

**Ready For College 2007:
A Report On New Mexico High School
Graduates Who Take Remedial Classes In
New Mexico Colleges And Universities**

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Overview

- New Mexico's Efforts To Ensure That Students Graduate From High School Ready For College
- Summary Of Results
- The 2007 Study
- The Results
 - Remediation
 - Ninth-Grade Pipeline
 - NM Standards-Based Assessment and Readiness For College
- Conclusions
- Appendices
 - Baseline & Trend Data For New Mexico's Public High Schools

Summary Of Results

- In the fall semester of 2006, slightly less than half (49.3%) of New Mexico public high school graduates took college remedial courses in numeracy and/or literacy. This is a slight decrease in the percentages of high school graduates who took remedial courses in the previous four years.
- Trend analyses for the seven years of data included in this study reveal that:
 - The percent of Native American students who take remedial courses has increased from 67% in 2000 to 71% in 2006.
 - The percent of Hispanic students who take remedial courses has increased from 55% in 2000 to 58% in 2006.
 - The percent of White students who take remedial courses has decreased from 36% in 2000 to 33% in 2006.
 - The percent of Black students who take remedial courses has increased from 53% in 2000 to 54% in 2006.
 - The percent of Asian students who take remedial courses has increased from 30% in 2000 to 43% in 2006.
- New Mexico's public high schools ranged from 85.8% to 17.9% in the average percentage of their graduates who needed remediation.

New Mexico Focuses on Remediation Rates & High School Readiness for College and Careers

2003 - Governor Richardson, the Legislature, and the citizens of New Mexico committed themselves to improving the entire education system from preschool to public school to higher education.

2006 – First annual *Ready for College* Report by the Office of Education Accountability, Higher Education Department and Public Education Department. Study of the number of New Mexico's high school graduates who needed remediation in reading or math when they entered college.

2006 Findings - 49% of high school graduates took one or more remedial courses when they enrolled in a New Mexico college or university. The data in the 2006 study reflect the fall semesters of 2000, 2001, 2002, 2003, and 2004.

2007 – Second annual *Ready for College* Report continues the focus on student readiness for college by examining the data from the fall semesters of 2005 and 2006. These data, along with those from 2000 to 2004 provide baseline based on 63,832 students from which to measure the state's efforts to ensure that students graduate from high school ready for college.

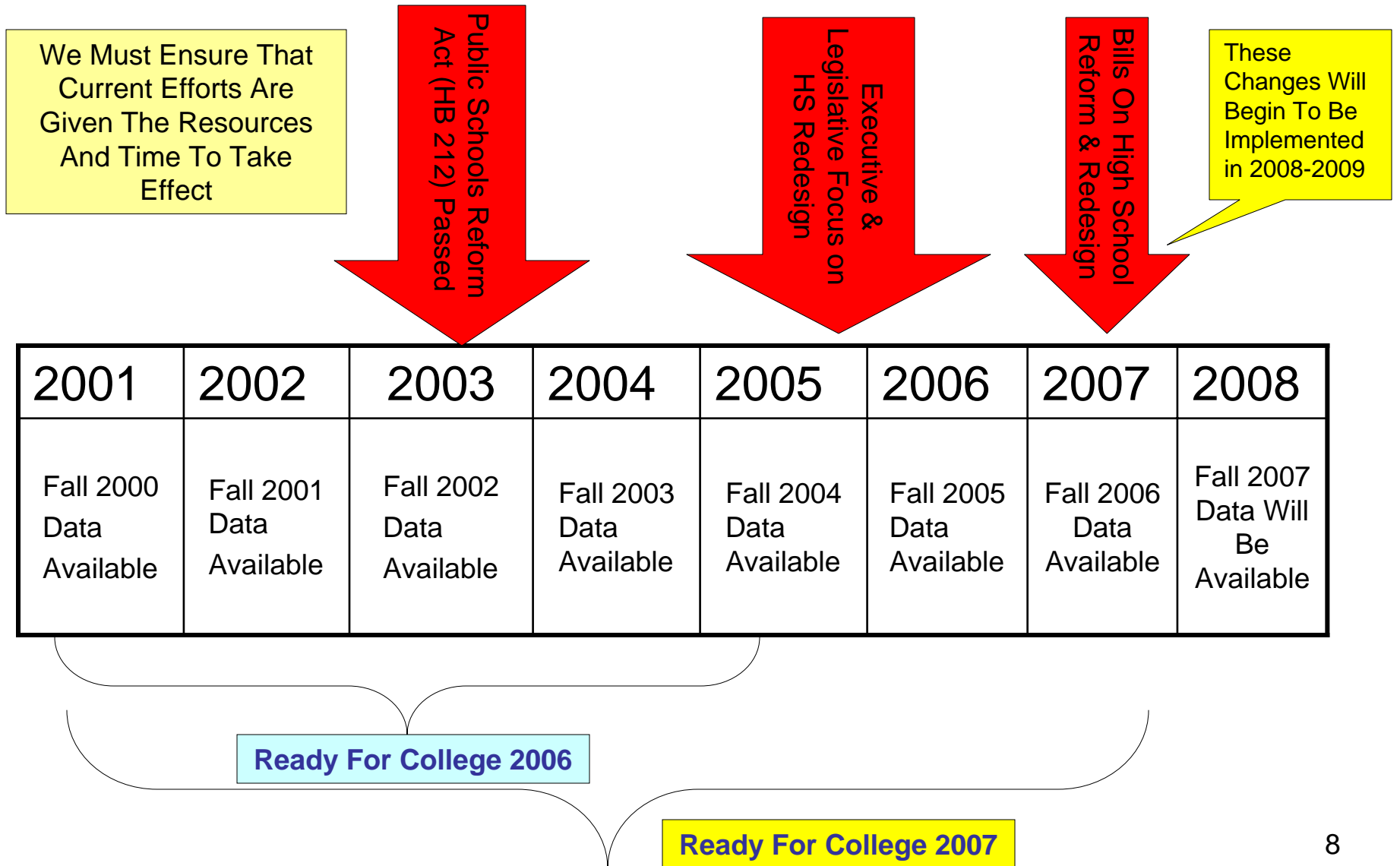
2006 and 2007 Alignment & High School Redesign Policy Initiatives

- Governor Richardson's High School Redesign Education Initiative
- LESC's Work Group on College-Workplace Readiness and High School Redesign
- HED & PED Alignment Taskforce to align high school competencies with college placement requirements
- Achieve, Inc., American Diploma Project
- HED, PED & CYFD Student Data Sharing Task Force (HM 42, 2006 NM Legislature)
- New Mexico Gaining Early Awareness And Readiness For Undergraduate Programs (GEAR UP)

2006 and 2007 Alignment & High School Redesign Policy Initiatives (continued)

- Achieving The Dream project at 6 NM community colleges
- Achieve, Inc. Alignment Institute
- The New Mexico Business Roundtable, Sandia National Labs, and the Public Education Department's Collaborative Effort To Redesign New Mexico's High Schools
- New Mexico First Town Hall "Today's Students, Tomorrow's Workforce: A Town Hall on Higher Education"
- Key Legislation Passed By The 2007 Legislature And Signed By The Governor:
 - High School Redesign (SB 561)
 - High School Reforms (SB 211)
 - Dual High School & Postsecondary Credits (SB 943)

The Data In These Studies Provide A Baseline Of Where We Have Been And Way Of Measuring The Effectiveness Of Future Efforts



The Data Set Includes Information From The Following Institutions of Higher Education

- Central New Mexico Community College
- Central New Mexico Community College – UNM Site
- Clovis Community College
- Eastern New Mexico University – Main Campus
- Eastern New Mexico University – Roswell
- Eastern New Mexico University – Ruidoso
- Luna Community College
- Mesalands Community College
- New Mexico Junior College
- New Mexico Institute of Mining and Technology
- New Mexico Highlands University
- New Mexico Military Institute
- New Mexico State University – Main Campus
- New Mexico State University – Alamogordo
- New Mexico State University – Carlsbad
- New Mexico State University – Doña Ana
- New Mexico State University – Grants
- Northern New Mexico College
- San Juan College
- Santa Fe Community College
- University of New Mexico – Main Campus
- University of New Mexico – Gallup
- University of New Mexico – Los Alamos
- University of New Mexico – Taos
- University of New Mexico – Valencia
- Western New Mexico University

The 2008 Data Set Will Include Information from New Mexico Tribal Colleges:

- Navajo Technical College (Crownpoint Institute of Technology)
- Diné College
- Institute of American Indian Arts
- Southwestern Indian Polytechnic Institute

Memoranda of Agreement (MOA's) to share student data were signed on February 15, 2007 between NMHED and each New Mexico tribal college.

Limitations Of The 2007 Study

- The study reports on approximately 45% of New Mexico high school graduates who attend New Mexico colleges and universities.
- This report does not provide information on what happens to college students who take remedial courses. The OEA, HED, and PED are planning to conduct these kinds of analyses.

The 2007 Study Continues To Focus On Key Questions Raised During The 2006 Study

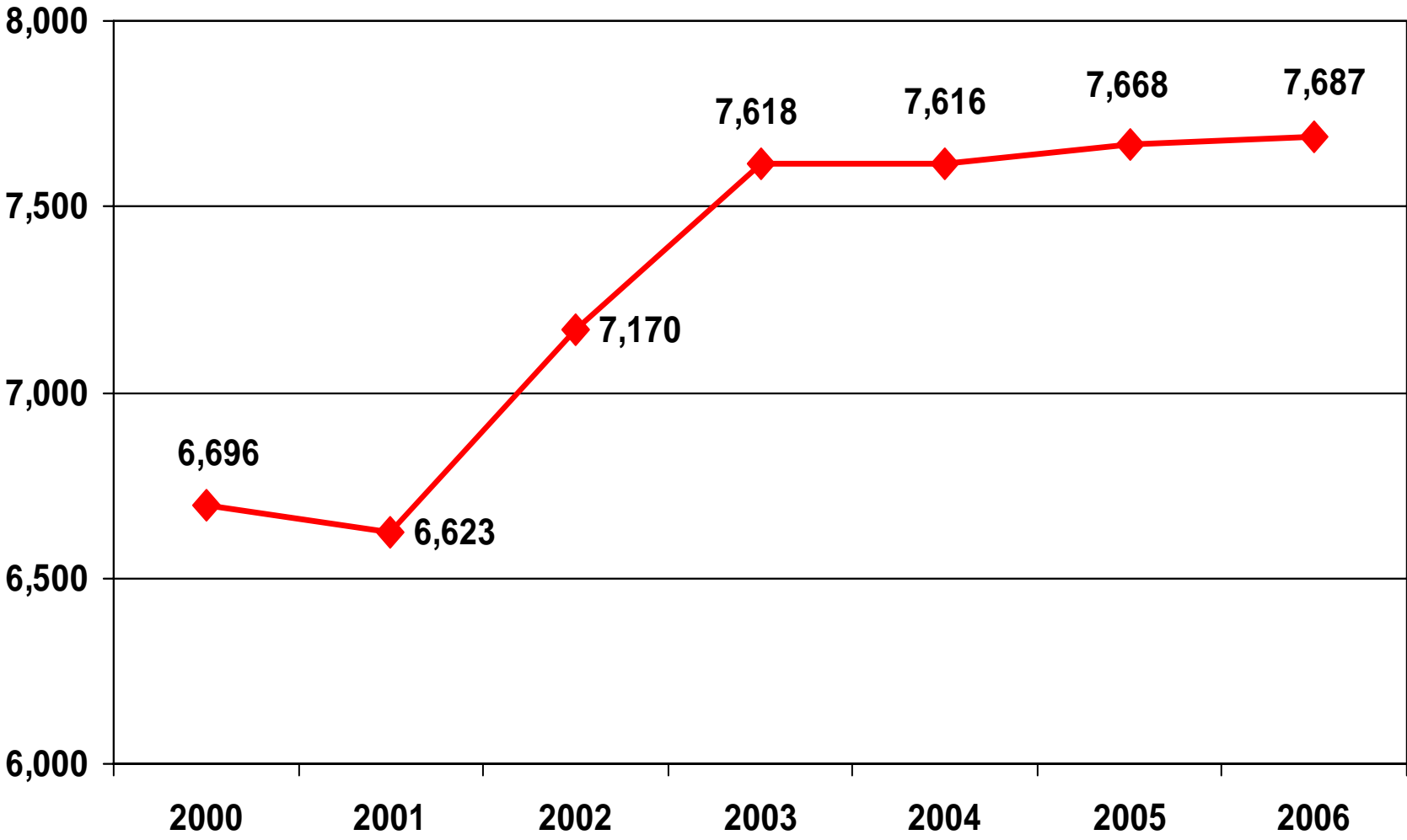
Questions Addressed In This Study

- How many students take remedial courses?
- What kinds of remedial courses do they take?
- What is the relationship between high school curriculum and the need for remedial course work?
- What are we learning about the placement tests that colleges use to place students in remedial classes?

Questions That Still Need To Be Addressed

- Are the high school courses aligned with New Mexico curriculum standards?
- What are the qualifications of high school teachers who teach these students?
- Can gaps in student learning be identified and addressed through corrective action in curriculum design and teacher training?
- How do colleges define remedial courses?
- What happens to college students who take remedial classes? Do they graduate at the same rate as other students? How long does it take them compared to other students?
- What do colleges need to do to improve the success of students in higher education?
- Will the number of college freshman taking remedial courses decline as HED and PED strengthen their alignment and new legislation and policies are implemented?

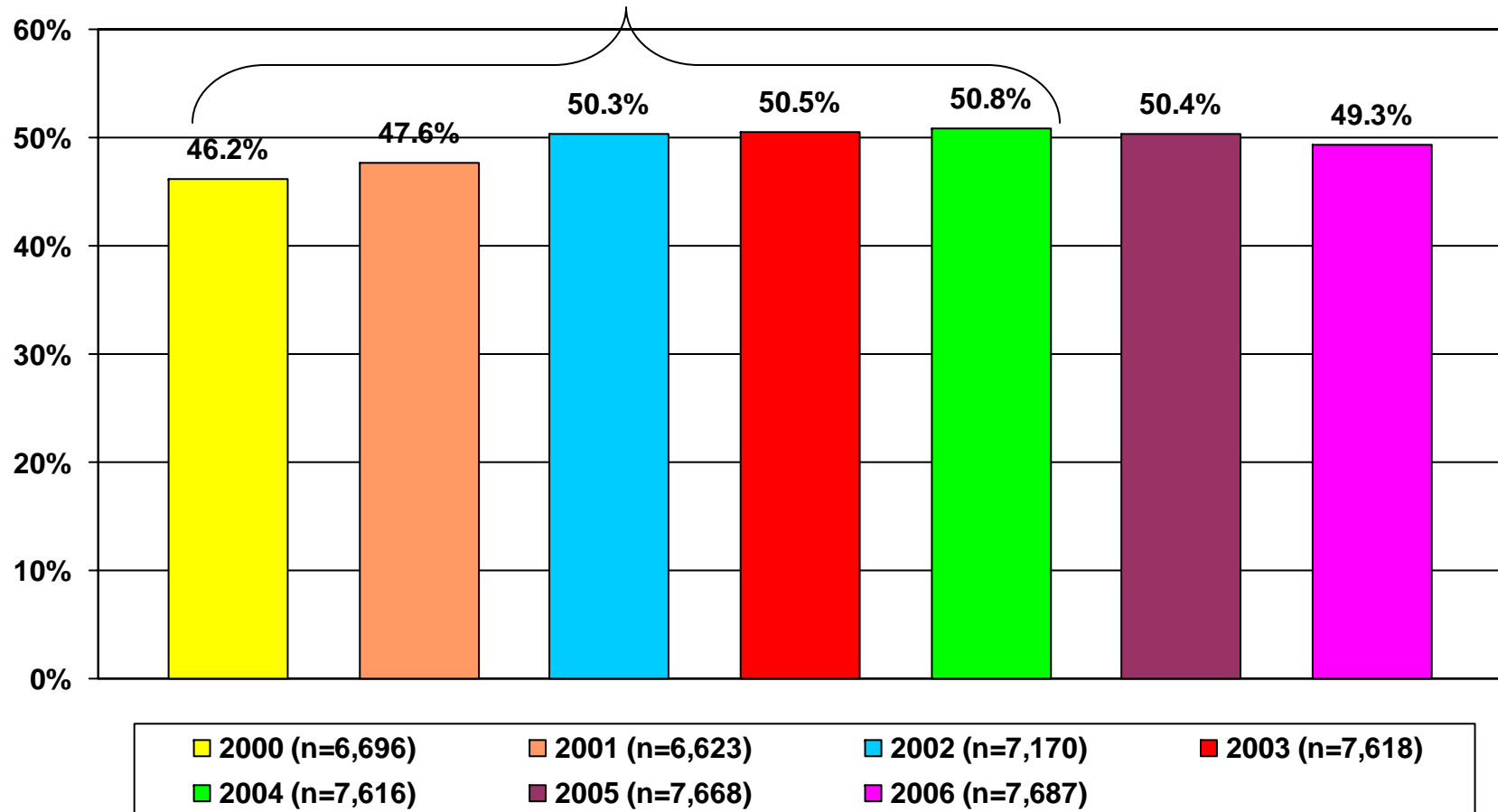
Numbers Of New Mexico Public High School Graduates Included In The Study: 2000 - 2006



Note: Data does not include charter schools or alternative schools

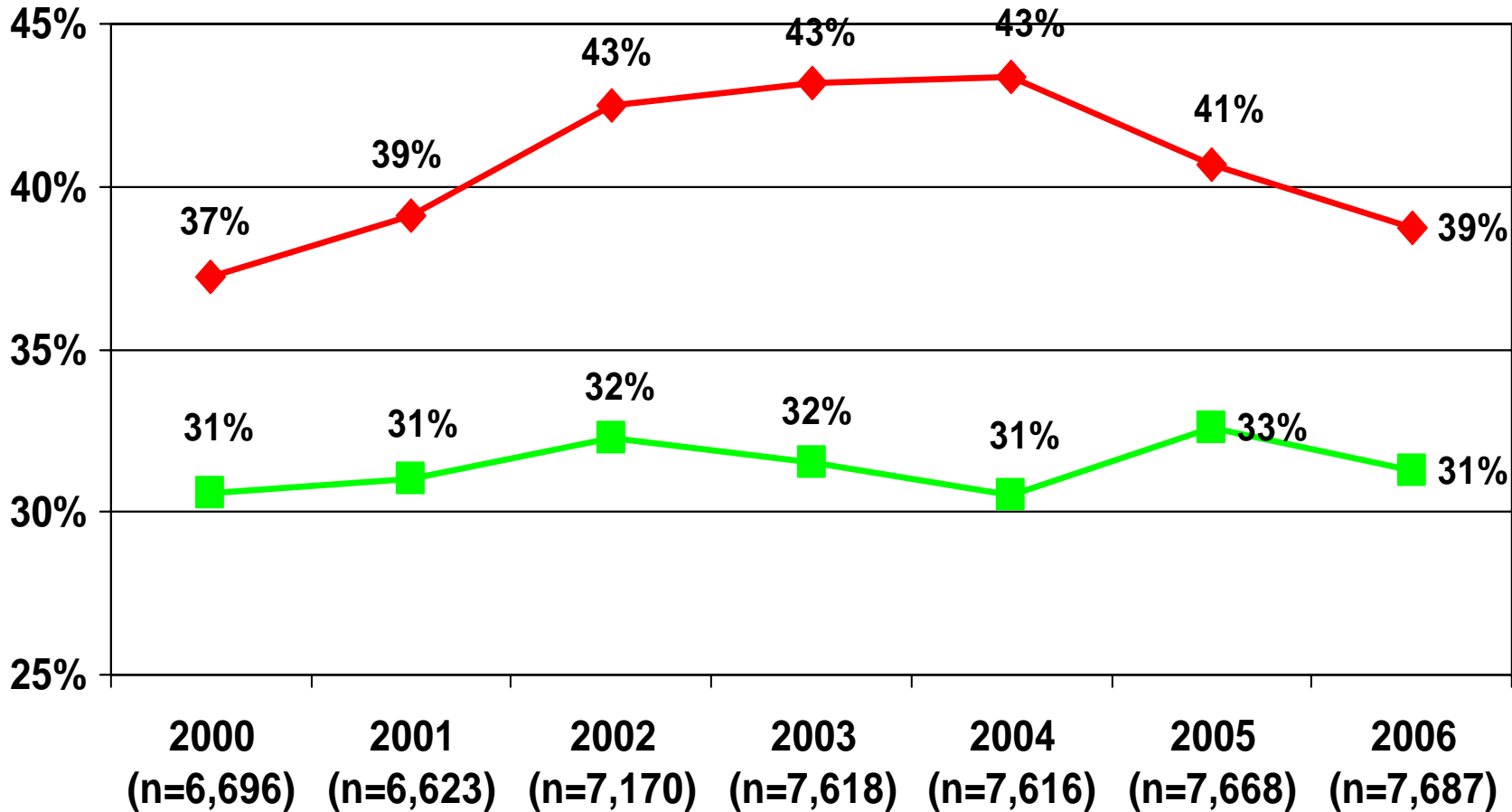
Percent of New Mexico Public High School Graduates Who Took Remedial Classes In Math And/OR Reading In New Mexico Colleges 2000-2006

5 YEAR AVERAGE 49%



Note: Data does not include charter schools or alternative schools

Percentages Of New Mexico Public High School Graduates Who Took Remedial Classes In Just Math OR In Just Reading 2000 - 2006



◆ Numeracy & Computation
 ■ Literacy & Communication

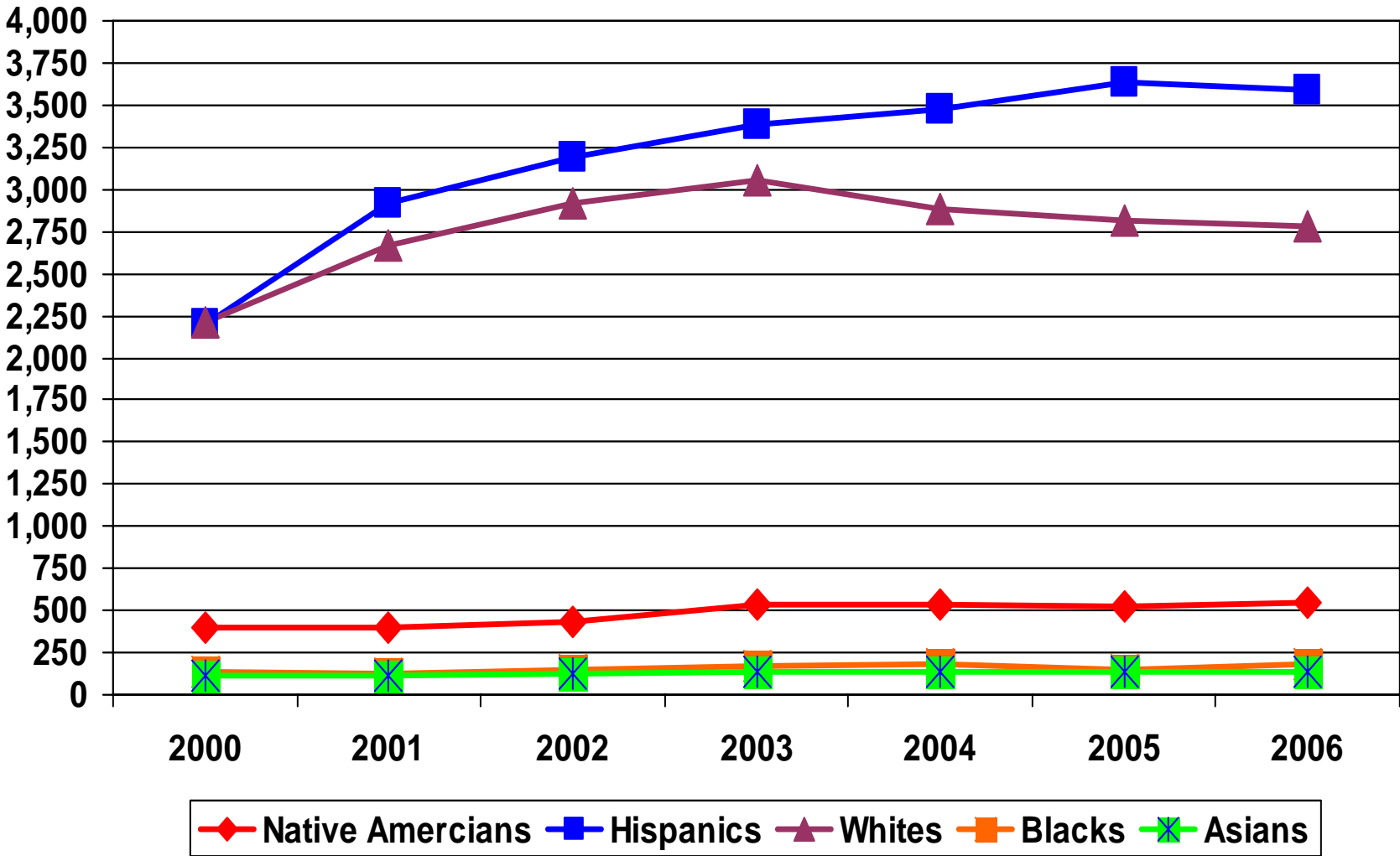
Note: Data does not include charter schools or alternative schools

**Percentages Of New Mexico Public High School Graduates
Who Took Remedial Classes By Ethnicity, 2000 – 2006**
(n=number of students included in study)

	2000	2001	2002	2003	2004	2005	2006
Native American	(n=394)	(n=395)	(n=438)	(n=539)	(n=540)	(n=526)	(n=544)
	67%	67%	67%	65%	67%	71%	71%
Hispanics	(n=2,197)	(n=2,928)	(n=3,201)	(n=3,397)	(n=3,488)	(n=3,640)	(n=3,589)
	55%	56%	60%	61%	60%	58%	58%
Whites	(n=2,206)	(n=2,670)	(n=2,923)	(n=3,061)	(n=2,897)	(n=2,820)	(n=2,785)
	36%	36%	36%	37%	38%	37%	33%
Blacks	(n=139)	(n=123)	(n=149)	(n=168)	(n=181)	(n=153)	(n=180)
	53%	49%	59%	59%	54%	58%	54%
Asians	(n=117)	(n=118)	(n=121)	(n=140)	(n=140)	(n=142)	(n=137)
	30%	33%	52%	34%	42%	37%	43%

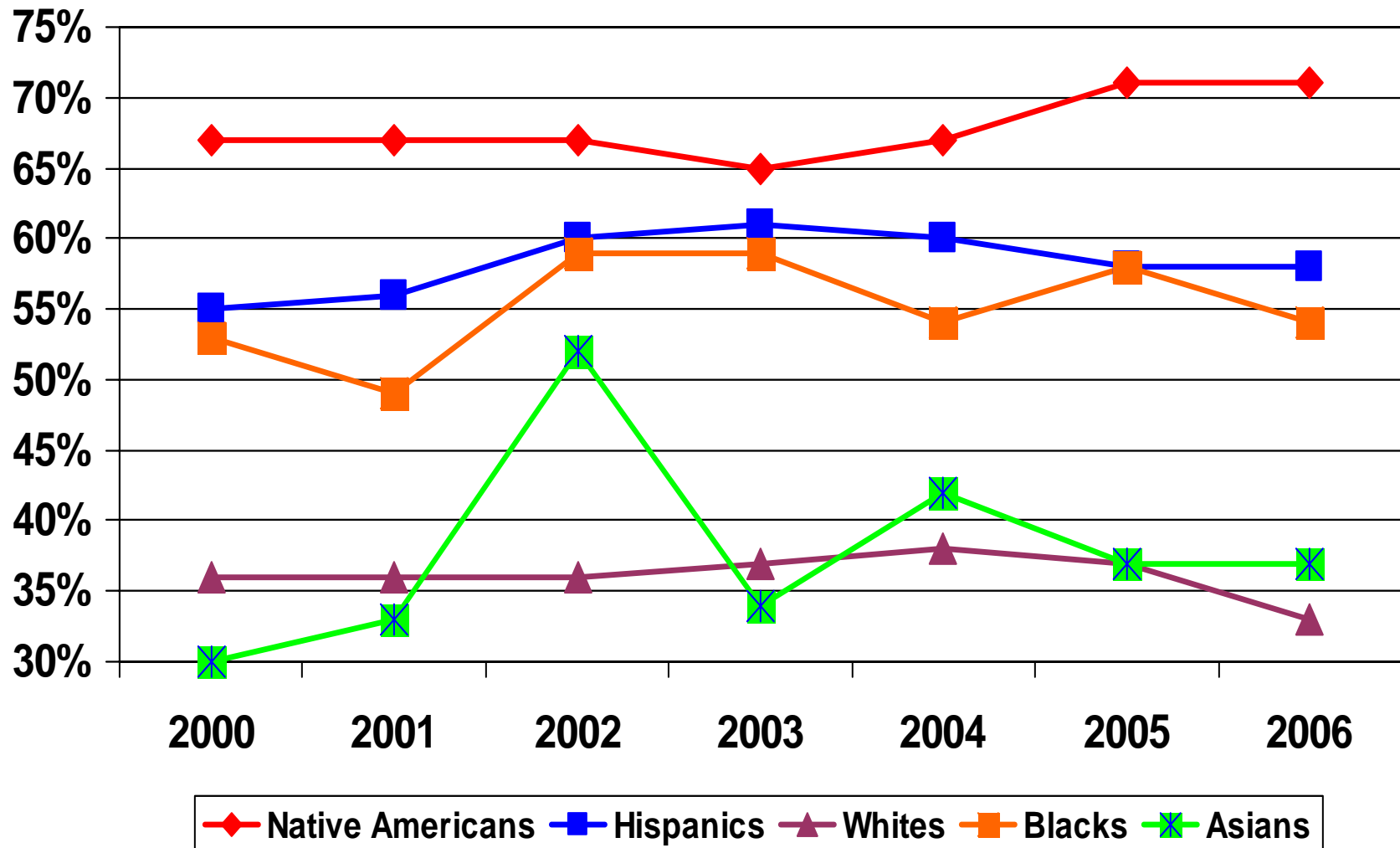
Note: Data does not include charter schools or alternative schools

Numbers Of New Mexico Public High School Graduates Included In The Study By Ethnicity, 2000 - 2006



Note: Data does not include charter schools or alternative schools

Percentages Of New Mexico Public High School Graduates Who Took Remedial Classes By Ethnicity, 2000 - 2006



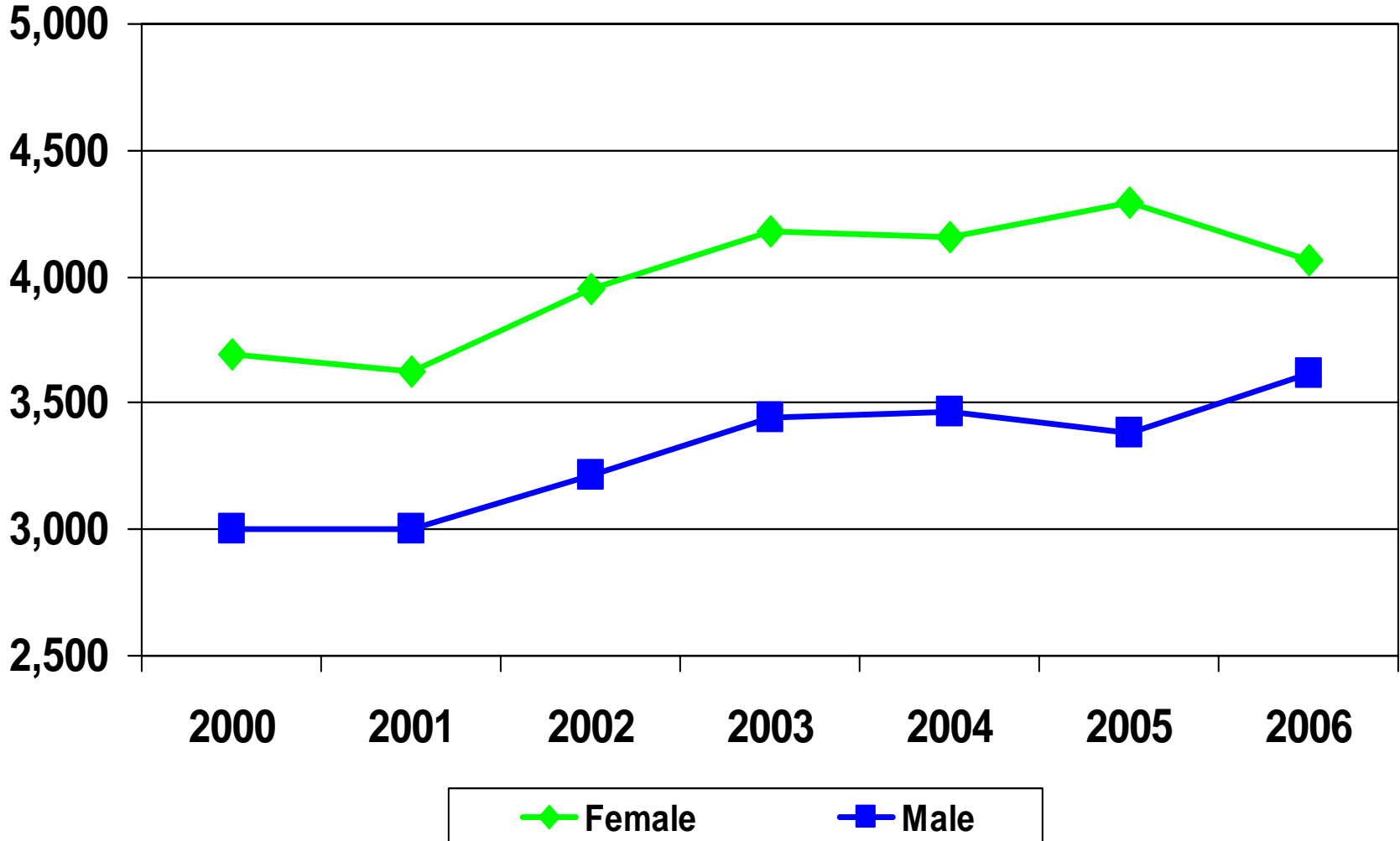
Note: Data does not include charter schools or alternative schools

Percentages Of New Mexico Public High School Graduates Who Took Remedial Classes By Gender, 2000 - 2006

	2000	2001	2002	2003	2004	2005	2006
Female	(n=3,691)	(n=3,622)	(n=3,953)	(n=4,178)	(n=4,153)	(n=4,290)	(n=4,069)
	48%	51%	53%	54%	53%	53%	53%
Male	(n=3,005)	(n=3,001)	(n=3,217)	(n=3,440)	(n=3,463)	(n=3,378)	(n=3,618)
	45%	43%	47%	47%	48%	48%	45%

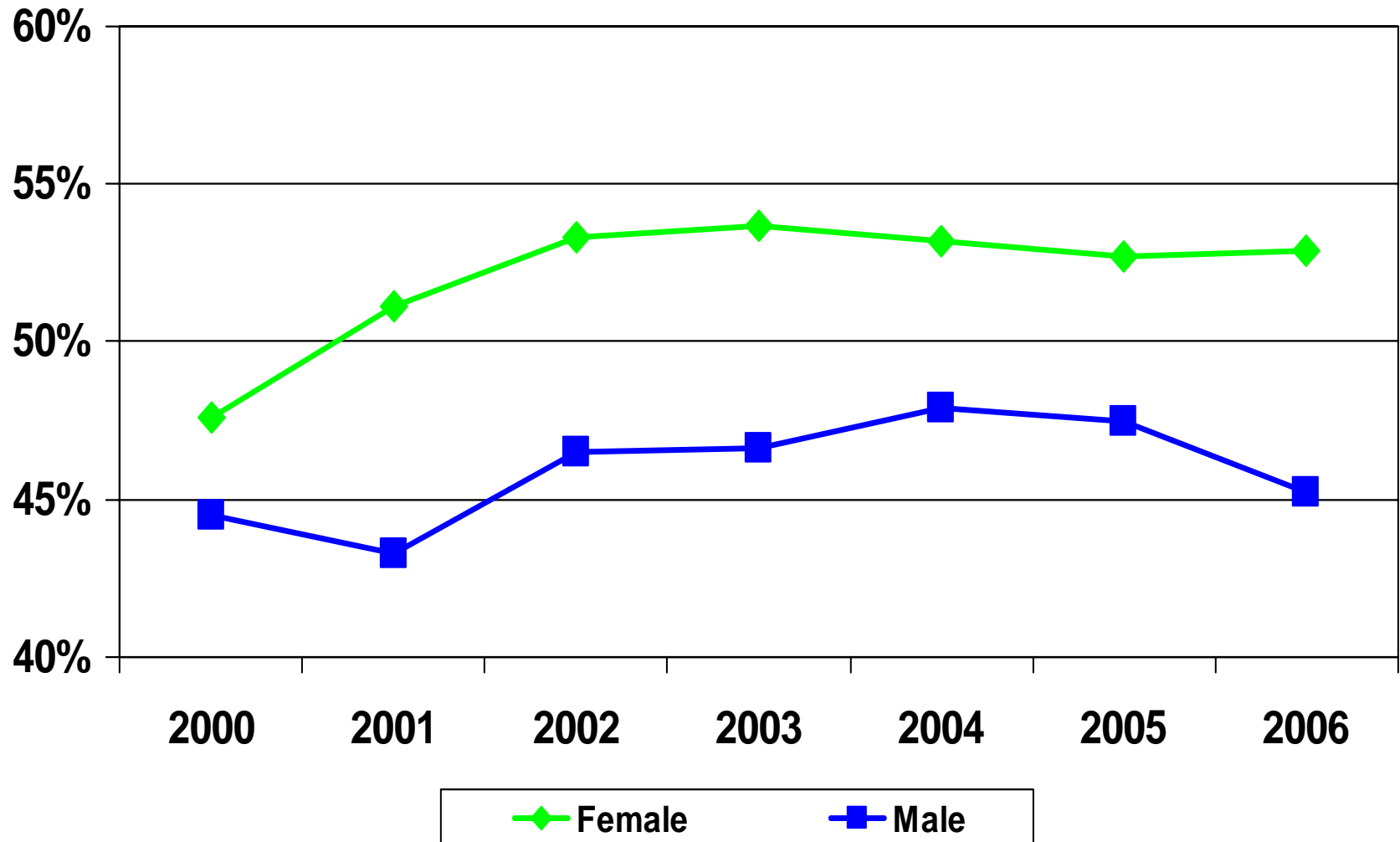
Note: Data does not include charter schools or alternative schools

Numbers Of New Mexico Public High School Graduates Included In The Study By Gender, 2000 - 2006



Note: Data does not include charter schools or alternative schools

Percentages Of New Mexico Public High School Graduates Who Took Remedial Classes By Gender, 2000 - 2006



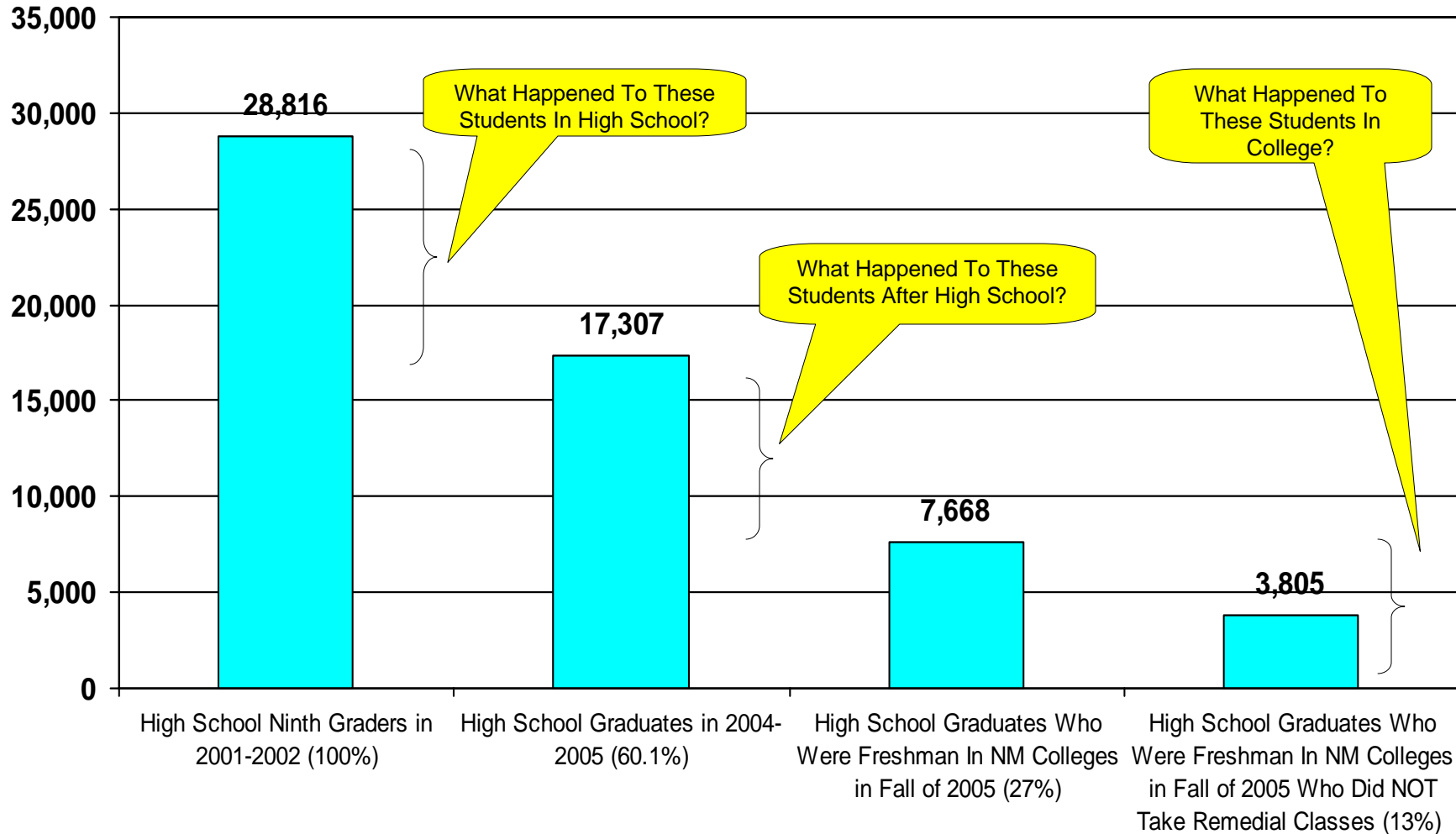
Note: Data does not include charter schools or alternative schools

So Far, We Have Examined How Many Public High School Graduates Are Ready For College In Their Freshman Year.

What Happens If We Extend Our View Of The Pipeline And Examine How Many Ninth Graders Who Enter High School Are Ready For College 5 Years Later?

How Many Students Who Enter Public High School As Ninth-Graders End Up Five Years Later Ready For College?

(Numbers of students who entered high school in 2001-2002 and entered college in fall of 2005)



What Does The Analysis Of Ninth Graders Who Are Ready For College Five Years Later Tell Us?

- Approximately 13% of the students who enter ninth-grade will be ready for college classes five years later.
- The Ready For College studies report on approximately 27% of the number of students who started high school as ninth-graders. In addition, these analyses are based on numbers of students at key points in the pipeline, rather than the more accurate method of tracking individual students through the PreK-20 education system.
- The study reveals that we don't know much about what happened to 73% of the students who started as ninth-graders in 2001-2002. Many could have moved to other states, moved around in New Mexico or dropped out. Many could have earned their GED. Many could have graduated and attended college outside New Mexico, joined the military, or entered the workforce.
- The study also reveals that we don't yet have clear data about how many public high school graduates who attend New Mexico colleges finish programs or earn their degrees.
- This study emphasizes the importance of the PED's unique student ID, using a cohort approach to graduation, and the PreK-20 data system envisioned in SB-211.

What Happens If We Take A Larger
Perspective Of The PreK-20 System
And Examine
The Relationship Between School
Performance On The New Mexico
Standards-Based Assessment and
College Remediation Rates?

An Exploratory Analysis

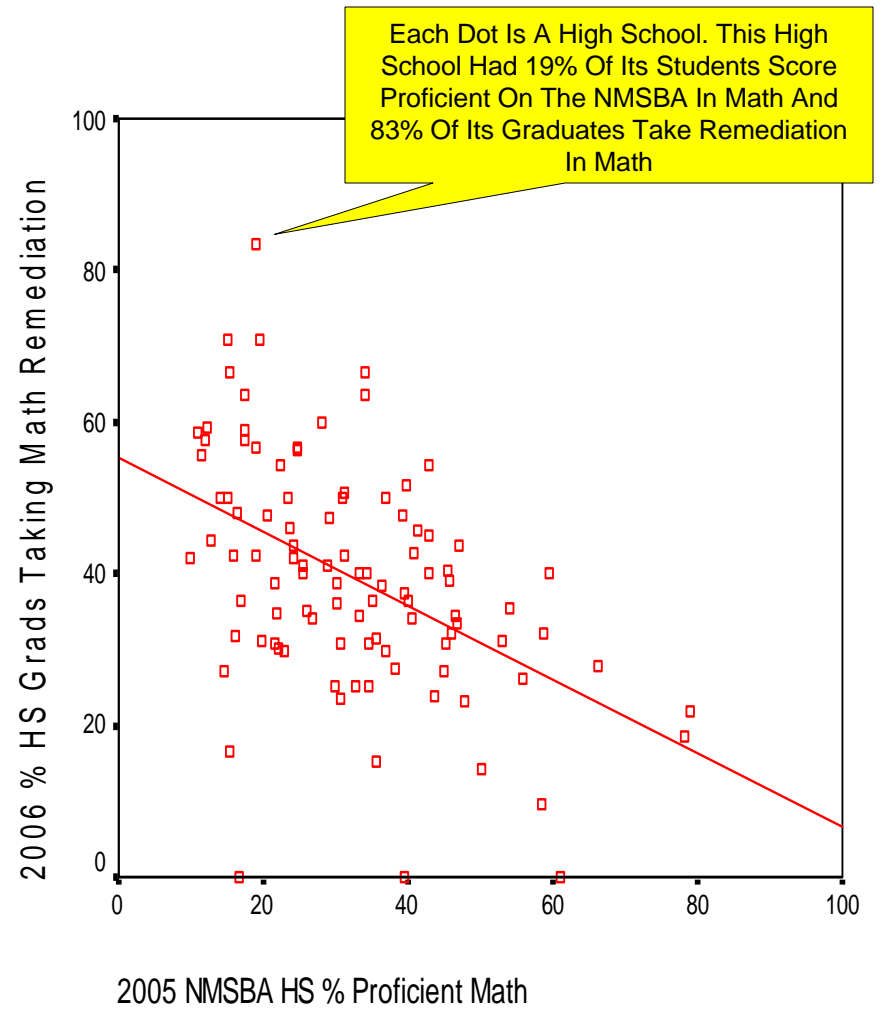
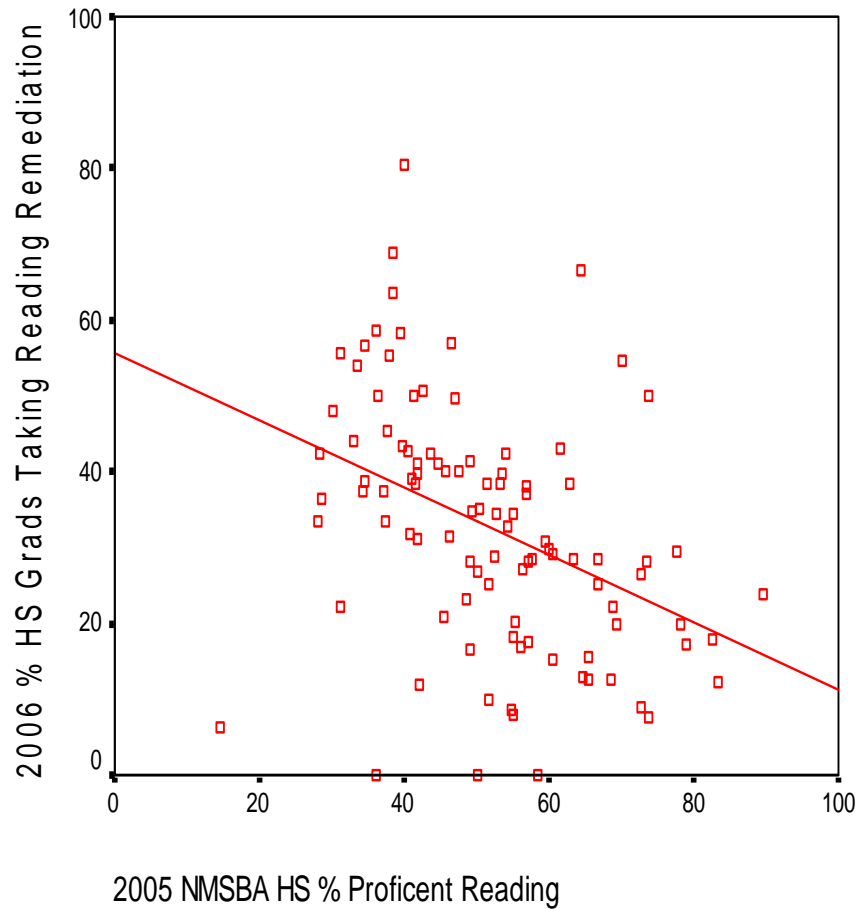
- Is there an alignment between the expectations of proficiency on the New Mexico academic standards and expectations of readiness at New Mexico institutions of higher education?
- Data from 100 public high schools was examined to determine the relationship between school performance in reading and math on the New Mexico Standards Based Assessment (NMSBA) in 2005 and remediation rates in 2006.
- Correlation and linear regression analyses were conducted.

Correlation Analysis

	2005 NMSBA Percent Proficient Math	2006 NMSBA Percent Proficient Math	2005 NMSBA Percent Proficient Reading	2006 NMSBA Percent Proficient Reading
2006 % of Grads Taking Remediation: Math	-.472	-.522		
2006 % of Grads Taking Remediation: Reading			-.398	-.517

These data reveal significant ($p < .01$) correlations between NMSBA performance in reading and math in 2005 and 2006 and subsequent remediation rates in 2006. This means that, overall, as the percentage of high school students meeting proficiency on the NMSBA increases, the percentage of high school graduates requiring remediation in college decreases.

Comparisons of The Percentage of Students Meeting Proficiency on the NMSBA in 2005 and Percentage of Graduates Requiring Remediation In Reading and Math in 2006.



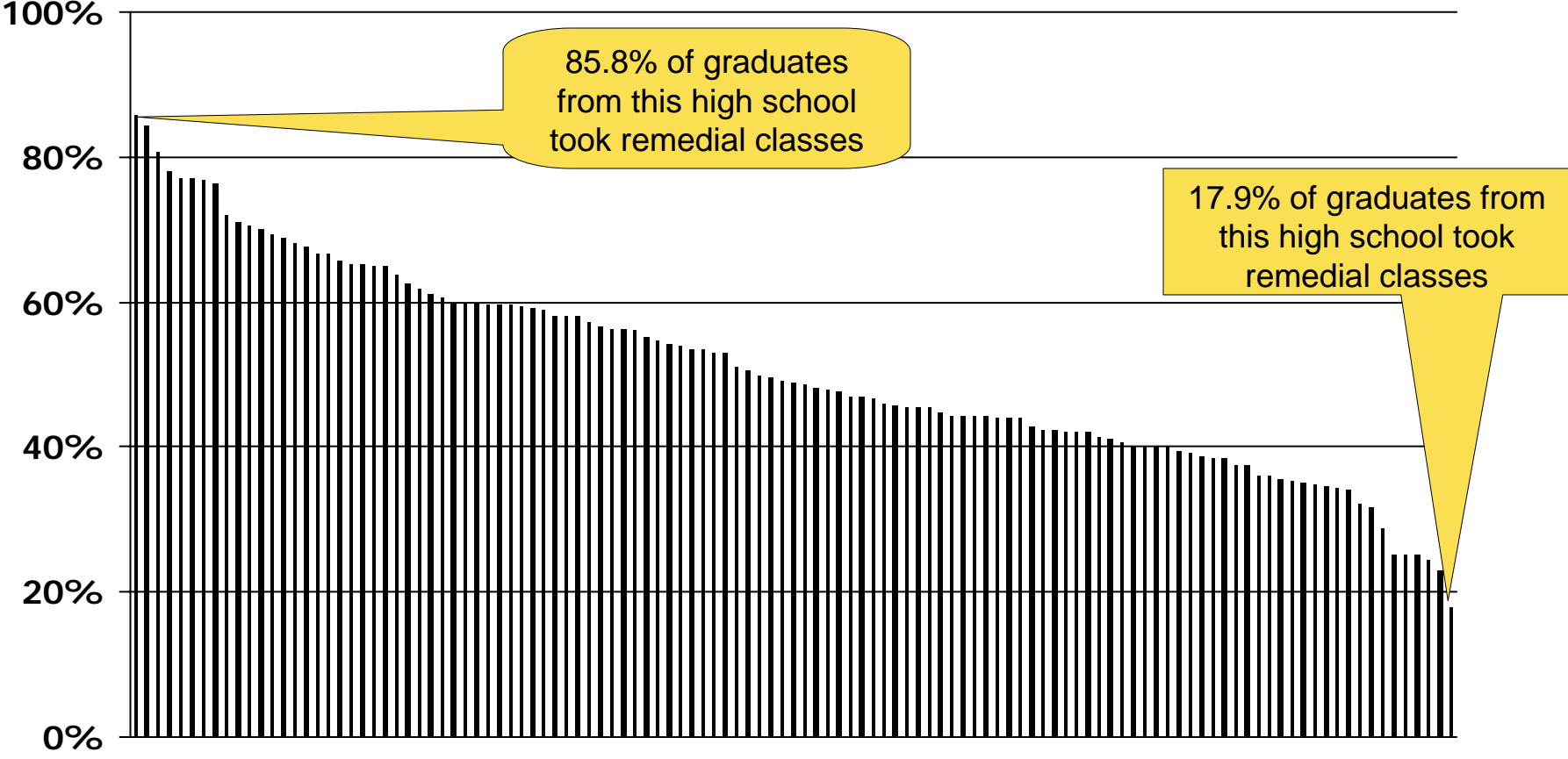
What Does This Analysis Of The Relationship Between Performance On The NMSBA And College Readiness Tell Us?

- This exploratory study reveals significant relationships between NMSBA proficiency rates and higher education remediation rates. This is good news and indicates an alignment between New Mexico's expectations of high school proficiency and higher education entrance expectations.
- This study was conducted using the schools as the unit of measure. More powerful studies should be conducted at the student level and will be possible as New Mexico's PreK-20 data system is further implemented.
- These data suggest that high schools should continue to work towards the goal of having all students reach proficiency on state academic standards, and that colleges should focus on ensuring that placement tests are consistent and valid across institutions.

A Closer Look At The Remediation Rates of New Mexico's Public High School Graduates

Percent of Public High School Graduates Taking Literacy And/OR Numeracy Courses In College By High School

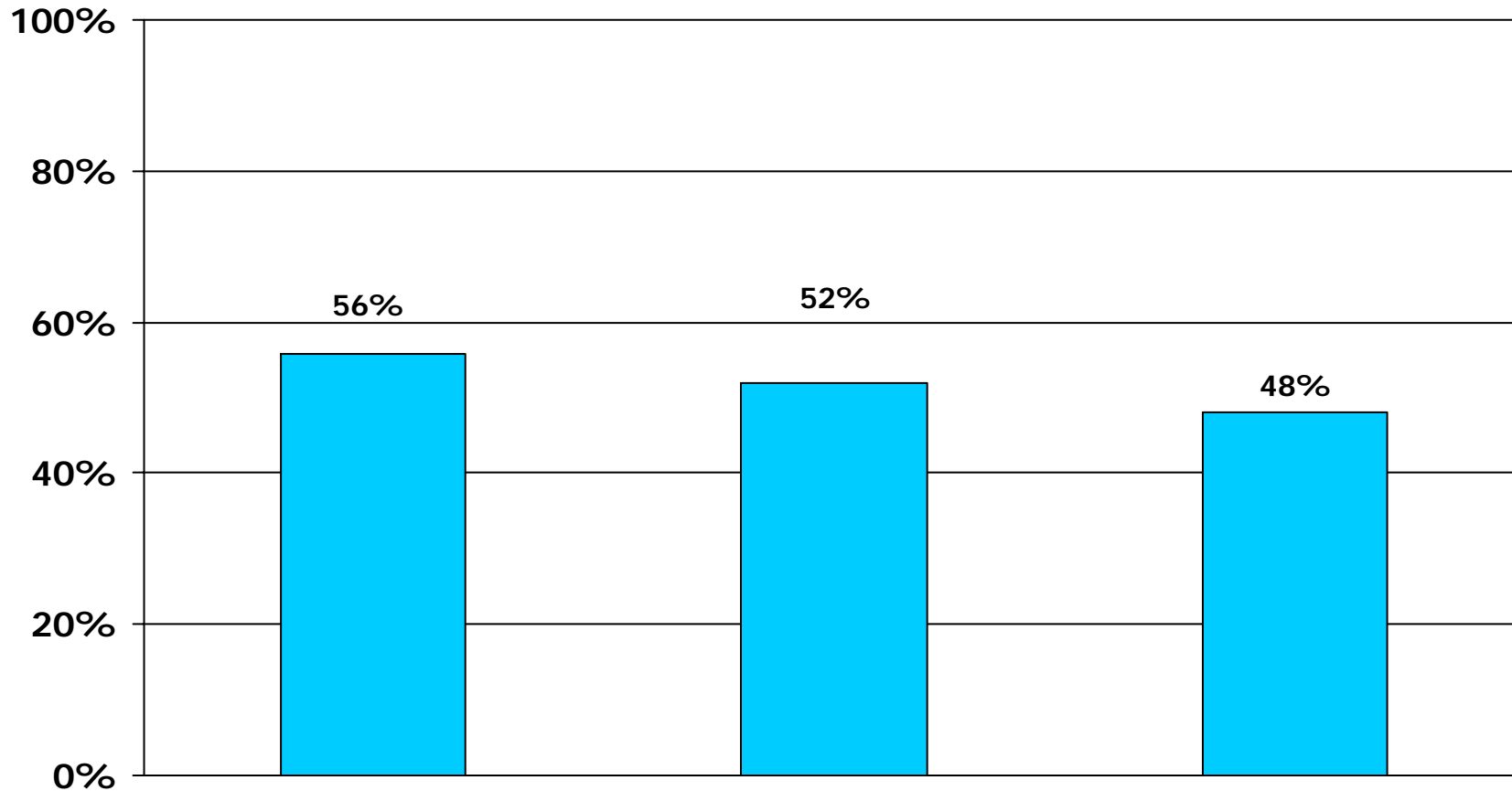
(n = 115; Average 2000-2006)



New Mexico's Public High Schools Ranked From High To Low Percentages

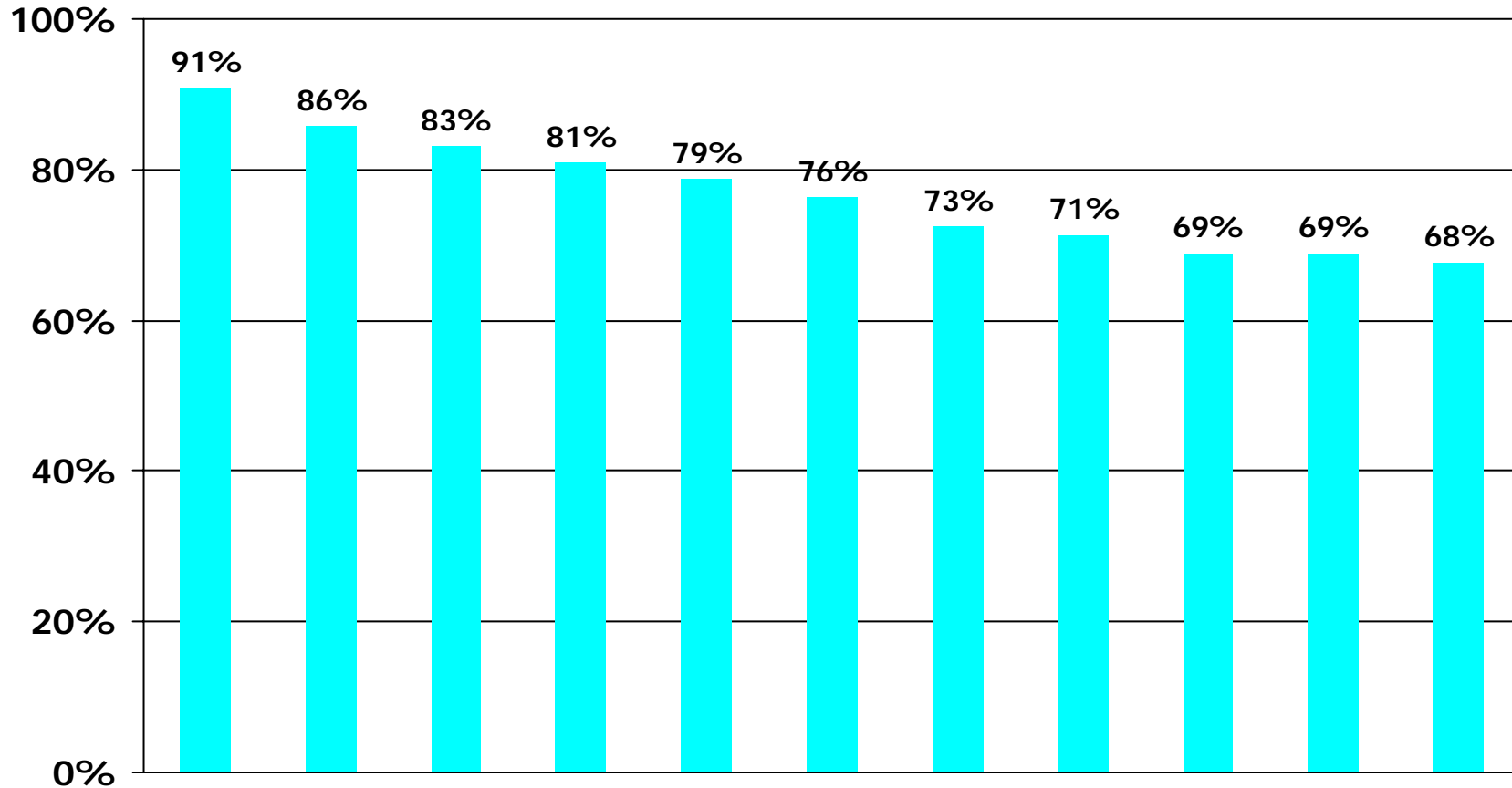
Note: Data does not include charter schools or alternative schools

**Percent of New Mexico Public Charter High School Graduates Taking Literacy And/Or Numeracy Courses In College By High School
(n = 3; Average 2000-2006)**



New Mexico's Public Charter High Schools Ranked From High To Low Percentages

**Percent of New Mexico Public Alternative High School
Graduates Taking Literacy And/Or Numeracy Courses In College By High
School
(n = 11; Average 2000-2006)**



New Mexico's Public Alternative High Schools Ranked From High To Low Percentages

Baseline & Trend Data For High Schools Are Included In The Appendix

How Might We Best Use These Remediation Data?

By Implementing Current Legislative and Policy Reforms

By Demonstrating Trends As An Important Measure Of Our Progress

By Using State Data To Inform And Refine Policies to Smooth the
Student Transition Between High School and College

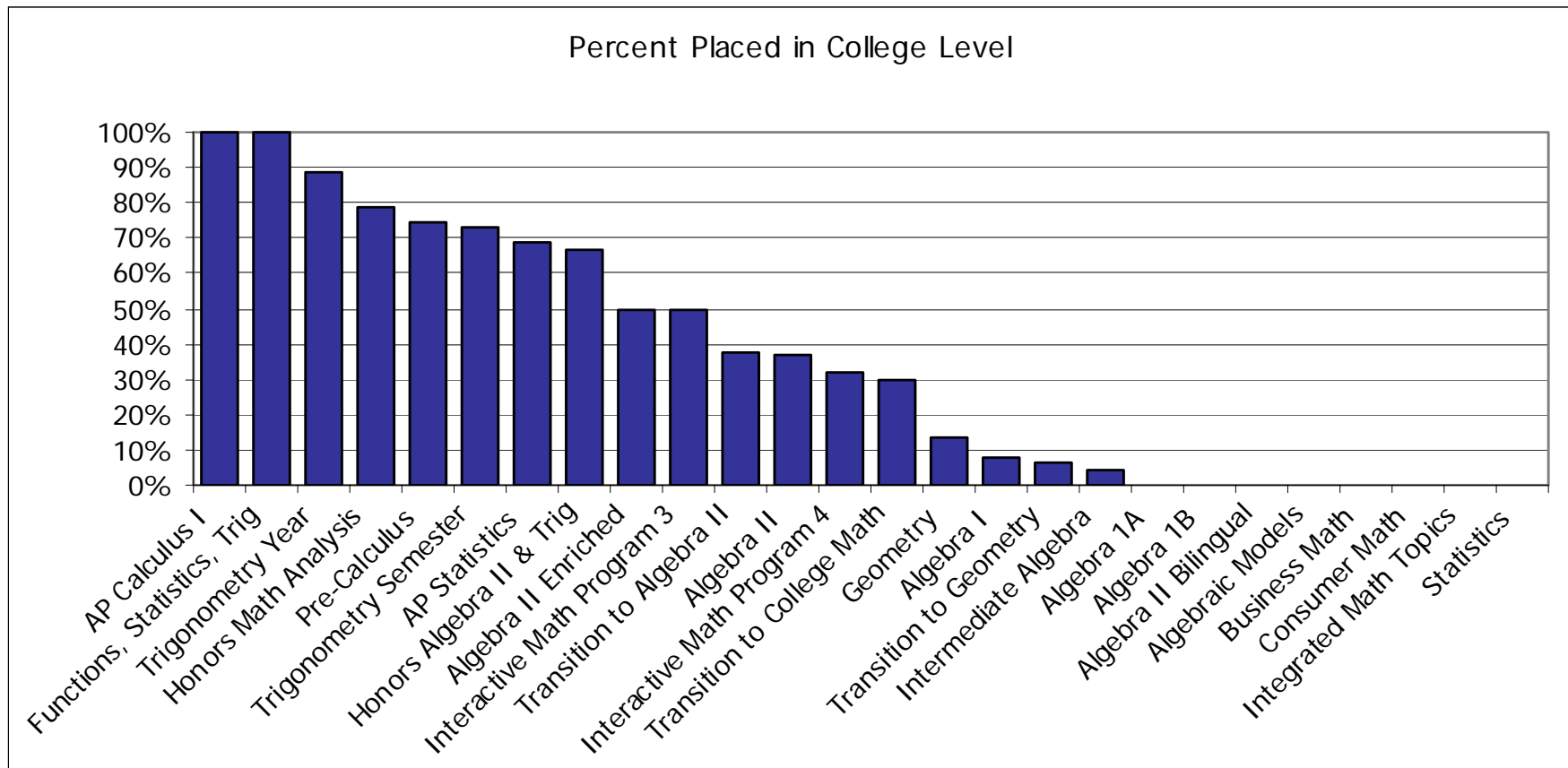
And

By Using These Data To Inform And Support The Vital Conversations
Among High Schools and Higher Education Throughout New Mexico

The Albuquerque Public Schools & Central New Mexico Community College Study Of High School Course Taking Patterns

- In Fall of 2006, APS & CNM conducted a study of 4,427 APS students who were placed in either developmental or college-level courses at CNM from 2001 to 2005.
- Overall, 44% of APS graduates test into developmental courses compared to a statewide average of 49%.
- Students taking a high school math class beyond Algebra II, and particularly those taking that math course during their senior year, were much more likely to test into college-level math.
- APS graduates enrolled at CNM and testing into developmental courses are more likely to be Hispanic and female.

First-Time Recent APS Graduates Placement When Highest Level of Math Taken In Senior Year APS Graduates Between 2001 and 2005 Enrolled at CNM



Source: **Course-Taking Pattern of APS Graduates Attending CNM** - A Joint Research Project of Albuquerque Public Schools and Central New Mexico Community College – Fall, 2006

HED & PED Alignment Task Force

- HED staff compiled a matrix of cut scores used by NM colleges and universities for college placement into Math 1113 and English 1113. These two courses are in the New Mexico general education common core adopted by all public postsecondary institutions in the state.
- HED/PED Alignment Task Force found that that New Mexico's universities and community colleges use a variety of tests and cut-off scores to determine which students need remediation.
- The Public School Reforms Act (HB-212) calls for high school curricula and end-of-course tests to be aligned with college placement tests. The fact that placement cut-off scores vary among colleges makes it more difficult to accomplish this legislatively mandated alignment.
- Higher education institutions must work together to clarify their expectations about the placement tests they use to determine if they place students in remedial courses. The HED/PED Alignment Task Force has convened monthly meetings of faculty and administrators to present their use of cut scores and student placement success.

The CNM & APS Study And The HED & PED Alignment Task Force Matrix Study Are Important Examples Of The Vital Conversations That Can Take Place Between High Schools And Higher Education

How Can We Support And Extend Those Conversations?

Some Questions To Get the Conversations Going

- Who are the key partners in high schools and colleges who need to be at the table?
- Where do we want to be in 2 years, 3 years, 4 years?
- What resources do we need to address the challenges of students who graduate from high school but are not ready for college?
- What can we learn from other high schools and college partnerships across New Mexico? Around the country?
- What are the course-taking patterns of high school graduates who need remediation? What about those students who don't need remediation?

Some More Questions To Get the Conversations Going

- What kinds of support do teachers need to ensure that students are successful in more rigorous courses that will better prepare students for college?
- How can we strengthen the relationships between teachers and counselors in high school and faculty and counselors in college?
- How we can we best engage students to take challenging courses throughout high school to prepare them for college?
- Other?

What Can The State Do To Address Remediation and Alignment Policy Needs?

- Make meaningful remediation data accessible.
- Assist with data analyses.
- Present the data in ways that can be easily interpreted and used.
- Work with district data personnel to facilitate the process of data collection (i.e. identifying course taking patterns).
- Garner resources so that school districts and colleges and universities can use the remediation data to best support students (i.e. facilitators, models for formalized partnerships, exchanges of practice and programs).
- Other?

What Are Some Of The Policy Questions Facing The State?

- How do we engage business, education and community constituencies in the education alignment policy process?
- How do we develop and sustain a process for continued alignment as we learn how to better prepare students for college & careers?
- How do we extend and sustain the policy processes established by the HED/PED Alignment Task Force?
- How do we focus our policy agenda for the next two years?
- What resources do we need to address the challenges of students who graduate from high school unprepared for college and careers?
- What can we learn from other states?

Conclusions

- The percentage of high school graduates who take remedial courses in college continues to remain around 49%.
- New Mexico has taken a number of important steps to redesign high schools and ensure that graduates are more prepared for college and/or the workplace. We need to be sure that these initiatives are given the time and resources to be successful.
- In particular, we need to focus our attention and resources on increasing:
 - Students' academic performance,
 - Rigor of high school courses,
 - Effectiveness of counseling and other support systems,
 - Fairness and accuracy of college placement tests, and
 - Standards that students will need to meet if they are to succeed college courses.

Conclusions (Continued)

- New Mexico efforts to implement an effective PreK-20 accountability system are beginning to provide us with the data to address important policy questions about student progress through the pipeline and the alignment between public education and higher education.
- We need to find ways to support the vital conversations between high schools and colleges that focus specifically on students' performance, the rigor of high school courses, the effectiveness of counseling and other support systems, the fairness and accuracy of college placement tests, and the standards that students will need to meet if they are to succeed college courses.

For More Information

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