



Florida State University
 Office of Budget and Analysis
 321 Westcott Building
 Tallahassee, Florida 32306-1360
 Phone (850) 644-4203 Fax (850) 644-9622

to: Debra Austin

LOCATION: _____

FAX NUMBER: 245-9397

FROM: Jill Kosiewski

DATE: 10-14-04

FAX

of pages

12

(Including cover page)

COMMENTS: Following is the Request
Strategic Plan V-Axis.

CONFIRMATION OF RECEIPT REQUESTED: YES NO (circle one)

(If confirmation is requested, please call sender when document is received. Thank you.)



THE FLORIDA STATE UNIVERSITY

Tallahassee, Florida 32306-1310

Office of the Provost and Executive Vice President

212 Westcott Building

(850) 644-1816 * FAX (850) 644-0172

MEMORANDUM

DATE: October 14, 2004
TO: Debra Austin
FROM: Lawrence G. Abele *L.G. Abele*
RE: Strategic Plan Y-Axis

Enclosed is Florida State University's response to the Y-axis. In order to complete the Y-axis several steps were necessary. First, using ten-year historical trends, we projected the number degrees by target area. The projections were then adjusted to reflect the mission and direction of the university. These numbers match our submission to the Division of Colleges and Universities for degrees awarded through 2013-14.

Access/Diversity: Our projections continue to show progress on this indicator; however, it will be difficult to have an impact on the 2008-09 graduating students since most of these students have already been accepted and admitted into the university. The 2012-13 goal reflects our ability to compete more effectively for the limited pool that is estimated to be available beginning in 2008-09. Both 2008-09 and 2012-13 targets will require improvements in retention and graduation rates of minorities since the universities' overall enrollment is projected to increase. The major elements of our analysis regarding these estimates are attached for your review.

The following methodology was used to estimate the research expenditures:
Total Research Expenditures: Data are based on the NSF's *Survey of Research and Development Expenditures at Universities and Colleges*, beginning with FSU's reported figures for FY03. Projected figures for FY09 and FY13 were increased by 7.87% annually (constant dollars), which is in keeping with the percent increase recommended by the BOG. This percent increase also mirrors the projected

increase based on a five-year history of FSU's actual increases (7.18% increase annually). Values are expressed per full-time faculty and are based on projected faculty numbers in the respective years.

Federal Research Expenditures: Data are based on the NSF's *Survey of Research and Development Expenditures at Universities and Colleges*, beginning with FSU's reported figures for FY03. Projected figures for FY09 and FY13 were increased by 9.38% annually (constant dollars), which is in keeping with the percent increase recommended by the BOG. This percent increase is somewhat less than the projected increase based on a five-year history of FSU's actual increases (6.32% increase annually), but is still reasonable based on an increased emphasis by the Vice President for Research on federal funding. Values are expressed per full-time faculty and are based on projected faculty numbers in the respective years.

C&G Research Expenditures: Data are based on the SUS Operating Budget, beginning with FSU's reported figures for FY03. Projected figures for FY09 and FY13 were increased by 7.87% annually (constant dollars), which is in keeping with the percent increase recommended by the BOG. This percent increase mirrors the projected increase based on a three-year history of FSU's actual increases (7.96% increase annually).

Association of American Universities Membership: FSU has added a goal of making significant progress toward being invited to become an AAU member institution. We are working hard to improve our retention and graduate rates. The average test scores of our entering freshmen continue to increase, we are working to improve our national reputation, renewed efforts are being placed on annual giving and we are making gains in our research expenditures.

U.S. Patents Issued: Data are based on actual and projected patent activity. We are showing a decrease in activity for three reasons: (1) many of our inventions of taxol-related compounds are being patented under an agreement with a private company and therefore are not listed as FSU patents, (2) because of the projected decrease in patent applications associated with declining Taxol activity, and (3) an emphasis by the Office of Research on pursuing only those patents that have an increased chance for producing revenue. Values are expressed per 1,000 full-time faculty and are based on projected faculty numbers in the respective years.

National Research Council Rankings and Other Forms of Recognition: The National Research Council does not rank many of FSU's programs. Several programs either are or will be recognized nationally. For example, the FSU School of Criminology was recently tied for #3 in a survey of criminologists from the Directory of the American Society of Criminology and the Academy of Criminal Justice Sciences. We are continuing to identify other forms of recognition for our programs and faculty. An addendum will be provided in the next few days.

Centers of Excellence: Professor Sir Harold Kroto's (Nobel-prize winning chemist) recent move provides the State and the university the opportunity to make a move to create a Center of Excellence in bio-nanotechnology. The Center of Excellence for Bio-NanoTechnology (CBNT) is a rapidly growing discipline that combines the function of biological molecules with nano-fabricated materials to yield unique devices. The CBNT will focus on the development of nano-machines powered by biological motors and biologically based sensors for medical, environmental monitoring, and security applications. CBNT will be the home of an interdisciplinary team dedicated to cutting-edge research and development in bio-nanotechnology.

In like fashion, the university hopes to attract state funding in the area of the Center for Computational Sciences. This Center will develop and foster an interdisciplinary research atmosphere and a culture for large-scale high performance computing, in which research scientists from the sectors of national laboratories, industries and academia come together and provide cross-fertilization of ideas and approaches from diverse disciplines, thereby, advancing our fundamental understanding of computational, information science & technology. The Center will acquire and maintain the state-of-the-art computing and visualization hardware that adequately supports the ambitious research and education agenda, to research and develop software for efficient use of the hardware and will ensure Florida is a leader in this field.

We hope to establish one additional Center of Excellence in 2012-13.

Meeting Community Needs: FSU continues to focus on community needs. The FSU Office of K-12 Initiatives was established in January 2000, to increase collaboration, joint research, and enhanced service learning in partnership with PreK-12 schools, other universities, businesses, governmental agencies and the community. The Office of K12 Initiatives provides coordination and support for collaborative efforts to seek and provide resources for Readiness and K12 projects.

The reading research center is the latest component of FSU's K-12 initiatives, which establishes partnerships with public schools to promote a "seamless" education system. The Center is a joint project of the Learning Systems Institute, the College of Arts and Sciences and the College of Education at FSU. This Center partners with the Florida Department of Education, the University of Central Florida and Reading Excellence Center.

An area where FSU meets the community needs is through community-based medical programs and rural medical education training sites. In partnership with Florida communities, the FSU College of Medicine has created a new model of medical education and research that uses interdisciplinary teams and emerging technologies. Clinical training takes place on the front lines of the health-care delivery system throughout the state. The emphasis is on ambulatory care settings such as physicians' clinics, HMOs, and chronic care facilities in rural, urban and suburban areas. Because the FSU College of Medicine partners with existing

medical facilities and practitioners throughout the state, students experience a broad spectrum of community-based medical care. Regional medical school campuses have been established in Orlando, Pensacola, Sarasota and Tallahassee, and are planned for Ft. Myers and Jacksonville. Nonprofit community corporations in each location provide community representation and input into the medical education program, as well as planning and coordination of student clinical experiences.

To reach our goal to become a top ranked public research university, FSU will need to reduce class sizes, add additional faculty, attain competitive faculty salaries, increase graduate student support and replace technology at a level to retain state of the art equipment. We will reallocate resources to our highest priorities; however, we will also need to establish constant, dependable resources.

We look forward to working with you and the Board on this initiative. If you have questions, please let me know.

**BOARD OF GOVERNORS
STRATEGIC PLANNING/EDUCATIONAL POLICY COMMITTEE**

**Strategic Planning for the State University System
Y-Axis**

Goals and Objectives	2002-03 (or as indicated)	2008-09	2012-13
A. Access to and Production of Degrees			
1. Bachelor	6,335	7,195	7,838
2. Master's	1,644	2,040	2,360
3. Doctoral*	290	368	444
4. Professional	242	325	473
TOTAL	8,511	9,928	11,115
5. Access/Diversity: Minority Representation in SUS Graduates as Percentage of Expected Representation	53.9%	55.2%	58.1%
B. Meeting statewide professional and workforce needs (details to support I.A.)			
TOTAL Degrees	8,511	9,928	11,115
TOTAL Degrees in Targeted Programs	2,564	3,145	3,710
Targeted Program Degrees as % of All Degrees	30.1%	31.7%	33.4%
1. Critical Needs: Education	197	198	249
2. Critical Needs: Health Professions	164	196	236
3. Economic Development: Emerging Technologies	1,350	1,685	1,964
a. Mechanical Science and Manufacturing	183	332	408
b. Natural Science and Technology	310	397	449
c. Medical Science and Health Care	5	13	22
d. Computer Science and Information Technology	783	850	967
e. Design and Construction	69	93	118
f. Electronic Media and Simulation	-	-	-
4. Economic Development: High-wage/high-demand jobs	853	1,086	1,261
5. Educated citizenry/workforce (not specifically targeted)	-	-	-
C. Building world-class academic programs and research capacity			
1. Research Expenditures			
a. Total Research Expenditures per full-time faculty (2002-03 dollars)	\$110,856	\$140,777	\$165,724
b. Federal Research Expenditures per full-time faculty (2002-03 dollars)	\$58,869	\$81,272	\$101,145
c. Research expenditures - Contracts and Grants (2002-03 dollars)	\$120,600,000	\$165,700,000	\$204,700,000
d. Make significant progress towards the goal of being invited to become a AAU member institution		Invitation/Application Started	1
2. U.S. Patents Issued per 1000 full-time faculty	13.8	10.6	6.1
3. National Research Council rankings (Number of ranked programs and, of those, number in top 25% nationally)	0	2	3
4. Center(s) of Excellence	0	2	3
5. Doctoral degrees per 1000 full-time faculty	221.7	260.1	299.0
6. Other Forms of National Recognition for Institutions' Academic and Research Programs			
a. Faculty Admitted to the National Academies in the last five years	1	2	3
b. Highly Cited Scholars	7	12	16
c. Nobel Prizes, Pulitzer Prizes and MacArthur Fellowships awarded to faculty in last five years	0	1	1
d. Academic Programs that will Receive National Recognition			
e. Number of Faculty Who Receive an Oscar			
f. Number of Faculty Who Receive a Tony Award			
D. Meeting community needs and fulfilling unique institutional responsibilities			
		See Attached Memorandum	

Establishing Diversity/Access Benchmarks at FSU

Preliminary Estimation: September 2004

1. Strategic targets at the state level: access/diversity

2003	74%	54,863	41.58%
2009	89%	68,927	43.42%
2013	100%	80,253	44.50%

2. Minority Graduate Representativeness Formula (MGR)

$$\text{MGR} = \frac{\left[\frac{\text{Minority Graduates}}{\text{All Graduates}} \right]_{\text{SUS } 20XX}}{\left[\frac{\text{Minority Population of State: 18-44 years old}}{\text{Total Population of State - 18-44 years old}} \right]_{20XX}}$$

3. Calculating the Minority Graduates in target years

$$\text{Minority Graduates} = [\text{MGR}] * [\text{Min18/44}] * [\text{All Graduates}]_{\text{SUS } 20XX}$$

4. Statewide Minority Graduate Targets

Year	Target
2003	16,880
2009	26,636
2013	35,712

5. Statewide Actual Minority Graduates 2003

Category	Actual	Target	Ratio	Gap	Total
Afr/Am	5,105	1,145	77	160	6,487
Hispanic	5,624	1,448	71	120	7,263
Other	1,970	483	42	110	2,605
					16,355

6. FSU Targets

Year	Actual	Target	Ratio	Gap
2003	8,511	53.9%	41.58%	
2009	9,928	55.2%	43.42%	
2013	11,115	58.1%	44.50%	

7. Implications of FSU Minority Graduates targeting scheme

Year	Actual	Target	Ratio
2003	1907		
2009	2379		3.75%
2013	2873		4.83%

8. Implications for FSU Minority Graduates Using State targeting scheme

	State Targeting	FSU Targeting
2003	1907	
2009	3414	10.19%
2013	4946	9.71%

9. Perspectives on FSU Minority Graduate Targets: What increase in minority graduates would be required in order to produce either the FSU targeted increase or the State targeting increase at FSU?

	State Targeting	FSU Targeting
2009	1,507	472
2013	1,532	494

10. Perspectives on the Targets: FSU Enrollees SAT Score Range 2003

Percentage	0.2%	1.1%	18.7%	27.5%	34.5%	17.9%
Number FTTC	4	29	474	697	872	454

11. Number of High School Graduate Test Takers Meeting SAT Levels of 1070 = 33.58% or 25,410 in 2002

12. Number of Minority School Graduate Test Takers Meeting SAT Levels of 1070 = 21.31% or 4,821 in 2003 (900/9018 = 9.98% Black, 1257/2903 = 43.3% Asian, - 2664/10700 = 24.90% Hispanic)

13. Number of test takers as % of Graduates in 2002 = 59.09 % or 128,050

14. Nota Bene: Graduates in 2009 enter in 2003 or 2004 or 2005
Graduates in 2013 enter in 2007 or 2008 or 2009

15. Forecast of Graduates from all Florida High Schools

Graduates in 2003, 2004, 2005 average = 147,160
 Graduates in 2007, 2008, 2009 average = 170,004

	Florida Public High School Graduates ¹	Estimated Private HS Graduates ²	Estimated Public and Private HS Graduates ²
1986	83,763	8,879	92,642
1987	84,402	8,947	93,349
1988	91,914	9,743	101,657
1989	93,046	9,883	102,909
1990	91,716	9,722	101,438
1991	89,512	9,488	99,000
1992	94,235	9,989	104,224
1993	92,590	9,815	102,405
1994	91,517	9,884	101,401
1995	93,299	10,263	103,562
1996	93,468	10,468	103,934
1997	98,350	11,114	109,464
1998	101,148	11,935	113,083
1999	105,673	12,892	118,565
2000	110,615	13,384	123,999
2001	115,696	14,115	129,811
2002	123,477	15,188	138,665
2003	128,073	15,881	143,954
2004	128,235	16,029	144,264
2005	136,111	17,150	153,261
2006	139,253	17,685	156,938
2007	145,146	18,579	163,725
2008	150,887	19,464	170,351
2009	155,696	20,240	175,936
2010	159,451	20,888	180,339

16. Percent minorities of all receiving standard diplomas 2003

- a. White Non-Hispanic - 59.69%
- b. Black Non Hispanic-- 19.16
- c. Hispanic -- 17.34%
- d. Other -- 3.81%

17. Number of minorities estimated receiving standard diplomas statewide (assume 2003 rate% and average for class)

	Black	Hispanic	Other
2003 class (retro intro 2000)	23,567	21,328	4,686
2009 class	28,196	25,518	5,607
2013 class	32,573	29,479	6,477

18. Number of Minorities Eligible by SAT 1070 to enter FTIC with success on SAT increased to 11% Black, 27% Hispanic, 40% Other for 2009 and 15% Black, 30% Hispanic and 40% Other for 2013

	Black	Hispanic	Other	Total
2003 class (retro to 2000)	2356	5332	1874	9,562
2009 class	3,101	6,890	2,242	12,233
2013 class	4,885	8,843	2,590	16,318

19. Retrofit to 2003 based on SAT for the top 75% using high school graduates from 2000 produces an underestimate unless most of the lower 20% of admissions is from underrepresented groups. In the out years, there do not appear to be enough minorities eligible under assumptions of modest improvements in current practice, current administration.

20. Increase in the Eligible Minorities in the top 75% and Needed FSU Increases

	Black	Hispanic	Other
2009	2,671	1,507	472
2013	4,085	1,532	494

21. This suggests that if FSU enrolls and graduates its proportionate share of underrepresented groups, it cannot meet the state target. Its own target for 2009 is reasonable and the target for 2013 may be understated by 100 to the closest order of magnitude. In each year, slightly increased numbers might be expected given projected increases in retention and graduation rates.