

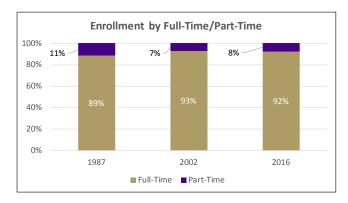
How JMU Has Changed - Students

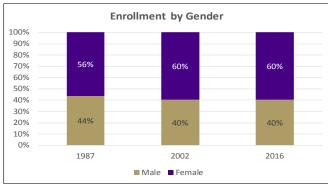
Dr. Frank Doherty, JMU's Director of Institutional Research, will be retiring in June 2018 after 31 years at JMU. He has witnessed enormous changes at JMU and has overseen the collection and reporting of data to the university community, the federal government and the Commonwealth of Virginia. This Research Note, and three others to follow, will summarize many of these changes. This note focuses on the student demographic changes since 1987. It will be followed by Research Notes on: changes in faculty and staff; changes in the facilities and finances of JMU; and finally, changes in students' and graduates' attitudes about themselves and JMU. The data for these notes will be drawn from official reports and data compiled by OIR since the early 1970s. Where possible, we attempt to use the data for 1987-88, 2002-03 (the 15th year of these data) and 2016-17. It is our hope that you will find these notes to be informative and useful.

Overall Enrollment

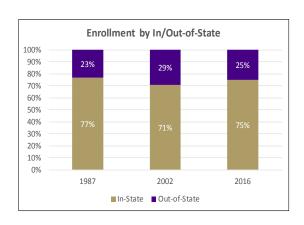
In 1987 JMU, for the first time, exceeded 10,000 on-campus students. President Ronald Carrier pushed strongly for JMU to continue to grow and expand academic programs. By 1990-91 the ISAT program had been approved and was being developed. In 1987 there were still cows in the fields that are now occupied by the East Campus. The only building on the east side of I81 was the Convocation Center, and it was connected to the main campus via the tunnel (Duke Dog Alley). Dr. Carrier believed that enrollment growth brought additional students, diversity and economic vitality to the area. He was able to work strategically with the General Assembly to secure funding for additional academic space as JMU grew. Dr. Carrier was also very strategic in focusing on a particular kind of student. He believed that JMU should not be another UVA or William & Mary which attracts the elite student, but rather the optimum niche for JMU was the well-rounded applicant with an SAT score between 900 and 1200. He believed these students would do well at JMU, and he was correct. Now, 30 years later, JMU has broadened this modest goal, and the outcomes have been extraordinary for the comprehensive institution JMU is. In 1987-88 approximately 25% of freshmen's combined SAT scores were greater than 1200; the same was true in 2016-17.

- Fall on- and off-campus enrollment at JMU rose by 97% from 10,822 in fall 1987 to 21,270 in fall 2016. Overall the changes in the proportions of full-time, female, and non-Virginia students have been moderate.
- Full-time students in 2016 represented 92% of all students, up from 89% in 1987.
- Out-of-state students in 2016 made up 25% of total students, up from 23% in 1987. In 2002-03 the out-of-state percentage was at a peak of 29%. The largest percentage growth in out-of-state students occurred from New Jersey, New York, and Pennsylvania.
- Females now comprise 60% of total students, up slightly from 56% in 1987.





Top Non-Virginia States of Origin								
				Percent				
State	1987	2002	2016	Change				
New Jersey	365	783	1344	268%				
Maryland	874	856	1018	16%				
Pennsylvania	338	773	824	144%				
New York	217	564	649	199%				
Delaware	87	81	75	-14%				
Connecticut	39	259	287	636%				



Undergraduate Enrollment and Outcomes

In 1987 fall on-campus undergraduate degree-seeking students (9,060) made up 89% of JMU's total enrollment. In 2016 the percentage rose slightly to 91 %.

- 90.9% of JMU's 2015 first-time freshmen returned in fall 2016. The return rate for fall 1989 freshmen was 93.5%. Since 1990 the one-year retention rate has exceeded 90.0%.
- JMU undergraduates continue to have very high graduation rates. Graduation rates this high in public institutions typically occur in large well-endowed flagship or elite institutions like UVA and UNC Chapel Hill. The four-year graduation rate increased from 59% for the fall 1987 freshmen to 67% for the fall 2012 freshmen. The six-year rate increased from 81% for the 1987 freshmen to 82% for the 2010 freshmen. Since 1987 the six-year graduation rate has been less than 80% only twice, and the six-rate has exceeded 80% every year since 1997. More than 95,000 Bachelor's degrees have been conferred since 1987-88.
- The disciplines in which students earned degrees have changed somewhat. In 1987-88 the top three majors were Communication Arts, Marketing, and Accounting. In 2016-17 the top four majors were Health Sciences, Communication * (Communication Studies + Media Arts & Design), Nursing, and Interdisciplinary Liberal Studies (students planning to be teachers). Health Sciences, the largest major in 2016-17, had only 22 degrees conferred in 1987-88. See below the top 10 degree fields for these three years.

Top 10 Bachelor's Degrees Conferred by Year

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Major	1987-88 Major		2001-02	2001-02 Major				
Communication Arts	169	Media Arts & Design *	137	Health Sciences	441			
Marketing	145	Communication Studies *	126	Media Arts & Design *	217			
Accounting	128	Psychology	234	Communication Studies *	187			
Finance	127	Health Sciences	215	Nursing	231			
Management	122	ISAT	191	Interdisc Liberal Studies	230			
Political Science	120	Computer Info Systems	176	Psychology	228			
Psychology	107	Finance	151	Biology	183			
Computer Info Systems	77	Computer Science	131	Marketing	162			
English	75	Art	114	Finance	156			
Early Childhood Education	69	Biology	93	Sport & Recreation Mgt	134			

^{*} Media Arts & Design and Communication Studies were combined as Communication Arts in 1987

The discipline areas that have more than doubled in graduates are: Communication Studies; Biology; Mathematics; physical sciences; Public Administration; and health professions. STEM / Health majors comprise a significant proportion of the increases.

Graduate Enrollment and Outcomes

In fall 1987 on-campus degree-seeking graduate students (605) made up 6% of JMU's total enrollment. In fall 2016 the percentage was still 6%.

- Annual degrees conferred inceased by 198% from 252 in 1990-91 to 751 in 2016-17. More than 14,000 graduate degrees have been conferred since 1987-88. Since 2003-04 90% of new Master's-level students graduated.
- The percentage of education-related Master's degrees increased from 30% (83) in 1990-91 to 46% (342) in 2016-17. A significant proportion of the education-related degree increase occurred due to the requirement that most students that seek to be certified to teach must obtain a Master's degree.
- JMU was not allowed to offer doctoral degrees until the late 1990s. It conferred its first doctoral degrees in 2000-01. Since 2000-01 the total number of doctorates conferred is 319, representing eight different programs.
- Below are listed the top 10 degrees conferred in 1987-88, 2001-02 and 2016-17. The disciplines in which the number of graduates more than doubled are education and health professions.

Top 10 Graduate Degrees Conferred by Year							
Major	1987-88 Major		2001-02 Major		2016-17		
Business Admin (M.B.A.)	56	Business Admin (M.B.A.)	56	Education (M.A.T.)	224		
Reading Education	17	Reading Education	17	Business Admin (M.B.A.)	39		
Counseling Psy (Master's)	15	Special Education	15	Education (M.Ed.)	34		
Special Education	15	Speech Pathology	15	Kinesiology (M.S.)	33		
Speech Pathology	15	Counseling Psychology	15	Speech Language Pathology -	31		
		(Masters)		Clinical (M.S.)			
School Library Media Serv.	11	Physical Education	10	Physician Assist (M.P.A.S.)	31		
Physical Education	10	Music	9	Accounting (M.S.)	24		
Music	9	School Administration	9	Nurse Practitioner	22		
School Administration	9	School Psychology (Masters)	8	Special Education (M.A.T.)	23		
School Psychology (M.Ed.)	8	Counseling Psychology (EdS)	7	Occu. Therapy (M.O.T.)	21		
		Hearing Disorders	7				
		Health Science	7				

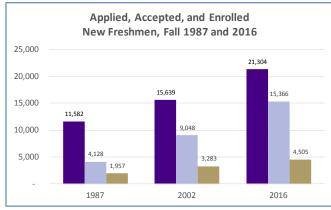
New Students

Undergraduate Admissions

In fall 2016 a total of 4,505 (29%) of accepted first-time, first-year students enrolled at JMU. This compares with 1,957 (47%) in 1987.

- Total applications for fall first-time freshmen increased by 84% from 11,582 in 1987 to 21,304 in fall 2016.
- JMU accepted 72% (13,366) of its freshman applicants for fall 2016 compared to 36% in fall 1987.

Why such a change in the acceptance rate? In 1987 11% of the enrolled freshmen reported on the First-Year Student Survey that they applied to 5 or more colleges. This compares to 42% of the fall 2016 freshmen. The ease

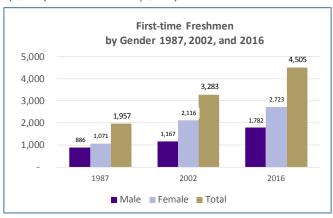


by which students can apply electronically to multiple institutions has increased the number of applicants across the country. Since the number of applicants who apply to many institutions has increased significantly, admissions offices across the country had to increase the number of students they admit to ensure they enroll the desired number of students. In some ways it is remarkable that JMU continues to graduate a very high percentage of students despite the challenges of enrolling highly qualified applicants. In fact, 80% say JMU was their first choice, up from 71% in 1987.

First-time Freshmen

JMU's freshman class more than doubled between fall 1987 (1,957) and fall 2016 (4,505).

- The average age of first-time freshmen (18) has not changed since 1987 since JMU mostly enrolls the traditional student who recently graduated from high school and desires a residential institution.
- JMU's freshmen class was 55% women in 1987 compared to 60% in 2016. The number of males increased from 886 in fall 1987 to 1,782 in fall 2016 (101%) while the number of females increased from 1,071 in fall 1987 to 2,732 in fall 2016 (155%).



- Of all 2016 first-time freshmen, only 4% applied to JMU alone. This compares to 7% of the fall 1987 freshmen
- 42% of the fall 2016 applicants applied to 5 or more colleges other than JMU. This compares to 11% of the fall 1987 freshmen.
- Of all 2016 first-time freshmen, 19% said their approximate high school rank was in the top 10%. This compares to 44% in the top 10% of the fall 1987 freshmen class.

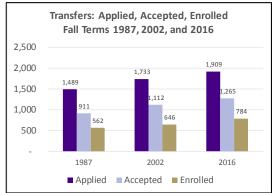
- The percentage of the 2016 students' fathers who earned at least a Bachelor's degree was 69% and for mothers it was 74%. In 1987 the percentage for fathers was 69% and mothers was 47%. It is clear that our students' mothers have higher educational achievement levels now than in 1987.
- In 2016 58% said that they or their parents would cover at least 80% of the total cost of attending JMU compared to 78% of the fall 1987 freshmen. The percentage of JMU students that receive Pell Grants (15%) is low compared to other institutions like JMU nationally.

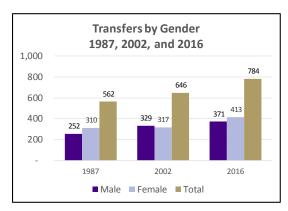
Transfer Enrollment

JMU has always been an excellent choice for transfer students. Studies conducted by OIR have demonstrated that more than 80% of transfers graduate. JMU enrolls the 4th highest number of transfers of any public institution in Virginia.

Transfers: Applied, Accepted, Enrolled
Fall Terms 1987, 2002, and 2016

- A total of 562 students transferred to JMU in fall 1987. In fall 2016 784 transfers enrolled, but summer and spring transfers brought the total to more than 1,000 enrolled during that academic year. Comparable data for the full academic year of 1987 is unavailable.
- In 2015, 92% of transfers were from Virginia compared to 82% in the year 2000.
- In 2015, 48% of all transfers were male compared to 51% in the year 2000. The percentage of male transfers is higher than first-time freshmen.
- The average age of an undergraduate transfer student is 22, the same as in 1987.
- Historically the majority of transfers come from:
 - Northern Virginia Community College
 - Blue Ridge Community College
 - Lord Fairfax Community College
 - Piedmont Virginia Community College
 - Virginia Western Community College





International Students

A total of 593 international students representing 74 countries attended JMU in 2016. In fall 1992 there were 104 international students. This represents a 470% increase in 25 years.

- A total of 65% of JMU's international students are degree-seeking undergraduates (compared to 50% in 1992); 8% are pursuing doctoral/graduate degrees (compared to 24% in 1992); and 27% are enrolled as Continuing Education students (compared to 26% in 1992).
- The gender distribution was 52% men and 48% women in 2016. The gender distribution was 63% men and 37% women in 1992.

Student Body Race & Ethnicity

JMU's commitment to the diversity of membership within its student body has not wavered during the past thirty years. When

student enrollment to the diversity student enrollment changed within certain populations the university provided leadership, programs and resources to ensure that the JMU today would reflect its commitment to diversity of all groups. In 1987-88 the primary race categories were American Indian, Black, Oriental, Hispanic and White. The federal

Race or								
Ethnicity	1987	Percent	Face or Ethnicity	2002	Percent	Race or Ethnicity	2016	Percent
American Indian	19	0.2%	American Indian	29	0.2%	American Indian/Alaska Native	37	0.2%
Black	779	7.7%	African American	629	3.9%	Black or African American	915	4.3%
Oriental	131	1.3%	Asian	695	4.4%	Asian	898	4.2%
Hispanic	71	0.7%	Hispanic	286	1.8%	Hispanic	1,187	5.6%
White	9,126	90.1%	White	13,521	84.7%	White	16,049	75.6%
	10,126	100.0%	Unknown	568	3.6%	Two or More Races	803	3.8%
			Non-Resident Alien	237	1.5%	Unknown/Unreported	719	3.4%
			Total	15,965	100.0%	Non-Resident Alien	593	2.8%
						Total	21,227	100.0%

government in 2010 changed the categories in which students can self-identity their racial/ethnicity or national origin. Thus comparing 1987 to 2017 is challenging because the same race or ethnic categories were not consistently used over this thirty year period. Since 2010 students have been able to select more than one race and specifically identify those races of their identity. Hispanic and multi-race are the fastest growing ethnic groups at JMU. As you review this section do take into account that how students identify today is not the same as they did thirty years ago. Despite the significant changes in how race and ethnicity are defined and reported, we can draw a few broad inferences from the data.

- JMU is clearly more diverse than in 1987, but precise comparisons between these three years are problematic at best.
- The mix of races/ethnicities changed. The main proportional growth in non-majority students has been for Asian and Hispanic students. African-American students, while a smaller proportion of the student population in 2016 than in 1987, grew from 779 in 1987 to 1,304 in 2016 (the number of students above in each category selected that category only, excluding multi-race). Since 2002-03 the percentage of all students who did not self-identify has declined.

Some Observations

JMU in 2016-17 was clearly a very different institution than it was in 1987-88. But in some ways it was not.

Changes:

- JMU has doubled in size since 1987. It is a far larger and more complex institution.
- JMU is a more diverse institution than in 1987. The composition of this diversity has clearly changed as the number of self-identified Asian, Hispanic and African-American students has dramatically increased. The number of international students has increased substantially (470%).
- The percent of degrees earned in disciplines such as STEM and Health grew significantly. STEM/Health degrees now represent approximately 32% of all degrees, up from 20% in 1987-88. JMU now offers doctoral degrees.
- Technology enables applicants to apply to vastly more institutions, placing significant stress on admissions offices to identify, admit and enroll sufficiently qualified students. The admit and yield rates have changed substantially since 1987.

Stayed the Same

- The university still admits the same highly qualified students it admitted 30 years ago. Consequently, the graduation rate remains extraordinarly high (80% +) for our size and type of institution.
- JMU enrolls a small proportion of graduate students (6%) and programs compared to other institutions of similar size and type. Degrees in education, primarily Masters, are still by far the highest percentage of total graduate degrees (46%).
- JMU continues to admit highly qualified students. The typical JMU student has highly educated parents, comes from more affluent homes, borrows at a lower rate than students at similar institutions, performed well in high school, and comes from similar areas of Virginia and out-of-state.