

# University of New Mexico Main Campus STEM Benchmarking Data (Broad STEM Definition) February 2016

#### INTRODUCTION

The following data has been collected by the UNM Office of Institutional Analytics in cooperation with the UNM STEM collaborative Center. This report is designed to assist UNM faculty and administrators track UNM undergraduate STEM student achievement outcomes over time.

The UNM STEM Collaborative Center is a five-year initiative funded by the US Department of Education Title V Program. The STEM Collaborative Center seeks to improve STEM education for all UNM undergraduate students, with a high priority placed on improving STEM education for Hispanic and low-income students. For more information on the STEM Collaborative, visit <a href="https://stem.unm.edu">https://stem.unm.edu</a>.

The term "STEM" refers to science, technology, engineering, and mathematics disciplines. The specific academic majors and disciplines included within STEM vary. For instance, the National Science Foundation sometimes uses a broad definition that includes health science, economics, and science education. The Department of Homeland Security uses a narrow definition that excludes these areas.

The data included in this report uses the broader STEM definition, and includes the majors listed in Appendix A.

This report was funded by the UNM STEM Collaborative Center. The Collaborative's charge includes improvement of STEM education for all undergraduate students, with a high priority placed on Hispanic and low-income students. Consequently, this report details achievement for three main cohorts:

- All undergraduate students
- Undergraduate students who are Hispanic and/or come from low-income backgrounds
- Undergraduate students who are NOT Hispanic and/or come from low-income backgrounds

These three cohorts do not provide UNM with a broad enough picture to fully benchmark STEM achievement. Over the next year, the STEM Collaborative and the Office of Institutional Analytics will create a customizable dashboard that will allow users to benchmark data for multiple ethnicities, income levels, and majors (among other variables).

#### **DEFINITIONS**

**General Student Population:** Full-time and part-time undergraduate students who are enrolled in credit-bearing courses delivered from the UNM Main Campus.

**First-Year Students:** Students who are attending college for the first time, either as full-time or part-time students. Students who completed dual credit in high school but who have not yet attended college after high school are included as first-year students. Students who have completed any college credits after graduating from high school are not counted as first-year students.

**STEM Interested Student:** Students who have declared a STEM or pre-STEM major. See Appendix A for list of majors, pre-majors and concentrations.

**Low-Income Student:** Degree seeking students who completed the FAFSA for the specified academic year, and who have an estimated family contribution less than \$5199 for that year. This EFC threshold is an estimate of when students may receive a Pell Grant.

Hispanic Student: Student who has self-declared as Hispanic on their application for admission.

**Hispanic and/or Low-Income Students:** Student who fits within either category of Hispanic student or low-income student. For instance, a student who is Hispanic but not low-income fits within the category of Hispanic and/or low-income. A student who is neither Hispanic nor low-income does not fit within this category.

First-generation Student: Degree seeking students who completed the FAFSA for the specified academic year, and who indicated that: (1) if from two-parent household, that neither of their parents attended college, or (2) if from one-parent household, that their parent did not attend college.

#### **LIMITATIONS**

Ethnicity, income and first generation data rely on student self-reporting. Consequently, these classifications are not independently verified.

Income levels are only reported for students who complete the FAFSA. Students who do not complete the FAFSA are assumed to not fit into the low-income student classification.

STEM interest is defined by student choice of major, pre-major or concentration. Accuracy for this classification is reliant on students updating their selections of majors in a timely fashion.

## PART ONE: ALL UNDERGRADUATE STUDENTS (all ethnicities, all income levels)

## Part One, Section One: INTEREST IN STEM

Table 1. First-Year STEM-Interested Students									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
Number of first-year students	3224	3409	3585	3340	3424	3517	3132		
Number of first-year students interested in STEM	1248	1343	1469	1515	1623	1724	1674		
Percentage of first- year students interested in STEM	38.71%	39.40%	40.98%	45.36%	47.40%	49.02%	53.45%		

Table 2	2. First-Ye	ar STEM-In	terested St	udents and	Ethnicity		
	2008- 09	2009-10	2010-11	2011-12	2012-13	2013-14	2014- 15
Total Number of first-year students interested in STEM	1248	1343	1469	1515	1623	1724	1674
Number of first-year STEM-interested students who are <b>Hispanic</b>	513	559	707	733	775	865	821
Percentage	41.11%	41.62%	48.13%	48.38%	47.75%	50.17%	49.04%
Number of first-year STEM-interested students who are <b>African American</b>	35	50	40	36	35	43	30
Percentage	2.80%	3.72%	2.72%	2.38%	2.16%	2.49%	1.79%
Number of first-year STEM-interested students who are <b>Asian</b>	61	62	40	69	73	71	97
Percentage	4.89%	4.62%	2.72%	4.55%	4.50%	4.12%	5.79%
Number of first-year STEM-interested students who are <b>American Indian</b>	76	92	72	93	96	80	49
Percentage	6.09%	6.85%	4.90%	6.14%	5.91%	4.64%	2.93%
Number of first-year STEM-interested students who are <b>Native Hawaiian</b>	0	0	4	4	3	0	3
Percentage	0.00%	0.00%	0.27%	0.26%	0.18%	0.00%	0.18%
Number of first-year STEM-interested students who are <b>White</b>	518	497	533	492	544	546	571
Percentage	41.51%	37.01%	36.28%	32.48%	33.52%	31.67%	34.11%
Number of first-year STEM-interested students who are <b>two or more</b> races	0	0	49	61	74	75	67
Percentage	0.00%	0.00%	3.34%	4.03%	4.56%	4.35%	4.00%
Number of first-year STEM-interested students who are non-resident alien	14	9	9	12	12	27	28
Percentage	1.12%	0.67%	0.61%	0.79%	0.74%	1.57%	1.67%
Number of first-year STEM-interested students who are race/ethnicity unknown	31	74	15	15	11	17	8
Percentage	2.48%	5.51%	1.02%	0.99%	0.67%	0.98%	0.47%

Table 3.	Table 3. Pre-College Academic Preparation and STEM First-Year Students								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
Average high school GPA for first-year students interested in STEM	3.39	3.31	3.35	Not available	3.419	3.407	3.441		
Average ACT composite score for first-year students interested in STEM	22.44	22.46	22.52	22.61	22.61	22.83	23.06		
Average SAT composite score for first-year students interested in STEM	1113.15	1113.98	1140.30	1089.26	1110.33	1112.15	1119.05		

	Table 4. Financial Aid and STEM First-Year Students								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
Total Number of first-year students interested in STEM	1248	1343	1469	1515	1623	1724	1674		
Number who completed the FAFSA	1038	1170	1302	1373	1463	1540	1499		
Percentage	83.17%	87.12%	88.63%	90.63%	90.14%	89.33%	89.55%		
Number with EFC < \$5199	418	512	591	653	689	730	698		
Percentage	33.49%	38.12%	40.23%	43.10%	42.45%	42.34%	41.70%		
Number who indicated first generation status	244	339	334	381	403	423	387		
Percentage	19.55%	25.24%	22.74%	25.15%	24.83%	24.54%	23.12%		

Table 5. Total Undergraduate Interest in STEM: All Undergraduate STEM-Interested Students (not restricted to first-year students)									
	2008-09 2009-10 2010-11 2011-12 2012-13 2013-14 2014-15								
Number of ALL full- time students, not just those interested in STEM	16002	17086	17942	18042	18046	18130	17618		
Number of STEM- interested full-time students	7332	7868	8339	8538	8840	9025	8839		
Percentage of all full-time students who are interested in STEM	45.82%	46.05%	46.48%	47.32%	48.99%	49.78%	50.17%		
Number of ALL part- time <i>and</i> full-time students, not just those interested in STEM	20295	21580	22793	23064	23128	23027	22317		
Number of STEM- interested part-time and full-time students	9513	10096	10781	10977	11345	11540	11277		
Percentage of all part-time and full- time students who are interested in STEM	46.87%	46.78%	47.30%	47.59%	49.05%	50.12%	50.53%		

Table 6. Av	Table 6. Average Cumulative GPA for STEM-Interested Undergraduate Students							
(not restricted to first-year students)								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
Average Cum GPA for all STEM-interested undergraduate students, based on end of academic year data	3.14	3.13	3.14	3.13	3.12	3.13	3.14	

## Part One, Section Two: GRADUATION IN STEM

Table 7. Four-year STE	Table 7. Four-year STEM Graduation for First-Year Students Interested in STEM									
	2008-09	2009-10	2010-11	2011-12						
	cohort	cohort	cohort	cohort						
Number of first-year STEM- interested students who graduated in STEM within four years	132	157	193	212						
Percentage of first-year STEM- interested students who graduated in STEM within four years	10.58%	11.69%	13.14%	13.99%						

Table 8. Five-year STEM Graduation for First-Year Students Interested in STEM									
	2008-09	2009-10	2010-11						
	cohort	cohort	cohort						
Number of first-year STEM-interested students who graduated in STEM within five years	299	350	361						
Percentage of first-year STEM-interested students who graduated in STEM within five years	23.96%	26.06%	24.57%						

Table 9. Six-year STEM Graduation for First-Year Students Interested in STEM								
	2008-09	2009-10						
	cohort	cohort						
Number of first-year STEM-interested students who graduated in STEM within six years	375	429						
Percentage of first-year STEM-interested students who graduated in STEM within six years	30.05%	31.94%						

## Part One, Section Three: RETENTION OF STEM STUDENTS

Table 10.	Table 10. Second Year Retention of First-Year Students Interested in STEM <sup>1</sup>							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
Number of first-year								
STEM students who								
returned to UNM	1016	1055	1114	1167	1294	1362	1342	
for their second								
year								
Percentage of first-								
year STEM students								
who returned to	81.41%	78.56%	75.83%	77.03%	79.73%	79.00%	80.17%	
UNM for their								
second year								

Table 11. Third Year Retention of First-Year Students Interested in STEM <sup>1</sup>							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	
Number of first-year STEM students who returned to UNM for their third year	869	916	934	1001	1121	1154	
Percentage of first-year STEM students who returned to UNM for their third year	69.63%	68.21%	63.58%	66.07%	69.07%	66.94%	

Table 12. Fourth Year Retention of First-Year Students Interested in STEM <sup>1</sup>							
2008-09 2009-10 2010-11 2011-12 2012-13							
Number of first-year STEM students who returned to UNM for their fourth year	803	817	854	914	961		
Percentage of first-year STEM students who returned to UNM for their fourth year	64.34%	60.83%	58.13%	60.33%	59.21%		

<sup>1</sup>Retention is defined as students enrolling in credit-bearing courses in the fall of the cohort academic year, and also enrolled in credit-bearing courses in the fall of the subsequent academic year. Retention does not include STEM persistence. For instance, a first-year STEM student who returns the second year as a History major counts as being retained. STEM degree persistence is measured in Section Four.

Tab	le 13. Fu	ıll-time L	Jndergra	duate ST	EM Stud	ent Retu	rn or Gra	duate R	ate <sup>1</sup>	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
	2010	2011	2011	2012	2012	2013	2013	2014	2014	2015
Number of full-time STEM undergraduate students at UNM	6940	6588	7235	6778	7430	7094	7771	7162	7728	6959
Number who graduated before next full semester	306	665	314	719	333	720	359	835	317	795
Number who returned for the next full semester	5562	4727	5838	4858	6060	5133	6309	5035	6285	4999
Total number of returners & graduators	5868	5392	6152	5577	6393	5853	6668	5870	6602	5794
Percentage of students who returned or graduated	84.6%	81.8%	85.0%	82.3%	86.0%	82.5%	85.8%	82.0%	85.4%	83.3%

<sup>1</sup>This benchmarking measure is designed to compare cohorts of students of various academic standings (for instance, a cohort that includes first-year students, sophomores, juniors and seniors). To measure the impact of a UNM intervention upon such a cohort, traditional retention measures may not be adequate. For instance, suppose a group of sophomores, juniors and seniors participate together in an undergraduate research project. In measuring the impact of this experience on student persistence, it would be meaningless to look at second-year retention rates, since all of these students are already passed their second years. Similarly, measuring third-year retention rates is inadequate, since some of the students have already passed this point as well. The Return or Graduate rate assumes that it is in the best interest of students to continue their educational careers through graduation. So if the students return the next semester, or if they graduate, then they are making successful progress.

Return or graduate rates are not exclusive to first-time students. They include all undergraduate enrolled students who are interested in STEM. Likewise, return or graduate does not include STEM degree persistence. STEM degree persistence is measured in Section Four.

## Part One, Section Four: STEM DEGREE PERSISTENCE

Table 14. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM,  before 2 <sup>nd</sup> year								
	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort	
Number of first-year students interested in STEM	1248	1343	1469	1515	1623	1724	1674	
	В	EFORE BEGI	NNING OF S	SECOND YEA	۸R			
Number who drop out of UNM before their second year	232	288	355	348	329	362	332	
Percentage who drop out of UNM before their second year	18.59%	21.44%	24.17%	22.97%	20.27%	21.00%	19.83%	
Number who stayed at UNM, but changed majors out of STEM before their second year	125	143	155	137	144	159	172	
Percentage who stayed at UNM, but changed majors out of STEM before their second year	10.02%	10.65%	10.55%	9.04%	8.87%	9.22%	10.27%	
Total Number who dropped or changed major out of STEM before second year	357	431	510	485	473	521	504	
Percentage who dropped or changed majors out of stem before second year	28.61%	32.09%	34.72%	32.01%	29.14%	30.22%	30.11%	

Table 15. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM,  before 3 <sup>rd</sup> year								
	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort	
Number of first-year students interested in STEM	1248	1343	1469	1515	1623	1724	1674	
	1	BEFORE BEG	INNING OF	THIRD YEAR	₹			
Number who drop out of UNM before their third year	379	427	535	514	502	570	NA	
Percentage who drop out of UNM before their third year	30.37%	31.79%	36.42%	33.93%	30.93%	33.06%	NA	
Number who stayed at UNM, but changed majors out of STEM before their third year	306	306	334	298	315	349	NA	
Percentage who stayed at UNM, but changed majors out of STEM before their third year	24.52%	22.78%	22.74%	19.67%	19.41%	20.24%	NA	
Total Number who dropped or changed major out of STEM before third year	685	733	869	812	817	919	NA	
Percentage who dropped or changed majors out of stem before third year	54.89%	54.58%	59.16%	53.60%	50.34%	53.31%	NA	

Table 16. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM,  before 4 <sup>th</sup> year								
	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort	
Number of first-year students interested in STEM	1248	1343	1469	1515	1623	1724	1674	
	В	EFORE BEGI	NNING OF F	OURTH YEA	۸R			
Number who drop out of UNM before their fourth year	445	526	615	601	662	NA	NA	
Percentage who drop out of UNM before their fourth year	35.66%	39.17%	41.87%	39.67%	40.79%	NA	NA	
Number who stayed at UNM, but changed majors out of STEM before their fourth year	400	374	409	389	403	NA	NA	
Percentage who stayed at UNM, but changed majors out of STEM before their fourth year	32.05%	27.85%	27.84%	25.68%	24.83%	NA	NA	
Total Number who dropped or changed major out of STEM before fourth year	845	900	1024	990	1065	NA	NA	
Percentage who dropped or changed majors out of stem before fourth year	67.71%	67.01%	69.71%	65.35%	65.62%	NA	NA	

## PART TWO: UNDERGRADUATE STUDENTS WHO IDENTIFY AS HISPANIC AND/OR LOW INCOME

## Part Two, Section One: INTEREST IN STEM

Table 17.	Table 17. First-Year STEM-Interested Students, Hispanic and/or Low-Income								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
Number of first-year Hispanic and/or low- income students	1816	2061	2375	2238	2232	2384	2105		
Number of first-year Hispanic and/or low- income students interested in STEM	727	798	964	1000	1052	1177	1114		
Percentage of Hispanic and/or low- income first-year students interested in STEM	40.03%	38.72%	40.59%	44.68%	47.13%	49.37%	52.92%		

Table 18. Total Undergraduate Interest in STEM: All Hispanic and/or Low-Income Undergraduate STEM-Interested Students (not restricted to first-year students)								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
Number of ALL full- time Hispanic and low-income students, not just those interested in STEM	9242	10477	11654	12085	12265	12538	12155	
Number of STEM- interested full-time Hispanic and low- income students	4247	4830	5416	5718	5978	6212	6039	
Percentage of all full-time Hispanic and low-income students who are interested in STEM	45.95%	46.10%	46.47%	47.31%	48.74%	49.55%	49.68%	
Number of ALL part- time and full-time Hispanic and low- income students, not just those interested in STEM	11755	13282	14886	15530	15852	15972	15462	
Number of STEM- interested part-time and full-time Hispanic and low- income students	5489	6213	7022	7358	7703	7957	7738	
Percentage of all part-time and full- time Hispanic and low-income students who are interested in STEM	46.70%	46.78%	47.17%	47.38%	48.59%	49.82%	50.05%	

## Part Two, Section Two: GRADUATION IN STEM

Table 19. Four-year STE	Table 19. Four-year STEM Graduation for First-Year Students Interested in STEM,								
Hispanic and/or Low-Income Students									
	2008-09	2009-10	2010-11	2011-12					
	cohort	cohort	cohort	cohort					
Number of first-year STEM- interested Hispanic and low- income students who graduated in STEM within four years	68	72	90	112					
Percentage of first-year STEM- interested Hispanic and low- income students who graduated in STEM within four years	9.35%	9.02%	9.34%	11.20%					

Table 20. Five-year STEM Graduation for First-Year Students Interested in STEM, Hispanic and/or Low-Income Students								
2008-09 2009-10 2010-1								
	cohort	cohort	cohort					
Number of first-year STEM-interested Hispanic and low-income students who graduated in STEM within five years	151	169	183					
Percentage of first-year STEM-interested Hispanic and low-income students who graduated in STEM within five years	20.77%	21.18%	18.98%					

Table 21. Six-year STEM Graduation for First-Year Students Interested in STEM, Hispanic and/or Low-Income Students						
	2008-09	2009-10				
	cohort	cohort				
Number of first-year STEM-interested Hispanic and low-income students who graduated in STEM within six years	194	224				
Percentage of first-year STEM-interested Hispanic and low-income students who graduated in STEM within six years	26.69%	28.07%				

## Part Two, Section Three: RETENTION OF STEM STUDENTS

Table 22. Second Year Retention of First-Year Students Interested in STEM,									
Hispanic and/or Low-Income Students									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15		
Number of first-year									
STEM-interested	584								
Hispanic and low-		622	622 700 750 026	826	914	884			
income students		022	708	750	020	914	004		
who returned for									
their second year									
Percentage of first-									
year STEM-									
interested Hispanic									
and low-income	80.33%	77.94%	73.44%	75.00%	78.52%	77.66%	79.35%		
students who									
returned for their									
second year									

Table 23. Third Year Retention of First-Year Students Interested in STEM,								
Hispanic and/or Low-Income Students								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
Number of first-year STEM- interested Hispanic and low- income students who returned for their third year	486	533	582	628	697	771		
Percentage of first-year STEM- interested Hispanic and low- income students who returned for their third year	66.85%	66.79%	60.37%	62.80%	66.25%	65.51%		

Table 24. Fourth Year Retention of First-Year Students Interested in STEM,								
Hispanic and/or Low-Income Students								
2008-09 2009-10 2010-11 2011-12 2012-13								
Number of first-year STEM-interested Hispanic and low-income students who returned for their fourth year	447	462	527	577	585			
Percentage of first-year STEM-interested Hispanic and low-income students who returned for their fourth year	61.49%	57.89%	54.67%	57.70%	55.61%			

## Part Two, Section Four: STEM DEGREE PERSISTENCE

Table 25. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 2 <sup>nd</sup> year, Hispanic and/or Low Income Students							
	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort
Number of first-year Hispanic and low- income students interested in STEM	727	798	964	1000	1052	1177	1114
	В	EFORE BEGI	NNING OF S	SECOND YEA	۸R		
Number who drop out of UNM before second year	143	176	256	250	226	263	230
Percentage who drop out of UNM before second year	19.67%	22.06%	26.56%	25.00%	21.48%	22.34%	20.65%
Number who stayed at UNM, but changed majors out of STEM before second year	70	81	110	90	98	110	124
Percentage who stayed at UNM, but changed majors out of STEM before second year	9.63%	10.15%	11.41%	9.00%	9.32%	9.35%	11.13%
Total number who dropped or changed major before second year	213	257	366	340	324	373	354
Percent who dropped or changed major before second year	29.30%	32.21%	37.97%	34.00%	30.80%	31.69%	31.78%

Table 26. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 3 <sup>rd</sup> year, Hispanic and/or Low Income Students							
	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort
Number of first-year Hispanic and low- income students interested in STEM	727	798	964	1000	1052	1177	1114
		BEFORE BEG	INNING OF	THIRD YEAR	?		
Number who drop out of UNM before third year	241	265	382	372	355	406	NA
Percentage who drop out of UNM before third year	33.15%	33.21%	39.63%	37.20%	33.75%	34.49%	NA
Number who stayed at UNM, but changed majors out of STEM before third year	173	175	226	199	215	245	NA
Percentage who stayed at UNM, but changed majors out of STEM before third year	23.80%	21.93%	23.44%	19.90%	20.44%	20.82%	NA
Total number who dropped or changed major before third year	414	440	608	571	570	651	NA
Percent who dropped or changed major before third year	56.95%	55.14%	63.07%	57.10%	54.18%	55.31%	NA

Table 27. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 4 <sup>th</sup> year, Hispanic and/or Low Income Students							
	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort
Number of first-year Hispanic and low- income students interested in STEM	727	798	964	1000	1052	1177	1114
	В	EFORE BEGI	NNING OF F	OURTH YEA	۱R		
Number who drop out of UNM before fourth year	280	336	437	423	467	NA	NA
Percentage who drop out of UNM before fourth year	38.51%	42.11%	45.33%	42.30%	44.39%	NA	NA
Number who stayed at UNM, but changed majors out of STEM before fourth year	222	209	271	250	272	NA	NA
Percentage who stayed at UNM, but changed majors out of STEM before fourth year	30.54%	26.19%	28.11%	25.00%	25.86%	NA	NA
Total number who dropped or changed major before fourth year	502	545	708	673	739	NA	NA
Percent who dropped or changed major before fourth year	69.05%	68.30%	73.44%	67.30%	70.25%	NA	NA

#### **PART THREE:**

## UNDERGRADUATE STUDENTS WHO DO NOT IDENTIFY AS HISPANIC AND/OR LOW INCOME

## Part Three, Section One: INTEREST IN STEM

Table 28. Fi	Table 28. First-Year STEM-Interested Students, NOT Hispanic and/or Low-Income							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
Number of first-year								
students who are	1411	1348	1210	1102	1192	1133	1027	
NOT Hispanic or	1411	1340	1210	1102	1192	1133	1027	
low-income								
Number of first-year								
students interested								
in STEM who are	521	545	505	515	571	547	560	
NOT Hispanic or								
low-income								
Percentage of first-								
year students								
interested in STEM	36.92%	40.43%	41.74%	46.73%	47.90%	48.28%	54.53%	
who are NOT	30.92/0	40.4370	41.74/0	40.73/0	47.30/0	40.20/0	34.3370	
Hispanic or low-								
income								

Table 29. Total Undergraduate Interest in STEM: Undergraduate STEM-Interested Students who are NOT Hispanic and/or Low-Income (not restricted to first-year students)							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Number of ALL full- time students who are NOT Hispanic or low-income, not just those interested in STEM	6757	6636	6285	5955	5780	5591	5454
Number of STEM- interested full-time students who are NOT Hispanic or low-income	3085	3038	2923	2820	2862	2813	2800
Percentage of all full-time students who are interested in STEM, and who are NOT Hispanic or low-income	45.66%	45.78%	46.51%	47.36%	49.52%	50.31%	51.34%
Number of ALL part- time and full-time students who are NOT Hispanic or low-income, not just those interested in STEM	8535	8295	7903	7531	7273	7052	6845
Number of STEM- interested part-time and full-time students who are NOT Hispanic or low-income	4023	3881	3757	3617	3639	3580	3530
Percentage of all part-time and full- time students who are interested in STEM, and who are NOT Hispanic or low-income	47.14%	46.79%	47.54%	48.03%	50.03%	50.77%	51.57%

## Part Three, Section Two: GRADUATION IN STEM

Table 30. Four-year STE	Table 30. Four-year STEM Graduation for First-Year Students Interested in STEM,								
Students are NOT Hispanic and/or Low Income									
	2008-09	2009-10	2010-11	2011-12					
	cohort	cohort	cohort	cohort					
Number of first-year STEM-									
interested students who are									
NOT Hispanic or low-income,	62	82	102	97					
and who graduated in STEM									
within four years									
Percentage of first-year STEM-									
interested students who are									
NOT Hispanic or low-income,	11.90%	15.05%	20.20%	18.83%					
and who graduated in STEM									
within four years									

Table 31. Five-year STEM Graduation for First-Year Students Interested in STEM,							
Students are NOT Hispanic and/or Low Income							
2008-09 2009-10 2010-11							
	cohort	cohort	cohort				
Number of first-year STEM-interested students							
who are NOT Hispanic or low-income, and who	144	176	171				
graduated in STEM within five years							
Percentage of first-year STEM-interested							
students who are NOT Hispanic or low-income,	27.64%	32.29%	33.86%				
and who graduated in STEM within five years							

Table 32. Six-year STEM Graduation for First-Year Students Interested in STEM,							
Students are NOT Hispanic and/or Low Income							
2008-09 2009-10							
	cohort	cohort					
Number of first-year STEM-interested students who are NOT							
Hispanic or low-income, and who graduated in STEM within six	175	199					
years							
Percentage of first-year STEM-interested students who are NOT							
Hispanic or low-income, and who graduated in STEM within six	33.59%	36.51%					
years							

## Part Three, Section Three: RETENTION OF STEM STUDENTS

Table 33. Second Year Retention of First-Year Students Interested in STEM,								
Students who are NOT Hispanic and/or Low-Income								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
Number of first-year								
STEM-interested								
students who are								
NOT Hispanic or	432	433	406	417	468	448	458	
low-income, and								
who returned for								
their second year								
Percentage of first-								
year STEM-								
interested students								
who are NOT	82.92%	79.45%	80.40%	80.97%	81.96%	81.90%	81.79%	
Hispanic or low-	82.92%	73.4370	00.4070	00.5770	01.5070	01.5070	81.7570	
income, and who								
returned for their								
second year								

Table 34. Third Year Retention of First-Year Students Interested in STEM,								
Students who are NOT Hispanic and/or Low-Income								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14		
Number of first-year STEM- interested students who are NOT Hispanic or low-income, and who returned for their third year	383	383	352	373	424	383		
Percentage of first-year STEM- interested students who are NOT Hispanic or low-income, and who returned for their third year	73.51%	70.28%	69.70%	72.43%	74.26%	70.02%		

Table 35. Fourth Year Retention of First-Year Students Interested in STEM, Students who are NOT Hispanic and/or Low-Income							
2008-09 2009-10 2010-11 2011-12 2012-13							
Number of first-year STEM-interested students who are NOT Hispanic or low-income, and who returned for their fourth year	356	355	327	337	376		
Percentage of first-year STEM-interested students who are NOT Hispanic or low-income, and who returned for their fourth year	68.33%	65.14%	64.75%	65.44%	65.85%		

## Part Three, Section Four: STEM DEGREE PERSISTENCE

	Table 36. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 2 <sup>nd</sup> year, Students who are NOT Hispanic and/or Low-Income							
belof	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	
	cohort	cohort	cohort	cohort	cohort	cohort	cohort	
Number of first-year students interested in STEM who are NOT Hispanic or low-income	521	545	505	515	571	547	560	
	В	EFORE BEGI	NNING OF S	ECOND YEA	·R			
Number who drop out of UNM before second year	89	112	99	98	103	99	102	
Percentage who drop out of UNM before second year	17.08%	20.55%	19.60%	19.03%	18.04%	18.10%	18.21%	
Number who stayed at UNM, but changed majors out of STEM before second year	55	62	45	47	46	49	48	
Percentage who stayed at UNM, but changed majors out of STEM before second year	10.56%	11.38%	8.91%	9.13%	8.06%	8.96%	8.57%	
Total number who dropped or changed major before second year	144	174	144	145	149	148	150	
Percent who dropped or changed major before second year	27.64%	31.93%	28.51%	28.16%	26.09%	27.06%	26.79%	

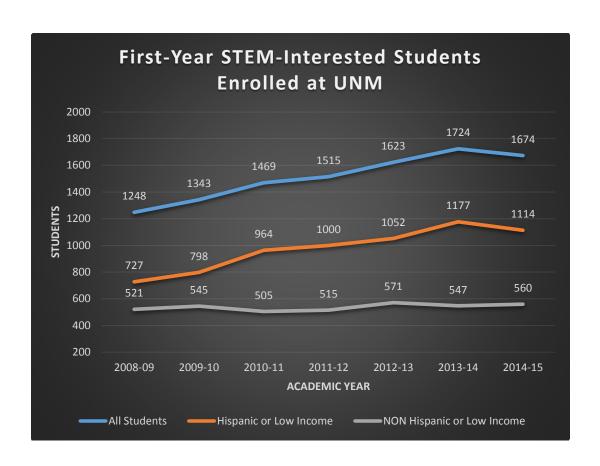
Table 37. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 3 <sup>rd</sup> year, Students who are NOT Hispanic and/or Low-Income							
30101	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort
Number of first-year students interested in STEM who are NOT Hispanic or low-income	521	545	505	515	571	547	560
	-	BEFORE BEG	INNING OF	THIRD YEAR	₹		
Number who drop out of UNM before third year	138	162	153	142	147	164	NA
Percentage who drop out of UNM before third year	26.49%	29.72%	30.30%	27.57%	25.74%	29.98%	NA
Number who stayed at UNM, but changed majors out of STEM before third year	132	131	108	99	100	102	NA
Percentage who stayed at UNM, but changed majors out of STEM before third year	25.34%	24.04%	21.39%	19.22%	17.51%	18.65%	NA
Total number who dropped or changed major before third year	270	293	261	241	247	266	NA
Percent who dropped or changed major before third year	51.82%	53.76%	51.68%	46.80%	43.26%	48.63%	NA

Table 38. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM,							
before 4 <sup>th</sup> year, Students who are NOT Hispanic and/or Low-Income  2008-09   2009-10   2010-11   2011-12   2012-13   2013-14   2014-15					2014-15		
	cohort	cohort	cohort	cohort	cohort	cohort	cohort
Number of first-year students interested in STEM who are NOT Hispanic or low-income	521	545	505	515	571	547	560
	В	EFORE BEGI	NNING OF F	OURTH YEA	R	•	
Number who drop out of UNM before fourth year	165	190	178	178	195	NA	NA
Percentage who drop out of UNM before fourth year	31.67%	34.86%	35.25%	34.56%	34.15%	NA	NA
Number who stayed at UNM, but changed majors out of STEM before fourth year	172	160	134	138	130	NA	NA
Percentage who stayed at UNM, but changed majors out of STEM before fourth year	33.01%	29.36%	26.53%	26.80%	22.77%	NA	NA
Total number who dropped or changed major before fourth year	337	350	312	316	325	NA	NA
Percent who dropped or changed major before fourth year	64.68%	64.22%	61.78%	61.36%	56.92%	NA	NA

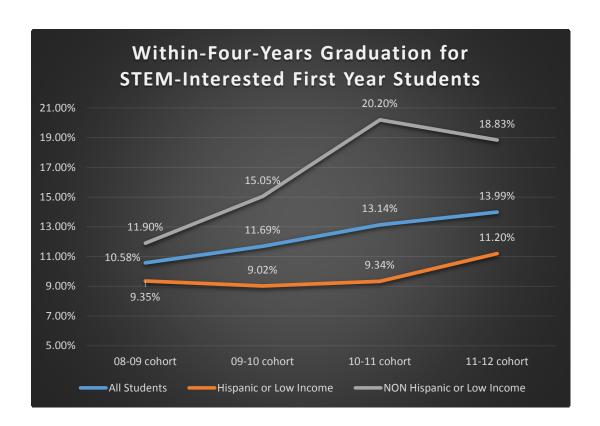
## PART FOUR: Achievement Gap Charts

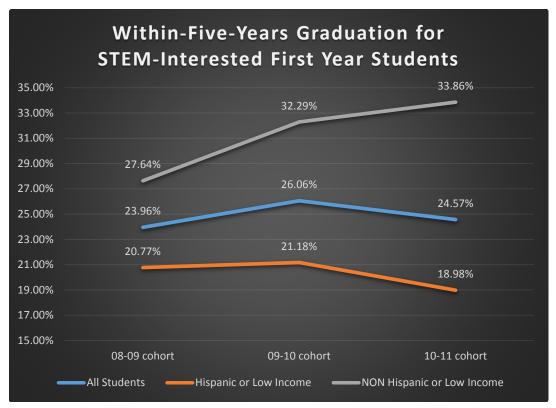
The following charts were created using data from the charts in Parts One, Two and Three. They illustrate selected longitudinal trends related to gaps in achievement between the three cohorts of students.

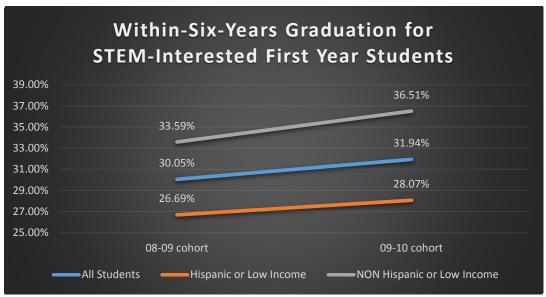
## Part Four, Section One: INTEREST IN STEM



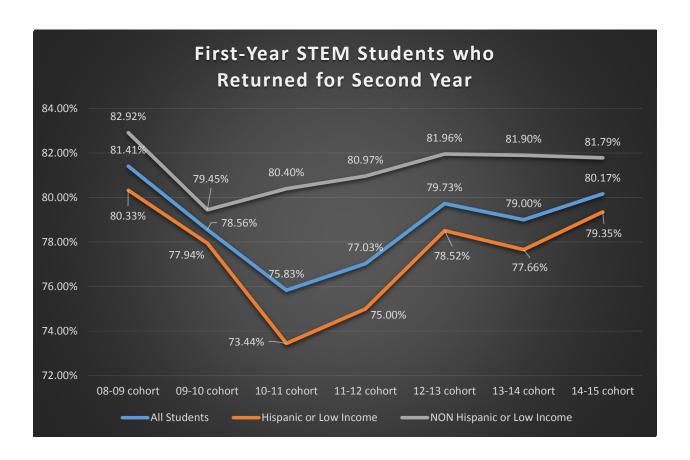
### Part Four, Section Two: GRADUATION IN STEM

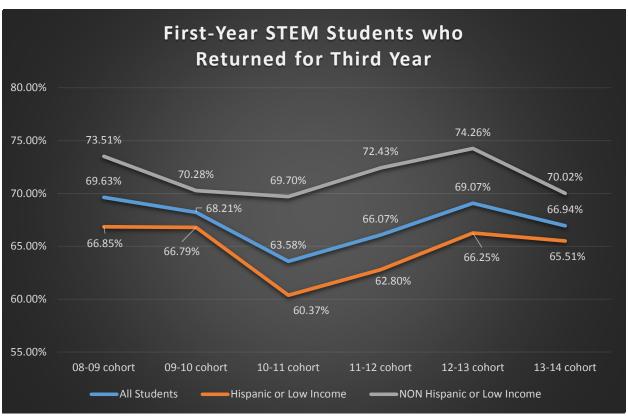


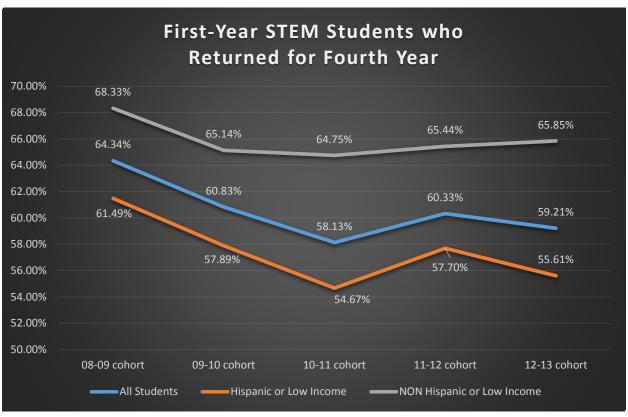




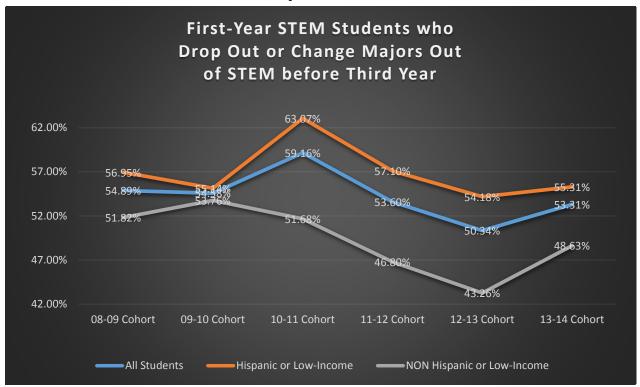
### Part Four, Section Three: RETENTION OF STEM STUDENTS







## Part Four, Section Four: STEM DEGREE PERSISTENCE\



## APPENDIX A: STEM Degree Majors

Major Description	Major Code
Anthropology	005
Anthropology	ANTH
Architecture	006
Architecture	ARCH
Biochemistry	249
Biochemistry	BIOC
Biology	012
Biology	BIOL
Chemical Engineering	015
Chemical Engineering	CHE
Chemistry	016
Chemistry	CHEM
Civil Engineering	017
Civil Engineering	CE
Computer Engineering	171
Computer Engineering	CPE
Computer Science	109
Computer Science	168
Computer Science	ACS
Computer Science	CS
Construction Engineering	262
Construction Engineering	CONE
Construction Management	263
Construction Management	474
Construction Management	CMGT
Construction Management	CONM
Dental Hygiene	022
Dental Hygiene	023
Dental Hygiene	DEHY
Dental Hygiene	DHYG
Earth & Planetary Sciences	340
Earth & Planetary Sciences	EPS
Economics	027
Economics	ECON
Electrical Engineering	173
Electrical Engineering	EE
Emergency Medical Services	379
Emergency Medical Services	EMS
Environmental Science	438
Environmental Science	ENSC
General Engineering	371
General Engineering	GENG
Geography	046

Geography	GEOG
Health, Medicine & Human Values	481
Health, Medicine & Human Values	HMHV
Integrative Studies	INGV
Management Info Systems (Con)	110
Mathematics	064
Mathematics	MATH
Mechanical Engineering	065
Mechanical Engineering	ME
Medical Laboratory Sciences	353
Medical Laboratory Sciences	MEDL
Nuclear Engineering	076
Nuclear Engineering	NE
Nursing	077
Nursing	456
Nursing	NUR
Nursing	NURS
Nutrition/Dietetics	024
Nutrition/Dietetics	NDIT
Physics	081
Physics	PHYC
Physics & Astrophysics	405
Physics & Astrophysics	PAP
Psychology	084
Psychology	PSY
Radiologic Sciences	407
Radiologic Sciences	RADS
Sociology	094
Sociology	SOC
Speech & Hearing Sciences	392
Speech & Hearing Sciences	SHS
Statistics	416
Statistics	STAT
Technology & Training	305
Technology & Training	TTR