

Yavapai COLLEGE

The logo is a circular emblem with a ship's wheel design. It is divided into four quadrants: top-left shows a silhouette of a person on a horse; top-right shows a silhouette of a person holding a tool; bottom-left shows a stylized evergreen tree; bottom-right contains the text 'Yavapai College' and '1966'.

Enrollment Forecast For 2010-2011

The Office of Academic Affairs

The Office of Institutional Research

Spring 2010

**2010-2011 FTSE and Headcount Projections for the Economic Estimates
Commission
March 2, 2010**

Introduction

The State of Arizona mandates that community colleges submit full-time student equivalency (FTSE) projections annually to the Economic Estimates Commission (EEC). The estimated FTSE submitted to the State is used to determine Yavapai College's expenditure limitation. This report details the methods and assumptions used in creating Yavapai College's 2010-2011 FTSE projections. FTSE was estimated using historical trends, and various assumptions about college management decisions and known factors impacting FTSE.

Methods

Separate models were created for each reporting category that is collected by the State (fall, spring, summer, short and open entry, open exit) and by course prefix. Exponential smoothing and autoregressive integrated moving average models, depending on the data, were used to create the base statistical forecasts.

Key administrators, faculty and staff were contacted regarding perceptions of enrollment factors and growth issues. Feedback from this group was manually integrated into the model and the final projections.

Assumptions

A. Population

The United States Census Bureau ¹ shows Yavapai County's 2008 population being 215,503. Based on in- and out-migration, birth and mortality, and building permit trends for Yavapai County we are estimating growth at 1% for 2009 and .5% for 2010. Institutional Research's estimated 2010 population is 218,746.

B. Tuition/Fee Structure

At the time of this forecast, a decision on increasing tuition was still under discussion. If tuition is raised, it is expected to be four dollars or less per credit hour. Using the scenario of a four dollar increase, it is expected to have little to no impact on access to higher education. The college's practice of setting aside a proportion of tuition for financial aid continues to serve the institution well. Continuing increases in Arizona's university tuition should continue to make Yavapai College an inviting and cost-effective alternative.

C. High School Graduates and Local School Information

In the past 12 years, the number of high school graduates in Yavapai County has increased 55%.

Graduation Year	Yavapai County High School Graduates
1998	1,083
1999	1,171
2000	1,125
2001	1,225
2002	1,183
2003	1,269
2004	1,337
2005	1,305
2006	1,429
2007	1,554
2008	1,657
2009	1,678

Population projections indicate that the number of high school graduates in Yavapai County will flatten as current economic conditions and the downturn in the housing market impact families' ability to move to Yavapai County.

Similarly, a number of schools in Yavapai County are losing enrollment due to families moving out of the area because of the current economic conditions and rising unemployment. The full impact on high school enrollment is not known at this time.

Yavapai College consistently has enrolled about 30% of Yavapai County high school graduates and this figure is expected to rise as more graduates attend community colleges rather than State universities due to rising university tuition prices and high unemployment.

D. Dual Enrollment and Joint Technical Education District

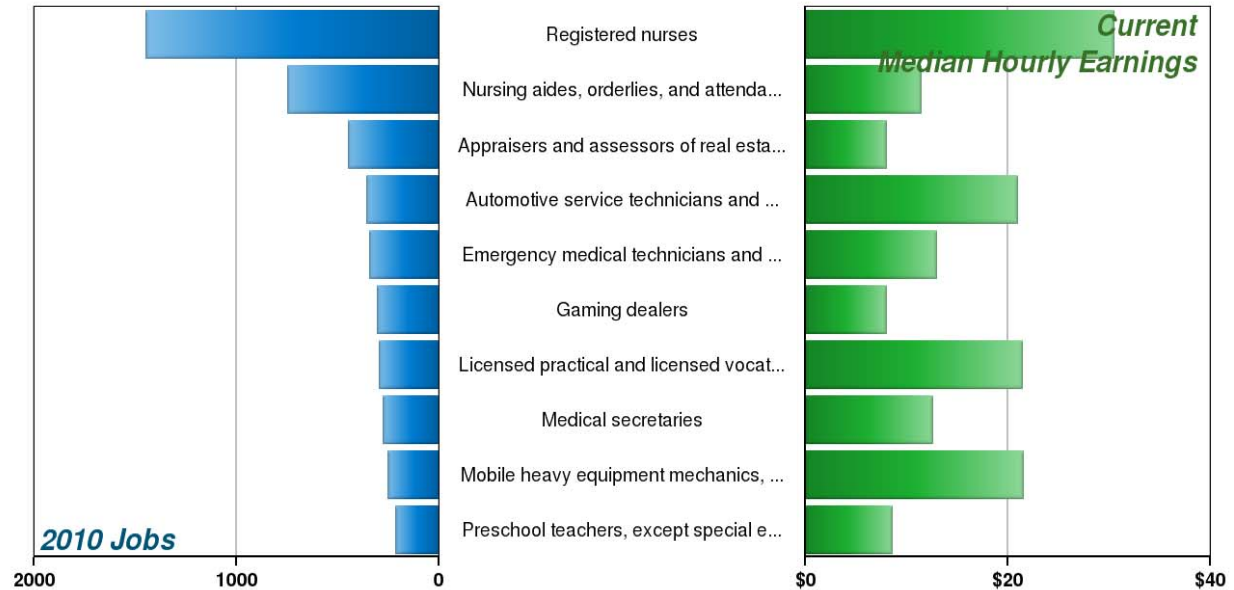
Dual Enrollment is expected to grow minimally in 2010-11. The new Joint Technical Education District (JTED) that was voter approved in 2008 is expected to provide the growth in dual enrollment for next year.

Another risk in this area is the Arizona Legislature's threats to eliminate FTSE reimbursement funding for Dual Enrollment. Past legislative attempts have ranged from reduced funding to complete elimination of State support for Dual Enrollment.

E. Occupational Outlook

Medical occupations dominate the largest and fastest growing jobs in Yavapai County. YC has programs directly related to eight of the ten largest occupations. Occupational trends in combination with the economic recession will have a positive impact on enrollment in Nursing, Allied Health programs, and Emergency Medical Technicians.

Largest Occupations Requiring Postsecondary Training to an Associate’s Degree



Source: EMSI, Yavapai County, spring 2010

F. Adult Basic Education

Adult Basic Education estimates flat to minimal growth in Adult Education (AED) for-credit courses and Adult Basic Education (ABE) clock hour courses.

G. Summer School

Susan Fleming, Prescott Valley Campus Dean, reported that better enrollment management should allow for increased summer offerings of about 20 additional sections. YC will continue its current eight-week summer schedule for 2010-11. A slight increase in summer FTSE is expected.

H. Public Services

Susan Fleming reports that Public Safety is one of the most expensive budgets for municipalities; however, Federal stimulus money should allow for modest growth in 2010-11.

I. Nursing

Per Chris Witbeck, Division Dean of Nursing, Nursing will add eight new nursing student positions in 2009-10 in the Verde. The additional FTSE from these new nursing students and continued growth in the Nursing Assistant area will add about 13 new FTSE.

J. Allied Health

Allied Health (AHS) should expect modest enrollment growth as more students seek careers in the Health Care industry.

Health Information Management (HIM) is expected to stay flat as a search for a qualified instructor continues.

Radiological Technician (RAD) began in 2009-10 and will introduce a new class in 2010-11 and should grow by three to five FTSE.

The Pharmacy Technician program which began in 2008-09 has not grown as expected and its survival looks tenuous at this point.

K. Career and Technical Education Center (CTEC)

Occupational enrollment as a whole is expected to hold flat in 2010-11 after declining in 2009-10. The college is investigating the drop in part-time CTE enrollment and trying to identify what factors the college can address to increase CTE enrollment.

L. Proposition 300 Implementation

The passing of proposition 300 requires Arizona public colleges to verify residency status. Since the passing of this proposition there has been a significant decline in Adult Basic Education and English as a Second Language enrollment. Most of the decline over the past two years is likely attributable to the legislative change; however, the continued decline may also be impacted by the housing decline and labor shortages due to the current recession.

M. Economic Outlook

The economic outlook for 2010-11 continues to be grim. The Eller College of Management reports that the recession is over, but that recovery for Arizona will be slow. Arizona's economy is one of the hardest hit.²

- Job growth ranking = 50th
- Personal income growth = 41st
- State Revenue growth = 43rd
- Fiscal peril – second only to California as worst
- Residential foreclosures = 4th
- Homeowners with negative equity = 2nd

Building permits have reached the bottom and the sales of existing homes are up; however, the still high amount of foreclosures will continue to contribute to a declining net in-migration for Yavapai County.

The State of Arizona will again experience a shortfall of revenue and the record 11 year decline in funding to Arizona community colleges will continue into a 12th year.

As a result of the economic environment YC should continue to see significant new enrollment from students who would typically choose an Arizona University, but because of tuition costs and proposed university enrollment caps will migrate to a community college.

Unemployment as of December 2009 in Yavapai County rose to 9.3%.

FTSE Projections 2010-11

Based on the projection model and human intelligence, Institutional Research is forecasting an annualized FTSE count of **4,086** for 2010-11.

FTSE by course prefix are presented on the following page.

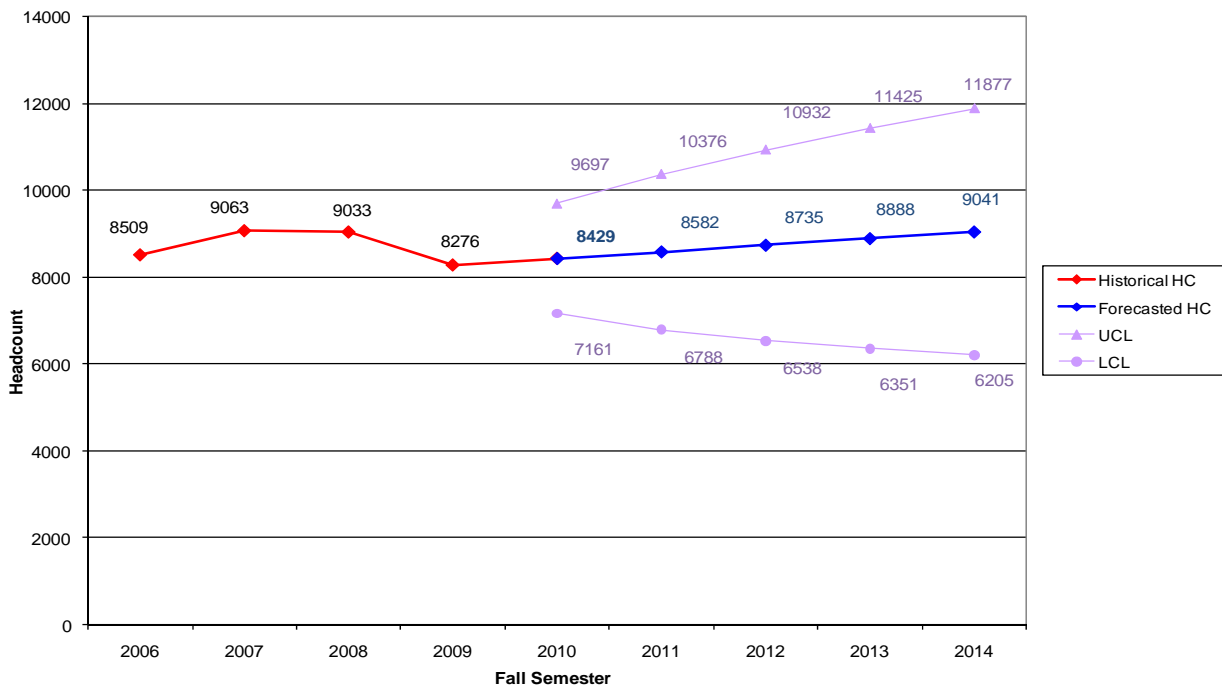
2010-11 Projections

Forecasted		
FTSE		
FY10-11		
Fall		3333.4
Spring		3459.1
Summer		347.4
Short		258.2
OEOE		84.5
Annualized Estimate		4086.35

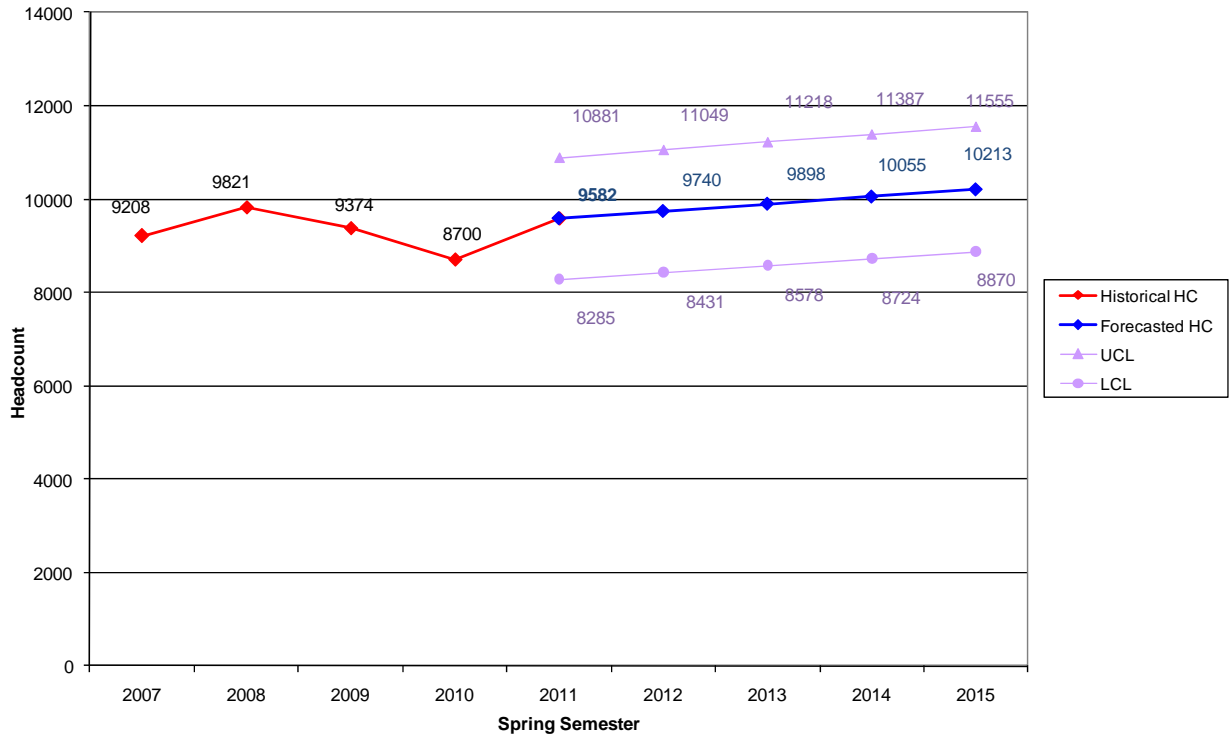
Note: Annualized FTSE is obtained by averaging fall and spring and then adding summer, short, and OEOE.

Headcount Projections 2010-11

Yavapai College Fall Census Headcount Forecast



Yavapai College Spring Census Headcount Forecast



Fall 2010 headcount is forecasted at 8,429 students, while spring 2011 headcount is projected to be 9,582. 95% confidence intervals are included to show the amount of variation in the headcount forecasts.

FTSE Projections by Course Prefix 2010-11

Prefix	10-11 Adjusted Projection	09-10 Estimate	08-09 Actual
ABE	26.1	26.1	26.1
ACC	71.9	62.8	72.1
AED	54.2	54.2	59.7
AFR	0.1	0.4	0.1
AGE	15.6	15.8	14.1
AGS	33.2	29.3	33.7
AHS	43.9	41.9	40.4
AJS	30.8	22.3	28.8
AMS	0.1	0.1	0.1
ANT	35.3	35.3	29.4
ART	228.5	228.5	243.9
ASL	15	9.8	17
AUT	77.1	75.2	81.2
AVT	15	2.3	0.8
BIO	314.5	293.6	275.5
BSA	190.2	167.8	184.6
CHM	67.3	67.3	64.8
CHP	1.7	1.7	1.6
CNC	5.8	5.7	3.6
CNT	67.1	67.1	72
COM	81.7	81.7	76.4
CRW	26.9	27.6	22.4
CSA	137.4	130.7	124
DAN	11.6	11.6	17.1
DFM	40.4	40.3	41
ECE	48.5	34.5	43.6
EDU	41.5	41.5	41.3
ELT	11.4	10.0	13.7
EMS	100.1	90.8	110.7
ENG	402.1	397.5	372.4
ENV	8.8	8.0	8.9
FSC	67.7	74.5	75.1
GEO	24.5	24.5	10.7
GLG	15.6	17.6	15.5
GRN	3.9	2.5	3.9
GST	30.6	30.6	24.9
HIS	44.1	44.4	37.4
HIM	12.2	12.2	3.4
HUM	43.7	36.7	49.6

Prefix	10-11 Adjusted Projection	09-10 Estimate	08-09 Actual
INT	4	3.0	4.1
IPT	7	6.2	9.2
JRN	15.5	15.5	12.6
LAW	16.4	14.9	19.8
MAT	494.5	479.6	440.1
MET	3.4	3.3	4
MTC	5.9	4.8	6.4
MUS	61.8	61.9	60.8
NSG	230.5	215.7	198.9
NTR	18.8	19.2	19.9
PCP	63.9	25.5	49.2
PHE	180	172.2	193.4
PHI	40.86	57.2	54.5
PHY	14.1	14.1	12.8
POS	6.5	6.5	5.3
PSY	197.8	186.6	164.2
RAD	6	3.0	na
RBT	20.2	19.5	27.6
REC	9.8	9.8	6.9
REL	16.3	na	na
RES	7.6	7.6	1.4
SBE	9.6	8.1	9.1
SOC	72.2	69.9	67.3
SPA	51.3	51.3	47.2
STU	34.2	23.5	40.6
THR	3.8	3.8	5.5
VIT	6.5	5.5	na
WEB	5.5	5.2	7
WFA	4.1	45.2	45.2
WLD	32.2	27.0	30.4

09-10 estimates are as of 2/15/2010

How Accurate Are We?

In 2004-05, we began producing enrollment forecasts using the methodology detailed in this report. Below are results indicating the accuracy of our forecasts.

Year	Forecasted FTSE	Actual FTSE	Error
2005-06	3,342	3,351	-0.003
2006-07	3,540	3,617	-0.02
2007-08	3,799	3,691	0.029
2008-09	3,838	3,921	0.022

Sources:

¹United States Census Bureau, Quick Facts, 2008 Yavapai County population estimate.

²Universtiy of Arizona, Eller College of Management, 2010/2011 Economic Forecast Luncheon. Marshal J. Vest, Director, Economic and Business Research Center and Gerald J. Swanson, Professor of Economics, Paul R. Portney Professor in Economics.