

# **Opportunity for Higher Education in Florida In the Human Capital Economy**

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## **Opportunity for Higher Education in Florida In the Human Capital Economy**

- I. Introduction.
  - A. I study higher educational opportunity from a public policy perspective that encompasses two worlds.
    - 1. World outside of the beltway: includes demographics, economics, especially labor market economics.
    - 2. World inside the beltway: political world where policy is made, programs are created, funds are appropriated.
  - B. My interpretation of federal and state policy (in laws, programs, appropriations, and changes to same) is that we have a broad national consensus that there is a significant *public interest* served by fostering higher educational opportunity.
  - C. There are three public policy *responsibilities* regarding the provision of opportunity for higher education:
    - 1. *Capacity* for the numbers of students seeking enrollment.
    - 2. *Competitive quality* in the curricular offerings of institutions.
    - 3. *Affordability* for students and their families by reasonable and equitable standards.
  - D. I use data to describe, and social science theory to interpret data, with respect to public policy objectives regarding opportunity for higher education.
- II. World outside of the beltway.
  - A. The human capital economy: more education leads directly to more income and higher living standards.
    - 1. Persons (**Figure 1**).
    - 2. Families and households (**Figures 2, 3, 4, and 7**).
    - 3. Cities (**Figure 5**).
    - 4. States (**Figure 6**).
    - 5. Changes over time: relationship has been strengthening since early 1970s (**Figures 8 – 13**).
    - 6. Other private correlates of educational attainment.
  - B. Higher educational opportunity in Florida.
    - 1. Educational attainment of Florida's adult population age 25 and over.

- a. High school diploma or more (Florida ranks 35<sup>th</sup>, with 81.9% compared to 82.8% for U.S.) (**Figure 14**).
  - b. GEDs: Florida ranks 2<sup>nd</sup> among states in the proportion of high school graduates who received their certification as GEDs at 27.8%, compared to 16.6% for U.S. in 1996 (**Figure 15**). GEDs are sought by high school dropouts who need a second chance at college and careers.
  - c. Bachelor's degree or more (Florida ranks 26<sup>th</sup>, with 22.5% compared to 24.4% for U.S.) (**Figure 16**).
2. Federal pre-college outreach programs.
- a. Upward Bound: In 1998 Florida enrolled 0.37% of its low income high school students in federally-funded and competitively-awarded Upward Bound programs, compared to 0.86% for the U.S. This ranked Florida 52<sup>nd</sup> among the 50 states plus DC and Puerto Rico (**Figure 17**).
  - b. Talent Search: In 1998 Florida enrolled 1.17 percent of its low income 6<sup>th</sup> through 12<sup>th</sup> graders in federally-funded and competitively-awarded Talent Search programs. Compared to 3.32% for the U.S. This ranked Florida 52<sup>nd</sup> among the 50 states plus DC and Puerto Rico (**Figure 18**).
3. Chance for college by age 19 (Florida ranks 47<sup>th</sup> in 1996 at 29.1%, compared to 39.7% for all states)

- a. Public high school graduation rate in Florida (**Figure 19**).

<u>Year</u>	<u>Rate</u>	<u>Rank</u>
1996	57.8%	47 <sup>th</sup>
1994	59.3%	48 <sup>th</sup>
1992	65.0%	45 <sup>th</sup>
1988	63.0%	49 <sup>th</sup>
1986	66.8%	

- b. College continuation rate for recent high school graduates in Florida (**Figure 20**).

<u>Year</u>	<u>Rate</u>	<u>Rank</u>
1996	50.3%	42 <sup>nd</sup>
1994	49.2%	45 <sup>th</sup>
1992	45.3%	47 <sup>th</sup>
1988	42.7%	35 <sup>th</sup>
1986	44.6%	

- c. Chance for college by age 19 in Florida (**Figure 21**):

<u>Year</u>	<u>Chance</u>	<u>Rank</u>
1996	29.1%	47 <sup>th</sup>
1994	29.2%	48 <sup>th</sup>
1992	29.4%	45 <sup>th</sup>

1988	26.9%	44 <sup>th</sup>
1986	29.8%	29 <sup>th</sup>

4. Chance for college for student from low income family backgrounds.
  - a. Florida ranks 20<sup>th</sup> for FY92-FY98 at 24.2%, compared to 23.6% for U.S. Trend in Florida ranks 24<sup>th</sup> **(Figure 22)**.
  - b. Student Support Services plus McNair: These are federally-funded and competitively-awarded programs targeted on undergraduates from low income, first generation families. In 1998, 1.96 percent of Florida's low income, first generation college students were enrolled in either SSS or McNair, compared to 4.61% percent for U.S. This ranked Florida 50<sup>th</sup> among the 50 states plus DC and Puerto Rico **(Figure 23)**.

C. Changing demographics of Florida's population.

1. Projections (from Western Interstate Commission on Higher Education).
  - a. Number: Total public and private high school graduates will increase from 102,000 in 1996, to 123,000 by 2000, to 138,000 by 2005, to a peak of 154,000 by 2008, then decline to 148,000 by 2012.
  - b. Race/ethnicity (public only):
    - (1) Black: From 21% in 1996, to 22% by 2000, to 22% by 2012.
    - (2) Asian: From 3% in 1996, to 3% in 2000, to 6% by 2012.
    - (3) Hispanic: From 14% in 1996, to 17% in 2000, to 32% by 2012.
    - (4) Non-Hispanic white: From 62 percent in 1996, to 58% in 2000, to 47% by 2012.
2. Florida has many low income school children.
  - a. Florida ranks 10<sup>th</sup>, with 48.0% of its children participating in school free/reduced-price school lunch program in 1997-98, compared to 40.1% for U.S. **(Figure 24)**.
  - b. Number of Florida residents 18 to 24 years old from families with incomes below 185% of federal poverty level when they were enrolled in 4<sup>th</sup> to 9<sup>th</sup> grades.

<u>Year</u>	<u>Population</u>
1992-93	294,802
1993-94	304,203
1994-95	269,306
1995-96	228,972

1996-97	251,779
1997-98	284,377
1998-99	271,851
1999-2000	327,922
2000-01	367,277
2001-02	406,564
2002-03	431,667
2003-04	471,321
2004-05	504,637
2005-06	508,268
2006-07	463,764

III. World inside the beltway—the political world.

- A. Florida’s higher education investment: state tax fund appropriations per \$1000 of personal income (Florida ranked 39<sup>th</sup> for FY2000 \$7.20, compared to \$7.94 for U.S.) (**Figures 25 and 26**).
- B. The forms of Florida’s investment. (Note: higher educational opportunity costs money, for the three public policy dimensions of higher educational opportunity: capacity, quality and affordability.)
  - 1. Institutional funding.
  - 2. Tuition policy: Florida has among the lowest public institution tuition and fee rates among for its public institution undergraduates of any state in FY1999.
    - a. Public universities: \$2114 ranked 49<sup>th</sup>.
    - b. Colleges and state universities: \$2114 ranked 44<sup>th</sup>.
    - c. Community colleges: \$1309 ranked 33<sup>rd</sup>.
  - 3. Student financial aid funding (Florida ranks 13<sup>th</sup> in proportion of state tax funds awarded as student grants, at 6.8%, compared to 7.0% for all states.)
    - a. Need-based financial aid. (Florida ranks 32<sup>nd</sup> in proportion of Pell Grant recipients also receiving state need-based grants at 23.1%, compared to 47.4% for all states in FY1997).
    - b. Merit-based financial aid.
  - 4. Shared responsibility in Florida .

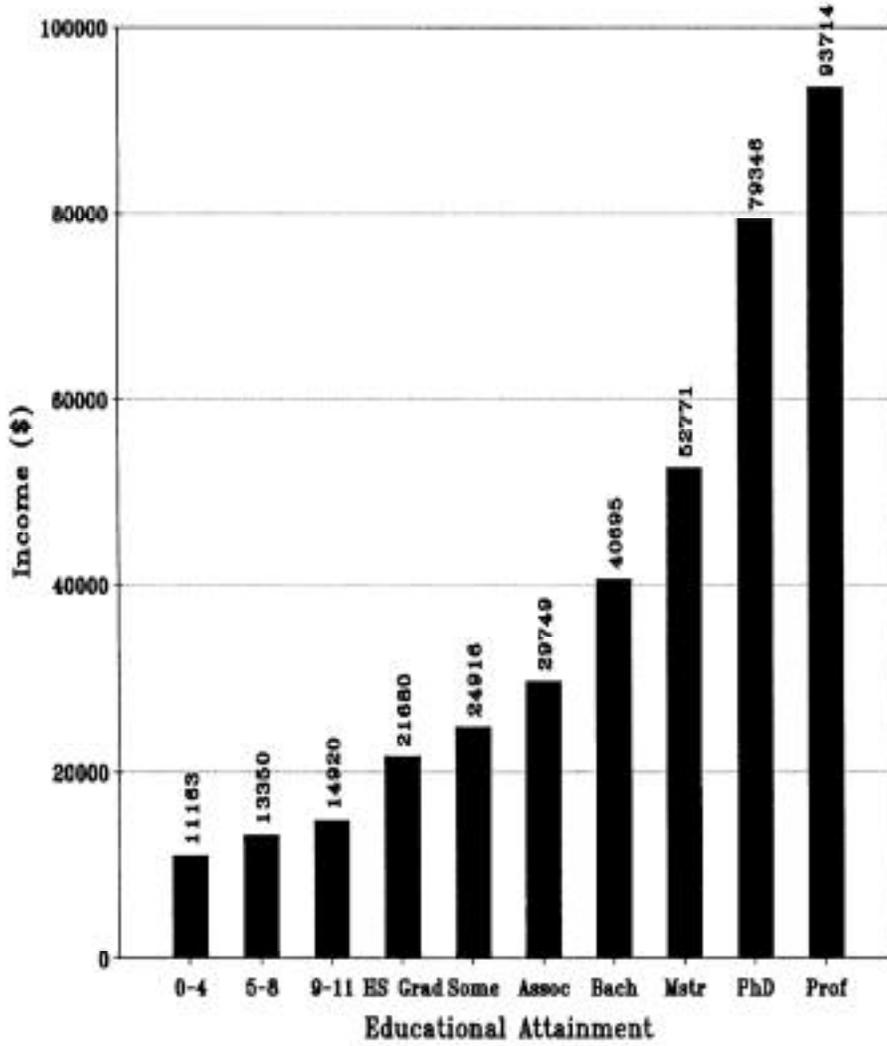
IV. Focusing public investment on those who need assistance.

- A. Academic needs of students: preparation for college.
  - 1. College core course-taking, from the Nation at Risk (1983).
  - 2. National trends and patterns: NCES and ACT.
  - 3. Supporting policy research: Adelman, Cabrera, others.
- B. Financial assistance for needy students.

1. The key concepts of need-based financial aid.
    - a. Costs of attendance.
    - b. Less Expected family contribution.
    - c. Equals Financial need.
  2. Packaging aid to meet financial need (**Figures 27a – g**).
    - a. Grants based on demonstrated financial need
    - b. Scholarships not based on need.
    - c. Educational loans which may or may not be need based.
    - d. Earnings from college employment.
  3. Supporting policy research: tuition elasticities, student price response coefficients.
- C. Providing need-based student financial assistance is a necessary, but insufficient response. Finances are but one of many barriers to postsecondary opportunity. Academic preparation is key (**Figure 28**).

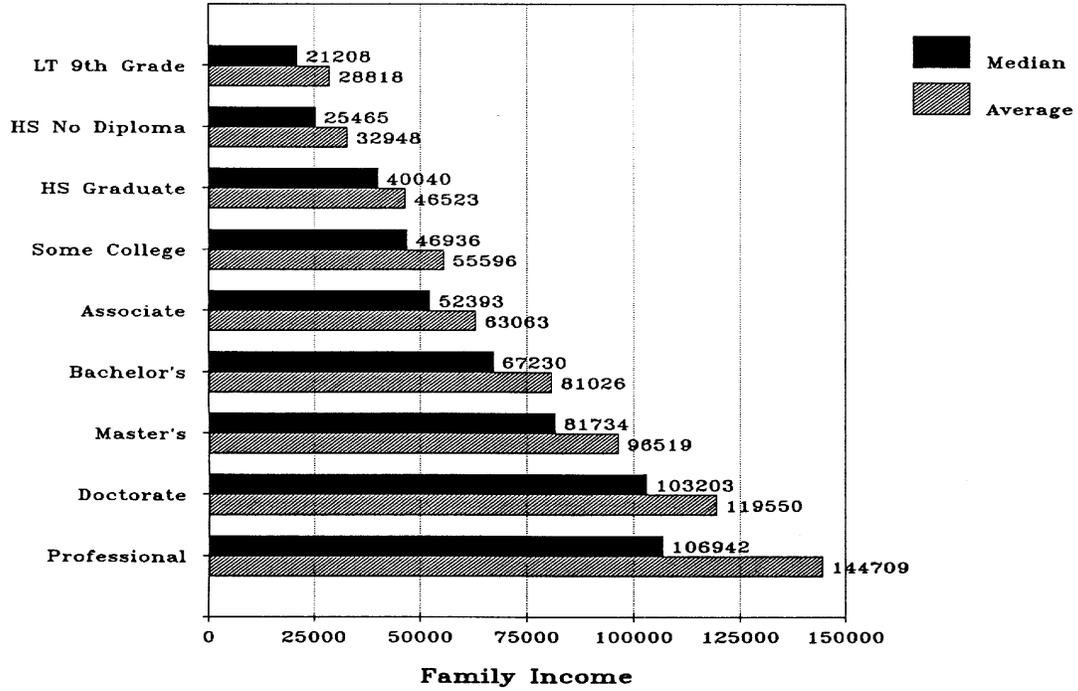
# Figure 1

## Average Annual Income for Persons 18 Years and Over by Educational Attainment 1997



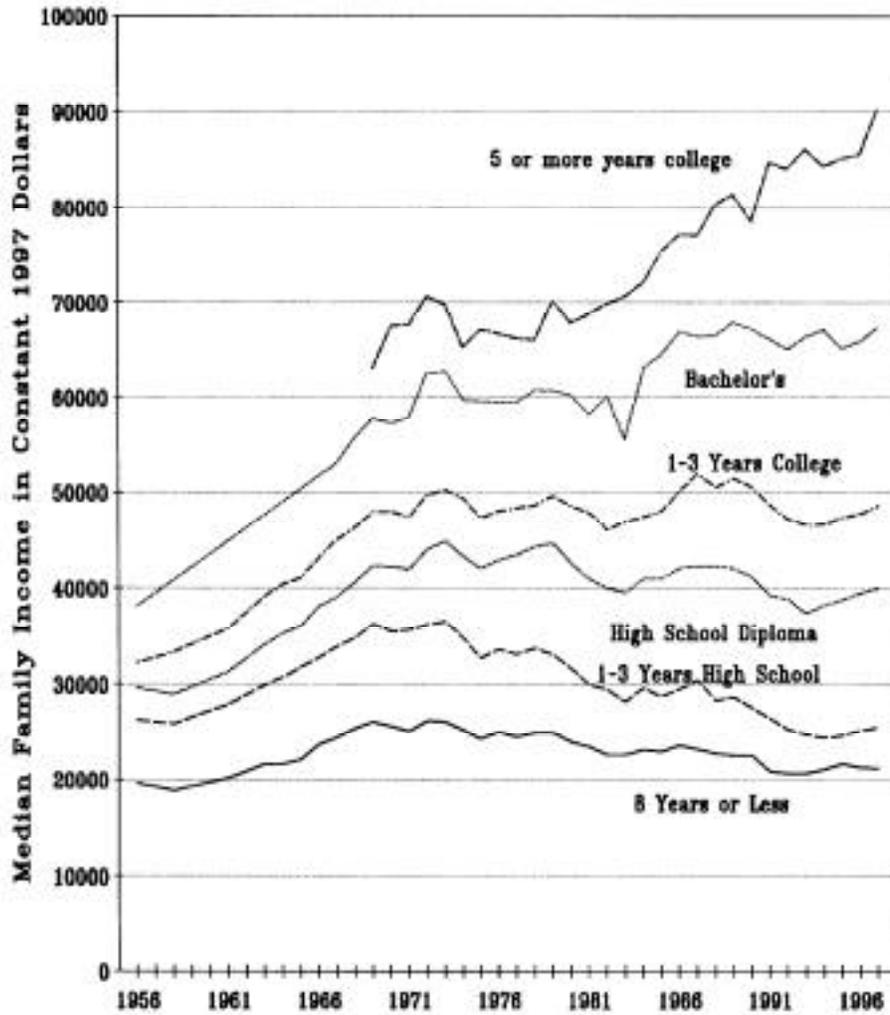
## Figure 2

Median and Average Family Income  
by Educational Attainment of Householder  
1997



# Figure 3

## Median Family Income by Educational Attainment of Householder 1956 to 1997



# Figure 4

## Change in Median Family Income by Educational Attainment of Householder Between 1973 and 1997

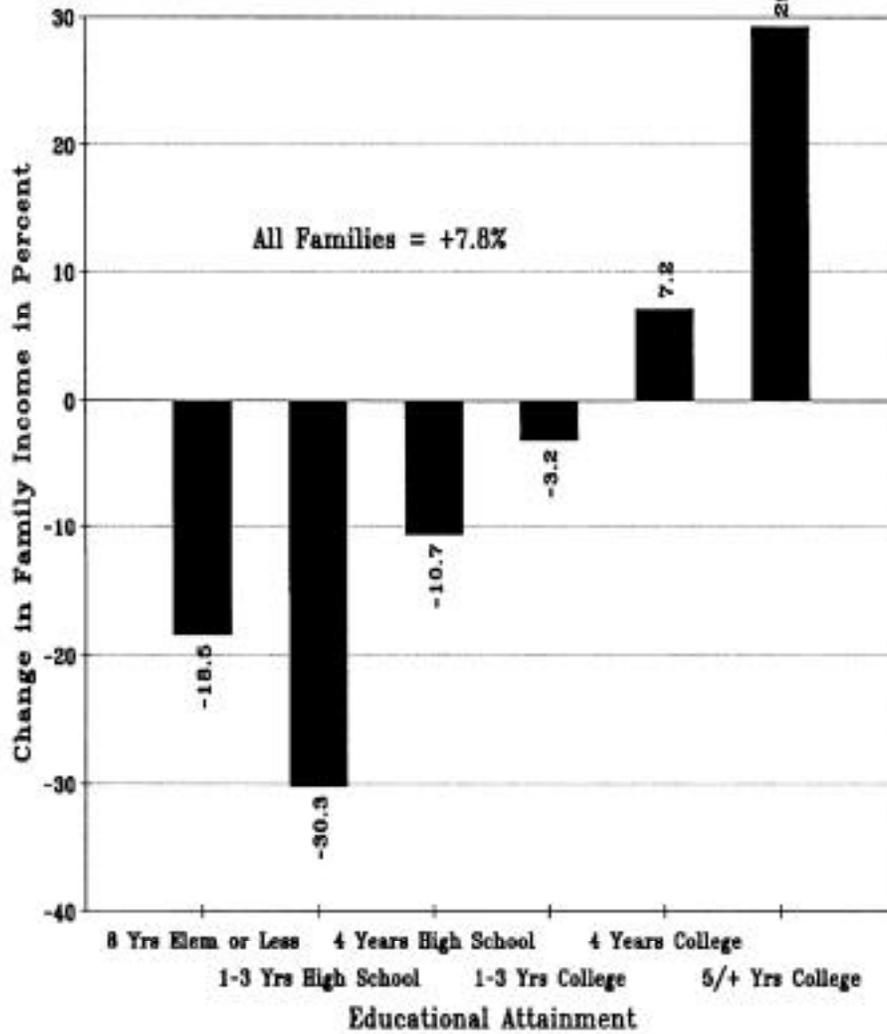


Figure 5

Income by Education for Metropolitan Areas  
1995

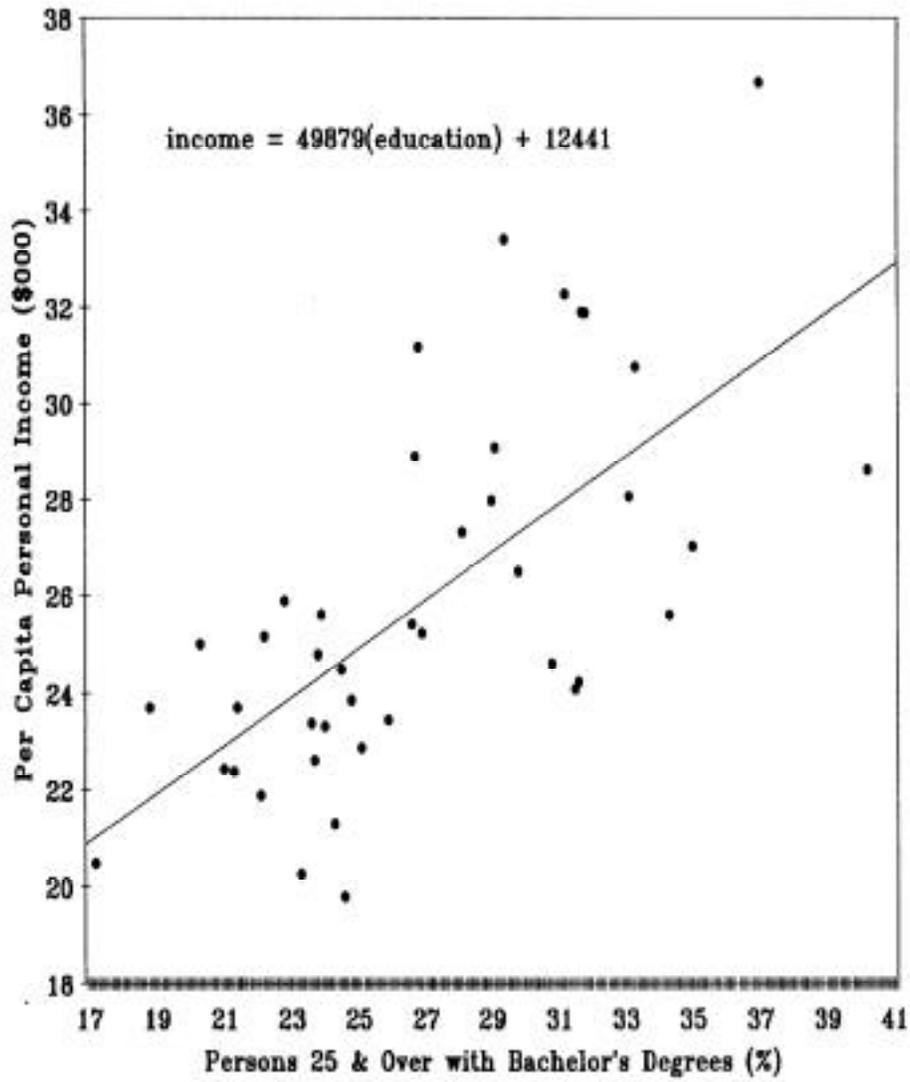
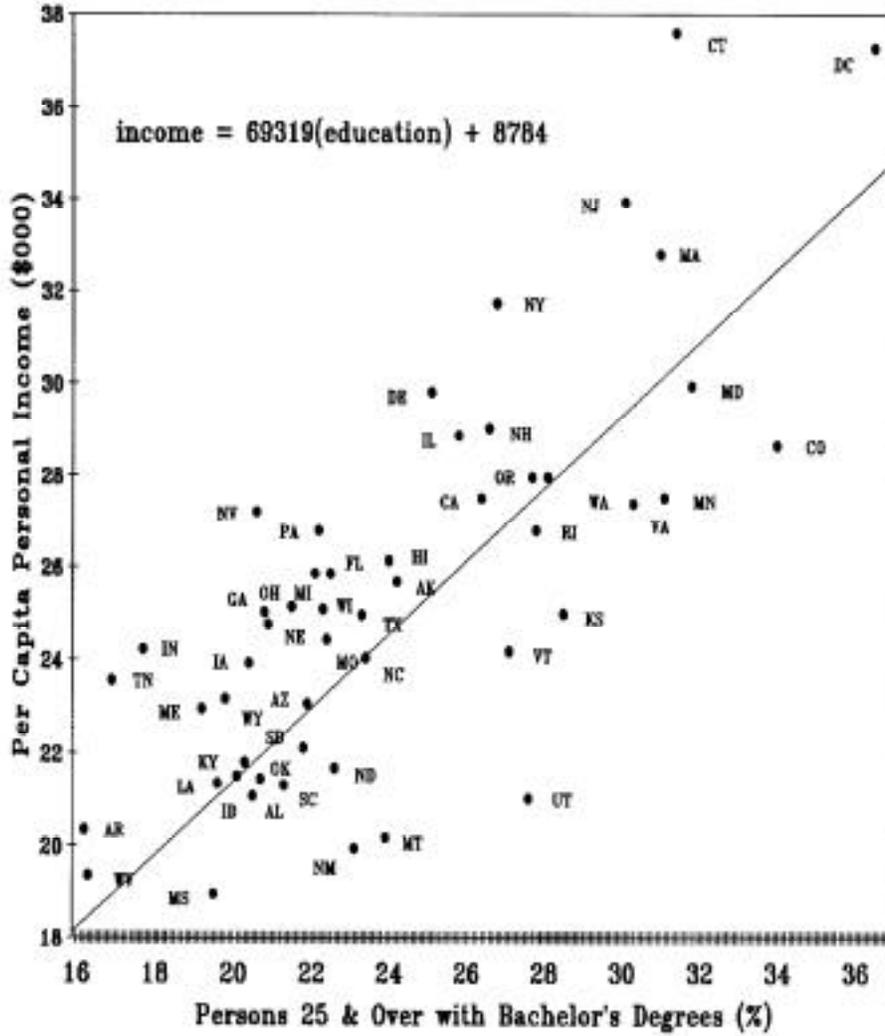


Figure 6

Per Capita Personal Income by State by Educational Attainment of Persons 25 and Over 1998



### Figure 7

<b>Federal Income Taxes Paid by Educational Attainment of Head of Household 1994</b>					
Educational Attainment of Head	Households (000)	Average Income	Total Income (000,000)	Preliminary Federal Income Tax Rate	Federal Income Taxes Paid (000,000)
Less Than Ninth Grade	8,242 8.8%	\$19,628	\$161,774 3.9%	6.44%	\$10,4128 2.2%
9th to 12th Grade (No Diploma)	9,644 10.3%	\$23,836	\$229,874 5.5%	7.85%	\$18,045 3.8%
High School Graduate	29,647 31.7%	\$36,308	\$1,076,423 26.0%	10.17%	\$109,472 23.1%
Some College, No Degree	16,786 17.9%	\$42,773	\$717,988 17.3%	10.59%	\$76,035 16.1%
Associate Degree	6,403 6.8%	\$48,046	\$307,639 7.4%	10.97%	\$33,748 7.1%
Bachelor's Degree	14,380 15.4%	\$64,536	\$928,028 22.4%	12.64%	\$117,303 24.8%
Master's Degree	5,506 5.9%	\$74,482	\$410,098 9.9%	13.87%	\$56,881 12.0%
Doctorate Degree	1,227 1.3%	\$100,593	\$123,428 3.0%	16.10%	\$19,872 4.2%
Professional Degree	1,710 1.8%	\$109,924	\$187,970 4.5%	16.80%	\$31,579 6.7%
<b>Total</b>	<b>93,546 100.0%</b>	<b>\$44,292</b>	<b>\$4,143,339 100.0%</b>	<b>11.42%</b>	<b>\$473,353 100.0%</b>
Any College	49.1%		64.5%		70.9%
Bachelor's Degree or More	24.4%		39.8%		47.7%

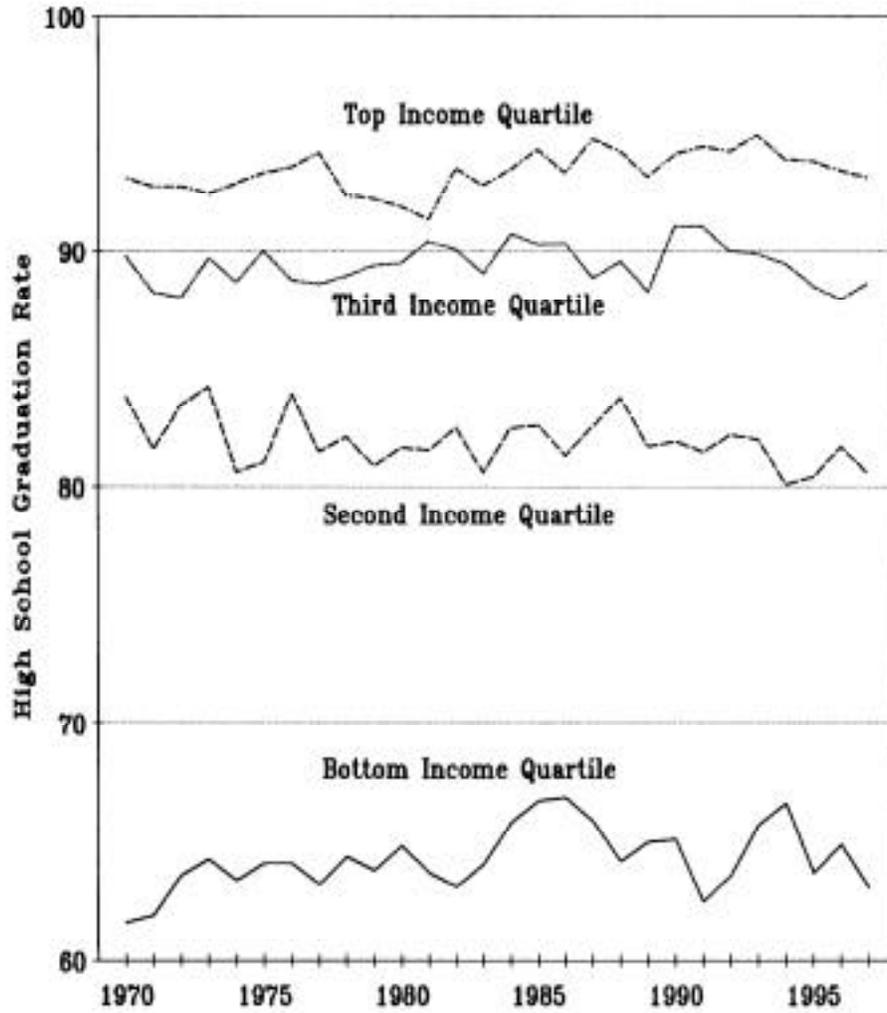
Sources: Household data from *Income, Poverty, and Valuation of Noncash Benefits: 1994*. Current Population Reports, Consumer Income, Series P-60, No. 189, Table 2. Preliminary Federal income tax rate derived from *Individual Income Tax Returns 1993*. Internal Revenue Service, Publication 1304, Table B.

## Figure 8

<b>Distribution of Households, Income and Federal Income Taxes Paid by Educational Attainment of Head of Household 1970-1994</b>									
<b>Educational Attainment of Head</b>	<b>1970</b>	<b>1975</b>	<b>1980</b>	<b>1985</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994p</b>
<b>Households</b>									
Number (thousands)	64,374	72,867	82,368	88,458	89,429	90,810	91,369	91,842	93,546
Less Than 8 Years	14.0%	11.5%	9.4%	7.5%	11.3%	10.3%	9.9%	9.3%	8.8%
8 Years	12.8	9.7	7.9	6.5					
1 to 3 Years HS	16.4	15.3	14.0	12.5	11.3	11.4	10.9	10.6	10.3
4 Years High School	31.3	33.1	34.6	35.4	35.8	33.2	32.9	32.0	31.7
1-3 Years College	11.8	14.0	15.6	17.3	18.4	22.1	22.8	24.3	24.7
4 Years College	13.6	9.2	10.2	11.8	12.8	14.5	14.6	15.0	15.4
5/+ Years College		7.2	8.2	9.1	10.4	8.5	8.8	8.7	9.0
Any College	25.4%	30.4%	34.0%	38.2%	41.6%	45.1%	46.2%	48.0%	49.1
4 Years or More	13.6	16.4	18.4	20.9	23.2	23.0	23.4	23.7	24.4
<b>Total Income</b>									
Amount (billions)	\$644	\$1004	\$1735	\$2,571	\$3,423	\$3,525	\$3,653	\$3,691	\$4,143
Less Than 8 Years	8.1%	6.3%	4.9%	3.6%	5.5%	4.8%	4.6%	4.2%	3.9%
8 Years	9.3	6.6	5.1	3.9					
1 to 3 Years HS	14.4	12.0	10.2	8.4	6.9	6.7	6.1	6.0	5.5
4 Years High School	32.6	33.4	34.1	32.2	31.2	28.5	27.8	26.2	26.0
1-3 Years College	13.9	15.8	17.2	18.7	19.8	23.4	23.8	24.3	24.7
4 Years College	21.8	13.4	14.8	17.2	18.6	20.9	21.0	21.8	22.4
5/+ Years College		12.4	13.7	16.1	18.0	15.7	16.7	17.5	17.4
Any College	35.7%	41.6%	45.7%	52.0%	56.4%	60.0%	61.5%	63.6%	64.5%
4 Years or More	21.8	25.8	28.5	33.3	36.6	36.6	37.7	39.3	39.8%
<b>Federal Income Taxes</b>									
Amount (billions)	\$70	\$111	\$225	\$306	\$386	\$390	\$399	\$441	\$473
Less Than 8 Years	4.1%	4.1%	2.3%	2.3%	3.5%	2.9%	2.6%	2.3%	2.2%
8 Years	6.9	5.2	3.9	2.8					
1 to 3 Years HS	13.9	10.2	8.6	6.5	5.3	4.9	4.3	4.2	3.8
4 Years High School	33.4	32.7	33.2	29.6	28.7	26.3	25.3	23.3	23.1
1-3 Years College	14.9	16.4	17.6	18.5	19.4	23.0	23.1	22.8	23.2
4 Years College	26.7	15.5	17.2	19.6	20.7	23.1	22.9	23.8	24.8
5/+ Years College		15.9	17.3	20.7	22.4	19.9	21.8	23.6	22.9
Any College	41.6%	47.8%	52.1%	58.8%	62.5%	66.0%	67.8%	70.2%	70.9%
4 Years or More	26.7	31.4	34.5	40.3	43.1	43.0	44.7	47.4	47.7
<b>Notes:</b>									
1. Definition of educational attainment changed in 1991 from years of school completed to highest degree earned.									
2. Households limited to those headed by persons over 25 years beginning in 1990.									

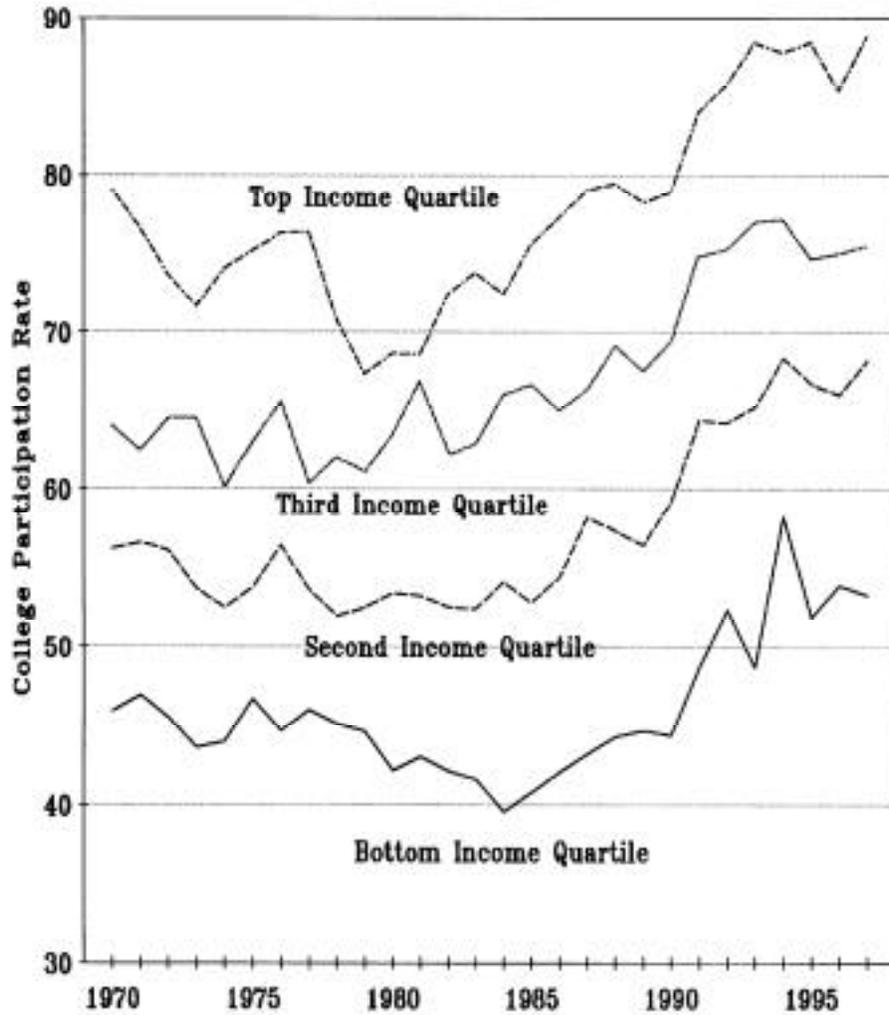
# Figure 9

## High School Graduation Rates by Family Income Quartiles for Unmarried 18 to 24 Year Olds 1970 to 1997



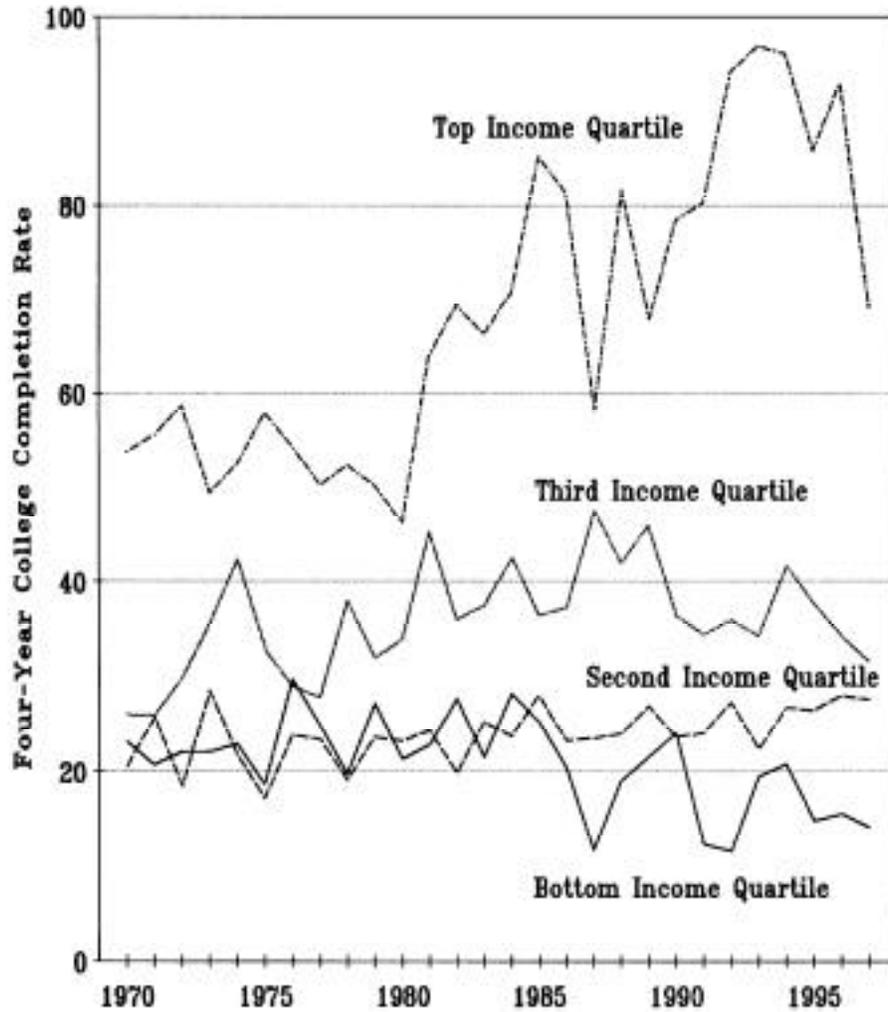
**Figure 10**

**College Participation Rates by Family Income Quartiles  
for Unmarried 18 to 24 Year Old High School Graduates  
1970 to 1997**



**Figure 11**

**Estimated Four-Year College Completion Rates by Age 24  
by Family Income Quartiles for Unmarried College Students  
1970 to 1997**



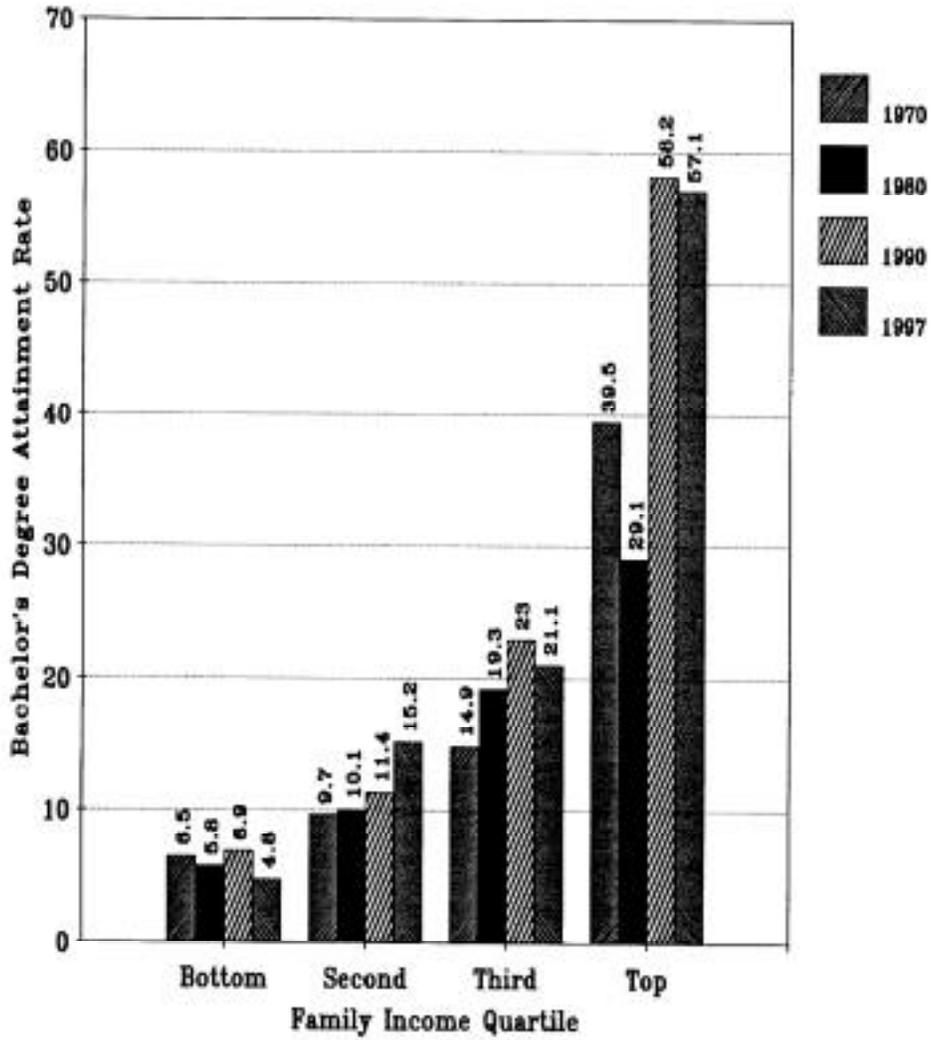
**Figure 12**

**Estimated Chances for a Baccalaureate Degree  
by Age 24 by Family Income Quartile  
1970 to 1997**



**Figure 13**

**Estimated Chances for Bachelor's Degree  
by Age 24 by Family Income Quartile  
1970, 1980, 1990 and 1997**



# Figure 14

## Persons 25 and Over with High School Diploma or More 1998

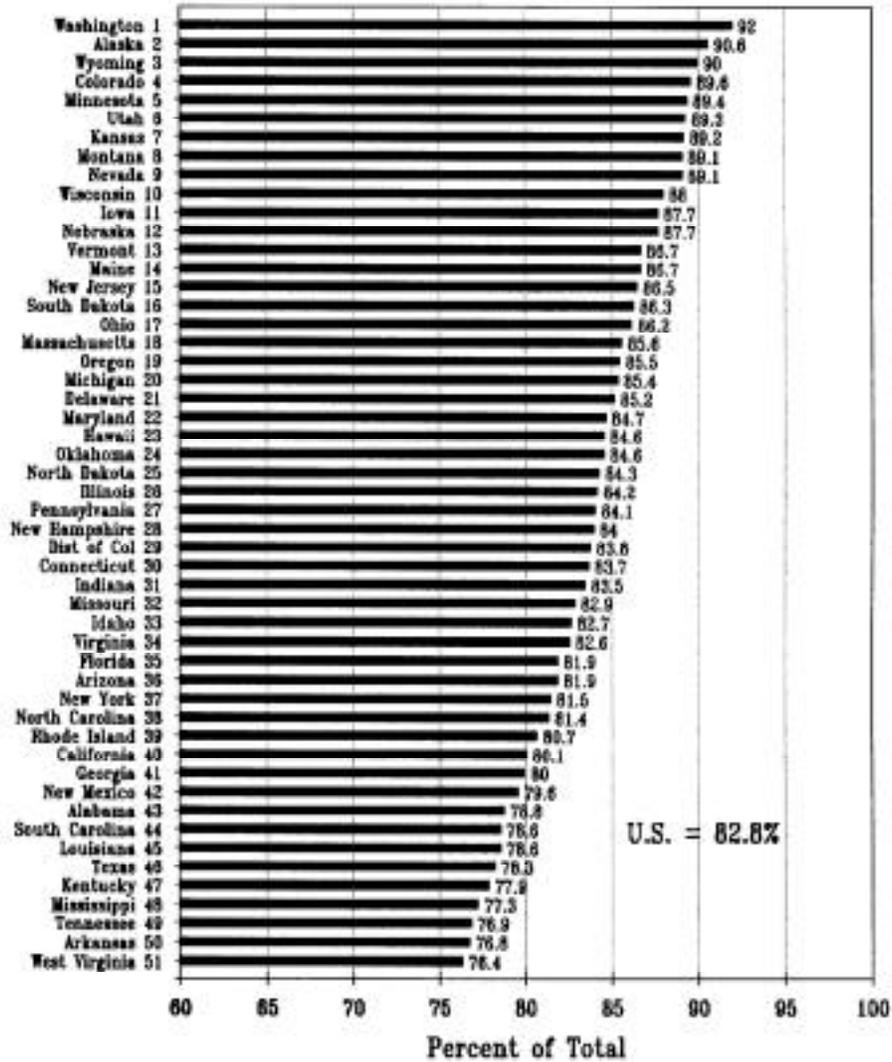
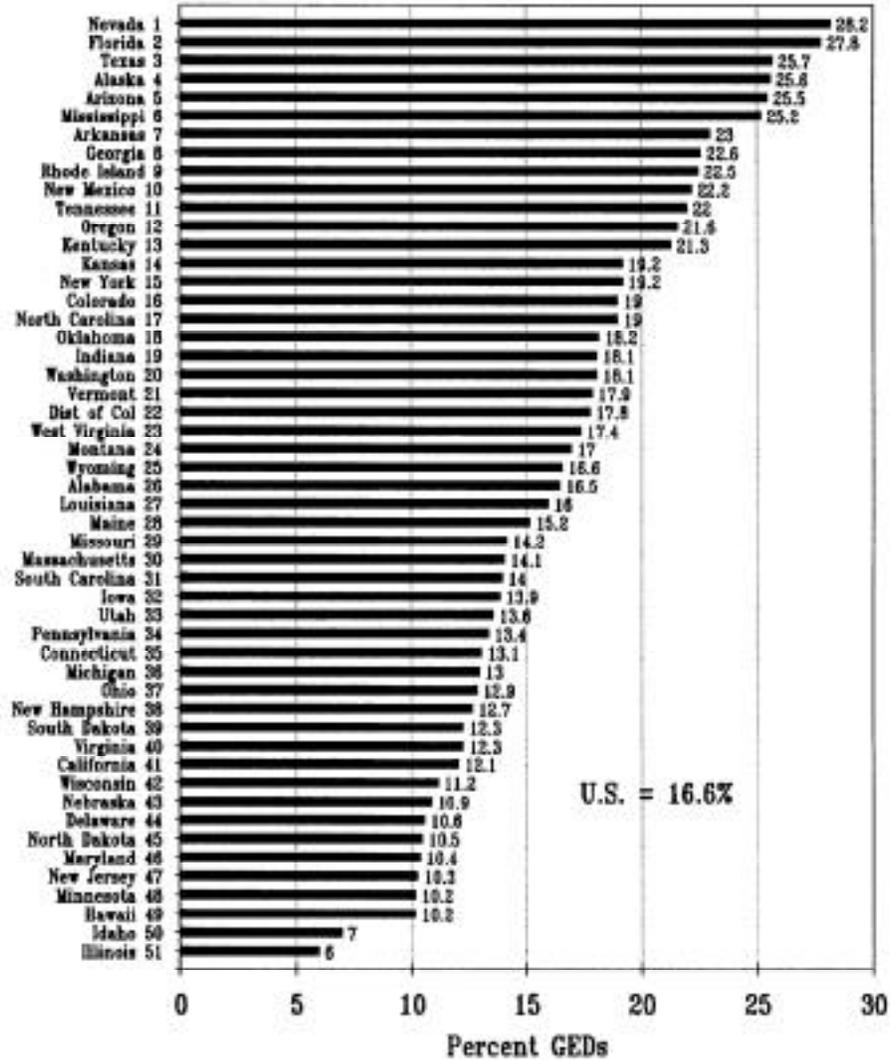


Figure 15

Proportion of High School Graduates Awarded as GEDs  
1996



# Figure 16

## Persons 25 and Over with Bachelor's Degrees or More 1998

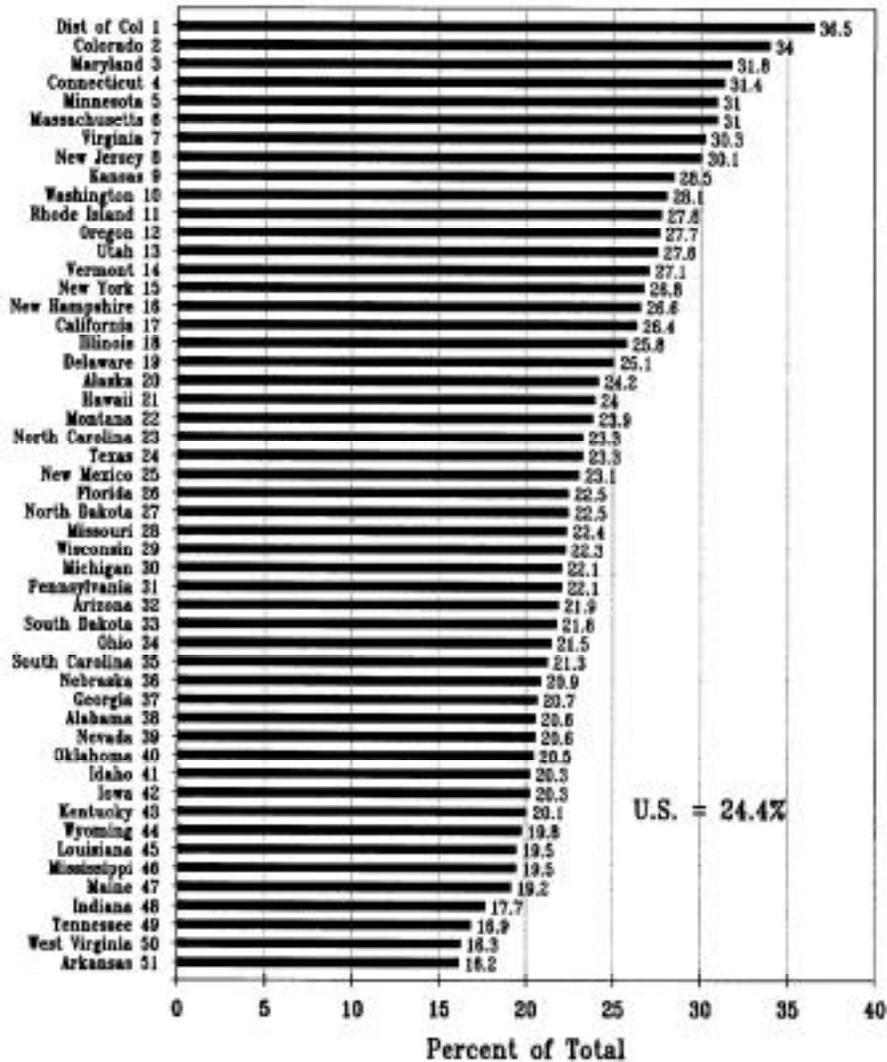
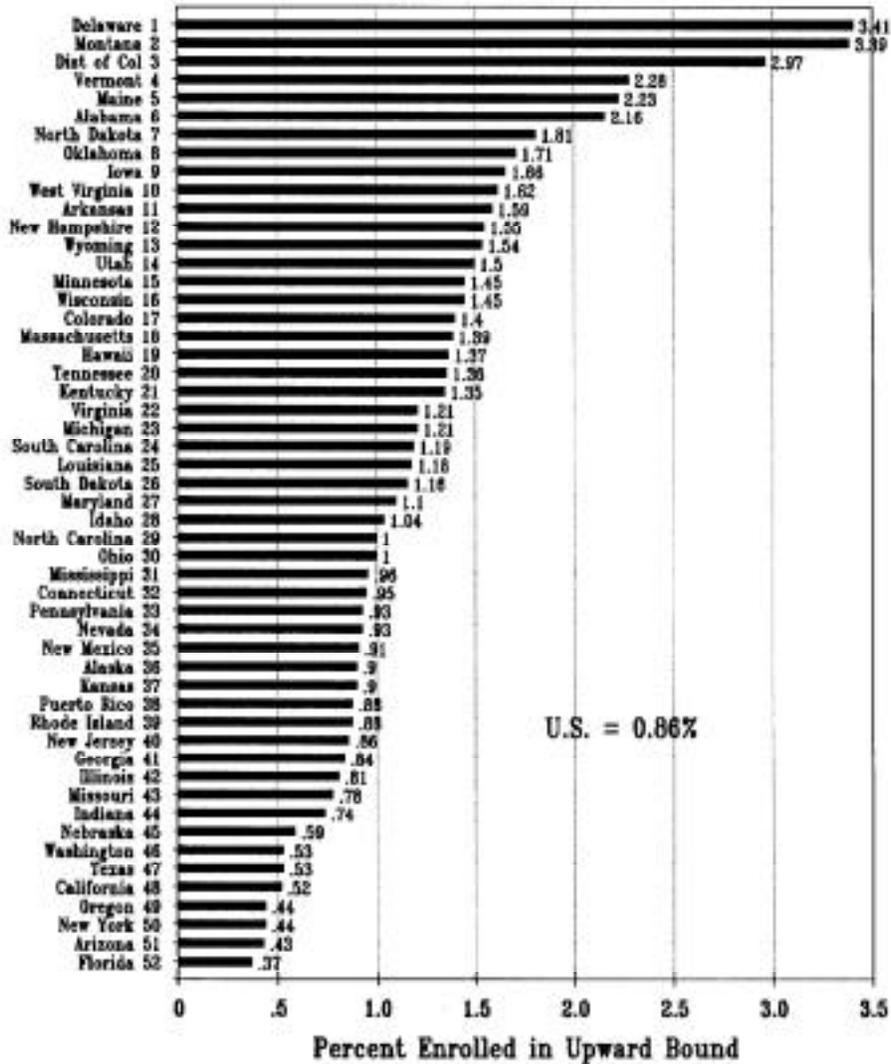


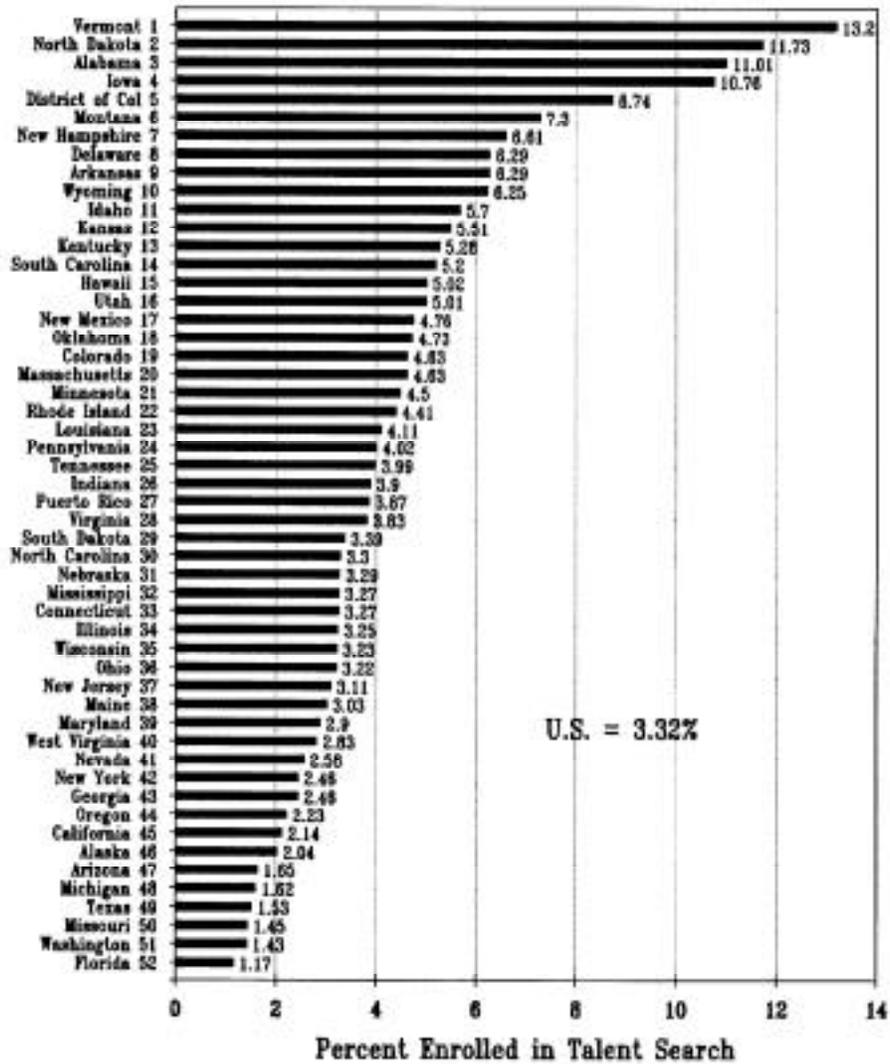
Figure 17

Upward Bound Market Coverage by State  
1998



# Figure 18

## Talent Search Market Coverage by State 1998



# Figure 19

## Public High School Graduation Rates By State, 1996

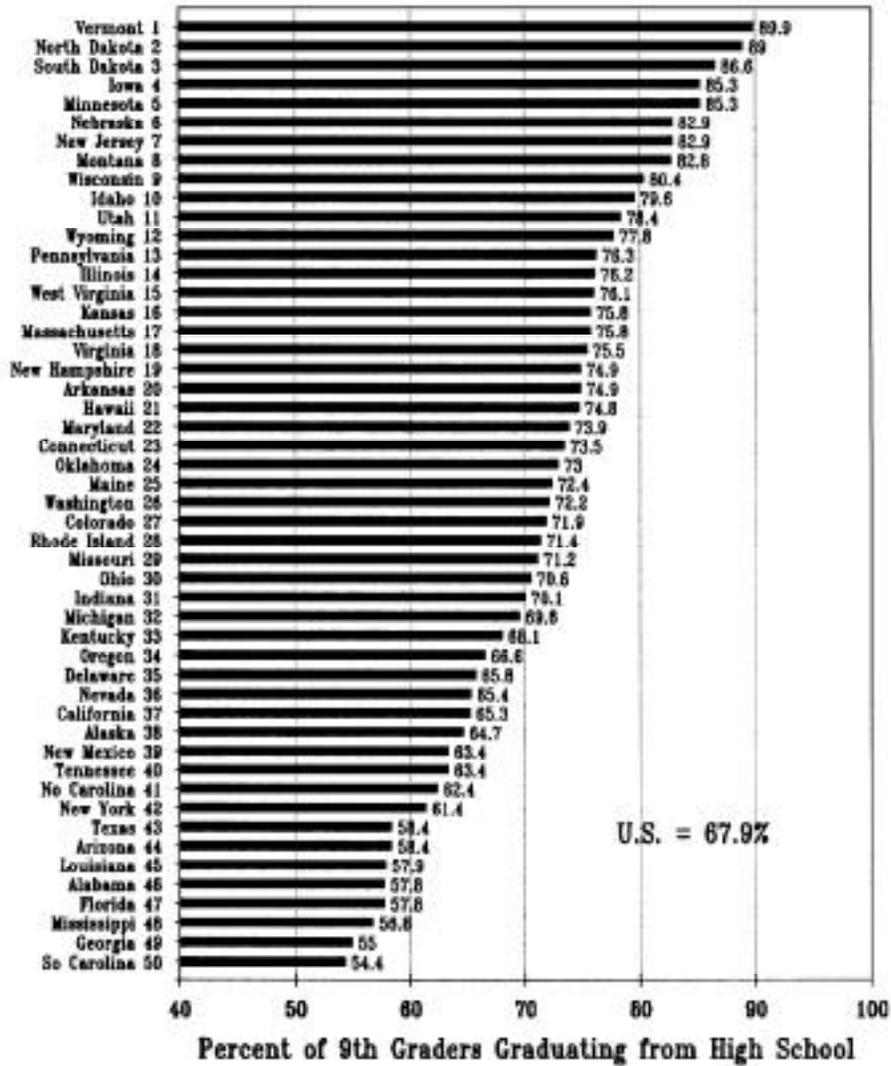
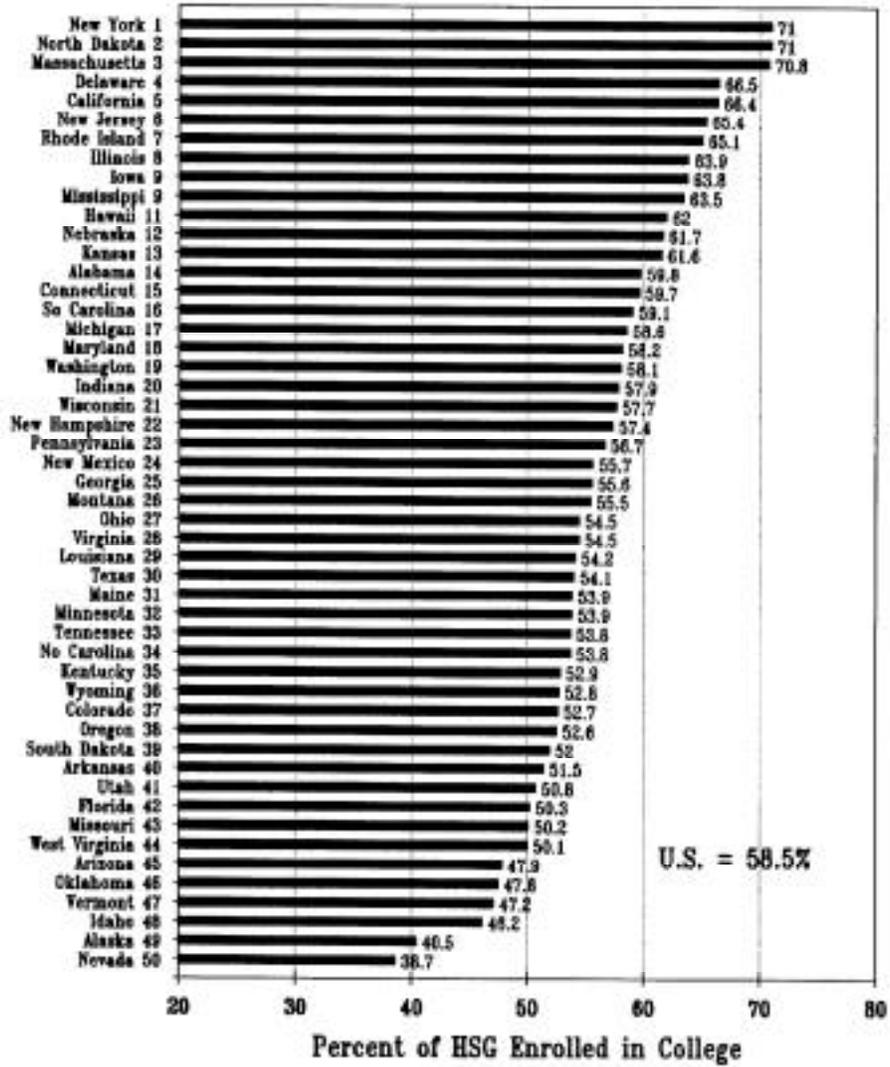


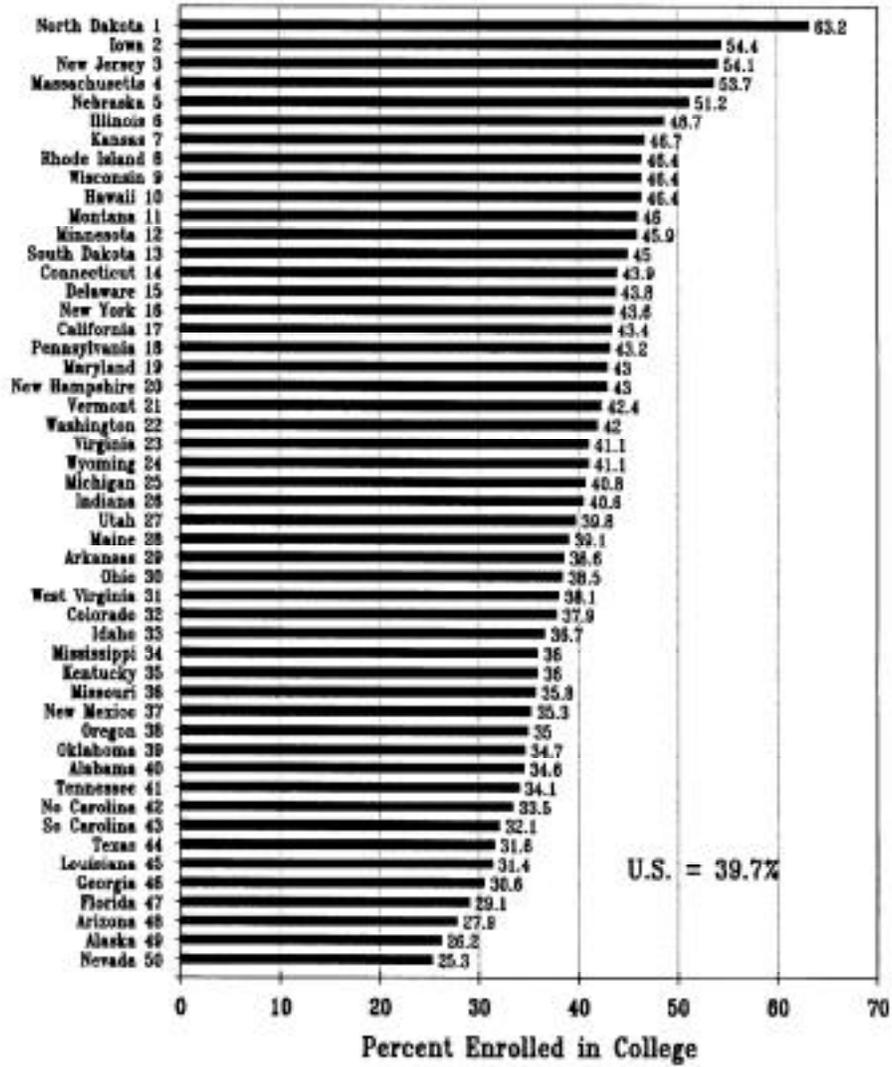
Figure 20

College Continuation Rate  
by State, 1996



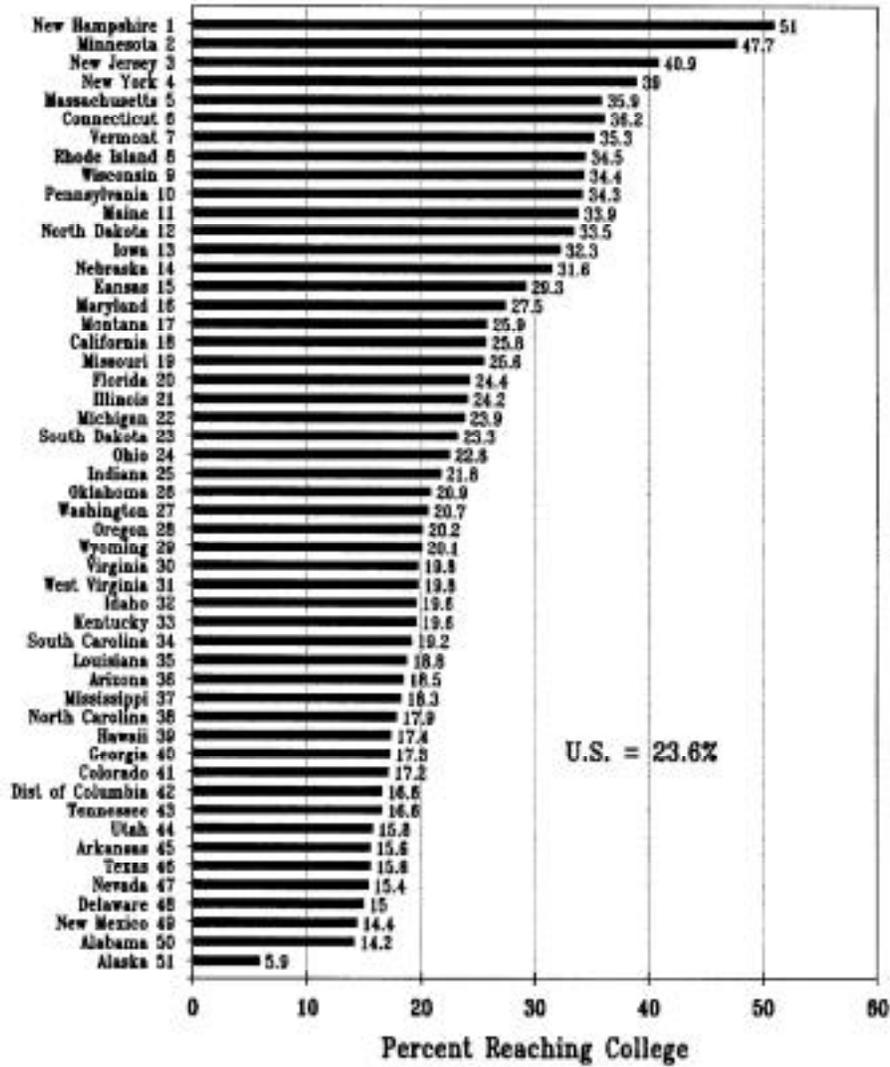
# Figure 21

## Chance for College by Age 19 by State, 1996



# Figure 22

## Chance for College for Students from Low Income Families Average of Rates 1992 through 1998



# Figure 23

## Student Support Services & McNair Market Coverage by State 1998

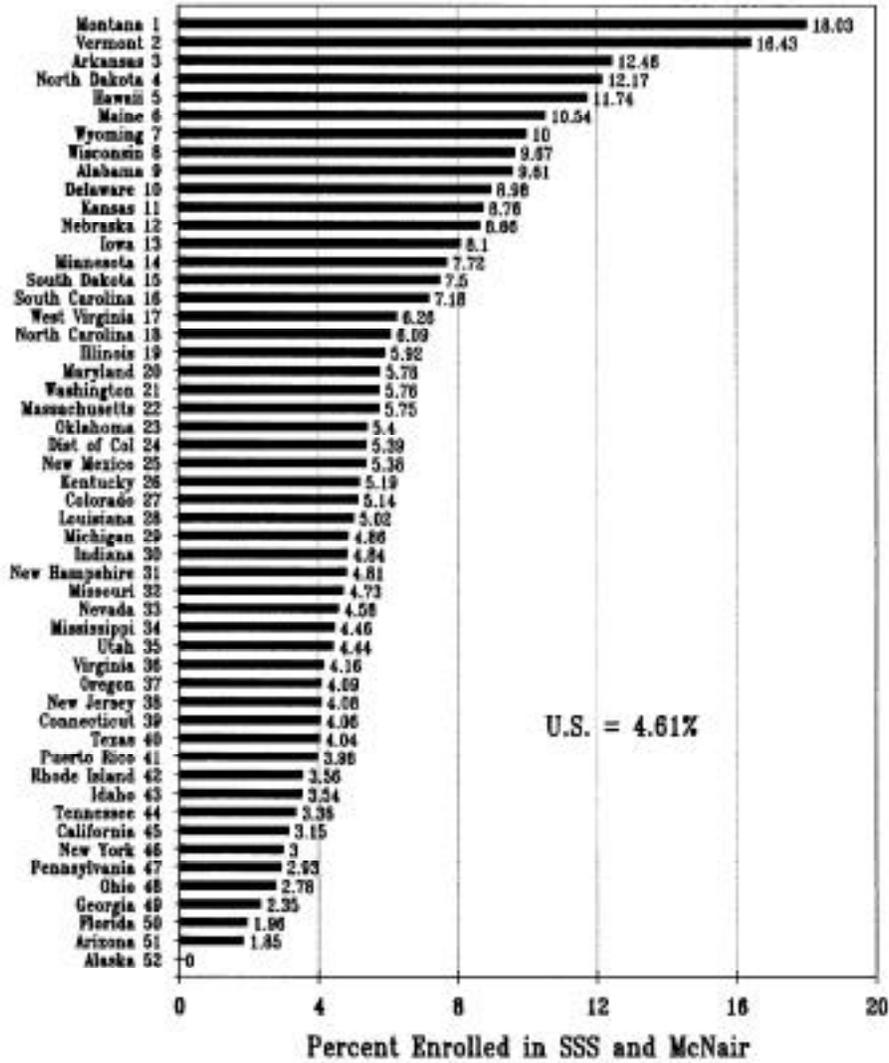


Figure 24

National School Lunch Program Approved Participation Rate by State, 1998-99

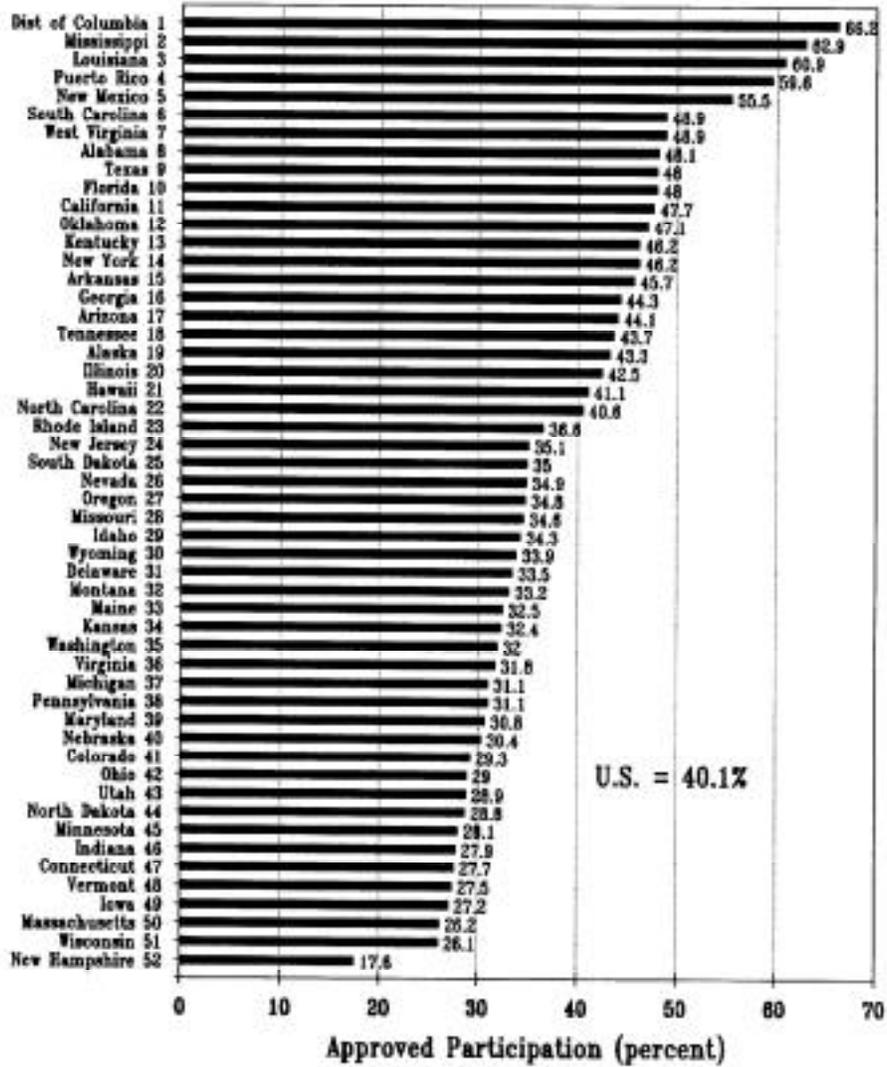


Figure 25

Appropriations of State Tax Funds for Operating Expenses  
of Higher Education per \$1000 of Personal Income  
FY2000

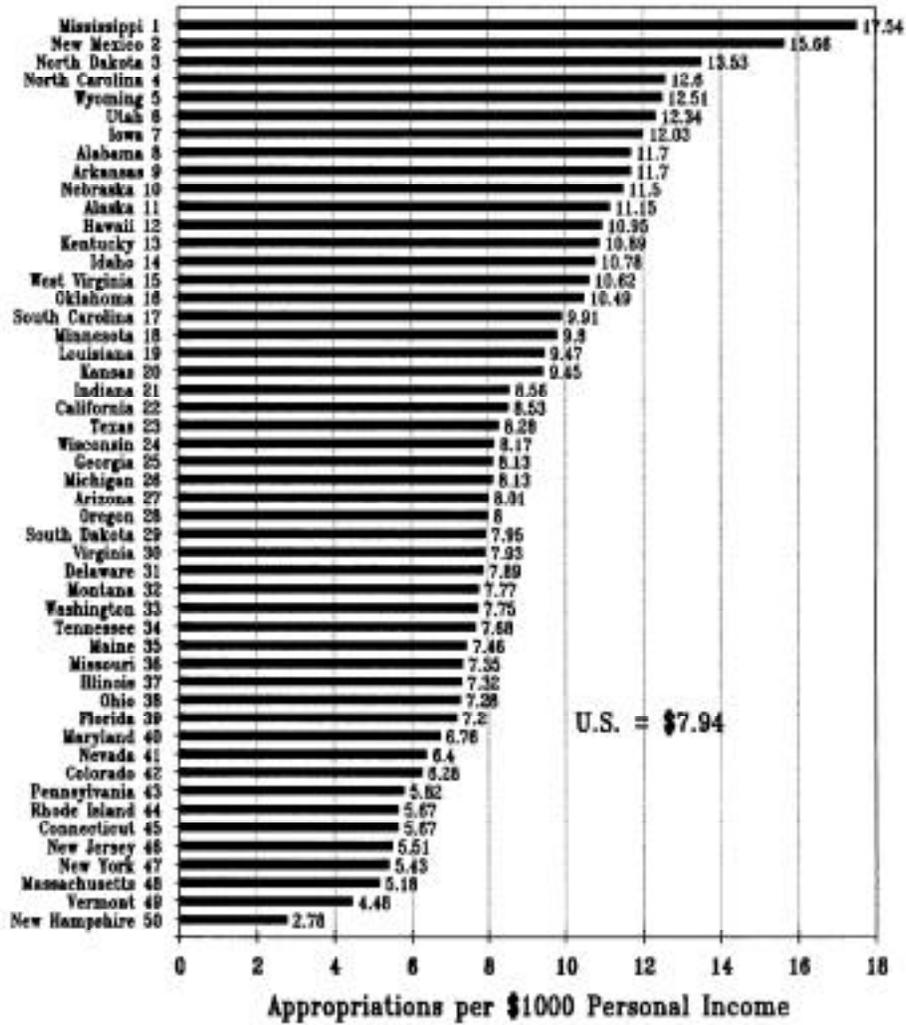
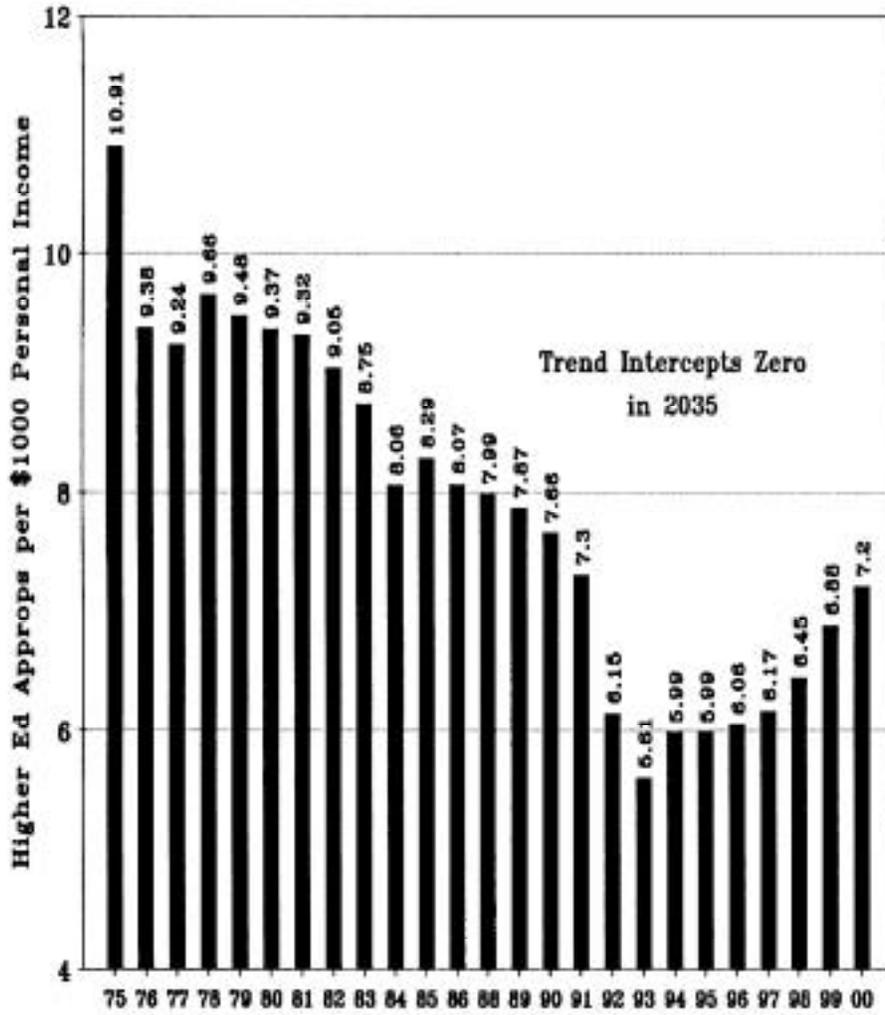


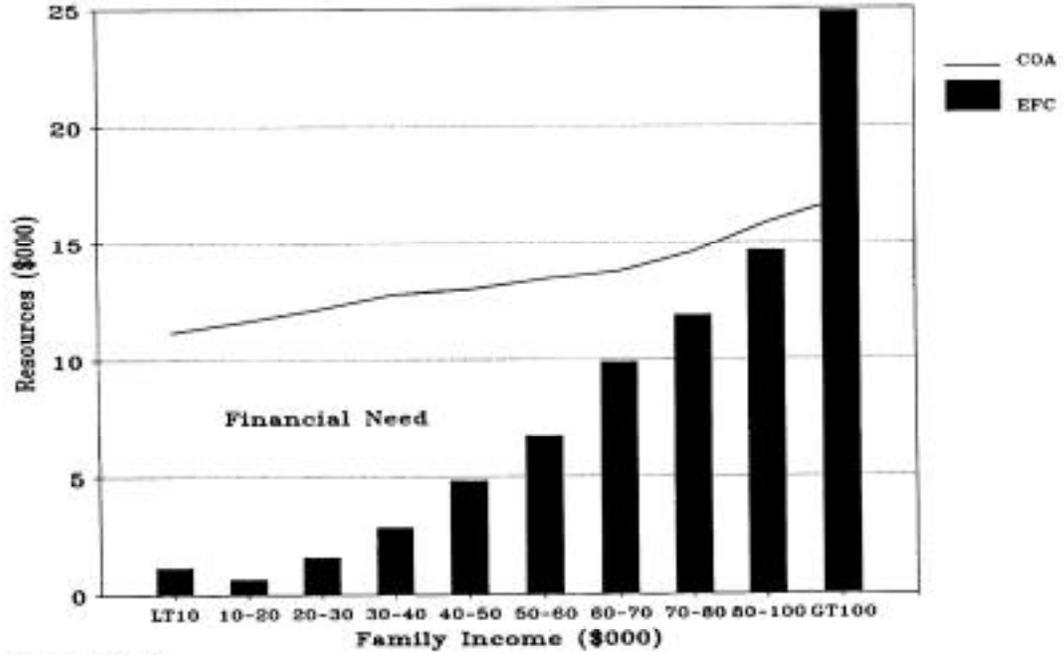
Figure 26

Florida Appropriations of State Tax Funds for  
Higher Education per \$1000 of Personal Income  
FY1975 to FY2000



# Figure 27a

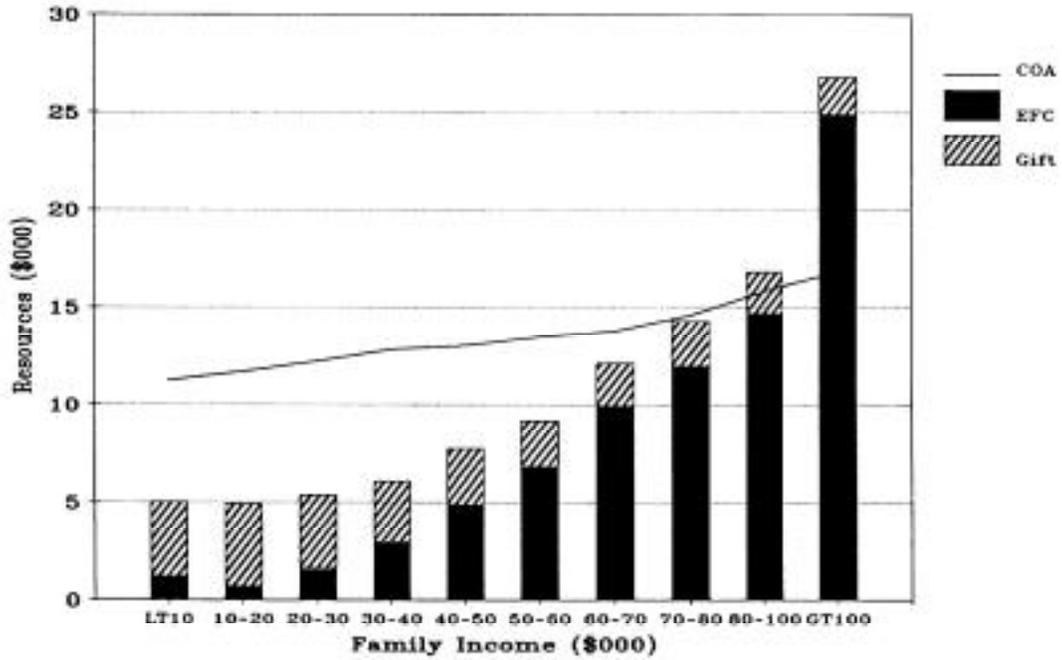
## Financing College Attendance Costs for Full-Time, Full-Year Aided Dependent Undergraduates 1995-96



Source: NPRAS95

# Figure 27b

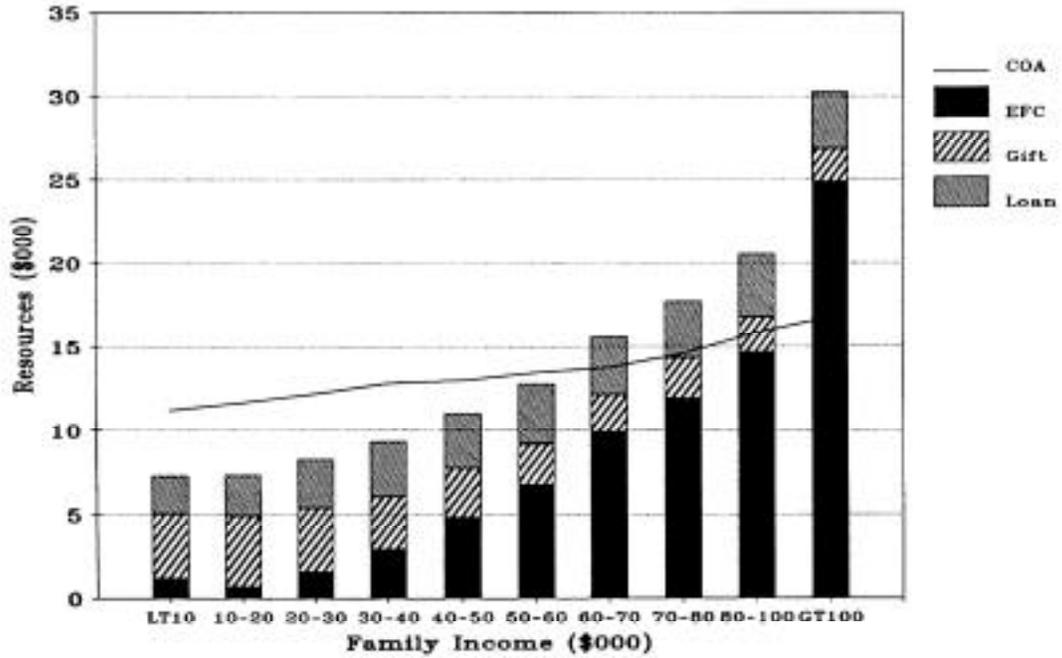
## Financing College Attendance Costs for Full-Time, Full-Year Aided Dependent Undergraduates 1995-96



Source: NPSABS

# Figure 27c

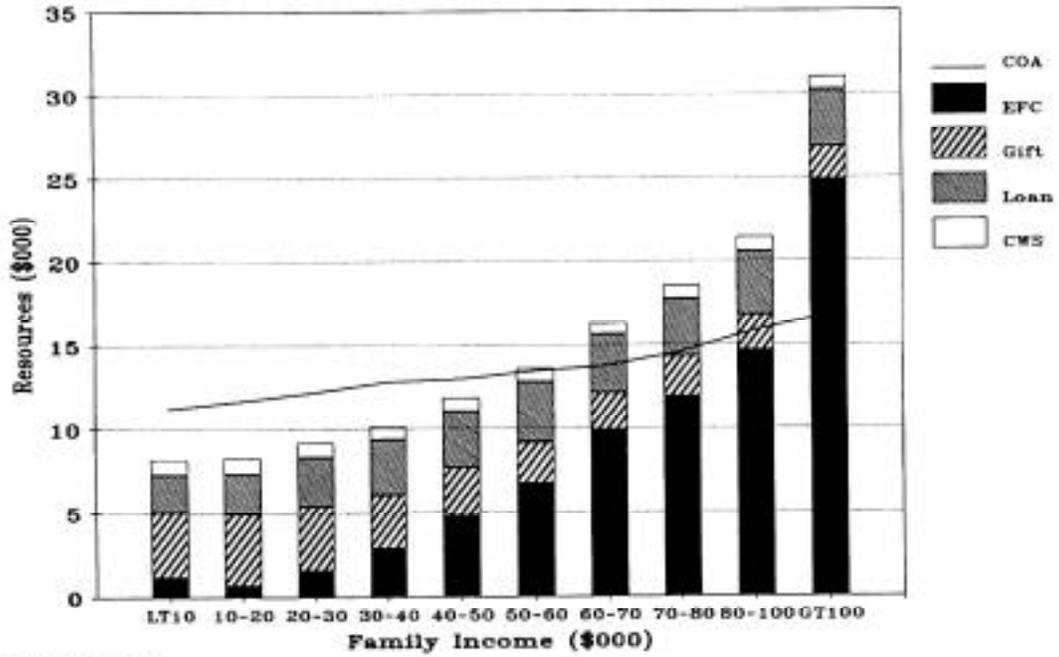
## Financing College Attendance Costs for Full-Time, Full-Year Aided Dependent Undergraduates 1995-96



Source: NPSAS95

# Figure 27d

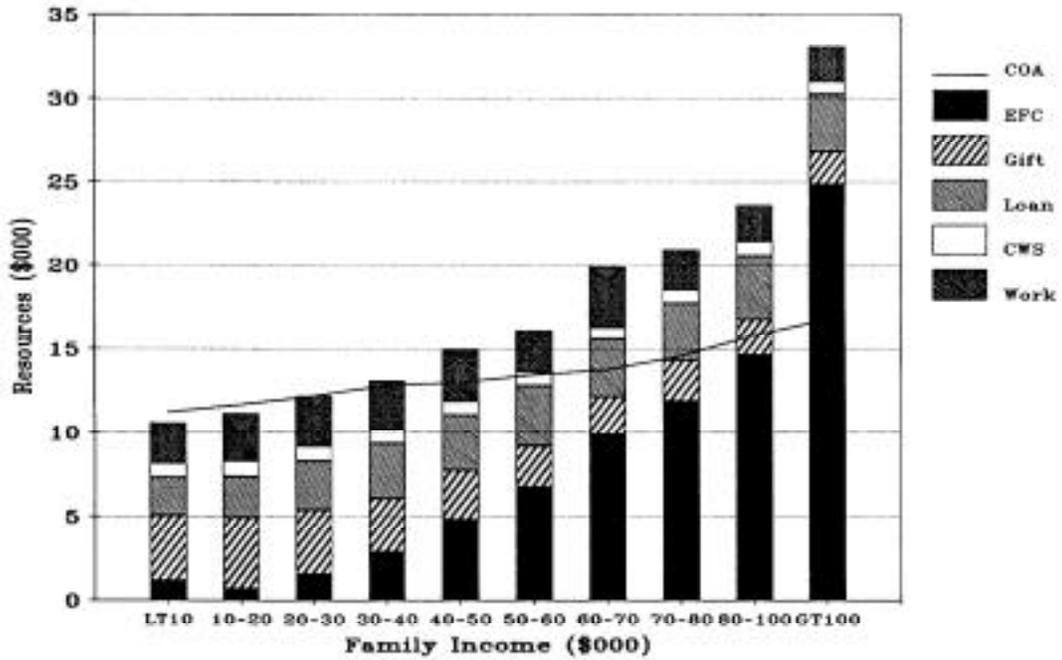
## Financing College Attendance Costs for Full-Time, Full-Year Aided Dependent Undergraduates 1995-96



Source: NPSA595

# Figure 27e

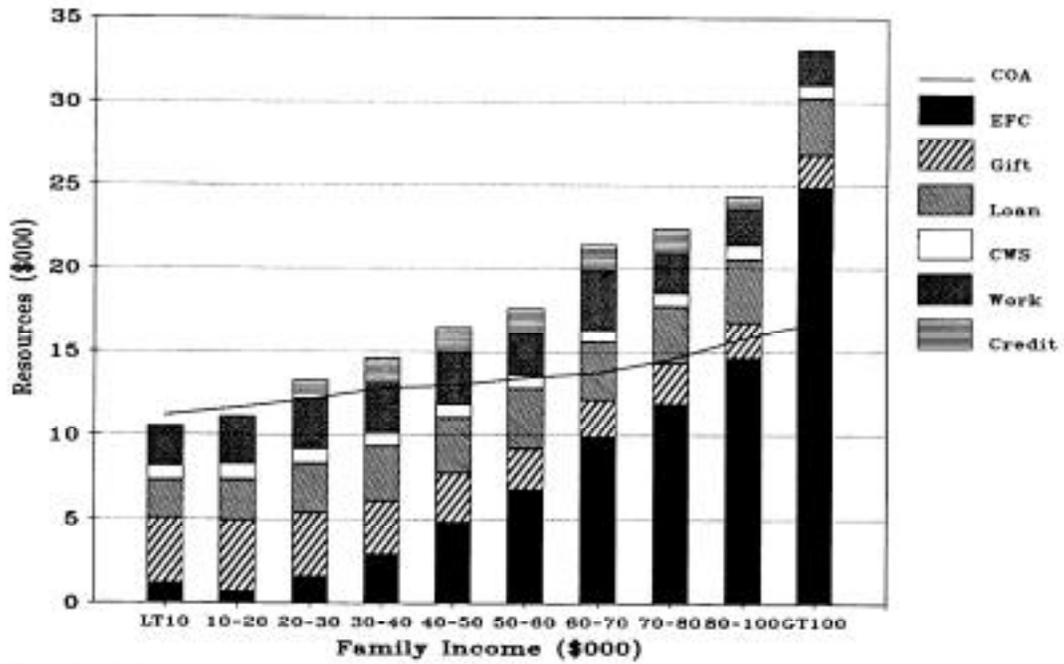
## Financing College Attendance Costs for Full-Time, Full-Year Aided Dependent Undergraduates 1995-96



Source: NPSAS95

# Figure 27f

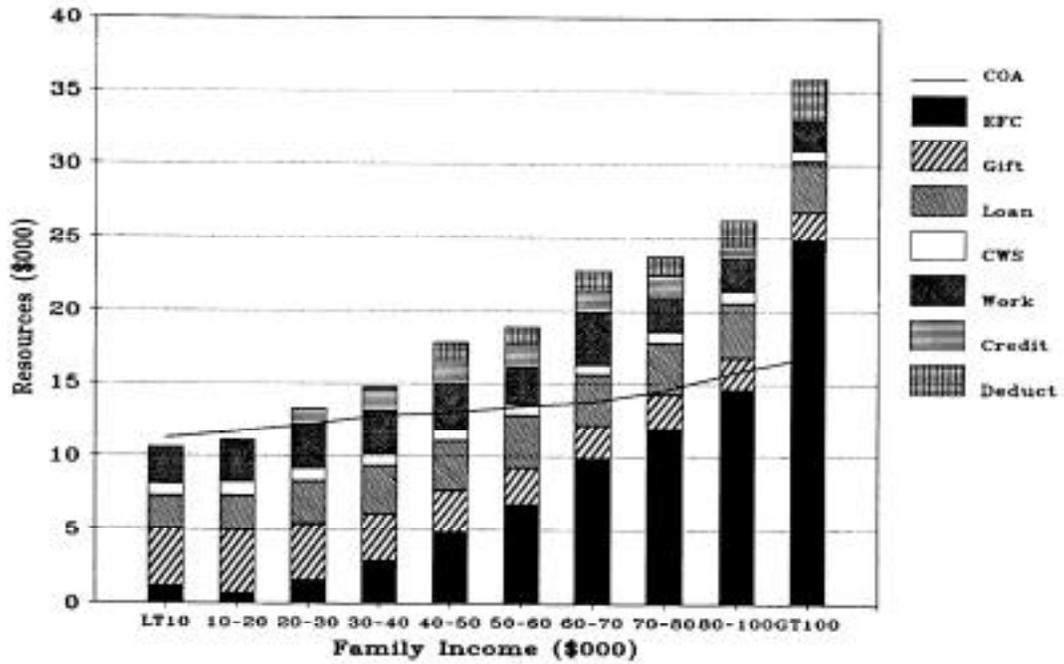
## Financing College Attendance Costs for Full-Time, Full-Year Aided Dependent Undergraduates 1995-96



Source: NPSAS95

# Figure 27g

## Financing College Attendance Costs for Full-Time, Full-Year Aided Dependent Undergraduates 1995-96



Source: NPSR895

# Figure 28

## Barriers to Higher Education

### Financial

- Financial aid forms/application process
- Needs analysis
- Amount of aid
- Type of aid - willingness to assume risk in college investment

### Academic

- Course-taking in high school
- Study habits and commitment

### Geographic

- Place-bound students
- Cultural divides

### K-12 Education Reform

- High stakes testing

### Institutional

- Admissions criteria
- Environment: academic and social

### Social

- Community values
- Peer pressures

### Cultural

- Aspirations
- Language

### Gender

- What's wrong with the guys?

### Information Technology

- Computer/Internet access and use

### Disabilities

- Learning
- Behavior disorders
- Health related

### Parents

- Dysfunctional families
- Uninformed parents
- Otherwise preoccupied parents