

# Progress 2007

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## Report of the Health Care Personnel Shortage Task Force

### Section Three: Outcome Measures & Health Care Professions Education Completion Statistics for 2001-2006



***June 2008***

**Workforce Training and Education Coordinating Board**

128 10th Avenue SW, PO Box 43105, Olympia, 98504-3105

360-753-5662, Fax 360-586-5862

[www.wtb.wa.gov](http://www.wtb.wa.gov)

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# Outcome Measures

The Health Care Personnel Shortage Task Force has identified four outcome measures:

1. The proximity of supply to demand (gap analysis) for selected occupations.

Occupational	Annual Need of Additional Newly Prepared Workers to Close the Gap by 2014
Registered Nurses	512
Physicians and Surgeons, All Specialists	311
Medical and Clinical Laboratory Technologists	186
Medical and Clinical Laboratory Technicians	93
Medical Equipment Preparers	83
Physical Therapists	78
Speech-Language Pathologists	78
Chiropractors	63
Dentists, Including All Specialists	61
Respiratory Therapists	56
Physical Therapist Aides	53
Surgical Technologists	52
Radiologic Technologists and Technicians	51
Pharmacists	48
Occupational Therapists	42
Dietitians and Nutritionists	40
Optometrists	40
Cardiovascular Technologists and Technicians	30
Psychiatric Technicians	16
Diagnostic Medical Sonographers	14

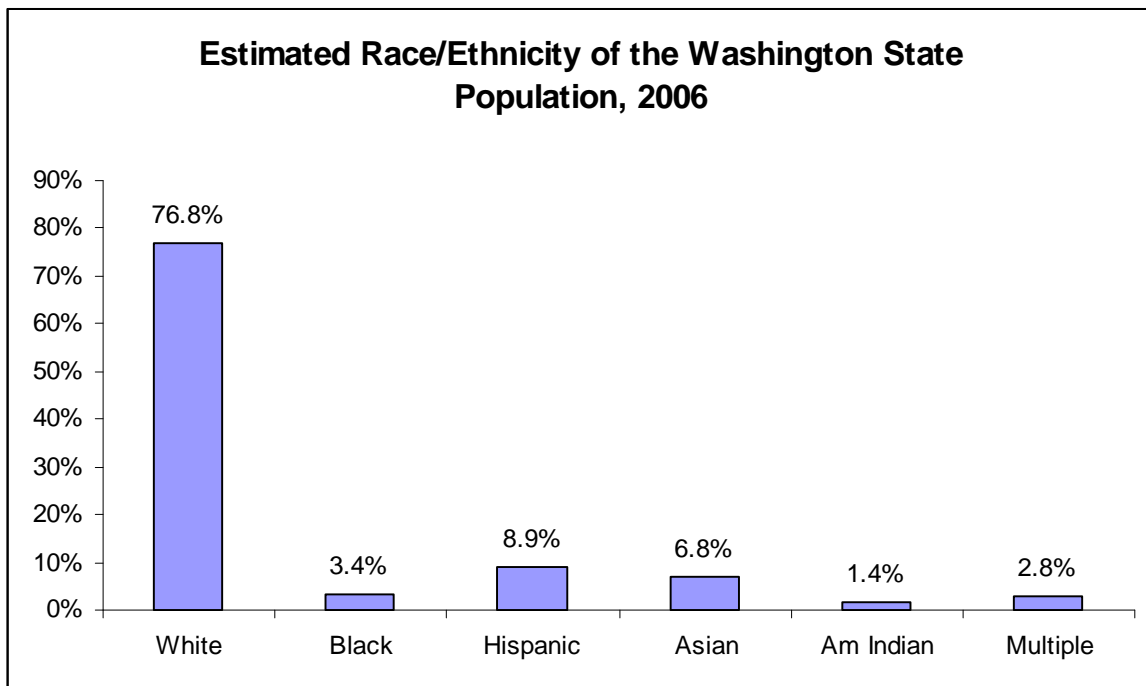
Source: Workforce Board Analyses of the Integrated Postsecondary Data System of the National Center for Education Statistics for 2001 through 2006.

2. Education enrollment, completion, including breakdowns for race/ethnicity for both at two-year, four-year institutions. See completion tables starting on page 3.
3. The number of school districts and high schools that offer a health option as part of their Health and Human Services Pathway. Updated data not available from OSPI for 2007. 2006 data showed that about half of high schools offered health care program options as part of their Health and Human Services Pathway.
4. Diversity of the health care workforce: The level to which health workforce diversity reflects the diversity of the populations served.

### Race/Ethnicity Overview for Some Health Care Professions in Percentages

Race/ Ethnicity	State Population	MD's	Physician Assistants	Dentists	Dental Hygienists	Nurse Practitioners	Registered Nurses	Practical Nurses
African American	3.2	1.0	2.4	0.9	0.5	1.1	1.0	4.4
American Indian/AK Native	1.6	0.5	1.2	0.7	1.1	0.6	1.0	1.9
Asian/Pacific Islander	5.6	7.5	5.9	8.5	3.4	2.9	4.4	4.3
Hispanic	6.0	2.0	4.5	0.7	1.7	1.6	1.7	2.5
Other or Unknown		7.5	3	8.6	4.4	4.8	16.8	20.1
White	83.5	81.5	83	80.6	88.9	89	75.1	66.7

Source: 2000 Census and Center for Health Workforce Studies, University of Washington. Data Snapshots derived from 1999 Washington state professional licensing survey (most recent data available).



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## INTRODUCTION

This report documents completions of postsecondary health career educational programs throughout Washington state. Each page summarizes program completions for one of 35 selected health education programs. The term “completion” as used in this report encompasses graduation from degree programs as well as completion of a course of study leading to a non-degreed credential. This report covers the period from 2001-02 through 2005-06. Trend data include absolute numbers of program completions by gender, population-adjusted completion rates, and completions by race/ethnicity. Throughout the report, each academic year, beginning in July and ending in June, is referred to by the calendar year in which the academic year ended.

## DATA SOURCES

Data for this report come from the Integrated Postsecondary Education Data system (IPEDS) of the National Center for Education Statistics for 2001 through 2006. IPEDS is a systematic survey of educational organizations whose primary purpose is to provide postsecondary education. IPEDS does not collect data from organizations that are not primarily educational in nature, for example, hospitals that offer nursing diploma programs. For this reason, the numbers of health career program completers may be underestimated for some professions, such as nurse aides. More information about IPEDS can be found at <http://nces.ed.gov/ipeds/>.

State population data are from the Office of Financial Management’s Population Estimates for 2006.

Gender: IPEDS provides complete counts by gender, imputing for missing data.

Race and Ethnicity: Completions reported by IPEDS categorize completers into one of the following racial/ethnic designations:

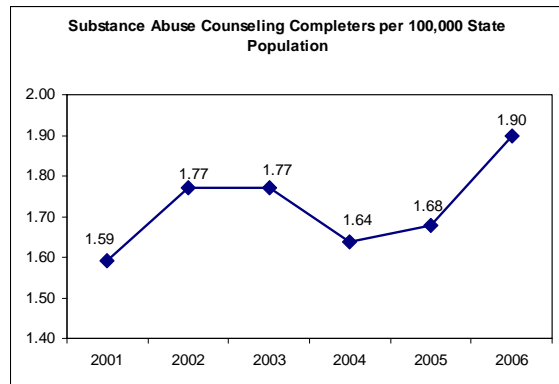
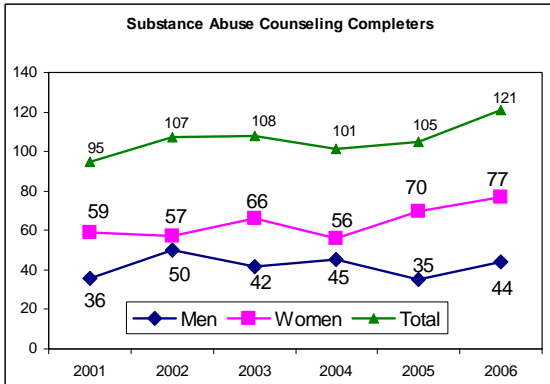
- White, non-Hispanic.
- Hispanic or Latino
- Black, non-Hispanic
- Asian or Pacific Islander.
- American Indian or Alaskan Native.
- Nonresident alien
- Unknown.

For the purpose of charting data the ethnic groups are designated as White, Black, Hispanic, Asian and American Indian. Some racial/ethnic data were missing from the data sets. Completions in this report by race and ethnicity are based on percentages for those completers in which race and ethnicity were known (excluding from the denominator those completers whose racial/ethnic data were missing).

## Limitations of the Data

The data in this report are subject to the following conditions. IPEDS attempts to conduct a complete census of all postsecondary educational organizations. Coverage is thought to be high, with response rates above 90 percent. Yearly verification is performed using accreditation lists, but it is not known how many institutions are missing. Although IPEDS imputes for non-responses, the extent of the undercount for missing institutions, non-responses, and specific health occupations where training is available outside of education institutions is unknown.

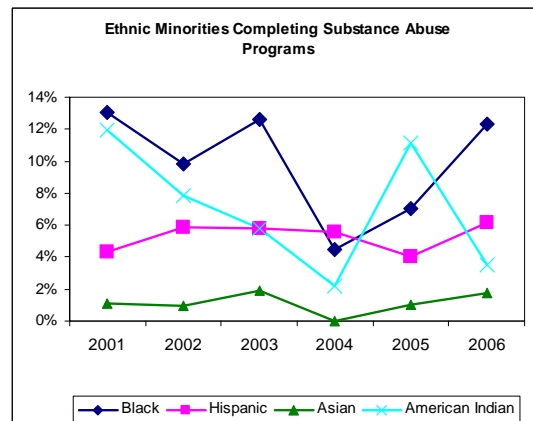
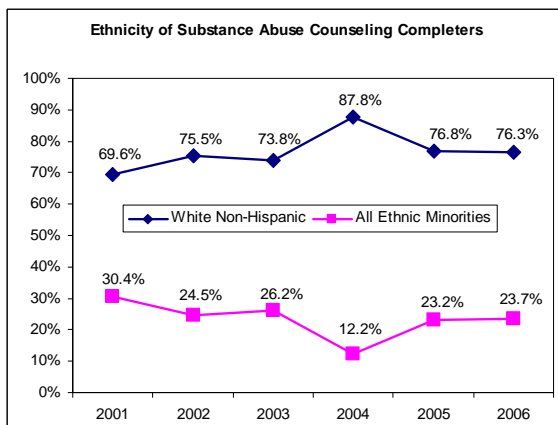
## Substance Abuse/Addiction Counseling Program Completers (CIP 51.1501)



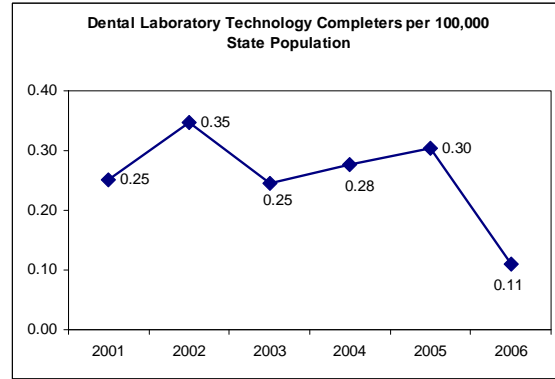
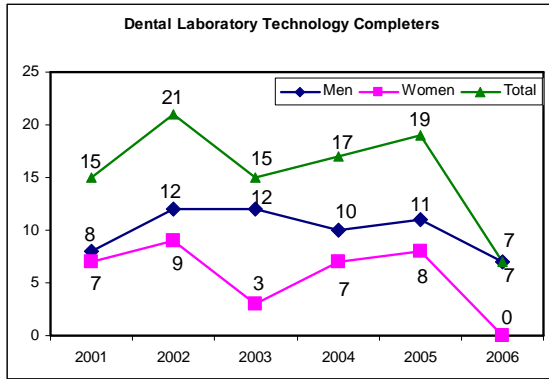
- Fourteen community and state colleges offered substance abuse/addiction counseling programs in 2006.
- There are several types of substance abuse/addiction counseling programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	32	63	55	50	50	63
Associate	39	38	51	51	55	58
Baccalaureate	4	3	1	0	0	0
Master's	15	1	0	0	0	0
2 to 4 years	5	2	1	0	0	0

- Total annual program completions increased by 27.4 percent from 2001 to 2006.
- Completions per 100,000 population increased by 19.4 percent over the same time period.
- 63.6 percent of program completers were female in 2006 compared to 62.1 percent in 2001.



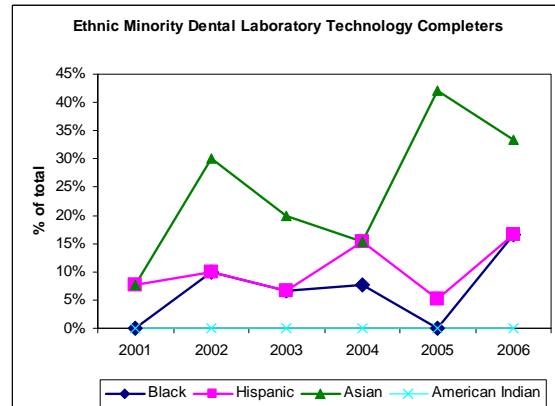
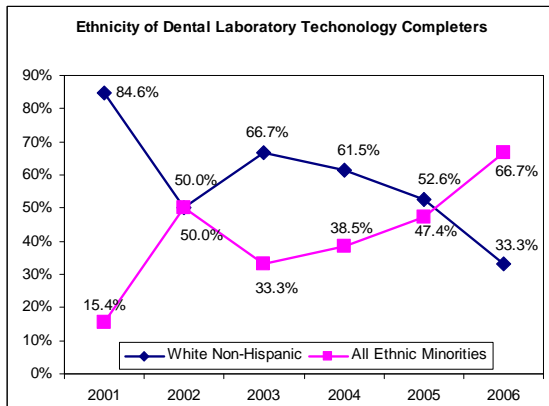
## Dental Laboratory Technology/Technician Program Completers (CIP 51.0603)



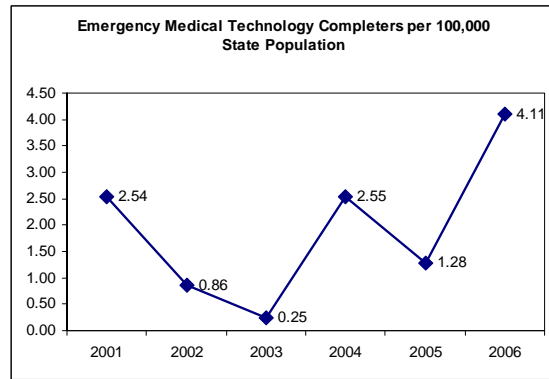
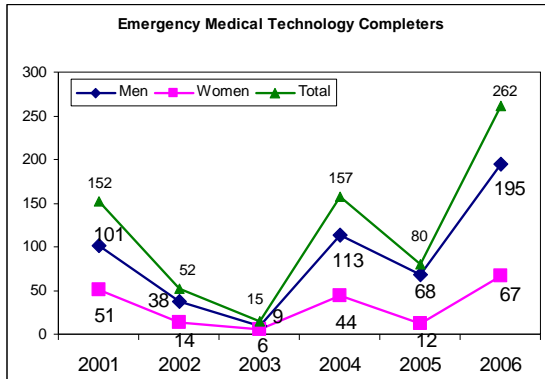
- One technical college offered a Dental Laboratory Technology/Technician program in 2006.
- The number of program completions from 2001-2006 are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	1	1	2	5	4	1
Associate	5	6	3	2	6	3
2 to 4 years	9	14	10	10	9	3

- Total annual program completions decreased by 53.3 percent from 2001 to 2006, however with the number of completions per year being low, a small variance in any one year can give a false impression of the significance of the percent of change. By using the 2005 program completion numbers there was a 26.7 percent increase in program completions between 2001 and 2005.
- Completions per 100,000 population decreased by 56.3 percent from 2001 to 2006 though they increased by 21 percent from 2001 to 2005.
- No program completers were female in 2006 compared to 46.7 percent in 2001 and 42.1 percent in 2005 .



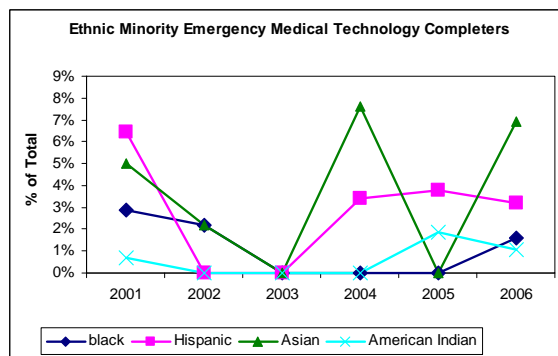
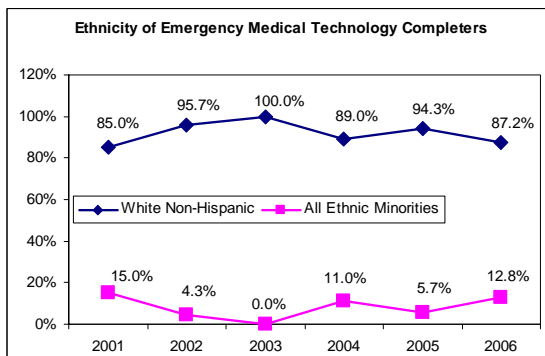
## Emergency Medical Technology/Technician Program Completers (CIP 51.0904)



- Seven community state and technical colleges in the state offered Emergency Medical Technology programs in 2006.
- There are several types of Emergency Medical Technology/Technician Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

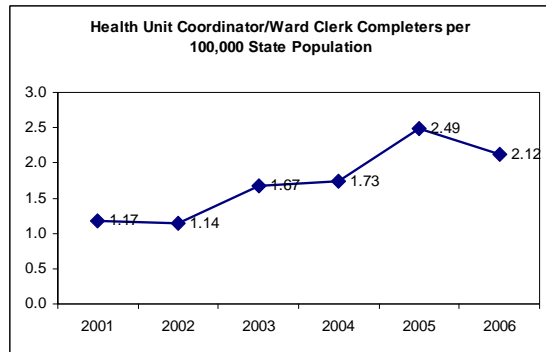
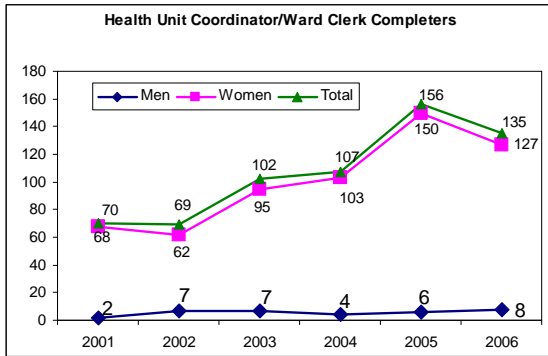
Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	137	24	0	140	63	246
Associate	4	14	8	7	9	10
Baccalaureate	11	14	7	10	8	6

- Total annual program completions increased by 72.4 percent from 2001 to 2006. Although the completions varied widely from year to year the overall trend shows there is a significant increase.
- Completions per 100,000 population increased by 64.5 percent over the same time period.
- 25.6 percent of program completers were female in 2006 compared to 33.6 percent in 2001.





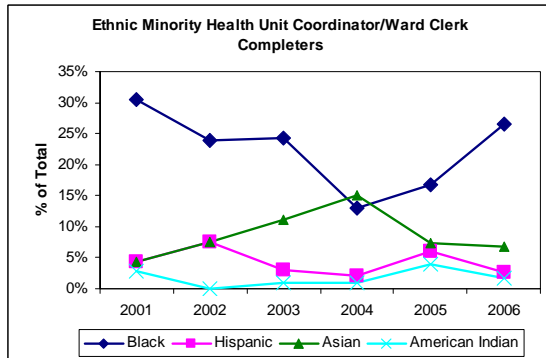
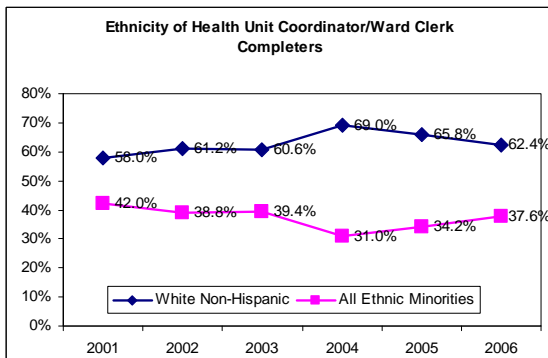
## Health Unit Coordinator/Ward Clerk Program Completers (CPT 51.0703)



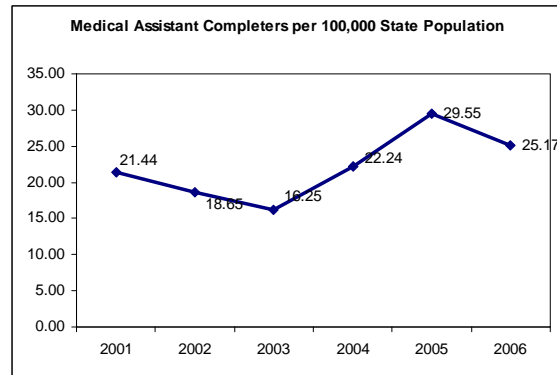
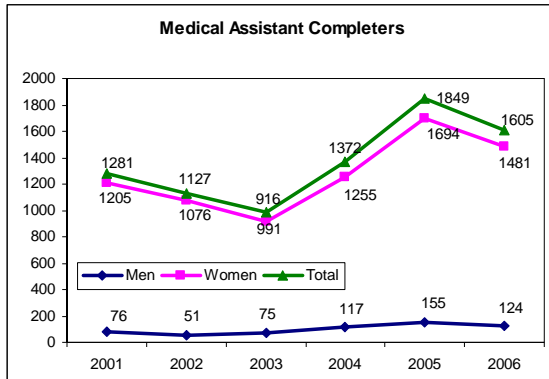
- Five community, state and technical colleges offered Health Unit Coordinator/Ward Clerk programs in 2006.
- There are two types of Health Unit Coordinator/Ward Clerk Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less that two years	70	68	101	101	148	135
Associate	0	1	1	6	8	0

- Total annual program completions increased by 92.9 percent from 2001 to 2006.
- Completions per 100,000 population increased by 80.7 percent over the same time period.
- 94.1 percent of program completers were female in 2006 compared to 97.1 percent in 2001.



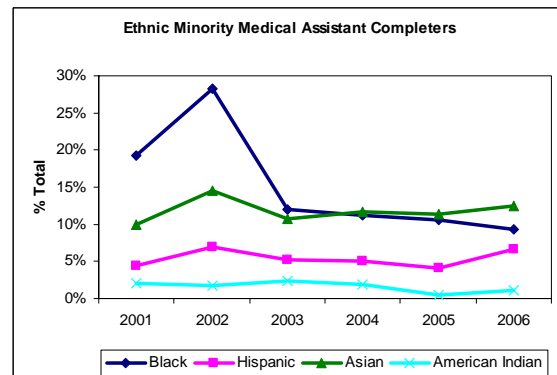
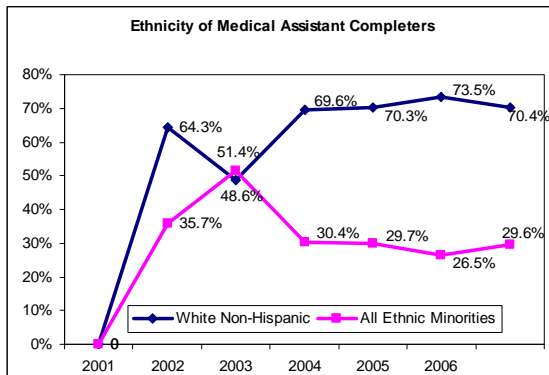
## Medical/Clinical Assistant (CIP 51.0801)



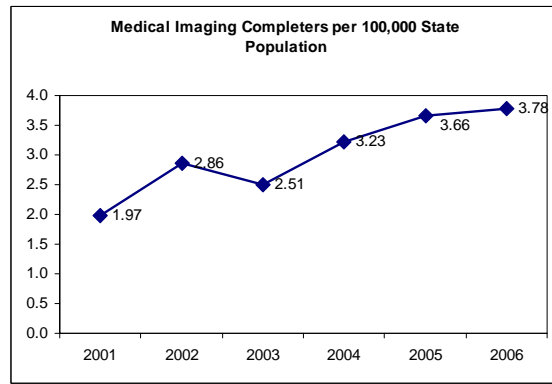
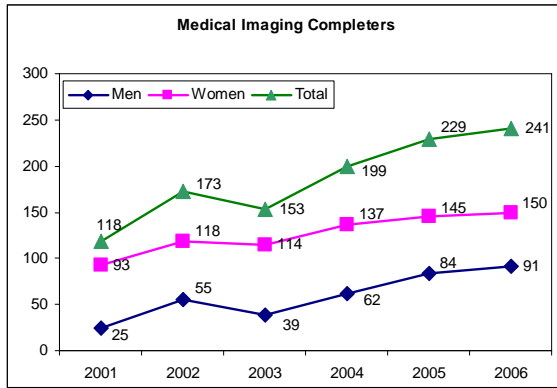
- Five community, state and technical colleges in the state offered Medical/Clinical Assistant programs in 2006.
- There are three types of Medical/Clinical Assistant Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	1229	1074	879	1207	1690	1422
Associate	52	53	95	164	155	174
2 to 4 years	0	0	17	1	4	9

- Total annual program completions increased by 25.3 percent from 2001 to 2006.
- Completions per 100,000 population increased by 17.4 percent over the same time period.
- 92.3 percent of program completers were female in 2006 compared to 94.1 percent in 2001.



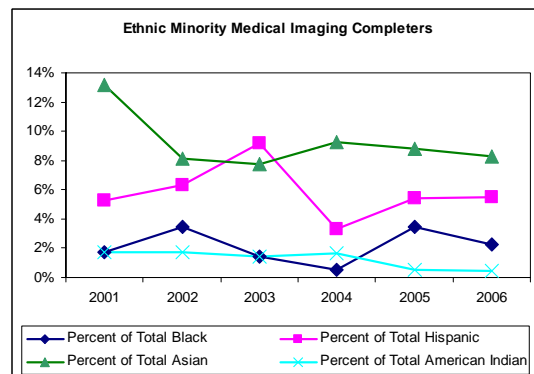
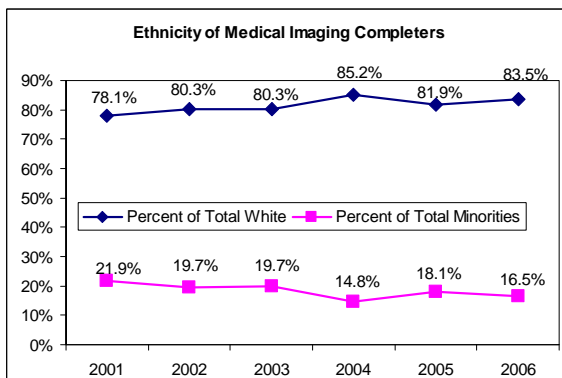
## Medical Imaging (Radiology) (CIPs 51.0905, 0907, 0910 and 0911)



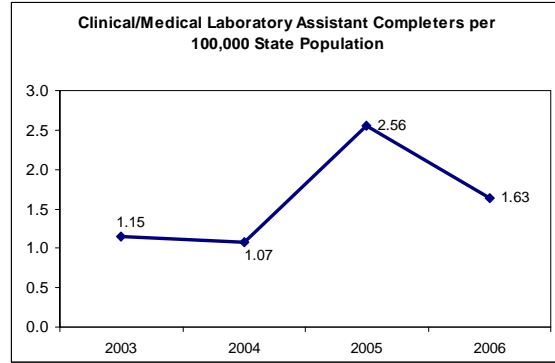
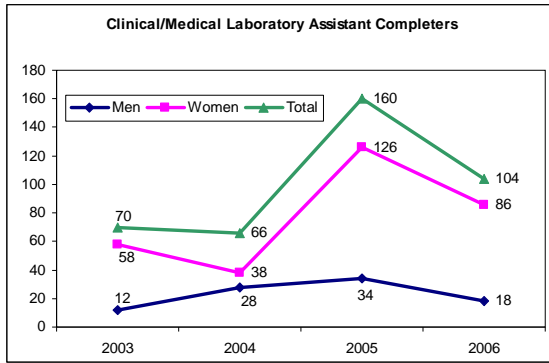
- Ten community, state and technical colleges in the state offered Medical Imaging (Radiology) courses in 2006. The courses include: Nuclear Medical Technology/Technologist; Medical Radiologic Technology/Science - Radiation Therapist; Diagnostic Medical Sonography/Sonographer & Ultrasound Technician; and Radiologic Technology/Science - Radiographer.
- The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	1	21	10	13	8	14
Associate	107	137	123	167	206	209
Baccalaureate	10	15	20	19	15	18

- Total annual program completions increased by 104.2 percent from 2001 to 2006.
- Completions per 100,000 population increased by 91.4 percent over the same time period.
- 62.6 percent of program completers were female in 2006 compared to 78.8 percent in 2001.



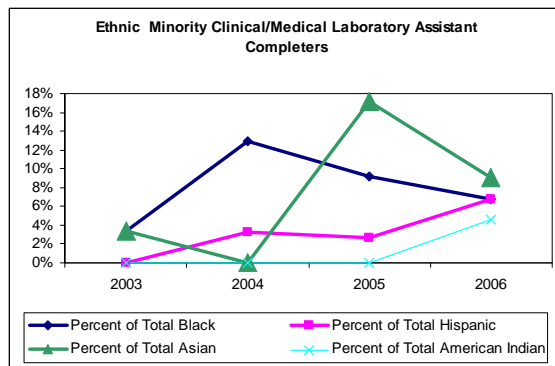
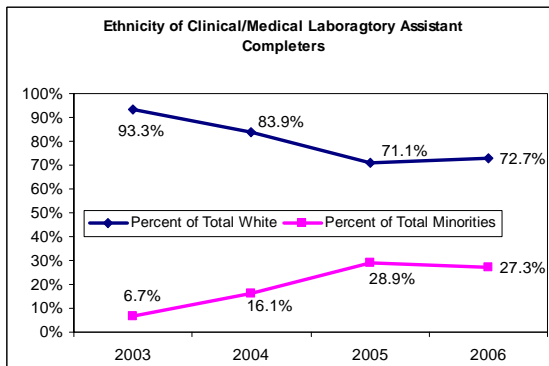
## Medical/Clinical Laboratory Assistant (CIP 51.0802)



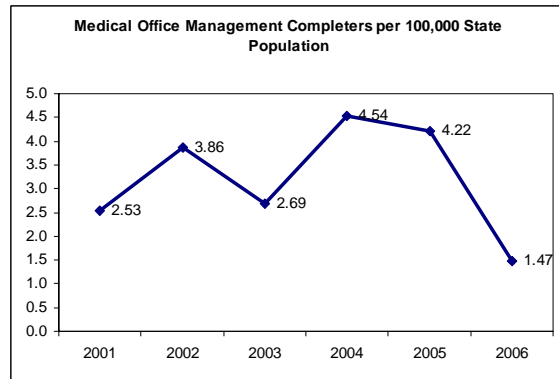
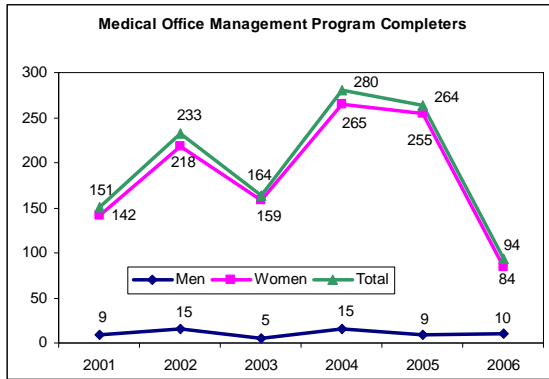
- Five community, state and technical colleges offered Medical/Clinical Assistant programs in 2006.
- There are three types of Medical/Clinical Laboratory Assistant Programs in Washington. Data for 2001 and 2002 is not available. The number of program completions from 2003-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less that two years			46	33	80	54
Associate			24	30	43	36
2 to 4 years			0	3	37	14

- Total annual program completions increased by 48.6 percent from 2003 to 2006.
- Completions per 100,000 population increased by 42.1 percent over the same time period.
- 82.7 percent of program completers were female in 2006 compared to 45.3 percent in 2003.



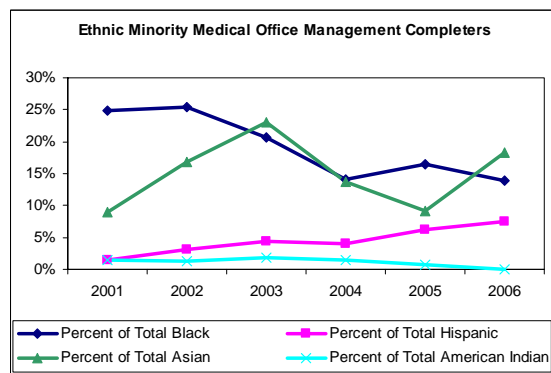
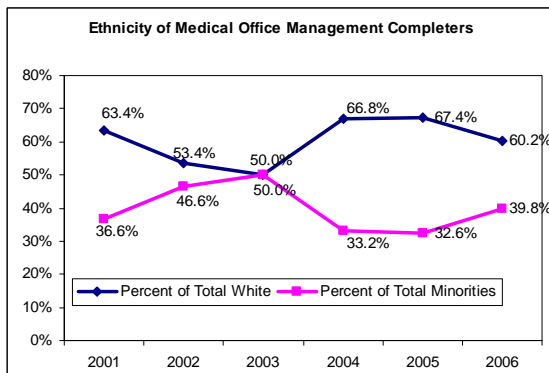
## Medical Office Management Administration (CIP 51.0705)



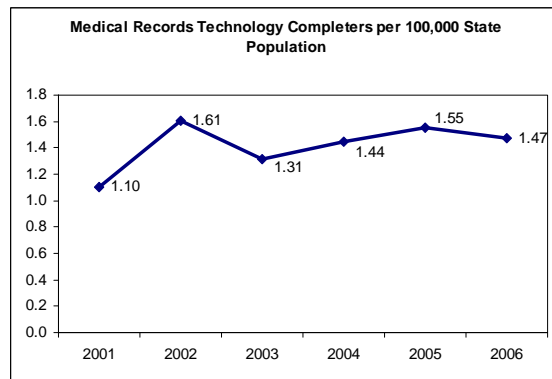
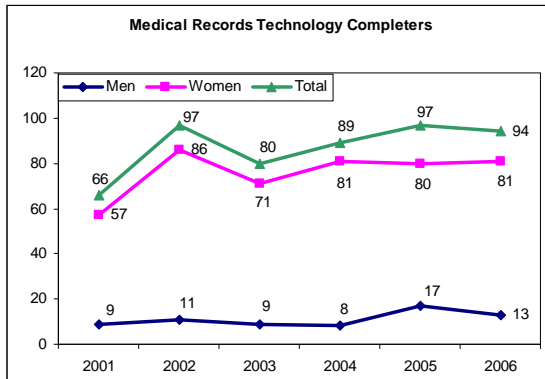
- Six community, state and technical colleges in the state offered Medical Office Management Administration programs in 2006.
- There are two types of Medical Office Management Administration Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	150	232	161	276	259	93
Associate	1	1	3	4	5	1

- Total annual program completions increased by 74.8 percent from 2001 to 2005. In 2006 the IPEDS data reflects significantly fewer completions which results in a decrease of 37.7 percent completions from 2001 to 2006.
- Completions per 100,000 population increased by 67.0 percent from 2001 to 2005 with a decrease of 41.7 percent in 2006.
- 89.4 percent of program completers were female in 2006 compared to 94 percent in 2001.



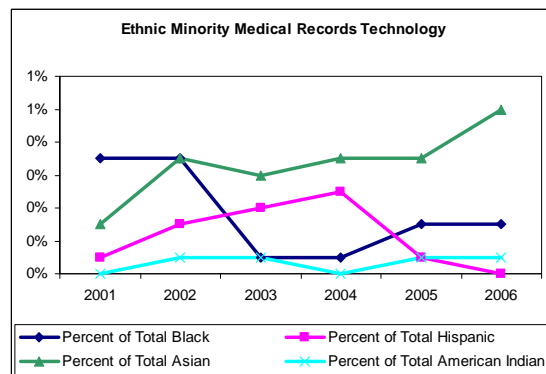
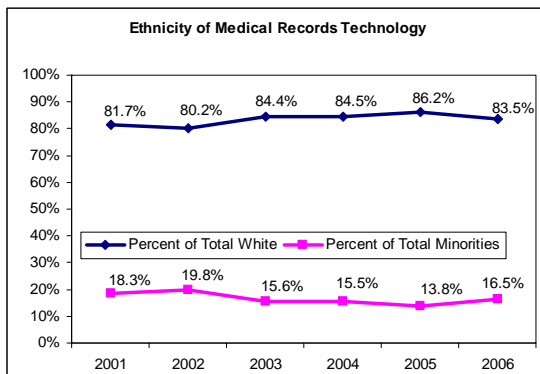
## Medical Records Technology/Technician CIP 51.0707



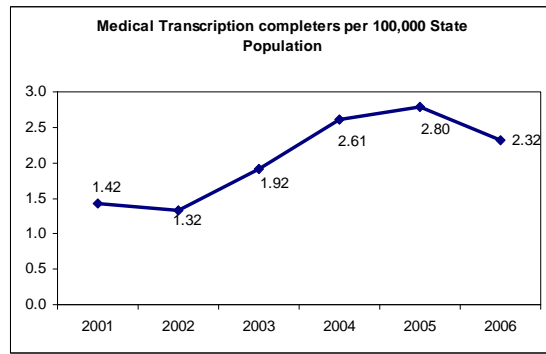
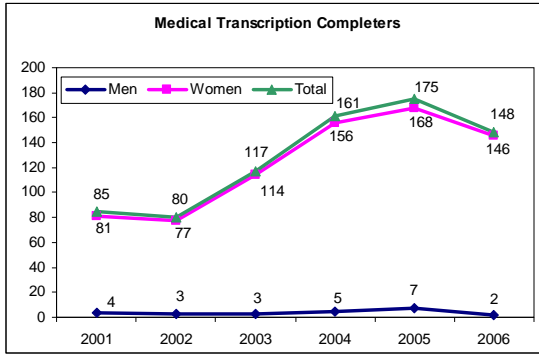
- Eight community, state and technical colleges offered Medical Records Technology/Technician programs in 2006.
- There are two types of Medical Records Technology/Technician Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less that two years	20	68	48	37	44	47
Associate	46	29	32	52	53	47

- Total annual program completions increased by 42.4 percent from 2001 to 2006.
- Completions per 100,000 population increased by 33.5 percent over the same time period.
- 86.2 percent of program completers were female in 2006 compared to 86.4 percent in 2001.



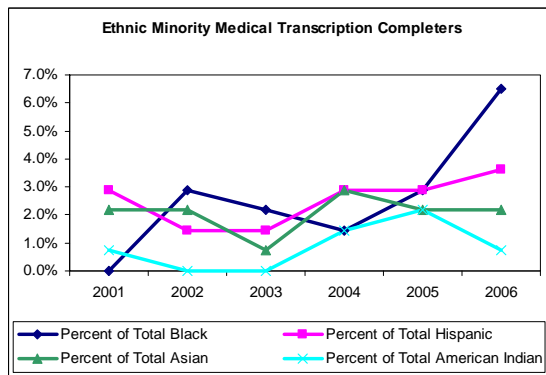
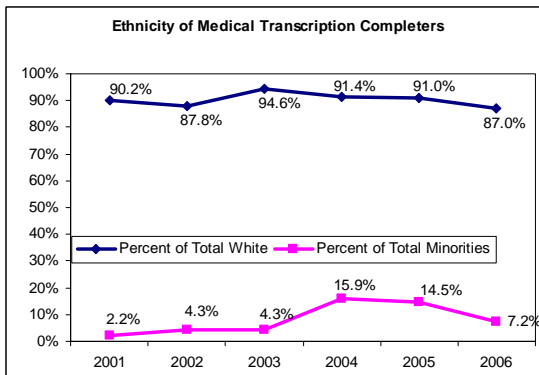
## Medical Transcription (CIP 51.0708)



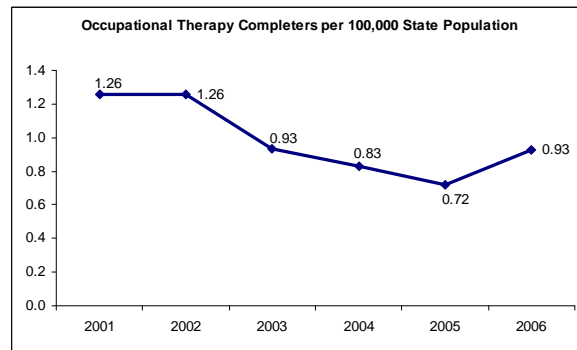
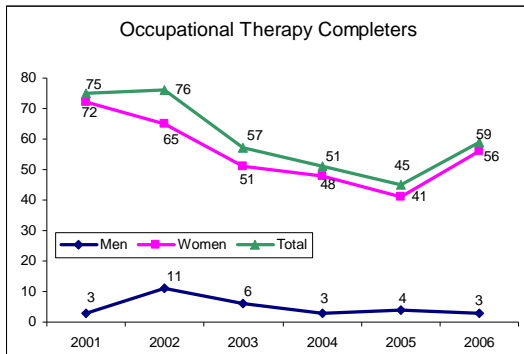
- Twelve community, state and technical colleges offered Medical Transcription programs in 2006.
- There are two types of Medical Transcription Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less that two years	83	79	116	161	174	148
Associate	2	1	1	0	1	0

- Total annual program completions increased by 74.1 percent from 2001 to 2006.
- Completions per 100,000 population increased by 63.2 percent over the same time period.
- 98.6 percent of program completers were female in 2006 compared to 95.3 percent in 2001



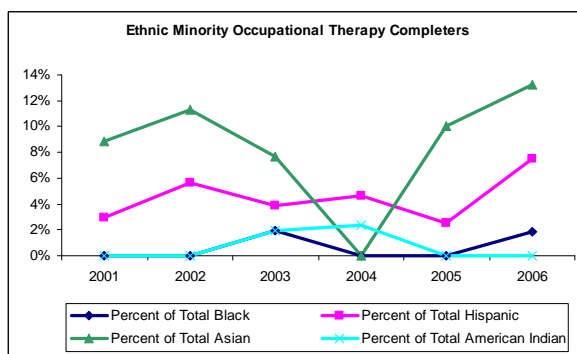
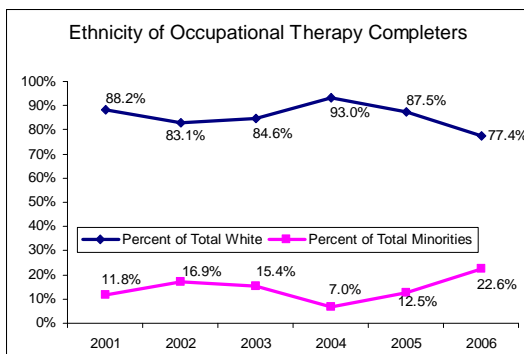
## Occupational Therapy (CIP 51.2306)



- Three universities in the state offered Occupational Therapy programs in 2006.
- There are two types of Occupational Therapy Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

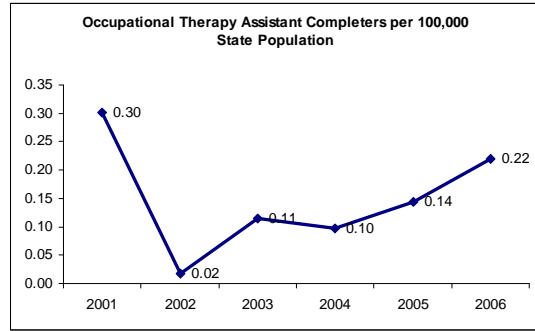
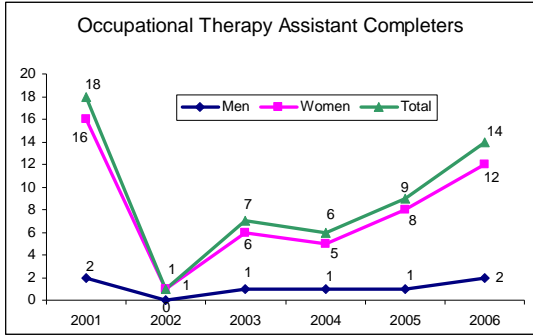
Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Baccalaureate	56	41	23	21	14	16
Master's	19	35	34	30	31	43

- Total annual program completions decreased by 21.3 percent from 2001 to 2006.
- Completions per 100,000 population decreased by 26.3 percent over the same time period.
- 94.9 percent of program completers were female in 2006 compared to 96 percent in 2001.





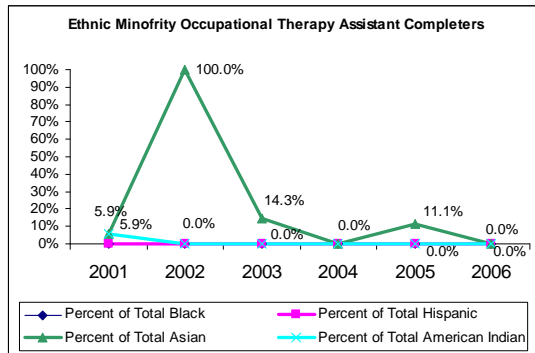
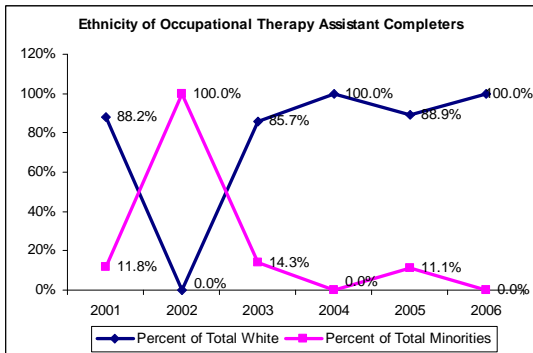
## Occupational Therapy Assistant (CIP 51.0803)



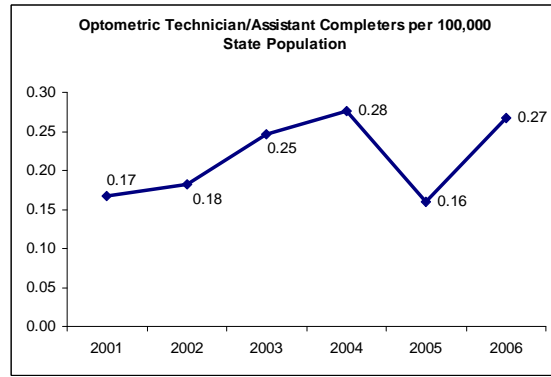
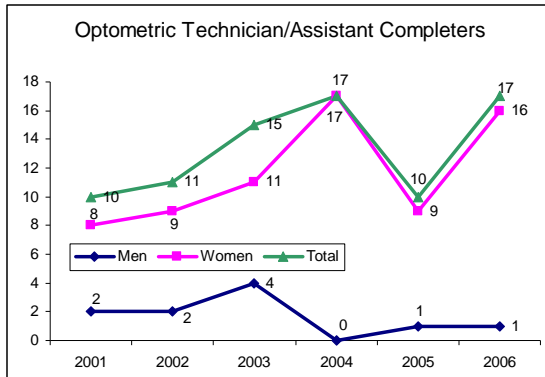
- One community college in the state offered an Occupational Therapy Assistant program in 2006.
- There is one type of Occupational Therapy Assistant Program in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Associate	18	1	7	6	9	14

- Total annual program completions decreases by 22.2 percent from 2001 to 2006. However, with the number of completions per year being low, a small variance in any one year can give a false impression of the significance of the percent of change. Excluding completions in 2001, the trend is increasing from 2002 to 2006.
- Completions per 100,000 population decreases by 27.1 percent over the same time period.
- 85.7 percent of program completers were female in 2006 compared to 88.9 percent in 2001



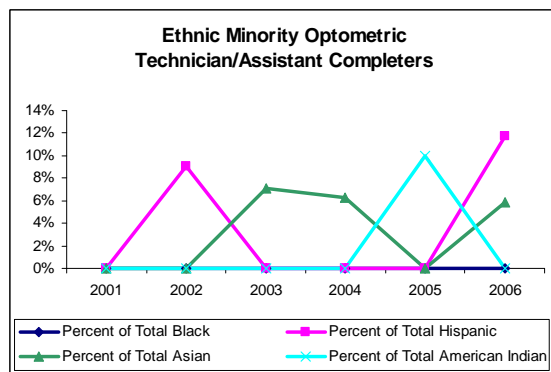
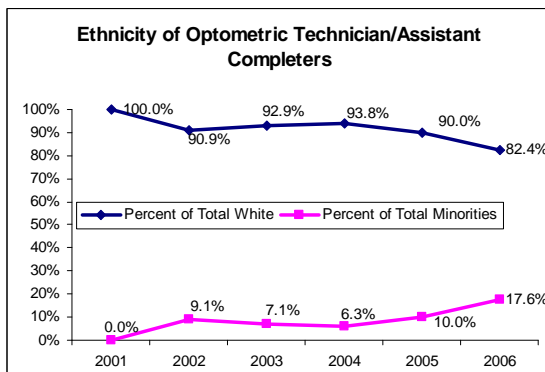
## Optometric Technician Assistant (CIP 51.1802)



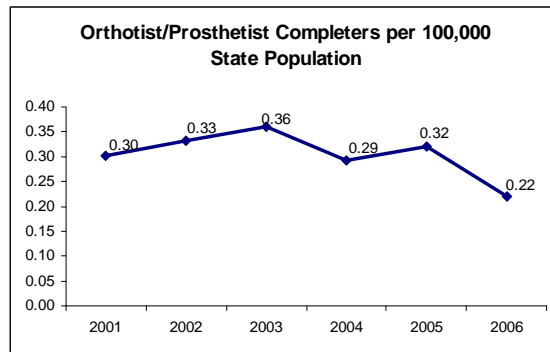
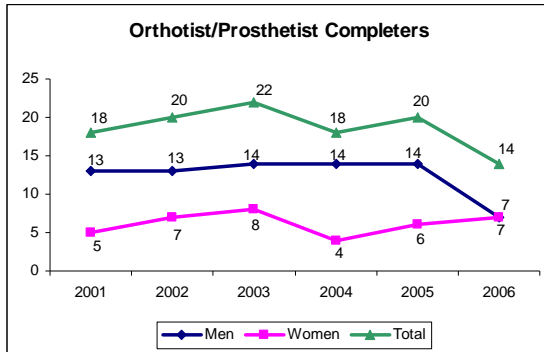
- Five community, state and technical colleges offered an Optometric Technician Assistant program in 2006.
- There are two types of Optometric Technician Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	8	8	10	9	8	9
Associate	2	3	5	8	2	8

- Total annual program completions increased by 70 percent from 2001 to 2006.
- With the number of completions per year being low, a small variance in any one year can give a false impression of the significance of the percent of change.
- Completions per 100,000 population increased by 59.3 percent over the same time period.
- 94.1 percent of program completers were female in 2006 compared to 80 percent in 2001.



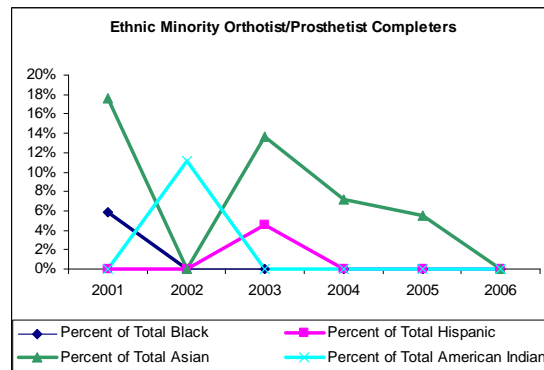
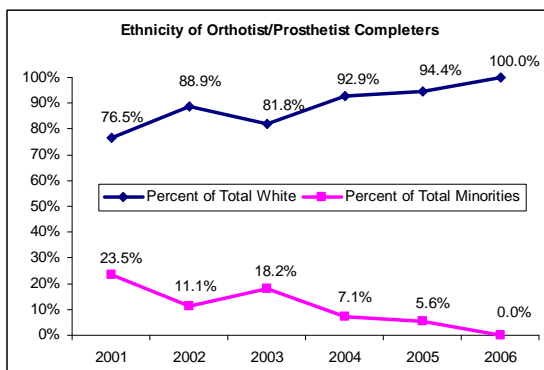
## Orthotist/Prosthetist (CIP 51.2307)



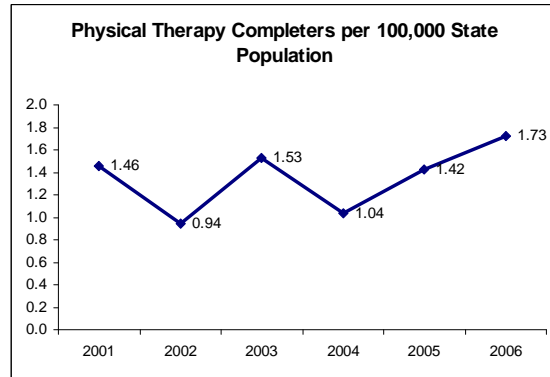
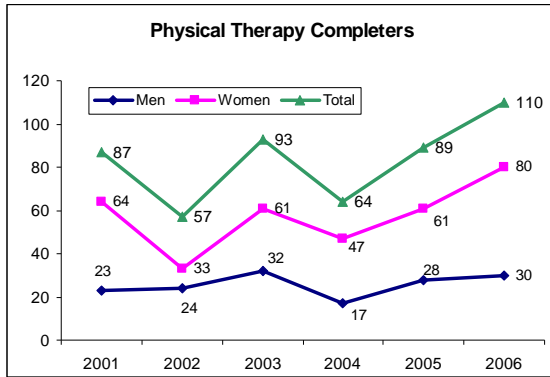
- One community college and one state university offered an Orthotist/Prosthetist program in 2006.
- There are three types of Orthotist/Prosthetist Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	2	2	2	1	0	0
Associate	3	8	7	8	8	5
Baccalaureate	13	10	13	9	12	9

- Total annual program completions increased by 11.1 percent from 2001 to 2005 but decreased by 22.2 percent in 2006.
- Completions per 100,000 population increased by 6.1 percent from 2001 to 2005 and decreased by 27.1 percent in 2006.
- 50 percent of program completers were female in 2006 compared to 27.8 percent in 2001.
- With the number of completions per year being low, a small variance in any one year can give a false impression of the significance of the percent of change.



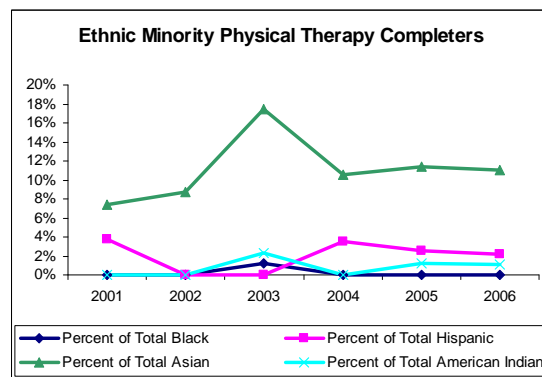
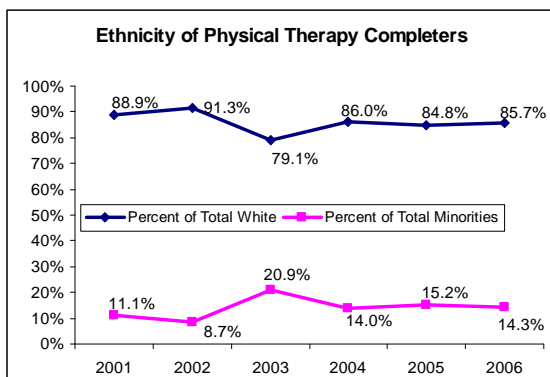
## Physical Therapy (CIP 51.2308)



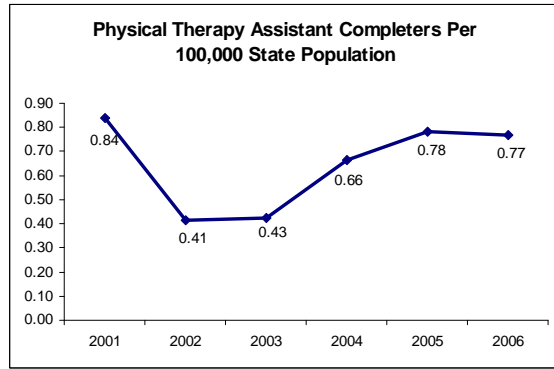
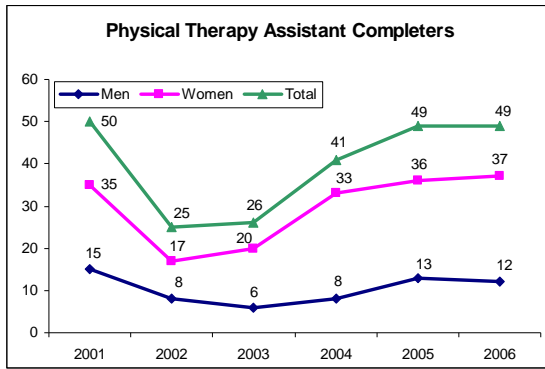
- Three universities in the state offered Physical Therapy programs in 2006.
- There are three types of Physical Therapy Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Baccalaureate	20	0	0	0	0	0
Master's	63	57	93	64	42	46
Doctoral	0	0	0	0	47	64

- Total annual program completions increased by 26.4 percent from 2001 to 2006.
- Completions per 100,000 population increased by 18.5 percent from 2001 to 2006.
- 72.7 percent of program completers were female in 2006 compared to 73.6 percent in 2001.



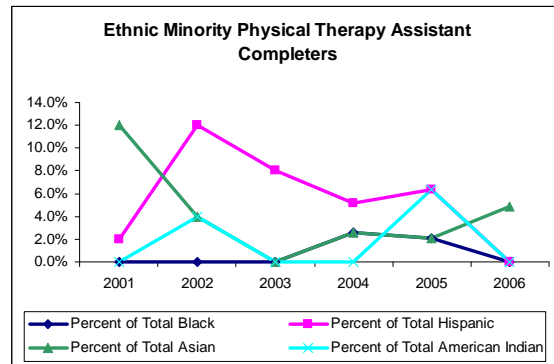
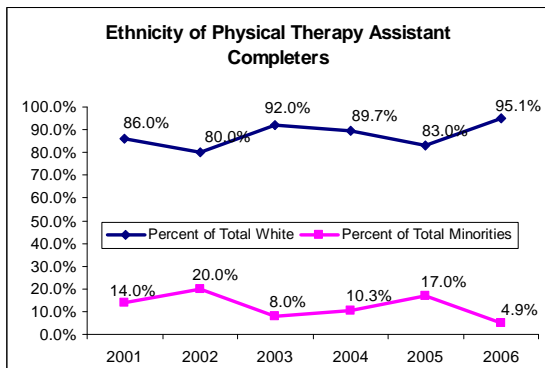
## Physical Therapy Assistant (CIP 51.0806)



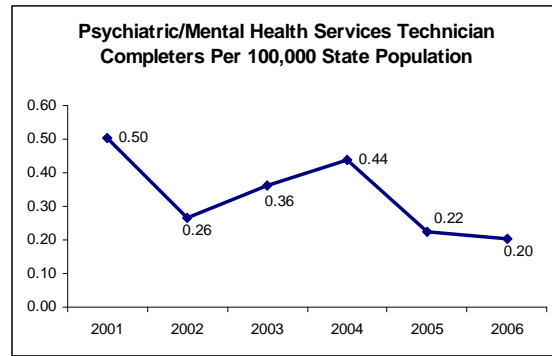
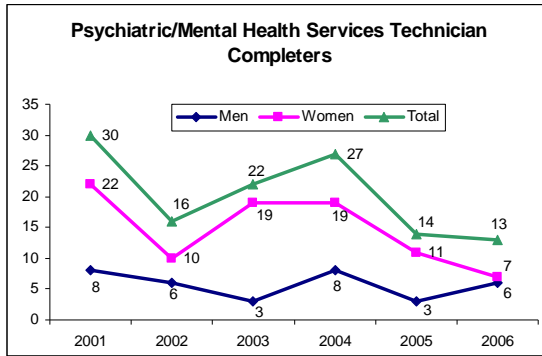
- Three community colleges in the state offered Physical Therapy Assistant programs in 2006.
- There is one type of Physical Therapy Assistant Program in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Associate	50	25	26	41	49	49

- Total annual program completions decreased by 2 percent from 2001 to 2006.
- Completions per 100,000 population decreased by 8.2 percent from 2001 to 2006.
- 57 percent of program completers were female in 2006 compared to 58.8 percent in 2001.



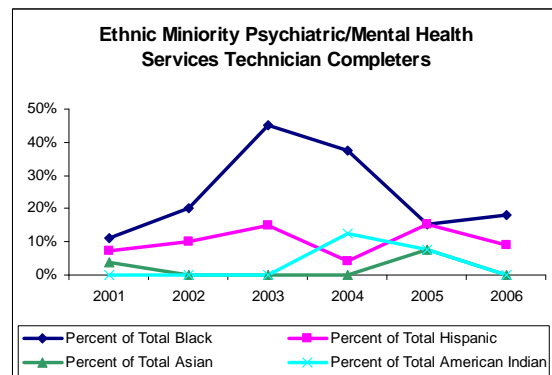
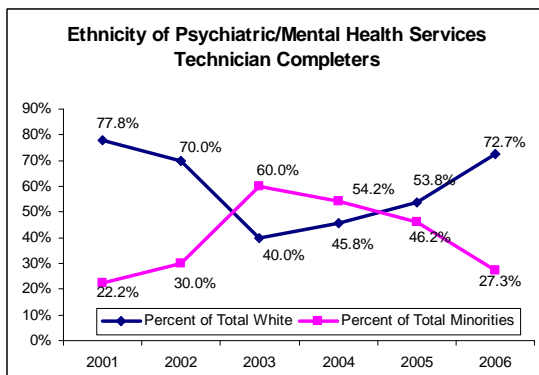
## Psychiatric/Mental Health Services Technician (CIP 51.1502)



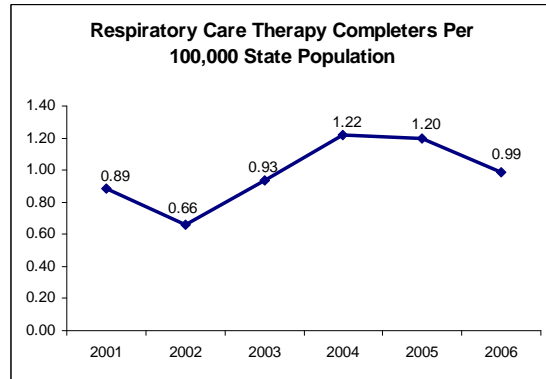
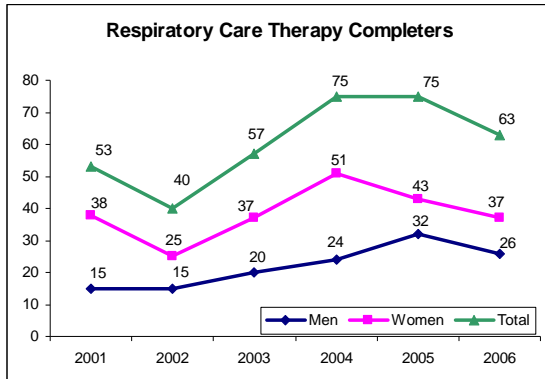
- Two community colleges in the state offered Psychiatric/Mental Health Services Technician programs in 2006.
- There are two types of Psychiatric/Mental Health Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	29	15	21	22	10	9
Associate	1	1	1	5	4	4

- Total annual program completions decreased by 56.7 percent from 2001 to 2006.
- Completions per 100,000 population decreased by 59.4 percent from 2001 to 2006.
- 53.8 percent of program completers were female in 2006 compared to 73.3 percent in 2001.
- With the number of completions per year being low, a small variance in any one year can give a false impression of the significance of the percent of change.



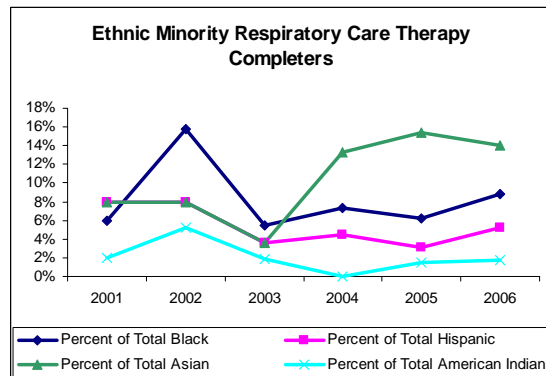
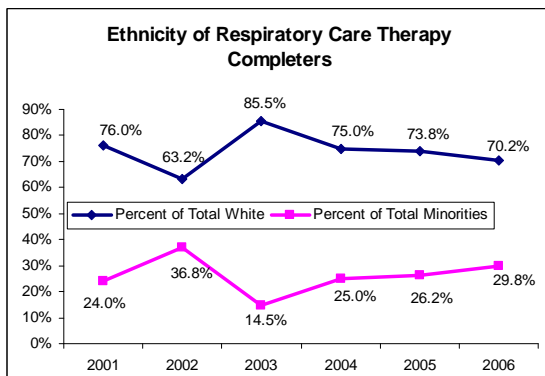
## Respiratory Care Therapy (CIP 51.0908)



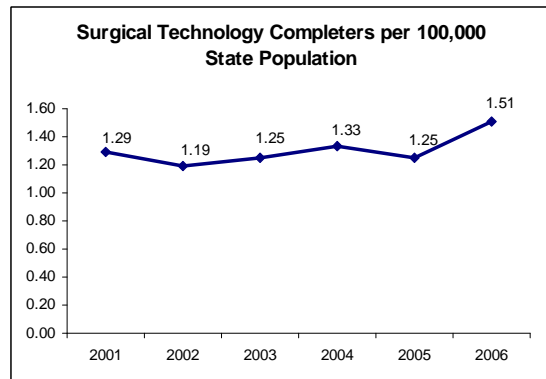
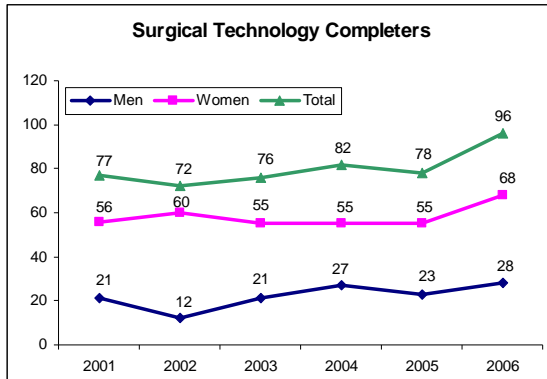
- Four community colleges in the state offered Respiratory Care Therapy programs in 2006.
- There have been three types of Respiratory Care Therapy Programs in Washington though currently only the Associates Degree program is used. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	10	9	0	0	0	0
Associate	43	31	47	65	75	63
2 to 4 years	0	0	10	10	0	0

- Total annual program completions increased by 18.9 percent from 2001 to 2006.
- Completions per 100,000 population increased by 11.4 percent from 2001 to 2006.
- 53.7 percent of program completers were female in 2006 compared to 71.7 percent in 2001.



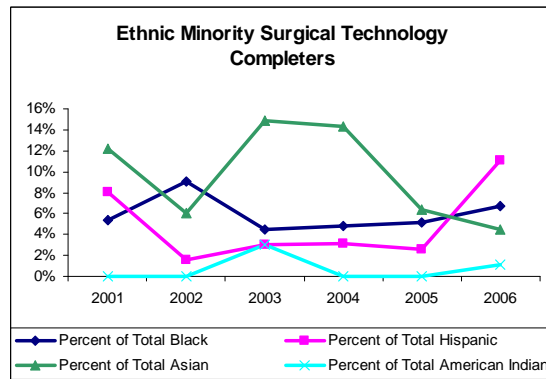
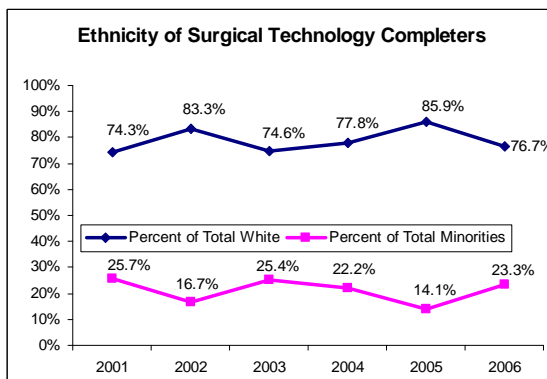
## Surgical Technology Program (CIP 51.0909)



- Eight state and community colleges offered Surgical Technology programs in 2006.
- There are two types of Surgical Technology programs in Washington. The number of program completions from 2001-2006 by type are as follows:

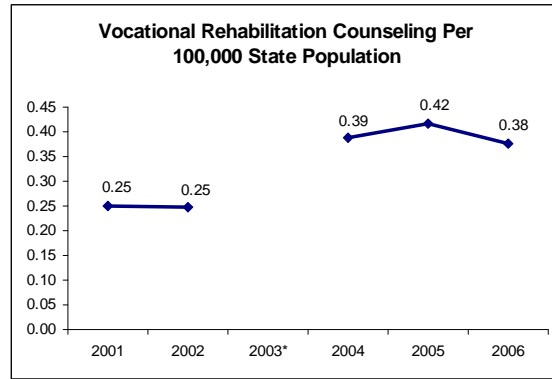
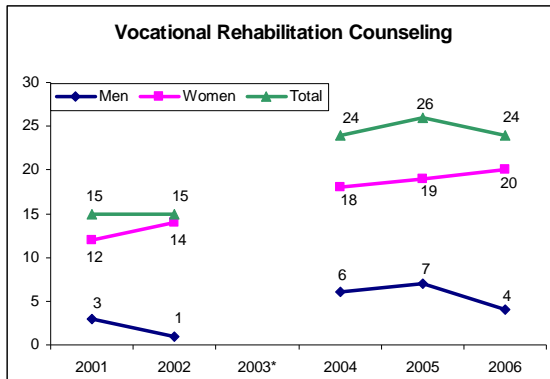
Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	54	64	59	67	54	56
Associate	23	8	17	15	24	40

- Total annual program completions increased by 24.7 percent from 2001 to 2006.
- Completions per 100,000 population increased by 16.8 percent from 2001 to 2006.
- 70.8 percent of program completers were female in 2006 compared to 72.7 percent in 2001.





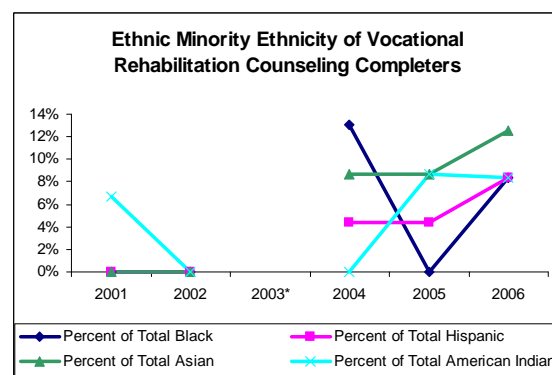
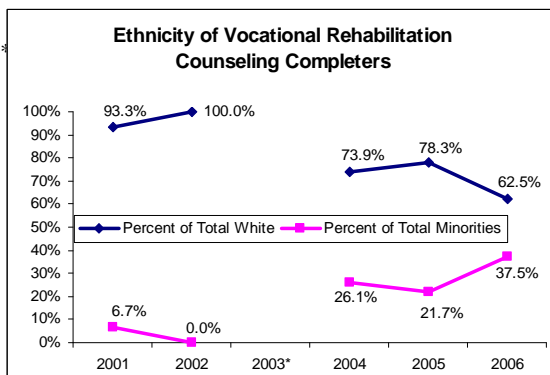
## Vocational Rehabilitation Counseling (CIP 51.2310)



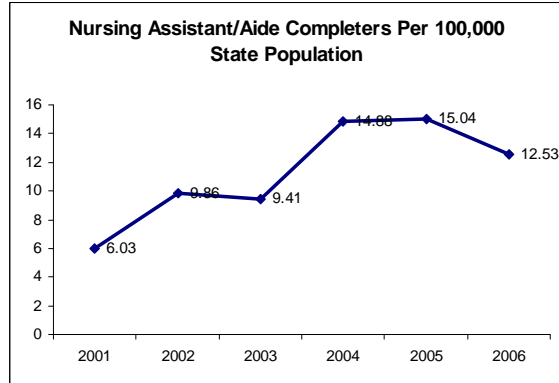
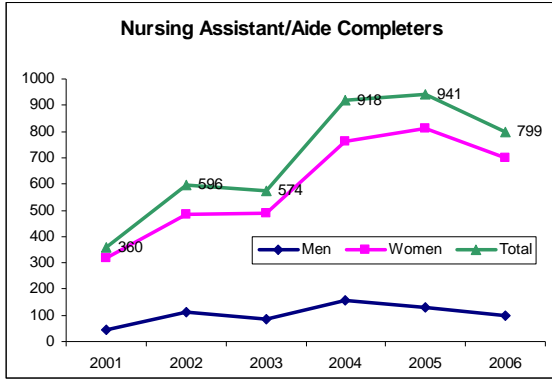
- Two universities and two community colleges offered Vocational Rehabilitation Counseling programs in 2006.
- Three types of Vocational Rehabilitation Counseling programs are listed in IPEDS data for Washington. The number of program completions from 2001-2002 and 2004-2006 by type are as follows: (IPEDS did not reflect any program completions in 2003).

Type of Program	Number of Program Completions						
	2001	2002	2003	2004	2005	2006	
Less than two years	5	5	0	1	0	0	
Associate	8	7	0	9	8	5	
Master's	2	3	0	14	18	19	

- Total annual program completions increased by 60 percent from 2001 to 2006.
- Completions per 100,000 population increased by 49.9 percent from 2001 to 2006.
- 83.3 percent of program completers were female in 2006 compared to 80 percent in 2001.



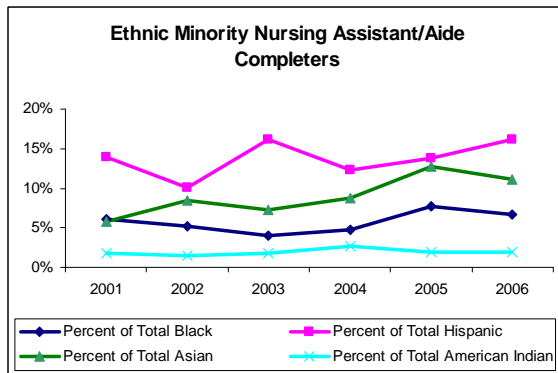
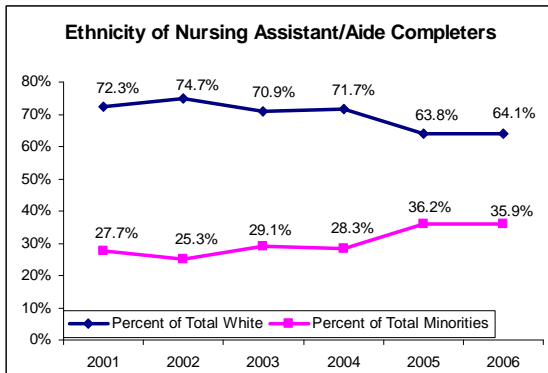
## Nursing Assistant/Aide (CIP 51.1614)



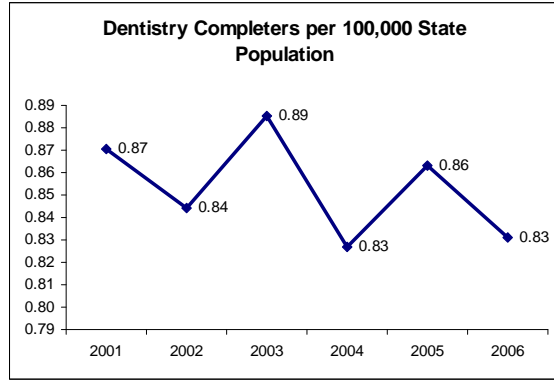
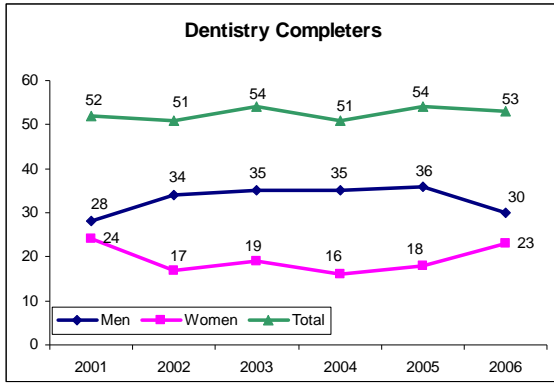
- Thirteen state, community and technical colleges offered Nursing Assistant/Aide programs in 2006.
- The number of program completions from 2001-2006 are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	360	596	574	918	941	799

- Total annual program completions increased by 121.9 percent from 2001 to 2006.
- Completions per 100,000 population increased by 108 percent from 2001 to 2006.
- 87.6 percent of program completers were female in 2006 compared to 88.1 percent in 2001.



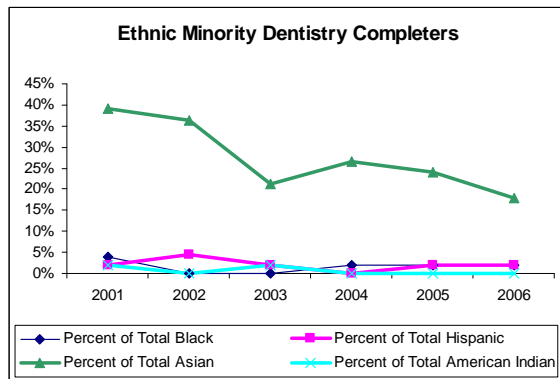
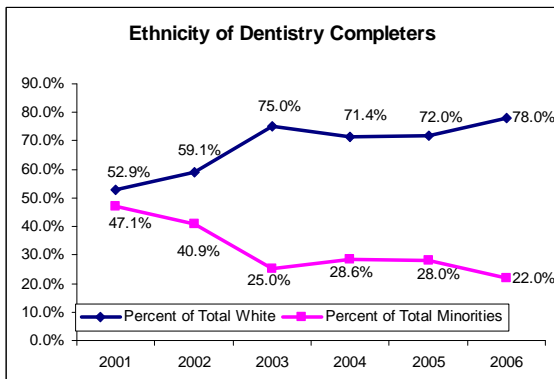
## Dentistry (CIP 51.0401)



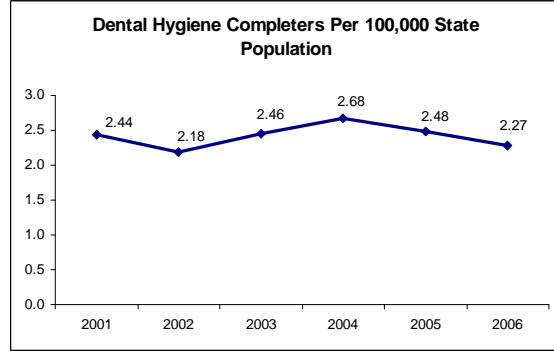
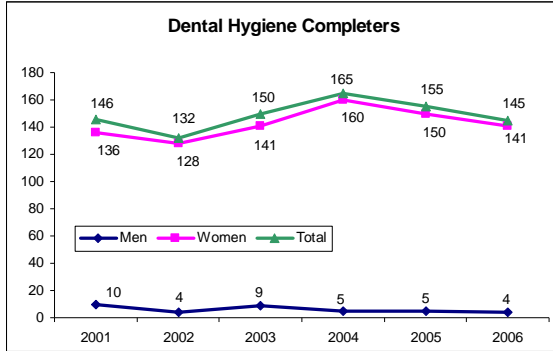
- One state university offered a Dentistry program in 2006.
- The number of program completions from 2001-2006 are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
First Professional Degree	52	51	54	51	54	53

- Total annual program completions increased by 1.9 percent from 2001 to 2006.
- Completions per 100,000 population decreased by 4.5 percent from 2001 to 2006.
- 43.4 percent of program completers were female in 2006 compared to 46.2 percent in 2001.



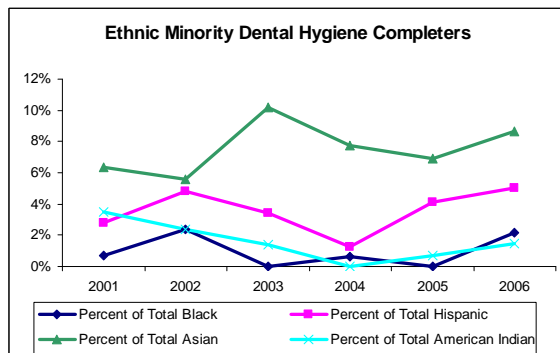
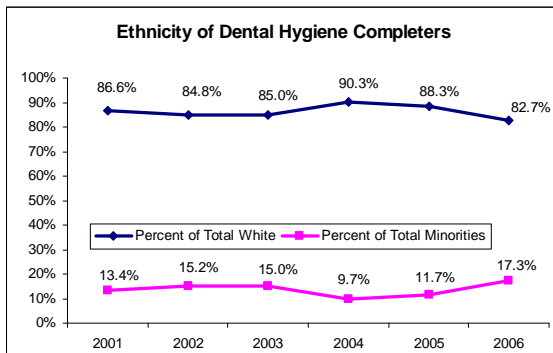
## Dental Hygiene (CIP51.0602)



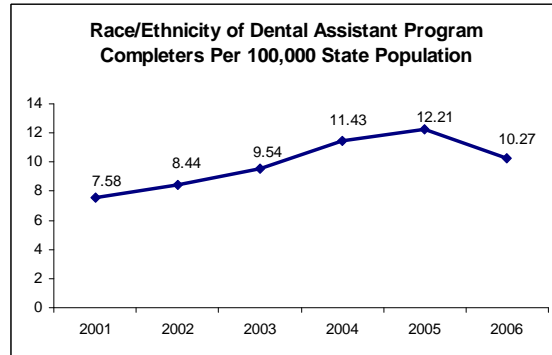
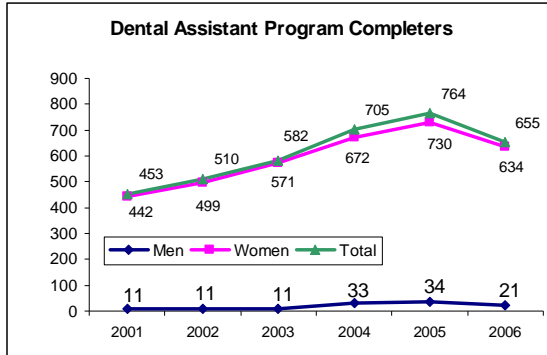
- Seven community, state colleges and universities offered Dental Hygiene programs in 2006.
- There are two types of Dental Hygiene programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Associate	109	105	114	119	98	95
Baccalaureate	37	27	36	46	57	50

- Total annual program completions decreased by 0.7 percent from 2001 to 2006.
- Completions per 100,000 population decreased by 6.9 percent from 2001 to 2006.
- 43.4 percent of program completers were female in 2006 compared to 46.2 percent in 2001.



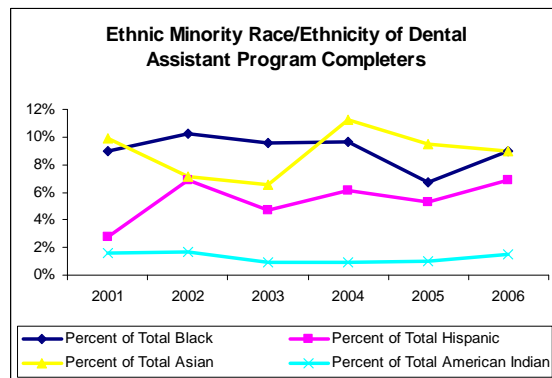
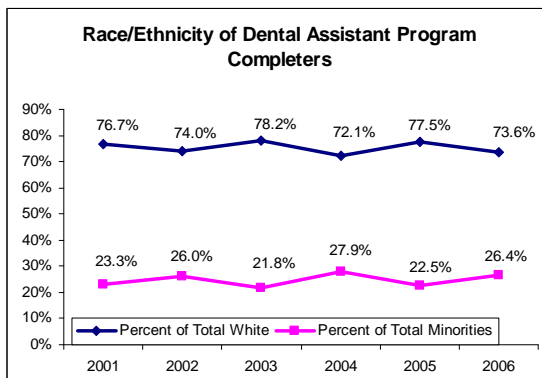
## Dental Assistant (CIP 51.0601)



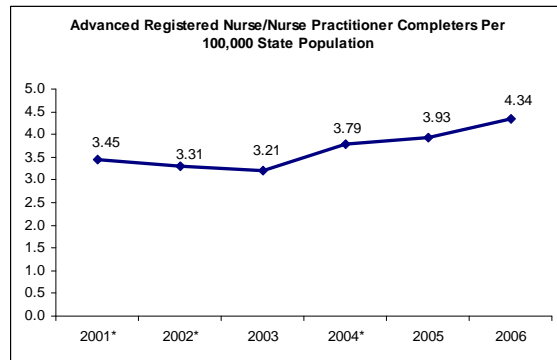
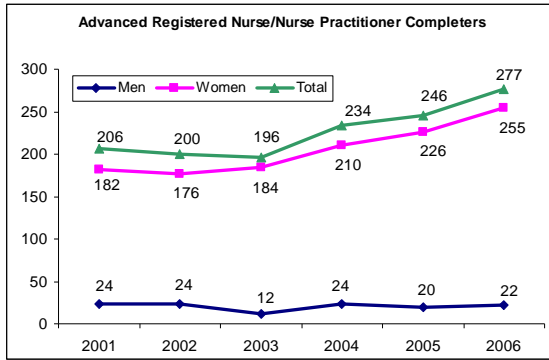
- Fourteen community, technical and state colleges offered Dental Assistant programs in 2006.
- There are three types of Dental Assistant programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	383	471	515	656	716	586
Associate	32	25	52	42	36	56
2 to 4 years	38	14	15	7	12	13

- Total annual program completions increased by 44.6 percent from 2001 to 2006.
- Completions per 100,000 population increased by 35.5 percent from 2001 to 2006.
- 96.8 percent of program completers were female in 2006 compared to 97.6 percent in 2001.



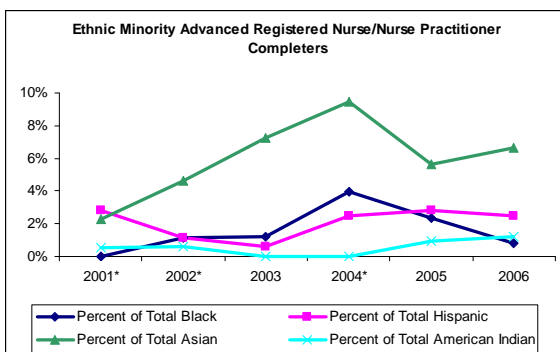
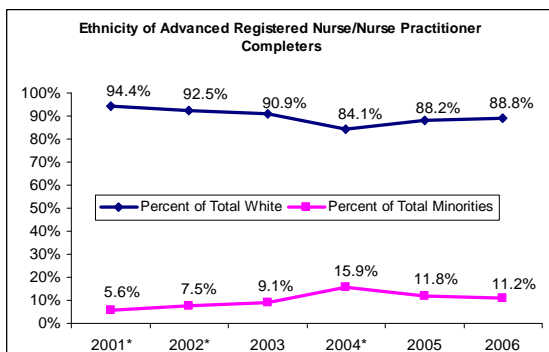
## Advanced Registered Nurse Practitioner (CIP 51.1605 and 1601)



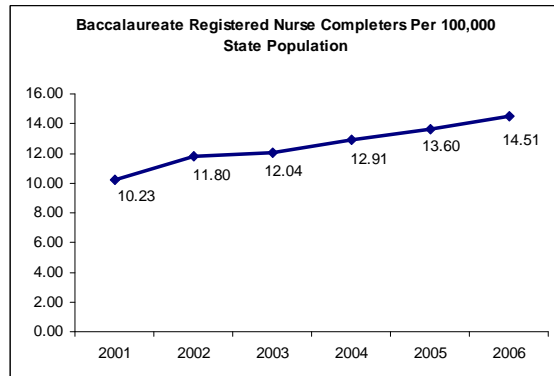
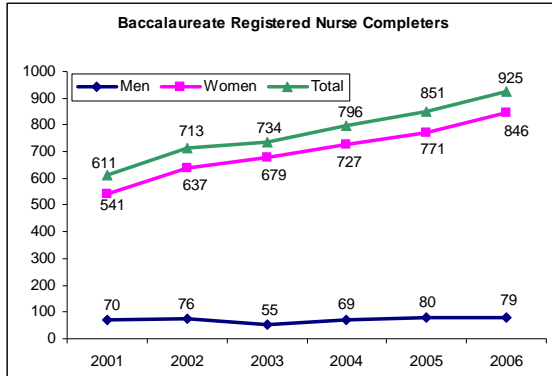
- Ten universities offered Advanced Registered Nurse/ Nurse Practitioner programs in 2006.
- Nurse Practitioners and Registered Nurses having a degree or certificate at or above the masters level were selected. There were three types of programs available. They are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Master's	190	187	10	224	19	14
Doctoral	14	13	0	10	0	0
Post Masters	2	0	186	0	227	263

- The total annual program completions increased by 34.5 percent from 2001 to 2006.
- Completions per 100,000 population increased by 26 percent from 2001 to 2006.
- 92.1 percent of program completers were female in 2006 compared to 88.3 percent in 2001.



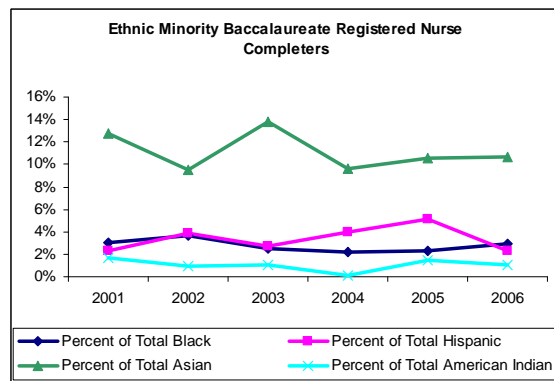
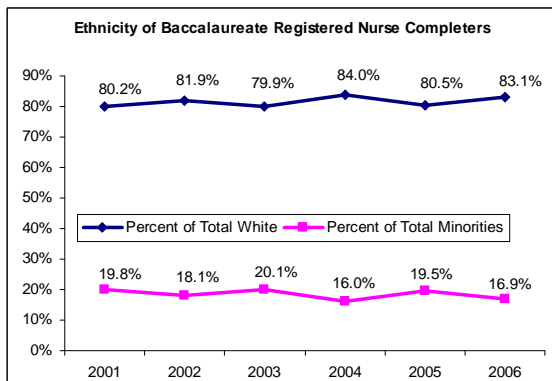
## Baccalaureate Registered Nurse (CIP 51.1601)



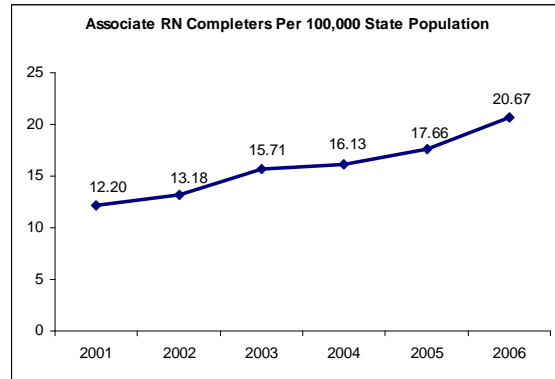
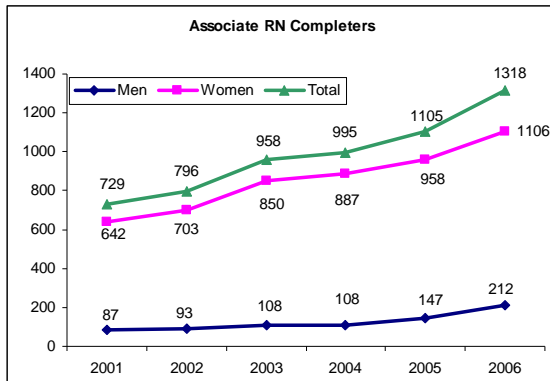
- Thirteen universities and colleges offered Baccalaureate level Registered Nurse programs.

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Baccalaureate	611	713	734	796	851	925

- Total annual program completions for baccalaureate level RNs increased by 51.4 percent from 2001 to 2006.
- Completions per 100,000 population increased by 41.9 percent from 2001 to 2006.
- 91.5 percent of program completers were female in 2006 compared to 88.5 percent in 2001.



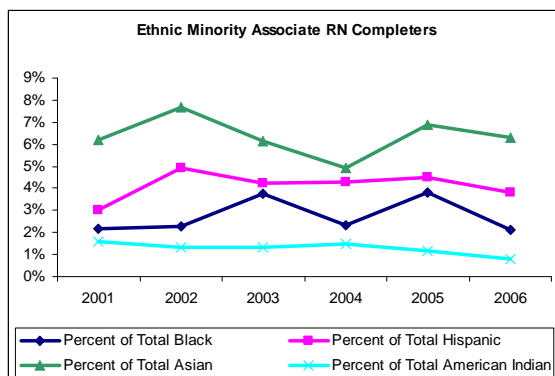
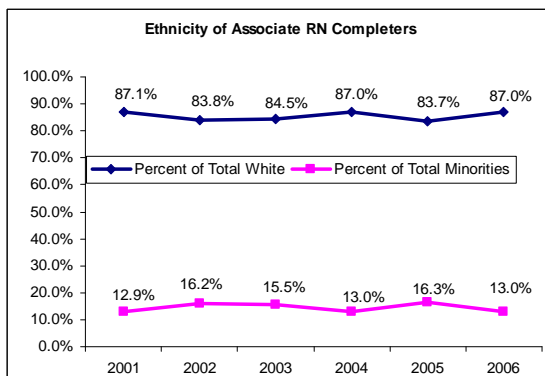
## Associate Registered Nurse (CIP 51.1601)



- Thirty-five community and technical colleges and universities offered Associate Level Registered Nurse programs in 2006.

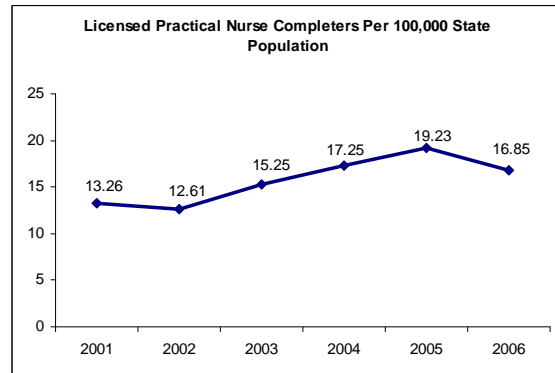
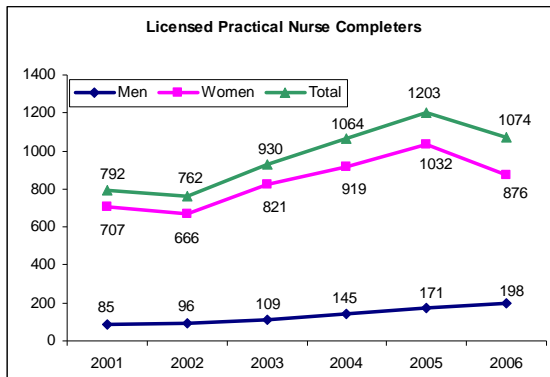
Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Associate	729	796	958	995	1105	1318

- Total annual program completions for associate level RNs increased by 80.8 percent from 2001 to 2006.
- Completions per 100,000 population increased by 69.4 percent from 2001 to 2006.
- 83.9 percent of program completers were female in 2006 compared to 88.1 percent in 2001.





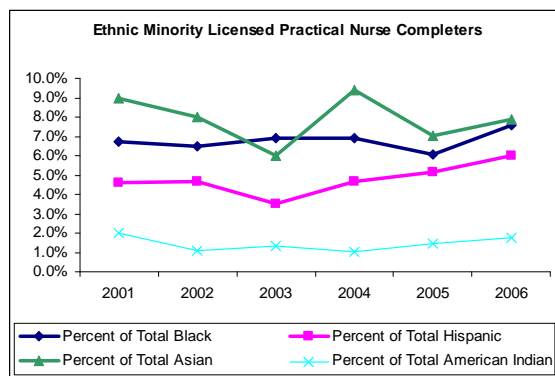
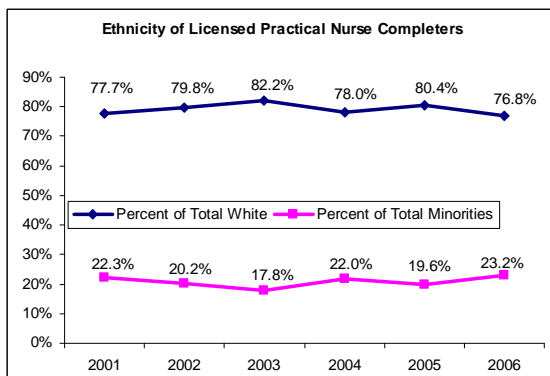
## Licensed Practical Nurse (CIP 51.1613)



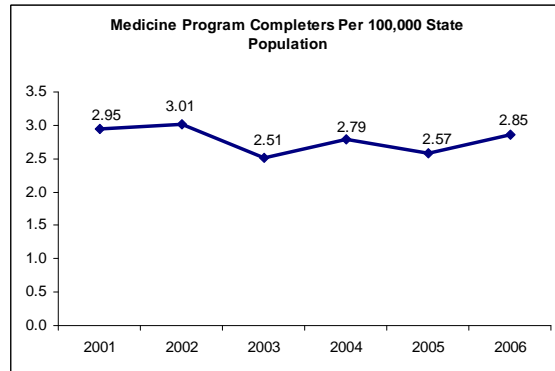
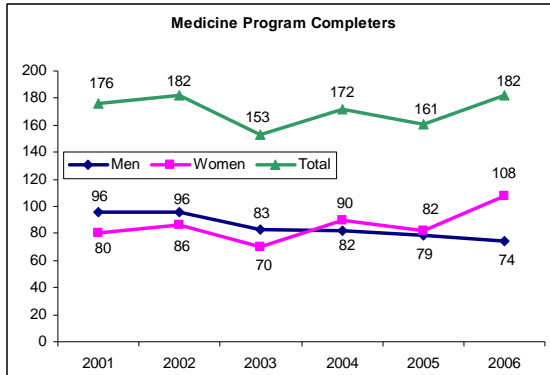
- Twenty-one community and technical colleges offered Licensed Practical Nurse programs in 2006.
- There are three types of Licensed Practical Nurse programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	711	677	839	992	1110	1019
Associate	36	39	25	27	41	55
2 to 4 years	45	46	66	45	52	0

- Total annual program completions for associate level LPNs increased by 35.6 percent from 2001 to 2006.
- Completions per 100,000 population increased by 27.1 percent from 2001 to 2006.
- 81.6 percent of program completers were female in 2006 compared to 89.3 percent in 2001.



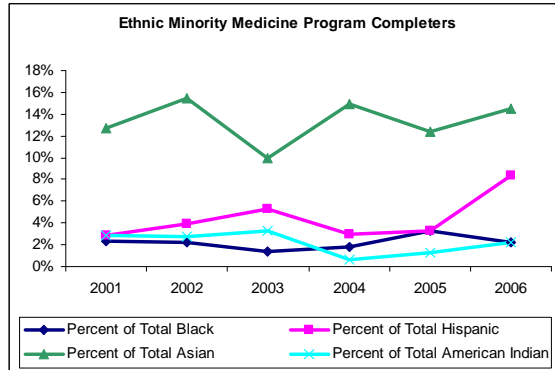
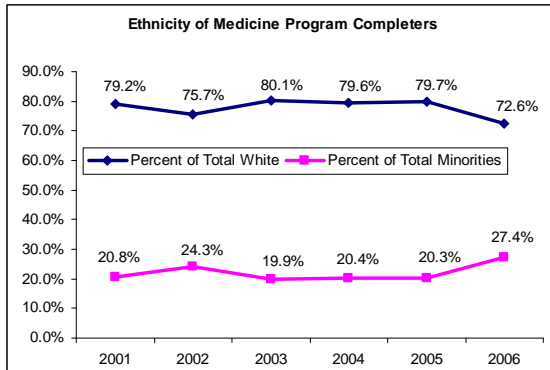
## Medicine (CIP 51.1201)



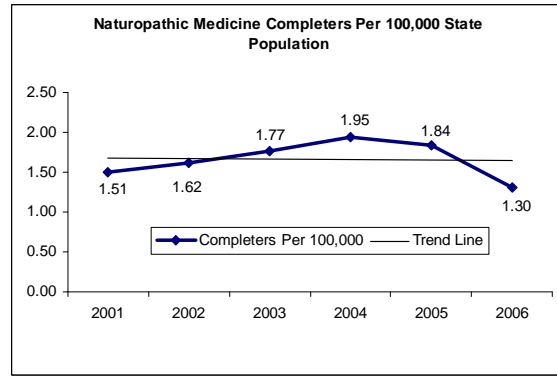
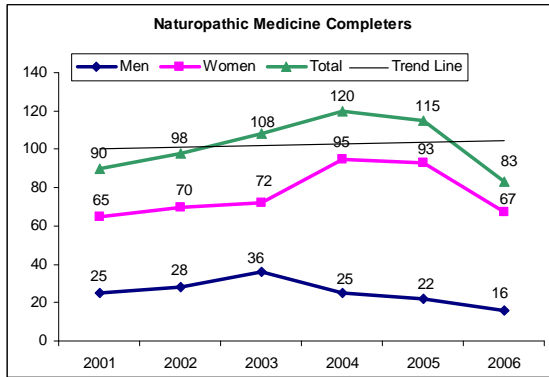
- One university offered a program in Medicine in 2006.

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
First-Professional Degree	176	182	153	172	161	182

- Total annual program completions increased by 3.4 percent from 2001 to 2006.
- Completions per 100,000 population decreased by 3.1 percent from 2001 to 2006.
- 59.3 percent of program completers were female in 2006 compared to 45.5 percent in 2001.



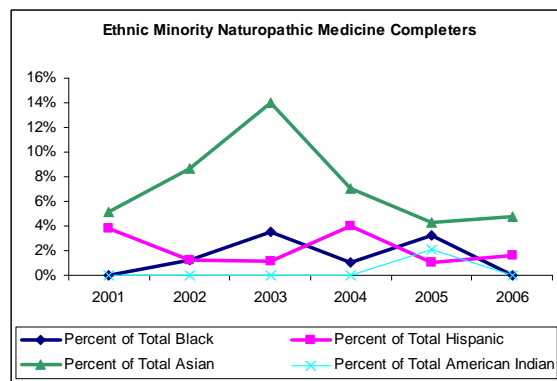
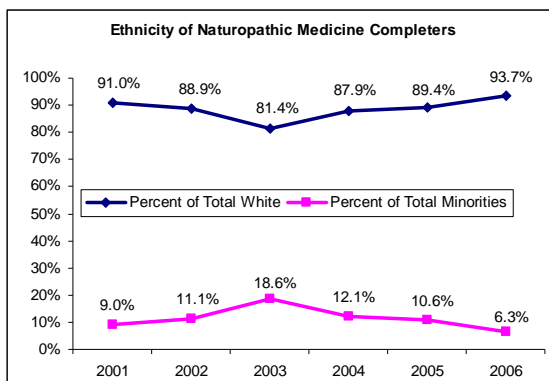
## Naturopathic Medicine (CIP 51.2704 pre-2003 and 51.3303 Post 2002)



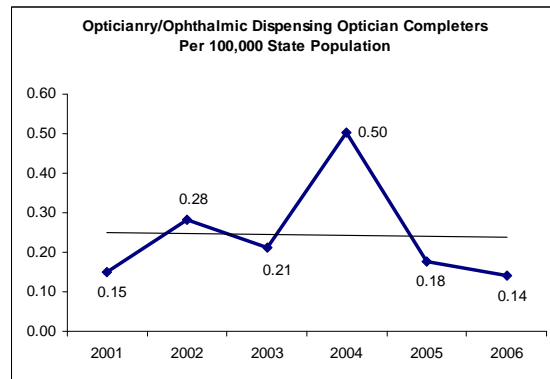
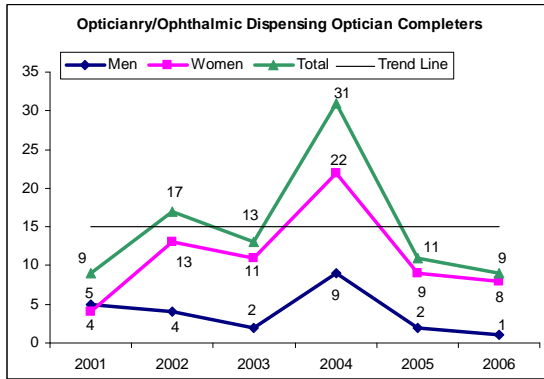
- One university offered a program in Naturopathic Medicine in 2006.

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
First-Professional Degree	90	98	108	0	115	83

- Total annual program completions decreased by 7.8 percent from 2001 to 2006 though there is a slight increase in the overall trend.
- Completions per 100,000 population decreased by 13.6 percent from 2001 to 2006 and the overall trend shows a slight decrease when adjusted for population growth.
- 80.7 percent of program completers were female in 2006 compared to 72.2 percent in 2001.



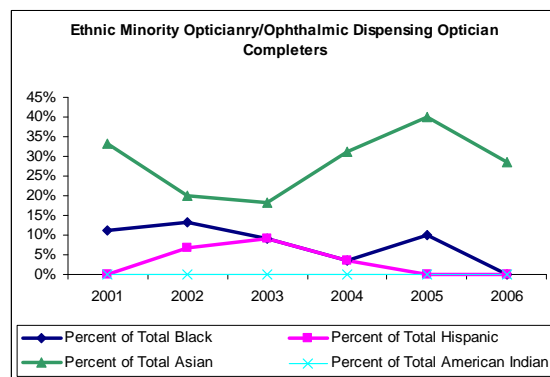
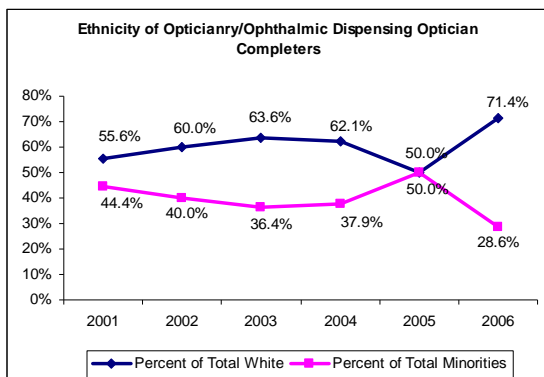
## Opticianry/Ophthalmic Dispensing Optician (CIP 51.1801)



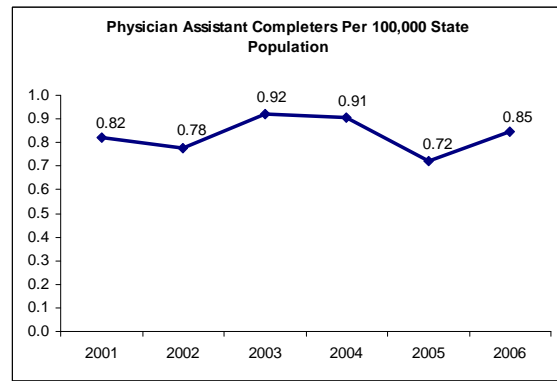
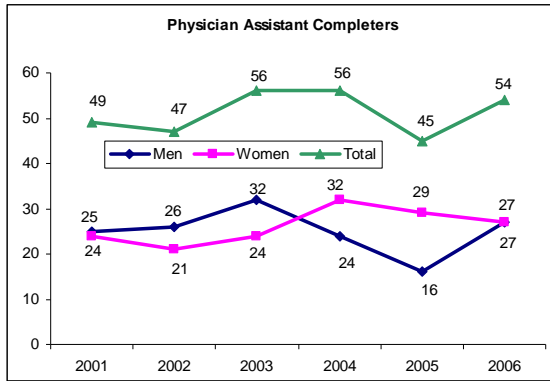
- Two community colleges offered Opticianry/Ophthalmic Dispensing Optician programs in 2006.
- There are two types of Opticianry/Ophthalmic Dispensing programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	0	1	1	5	1	2
Associate	9	16	12	26	10	7

- Total annual program completions was the same from 2001 to 2006 the overall trend remained steady despite a spike in program completions in 2004.
- Completions per 100,000 population decreased by 6.3 percent from 2001 to 2006 and the overall trend shows a slight decrease when adjusted for population growth.
- 88.9 percent of program completers were female in 2006 compared to 44.4 percent in 2001.
- Since the number of completions per year are low, a small variance in any one year can give a false impression of the significance of the percent of change.



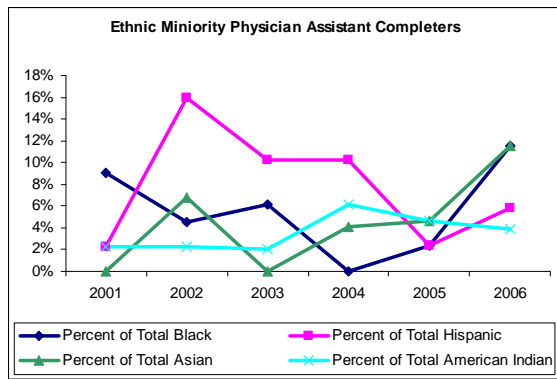
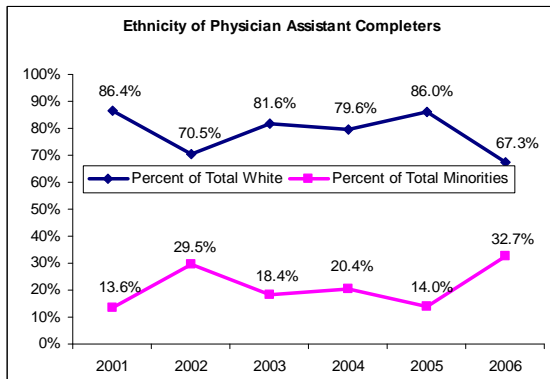
## Physician Assistant (CIP 51.0807 Pre-2003 and 51.0912 Post 2002)



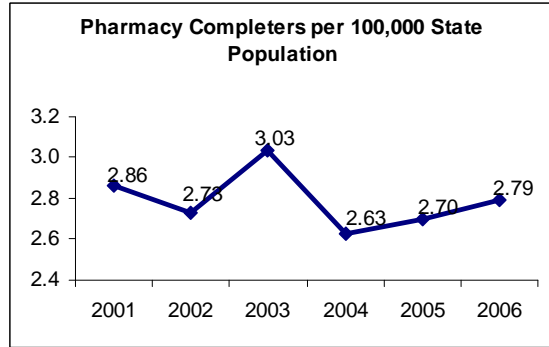
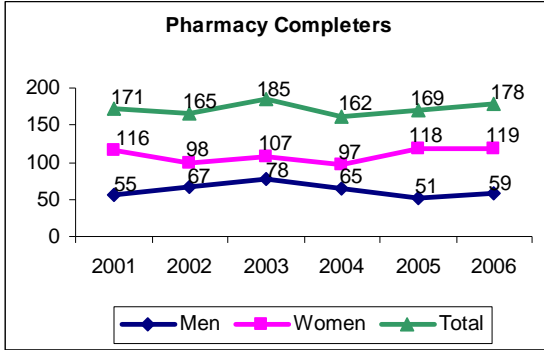
- One university offered a Physician Assistant program in 2006.

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Baccalaureate	49	47	56	56	45	54

- Total annual program completions increased by 10.2 percent from 2001 to 2006.
- Completions per 100,000 population increased by 3.3 percent from 2001 to 2006.
- 50 percent of program completers were female in 2006 compared to 49 percent in 2001.



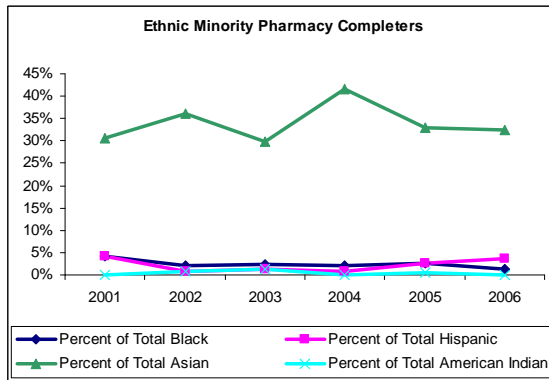
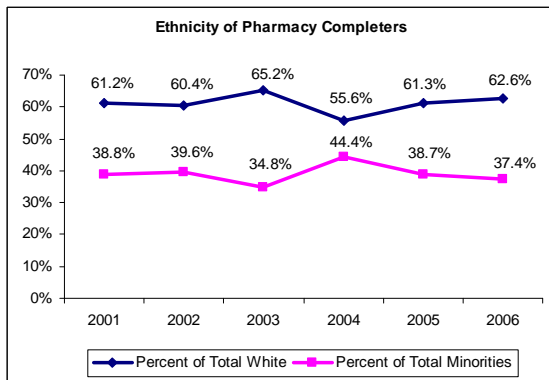
## Pharmacy (CIP 51.2001)



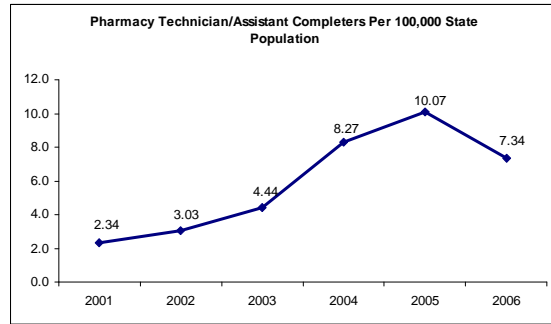
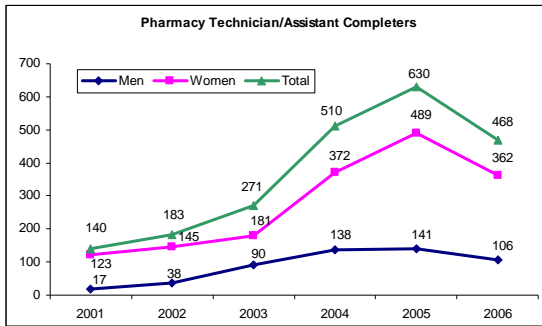
- Two universities offered a Pharmacy program in 2006.
- The number of program completions from 2001-2006 are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
First-professional degree	171	165	185	162	169	178

- Total annual program completions increased by 4.1 percent from 2001 to 2006.
- Completions per 100,000 population decreased by 2.4 percent from 2001 to 2006.
- 66.9 percent of program completers were female in 2006 compared to 67.8 percent in 2001.



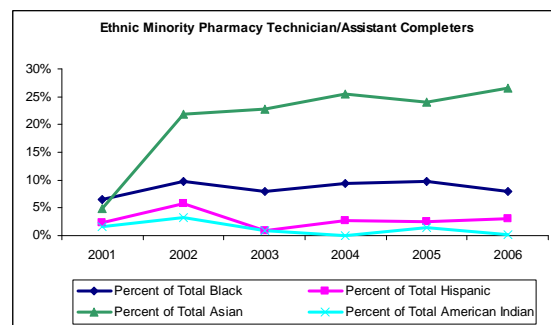
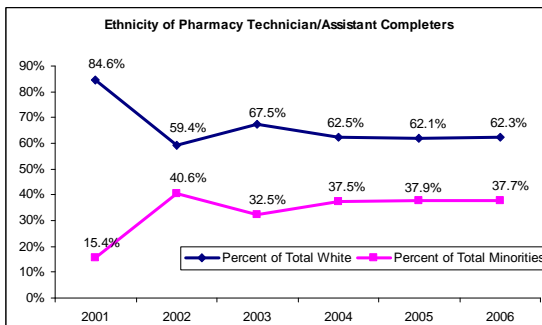
## Pharmacy Technician/Assistant (CIP 51.0805)



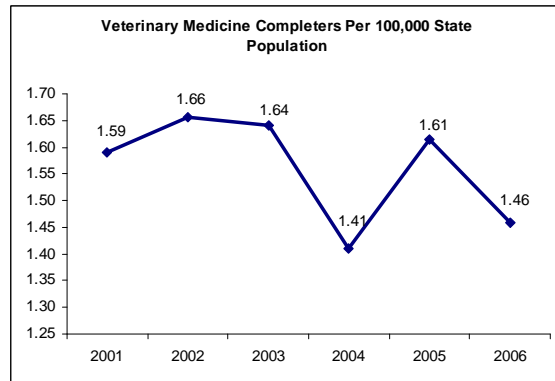
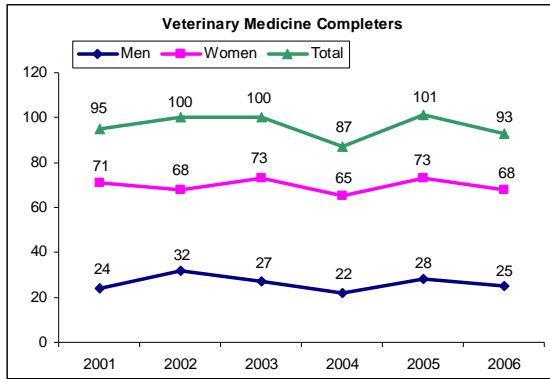
- Fourteen state, community and technical colleges offered Pharmacy Technician/Assistant programs in 2006.
- There are two types of Pharmacy Technician/Assistant Programs in Washington. The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
Less than two years	128	172	248	477	609	450
Associate	12	11	23	33	21	18

- Total annual program completions increased by 234.3 percent from 2001 to 2006.
- Completions per 100,000 population increased by 142.3 percent from 2001 to 2006.
- 77.4 percent of program completers were female in 2006 compared to 87.9 percent in 2001.



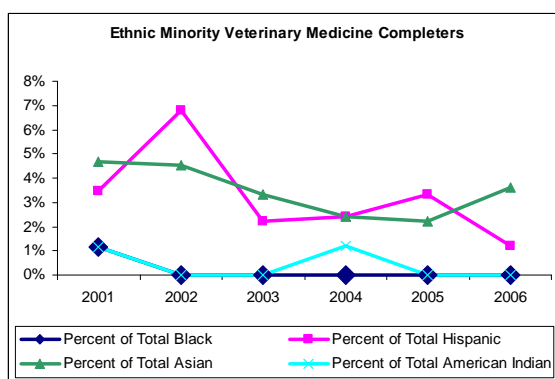
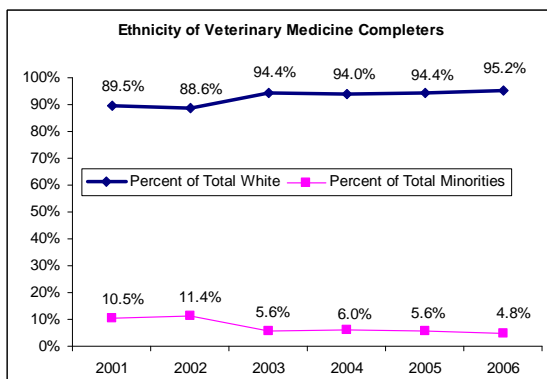
## Veterinary Medicine (CIP 51.2401)



- One university offered a program in Veterinary Medicine in 2006.
- The number of program completions from 2001-2006 by type are as follows:

Type of Program	Number of Program Completions					
	2001	2002	2003	2004	2005	2006
First-professional Degree	95	100	100	87	101	93

- Total annual program completions decreased by 2.1 percent from 2001 to 2006.
- Completions per 100,000 population decreased by 11.9 percent from 2001 to 2006.
- 73.1 percent of program completers were female in 2006 compared to 74.7 percent in 2001.





## Appendix B: Glossary of Terms

- **AHECS** are Area Health Education Centers. They exist across the United States and receive both federal and state funding. Washington has AHEC centers in Western and Eastern Washington. Their mission includes developing the health care workforce for underserved poor communities.
- **Articulation** refers to the recognition by educational institutions of prior education and training that students receive at other educational institutions or on-the-job, and allow these to count as credits towards a certificate, diploma or degree.
- **G-FS** is General Fund, State and is noted in Appendix A where certain strategies might require an appropriation.
- **HECB** is the Higher Education Coordinating Board.
- **High Demand** refers to occupations where employer demand exceeds labor supply.
- **L** denotes the Legislature and is noted in Appendix A where certain strategies might require the support of the Legislature either through law changes or funding appropriations.
- **Mentors (see also preceptors) include definition**
- **OSPI** is the Office of Superintendent of Public Instruction.
- **Preceptors (see also mentors) include definition**
- **Professional Boards and Commissions** refer to the 77 health professions regulated by the Department of Health either through the Secretary or the 16 professional boards and commissions. They are among the responsible entities named for reviewing regulations related to program accreditation, faculty qualifications, clinical, articulation of programs, and apprenticeships, among others.
- **SBCTC** is the State Board for Community and Technical Colleges.
- **Skills Panels** are Health Skill panels.
- **Underserved** refers to federal health professional shortage area designations known as Medically Underserved Areas (MUA's), or Medically Underserved Populations (MUP's).
- **WACMHC** is the Washington Association of Community and Migrant Health Centers.
- **WDCs** Workforce Development Councils have been the main convener of Health skill panels and are the state's workforce investment boards for the purposes of the Workforce Investment Act of 1998.
- **(To add other abbreviations)**

Appendix C: Allied Health Subcommittee Members

Appendix D: Data Development Subcommittee Members