Yavapai COLLEGE

Fall Credit Enrollment Analysis:
A Long Term View 1991-2000

The Office of Institutional Planning,
Research, and Assessment

September 2001

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A Long Term View 1991-2000

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TABLE OF CONTENTS

Page

TABLE OF CONTENTS

Page

LIST OF TABLES

Page

LIST OF FIGURES

Page

LIST OF FIGURES

Page

EXECUTIVE SUMMARY

This study examines fall headcount and full-time student equivalency (FTSE) enrollment at Yavapai College from 1991 to 2000. Trend analysis was conducted on headcount, FTSE, academic divisions, demographic variables, and student status and admission variables. Trend analysis identifies differences between long-term trends and short-term fluctuations. Findings of this analysis are used to examine Yavapai College's future enrollment picture.

Summary Highlights:

- Total **duplicated headcount** has increased 20 percent between 1991 and 2000, from 13,725 to 16,474. There has been considerable short-term fluctuation, but trend analysis indicates a strong, positive growth trend.

- **Unduplicated headcount** has increased 49 percent between 1991 and 2000, from 5,540 to 8,255. Unduplicated headcount has exhibited very strong and consistent growth trends.

- Both **male** and **female enrollment** has shown very strong, positive, consistent growth over the last ten years; the female to male ratio has been consistent at about 63 percent female to 37 percent male.

- **White, Hispanic and Asian enrollment** have grown considerably over the last ten years; **Black enrollment** increased slightly and **Native American enrollment** declined.

- **In-county enrollment** shows a very strong, consistent and positive trend over the last ten years (up 33 percent). **Other-Arizona-county residents** decreased by 18 percent and **out-of-state enrollment** increased 375 percent; however, the growth would be 20 percent if elder hostel enrollment were excluded.

- All **age cohorts** grew in number over the 1991–2000 time period. Largest growth was in 60 and over (145%), 16 and under (133%), and 35–39 (53%). The 17–24 cohort grew 17 percent and the 25–34 cohort grew 10 percent.

- All **admission categories** of students showed strong, consistent growth. Continuing students were up 41 percent, returning students up 24 percent, and new students up 78 percent. Prior to for-credit elder hostel, new student enrollment had grown 22 percent.

- Yavapai College has experienced a major shift in the proportion of **full-time** to **part-time headcount**. In 1991, 25 percent of students were full-time, while in

2000 that figure dropped to 14 percent. Prior to for-credit elder hostel, full time enrollment was 18 percent of total enrollment.

- For the period 1991-2000, headcount enrollment has increased for all three of Yavapai College's **campuses**: Prescott 389 (10%), Verde 594 (45%) and Community 1,988 (548%).

- Trend analysis revealed a significant growth trend in **overall fall FTSE** for the 1991-2000 period increasing from 2,248 to 2,592—a 15 percent growth.

- Time series analysis by campus administration revealed positive long-term **FTSE** trends for **Verde** and **Community** Campuses. **Prescott** was the only campus to show a weak negative FTSE trend for the 1991-2000 period.

- District wide, trend analysis indicated positive FTSE growth over the 1991-2000 period for the following divisions: **Business and Computers**; **Public Services and Gunsmithing**; **Technology**; **Visual and Performing Arts**.

- **Liberal Arts** and **Communications** divisions exhibited the largest FTSE declines over the past ten years with almost all decreases coming from the Prescott campus.

- Trend analysis indicated no significant FTSE trends for the **Health, P.E. and Athletics**, **Nursing and Allied Health** or **Science and Math** divisions.

INTRODUCTION AND METHODS

INTRODUCTION

This analysis of Yavapai College's enrollment examines trends in fall enrollment from 1991 through 2000. This study explores the relationship between enrollment, FTSE and a variety of internal variables. Lastly, implications for future FTSE and enrollment are considered.

METHODS

All fall enrollments were included (regular, short, and open entry courses) in the analysis. Data from regular courses was compiled from the college's official reporting day (45th day of instruction) files. Data from short and open entry courses was collected from final day roster files.

Analysis

A clear understanding of enrollment data requires distinguishing between short-term fluctuations and long-term trends. This is important for two reasons:

- Factors influencing short-term fluctuations and long-term trends are often different.

- It is important to identify if recent changes are only short-term fluctuations or if they signal a change in a long-term trend.

To distinguish between short-term fluctuations and long-term trends, linear regression and correlation analysis were utilized.

Interpreting Trend Analysis

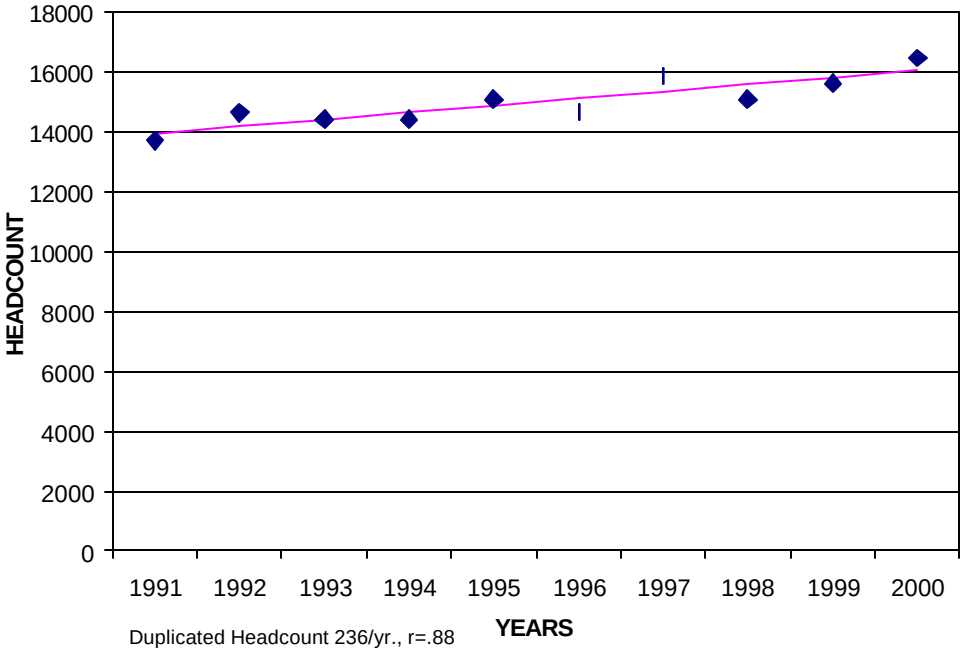
Using linear regression for trend analysis, the correlation coefficient "r" is a measure used to distinguish between long-term trends and short-term fluctuations. A coefficient of +1 or –1 would mean that all of the variation would be due to the trend, and none attributed to short-term fluctuations. Additionally, a +1 means that higher values of one variable are exactly associated with higher values of another variable. Likewise, a –1 indicates that higher values of one variable are exactly associated with the lower values of another variable. A coefficient of zero would indicate that all of the variation would be due to fluctuations and none to the trend. The nearer the coefficient is to +1 or –1, the more important the trend is in comparison with the fluctuations, and the more consistent the trend over time.

FALL SEMESTER HEADCOUNT ENROLLMENT TREND ANALYSIS

Total Credit Headcount Enrollment

Total headcount enrollment counts a student for each of their registrations. Therefore, a full-time student enrolled in five courses will be counted five times, while a part-time student enrolled in one course would be counted once. This type of enrollment counting is referred to as duplicated headcount. Duplicated headcount is important to our understanding of enrollments impact on areas such as classroom facilities, libraries, and computer labs.

FIGURE 1. FALL ENROLLMENT (DUPLICATED): 1991-2000



Fall	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Duplicated Enrollment	13,725	14,657	14,426	14,429	15,102	14,665	15,874	15,107	15,644	16,474

Trend Analysis Results

- Figure 1 shows considerable fluctuation over the past ten years; however, trend analysis indicates a strong, positive growth trend (r=.88).

- Duplicated enrollment increased from 13,725 to 16,474 between 1991 and 2000, an increase of 20 percent.

- Fall 2000 duplicated enrollment was 16, 474, an increase of five percent over the previous fall, and the third successive fall enrollment increase.

On the following page, Table 1 presents detail level enrollment information by selected student demographic variables. Also included are ten year number and percent changes. The data in Table 1 is the source data used for the trend analysis that follows.

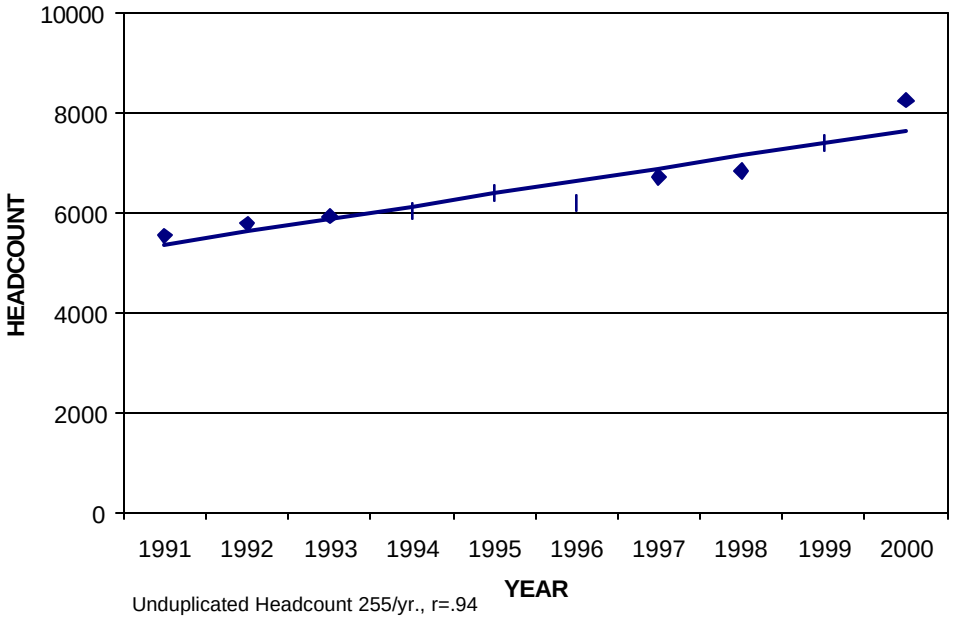
TABLE 1. UNDUPLICATED HEADCOUNT ENROLLMENT BY SELECTED DEMOGRAPHIC VARIABLES, FALL 1991 TO FALL 2000												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	91-00 # Change	91-00 % Change
TOTAL*	5,540	5,778	5,938	6,050	6,407	6,212	6,708	6,830	7,408	8,255	2,715	49%
GENDER												
Male	2,052	2,187	2,176	2,190	2,316	2,248	2,504	2,501	2,787	3,075	1,023	50%
%	37%	38%	37%	36%	36%	36%	37%	37%	38%	37%		
Female	3,482	3,587	3,755	3,823	4,063	3,939	4,180	4,298	4,555	5,161	1,679	48%
%	63%	62%	63%	64%	64%	64%	63%	63%	62%	63%		
Total	5,534	5,774	5,931	6,013	6,379	6,187	6,684	6,799	7,342	8,236		
ETHNICITY												
Asian	45	52	57	57	79	80	70	58	64	72	27	60%
%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%		
Black	37	26	37	39	40	33	42	45	35	41	4	11%
%	1%	0%	1%	1%	1%	1%	1%	1%	1%	1%		
Hispanic	229	255	285	277	284	293	282	289	290	348	119	52%
%	4%	4%	5%	5%	5%	5%	5%	5%	5%	6%		
Native American	174	175	199	166	166	150	155	188	173	147	-27	-16%
%	3%	3%	4%	3%	3%	3%	3%	3%	3%	2%		
White	4,925	5,161	4,994	5,025	5,391	5,203	5,566	5,659	5,700	5,659	734	15%
%	91%	91%	90%	90%	90%	90%	91%	91%	91%	90%		
Total	5,410	5,669	5,572	5,564	5,960	5,759	6,115	6,239	6,262	6,267		
RESIDENCY												
In-County	4,711	4,926	5,029	5,155	5,492	5,406	5,825	5,963	6,120	6,275	1,564	33%
%	85%	85%	85%	85%	86%	87%	87%	87%	83%	76%		
Other Arizona	499	475	540	541	544	477	491	470	452	411	-88	-18%
%	9%	8%	9%	9%	8%	8%	7%	7%	6%	5%		
Out-of-State	330	377	369	354	371	329	392	397	836	1,569	1,239	375%
%	6%	7%	6%	6%	6%	5%	6%	6%	11%	19%		
Total	5,540	5,778	5,938	6,050	6,407	6,212	6,708	6,830	7,408	8,255		
AGE GROUP												
16 and Under	51	52	65	82	157	117	93	112	109	119	68	133%
%	1%	1%	1%	1%	2%	2%	1%	2%	2%	1%		
17-24	1709	1771	1815	1927	2080	1953	2071	2074	2109	2007	298	17%
%	32%	31%	31%	32%	33%	32%	31%	30%	29%	24%		
25-34	913	984	961	928	916	868	953	967	938	1006	93	10%
%	17%	17%	16%	16%	14%	14%	14%	14%	13%	12%		
35-59	1773	2020	2105	2127	2199	2245	2411	2407	2511	2711	938	53%
%	33%	35%	36%	36%	35%	37%	36%	35%	35%	33%		
60 and over	977	879	908	918	997	960	1103	1254	1520	2391	1,414	145%
%	18%	15%	16%	15%	16%	16%	17%	18%	21%	29%		
Total	5,423	5,706	5,854	5,982	6,349	6,143	6,631	6,814	7,187	8,234	2,811	52%

*Due to missing values, some categories may not sum to this total.

Unduplicated Headcount Enrollment

Unduplicated headcount is the counting of each student only once, regardless of the students credit load.

FIGURE 2. UNDUPLICATED HEADCOUNT TRENDS: 1991-2000



Trend Analysis Results

- Unduplicated headcount has exhibited very strong and consistent growth trend over the past ten years.

- Unduplicated headcount increased from 5,540 to 8,255 between 1991 and 2000, an increase of 49 percent (Table 1). This 49 percent increase compares favorably with 2000 U.S. Census figures that show the Yavapai County population increasing 56 percent between 1990 and 2000 (Table 4).

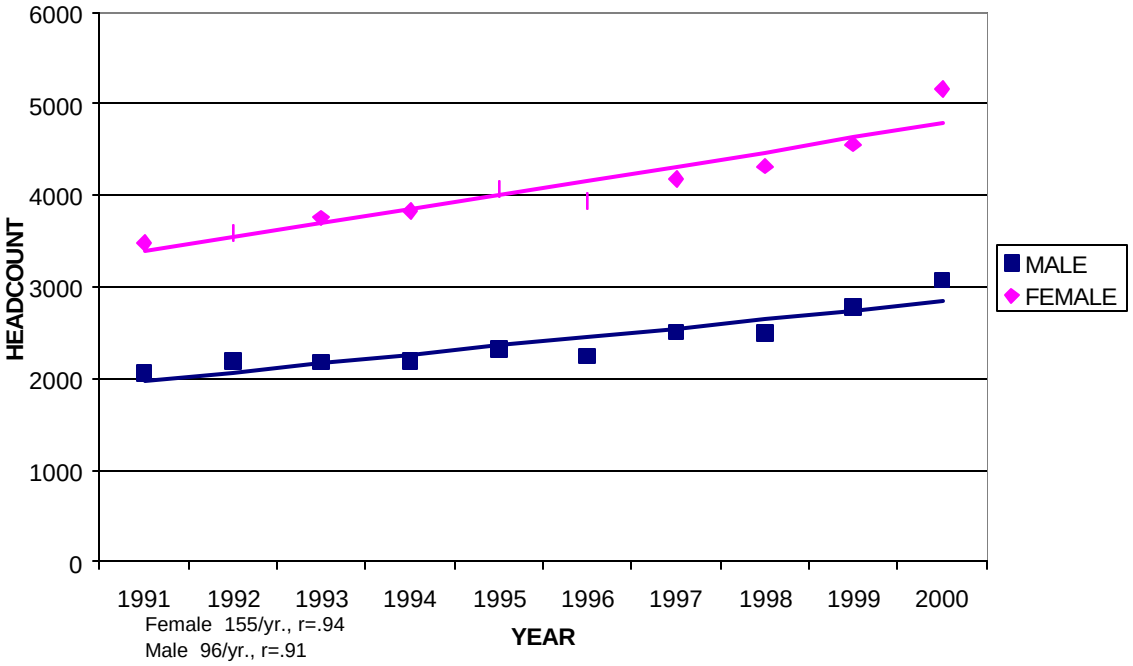
DEMOGRAPHIC INDICATORS

Demographic indicators used in this analysis include gender, ethnic status, place of residence, and age. Unduplicated enrollment figures are used to present demographics.

Gender

Historically, there have been more females than males attending Yavapai College. This trend has continued over the past ten year period.

FIGURE 3. GENDER TRENDS: 1991-2000



Trend Analysis Results

- Both male and female enrollments have shown very strong, positive, consistent growth over the ten year period (estimated gain of 155 females and 96 males per year).

- The number of men attending Yavapai College has increased 50 percent from 2,052 to 3,075 between 1991 and 2000, while female enrollment has grown from 3,482 to 5,161, an increase of 48 percent.

- The female to male ratio has shown little variability and has remained constant at about 63 percent female to 37 percent male.

Ethnic Status

Yavapai College's ethnic makeup continues to be very homogenous with the majority of enrollment being White, non-Hispanic (91% in 1990; 90% in 2000). People of Hispanic ethnicity represent Yavapai College's next largest enrollment, and are one of the fastest growing ethnic groups over the past ten years, but are only six percent of total enrollment. Native Americans represent the third largest enrollment, followed by Asians and Blacks. For this study, persons with unreported ethnicity were excluded from the ethnic trend analysis.

FIGURE 4. ETHNICITY TRENDS (WHITE, NON-HISPANIC): 1991- 2000

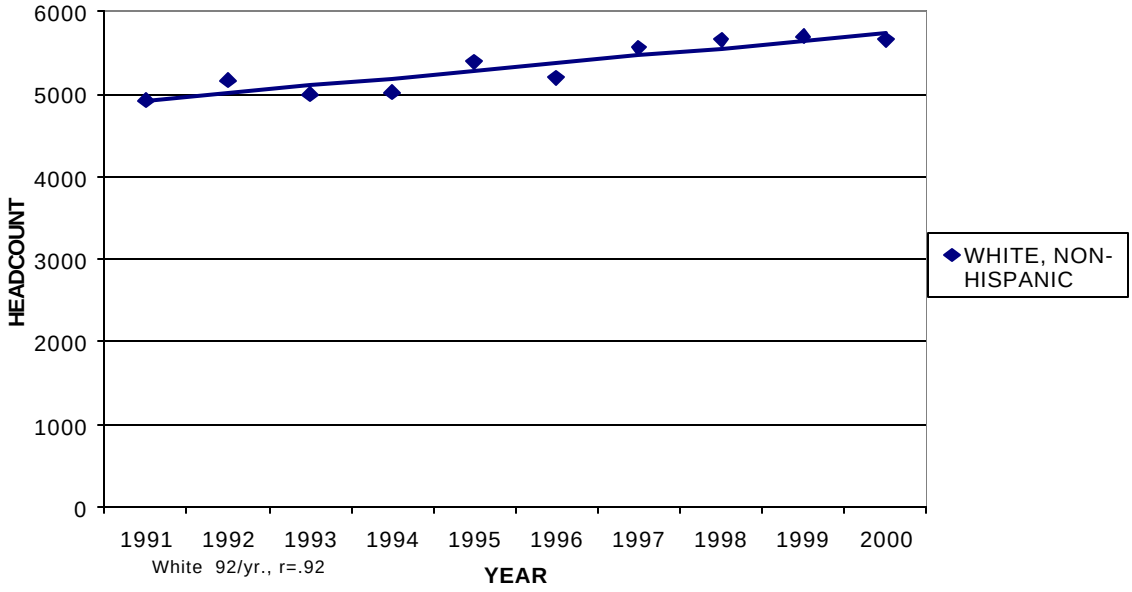
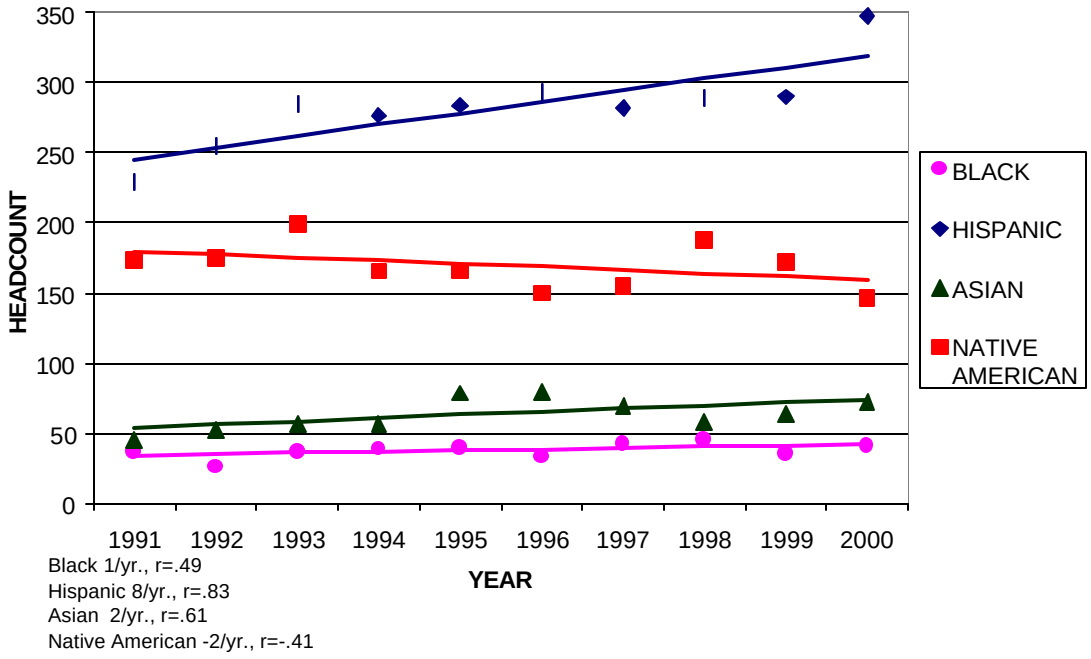


FIGURE 5. ETHNICITY TRENDS (NON-WHITE): 1991-2000



Trend Analysis Results

- As indicated by Figures 4 and 5, White and Hispanic enrollments show a very strong, positive trend over the past ten years.

- Over the past ten years, White, Hispanic and Asian enrollments accounted for 99 percent of the student headcount increase. Asian headcount increased by 27, Hispanic headcount increased 119, while White headcount increased by 734 from 1991 to 2000, an increase of 60 percent, 52 percent and 15 percent respectively.

- Hispanic enrollment increased dramatically from 290 in 1999 to 348 in 2000, an increase of 20 percent.

- Asian enrollment increases between 1991 and 2000 are small in number (27), but their ten year growth rate (60%) is the highest among all ethnic populations.

- Black enrollment has increased slightly over the period, but does not indicate any significant growth.

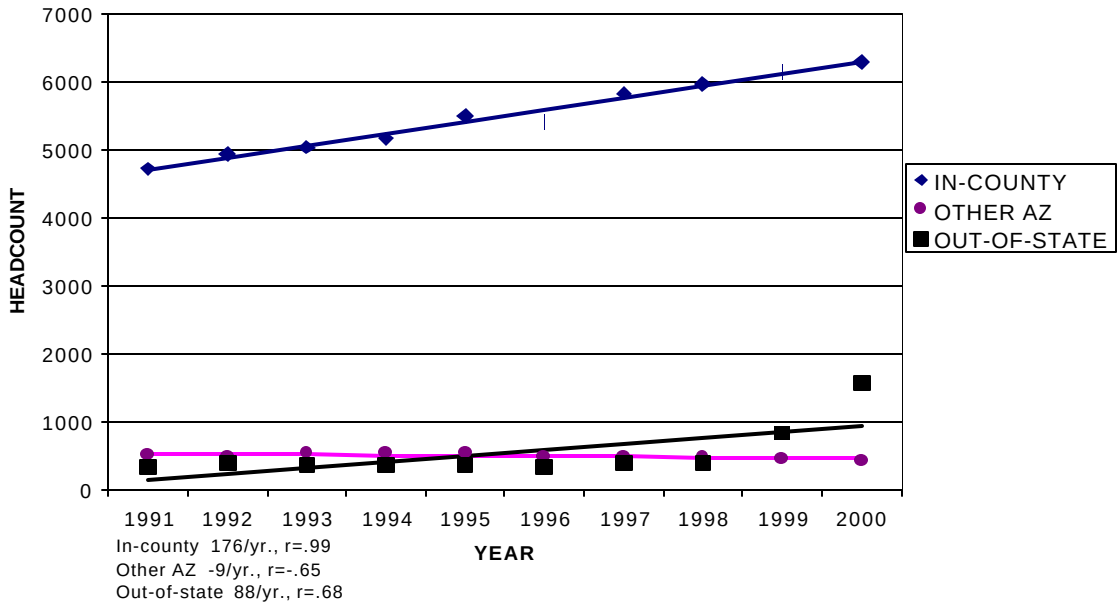
- Native Americans were the only ethnic population to show a decline over the period (estimated loss at two per year). Native American enrollment dropped 16 percent from 174 in 1991 to 147 in 2000.

- Yavapai College's Native American enrollment has exhibited high variability over the period with a high of 199 students in 1993 and a low of 147 in 2000.

Place of Residence

Not surprisingly, the majority of Yavapai College's enrollment consists of residents of Yavapai County. Traditionally, residents of other-Arizona-counties have made up the second largest enrollment contingency. However, declines in other-Arizona-county enrollment combined with new out-of-state elder hostel enrollment has pushed out-of-state residency into the second largest enrollment group.

FIGURE 6. PLACE OF RESIDENCE: 1991-2000



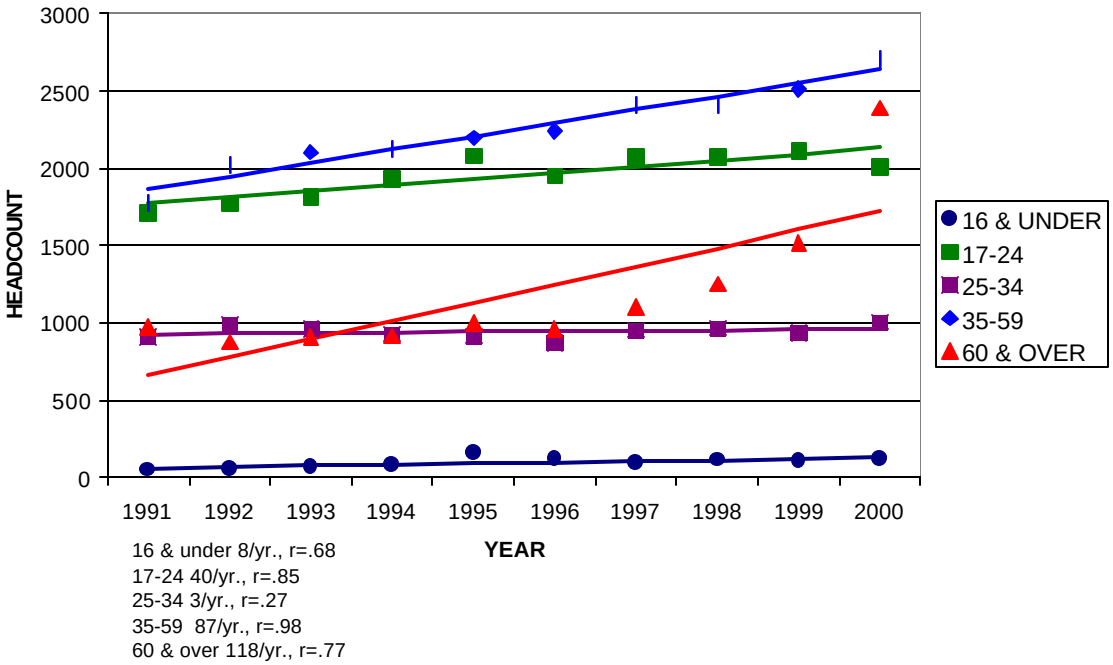
Trend Analysis Results

- As indicated by Figure 6, in-county enrollment shows a very strong, consistent and positive trend over the period.
- In-county enrollment increased 33 percent over the past ten years, estimated growth 176 in-county students per year.
- Trend analysis revealed a moderate, negative trend in other-Arizona-county enrollment over the period, estimated loss is nine students per year.
- Comparing the 1991-1995 period with 1996-2000, the average enrollment for other-Arizona-county enrollment decreased from 520 (1991-1995) to 460 (1996-2000).
- Out-of-state enrollment has grown 375 percent between 1991 and 2000; however, this rate of growth is inflated due to the introduction of elder hostel courses beginning in fall 1999. Before the addition of for-credit elder hostel courses, out-of-state enrollment had increased from 330 in 1991 to 397 in 1998, an increase of 20 percent.

Age Cohorts

Age is a difficult demographic to present. For example, Yavapai College student's arithmetic average age in fall 2000 was 43; however, anyone visiting the college would conclude that YC's student population looks much younger than 43. This perception is due to the fact that age is intrinsically tied to credit load. Younger students tend to enroll for more credit hours; thereby they are on campus more often than their older counterparts who typically enroll for fewer credit hours. For this reason, Table 3 lists age cohorts by part-time and full-time status.

FIGURE 7. AGE COHORT TRENDS: 1991-2000



Trend Analysis Results

- Clearly evident in Figure 7, all age cohorts have exhibited positive growth over the 1991-2000 period.

- The largest number of students and the second fastest growing age cohort are students between the ages of 35 and 59. This cohort grew 53 percent between 1991 and 2000. Trend analysis indicates very strong, consistent growth trend over the past ten years, estimated annual gain is 87 students per year.

- Students in the 17-24 age cohort make up the third largest number of students at YC in fall 2000, and grew 17 percent between 1991 and 2000. When considering credit load, the 17-24 cohort accounts for more than 70 percent of all full-time students. Trend analysis for the 1991-2000 period identified a consistent and strong growth trend for the 17-24 cohort.

- The 25-34 year old cohort has shown little variability over the past ten years. Trend analysis shows a weak, positive trend, estimated gain of three students per year. This cohort grew ten percent between 1991 (913) and 2000 (1006).

- Examining Figure 7, the 60 and over cohort shows strong consistent growth. This cohort grew 145 percent between 1991 (913) and 2000 (1006). However, this cohort is skewed positively by the addition of elder hostel in 1999 and 2000 making trend analysis unreliable for forecasting.

TABLE 2. PROPORTION OF FULL-TIME AND PART-TIME HEADCOUNT, FALL 1991 TO FALL 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Full-Time	25%	24%	25%	24%	23%	19%	21%	18%	16%	14%
Part-Time	75%	76%	75%	76%	77%	81%	79%	82%	84%	86%

- The 16 and under cohort has more than doubled over the past ten years from 51 students in 1991 to 119 in 2000 (Table 1).

- In 1991, 25 percent of Yavapai College's students were full-time (Table 2). Over the past ten years, that percentage has declined to a low of 14 percent in 2000. A partial explanation for the low percentage of full-time students in fall 2000 is the addition of elder hostel enrollments. However, removing elder hostel from the analysis only raises the percent of full-time students to 16, which would still equal a ten year low.

- While the age cohorts 17-24, 25-34, and 35-59 all increased over the past ten years, increases did not keep pace with Yavapai county growth as reported in the 2000 U.S. Census (Table 4).

TABLE 3. TOTAL, FULL-TIME, AND PART-TIME HEADCOUNT BY AGE COHORTS FOR FALL 1991-2000												
											# Change	% Change
AGES	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	1991-2000	1991-2000
TOTAL*	5,540	5,778	5,938	6,050	6,407	6,212	6,708	6,830	7,408	8,255	2,715	49%
16 and under	51	52	65	82	157	117	93	112	109	119	68	133%
%	1%	1%	1%	1%	2%	2%	1%	2%	2%	1%		
17-24	1709	1771	1815	1927	2080	1953	2071	2074	2109	2007	298	17%
%	32%	31%	31%	32%	33%	32%	31%	30%	29%	24%		
25-34	913	984	961	928	916	868	953	967	938	1006	93	10%
%	17%	17%	16%	16%	14%	14%	14%	14%	13%	12%		
35-59	1773	2020	2105	2127	2199	2245	2411	2407	2511	2711	938	53%
%	33%	35%	36%	36%	35%	37%	36%	35%	35%	33%		
60 and over	977	879	908	918	997	960	1103	1254	1520	2391	1414	145%
%	18%	15%	16%	15%	16%	16%	17%	18%	21%	29%		
Total	5,423	5,706	5,854	5,982	6,349	6,143	6,631	6,814	7,187	8,234	2,811	52%
FULL-TIME												
16 and under	2	5	3	1	9	5	5	4	9	8	6	300%
%	0%	0%	0%	0%	1%	0%	0%	0%	1%	1%		
17-24	974	983	996	1,034	1,100	853	1,032	917	869	851	-123	-13%
%	73%	72%	69%	71%	75%	73%	74%	75%	74%	74%		
25-34	188	178	201	180	170	153	193	159	172	155	-33	-18%
%	14%	13%	14%	12%	12%	13%	14%	13%	15%	14%		
35-59	167	192	243	236	186	160	167	137	127	129	-38	-23%
%	12%	14%	17%	16%	13%	14%	12%	11%	11%	11%		
60 and over	6	3	2	5	5	2	4	3	1	4	-2	-33%
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Total	1,337	1,361	1,445	1,456	1,470	1,173	1,401	1,220	1,178	1,147	-190	-14%
PART-TIME												
16 and under	49	47	62	81	148	112	88	108	100	111	62	127%
%	1%	1%	1%	2%	3%	2%	2%	2%	2%	2%		
17-24	735	788	819	893	980	1,100	1,039	1,157	1,240	1,156	421	57%
%	18%	18%	19%	20%	20%	22%	20%	21%	21%	16%		
25-34	725	806	760	748	746	715	760	808	766	851	126	17%
%	18%	19%	17%	17%	15%	14%	15%	14%	13%	12%		
35-59	1,606	1,828	1,862	1,891	2,013	2,085	2,244	2,270	2,384	2,582	976	61%
%	39%	42%	42%	42%	41%	42%	43%	41%	40%	36%		
60 and over	971	876	906	913	992	958	1,099	1,251	1,519	2,387	1,416	146%
%	24%	20%	21%	20%	20%	19%	21%	22%	25%	34%		
Total	4,086	4,345	4,409	4,526	4,879	4,970	5,230	5,594	6,009	7,087	3,001	73%

*Due to missing values, items may not sum up to total enrollment figures.

TABLE 4. U.S. CENSUS FIGURES FOR YAVAPAI COUNTY: 1990 & 2000				
	Census	Census	Number	Percent
	1990	2000	Change	Change
STATE/COUNTY				
Arizona	3,665,339	5,130,632	1,465,293	40%
Yavapai County	107,714	167,517	59,803	56%
CITY				
Prescott	26,592	33,938	7,346	28%
Prescott Valley	8,904	23,535	14,631	164%
Chino Valley	4,837	7,835	2,998	62%
Camp Verde	6,243	9,451	3,208	51%
Cottonwood	5,918	9,179	3,261	55%
Clarkdale	2,144	3,422	1,278	60%
Sedona	7,720	10,192	2,472	32%
AGE COHORTS				
10 to 19	12,995	21,220	8,225	63%
20 to 24	4,937	7,943	3,006	61%
25 to 34	12,198	15,335	3,137	26%
35 to 54	25,701	46,465	20,764	81%
55 & Over	39,068	58,364	19,296	49%

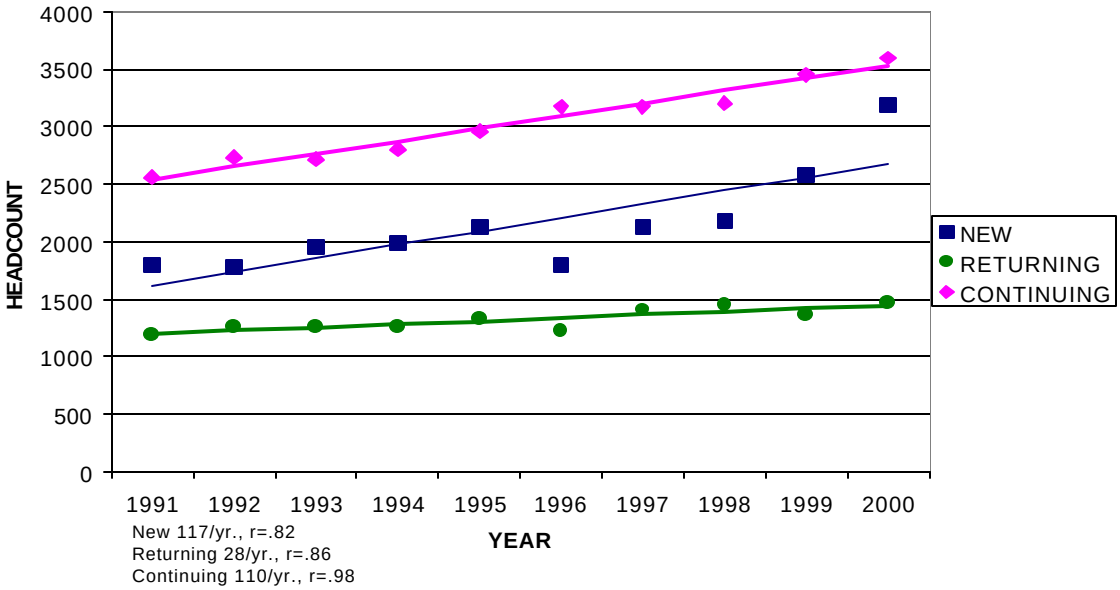
Source: U.S. Census Bureau, April 1, 2000 Census

STUDENT STATUS INDICATORS

Fall Admission Status

Students are classified as new, continuing, or returning. New students are those enrolling at Yavapai College for the first time. Continuing students are those who attended the college the prior spring or summer semester. Returning students are those who have previously attended the college but did so more than one semester ago. The majority of enrollment each fall is made up of continuing students, followed by new and returning students respectively.

FIGURE 8. FALL ADMISSION STATUS: 1991-2000



Trend Analysis Results

- Trend analysis shows strong, consistent growth for all admission categories. Estimated growth for new, continuing and returning students is 118, 111 and 28 respectively.

- Continuing student enrollment increased from 2,556 in 1991 to 3,595 in 2000, an increase of 41 percent.

- Returning student enrollment grew from 1,191 in 1991 to 1,473 in 2000, an increase of 24 percent.

- New student enrollment increased by 78 percent between 1991 (1,793) and 2000 (3,187), about 50 percent of this growth can be attributed to the addition of for-credit elder hostel courses. Prior to for-credit elder hostel courses, new student enrollment had grown 22 percent between 1991 and 1998.

TABLE 5. UNDUPLICATED HEADCOUNT ENROLLMENT BY SELECTED STUDENT STATUS INDICATORS, FALL 1991 TO FALL 2000**												
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	91-00 # Change	91-00 % Change
TOTAL* **	5,540	5,778	5,938	6,050	6,407	6,212	6,708	6,830	7,408	8,255	2,715	49%
ADMIN. STATUS												
New	1,793	1,786	1,958	1,982	2,123	1,805	2,124	2,181	2,584	3,187	1,394	78%
%	32%	31%	33%	33%	33%	29%	32%	32%	35%	39%		
Returning	1,191	1,257	1,264	1,263	1,327	1,228	1,407	1,446	1,369	1,473	282	24%
%	21%	22%	21%	21%	21%	20%	21%	21%	18%	18%		
Continuing	2,556	2,735	2,716	2,805	2,957	3,179	3,177	3,203	3,455	3,595	1,039	41%
%	46%	47%	46%	46%	46%	51%	47%	47%	47%	44%		
Total	5,540	5,778	5,938	6,050	6,407	6,212	6,708	6,830	7,408	8,255		
CLS. STANDING												
Freshman	4,663	4,817	4,897	4,974	5,286	5,048	5,447	5,568	6,069	6,952	2,289	49%
%	84%	83%	82%	82%	83%	81%	81%	82%	82%	84%		
Sophomore	877	961	1,041	1,076	1,121	1,164	1,261	1,262	1,339	1,303	426	49%
%	16%	17%	18%	18%	17%	19%	19%	18%	18%	16%		
Total	5,540	5,778	5,938	6,050	6,407	6,212	6,708	6,830	7,408	8,255		
STATUS												
Full-Time	1,366	1,384	1,462	1,471	1,487	1,188	1,421	1,223	1,181	1,152	-214	-16%
%	25%	24%	25%	24%	23%	19%	21%	18%	16%	14%		
Part-Time	4,174	4,394	4,476	4,579	4,920	5,024	5,287	5,607	6,227	7,103	2,929	70%
%	75%	76%	75%	76%	77%	81%	79%	82%	84%	86%		
Total	5,540	5,778	5,938	6,050	6,407	6,212	6,708	6,830	7,408	8,255		
CAMPUS LOC.												
Prescott	3,942	3,963	4,076	4,126	4,240	4,229	4,498	4,339	4,570	4,331	389	10%
%	70%	67%	67%	66%	64%	65%	64%	61%	59%	50%		
Verde	1,306	1,372	1,360	1,499	1,634	1,510	1,641	1,722	1,676	1,900	594	45%
%	23%	23%	22%	24%	25%	23%	24%	24%	22%	22%		
Community	363	560	660	655	791	729	835	1,036	1,504	2,351	1,988	548%
%	6%	9%	11%	10%	12%	11%	12%	15%	19%	27%		
Total	5,611	5,895	6,096	6,280	6,665	6,468	6,974	7,097	7,750	8,582		
CLASS TIME												
Day	4,464	4,160	4,583	4,168	4,407	4,227	4,597	4,621	5,207	5,956	1,492	33%
%	64%	55%	60%	53%	52%	52%	52%	54%	56%	59%		
Evening	2,473	3,154	2,894	3,427	3,518	3,411	3,615	3,544	3,442	3,462	989	40%
%	35%	42%	38%	44%	42%	42%	41%	41%	37%	34%		
Weekend	71	222	206	258	497	505	557	460	606	627	556	783%
%	1%	3%	3%	3%	6%	6%	6%	5%	7%	6%		
Total	7,008	7,536	7,683	7,853	8,422	8,143	8,769	8,625	9,255	10,045		

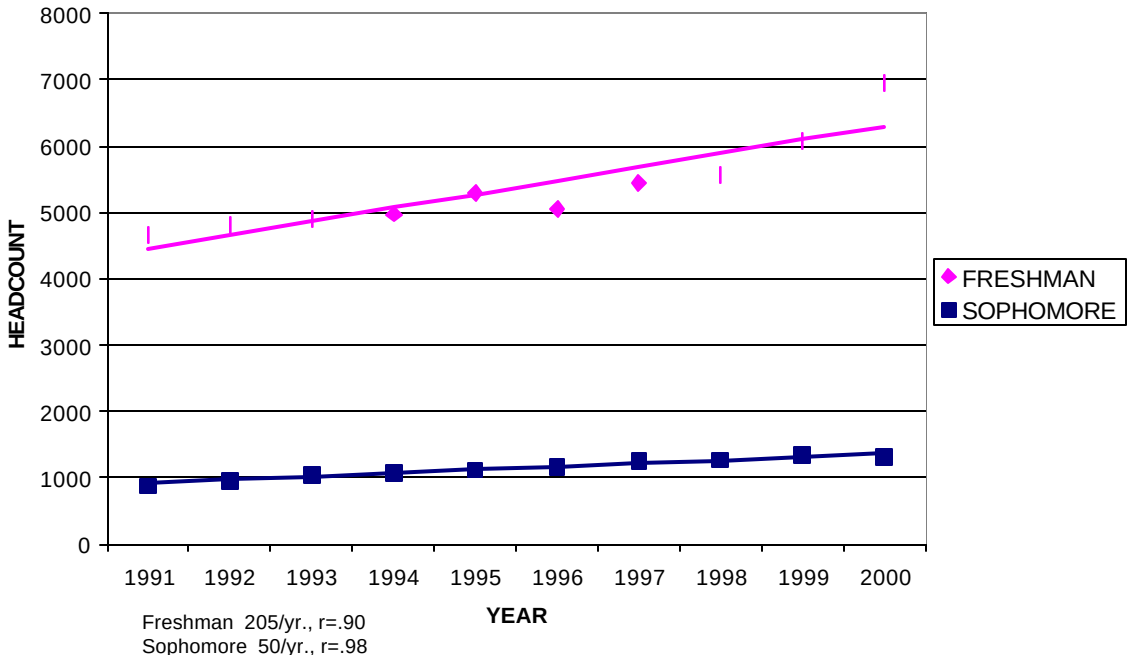
*Due to missing values, some categories may not sum to this total.

**Students may attend more than one campus, or attend multiple class times, hence, the sum may be greater than this total

Class Standing

Students are classified as either freshman (completed less than 33 semester hours) or sophomores (completed 33 or more semester hours). Historically, the majority of Yavapai College students have been classified as freshmen.

FIGURE 9. FALL CLASS STANDING: 1991-2000



Trend Analysis Results

- As indicated by Figure 9, trend analysis yielded similar findings for both freshman and sophomores. Both class-standing categories show very strong, positive trends (estimated gains of 205 freshman and 50 sophomores a year).

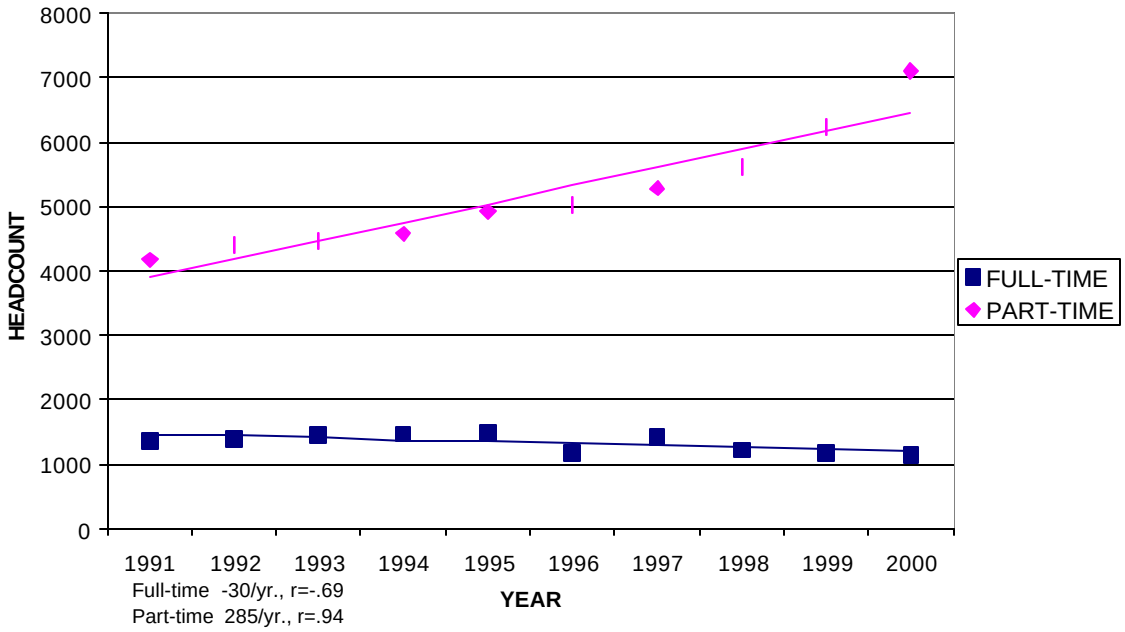
- Nine out of the past ten years, sophomore enrollment has increased (Table 5). Fall 2000 experienced a slight decrease of three percent (36) compared to the fall 1999 enrollment level.

- The dramatic rise in freshmen between 1999 and 2000 is largely due to the addition of more for-credit elder hostel courses.

Full-Time and Part-Time Status

Students are classified as either full-time (registered for 12 or more credit hours) or part-time (registered for less than 12 credit hours). The proportion of full-time students to part-time students has significantly changed over the period. In 1991, 25 percent of Yavapai College's students were full-time. As of fall 2000, fewer than 14 percent of students are full-time.

FIGURE 10. FULL-TIME AND PART-TIME TRENDS: 1991-2000



Trend Analysis Results

- Trend analysis identified a very strong, consistent and positive trend for part-time students, estimated growth 285 students per year. Full-time enrollment showed a moderate, consistent and declining enrollment, estimated loss 30 full-time students per year.

- Part-time enrollment increased every year for the past ten years. Overall, part-time enrollment grew 73 percent between 1991(4,086) and 2000 (7,087). The large increases shown in 1999 and 2000 are due to elder hostel enrollment.

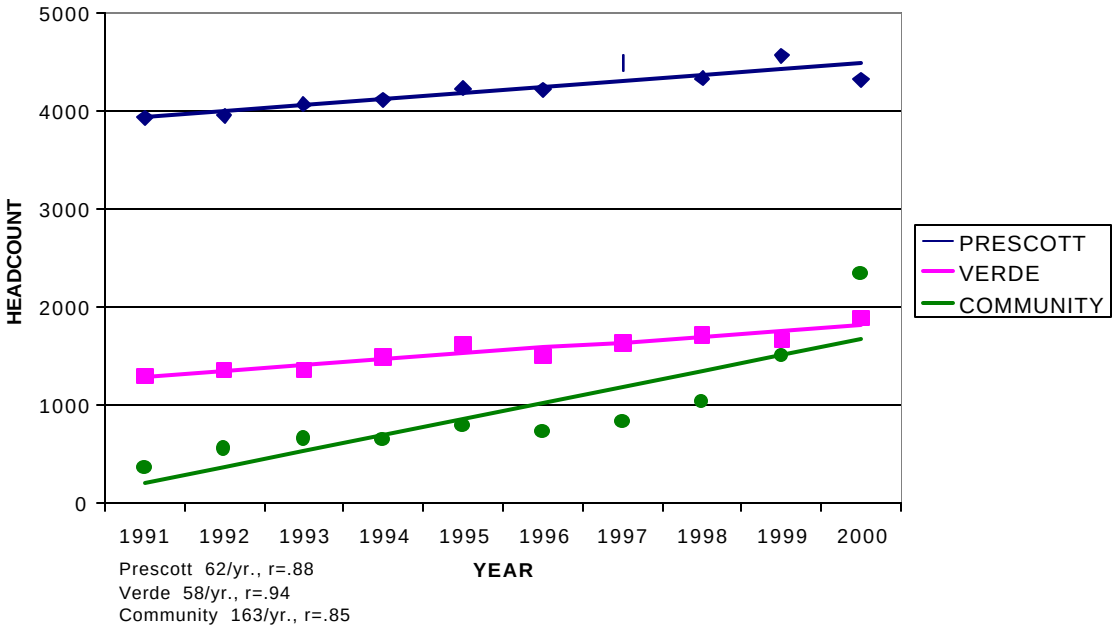
- Full-time enrollment showed moderate growth between 1991 and 1995, but after a 20 percent decline in 1996, full-time enrollment has continued to trend negatively.

- Average full-time enrollment is lower for the 1996-2000 (1,233) period compared to the 1991-1995 (1,434) period.

Students by Campus Location

Yavapai College is organized into three campuses: Prescott, Verde (Clarkdale), and Community. Included under the Verde campus are the Sedona Center and all other Sedona locations. Unlike Prescott and Verde, Community campus does not have a central campus facility. Community campus consists of two learning centers, one in Prescott Valley and another in Chino Valley, and various community locations throughout Yavapai County.

FIGURE 11. ENROLLMENT BY CAMPUS LOCATION: 1991-2000



Trend Analysis Results

- As the trend lines indicate, all three campuses exhibited strong, and consistent growth, estimated gains at 63 (Prescott), 59 (Verde), 163 (Community).

- Prescott enrollment increased from 3,942 in 1991 to 4,331 in 2000, an increase of ten percent. While Prescott's enrollment for the period is trending positively, it has shown much more volatility over the 1996-2000 period compared to the previous five years.

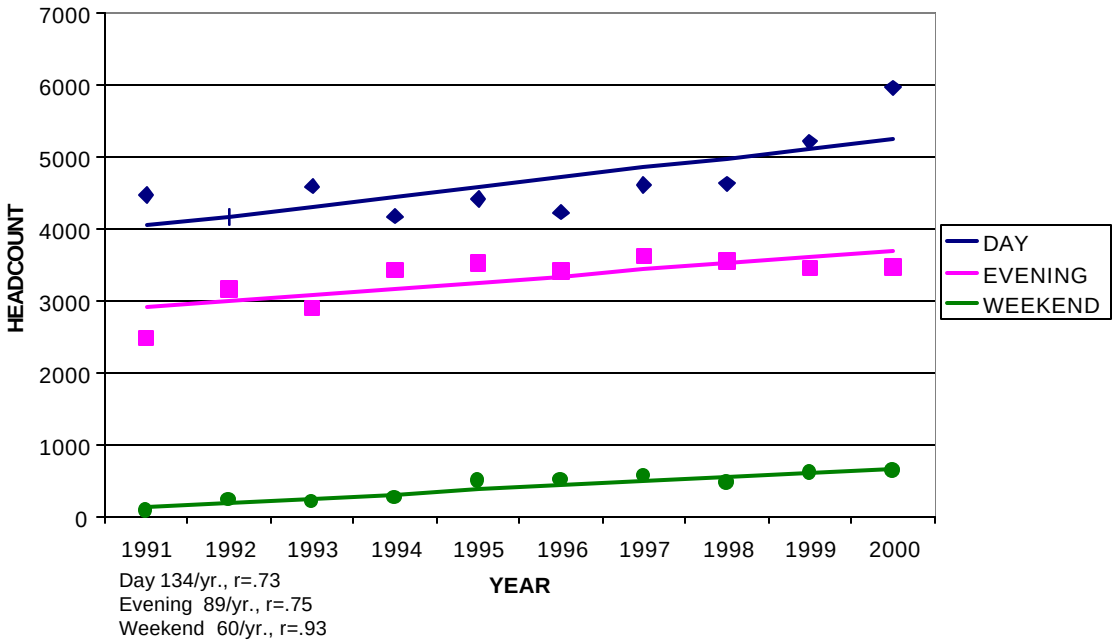
- Verde campus enrollment increased from 1,306 in 1991 to 1,900 in 2000, an increase of 45 percent.

- Community campus grew by a staggering 548% from 363 in 1991 to 2,351 in 2000. Community campus has been the fastest growing campus every year during the past ten years, with the exponential growth in 1999 and 2000 due to the addition of for-credit elder hostel courses.

Students by Time of Attendance

Courses are identified as either day, evening or weekend. Students are not limited to just one time of attendance; therefore, summing day, evening and weekend enrollment will result in some duplication of headcount. The majority of enrollment is made up of daytime students.

FIGURE 12. ENROLLMENT BY TIME OF ATTENDANCE: 1991-2000



Trend Analysis Results:

- As shown in Figure 12, day and evening enrollment exhibited a lot of fluctuation over the ten year period, but the overall trend indicates strong to moderate, positive growth, estimated at a gain of 134 day students and 89 evening students per year.

- Weekend enrollment increased from 71 in 1991 to 627 in 2000, an increase of 783 percent.

- For the 1991-1995 time period, day attendance accounted for 60 percent of enrollment, followed by evening (40%) and weekend (<1%). The average enrollment for 1996-2000 showed a proportional five percent decrease for day attendance (55%), while evening enrollment remained constant (39%) and weekend enrollment grew (6%).

FALL SEMESTER FTSE ENROLLMENT TRENDS

Introduction

Fall semester FTSE enrollment has exhibited much fluctuation in recent years. What can we derive from Yavapai College's roller coaster FTSE trend? The analysis will determine if this history reflects short-term anomalies or trends.

To distinguish short-term fluctuations from long-term trends, the report analyzes ten years (1991-2000) of FTSE data. There are two primary reasons for using a long-term picture of FTSE enrollment:

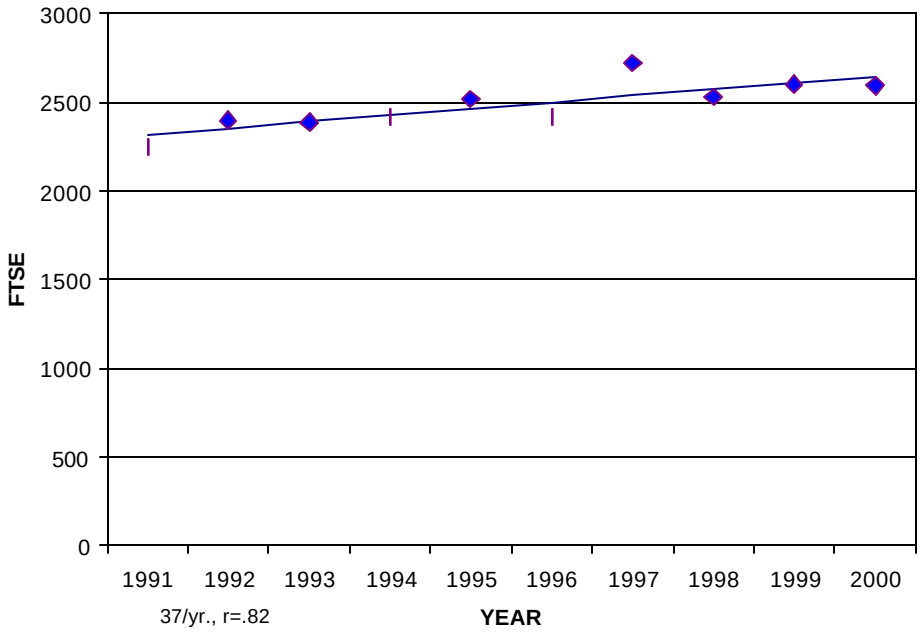
- A more extensive time series, such as the ten year period we are investigating, provides a more meaningful distinction between short-term fluctuations and long-term trends. The longer the time series is, the easier it is to identify cyclical effects on enrollment.

- Statistically, a longer time series provides a better foundation for distinguishing short-term fluctuations from any long-term trend present. Confidence in the effort to accurately determine if recent changes in FTSE represent short-term fluctuations or changes in long-term trends depends largely upon the length of the time series used for analysis. In short, the longer the time period used, the more reliable the estimated trend in the data.

Total FTSE Enrollment

For the purpose of this study, FTSE was calculated on total student credit hours as of census day for regular courses and final day for students enrolled in short-term or open exit/open entry courses. The formula for calculating FTSE is total credit hours divided by 15.

FIGURE 13. FALL FTSE ENROLLMENT: 1991-2000



Fall	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
FTSE	2,248	2,397	2,386	2,414	2,518	2,417	2,720	2,525	2,600	2,592

Trend Analysis Results

- Trend analysis shows a significant growth trend in FTSE over the 1991-2000 period. The high correlation with year (r=.82) indicates that Yavapai College's FTSE growth is not the result of short-term fluctuations, but a true growth trend.

- Examining the 1991-2000 period, FTSE enrollment has shown considerable variability, ranging from a low of 2,248 in 1991 to a high of 2,720 in 1997. The average FTSE for the period was 2,482.

- Fall 2000 FTSE of 2,592 represented a less than one percent decrease in FTSE over the previous year. The largest one year increase was 303 (from 1996 to 1997), while the largest one year decrease was 194 (from 1997 to 1998).

FTSE ENROLLMENT BY CAMPUS ADMINISTRATION

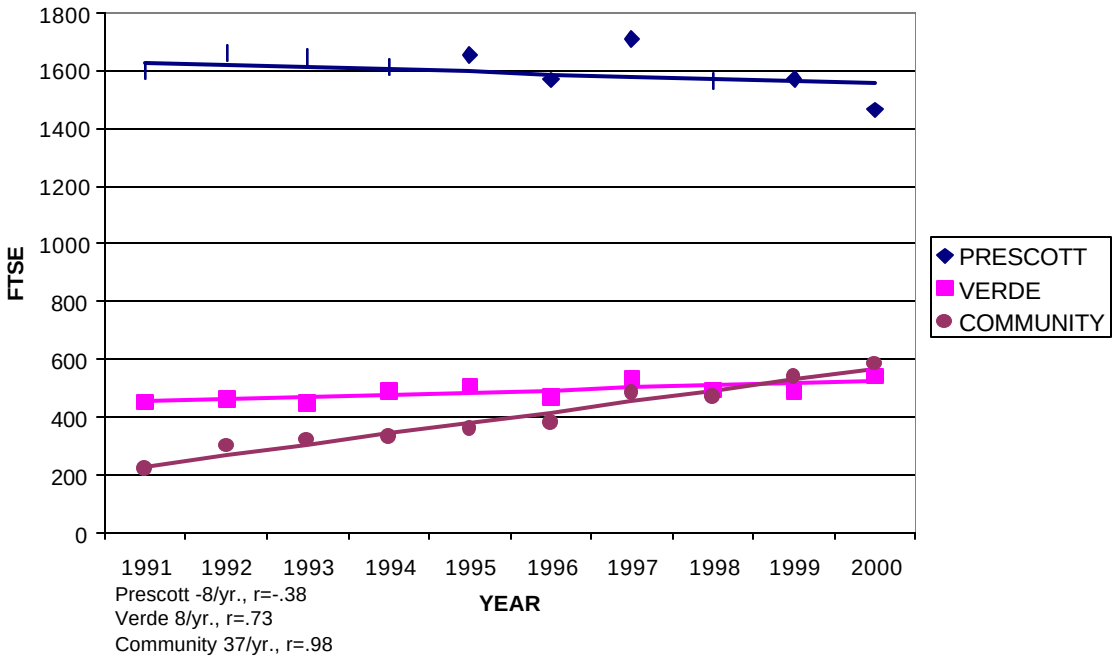
For this report, FTSE is reported by administrative structure and not campus location. The use of administrative structure is necessary because many Community campus courses take place on the Prescott and Verde campuses. The current administrative structure has been applied to the entire 1991-2000 period.

Overall, Yavapai College's FTSE enrollment has grown 15 percent between 1991 and 2000, but enrollment by campus administration has varied widely. The Prescott campus is far and away the largest FTSE producer, however, Verde and Community campuses are growing at faster rates.

TABLE 6. FTSE BY CAMPUS ADMINISTRATION, FALL 1991 TO FALL 2000

	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	91-00 # Change	91-00 % Change
CAMPUS												
Prescott	1,597	1,660	1,647	1,613	1,654	1,569	1,708	1,567	1,572	1,464	-133	-8%
Verde	453	463	450	493	509	469	533	494	487	542	89	20%
Community	198	273	289	308	355	379	479	464	541	586	388	196%
Total	2,248	2,397	2,386	2,414	2,518	2,417	2,720	2,525	2,600	2,592	344	15%

FIGURE 14. FTSE BY CAMPUS ADMINISTRATION: 1991-2000



Trend Analysis Results

- As seen in Figure 14, Prescott is exhibiting a weak decline in FTSE enrollment, estimated at a loss of eight FTSE per year. The correlation of -.38 indicates that short-term fluctuations are responsible for much of the variation in Prescott's total enrollment. About 85 percent of the variation in Prescott FTSE is due to short-term fluctuations, the remaining 15 percent can be attributed to a trend.

- Prescott's FTSE has declined seven percent over the past ten years from 1,597 in 1991 to 1,464 in 2000. Much of Prescott's FTSE decline can be attributed to the decline in full-time enrollment. Another factor influencing Prescott's FTSE is the displacement of growth to the Prescott Valley and Chino Valley centers.

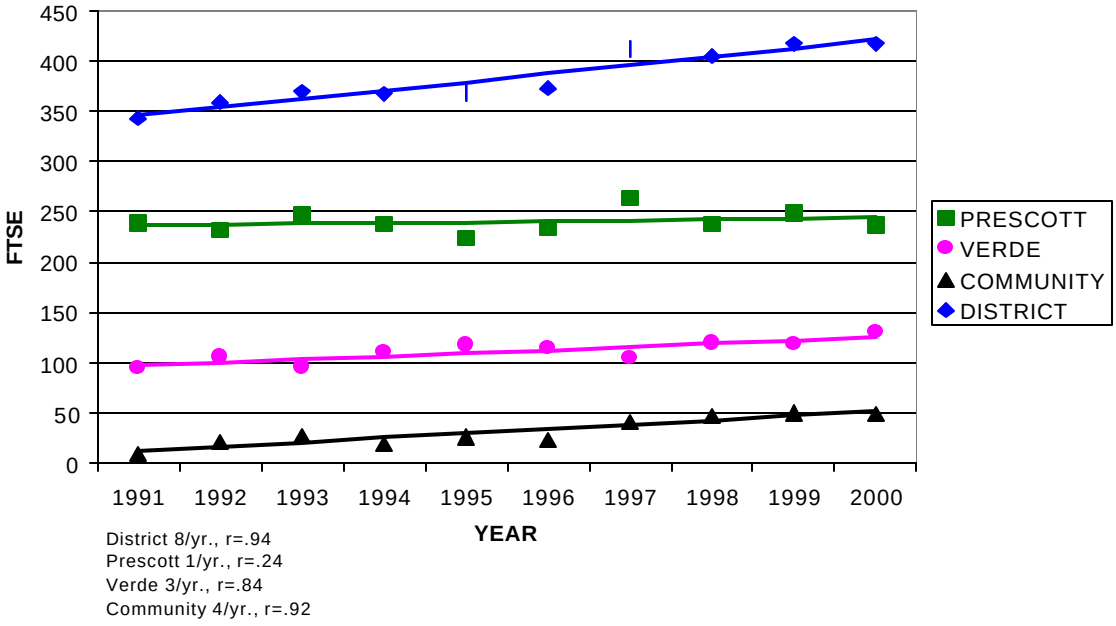
- Verde FTSE enrollment shows a moderate growth trend for the period. Verde FTSE increased 20 percent between 1991-2000 from 453 to 542.

- Trend analysis indicates a very strong, positive and consistent trend for Community campus, estimated gain of 37 FTSE per year. Community FTSE grew from 198 in 1991 to 586 in 2000.

FTSE ENROLLMENT BY DIVISION

Yavapai College's FTSE generating academic programs and courses are organized into nine divisions: Business and Computers; Communications; Health, P.E. and Athletics; Liberal Arts; Nursing and Allied Health; Public Services and Gunsmithing; Science and Math; Technology; Visual and Performing Arts. In this study, FTSE is analyzed at both the district and campus administration level.

FIGURE 15. BUSINESS AND COMPUTER DIVISION FTSE TRENDS: 1991-2000



District 8/yr., r=.94
Prescott 1/yr., r=.24
Verde 3/yr., r=.84
Community 4/yr., r=.92

Business and Computer Division FTSE
Trend Analysis Results

- Examining the Business and Computer division at the district level reveals a very strong, positive and consistent growth trend over the past ten years. Between 1991 and 2000, FTSE increased 22 percent from 343 to 417 (Table 7).

- Business and Computer FTSE for Prescott exhibited no significant trend. Changes in enrollment are due to short-term fluctuations around a constant level of enrollment.

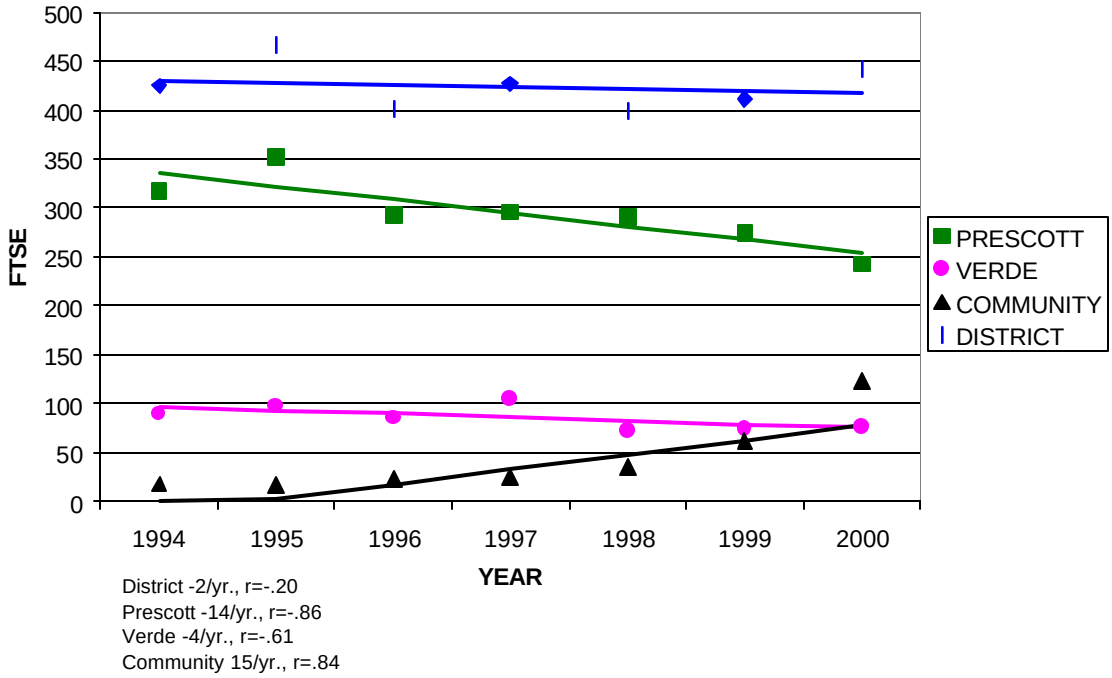
- Trend analysis for Verde's Business and Computer enrollment shows a strong, consistent growth trend. Total FTSE increased 11 percent between fall 1999 and fall 2000, and 37 percent over the past ten years.

- Community campus Business and Computer enrollment increased from nine in 1991 to 49 in 2000, an increase of 458 percent. Trend analysis shows very strong, consistent growth for the Community campus Business and Computer division.

Communications Division FTSE

The Communications Division was newly created in 1994; therefore, trend analysis will cover the 1994-2000 time period.

FIGURE 16. COMMUNICATIONS DIVISION FTSE TRENDS: 1994-2000



Trend Analysis Results

- Despite a seven percent increase between 1999 and 2000, trend analysis at the district level shows no significant trend for the Communications division for the 1994-2000 period.

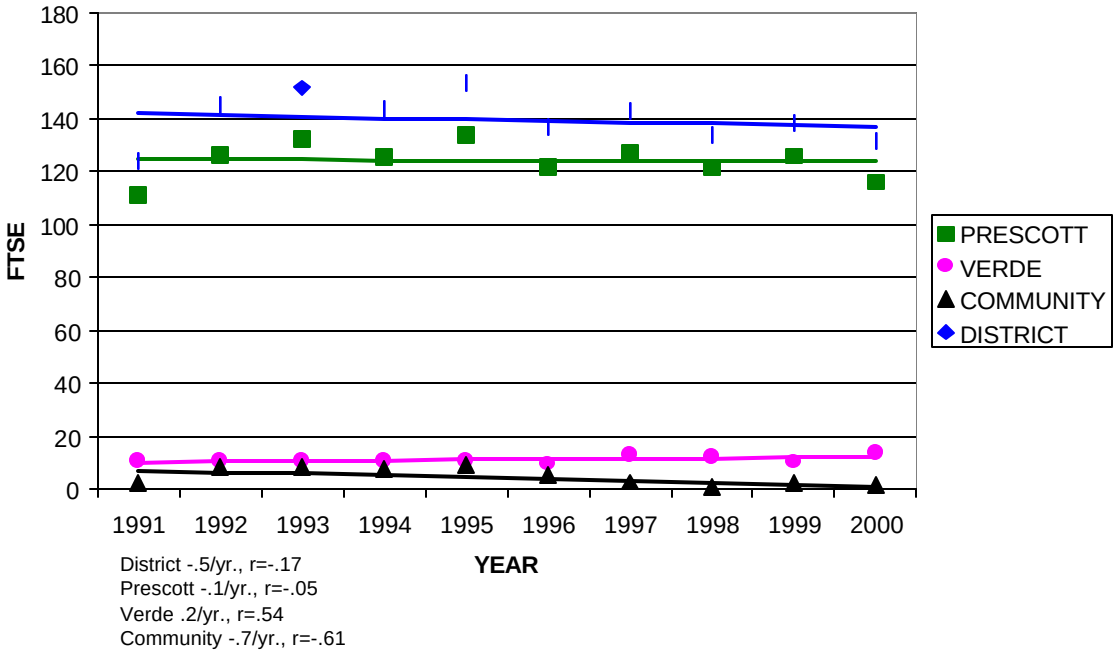
- The high negative correlation (r=.86) indicates a strong downward trend for Prescott's Communications division. FTSE of 243 for fall 2000 represents the lowest enrollment in the past seven years.

- The Communications division (Verde) has seen small FTSE increases in each of the past three years. In spite of these recent small gains, trend analysis for the 1994-2000 period indicates a moderate declining trend for Verde's Communications division.

- As the trend line indicates in Figure 16, the Communications division for Community campus has experienced strong, consistent growth between 1994 and 2000. The dramatic growth exhibited in fall 1999 and 2000 is largely due to the addition of for-credit elder hostel courses.

Health, P.E. and Athletics Division FTSE

FIGURE 17. HEALTH, P.E. AND ATHLETICS DIVISION FTSE TRENDS: 1991-2000



Trend Analysis Results:

- At the district level, Health, P.E. and Athletics exhibited no significant trend. While 1991 through 1995 showed positive FTSE growth, the trend line suggests that Health, P.E. and Athletics has a steady enrollment base, and the fluctuations shown over the past ten years are primarily due to short-term fluctuations.

- Over the 1991-2000 time period, Prescott Health, P.E. and Athletics has shown minimal variability, with no significant trend present.

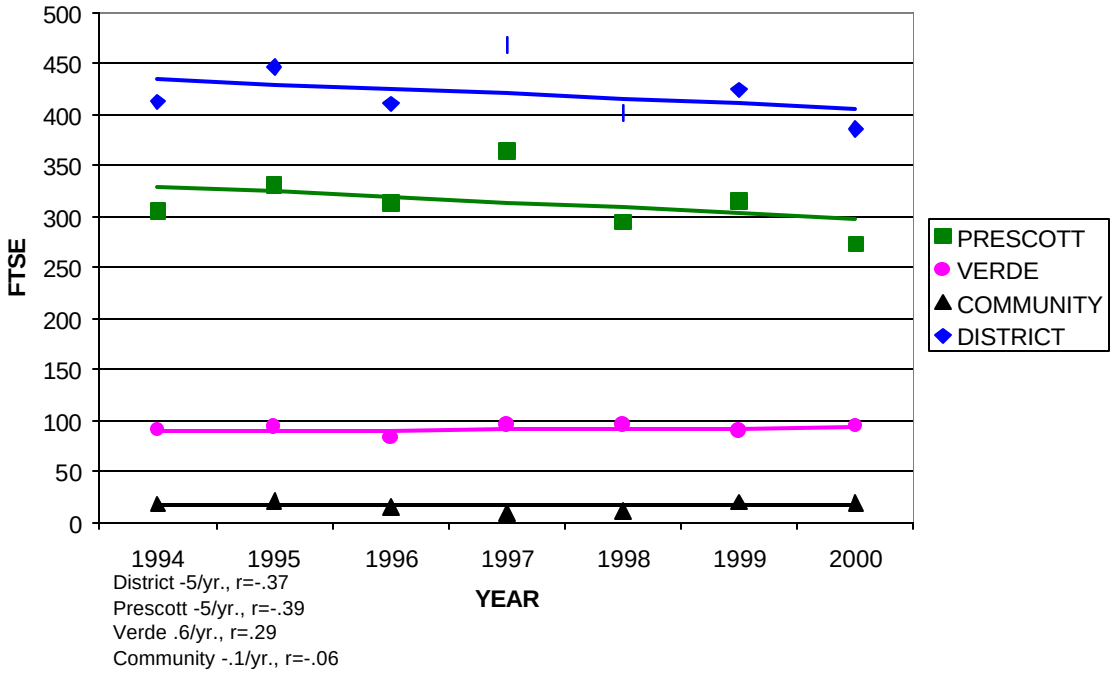
- In Verde, Health, P.E. and Athletics has exhibited a moderate, positive trend over the past ten years.

- Trend analysis reveals a moderate decline for Health and Athletics administered through Community campus, estimated loss about one FTSE per year.

Liberal Arts Division FTSE

Beginning in 1994, the Liberal Arts division was reorganized as a result of the creation of a new Communications division. Due to the changes the Liberal Arts division underwent, data is presented for the 1994-2000 period.

FIGURE 18. LIBERAL ARTS DIVISION FTSE TREND: 1994-2000



Trend Analysis Results

- District wide, Liberal Arts exhibited a weak, negative trend over the 1994-2000 period, estimated loss of 5 FTSE per year.

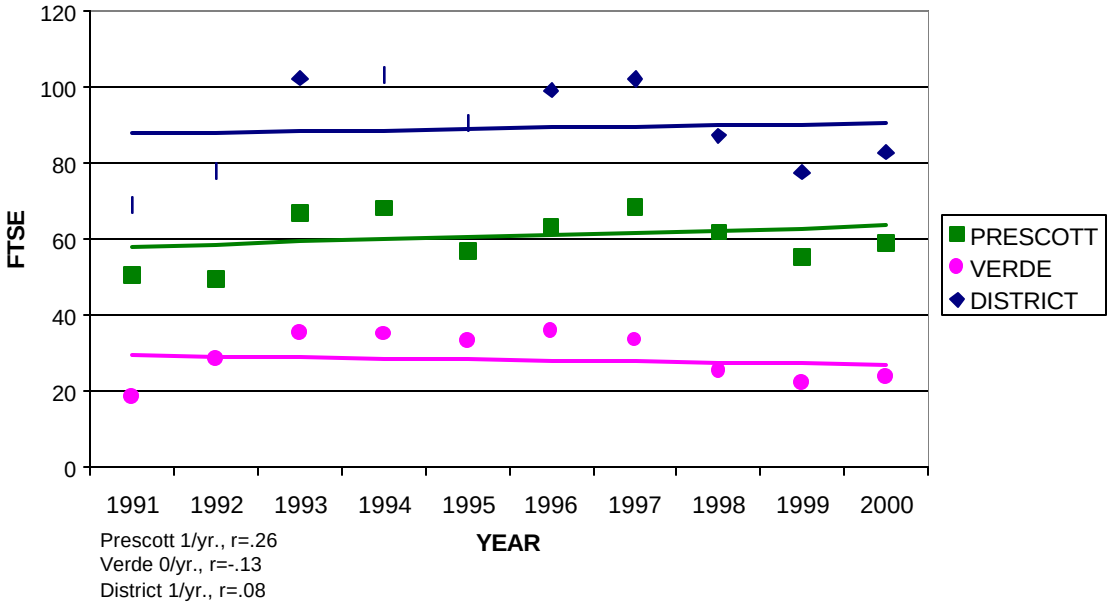
- For the 1994-2000 period, trend analysis shows a weak decline in Prescott Liberal Arts FTSE. Prescott FTSE declined by 32, from 304 in 1994 to 272 in 2000.

- Trend analysis indicates a very weak, positive trend for Verde Liberal Arts. Liberal Arts fall 2000 FTSE of 94 was slightly higher than the average (mean=92) FTSE for the 1994-2000 period.

- No significant trend was identified for Community Liberal Arts. FTSE variability is due solely to short-term fluctuations around a base level of enrollment.

Nursing and Allied Health Division FTSE

FIGURE 19. NURSING AND ALLIED HEALTH DIVISION FTSE TRENDS: 1991-2000



Trend Analysis Results

- Trend analysis for the Nursing division (District) reveals no significant trend for the 1991-2000 period. The extremely low correlation (r=.08) between year and FTSE indicates that the variation in enrollment is due to short-term fluctuations around a consistent base level of enrollment.

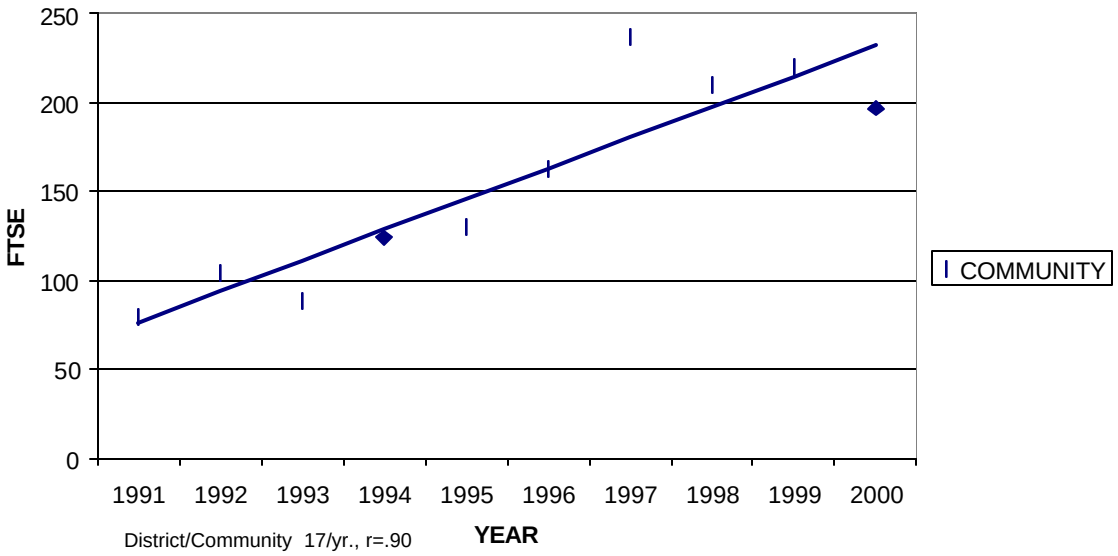
- Nursing and Allied Health FTSE for Prescott exhibited no significant trend over the 1999-2000 period. Enrollment has shown considerable variability, but Prescott's Nursing and Allied Health exhibits a constant core enrollment over the past ten years.

- Trend analysis shows no trend for Nursing and Allied Health (Verde). Similar to Prescott's enrollment, trend analysis indicates that variations in enrollment are due to short-term fluctuations around a consistent enrollment base.

Public Services and Gunsmithing Division FTSE

All Public Services and Gunsmithing courses are administered by Community campus. Therefore, there is only one trend line that represents both the District and Community campus.

FIGURE 20. PUBLIC SERVICES AND GUNSMITHING DIVISION FTSE TRENDS: 1991-2000

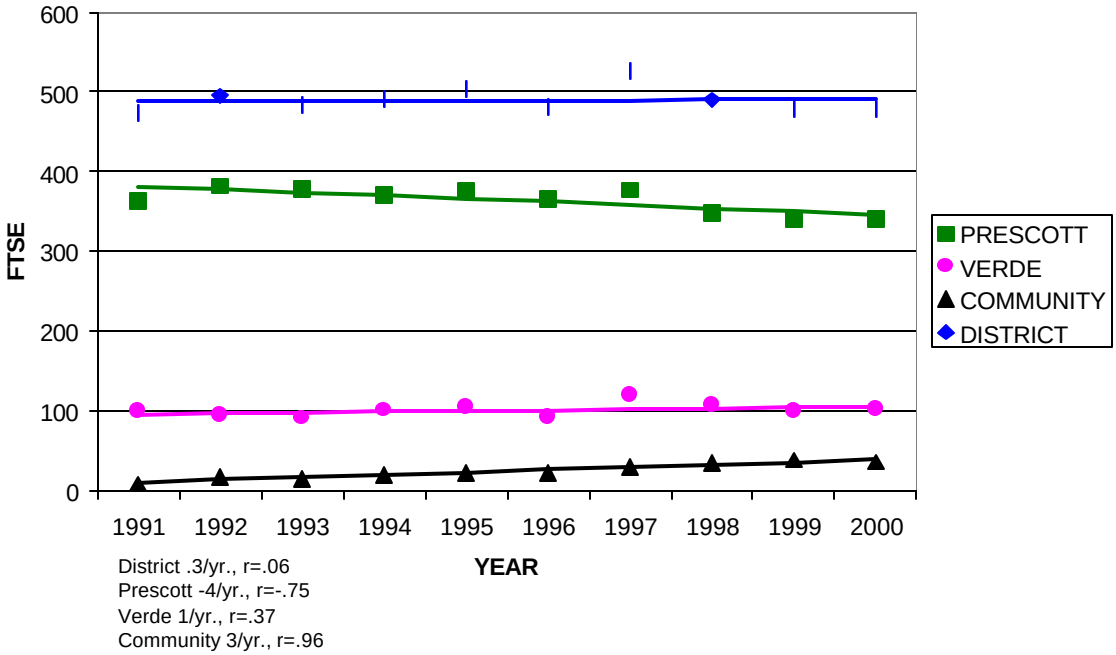


Trend Analysis Results

- Trend analysis for the Public Services and Gunsmithing division indicates a very strong, consistent, and positive trend for the 1991-2000 period.
- FTSE increased from 79 in 1991 to 197 in 2000, an increase of 148 percent.
- The Public Services and Gunsmithing division's growth is estimated at 17 FTSE annually.

Science and Math Division FTSE

FIGURE 21. SCIENCE AND MATH DIVISION FTSE TRENDS: 1991-2000



Trend Analysis Results

- From a district perspective, the Math and Science division has shown little variability between 1991 and 2000. The very low correlation with year (r=.06) over the past ten years indicates no significant trend for Math and Science.

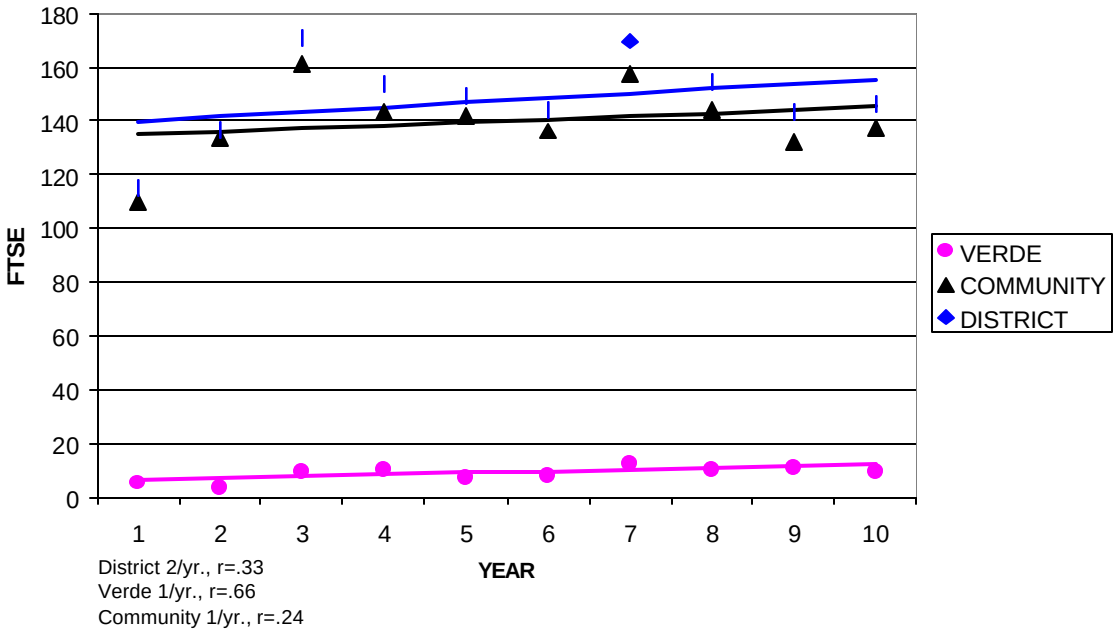
- Trend analysis of the Math and Science division (Prescott) shows a consistent, moderate negative trend, estimated loss of four FTSE per year. Math and Science FTSE (Prescott) declined from 364 in 1991 to 341 in 2000, a decrease of seven percent.

- Math and Science at Verde exhibited a weak, positive trend for the 1991-2000 period. Estimated FTSE growth is one per year.

- Trend analysis for Math and Science (Community) shows a very strong, consistent, positive trend. FTSE increased from 8.6 in 1991 to 35.87 in 2000.

Technology Division FTSE

FIGURE 22. TECHNOLOGY DIVISION FTSE TRENDS: 1991-2000



Trend Analysis Results

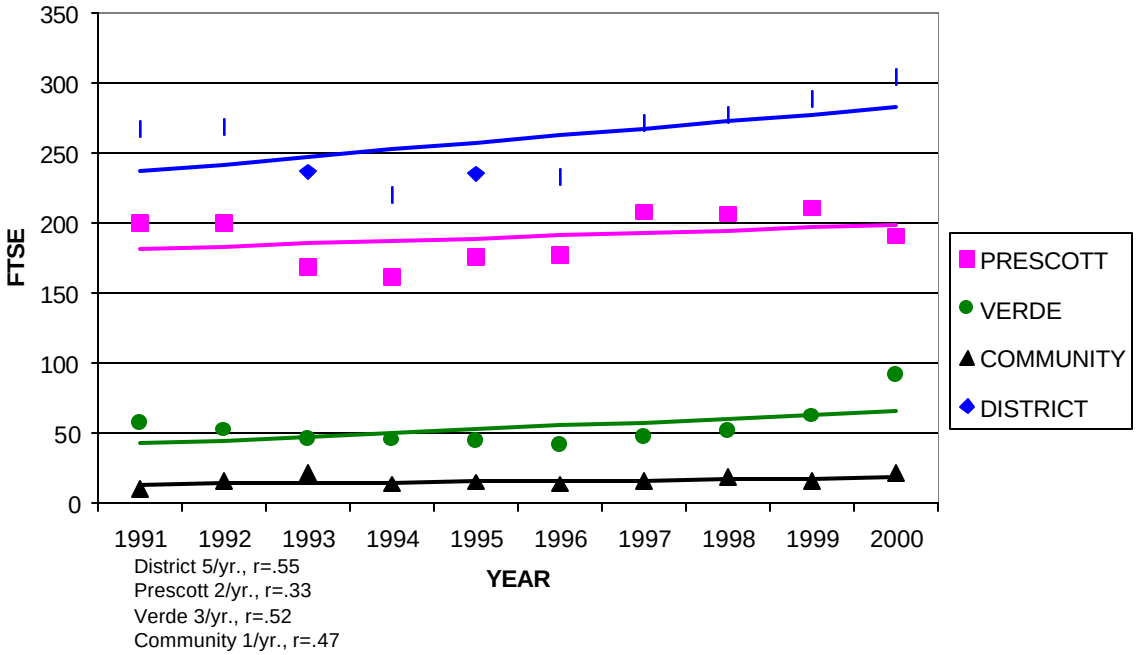
- Trend analysis indicates weak, positive growth for the Technology division. The Technology division has experienced much variation over the past ten years, and the low correlation (r=-.33) suggests short-term fluctuations are primarily responsible.

- Technology division (Verde) has shown moderate growth over the past ten years, growing from five in 1999 to nine in 2000.

- As shown in Figure 22, Technology division (Community) has exhibited much fluctuation over the 1991-2000 period, with trend analysis showing a weak, positive growth trend.

Visual and Performing Arts Division FTSE

FIGURE 23. VISUAL AND PERFORMING ARTS DIVISION FTSE TRENDS: 1991-2000



Trend Analysis Results

- Trend analysis reveals a weak to moderate, positive FTSE increase in Visual and Performing Arts at the District level for the 1991-2000 period. Over the 1996-2000 period, FTSE has increased each year, growing from 232 (1996) to 304 (2000).

- Visual and Performing Arts (Prescott) shows a weak, positive trend. In spite of the positive trend, the low correlation with year (r=.33) suggests that short-term fluctuations are responsible for much of the variation exhibited over the past ten years.

- Trend analysis indicates a weak to moderate growth trend between 1991 and 2000 for Visual and Performing Arts (Verde). Estimated growth of three FTSE per year.

- Visual and Performing Arts (Community) exhibited little variability and a weak growth trend for the 1991-2000 period.

TABLE 7. FTSE BY DIVISION ADMINISTRATION, FALL 1991 TO FALL 2000											
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	10 Year % Change
BUSINESS AND COMPUTERS											
Prescott	239	232	247	239	224	233	265	238	249	237	-1%
Verde	96	106	96	111	118	115	106	120	118	131	37%
Community	9	22	27	19	26	24	42	47	50	49	459%
District	343	359	370	368	368	372	412	404	417	417	22%
COMMUNICATIONS											
Prescott	NA	NA	NA	317	352	293	296	291	275	243	-24%
Verde	NA	NA	NA	90	98	85	106	72	74	76	-15%
Community	NA	NA	NA	18	17	23	25	36	63	123	591%
District	NA	NA	NA	425	467	401	427	399	412	442	4%
HEALTH, P.E. AND ATHLETICS											
Prescott	111	126	132	125	134	122	127	121	126	116	5%
Verde	10	11	11	11	11	9	13	12	10	14	31%
Community	3	8	8	7	9	6	3	1	2	2	-32%
District	124	145	151	143	153	137	143	134	138	131	6%
LIBERAL ARTS											
Prescott	NA	NA	NA	304	331	313	364	294	315	272	-11%
Verde	NA	NA	NA	90	94	82	96	96	90	94	5%
Community	NA	NA	NA	18	21	15	8	11	19	19	9%
District	NA	NA	NA	412	446	410	468	401	424	386	-6%
NURSING AND ALLIED HEALTH											
Prescott	51	49	67	68	57	63	69	62	55	59	17%
Verde	18	29	35	35	33	36	34	25	22	24	30%
District	69	78	102	103	91	99	102	87	78	83	20%
PUBLIC SERVICES/GUNSMITH											
Community	79	104	89	124	130	163	237	210	220	197	148%
District	79	104	89	124	130	163	237	210	220	197	148%
SCIENCE AND MATH											
Prescott	364	382	378	370	377	367	377	348	341	341	-6%
Verde	100	95	91	101	104	92	120	108	99	102	2%
Community	9	18	15	20	22	22	29	34	38	36	317%
District	473	495	484	491	503	481	526	490	479	479	1%
TECHNOLOGY											
Verde	5	3	10	10	7	8	12	10	11	9	77%
Community	61	75	103	85	115	113	119	108	132	137	123%
District	67	79	113	96	122	121	131	118	143	146	120%
VISUAL & PERFORMING ARTS											
Prescott	200	200	169	161	175	177	208	206	211	191	-5%
Verde	57	52	46	45	44	41	48	52	62	92	61%
Community	10	16	22	14	15	14	16	18	16	21	111%
District	267	268	236	220	235	232	271	276	289	304	14%

EXPECTATIONS FOR FUTURE ENROLLMENT

Statistical analyses on headcount and FTSE enrollment for 1991-2000 show that Yavapai College has experienced positive growth in both student enrollment and FTSE. The strong trends identified suggest a positive enrollment and FTSE forecast for fall 2001 in headcount and FTSE.

Unduplicated headcount has grown in almost all demographic and student status indicator areas. This is the good news. The not so good news is full-time students and out-of-county students exhibited negative trends and have the potential to negatively impact future enrollment and FTSE. The past three fall semesters FTSE has declined; all of this decline can be attributed to the loss of full-time students. The loss of out-of-county students is highly correlated with full-time status due to the fact that out-of-county students tend to carry higher credit loads. While trend analysis for the 1991-2000 period indicates strong growth for FTSE, the continued loss of full-time students could jeopardize this trend. Results of this study suggest continued growth in overall headcount, but all growth driven by part-time enrollment.

Analysis by campus administration revealed that Prescott is experiencing a negative trend in FTSE. The trend is weak suggesting that focusing on short-term fluctuations would be most helpful in forecasting future FTSE. Prescott's overall headcount enrollment continues to increase; unfortunately new students are enrolling in fewer credit hours than in the past, which is driving the negative trend in Prescott's FTSE.

Trend analysis is based on past data; therefore, any forecast is valid only to the extent that the factors influencing enrollment remain relatively the same. Significant changes in new program development or marketing efforts, for instance, could weaken the validity of any forecast model based on past data. Publicity of the college's Master Plan, and the subsequent media exposure of the 2000 Yavapai College bond campaign and passage may significantly reduce the validity of using past data to accurately forecast future

enrollment. Another factor not considered in this study was the exclusion of external factors such as high school graduation rates, unemployment rates and population trends.

In conclusion, the long-term perspective taken in this study indicates overall strong growth in both student headcount and FTSE. The decline in full-time students, especially on the Prescott campus needs further investigation. However, the results of this time-series analysis in combination with the bond passage and implementation of the Master Plan indicate a strong and growing future for Yavapai College's enrollment.