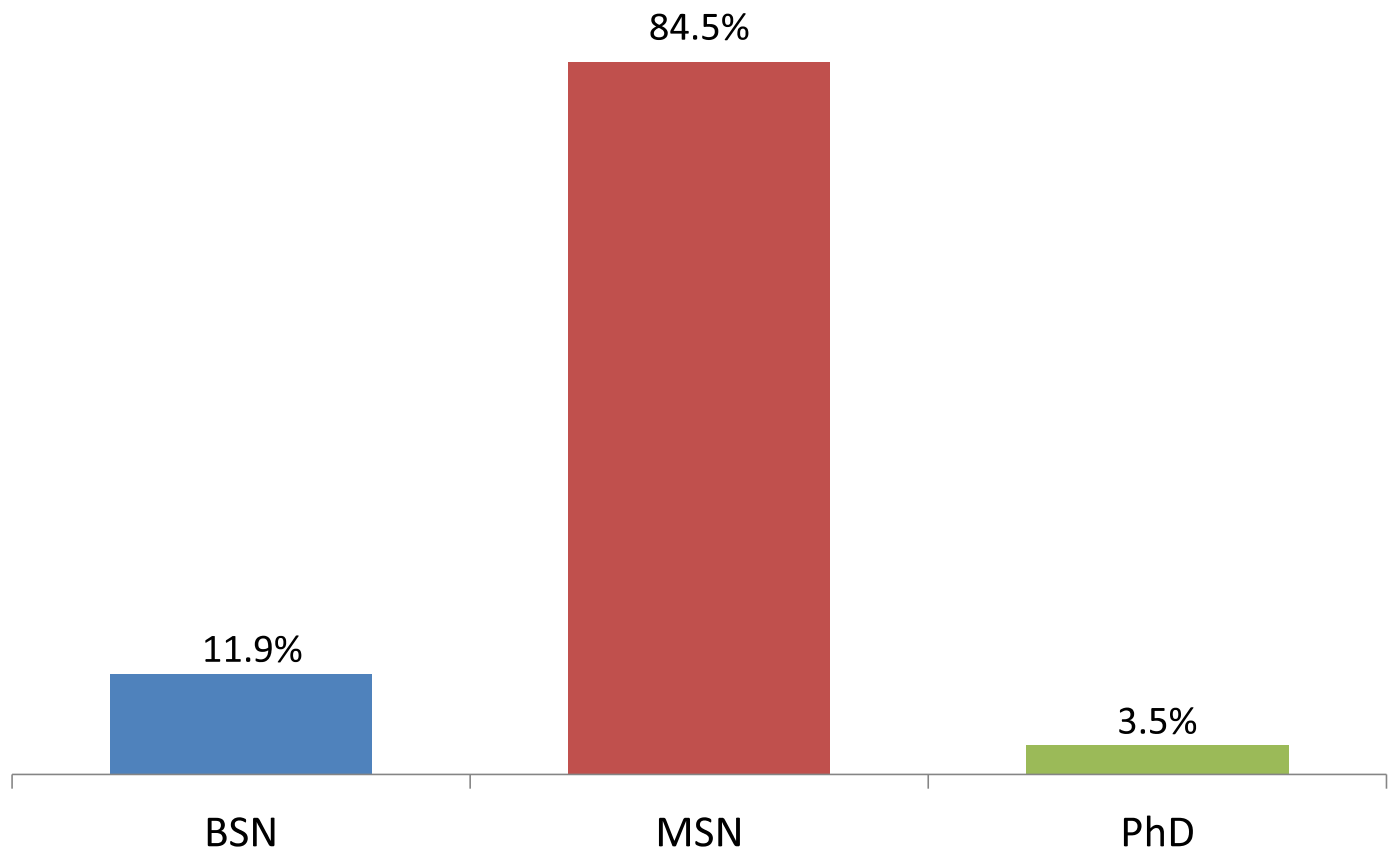


## Degree Type Offered

- ! Associate Degree in Nursing
- ! Bachelor of Science in Nursing

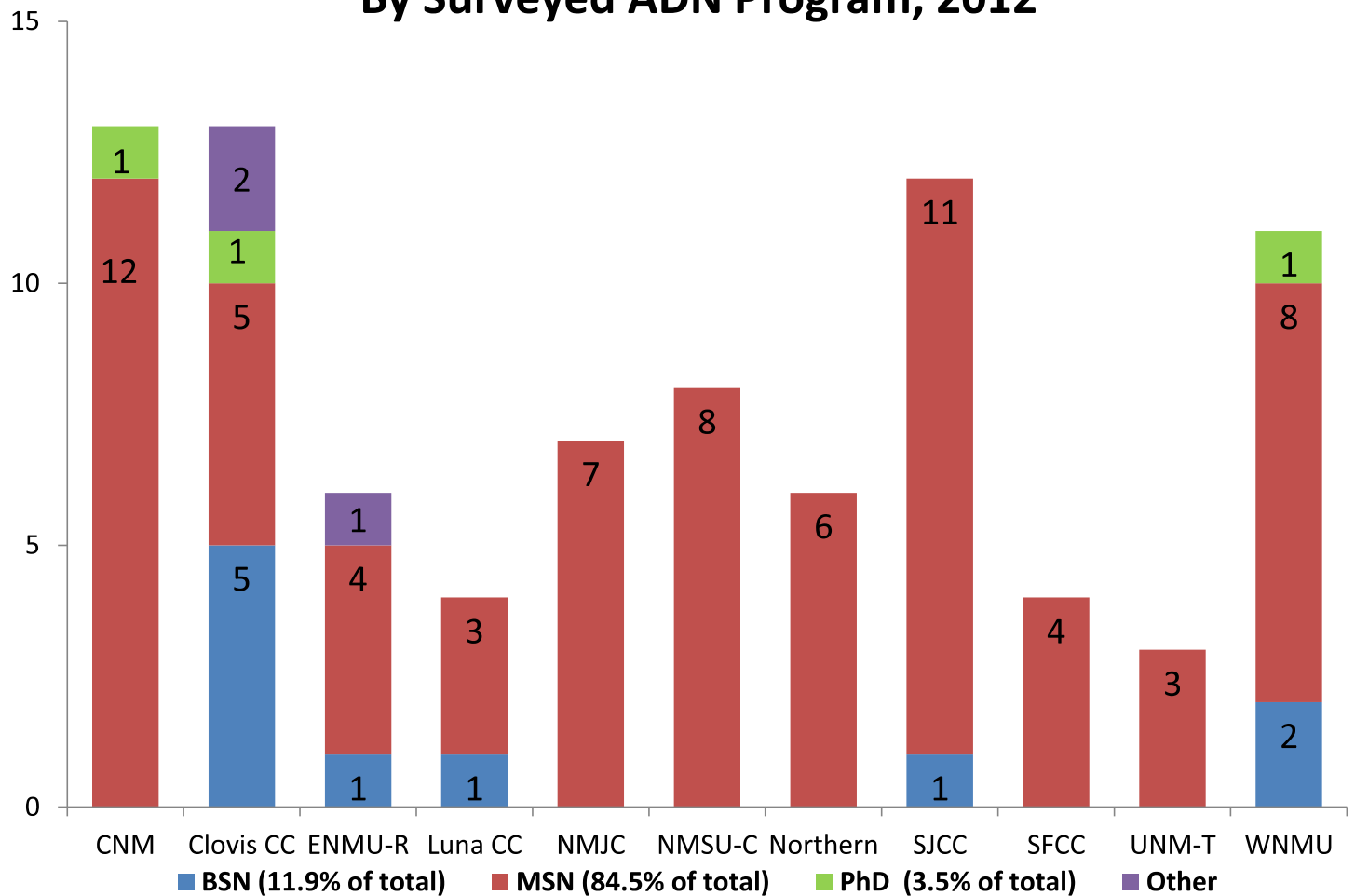
Source: New Mexico Board of Nursing Governor's Report 2012.

# All Full-Time Faculty By Highest Degree Earned, Surveyed NMNEC ADN Programs, 2012



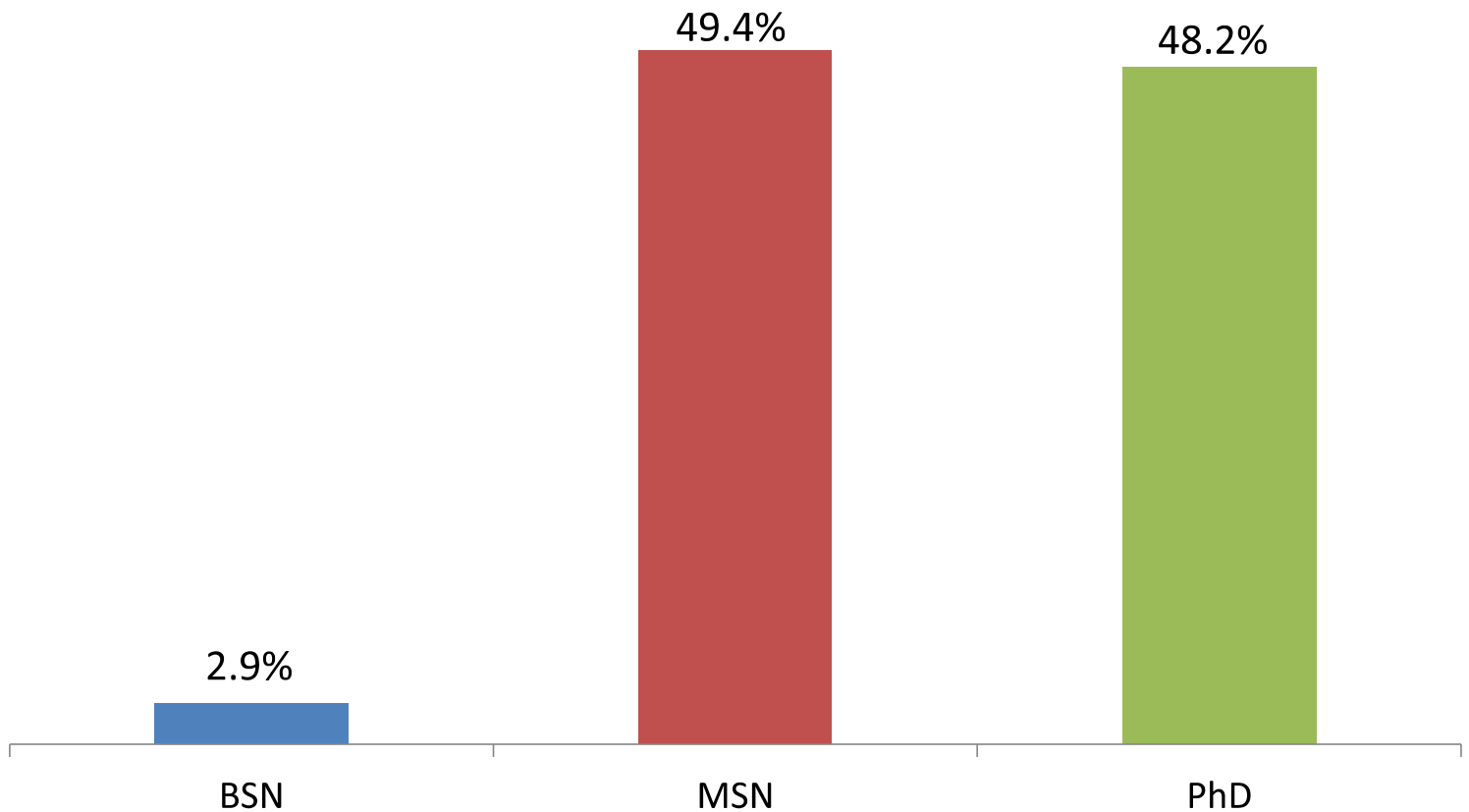
Source: Respondents to 2012 NMNEC Academic Survey question that asked for “**Number of faculty by degree (highest degree earned).**” Response categories were: “**Doctoral Degree in Nursing or Related field; Master’s Degree in Nursing; Master’s Degree in Other Field; Bachelor’s Degree in Nursing; or Other.**”

# Full-Time Faculty By Highest Degree Earned, By Surveyed ADN Program, 2012



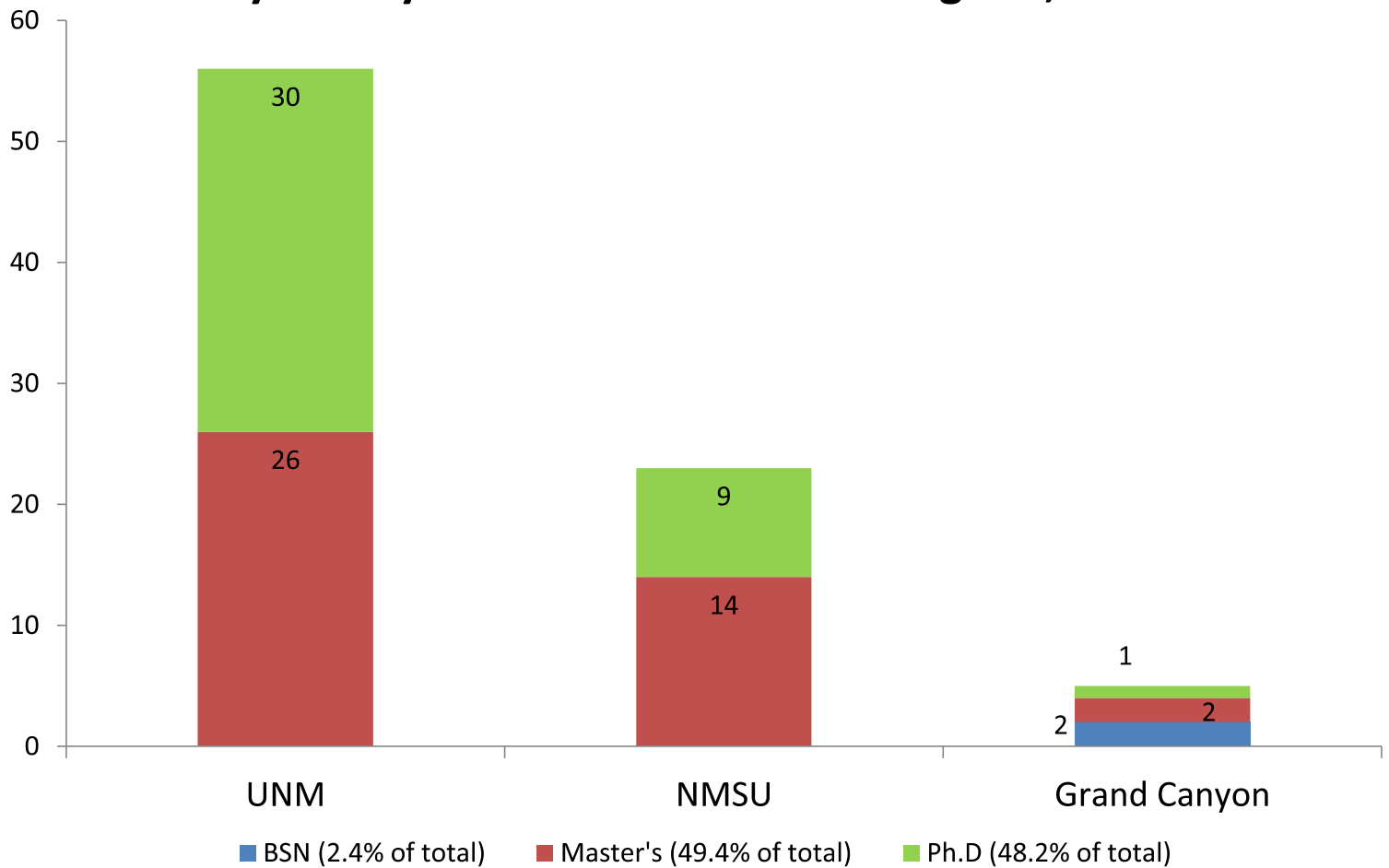
Source: Respondents to 2012 NMNEC Academic Survey question that asked for “**Number of faculty by degree (highest degree earned).**” Response categories were: “Doctoral Degree in Nursing or Related field; Master’s Degree in Nursing; Master’s Degree in Other Field; Bachelor’s Degree in Nursing; or Other.”

# All Full-Time Faculty By Highest Degree Earned, Surveyed NMNEC Pre-Licensure BSN Programs, 2012



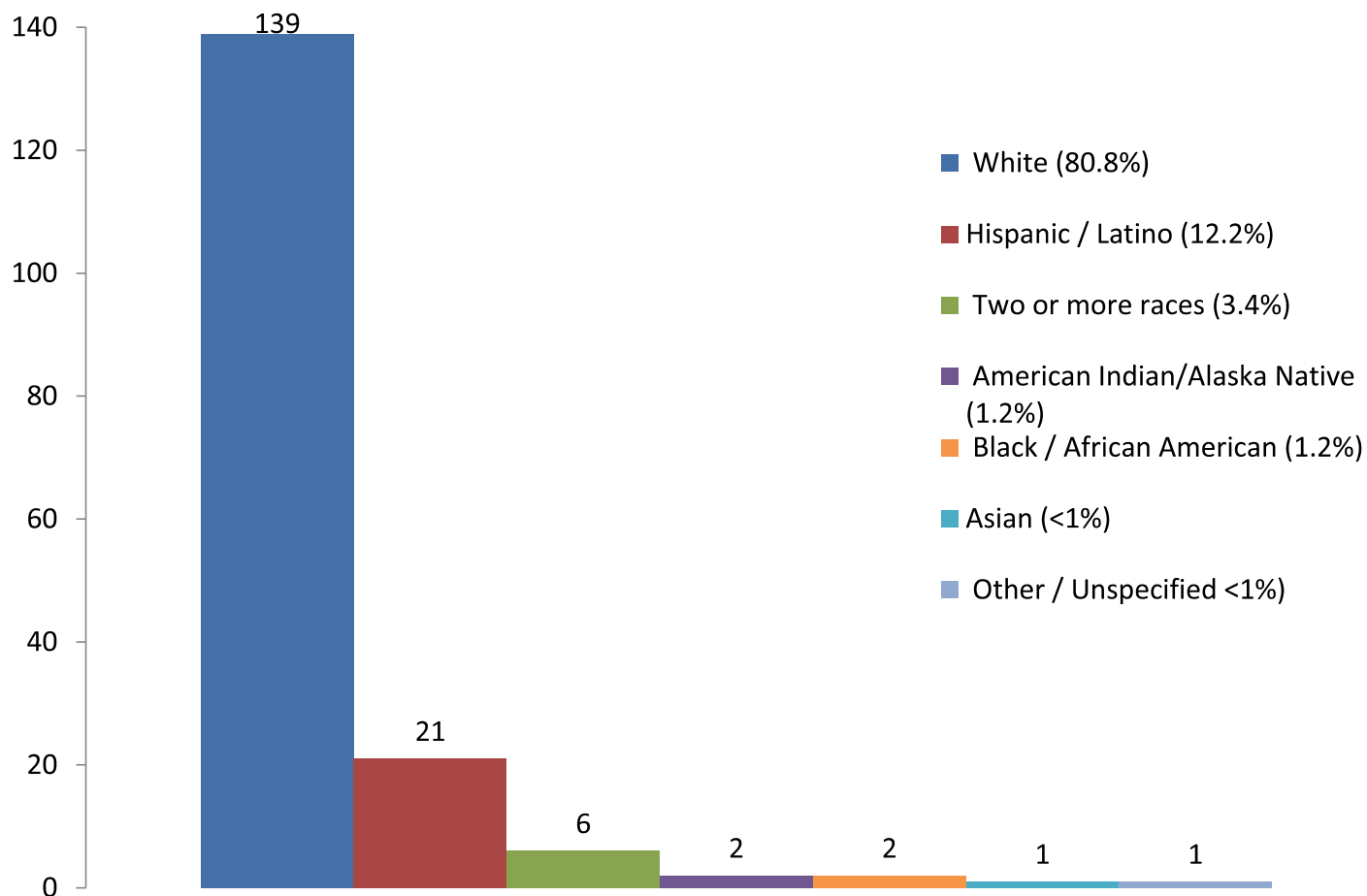
Source: Respondents to 2012 NMNEC Academic Survey question that asked for "Number of faculty by degree (highest degree earned)." Response categories were: "Doctoral Degree in Nursing or Related field; Master's Degree in Nursing; Master's Degree in Other Field; Bachelor's Degree in Nursing; or Other."

# Full-Time Faculty By Highest Degree Earned By Surveyed Pre-Licensure BSN Program, 2012



Source: Respondents to 2012 NMNEC Academic Survey question that asked for "Number of faculty by degree (highest degree earned)." Response categories were "Doctoral Degree in Nursing or Related field; Master's Degree in Nursing; Master's Degree in Other Field; Bachelor's Degree in Nursing; or Other."

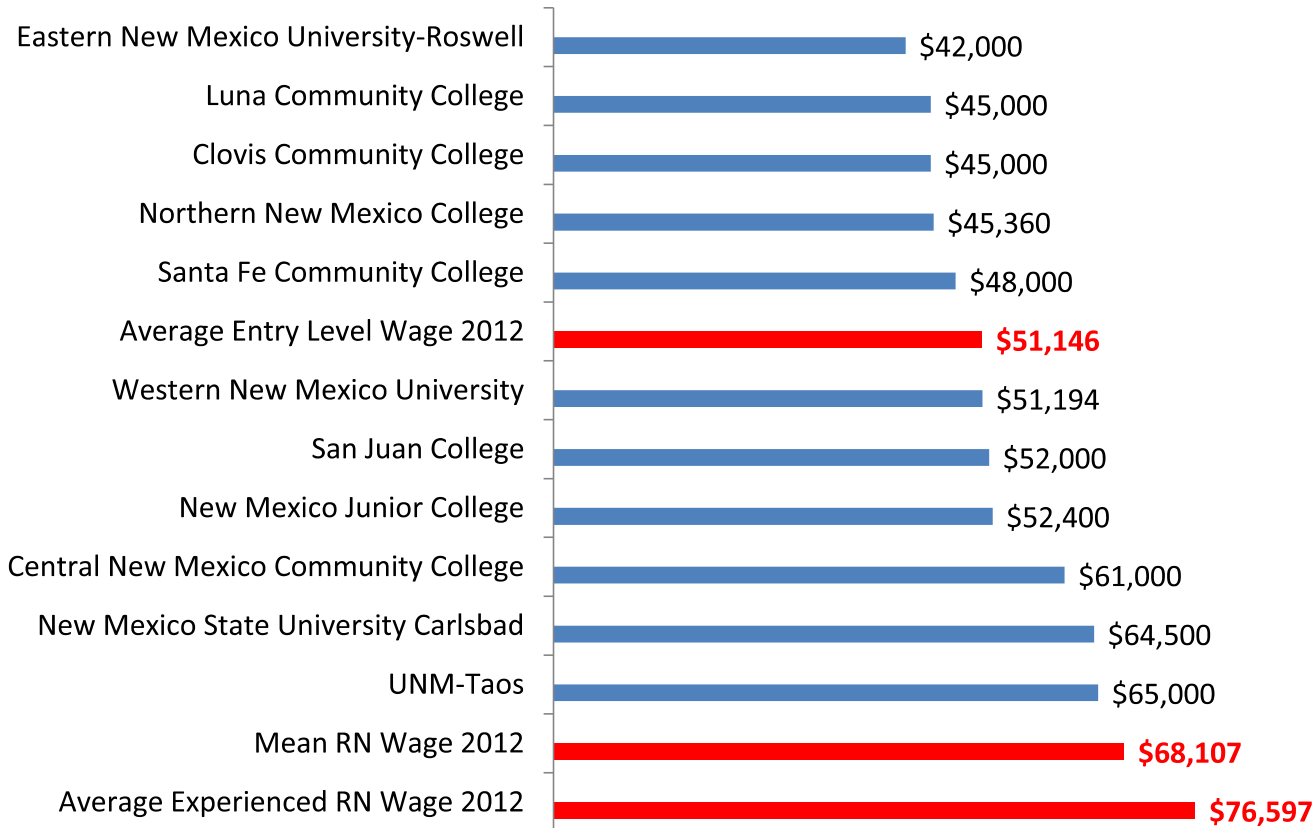
## Fulltime Faculty by Race, All Surveyed NMNEC Programs



Source: All respondents to 2012 NMNEC Academic Survey question that asked for “**Number of full-time faculty by race/ethnicity.**” Note: No Native Hawaiian/Pacific Islanders reported.

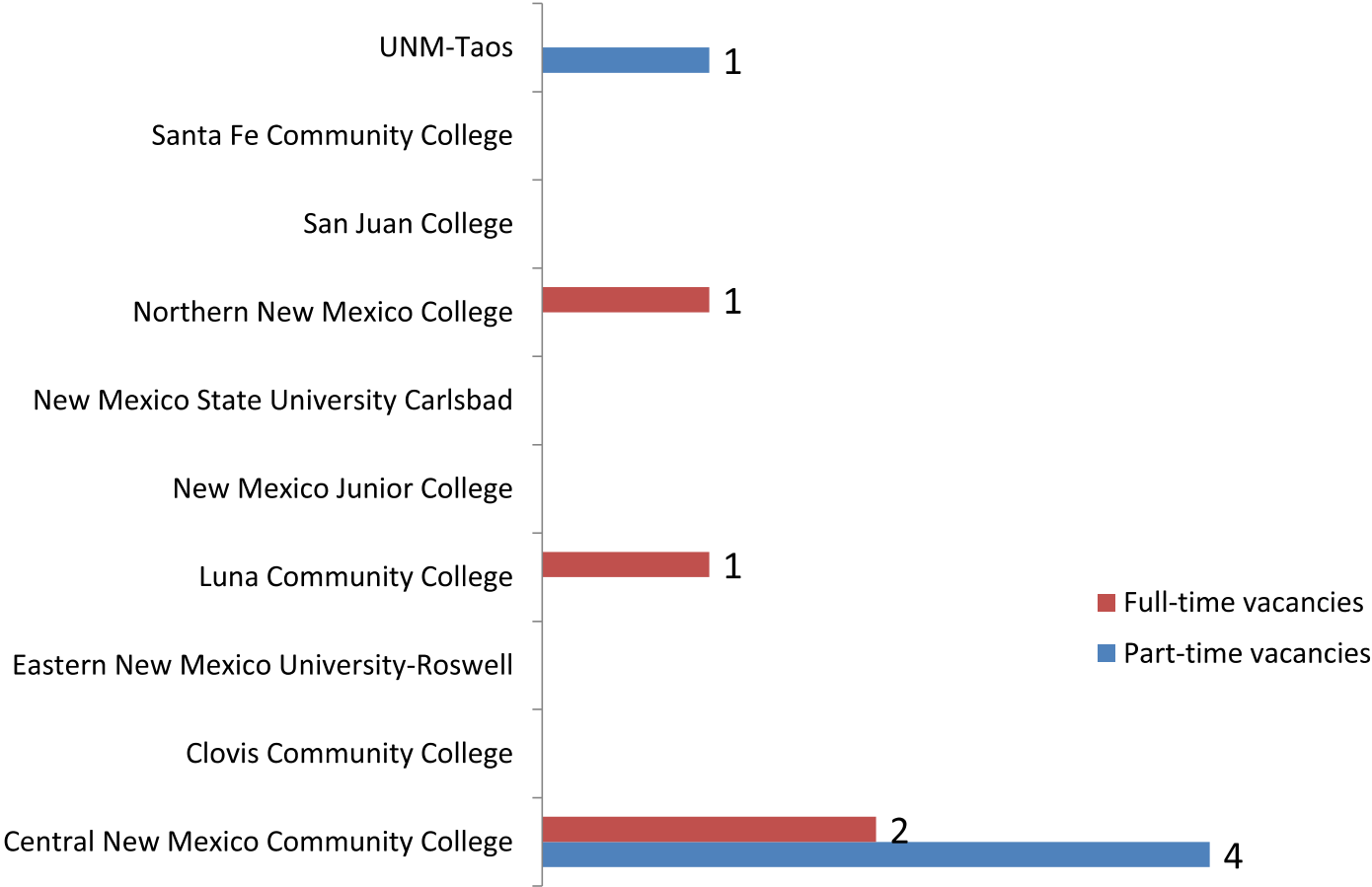
# ADN Program Faculty Salaries Compared to New Mexico Practicing RN Salaries, 2012

(Note: Faculty Salaries are 9-month; Practicing RN Salaries are 12-month)



Source: Respondents to 2012 NMNEC Academic Survey question that asked, "What is the average salary of your full-time nursing faculty (tenured and non-tenured)?" New Mexico Department of Workforce Solutions, Economic Research and Analysis Bureau, Wage Information for Job Seekers, [www.dws.state.nm.us/eds](http://www.dws.state.nm.us/eds)

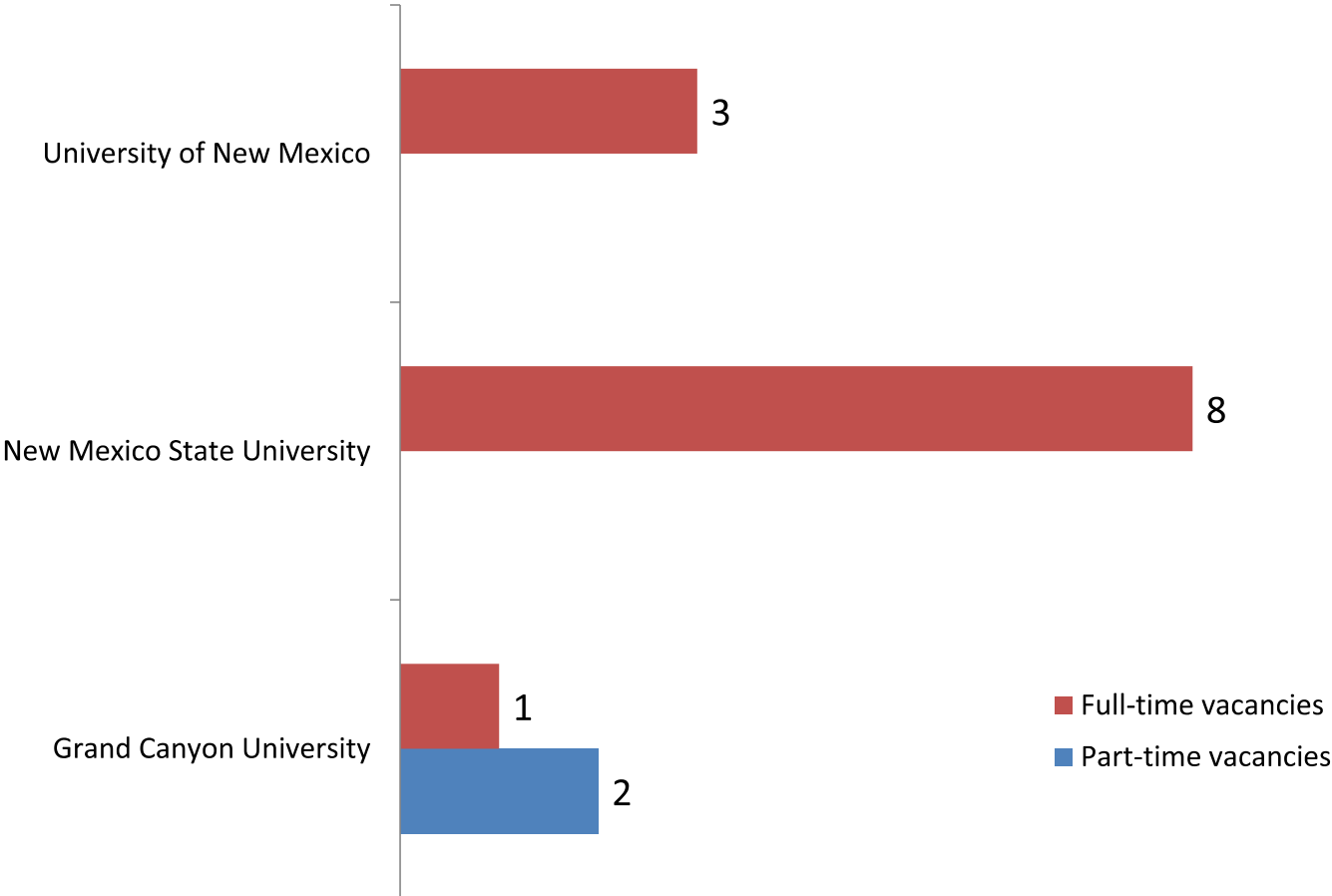
# Faculty Vacancies, By Surveyed ADN Program



Source: Respondents to 2012 NMNEC Academic Survey question that asked, “As of today, how many faculty vacancies does your school have? “



# Faculty Vacancies, By Surveyed Pre-Licensure BSN Program



Source: Respondents to 2012 NMNEC Academic Survey question that asked, “As of today, how many faculty vacancies does your school have?”

# Will We Have the Nurses We Need To Take Care Of New Mexico?

## What Do The Data Tell Us About Challenges That Programs Face?

- Efforts to increase nursing program capacity are hampered by the lack of nurses trained at the graduate degree levels required to serve as program faculty and clinical preceptors.
- A healthy educational pipeline requires that a significant portion of students pursue graduate degrees in nursing. (NM Center for Nursing Excellence, 2009)
- The nearly 60% of NM RNs trained below the BSN level, however, are currently unprepared to pursue graduate education, and so are unprepared to move into these roles that are key to increasing nursing program capacity in the state.
- Students who enter the profession through a BSN are four times more likely to pursue graduate degrees than students who enter through an ADN - 16.8% versus 4.3% nationally (Joynt & Kimball, 2008) .
- With many nursing professors approaching retirement, there may not be enough in the nurse faculty “pipeline” to replace even the existing faculty workforce.
- Faculty salaries among surveyed schools also highlights the challenge of recruiting and retaining nursing faculty within a competitive nursing marketplace. Faculty positions are demanding yet offer low salaries when compared to clinical practice salaries.

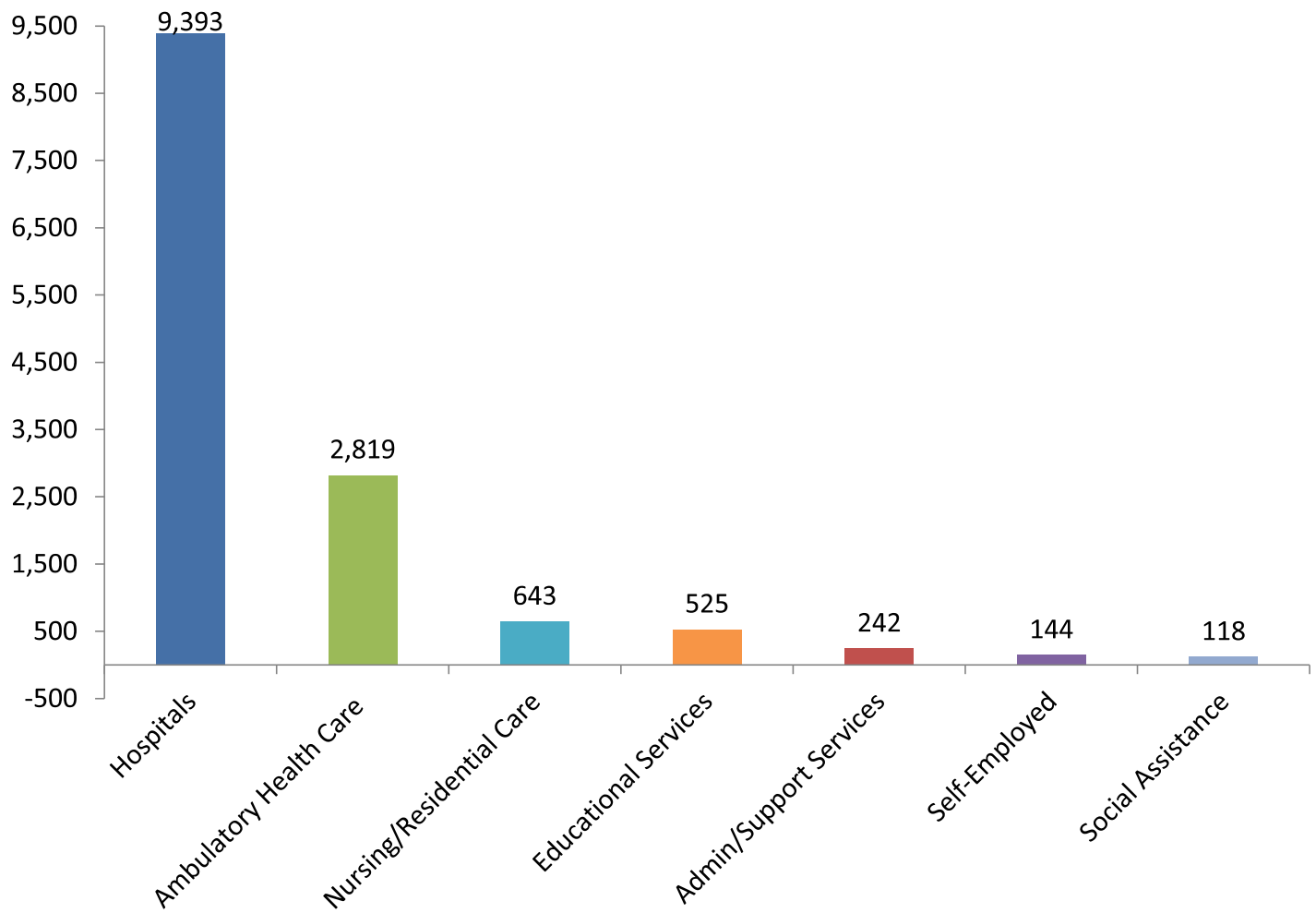
# What is the Current Employment Picture for Nurses in New Mexico?

## RN Wages, For Middle 50% Of Workers, By NM Region, 2011

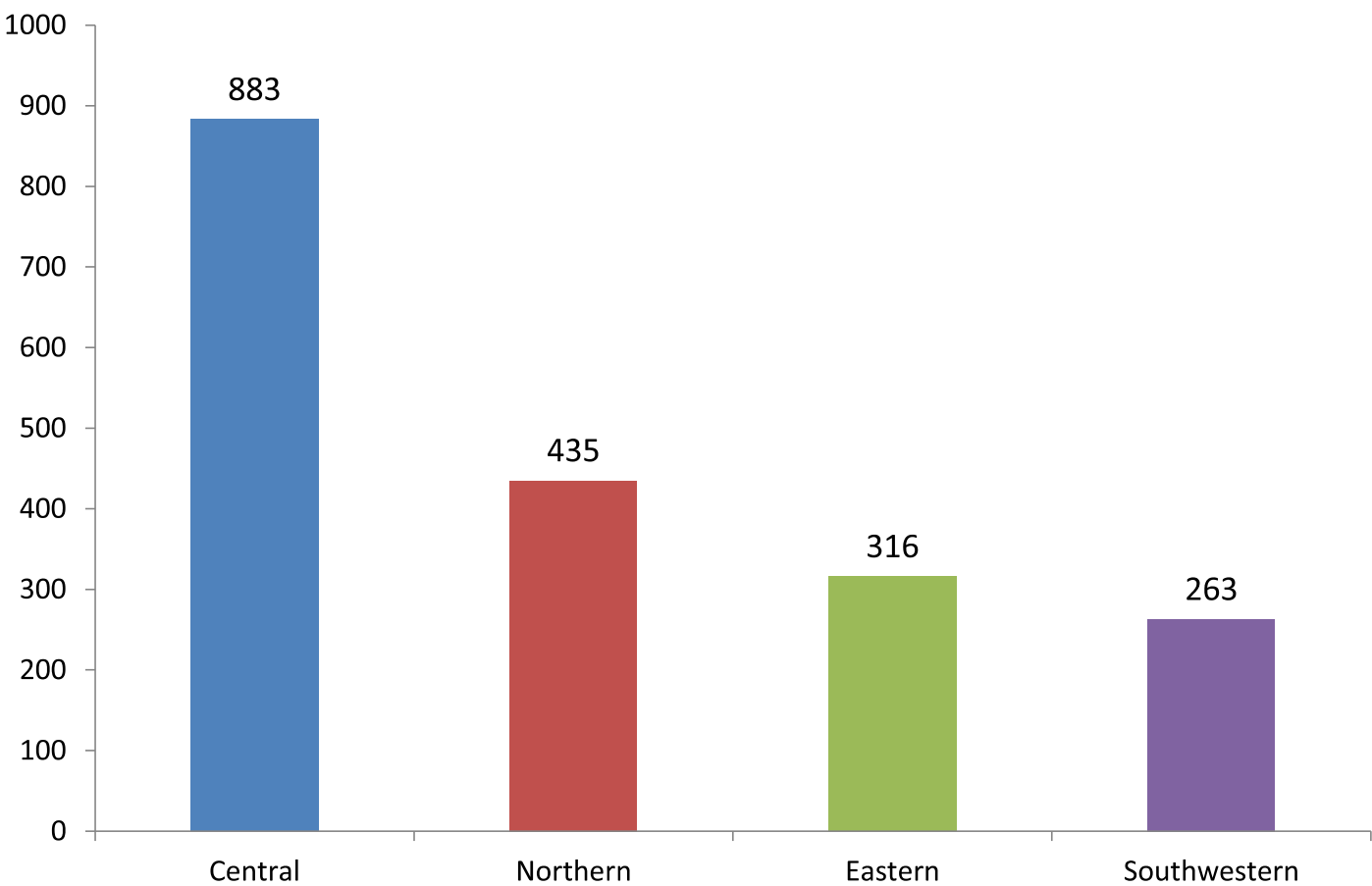


Source: New Mexico Department of Workforce Solutions, Economic Research and Analysis Bureau, 2011 Wage Information for Job Seekers, [www.dws.state.nm.ud/eds](http://www.dws.state.nm.ud/eds)

# RNs Employed By Industry Type In New Mexico, 2011 (DWS)




# Online Advertised Jobs Data for Registered Nurses, March 2013



Source: New Mexico Workforce Solutions, online advertised jobs data, [www.jobs.state.nm.us](http://www.jobs.state.nm.us)

# Long-Term Employment Projections for RNs in New Mexico,

## Department of Workforce Solutions

Occupation	2010 Estimated Employment	2020 Projected Employment	Total 2010 - 2020 Employment Change	Annual Avg. Percent Change	Total Annual Avg. Openings	Annual Avg. Openings Due to Growth	Annual Avg. Openings Due to Replacement
Registered Nurses	15,146	19,065	3,919	2.30%	666	392	274
Total All occupations	855,296	991,600	136,304	1.50%	34,094	13,936	20,158
 BRIGHT OUTLOOK STATEWIDE							

Source: New Mexico Workforce Connection, Labor Market Statistics, Occupational Employment Projections Unit, [www.jobs.state.nm.us](http://www.jobs.state.nm.us).

# Will We Have the Nurses We Need To Take Care Of New Mexico?

## What Does The Employment Data Suggest?

- Job projections for nurses in New Mexico in the next ten years remain strong.
- About 60% of projected job openings by 2020 may be due to the creation of new nursing positions.
- Employment opportunities for nurses are distributed across the various regions of the state.
- No data exists, however, to indicate whether employers of RNs require or prefer BSN- to ADN-educated nurses.



# How is the Nation Responding To The Need For Nurses?

# IOM's The Future of Nursing Report, 2010

- **Key Messages:**

- Nurses should practice to the full extent of their education and training.
- Nurses should achieve higher levels of education and training through an improved education system that promotes seamless academic progression.
- Nurses should be full partners, with physicians and other health care professionals, in redesigning health care in the United States.
- Effective workforce planning and policy making require better data collection and an improved information infrastructure.

- **Recommendation 4: Increase the proportion of nurses with a baccalaureate degree to 80 percent by 2020.** Academic nurse leaders across all schools of nursing should work together to increase the proportion of nurses with a baccalaureate degree from 50 to 80 percent by 2020. These leaders should partner with education accrediting bodies, private and public funders, and employers to ensure funding, monitor progress, and increase the diversity of students to create a workforce prepared to meet the demands of diverse populations across the lifespan.

Source: The Future of Nursing, Leading Change, Advancing Health, Committee on the Robert Wood Johnson Foundation Initiative on the Future of Nursing, at the Institute of Medicine, October 2010.

# How is New Mexico Responding To The Need For Nurses?

## The New Mexico Nursing Education Consortium (NMNEC)'s Approach

- By increasing the education level of the state's nurses, the NMNEC effort aims to improve the health of New Mexicans both now and for the long-term.
- NMNEC has developed a collaboration of nearly every nursing program across the state to create a common core curriculum in nursing education, transforming the current structure into a resource-efficient and easily-accessible baccalaureate program for students.
- The goals are to encourage, support, and provide advanced nursing education (bachelor degree and above) in communities through partnerships between community colleges and universities, provide a seamless transition through nursing education for students, and to maximize efficiencies through a common curriculum, sharing of faculty, technology, and other resources.

Source: <http://www.nmnec.org/>

# Going Forward □ What We Don't Know □ et

As the NMNEC efforts move forward, it will be important to build on what we **do** know about the ability of the state's nursing education pipeline to meet the health needs of New Mexico by addressing important questions whose answers we **don't** yet know:

## **ABOUT STUDENTS:**

- What reasons do nursing students have for choosing ADN vs. BSN programs?
- What incentives do students perceive for choosing the BSN versus ADN degree?
- How many applicants who are not admitted to one school or program are accepted at another school or program? Do we need to develop ways to track this?
- What barriers to entry do potential nursing students face, for each degree program?
- What barriers to completion do nursing students face, in each degree program?
- How readily do new RN graduates (entry-level nurses) find employment?
- How many graduates of colleges in the state find employment in the state?

## **ABOUT PROGRAMS:**

- What information are we missing from the schools NOT represented in the NMNEC survey responses – particularly private institutions – to fill out the whole picture of nursing education in the state?

# Going Forward □ What We Don't Know □ et

## **ABOUT EMPLOYERS:**

- What is New Mexico employer preference for BSN vs. ADN nurses?
- Does employer preference vary by job type, facility type, or geographical setting?
- Are there pay differentials for RNs trained by ADN programs, BSN programs, or nationally accredited programs?
- What is New Mexico employer need for entry-level nurses versus experienced nurses?

## **ABOUT THE NURSING WORKFORCE:**

- What is the racial/ethnic make-up and distribution of the state's nursing workforce (not previously collected in the Board of Nursing licensing surveys, but to be reported from here on out)?

# Going Forward: Implementation Tracking

As the new NMNEC nursing curriculum moves forward into its full implementation phase, it will be important to track:

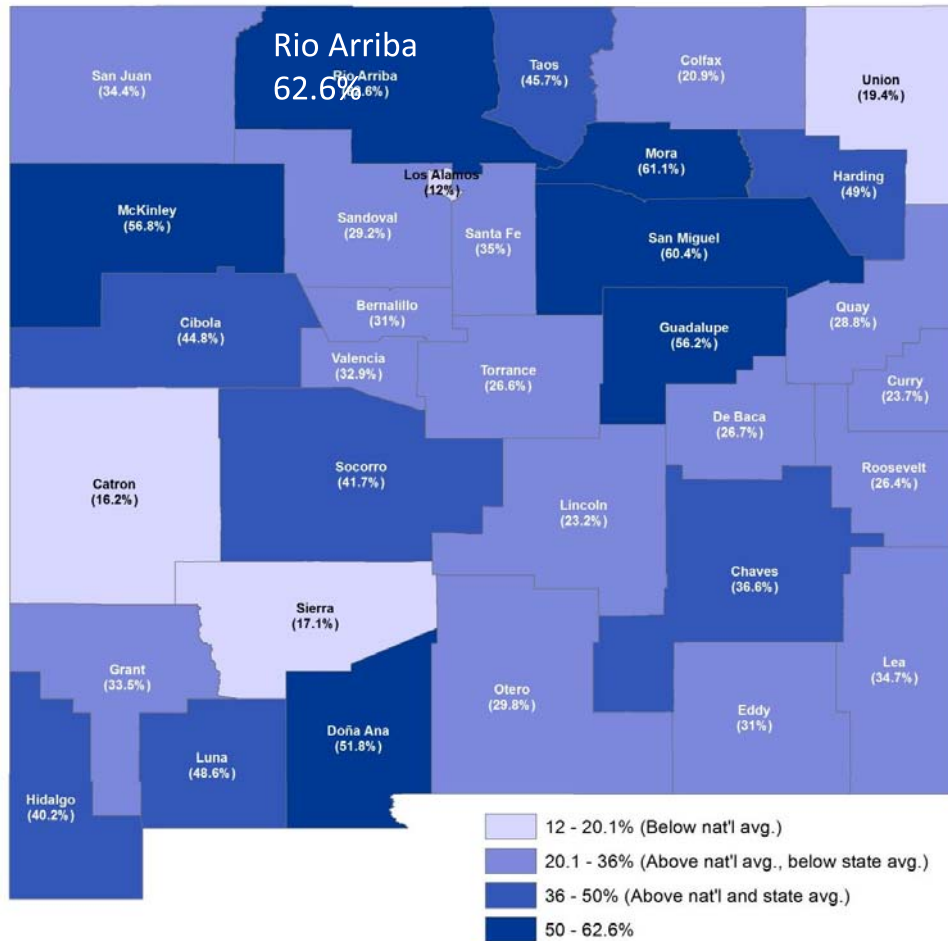
- What actual nursing employment opportunities will the ACA health care expansion open?
- What effects will economic recovery or continued economic downturn have on nursing employment opportunities?
- What impact will nurse retirement rates have on nursing employment opportunities?
- Where will newly graduated nurses find entry-level employment opportunities?
- What impact will implementation of the new statewide nursing curriculum have on program capacities, enrollment numbers, attrition, graduation rates, and NCLEX licensing test pass rates?
- How will faculty retirements or other turnover continue to affect program capacity?
- How are faculty shortages, more demanding licensure passage rates, and other factors key to accreditation continuing to impact availability of quality nursing education in the state?

# Appendices



# Demographic and Health Data for New Mexico

# Percentage Of Individuals Who Speak A Language Other Than English At Home, By County



New Mexico is Rich in Languages:

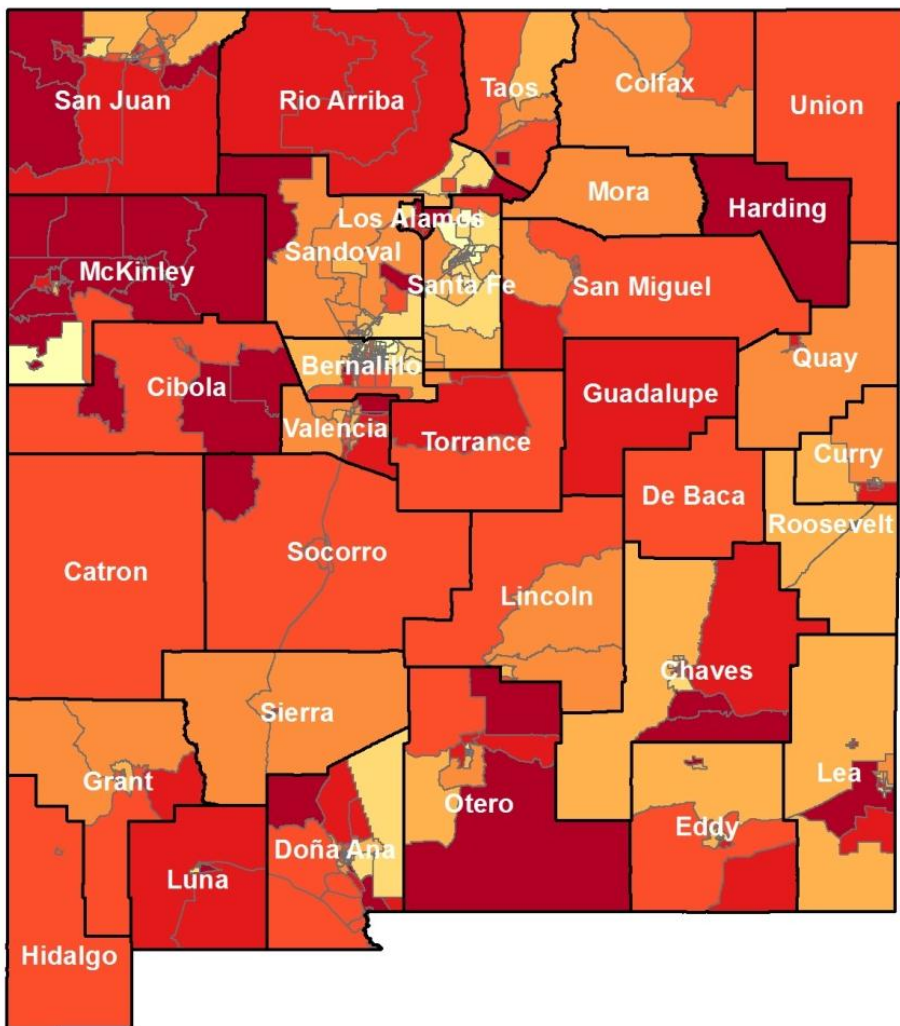
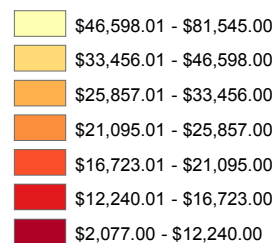
In New Mexico, 36% of individuals speak a language other than English at home, compared to 20.1% in the United States.

Rio Arriba County, at 62.6%, has the highest concentration of residents in New Mexico who speak a language other than English at home. Los Alamos County, at 12%, has the lowest concentration.

# Per Capita Income In New Mexico

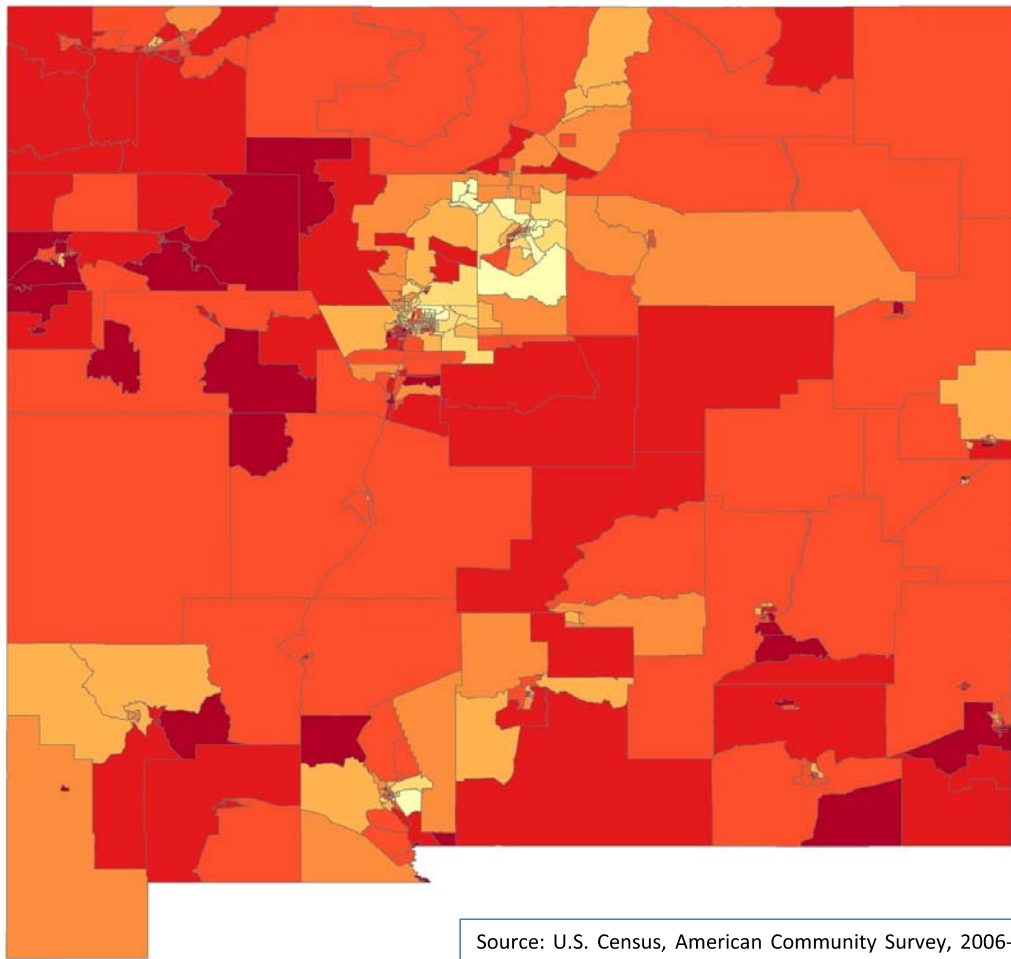
Per Capita Income is a frequently-used way to measure a community's economic health. The per capita income in most of New Mexico's communities is below the state average of \$22,966 and the national average of \$27,334.

**Legend**  
Per Capita Income  
in the Last 12 Months  
(in 2010 Inflation-Adjusted  
Dollars)



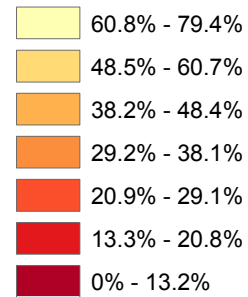
Source: U.S. Census Bureau, 2006-2010 American Community Survey

# Percentage of Individuals Over 25 Years of Age With an Associates Degree or Higher, By Census Tract



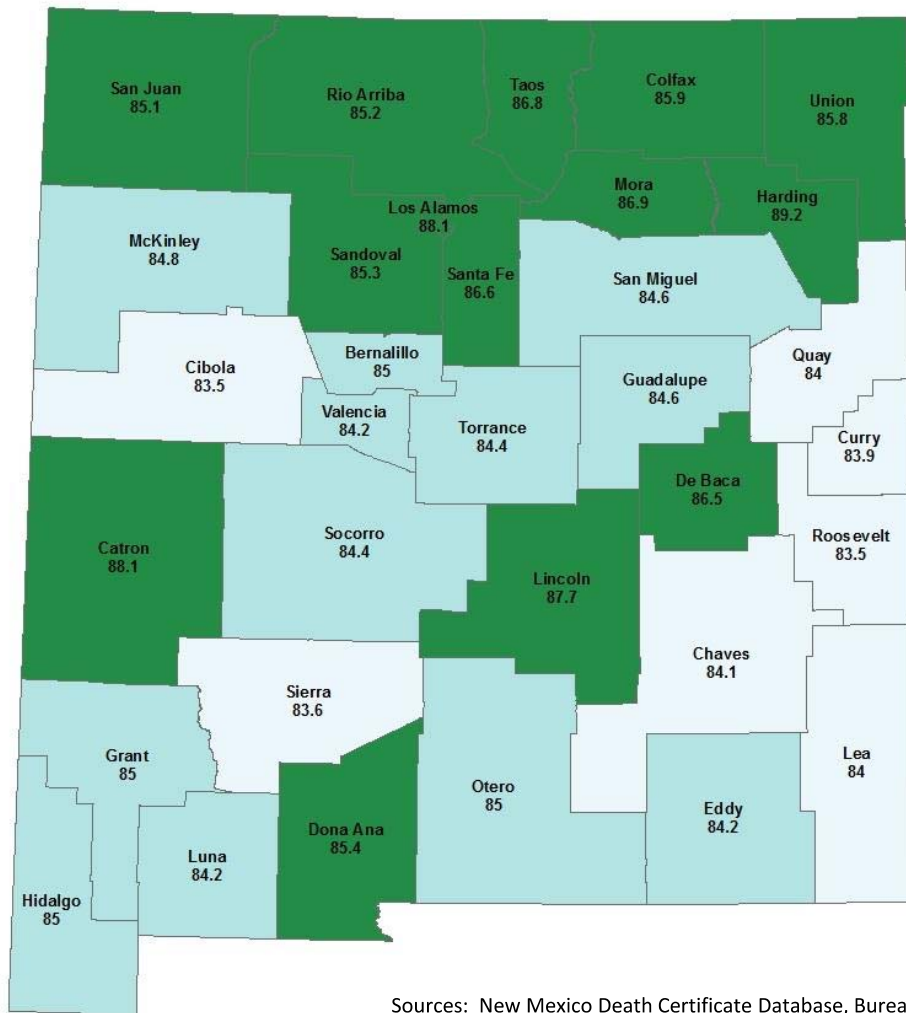
## Legend

### Percentage of Individuals Over 25 Years of Age With an Associates Degree Or Higher



Source: U.S. Census, American Community Survey, 2006-2010 Five-Year Estimates. Rates are reported by census tract. State and national averages taken from the 2010 American Community Survey (state avg. = 32.6%; national avg. = 35.4%).

# Life Expectancy from Age 65, by County, 2007-2011



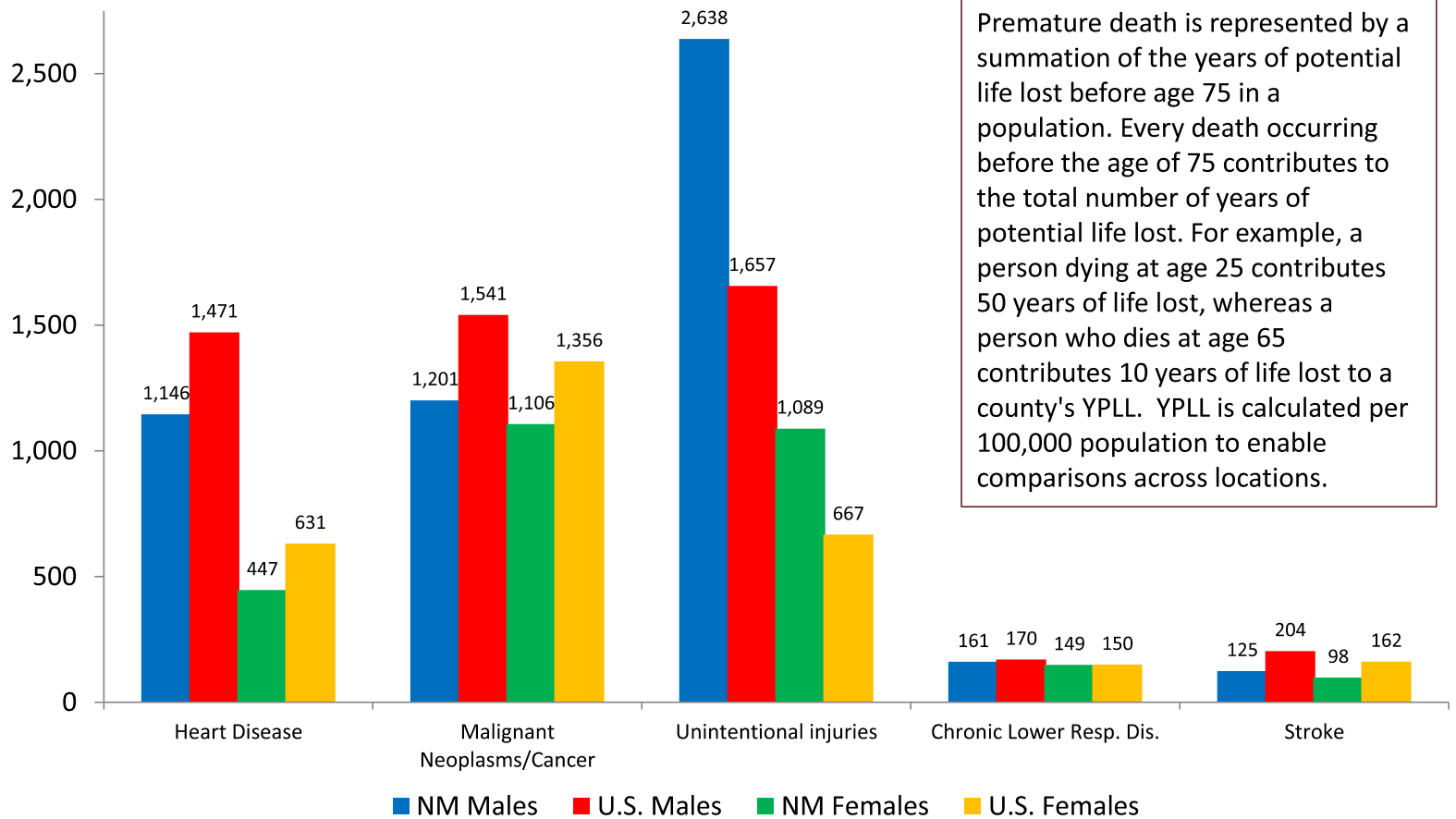
Life expectancy at age 65 is often used as a measure of an adult population's health.

The state average for 2007-2011 was 85.1 years. The national average for 2009 was 84.2 years.

- 83.5 - 84.1 (below nat'l and state avgs)
- 84.2 - 85 (above nat'l and below state avgs)
- 85.1 - 89.2 (above both nat'l and state avgs)

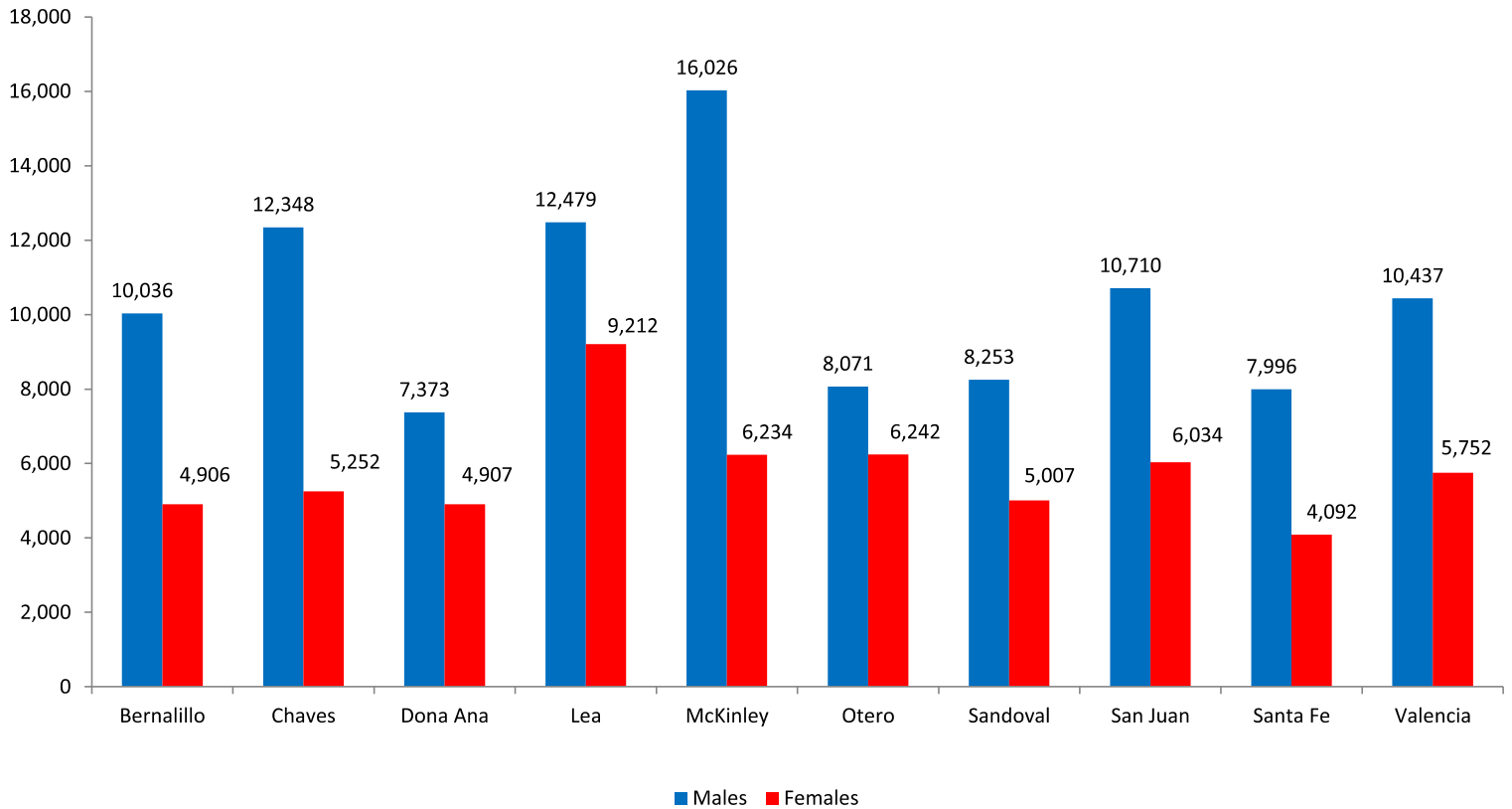
Sources: New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health: <http://ibis.health.state.nm.us/query/result/mort/MortCntyLifeExp/LifeExp65.html>. U.S. Dept. of Health and Human Services, Centers for Disease Control and Health, United States, 2011: [www.cdc.gov/nchs/data/abus/abus11.pdf#022](http://www.cdc.gov/nchs/data/abus/abus11.pdf#022).

# Top Five Causes Of Premature Death: Years Of Potential Life Lost (YPLL), US And NM, By Sex, 2006



Source: New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health: [http://ibis.health.state.nm.us/indicator/view\\_numbers/YPLL.LdgCause.html](http://ibis.health.state.nm.us/indicator/view_numbers/YPLL.LdgCause.html). YPLL is calculated by the number of deaths in a population multiplied by the remaining years of life expectancy in each of 19 5-year age groups, summed across age groups.

# Premature Deaths/Years of Potential Life Lost Before Age 75, New Mexico's 10 Largest Counties, All Causes of Death, by Sex, 2006



Source: New Mexico Death **Certificate** Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health: [http://ibis.health.state.nm.us/indicator/view\\_numbers/YPLL.LdgCause.html](http://ibis.health.state.nm.us/indicator/view_numbers/YPLL.LdgCause.html). YPLL is calculated by the number of deaths in a population multiplied by the remaining years of life expectancy in each of 19 5-year age groups, summed across age groups.

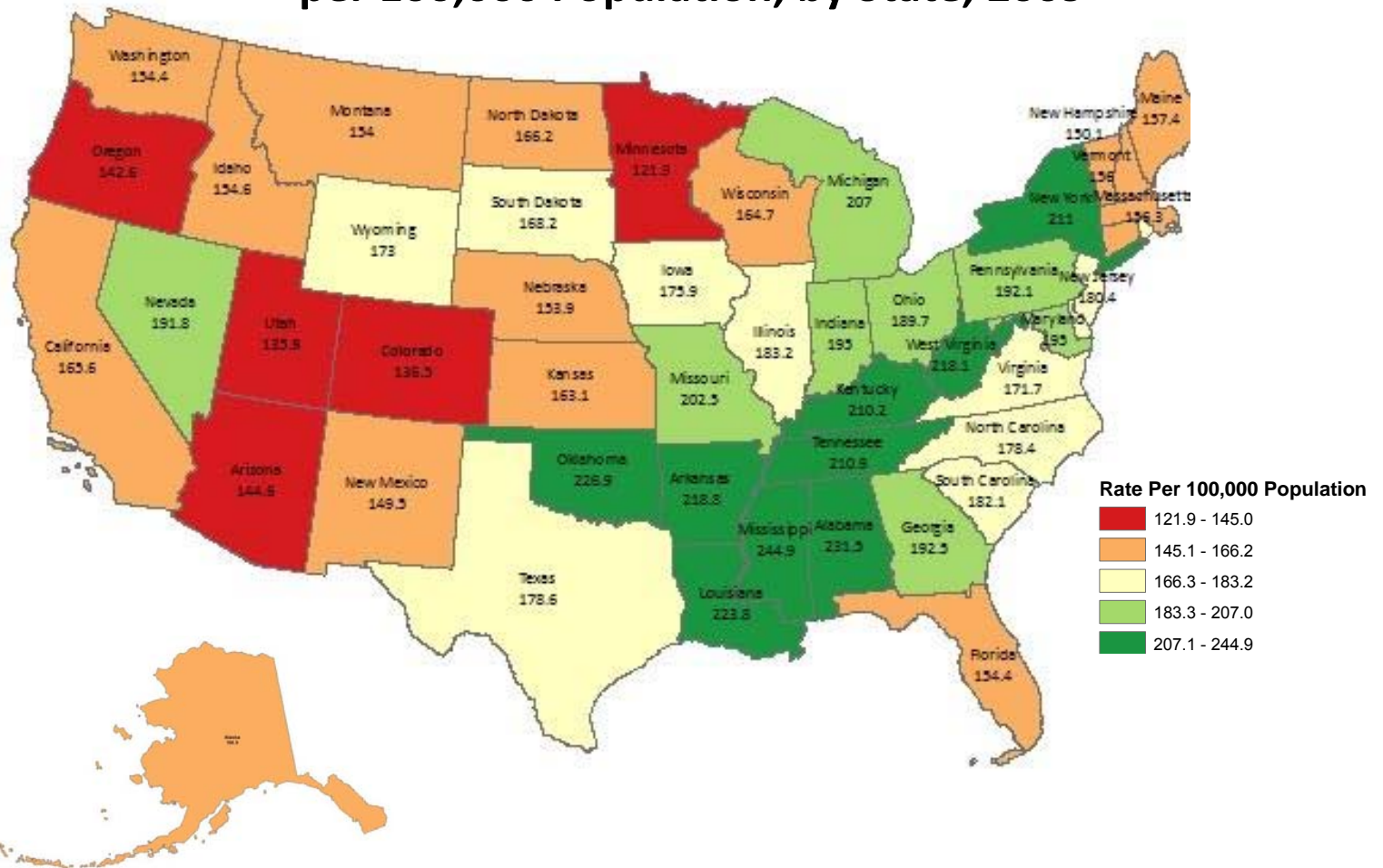
# Chronic Disease Prevalence

- Chronic diseases such as heart disease, cancer, hypertension, stroke, and diabetes account for 80% of all deaths in the U.S.
- Chronic disease accounts for 75% of the nation's health care costs.
- Many of the risk factors that contribute to the development of these diseases are preventable.

Source: <http://www.healthypeople.gov/2020/about/DefaultPressRelease.pdf>

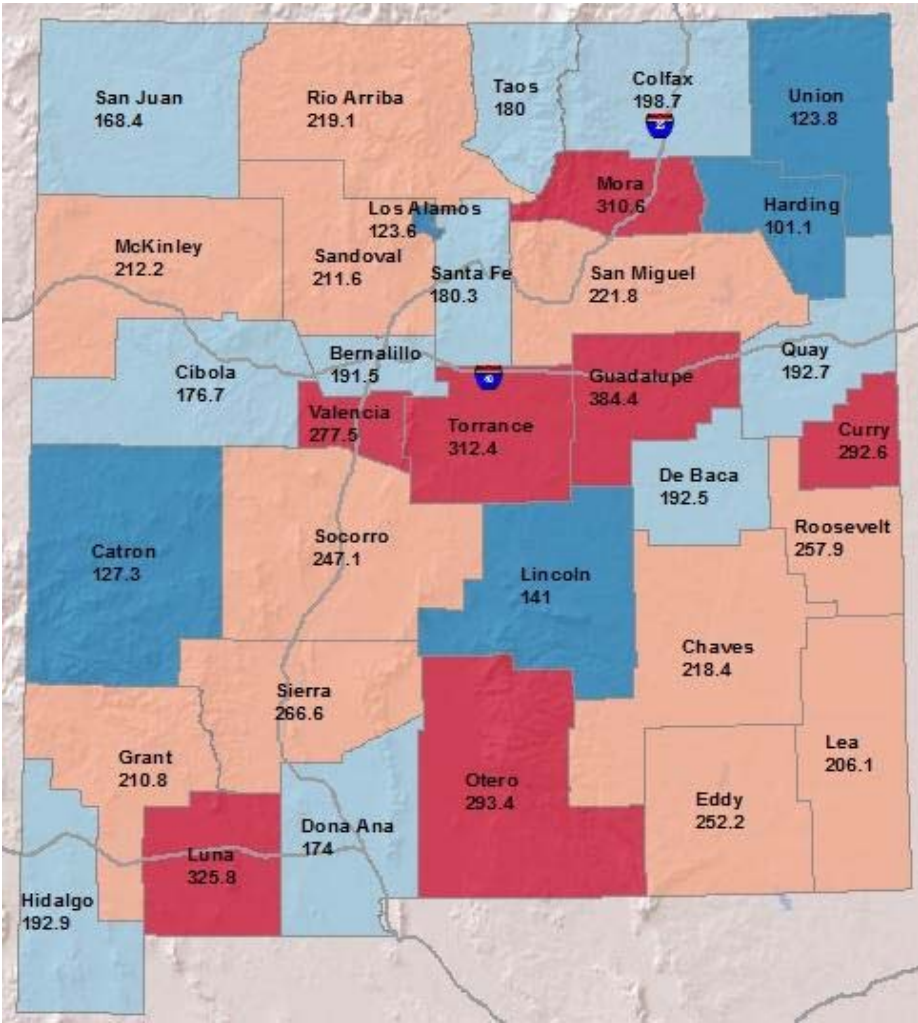


# Diseases of the Heart Death Rate per 100,000 Population, by State, 2009

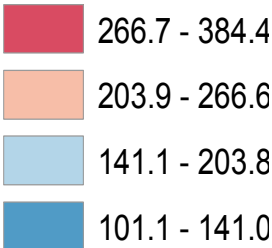


Source: Kaiser State Health Facts, 2009.

# Diseases Of The Heart Death Rate, Per 100,000 Population, By County, 2007-2009

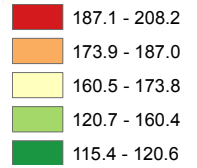
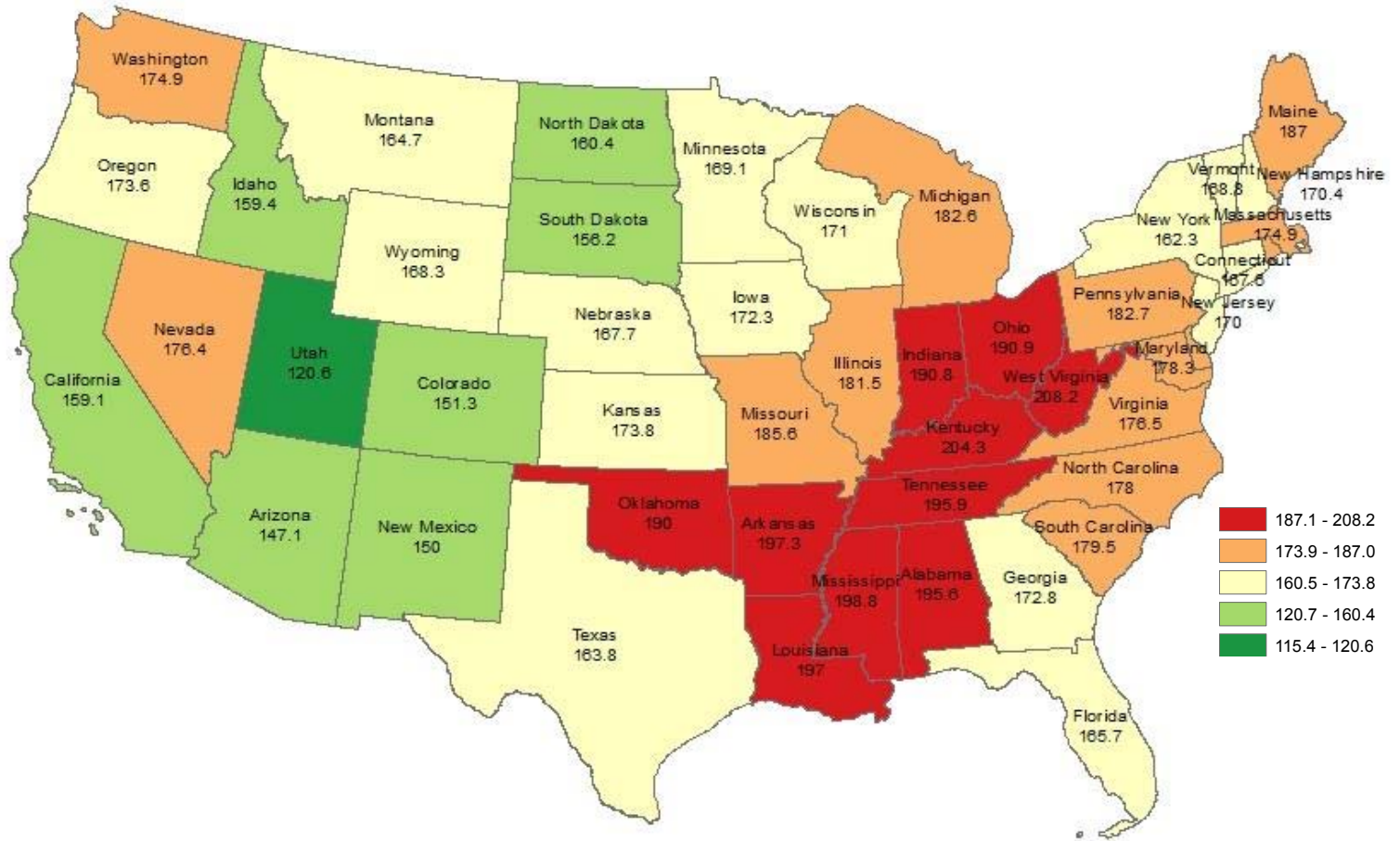


The statewide average is 203.8 deaths per 100,000 population. The national average is 190.9.



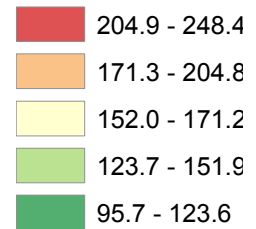
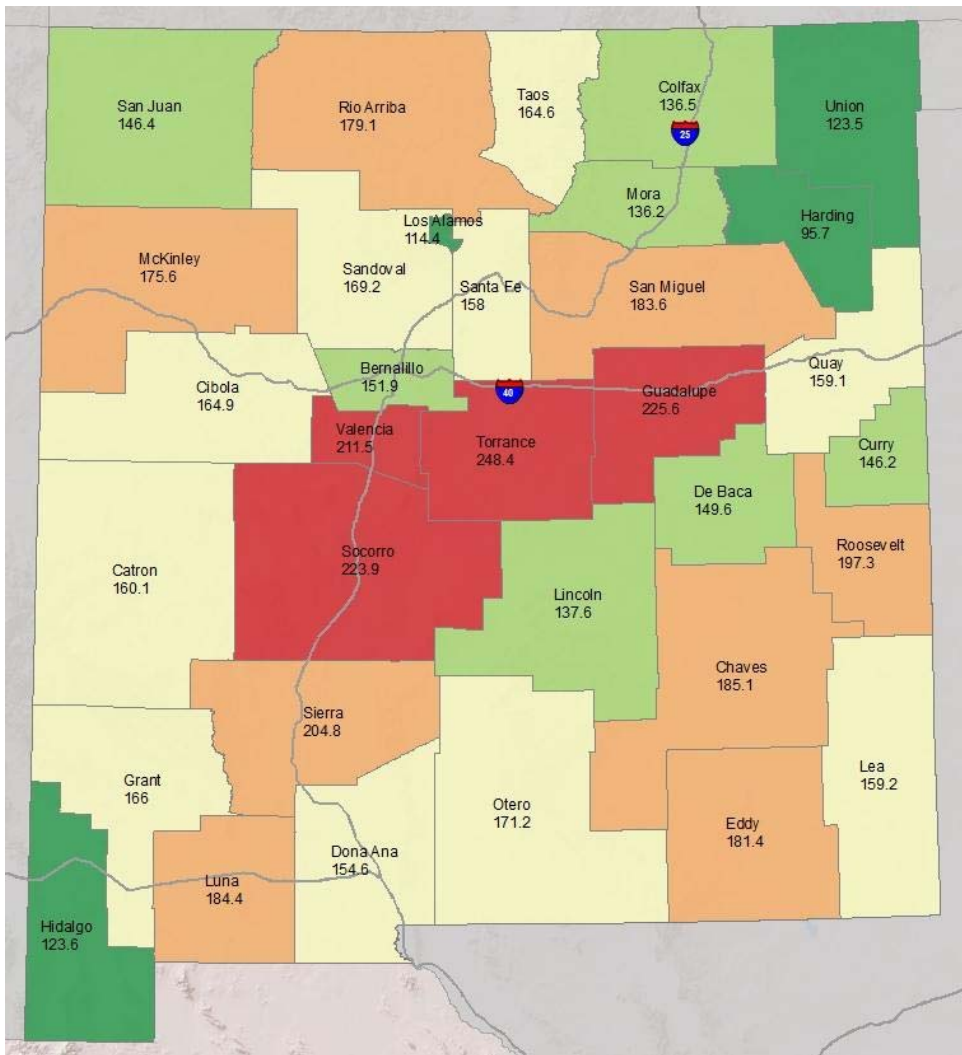
Source: New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health. Age-adjusted to U.S. standard population; U.S. 2007 age-adjusted mortality rate.

# Cancer Deaths per 100,000 Population, by State, 2009



Source: Kaiser State Health Facts, based on The Centers for Disease Control and Prevention (CDC), National Center for Health Statistics, Division of Vital Statistics, National Vital Statistics Report Volume 60, Number 3, December 2011

# Cancer Deaths Per 100,000 Population, by County, 2006-2010



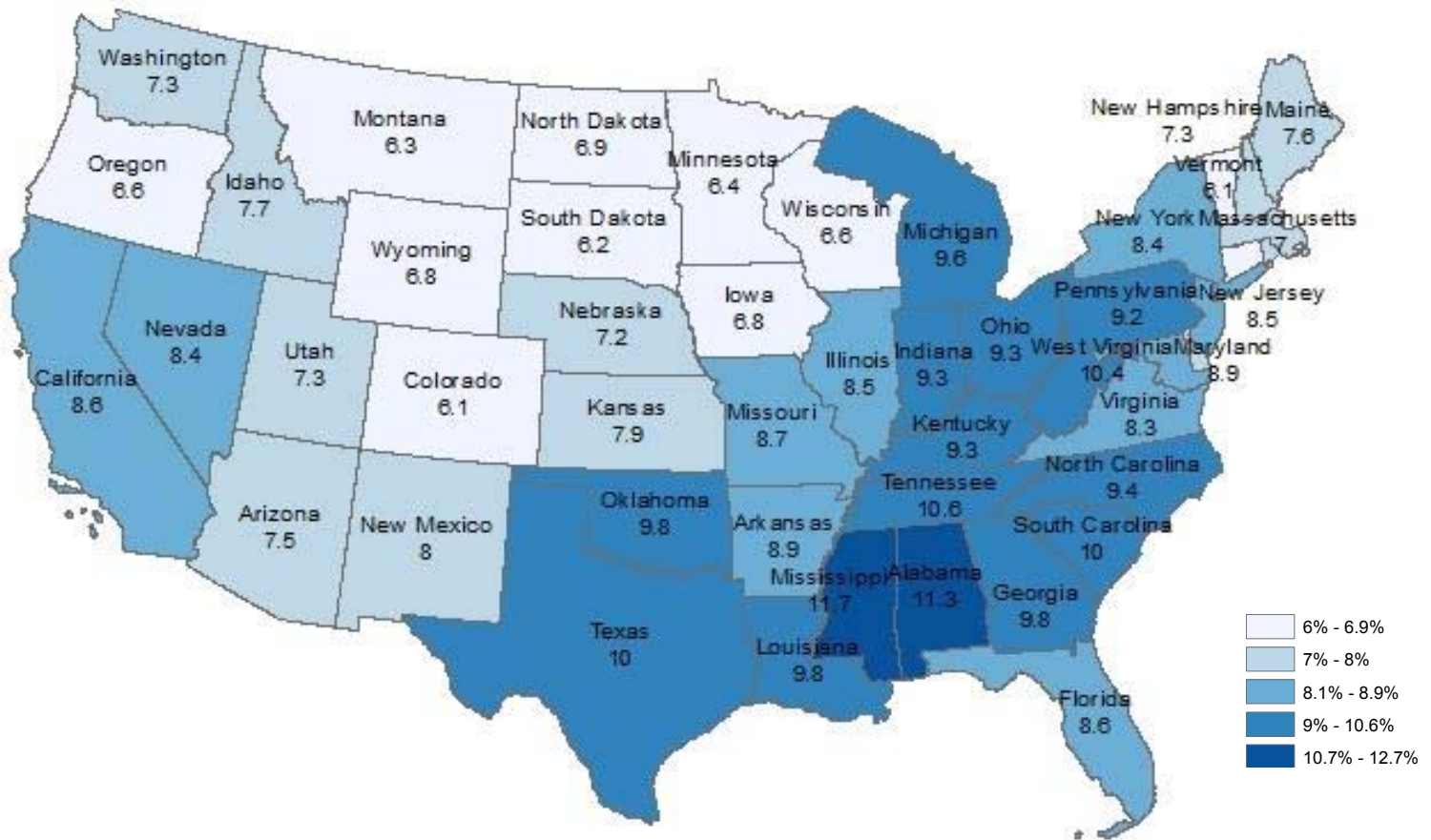
Source: New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health. Age-adjusted to 2000 U.S. Population.

# Smoking and Chronic Respiratory Disease

- Smoking is the leading preventable cause of death in the United States.
- One in five adults and one in four youth smoke in New Mexico.
- In New Mexico, about 2,100 people die annually from tobacco use and another 42,000 are living with tobacco-related diseases.
- Annual smoking-related costs in New Mexico are \$928 million (\$461 million in direct medical costs and \$467 million in lost productivity).

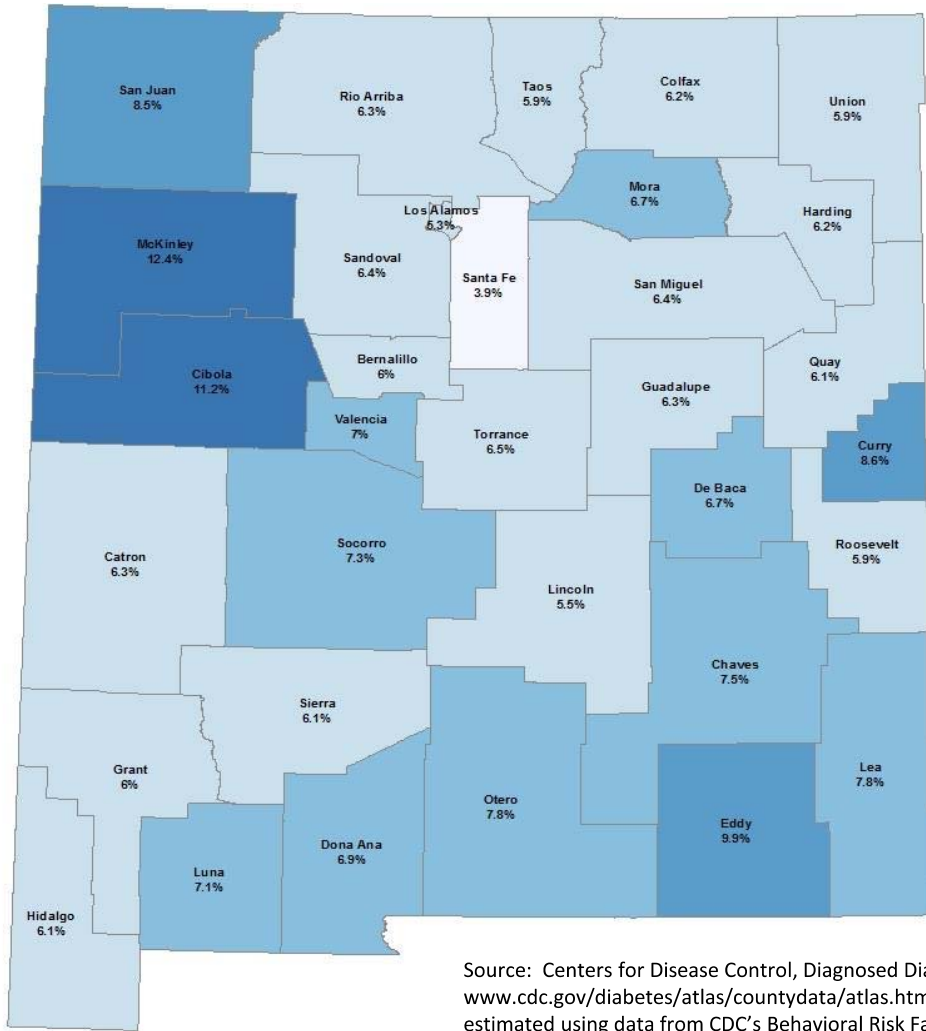


# Prevalence Of Adult Diabetes, As Percentage of Adult Population, by State, 2010



Source: National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation, Diagnosed Diabetes Among Adults, 2010. Estimates were calculated using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS). Estimates were calculated among adults aged 18 years and older, based on a single year of data, and age-adjusted to the 2000 U.S. population. Accessed from the Centers for Disease Control and Prevention, [http://www.cdc.gov/diabetes/atlas/obesityrisk/State\\_EXCELstatelistDM.html](http://www.cdc.gov/diabetes/atlas/obesityrisk/State_EXCELstatelistDM.html)

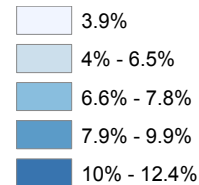
# Diabetes Prevalence, by County, 2009



New Mexico has had a sustained increased in prevalence of diabetes over the last decade.

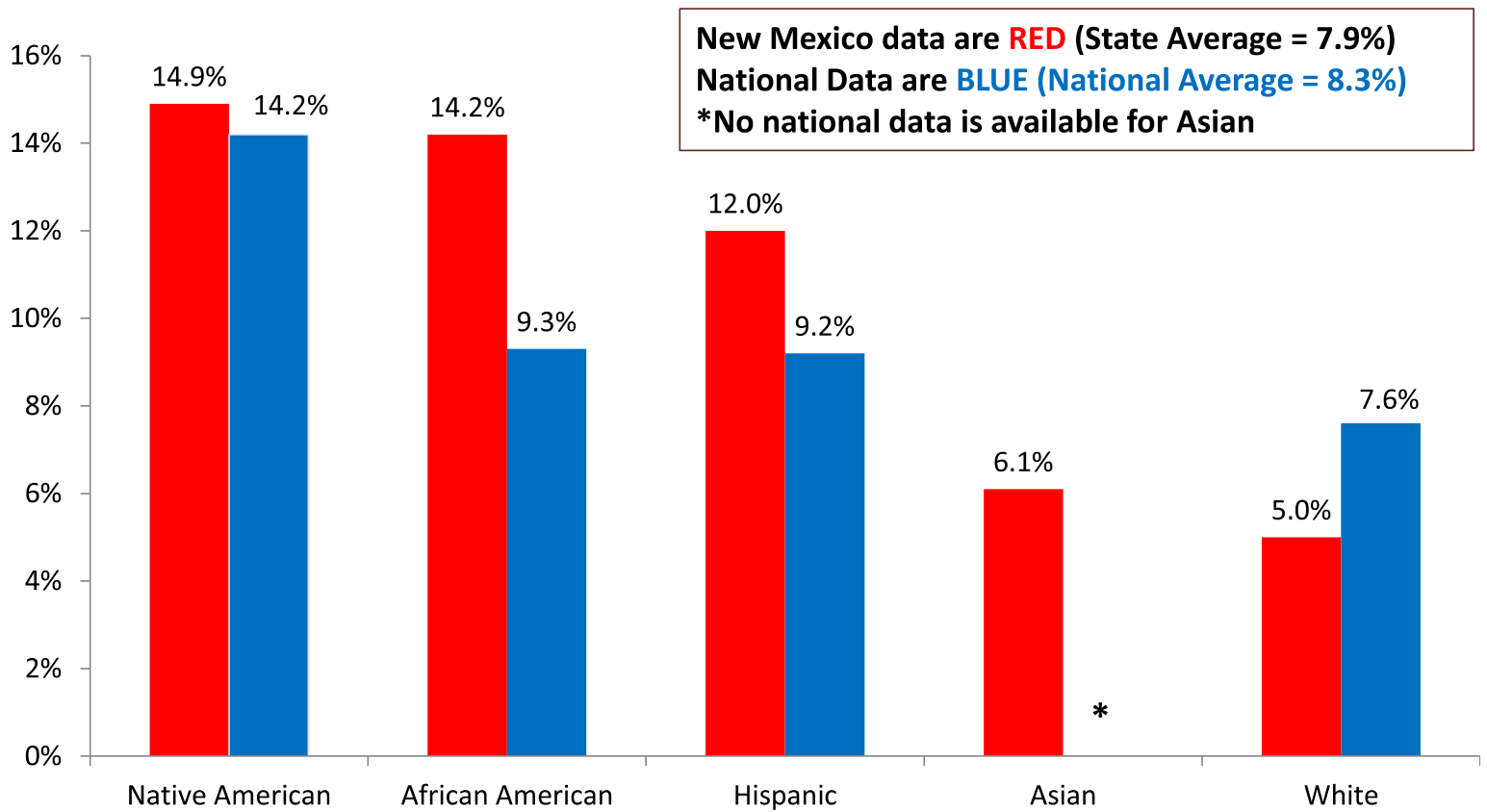
Prevalence rates report only diagnosed cases, and so represent an estimate of the minimum number of adults with diabetes in the state. Public health officials estimate that 1/3 more of the adult population has undiagnosed diabetes. The rate of diagnosed adult diabetes is about 8% in NM, and 11.3% nationally.

## Percentage of Adults, Age 20+ Diagnosed with Diabetes



Source: Centers for Disease Control, Diagnosed Diabetes Percentage, 2009, New Mexico by County, [www.cdc.gov/diabetes/atlas/countydata/atlas.html](http://www.cdc.gov/diabetes/atlas/countydata/atlas.html). Percentages are age-adjusted to U.S. 2000 population, and are estimated using data from CDC's Behavioral Risk Factor Surveillance System (BRFSS) and data from the U.S. Census Bureau's Population Estimates Program. New Mexico Department of Health: [http://ibis.health.state.nm.us/indicator/view/DiabPrevI.Year.NM\\_US.html](http://ibis.health.state.nm.us/indicator/view/DiabPrevI.Year.NM_US.html).

# Percentage Of New Mexico's Adults With Type 2 Diabetes, Compared To National Data, By Race/Ethnicity, 2007-2009

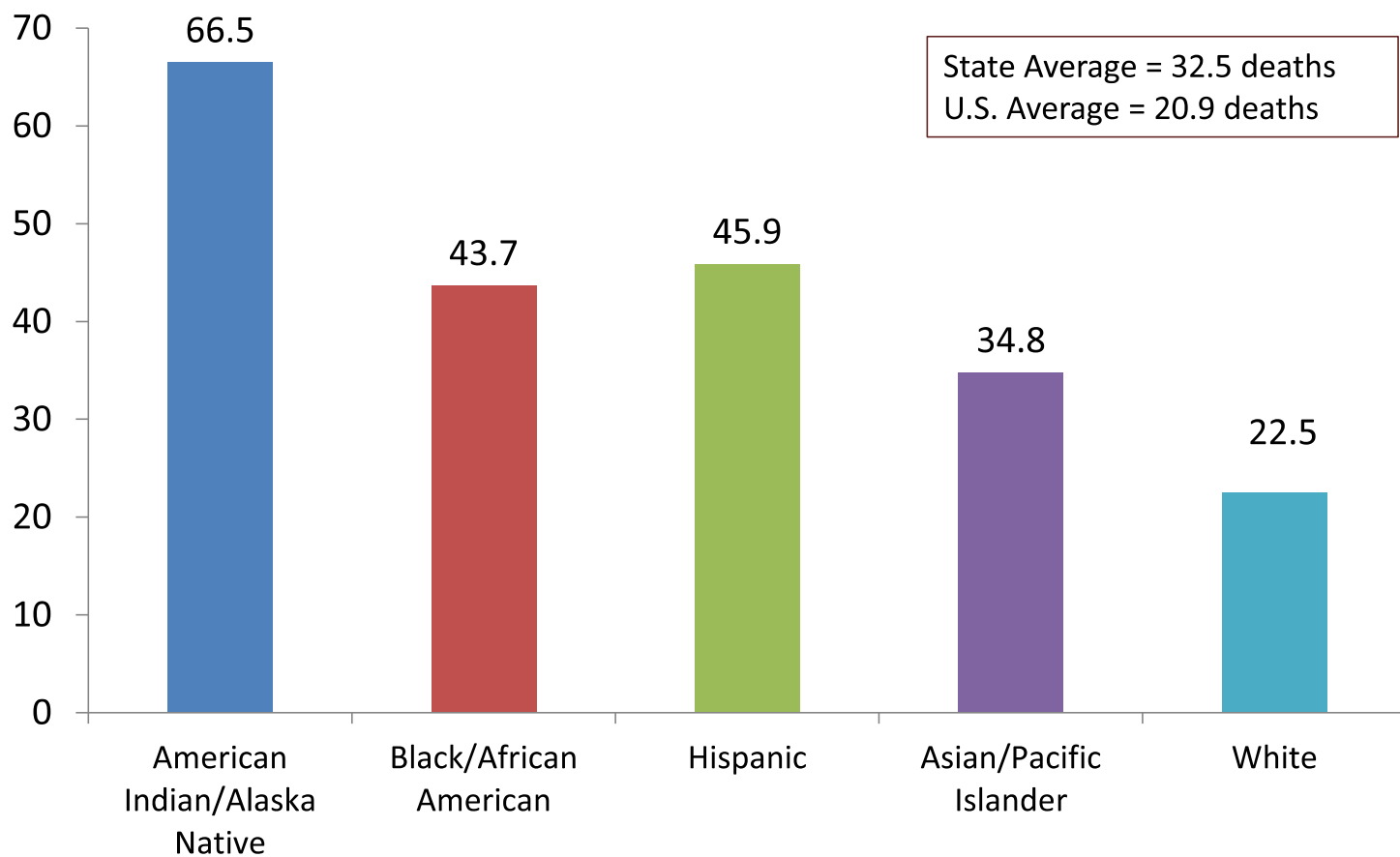


Source: New Mexico Department of Health, Diagnosed Diabetes Prevalence, by Race/Ethnicity, 2007-2009:  
<http://ibis.health.state.nm.us>. Age-adjusted to 2000 U.S. population.

\* 2011 Data, Centers for Disease Control and Prevention, National Center for Health Statistics, Division of Health Interview Statistics, data from the National Health Interview Survey. Statistical analysis by the Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation.

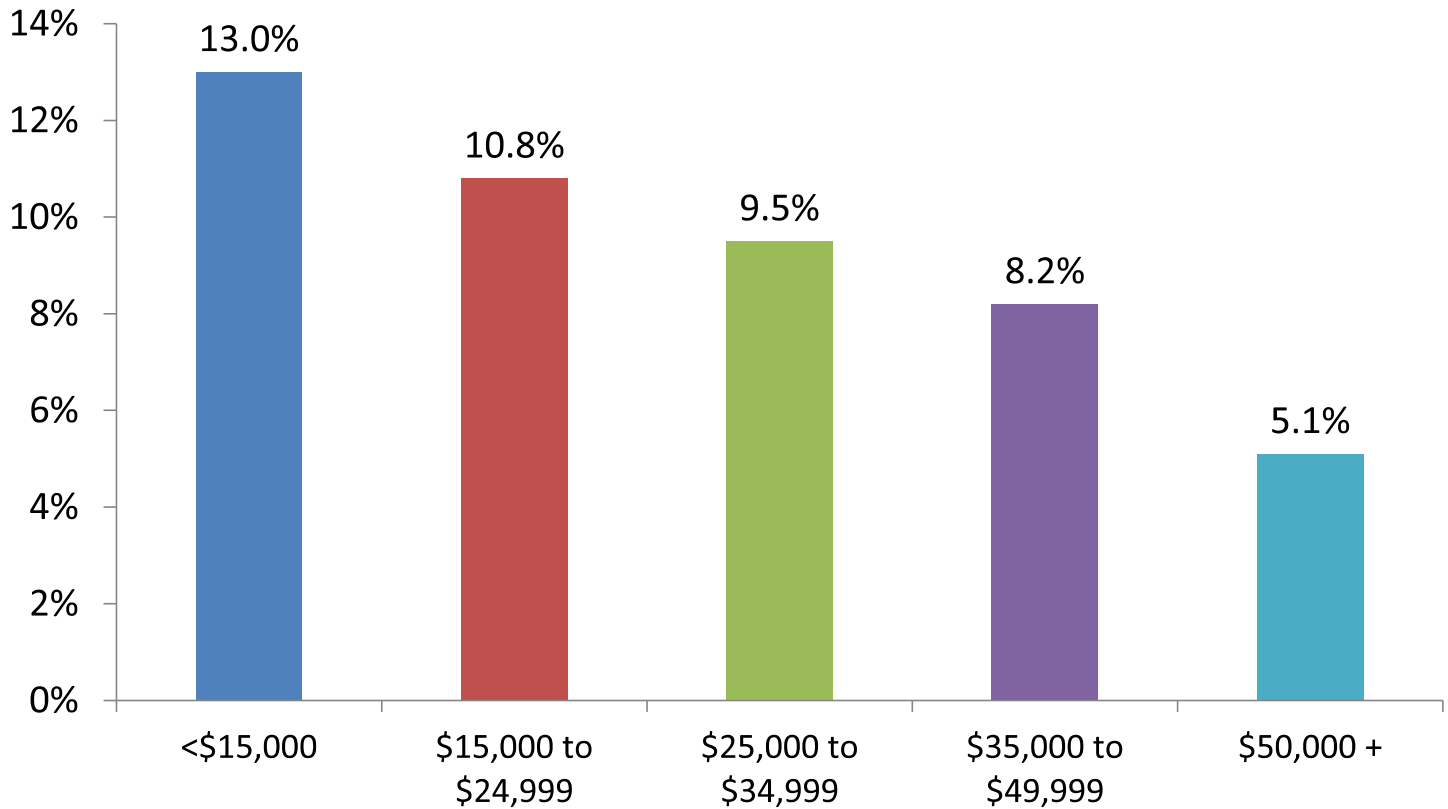


# Diabetes Deaths Per 100,000 Population, New Mexico, By Race/Ethnicity, 2008-2010



Source: New Mexico Death Certificate Database, Bureau of Vital Records and Health Statistics, New Mexico Department of Health, <http://ibis.health.state.nm.us>.

# Percentage of New Mexico's Adult Diagnosed with Diabetes by Household Income Level, 2007-2009



Source: Behavioral Risk Factor Surveillance System Survey Data, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, together with New Mexico Department of Health, Injury and Behavioral Epidemiology Bureau, <http://ibis.health.state.nm.us>.

# Non-Medical Implications of Diabetes

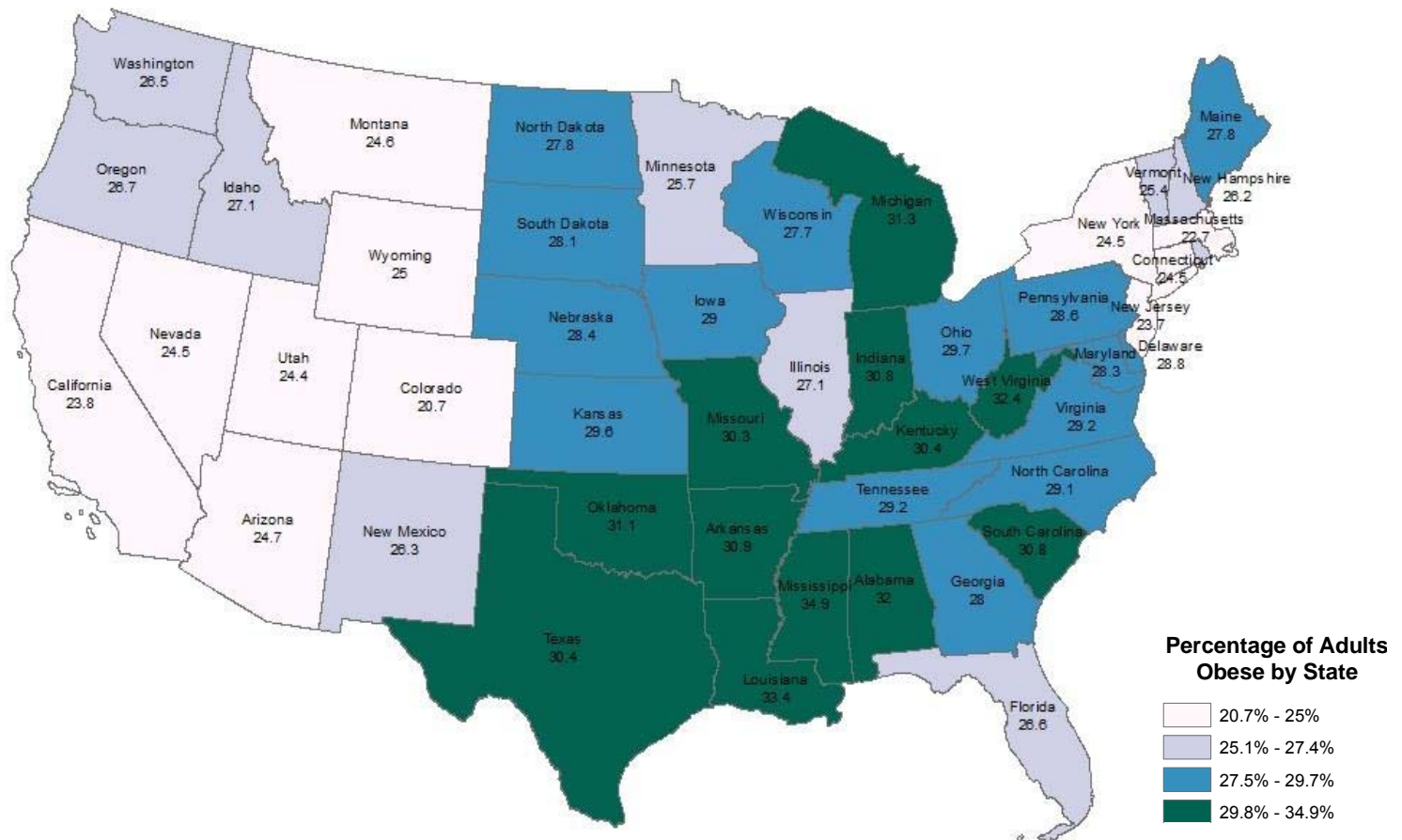
There are several significant non-medical economic effects of diabetes on the young adult population:

- An increased risk of dropping out of high school
- Reduced college attendance
- Reduced employment
- Reduced yearly earnings

Diabetes has a marked effect on educational and labor-market outcomes.

Source: Fletcher & Richards, 2012, Health Affairs

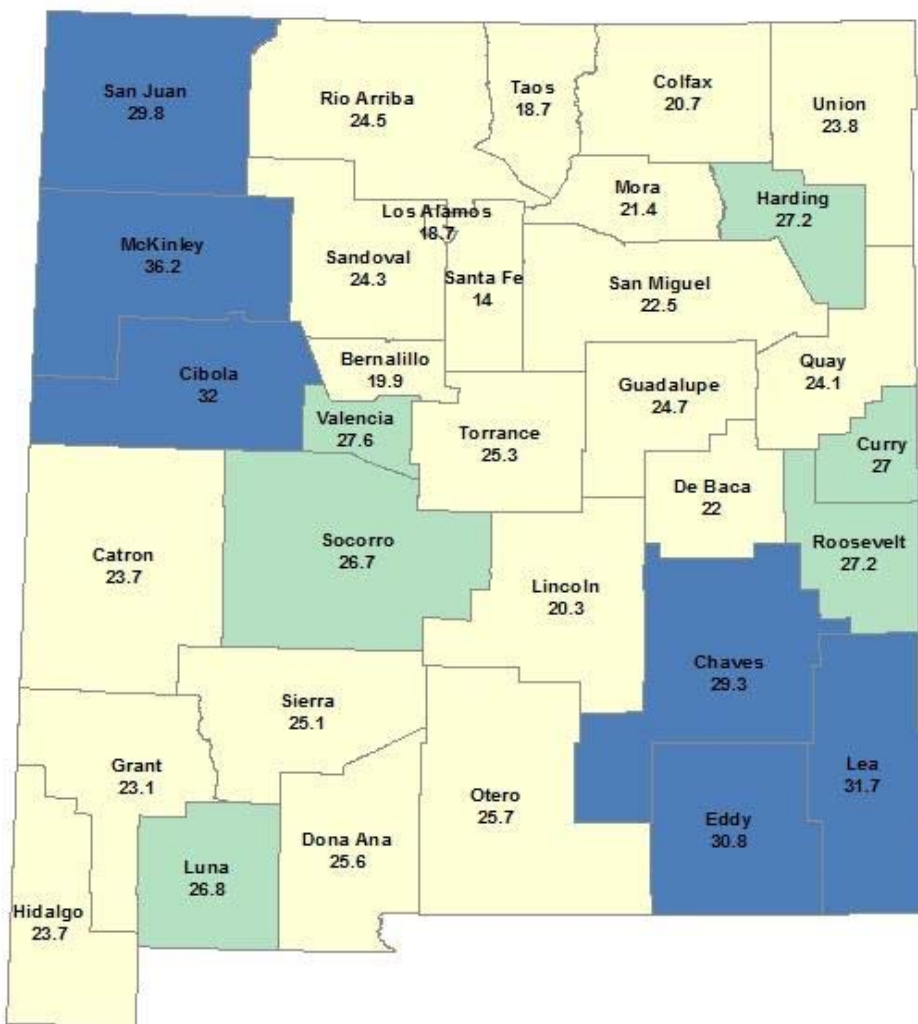
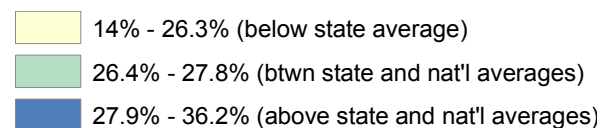
## Percentage of Adults Obese (BMI>30), by State, 2011



Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control, Prevalence of Obesity (BMI), 2011: <http://apps.nccd.cdc.gov/brfss/list.asp?cat=OB&yr=2011&qkey=8261&state=All>

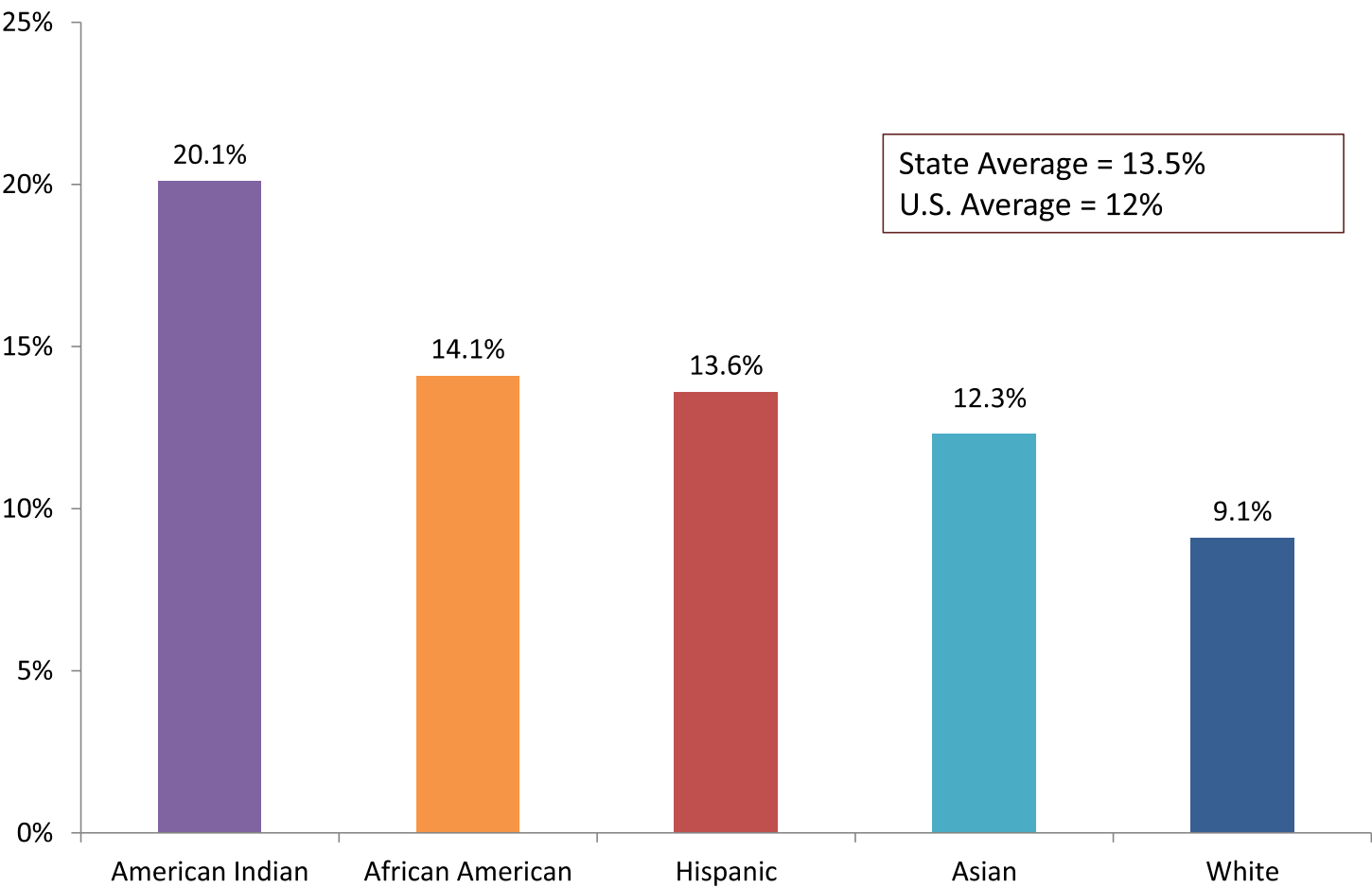
## Percentage of Adults Who are Obese (BMI >30), by County, 2009

Obesity is associated with an increased risk for a number of chronic diseases, including heart disease, stroke, diabetes, and some cancers. In both NM and the US, the percentage of adults who are obese has more than doubled since 1990. The NM state average is 26.3% and the U.S. average is 27.8%.

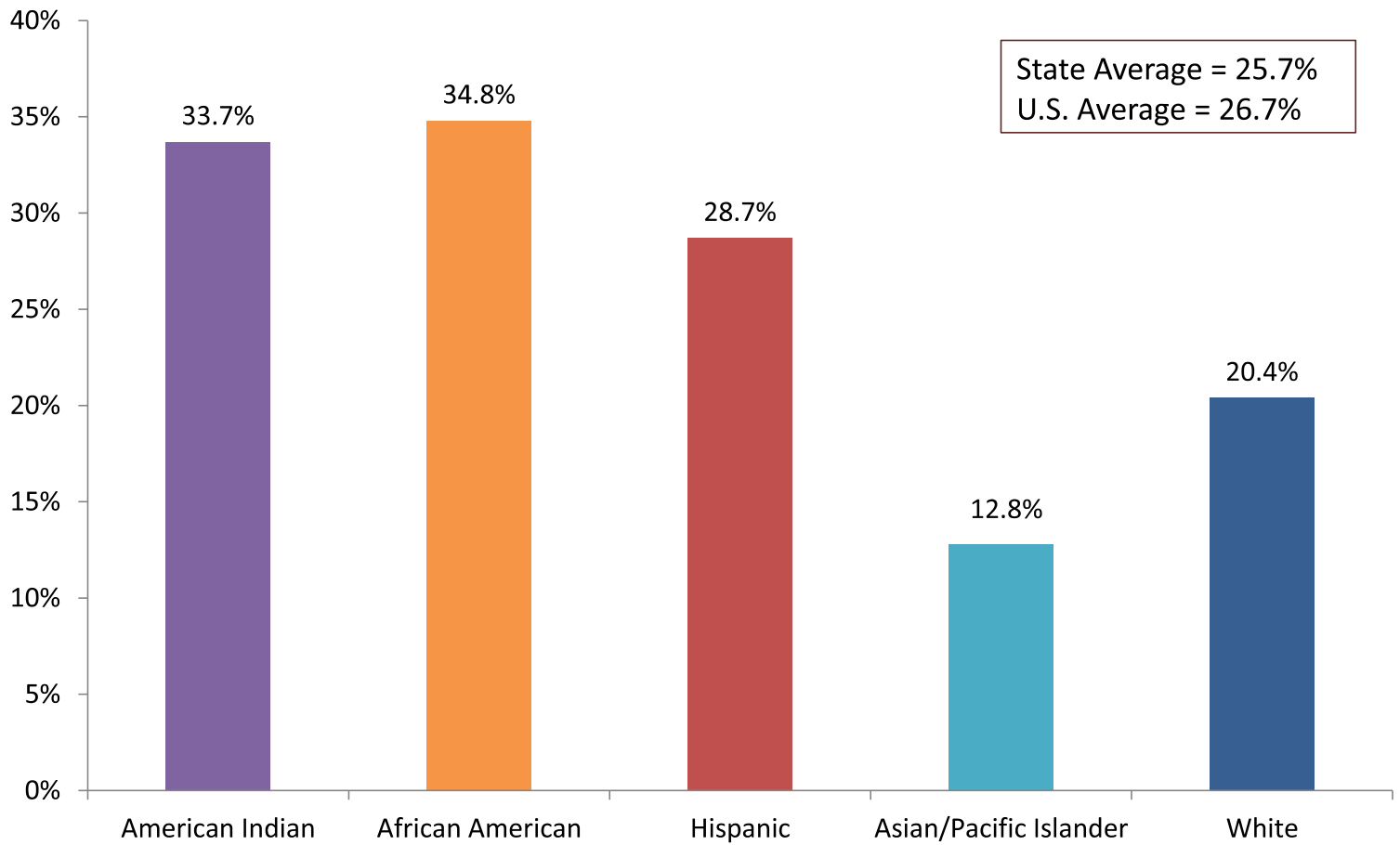


Source: Centers for Disease Control, <http://www.cdc.gov/diabetes/atlas/countydata/atlas.html>;  
<http://ibis.health.state.nm.us/indicator/view/ObesityAdult.Cnty.html>.

# Percentage of NM Adolescents Who Were Obese, by Race/Ethnicity, 2009



## Percentage Of NM Adults Who Were Obese, By Race/Ethnicity, 2006-2008



Source: Behavioral Risk Factor Surveillance System Survey Data, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, together with New Mexico Department of Health, Injury and Behavioral Epidemiology Bureau.

# NMNEC Academic Survey Instrument



# New Mexico Nursing Education Consortium

## 2012 Academic Survey Instrument

### Part 1: School Demographics

1. Is your school Rural or Urban, as defined by the U.S. Census Statistical Metropolitan Area?  
(New Mexico Metropolitan Areas also known as Urban are Albuquerque, Rio Rancho, Farmington, Las Cruces, and Santa Fe.)
2. What academic schedule does your program follow?  
(2 Semesters or 3 Terms/yr.)
3. Indicate the current accrediting organization for your parent institution.  
(Regional accreditation; no institutional accreditation; other.)
4. Indicate the current nursing accreditation status of your nursing program.  
(NLNAC, CCNE, both, in process, none.)
5. Type of degree programs offered by your institution.  
(ADN, BSN, RN-BSN, MDN, Nursing doctorate)

### Part II: Faculty Positions, Demographics, and Compensation

1. As of today how many full-time nursing faculty does your school employ?  
Number of full-time faculty by gender (M,F)  
Number of full-time faculty by race/ethnicity. (Categories)  
Number of faculty by degree (highest degree earned). (Doctoral degree in nursing or related field; Master's Nursing; Master's Other; BSN; Other)
2. As of today, how many part-time nursing faculty does your school employ?  
Number of part-time nursing faculty by employment categories. (above or below .5 FTE)  
Number of part-time faculty by gender. (M/F)  
Number of part-time faculty by race/ethnicity. (categories)
3. As of today, how many faculty vacancies does your school have? (FT, PT)
4. What is the average salary of your full-time nursing faculty (tenured and non-tenured)?
5. What is the average salary of your part-time faculty?  
(Average salary per % of FTE; Average payment per credit hour taught; other)

# New Mexico Nursing Education Consortium

## 2012 Academic Survey Instrument (cont.)

### Part III: Nursing Program Student Admission, Progression, and Graduation Data

Sections for ADN (associate's degree in nursing); BSN (bachelor's of science in nursing); RN-BSN (bachelor's completion program)

In the last Academic Year (AY) 2011-12 (defined as Summer 2011, Fall 2011 and Spring 2012), please provide the following information for the [ADN, BSN, or RN-BSN] program offered at your institution.

#### Admissions:

1. Total admission capacity for AY 2011-12:
2. Total Number of qualified applicants (qualified applicant means applicant meets all admissions criteria) who applied to your [ADN, BSN, RN-BSN program] in AY 2011-12.
  - a. Number of qualified applicants by gender
  - b. Number of qualified applicants by race/ethnicity
3. Total number of students admitted to your [nursing program] in AY 2011-12 by term/semester. (Summer 2011/ Fall 2011/ Spring 2012)
  - a. Total number of students admitted by gender in AY 2011-12.
  - b. Total number of students admitted by race/ethnicity in AY 2011-12.
4. Total number of students who transferred into your nursing program from another New Mexico nursing program.

#### Progression & Attrition:

5. Total number of students enrolled in your [program] in AY2011-12 by term/semester. (Summer 2011, Fall 2011, Spring 2012)

#### Attrition

6. Please indicate the attrition during this AY (Summer 2011, Fall 2011, Spring 2012). Attrition is defined as the number of students admitted to your nursing program who permanently withdraw from your program without graduating regardless of the reason (i.e. includes voluntary or dismissed).
  - a. If your program uses an alternate definition of attrition, please provide here.

# New Mexico Nursing Education Consortium

## 2012 Academic Survey Instrument (cont.)

7. What is the number of terms/semesters that it takes for a student to complete the nursing program if they follow the recommended degree plan as a full-time student? (*Terms/Semesters*)
8. Over the last 3 years, what is the average number of terms/semesters it takes for your graduates to actually complete the program? (*terms/semesters*)
9. Total number of graduates from your [nursing program] in AY 2011-12 by term/semester. (Summer 2011, Fall 2011, Spring 2012)
  - a. Total number of graduates by gender in AY 2011-12 (F/M)
  - b. Total number of graduates by race/ethnicity in AY 2011-12. (*categories*)
10. What percent of the total number of your enrolled students receive federal financial aid or some combination of financial aid and or support other than the NM lottery scholarship in AY 2011-12 (Summer 2011, Fall 2011, and Spring 2012)? (This information helps to provide an indicator of the need for scholarship money.)

### Pre-Nursing Enrollment

11. What is the total undergraduate pre-nursing enrollment for this past AY (Summer 2011, Fall 2011, and Spring 2012)? Pre-nursing definitions may vary by program but would include declared major or students who are not yet admitted but who are being actively tracked or advised as pre-nursing students by your program. (*Summer 2011, Fall 2011, Spring 2012, do not current collect this data*)

### MSN (Same as Part III, ADN through #3)

4. Total number of students enrolled in your MSN degree program in AY 2011-12 by term/semester.
5. Please indicate the attrition during this AY (Summer 2011, Fall 2011, Spring 2012). Attrition is defined as the number of students admitted to your nursing program who permanently withdraw from your program without graduating regardless of the reason (i.e., includes voluntary or dismissed).
  - a. If your program uses an alternate definition of attrition, please provide here.
6. Total number of graduates from your MSN degree program in AY2011-12 by term/semester.
  - a. Total number of graduates by gender in AY 2011-12.
  - b. Total number of graduates by race/ethnicity in AY2011-12.

# New Mexico Nursing Education Consortium

## 2012 Academic Survey Instrument (cont.)

7. Over the last 3 years what is the average number of terms/semesters it takes for your graduates to actually complete the program? (*Terms, semesters*)

### DOCTORAL

Same as MSN, plus:

8. What percent of doctoral students receive some form of financial assistance (scholarships, fellowships, etc.)?

**Part IV: Program & Faculty Evaluation (not used in this report))**

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